CMPO Working Paper Series No. 03/074

The Role of Donated Labour and Not for Profit at the Public/Private Interface

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April 2003

Abstract
The aim of this paper is to assess the role of donated labour and not-for-profit (NFP) entities at the public private interface. After discussing what a NFP enterprise is and providing general background, we look at the underlying theory of NFP institutions. The fact that NFP companies are able to precommit themselves not to expropriate donated labour is identified as a primary justification of the NFP model and we emphasise the role that purchasers play in the expropriation problem and suggest that this is a particular concern for institutions at the public private interface. After summarising the empirical literature we provide a brief case study of Glas Cymru and show that it is likely to fall foul of the purchaser problems in that the structure makes it hard to avoid expropriation of donated labour. Although there is limited empirical evidence investigation of what is available suggests that the shift from FP to NFP has had no significant effect on the company. Finally, we address the issue of Foundation Hospitals and suggest that there is more, albeit limited, reason to suggest that the NFP status will prove beneficial for donating labour.

Keywords: not-for-profit, public/private interface

JEL Classification: L31, H10

Acknowledgements
This paper was prepared for the New Institutional Forms in the Public Sector Conference organised by the London School of Hygiene and Tropical Medicine, and the London School of Economics, 10 April 2003. We thank the Leverhulme Trust for funding this research.

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CMPO is funded by the Leverhulme Trust.

1. Introduction

Prior to the early 20th century, social service provision in the UK was undertaken primarily by the voluntary sector (on a not-for-profit basis) and it was only in the 1940s that the State came to dominate the funding and production of healthcare, education and social insurance. Not-for-profits (NFPs) have also long been involved in the provision of public services in the US, particularly in health and education. However, recently we have seen what can be thought of as a new breed of NFPs in the UK. They supply public services that are or have until recently been seen as the preserve of the public sector and, directly or indirectly, the government plays a major role in their financial position and dictates their sphere of activity. In the case of the Welsh Water utility, Glas Cymru, and Railtrack's successor, Network Rail, these are monopoly suppliers of public services where the current NFP status has arisen from the financial weakness or bankruptcy of their predecessors. In health the government is busy creating NFP Foundation Hospitals and has indicated that it may also create NFP Primary Care Trusts. The 'new breed' of NFPs are commercial as opposed to donative NFPs in that they do not depend primarily on grants and donations to survive other than government provided finance. Their main source of income is fees.

An obvious question is what can NFPs bring to the public private interface. The Government itself appears to be divided in its attitude towards the role that NFPs can play in the delivery of public services. With respect to the water industry, Philip Fletcher, the Director General of Water Services, has declared that he is unlikely to approve NFP proposals, that he believes Welsh Water is a 'special case' and that the equity shareholder model has performed well for the rest of the industry. This position has also been affirmed by David Drury, the Drinking Water Inspector, who argues that it will complicate quality regulation.[1] In contrast, the government (although not all backbenchers) is enthusiastic to grant Foundation Hospitals with considerable financial and administrative freedom.

[1] See Ofwat (2001a) The Proposed Acquisition of Dwr Cymru Cyfyngedig by Glas Cymru Cyfyngedig: A Position Paper by Ofwat.

The aim of this paper is to assess the role of NFPs at the public private interface with particular reference to donated labour. We first discuss what NFP means (Section 2) and analyse its theoretical foundations (Section 3) before assessing the empirical literature (Section 4). Section 5 provides a brief case study of Glas Cymru and its performance since inception and discusses the implications for Foundation Hospitals and NFP Primary Care Trusts before drawing conclusions (Section 6).

2. What is 'Not-For-Profit'?

In this section, we describe the features of NFPs that distinguish them from their for-profit (FP) counterparts. It is helpful to view this from two aspects. One is to consider the definition in terms of the economic transfers and control. The other is to look at the legal forms that NFPs can take.

2.1 Economic perspective

There are two key economic characteristics that NFPs typically possess. The first relates to the non-distribution constraint (NDC) that NFPs face. It is not obvious immediately what the NDC means. Clearly, it cannot involve distribution of profit to shareholders but it is generally accepted that its application is broader than this. Here we work with the idea that a NFP is not able to distribute any 'profit' or residual element to anyone who is able to exercise control or direct influence over the entity.[2] The second characteristic, closely related to this, is that NFPs have no owners in the traditional sense. Instead, managers are typically accountable to boards that by and large are composed of stakeholders (e.g. consumers, donors, employees) and surpluses earned are reinvested in the firm.

Although not a clear separation it is useful to divide NFPs into two strands: the member-serving type organisations, which are created to provide for their immediate members (e.g. cooperatives, mutuals and trade unions), and public-benefit type organisations, which exist primarily to serve the community at large (e.g. hospitals, social welfare agencies and educational establishments). The two are distinguished in

[2] This is akin to Hansmann (1996) who stated, "the critical characteristic of a nonprofit firm is that it is barred from distributing any profits it earns to persons who exercise control over the firm."

that beneficiaries of surpluses in the former are its immediate members whereas recipients of benefits of surpluses in the latter are drawn from a broader public. Most NFPs are likely to lie somewhere between the two polar cases with some of the surpluses being channelled or diverted to improve the welfare of managers and employees and some directed towards the greater public good. For this paper we are mainly interested in NFPs located close to or at the selfless end of the spectrum.

2.2 Legal Context

In the UK, NFPs may adopt one of five main legal forms, that of a (i) trust, (ii) unincorporated association, (iii) friendly society, (iv) company limited by guarantee (CLG) or (v) industrial and provident society (IPS).

The first three are unincorporated; thus do not have separate legal personalities and assets are held by members on behalf of the organisation. Trusts tend to be grant-making establishments, unincorporated associations can be thought of as partnerships in the FP sector and friendly societies, which are similar to building societies, cooperative societies and trade unions, are unincorporated mutual insurance associations.

In contrast, the CLG and IPS forms involve incorporation, and have the advantage of being able to obtain credit and enter into contracts. The former has no share capital and is instead owned by members who are liable to pay only a limited, usually nominal, sum of money upon winding up of the company. As such, it has no contributed capital while it is a going concern and can only be re-registered as an unlimited company. Examples of CLGs are Glas, Network Rail and the Hackney LEA Learning Trust. IPSs such as BUPA and most housing associations are hybrids between friendly societies and CLGs with the liability of their members being limited to any outstanding amounts on the purchase of their shares. IPSs have the additional benefit that the regulations and legislation governing them are less detailed and more flexible than that which applies to CLGs and other companies. However, an

organisation must demonstrate that it has 'special reasons' for not registering under the Companies Act in order to register as an IPS.[3]

In its 2002 review of charities and the wider NFP sector, the government's Strategy Unit recognised that none of the aforementioned legal forms available to the voluntary sector are well suited to their needs. Thus, they proposed the creation of two new legal forms, that of a Community Interest Company (CIC) and Charitable Incorporated Organisation (CIO). The former is similar to the CLG except that it can issue preference shares if it so chooses. The latter is also an incorporated limited liability organisation but it will only be available to charities and is intended to reduce confusion in the areas where company and charity law currently overlap and differ. The review further proposed the modernisation of the IPS form.[4] More recently, the government has announced its intention to establish Foundation hospitals as Public Benefit Corporations, another new legal form that is reminiscent of the CLG.

The governing boards of all of the above legal forms are almost always unremunerated and cannot materially benefit from the organisation's activities i.e., satisfy the NDC. While, this is true of the new breed of NFPs with which we are concerned, the remuneration of the management boards of Glas and Network Rail are tied to performance as a means to incentivise them. The management boards of Foundation hospitals may be similarly incentivised as there is nothing in their constitution preventing compensation from being linked to performance. If the incentive schemes are based on something analogous to 'profit' then this muddies the waters with regard to, although not technically violating, the NDC.

While not mapping directly onto the FP-NFP distinction, the role of charities is important. Many charities are NFP but FP charities do exist. In the UK, the charitable status is granted on the basis of organisational substance rather than form and organisations must satisfy two criteria in order to obtain it. They must (i) have purposes that are regarded as being exclusively charitable (i.e. towards the relief of poverty, advancement of education, advancement of religion, or "other purposes

[3] See, Private action, Public benefit, 2002, Section 2.

[4] See, Private action, Public benefit, 2002, Section 5.

beneficial to the community"[5]) and (ii) be established for public benefit. The latter is determined on an individual case-by-case basis and allows for a diverse array of NFP institutions to be recognised as charities (e.g. in health and social care but not NHS trusts.[6]

In the afore-mentioned review, the Strategy Unit took the view that 'the law is confusing and unclear' and recommended a redefinition and expansion of charitable purpose to include the advancement of health, culture, arts and heritage, amateur sport, environmental protection and improvement, social and community advancement, and the promotion of human rights, conflict resolution and reconciliation in addition to the above-mentioned categories.

Charitable status automatically confers comprehensive constitutional and fiscal privileges such as income, corporation and capital gains tax exemptions on funds that have been used solely for charitable purposes. In the US, NFPs in health are exempt from most federal, state and local taxes on charity donations, property and income.[7] Non-charitable voluntary organisations also may qualify for tax relief on charitable income if "it is not a public body, but whose activities are carried out otherwise than for profit" (e.g. housing associations).[8]

3. Theory

3.1 Introduction

The central question we are concerned with here is whether there exists a robust argument for why the benefits of NFP cannot be replicated in institutional forms other than NFP. The problem with many explanations for the existence of NFPs is that they can be replicated in FP organisational forms and hence cannot be fundamental explanations of the dominance of the NFP form. For example, it is sometimes argued

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[5] See, Private action, Public benefit, 2002, Section 5.

[6] See Kendall and Knapp (1997).

[7] See Frank and Salkever (1994).

[8] See Kendall and Knapp (1997).

that NFPs face lower costs of borrowing because they are financed entirely by debt, which is tax deductible, rather than a mixture of debt and equity. This argument depends in part on the existence of the debt/equity tax advantage, which is far from obvious.[9] More significantly, if there is a tax advantage to debt then this is true both for NFP and FP entities. So any benefits arising for NFPs from this source should be replicable by FP companies and it is not clear why this suggests NFP is a dominant form.

It has been suggested that founders of NFPs are ideologues. It is argued that they will thus be more inclined to hire like-minded people who themselves will want their values to be reflected in the service provided and consequently require less monitoring. Furthermore, if NFP producers are ideological and have a group of customers from which they can pick, they have additional incentives to screen and cream-skim over and above that of FP producers in that their personal goals may be better fulfilled by more 'desirable' candidates. In turn, having a 'better' group of customers makes it easier to attract 'better' customers owing to network externalities (e.g. universities with better students will attract better students). While these attitudes can be significant, as with the tax arguments, their existence alone cannot explain NFPs since there is nothing in this argument as it stands to ensure that the appropriate form must be NFP. It appears that an ideologue can set up a FP with the same mission. Indeed, many FP companies have grown up rapidly on the back of a strong commitment to a mission (Body Shop is an example). Whether this is sustainable in the long run is a central issue to which we return in the next subsection.

3.2 Expropriation Theory

We believe that expropriation, and the drive to avoid its negative consequences, underpins the most robust theoretical explanation for the dominance of the NFP form. Specifically, our claim is that the central feature that distinguishes NFPs from FPs is the difficulty in expropriating surpluses away from the intended mission in the former relative to the latter. This has consequences for employees, donors, etc, that can make

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[9] See any standard finance text, e.g., Brealey and Myers, Copeland and Weston.

NFPs the dominant form in certain circumstances. A necessary condition for expropriation to be a problem is that it is not possible to write perfect all embracing contracts that completely determine the outcome whatever events occur. Note that in a perfect world (i.e., one where FP firms are fully able to precommit themselves not to manipulate the contributions of customers, employees, or donors in the face of the incentives that stem from profit-maximisation) then the expropriation theory maintains that NFP firms have no real advantages over FP firms. That is, any benefit that a NFP structure brings can be replicated by writing contracts that force management to adopt the same strategies.

In practice, contracts are not perfect in this way (see, for example, Grout (1984), Hart, Schleifer and Vishny (1997)). There are many activities that cannot be precisely contracted on for all sorts of reasons, e.g., they may be important but too nebulous (e.g., requirements that all employees be 'on mission'), too difficult to define legally (a manager agreeing to do something if employees commit to 'going the extra mile' when needed), the potential outcomes may be too numerous to categorise, etc. This makes it difficult for a manager, for example, to retain flexibility in decision making while at the same time credibly precommitting to do A instead of B in some situations where it is known that, when the time comes, the turn of events may be such that he/she would prefer to do B instead of A. If it is possible to correctly define A and B so that they can enter a contract then it may be possible to contract to do A rather than B all of the time but that may be hopelessly inefficient if there are some circumstances when A is clearly the wrong thing to do. If A and B are too hard to write into a contract then even this type of commitment will not be possible. Because contracts can never cover all eventualities then the best possible outcome is usually unachievable. In which case institutional structure matters since different institutional forms will deliver different outcomes. In particular, for our purposes here, if we cannot write contracts to rule out all expropriation then we may have strong reasons to prefer one institutional form over another if they affect the scale of expropriation.

Consider a FP company. Owners receive the residual income once all costs are met. If, in a simple example, revenues are 100 and costs are 95 then owners receive a residual profit of 5. A reduction in costs of 5% (i.e., costs fall to just over 90) is extremely valuable to the owners since it almost doubles the value of the company.

The FP form thus creates powerful incentives to reduce and control costs, sometimes even at the expense of quality if it is difficult to contract perfectly over quality. Where cost control is a significant concern then the FP form is likely to be preferable. Compare this to a situation where employees are concerned about the quality of the institution's output. For example, nurses may care strongly about the quality of patient care in their hospital and be willing to work far more than the minimum that he or she could get away with as long as the extra effort manifests itself in better patient care. This type of labour is usually referred to in the literature as donated labour.

It is useful to distinguish between public service motivation, i.e., the desire to work in public services to contribute to output, quality, etc., and donating labour, which is the labour donated beyond what is explicitly or implicitly contractually required. The difference is that employees may have preferences that include public sector motivation but may still fail to donate labour if the institutional structure damages the incentives. For example, the very strength of the FP form, i.e., incentives to increase profit, makes it ill suited to meet the needs of such an employee. Consider a hospital where all employees have a preference for public sector motivation and, by way of example, decide that they will never leave a shift if there is nobody else to take over. A FP company will find it hard to precommit not to take advantage of this by hiring fewer employees than before in any given situation since by hiring fewer employees than it would otherwise have done the profit and value of the business can be increased. But, of course, the employees will realise this and so will not 'go the extra mile' because the donated labour does not improve the quality of patient care. So the FP form is unable to deliver the preferred outcome. In our terms the FP form cannot prevent itself from expropriating donated labour if it arose and so it never gets any out of its employees.

In contrast, NFP works well in this situation as long as there is limited diversion of surpluses by management. Since the NDC forces the NFP to invest its surplus within the business, which as long as managerial diversion is small means it will be spent on the company's mission, then donated labour improves the outcome of the business. Furthermore, if this improves the quality and hence the income the entity can receive then this generates even more money to be reinvested, which further improves the

product. Thus the NFP form works very well here since it ensures that donated labour is not expropriated and hence employees that wish to donate labour will have a structure that allows them do so. In this case the NFP companies will be superior to their FP equivalents and will be the dominant form.[10]

We have presented the argument in a specific example but it is clear that it applies in many forms. For the reasons above NFPs should be able to attract more philanthropic and benevolent (i.e. altruistic) individuals than FPs.[11]. So not only do NFPs get the best out of mission-motivated employees but these organisations attract employees who wish to offer donated labour. This self-select effect further helps NFPs to produce higher quality at a cheaper price. As a result purchasers who find it hard to ascertain quality may thus prefer to purchase from NFPs since there are incentives for their quality to remain high even when it is hard to commit to. That is, NFP status serves as a trust signal and again confers a competitive advantage over FP firms.[12] Furthermore, if consumers believe that NFPs have less incentive to misrepresent quality they are likely to be more willing to pay higher prices up front in expectation of higher quality. Employees in NFPs may also be more willing to invest in higher levels of firm-specific human capital investment since they perceive NFP firms as having less financial incentive to cut their wages or benefits ex-post.[13] Finally, note that what works for donated labour should also works for all donors. If outside donors believe that the risk of diversion of funds is lower in NFPs, they are likely to donate more. In this way, NFP status again serves as a trust signal.[14]

Of course, NFP forms will have inherent weaknesses. It is often argued that the absence of powerful governance mechanisms in NFPs results in an orientation towards the preferences of their elite workers who may be willing to accept lower wages as a compensating differential for having greater influence over the firm. This

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[10] These ideas have been formalised by Francois (2000) and Glaeser and Shleifer (2001).

[11] See for example Duggan (2000) and Rose-Ackerman (1996).

[12] See for example Hansmann (1996).

[13] See for example Glaeser and Shleifer (2001).

[14] See for example Rose-Ackerman (1996).

is accentuated in wealthier firms that are more financially independent. In FP firms, investors will be able to create incentives to undo the influence of workers even if they are able to lobby managers. They assume that board control is strongest and effective in clearly observable areas (i.e. salaries).[15] NFP decision makers may be more inclined to consume perquisites as compensation for their inability to incorporate profits into their salaries ex-post.[16] Further, they may be less responsive to changes in financial incentives, and invest less effort in cost cutting because the returns to such investment is lower.[17] Thus, even though they may produce higher levels of unobservable quality, in some markets NFPs may be less productively efficient compared to FPs in imperfectly competitive markets.[18] Average costs may be higher when quantity and contractible quality are controlled for.[19]

3.3 The Role of Purchasers in the Expropriation Model

The existing theory focuses on the ability of NFP entities to avoid the expropriation of donated labour, etc., that arises in FP forms. However, focussing on profit driven owners and their capacity as residual claimant on resources ignores the role of purchasers as brokers of power in the distribution of surpluses. Existing theories assume do not allow address the effect of changing the power of purchasers. This is unrealistic in the context of NFPs at the public private interface and will provide misleading conclusions.

If the purchasing market is not perfectly competitive then purchasers will have some monopoly power and this will be reflected in the price that will be paid for the output. If the NFP enterprise bargains with a purchaser then the outcome will be determined

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[15] See for examp le Glaeser (2002). Bennet, Iossa and Legrenz (2003) examine further corporate governance issues. The latter also provide a good discussion of finance, risk and the role of stakeholders as board members.

[16] A point made by many authors, see for example Pauly (1987).

[17] See for example Glaeser and Shleifer (2001).

[18] See for example Ettner and Hermann (2001).

[19] See for example Malani, Philipson and David (2002).

by the power in the bargaining process and the number of alternative purchasers that are available. The fewer alternative purchasers then the more the price will reflect the cost of the NFP enterprise and the less it reflects the valuation of the purchaser. If there are many purchasers and/or they are in a weak bargaining position then the benefits of NFP over FP outlined in the previous sub-section will hold. However, as the number of purchasers' falls then the greater is the opportunity for a purchaser to expropriate donated labour. In the extreme where there is a single very powerful purchaser then the opportunity to expropriate all the donated labour by reducing other inputs reappears in the NFP model. This is because an all powerful purchaser can beat down the price so low that the NFP has no alternative but to cut back on other inputs and this cash starvation can soak up (and essentially negate) the gains that would otherwise arise from donated labour. Whether the purchaser wishes to do so depends on the valuation structure, which we now discuss.

If a powerful purchaser buys from a FP company it will have to pay the 'full market' price. However, if the powerful purchaser buys from a NFP and employees have donated labour then the powerful purchaser can obtain the same output at a far lower price by essentially replicating the strategy of the FP owners, i.e., bargaining the price so low that the donated labour is expropriated. Of course, if the purchaser values the additional quality more than the money saved by expropriation then this will not be a problem since the purchaser will have no incentive when the time comes to drive down the price (see, Glaeser and Schleifer (2001) who address the single purchaser situation). However, it will be very unlikely that the purchaser will not wish to indulge in some degree of expropriation.

Of course, there is an obvious problem. If expropriation is the best strategy for the purchaser, it may face exactly the same problem the FP firm faced, i.e., it cannot pre-commit not to expropriate the donated labour so none may be offered. If the purchaser does wish to expropriate the donated labour within a NFP firm then whether any is offered depends on the attitude of the employees to the diverted finance. Traditional theory assumes that employees in the FP case attach a zero value to profits received by owners. This is why donated labour stops when the FP firm expropriates. If the powerful purchaser is the state then it could be possible that income saved by the state through expropriation is used in ways that gives utility to those donating

labour. In this case they may continue to donate labour even though it is expropriated away from its initial intended purpose.[20] In practice we think this is unlikely. Taking the situation where employees only care about the output of their NFP employer, Grout and Yong (2003) provide a model of a NFP entity where the benefits of NFP over FP falls as the number of purchasers falls and where the outcome with a single all powerful purchaser is identical to that of the FP entity. That is, the FP problem is not resolved by introducing NFP.

3.4 Summary

In this section we have identified expropriation as a critical determinant of institutional form when there is a possibility of donated labour. Furthermore, we have shown that powerful purchasing is likely to be a major issue to address. We believe that state expropriation is potentially a big problem for the public sector. There are many instances where employees feel they have invested heavily in activity-specific human capital (teachers are a good example, nursing possibly another) and that the state is able to change the ground-rules and yet retain labour supply. For the purposes of this paper we certainly suggest that powerful purchasing is a feature of many situations at the public private interface and must be addressed in the NFP context. In the next section we look at existing empirical evidence.

4. US Empirical Evidence

Overall, the empirical evidence on NFPs is relatively inconclusive although there is a common finding that donations to NFPs are higher than to FPs and a slightly weaker finding that less well-informed consumers tend to self select themselves towards NFPs.

With respect to efficiency, the expropriation model envisages NFPs to be less productively efficient than FPs although this depends on the precise measure taken. In the empirical literature, typically three approaches have been employed to compare efficiency; (i) paired comparisons of FP and NFP providers using cost per patient day,

[20] To be pedantic it is not really expropriated if those donating know what will happen and still value the final indirect destination of the donated labour.

cost per patient, or cost per admission as measures of efficiency, (ii) regression analyses controlling for case-mix; and (iii) use of linear programming techniques to estimate frontier production functions where inefficiency is measured by the distance from the frontiers. There are just as many studies that find efficiency to be lower in NFPs as there are ones that find it to be higher than or equal to FPs with no common theme emerging to categorise them. Among those in the first group are those conducted by Cutler and Horwitz (2000), Ferrier and Valdmanis (1996), Rundall and Lambert (1984), and Wilson and Jadlow (1982) on hospitals, and Nyman and Bricker (1989) on nursing homes. Among those in the second group are those undertaken by Duggan (2000), Ettner and Hermann (2001), Woolhandler and Himmelstein (1997), and Becker and Sloan (1985) on hospitals, Blau and Mocan (2000), and Mocan (1997) on day care centres, and Mark (1996) on psychiatric homes.

According to the expropriation model, quality (both observable and unobservable) is likely to be higher in NFPs. Studies have measured quality in 3 ways; (i) by examining health outcomes (e.g. readmission and mortality rates), (ii) third-party assessments (e.g. frequency of violations of regulations or accreditations), and (iii) the intensity of quality-related input usage. As with investigations of efficiency, the evidence on quality is inconclusive. Among the studies that find quality to be higher in NFPs are those conducted by McClellan and Staiger (2000) and Marmor et al. (1986) on hospitals, Cohen and Spector (1996), Weisbrod (1997), and Frank and Salkever (1994) on nursing homes, Mark (1996) on psychiatric homes, and Weisbrod (1997) on mentally handicapped facilities. Among the studies that find quality in NFPs to be lower than or equal to that of FPs are those undertaken by Cutler and Horwitz (2000), Sloan et al. (1998), and Gray and McNerney (1986) on hospitals, Morris and Helburn's (2000), and Mocan (1997) on child care centres, Ettner and Hermann (2001) on the elderly in psychiatric care, and Heinrich (2000) on job-training programs.

Many theories predict compensation should be lower in NFPs, which is what Frank (1996), Weisbrod (1983), and Roomkin and Weisbrod (1997) find when examining a variety of socially responsible occupations, law firms and hospitals respectively. However, Blau and Mocan (2000) find compensation to be higher and Preston (1988) finds no difference when examining the day care industry.

As indicated above, there are two areas where evidence has been less contradictory. The first relates to the level of donations of time and money, which is found to be consistently higher in NFPs although this is hardly surprising. Weisbrod (1997) found the number of volunteers working in church-related NFPs in nursing, mentally handicapped institutions and child day care centres to be significantly greater than in their FP counterparts. The second concerns the self-selection of less well-informed consumers into non-profit institutions as found by Hirth (1993), Holtmann and Ullmann (1991) and Schlesinger et al. (1996). However, the proxies are difficult and those used are somewhat dubious. For example, Hirth (1993) assumes that higher information acquisition costs are linked to the absence of a next of kin to help with decision-making.

Thus, it appears that in most respects the empirical evidence on NFPs is inconclusive and it is difficult to see a strong message coming from the literature as a whole; a view reflected in Glaeser (2002).

5. Implications at the Public-Private Interface

In this section we provide a brief case study of the Welsh Water utility, Glas Cymru, which was recently established as a NFP organisation, discuss in passing the position of Network Rail and then look at the implications for the role of NFP and public private partnerships in the health sector.

5.1 Glas Cymru and Network Rail

Glas Cymru

Throughout the late 1990s Welsh Water was in a financially weak position and this ultimately led to a successful hostile takeover of Hyder (Welsh Water's parent) by Western Power Distribution (WPD). WPD's intention was to combine its South West power distribution network, SWEB, with Hyder's South Wales Electricity group, Swalec and it had little interest in water. WPD was anxious to divest itself of Welsh Water, and finally sold it to Glas Cymru Cyfyngedig (Glas) in November 2000 for £1.85bn. An interesting feature of the sale was that Glas purchased the company for

93% of its Regulatory Asset Value. The sale was essentially approved by Ofwat (the water industry regulator) in January 2001.

Glas was created in April 2000 as a private CLG for the sole purpose of acquiring Welsh Water. It is owned by and accountable to 200 members comprising a variety of stakeholders who have no financial interest in the company except for their liability of £1 to be paid in the event that the company goes into bankruptcy. Surpluses earned are to be reinvested and when they have exceeded £300m, will be passed back to consumers in the form of lower bills. The goal is to distribute £11m and £12m in customer rebates in 2003 and 2004 respectively.

It is the duty of the members to monitor the board of Glas, which is composed mainly of non-executive directors. The remuneration of executive directors is based on Glas' financial performance in terms of growth in reserves, customer rebates, regulated asset ratio and credit ratings of the bonds. Service performance relative to the rest of the industry will also be taken into consideration. While a legal NFP, in some sense it does not adhere to the economic definition of NFP because it infringes the NDC (by distributing a proportion of surpluses to those who control the firm). In May 2001, Glas successfully raised £1.9bn on the British and continental bond markets. The proceeds from the bond issuance were used to refinance Welsh Water's debts and has currently reduced its cost of capital to just above 4%. Since Ofwat has agreed to apply the same cost of capital to Glas as to the other equity-funded water companies in its determination of prices (i.e. 6.5%), Glas is able to generate savings of £50m per annum; these are targeted to reach £350m by 2005.

There are two particular features of Glas that run counter to the view that the company may benefit from circumventing the expropriation problem. One concerns the contracting out of Glas' activities. Prior to its acquisition by Glas, Welsh Water had already outsourced 3 major aspects of its business: i) more than 50% of its capital investment programme worth an annual £240m had been contracted out to 6 service providers, each of whom will contribute over £100m by 2005; ii) 4 service providers had been appointed to operate its sewerage network for £7-8m per annum until 2005; and iii) the management of its laboratory and quality sampling activities had been allocated to one service provider for a 5 year term. In addition, several consultants had

been engaged to perform strategic and technical planning functions. In total, activities equivalent to over 50 % of Welsh Water's total costs had been outsourced.

Since its takeover Glas has increased the proportion of outsourced work to 80% through its procurement plan. The remaining 20% comprise of mainly fixed costs such as Licence and environmental fees. This was achieved through the award of 2 contracts by means of competitive tendering: the £450m operations and maintenance contract (OSA) to United Utilities (owner of North West Water) and the £66m customer services contract (CSA) to Thames from March 2001-2005. Logica Services Ltd was appointed to manage information technology for the period to 31 March 2005 under a £80m contract. Consequently, approximately 1400/400/350 employees were transferred from Welsh Water to United Utilities/Thames/Logica. The remuneration due to the service providers is linked to performance. The OSA and CSA will be re-tendered in 2003/04. Glas also plans to outsource its capital maintenance expenditure (Glas Information Memorandum, 2001). It is uncertain, and probably unlikely, that Glas employees may be concerned with the quality and output of the company sufficiently to offer a significant amount of donated labour but any such hope is diluted by the fact that as an immediate consequence of the takeover, Glas moved an additional 2,150 employees off the payroll and onto FP contractors. Thus the conventional benefit of NFP status is difficult to see in this case. This problem is exacerbated by the presence of incentive contracts to management.

The other problem with regard to gains that could arise from the NFP status is that the water industry is regulated. Ofwat exerts control via a price cap which takes the form of RPI+K where RPI is the retail price index and K is composed of a positive quality factor, Q, and a negative efficiency factor, X. X consists of the overall scope for efficiency savings achievable by the industry and the comparative efficiency of individual companies within the industry (i.e. company specific catch-up). X is set individually for each firm. It was hoped that price control via yardstick competition would substitute for the lack of direct competition. The price cap is fixed for 5 years with the next reassessment due in 2005. If the X is set formally by yardstick competition then an efficient company should be able to keep its abnormal return. However, in practice the process is far more complex and, as has been explicitly stated by the regulator, judgement has to be brought to bear over and above the results

given by the statistical comparisons of the companies. Clearly, the process leaves significant scope for a company's X to reflect and specifically return to customers above average performance. Even if employees wish to donate labour to improve the quality of the service it is less obvious that they will see the benefit returned in the form of lower prices as a good substitute.

Having said this Glas appears to have been able to improve its financial position. There may be many reasons for this some of which may be short lived and are unrelated to its NFP structure. Clearly the fact that the company was purchased at a price equal to 93% of its regulatory asset base but is funded by the regulator to earn a fair return on its full asset base helps provide a financial cushion. Also the initial contracting prices may be favourable. In formulating and implementing its procurement plan, Glas must adhere to Welsh Water's Licence modifications that pertain to arrangements for contracting out. Ofwat has stated that Welsh Water should maintain a level playing field "The Appointee's procurement of the activities must be such as to ensure, as far as possible, that no existing contractor has any competitive advantage over other prospective contractors." (Ofwat, 2001b). However, there exists the possibility that low-balling occurred. 'Low balling' refers to the practice of setting fees below total current costs to win a contract in the hope of ratcheting the price up once the contractor is established as the incumbent with all the advantages that this brings against future competitors. Incumbents expect to extract client-specific quasi-rents in future periods having developed cost advantages over their competitors in the initial period. This problem is particularly common in auditing markets (see Grout et al (1994)) and has been a significant cause of concern for policy makers. If this is an issue here then we should expect some of Glas' benefits to be temporary.

Some other benefits may be longer lived but one needs to be careful with their interpretation. Glas' revenue comes from sales to customers and with NFP status customer prices not profits will respond to changes in circumstances. This implies that risk is passed downstream to customers not upstream to shareholders. Surpluses may move cyclically with the market although this is less of an issue with water than with other services such as rail. Because these surpluses are fed back to consumers through prices then prices will higher when the economy does badly and lower when

the economy does well. This increases the variance of real income of the customers, i.e., the consumers hold risk that was previously held by the company. The company is thus less risky and should as a result have a lower cost of capital to reflect the fact that it holds less risk. Unlike the other benefits, which may be transitory, this one may be a long run benefit to Glas.

Therefore there are good arguments why Glas' financial performance since its inception should have improved. However, what is of more immediate concern is what has happened to its productivity and quality since it became a NFP. Theory suggests that the gains arising from the shift should be mitigated since the scale of contracting out has increased and benefits in lower costs and greater effort arising from donated labour can be extracted by the regulator at the next price review. Unfortunately, there is limited information to address this question but what is available are the annual relative efficiency and quality assessments conducted by Ofwat. We now investigate these to see if there has been any effect.

Since 1997, Ofwat has published reports on the relative operating efficiencies (opex) and capital maintenance efficiencies (capex) of all water and sewerage companies (WaSC) and water only companies (WoC). Operating costs include employment costs, power costs, materials and contracted services. Cost of capital is excluded. Efficiency is calculated on the basis of 3 econometric models for distribution, business activities, and power costs. Capital maintenance costs are those associated with maintaining existing levels of serviceability of assets. Efficiency is modelled on the average annual maintenance expenditure from 1993-1994 to the respective period of assessment with adjustments made for individual company circumstances. Companies are then grouped into 5 bands (A being the most efficient) that are ranked according to the required percentage reductions to their costs that would allow them to achieve the efficiency of a chosen benchmark company that is deemed to be appropriate for comparison with the rest of the industry. Table 1 shows the percentage reduction that would be required to move from the least efficient to most efficient band. As one can see these differentials are significant and so the companies are spread in terms of efficiency.

Table 1

Percentage reduction in costs that would be required to move from least efficient to most efficient band

	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002
Opex:					
Water	25-30%	25-30%	40%	40%	40%
Sewerage	-	-	20%	30%	30%
Capex:					
Water	40%	20%	35%	40%	40%
Sewerage	-	-	35%	40%	40%

Although we do not produce the detailed relative efficiency ranking tables here they indicate that Welsh Water has consistently under performed in terms of operating efficiency whereas it has consistently done well with respect to capital maintenance. The converse is true of the two contractors United Utilities (i.e. North West) and Thames. Thus, we should expect to see efficiency gains in opex as a result of the contractual arrangements. On the other hand, if the NFP ownership status has brought benefits to Welsh Water, we should expect to see improvements in both opex and capex. The latest figures available cover the period when Glas ran the company (i.e., it is NFP), which we can compare to the previous FP position. To do this we initially calculate transition matrices (one for opex and one for capex) aggregated over the entire period 1997-2002.

Table 2a

Transition matrix of operating efficiency for both WaSCs & WoCs

	E	D	C	B	A	Total
E	20%	60%	20%			5
D	4%	32%	56%	8%		25
C		17.78%	46.67%	26.67%	8.89%	45
B		3.03%	15.15%	48.48%	33.33%	33
A			7.69%	42.31%	50%	26
Total	1.49%	14.93%	32.09%	30.6%	20.9%	134

Table 2b

Transition matrix of capital maintenance efficiency for both WaSCs & WoCs

	E	D	C	B	A	Total
E	60%	15%	25%			20
D	15%	55%	30%			20
C	4.08%	16.33%	51.02%	18.37%	10.2%	49
B			22.73%	54.55%	22.73%	22
A			13.04%	21.74%	65.22%	23
Total	12.69%	16.42%	32.84%	19.4%	18.66%	134

Each cell in a figure gives the probability of moving from the t-1 ranking (given on the left) to the ranking in year t (given on the horizontal). The matrices show that persistence is quite high, i.e., the probability of remaining in the same band from one

period to the next tends to be much higher than the probability of moving into another band, whether it is up or down. However, with the exception of band A, it is also apparent that there is a slight upward drift in efficiency rank. This is particularly the case for opex. Almost identical results were found when Welsh Water's transition from the penultimate period to the final period were excluded from the calculations. The exercise was repeated for WaSCs only with virtually no change in the results being observed. We also derived the transition matrices having performed ordered probit analysis and found the results to be robust.

Between 2001 and 2002 (i.e. post acquisition by Glas), Welsh Water's opex ranks improved. There are two measures, one for water and one for sewerage. These moved from band E to D and from D to C respectively. However, its ranks (two again) were unchanged in terms of capex, remaining at B and A for both water and sewerage services respectively. From the matrices, we can deduce that since Welsh Water's actual movements in opex and capex correspond to the greatest probability that would occur irrespective of the acquisition by Glas, the change in ownership status has not brought any gains in efficiency beyond that already expected.

The above relates to efficiency and it is not immediately obvious whether these should be expected to fall or rise although one should expect output per employee to increase. In contrast, there is some consensus that service should improve if a company moves from FP to NFP and employees donate labour. Ofwat also produces annual reports on levels of service for the water industry in England and Wales and we can use these in a similar manner to our investigation of efficiency levels. These Ofwat reports are a compilation of key measures of customer service, which at industry level have continually improved since 1991. These measures are aggregated into an overall performance assessment (OPA), which permits comparisons to be made between companies. It is also taken into consideration in the adjustment of price limits during periodic reviews with possible adjustments ranging from +0.5% for outperforming companies and –1% for under performing companies. The measures included in the OPA relate to:

1. Water supply – pressure, interruptions, hosepipe bans, drinking water quality.
2. Sewerage service – flooding incidents, risk of flooding.

3. Customer service – complaints, billing, meter reading, telephone calls, debt and revenue policies, compensation, information disclosure.
4. Environment – leakage, sewerage treatment, pollution, sludge disposal.

Of all WaSCs and WoCs companies, Glas was ranked joint 10th best in terms of OPA in 2002, 21st best in 2000, 17th best in 1998, and 19th best in 1997. It appears that between 2000 and 2002 Welsh Water experienced a significant relative improvement in its OPA but the lack of information for 2000-2001 renders it difficult to discern whether the improvement occurred preceding or subsequent to its conversion into a NFP.

Ofwat also includes individual measures of service levels in these reports and this is more useful for our purpose. DG2 relates to the number of households that receive inadequate water pressure, DG3 concerns the number and duration of unplanned supply interruptions, whilst DG5 and DG5a refer to the number of properties that have suffered and are prone to internal flooding from overloading and other causes respectively. DG6 and DG7 are measures of responsiveness to billing contact and written complaints respectively, and DG8 relates to regularity and accuracy of metered bills. DG3, DG6, DG7, and DG8 are based on absolute assessments whilst DG2, DG5 and DG5a are based on comparative assessments.

We calculated transition matrices for these measures of service level as before and again found a high degree of persistence for all the measures. Table 3 shows the measure for Glas in 2001 and 2002 and the implied transition probabilities conditional on where Welsh Water started in 2001 drawn from the whole sample of transitions for all WaSCs or all WoCs and WaSCs.

Table 3

Ofwat's service level transition probabilities

	Glas		Probability of: [WaSCs only]		Probability of: [WaSCs and WoCs]	
	2001	2002	Same level	Moving down	Same level	Moving down
D2	2	2	87.5%	0%	84.62%	0%
D3	3	3	84.16%	10.53%	92.31%	3.85%
D6	3	3	100%	0%	100%	0%
D7	3	3	100%	0%	96.88%	1.56%
D8	3	3	96.3%	3.7%	96.62%	3.08%
D5	1	1	40%	0%	-	-
D5a	2	3	66.67%	26.67%	-	-

In almost all cases Welsh Water's actual movements correspond to the greatest probability that that would have occurred without the shift from NP to NFP. We can loosely conclude that the change in ownership status has not brought any improvements in service level beyond that already expected. The exception being DG5 for which it did worse than expected and DG5a for which it performed better than expected.

Further, turning to the number of complaints Glas received, the NFP status has not brought improvement. The number of complaints per 1000 connections it received increased from 6.4 to 9.1 to 13 between 2000, 2001 and 2002 despite the average for the industry remaining at around 5. Finally, drinking water quality, as reported by the Drinking Water Inspectorate (DWI) is based on the average of mean zonal percentage

compliance for 17 key parameters. The firms are then divided into 3 categories: statistically significantly below average, not statistically significantly different from average, and statistically significantly above average. Welsh Water was regarded as being statistically significantly below average in 1996-1999 and in 2001 thereby suggesting that quality deteriorated in 2001.

Thus, with the limited information we have we can conclude that the conversion of Welsh Water into a NFP CLG does not appear to have provided any material benefits save for financial changes.

Network Rail

Although it is too early to be able to make a judgement on the impact of Network Rail, the structure of the industry appears to suffer from the same problems as Glas and in addition the government plays a far larger role in funding. The final demise of Railtrack began in April 2001, when the government agreed to grant £1.5bn and advance it £500m to cover a shortfall in freight income. In July 2001, John Robinson (Chairman) approached Stephen Byers (Transport Secretary) for an extra £2bn. Three possible options were considered to resolve the problem: (i) Project Ariel – a government plan to put Railtrack into administration and transform it into a NFP company; (ii) Project Rainbow - a four-year recovery plan at which point the government would be offered an equity stake; and (iii) re-nationalisation, although option this was not considered in any detail. On October 5, Byers rejected Project Rainbow and put Railtrack into administration. At this point it had debts amounting to £3.3bn.

Network Rail was formed in March 2002 and completed its acquisition of Railtrack in October later that year. It is a private NFP CLG owned by and accountable to members (the SRA, the industry (i.e. rail licence holders) and public interest members) with no financial or economic interest in it. Operating surpluses are to be re-invested. Remuneration of senior staff is based on performance indicators (safety, punctuality and capacity). Prior to being put into administration, the government had provided two-thirds of Railtrack's revenue and the government will continue to provide significant direct funds to Network Rail. In this respect Network Rail faces greater opportunities for expropriation since it is squeezed both at the purchaser and

funding side. Given the experience of Glas Cymru it is difficult to see how Network Rail will derive any greater benefit than Glas from its NFP status.

5.2 The UK Health Sector

NHS Background

The NHS is funded almost exclusively from general tax revenues. Prior to 1991, the NHS budget for hospital care was allocated to regional and district health authorities (RHAs and DHAs) by the Department of Health (DoH). They in turn distributed the funds among public hospitals that were owned and managed by DHAs (Gray and Normand, 1995). April 1991 witnessed the establishment of the NHS Internal Market through the introduction of contractual funding designed to separate the provider and purchasing roles for health services within NHS to encourage efficiency through "managed competition" among both public and private providers. Further, NHS Trusts were supposedly given autonomy from the government over management. However, the effectiveness of the Internal Market was called into question as early as 1995 with health ministers being "increasingly concerned that money had not followed the patient and that the contracting system was carrying high transaction costs." (Propper, Burgess and Abraham, 2003). Thus, the government decided to promote cooperation rather than competition for funds and abolished the NHS Internal Market in April 1999. Instead, they sought to reform the system through *The NHS Plan* published in July 2000.

The intent of *The NHS Plan* is twofold: that of investment through sustained increase in funding and that of reforming the system around the needs of the patient. Two of the main components of the latter involve 'shifting the balance of power' from Whitehall to the frontline and 'reforming NHS financial flows'. As part of this, in April 2002, the structure of the NHS was modified to "devolve power from the Government to the local health service"[21] by giving Primary Care Trusts (PCTs) greater authority over resource allocation between all providers of hospital, community and primary care, as well as decentralising decision-making and budget allocation within organisations themselves by empowering frontline staff and patients.

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[21] See DoH (2002a) Shifting the Balance of Power: The Next Steps.

This has resulted in the abolishment of the previous NHS Executive Regions and Health Authorities, and the creation of four regional Health and Social Care Directorates (HSCD) and 28 Strategic Health Authorities (StHA).

Each of the HSCDs, which are part of the DoH, manages the overall financial performance of the NHS in London, the Midlands and Eastern, the North and the South. For 2003-2004, they will assign operational ("block") capital directly to PCTs and NHS Trusts, as well as allocating strategic ("discretionary") capital to the StHAs in accordance with their 3-year Franchise Plans. The StHAs will in turn distribute their strategic capital among the PCTs and NHS Trusts. The HSCDs are also responsible for performance managing the StHAs, setting direction and securing resources, and have the power to intervene where necessary. Thus, the StHAs are accountable to the HSCDs and in turn, their central duty is to hold to account PCTs and NHS Trusts through agreeing and reviewing local delivery plans and intervening to secure improved performance. The 302 PCTs, which are generally based on whole electoral wards, will, subject to legislation, be directly assigned 75% of the total NHS budget by the DoH as of 2004. They are charged with arranging and securing the provision of care for their local population whether directly or through commissioning. The NHS Trusts work in partnership with the PCTs to formulate and implement local service delivery plans.

Ultimately, instead of commissioning on historic funding patterns and locally negotiated annual increases for a whole range of services (i.e. block agreements), PCTs will contract on volume using the standard national price tariff taking into account case mix and regional variation in costs of service delivery (i.e. service level agreements). Further, providers will be paid only for services actually delivered.

The motivation behind the development of a standard price tariff was to encourage PCTs to concentrate on the quality and volume of care whilst minimising transaction costs associated with local price negotiations. The initial tariffs for 2003/4 will be based on 2001/02 NHS reference costs for various treatments, with separate tariffs for emergency vs elective treatment but not for inpatient vs outpatient care. The tariff will be adjusted for case mix using Healthcare Resource Groups (HRGs), which are similar to Diagnosis Related Groups (DRGs) in the US. Further, the tariff will take

into account inflation and regional variations in the cost of provision in terms of staff, land and buildings. The former will be adjusted downwards for expected overall efficiency gains that are targeted at 1% per annum for three years from 2003/04. The latter will be calculated using the same formula, the Market Forces Factor (MFF), which is currently used to allocate resources to StHAs and, from 2003/4 to PCTs.[22]

Where the level (i.e. volume) of service delivered by a provider falls short of what was set out, PCTs will be able to claw back the corresponding funds on a quarterly basis. These funds will be redirected to providers who have delivered higher than originally contracted levels of activity. Finally, the move to the national tariff will be phased in over the next five years.

Foundation hospitals

Existing NHS Trusts were supposed to guarantee self-governing status but their legal status – with direct accountability to Ministers – meant that the government continued to run the NHS. Both PCTs and NHS Trusts are directly accountable to the Secretary of State for Health through Strategic Health Authorities whereas FHs will be legally sovereign from the Secretary of State. Instead, they will be monitored by a specifically created Independent Regulator and held to account through the commissioning process.

Each FH is to be established as a public benefit corporation, which is somewhat akin to the CLG form adopted by Network Rail and Glas. Its assets will be transferred from the State to its members who will be composed of local people, staff and patients. The first group will make up the majority of the Board of Governors, which will also contain at least one elected representative from the FH's staff, a commissioning PCT and a university if the FH includes a medical or dental school. The Board of Governor's responsibility will be to monitor the Board of Directors who will be in charge of the day-to-day operation of the FH. In addition, the FH must establish an audit and a remuneration committee.[23]

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[22] See DoH (2002b) Reforming NHS Financial Flows: Introducing payment by results.

[23] See House of Commons (2003) Health and Social Care (Community Health and Standards) Bill

FHs will be given increased financial freedoms in three key areas. They will be allowed to retain operating surpluses as well as proceeds from asset disposals of provided these are used towards the provision of NHS services. However, they will not be able to dispose of regulated assets without the regulator's approval. Further, FHs will be able to access capital from public and/or private sector sources subject to their annual prudential borrowing limits as set by the Independent Regulator in accordance with the Prudential Code. They will only be permitted to borrow against unregulated assets and revenue streams such as those relating to retail premises, general amenities and other non-clinical facilities. New legislation will be enacted to prevent assets and surpluses from being paid out as dividends or bonuses to its members but used instead to provide core NHS services. Thus, there are still constraints on FHs' ability to raise finance independently of the State.[24]

FHs will be similar to existing NHS Trusts in terms of their contractual obligations. PCTs will commission these services from FHs in much the same way as other NHS Trusts (i.e. by negotiating service level agreements). However, because FHs will not be directly accountable to the State, these service agreements will have to be legally binding. They are expected to cover longer periods of 3 years and should specify the range, volume, and cost of services to be provided; in addition to incorporating penalty clauses that will allow PCTs to claw back funding where certain targets are not met.

As with NHS Trusts, FHs will also be permitted to contract with private patients and organisations on a subset of non-NHS clinical services. However, this contracted income will be limited by a license condition to a fixed fraction of total income. Thus, their primary source of income will be the afore-mentioned agreements with PCTs. The price that they will be able to charge for clinical services will be increasingly based on a standard national tariff, which will be introduced in 2003/04 and become fully operational by 2007/8. Other sources of income available to FHs with respect to funding for training and education, as well as for large capital projects will be the same as that accessible by other NHS Trusts. The former will still be negotiated with

[24] See DoH (2002c) A Guide to NHS Foundation Trusts.

StHAs and higher education institutions, and the latter will still be secured through the Private Finance Initiative.

The use of national tariffs instead of locally negotiated annual increases helps limit the possibility of expropriation at the individual unit level and in this respect the effect of NFP in FHs appears to be more robust than in the context of Glas or Network Rail. There are limitations that may impact on the retention of donated labour. Where targets are not met then there is scope for claw back and, unless there are strict rules, this will enable a degree of specific treatment. The three-year service agreements may also impact on the retention of donated labour. Exploitation potential appears to be strongest when labour is donated at a 'macro' level. That is, if labour donations are made across larger units than individual FHs, e.g., working agreements negotiated at higher levels, then the problem of expropriation cannot be avoided. But, as indicated above, in general it appears that NFP status carries more scope for positive benefits in this arena of the public private interface than where we are dealing with utility type companies. In the case of FHs, however, we are really interested in comparing the NFP status with state ownership not a FP alternative. For this reason it is necessary to consider what may have happened to donated labour under the old system. The current changes shift power away from the centre but this is a general policy, not one associated with the creation of NFP FH. Therefore, it is not obvious that FHs will lead to more donated labour than will arise from hospitals that do not have this status. As indicated in the theory section it may be the case that the powerful role of the government is such that the system cannot improve on the donated labour issue. That is, if employees, whether in state or NFP hospitals, believe that aggregate donated labour will be expropriated then it will not be forthcoming. Creation of NFP FHs will not help to sidestep this problem.

PPPs

Finally, it is useful to consider the impact of PFI/PPP structures in the sector (for the economics of PPPs see Grout (1997, 2001, 2003a, 2003b) and Grout and Stevens (2003)). There is a common view that PPPs work well in 'infrastructure heavy/ employee light' structures and less well in people intensive sectors. The expropriation approach we have advocated in this paper may help to provide a formal analytical framework to understand what is happening. Where donated labour is a significant

issue and where the activity is labour intensive then the use of private money brings considerable disadvantages, through the impact of potential expropriation on labour effort. PPPs in the health sector are quite likely candidates to fall into this category. In contrast, projects where there is likely to be little donated labour and which are infrastructure heavy, such as roads, are unlikely to suffer negative effects of the shift to a FP structure and so may be able to capture the benefits of the cost conscious FP structures without losing any donated labour in the process. Note, there is also the purchaser problem that adds to the above difficulties where there is potential donation of labour. Anecdotal evidence suggests that PPPs work well in transport and have been far more problematic in health. Although the reasons are complex, the approach we have adopted in this paper may go some way to providing an analytical explanation for this evidence.

6. Conclusions

The aim of this paper is to assess the role of donated labour and not-for-profit entities at the public private interface. After discussing what a NFP enterprise is we look at the underlying theory of NFP institutions. The fact that NFP companies are able to precommit themselves not to expropriate donated labour is identified as a primary justification of the NFP model. We also emphasise the role that purchasers play in the expropriation problem and suggest that this is a particular concern for institutions at the public private interface. After summarising the empirical literature we provide a brief case study of Glas Cymru and show that it falls foul of the purchaser problems in that the structure makes it hard to avoid expropriation of donated labour. Although there is limited empirical evidence investigation of what is available suggests that the shift from FP to NFP has had no significant effect on the company. Finally, we address the issue of Foundation Hospitals. We suggest that there is more hope that the NFP status will prove beneficial but raise some reservations. Finally, we briefly consider the role of PPP in the light of donated labour and suggest that it may help to explain the commonly held view that PPPs work well in ‘infrastructure rich’ sectors such as transport and may work less well in employee intensive sectors such as health.

References

Becker and Sloan (1985) Hospital Ownership and Performance. *Economic Inquiry*, 23(1), 21-36.

Bennet, J., Iossa, E. and Legrenz, G. (2003) The Role of Commercial Non-Profit Organisations in the Provision of Public Services, *Oxford Review of Economic Policy*.

Blau, D. M. and Mocan, H. N. (2002) The Supply of Quality in Child Care Centers. *Review of Economics and Statistics*, 84(3), 483-496.

Cohen, J.W. and Spector, W.D. (1996) The Effect of Medicaid Reimbursement on Quality of Care in Nursing Homes. *Journal of Health Economics*, 15, 23–48.

Cutler and Horwitz (2000) Converting Hospitals from Not-For-Profit to For-Profit Status: Why and What Effects? In: Cutler, D. (Ed.), *The Changing Hospital Industry: Comparing Not-For-Profit and For-Profit Institutions*, University of Chicago Press, Chicago.

Department of Health. (2002a) *Shifting the Balance of Power: The Next Steps*. January 2002

Department of Health. (2002b) *Reforming NHS Financial Flows: Introducing payment by results.* October 2002

Department of Health. (2002c) *A Guide to NHS Foundation Trusts*
December 2002

Drinking Water Inspectorate *Drinking Water Assessment of Overall Quality and Operational Performance*

Duggan, M. G. (2000) Hospital Ownership and Public Medical Spending. *Quarterly Journal of Economics*, 115(4), 1343-1373.

Ettner, S. L. and Hermann, R. C. (2001) The Role of Profit Status under Imperfect Information: Evidence from the Treatment Patterns of Elderly Medicare Beneficiaries Hospitalized for Psychiatric Diagnosis. *Journal of Health Economics*, 20(1), 23-49.

Ferrier and Valdmanis (1996) Rural hospital performance and its correlates. *Journal of Productivity Analysis*, 7, 63–80.

Francois, P. (2000) 'Public Service Motivation' as an Argument for Government Provision. *Journal of Public Economics*, 78(3), 275-299.

Frank, R. H. (1996) What Price the Moral High Ground? *Southern Economic Journal*, 63(1), 1–17.

Frank, R. G. and Salkever, D. S. (1994) Nonprofit Organisation in the Health Sector. *Journal of Economic Perspectives*, 8(4), 129-144.

Glaeser, E. L. (2002) The Governance of Not-For-Profit Organizations. NBER working paper 8921.

Glaeser, E. L. and Shleifer, A. (2001) Not-For-Profit Entrepreneurs. *Journal of Public Economics*, 81(1), 99-115.

Glas Information Memorandum, 4 May 2001.

Gray, B. H. and McNerney, W. J. (1986) For-Profit Enterprise in Health Care: The Institute of Medicine Study. *New England Journal of Medicine*, 314 (23), 1523–1528.

Gray, A. M. and Normand, C. (1995) Hospital Financing in England. In U.S. Congress, Office of Technology Assessment, Hospital Financing in Seven Countries, OTA-BP-H-148. Washington, DC: U.S. Government Printing Office.

Grout, P.A. (1984) "Investment and wages in the absence of binding contracts: a Nash bargaining approach". *Econometrica.*

Grout, P.A. (1997) "The Private Finance Initiative: an economic assessment" *Oxford Review of Economic Policy,* 13, no.4.

Grout, P.A. (2001) 'Is the Private Finance Initiative a Good Deal?' *Markets and Public Organisation, Issue No 6.*

Grout P.A. (2003a) 'Public and private sector discount rates in public-private partnerships' *Economic Journal*

Grout, P.A. (2003b), Is There Real Missing Risk in Public Private Partnerships?, *Public Private Finance*

Grout, P.A., I.D. Jewitt, C. Pong and G. Whittington (1994) "'Auditor professional judgement': implications for regulation and the law" *Economic Policy*

Grout P.A. and M. Stevens (2003) 'Financing and Managing Public Services – An Assessment' *Oxford Review of Economic Policy* (forthcoming)

Grout P.A. and Yong M.J. (2003) Donated Labour, Not-for-Profits and Purchaser Power. *CMPO Discussion Paper*.

Hansmann, H. B. (1996) The Ownership of Enterprise. Cambridge, MA: Belknap Press of Harvard University Press.

Hart, O.D., Shleifer, A. and Vishny, R. W. (1997). 'The Proper Scope of Government: Theory and an Application to Prisons', *Quarterly Journal of Economics*, vol. 112, pp. 1126-61.

Heinrich, C. J. (2000) Organizational Form and Performance: An Empirical Investigation of Nonprofit and For-Profit Job-Training Service Providers. *Journal of Policy Analysis and Management*, 19(2), 233–261.

Hirth, R.A. (1993) Consumer Information and Ownership in the Nursing Home Industry. Unpublished Ph.D. dissertation, University of Pennsylvania.

Holtmann, A.G. and Ullmann, S.G. (1991) Transactions Costs, Uncertainty, and Not-For-Profit Organizations. *Annals of Public and Cooperative Economy*, 62, 641–653.

House of Commons (2003) Health and Social Care (Community Health and Standards) Bill, Bill 70, London: The Stationary Office.

Kendall and Knapp (1997) The United Kingdom. In Salamon, L. and Anheier, H. Defining the Nonprofit Sector: A Cross National Analysis', 256-258.

Malani, A., Philipson, T. and David, G. (2002) Theories of Firm Behavior in the Non-Profit Sector: A Synthesis and Empirical Evaluation, NBER paper 0209.

Mark, T.L. (1996) Psychiatric hospital ownership and performance: Do nonprofit organizations offer advantages in markets characterised by asymmetric information? *Journal of Human Resources*, 31(3), 631–649.

Marmore, T. R., Schlesinger, M. and Smithey, R. W. (1986) A New Look at Nonprofits: Health Care Policy in a Competitive Age. *Yale Journal of Regulation*, 3(2), 313–349.

McClellan and Staiger (2000) Comparing Hospital Quality at For-Profit and Not-For Profit Hospitals. In: Cutler, D. (Ed.), The Changing Hospital Industry: Comparing Not-For-Profit and For-Profit Institutions. University of Chicago Press, Chicago.

Mocan, H. N. (1997). Cost functions, efficiency, and quality in day care centres. *Journal of Human Resources*, 32(4), 861-891.

Morris, J. R. and Helburn, S. W. (2000) Child Care Center Quality Differences: The Role of Profit Status, Client Preferences, and Trust. *Nonprofit and Voluntary Sector Quarterly*, 29(3), 337-399.

Nyman, J. A. and Bricker, D. L. (1989) Profit Incentives and Technical Efficiency in the Production of Nursing Home Care. Review of Economics and Statistics, 71(4), 586-594.

Ofwat '*Levels of service for the water industry in England and Wales*'

Ofwat "*Water and Sewerage Service Unit Costs and Relative Efficiency*"1997-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002.

Ofwat (2001a) *The Proposed Acquisition of Dwr Cymru Cyfyngedig by Glas Cymru Cyfyngedig: A Position Paper by Ofwat.*

Ofwat (2001b) *The Proposed Acquisition of Dwr Cymru Cyfyngedig by Glas Cymru Cyfyngedig: Proposed Licence Modifications by Ofwat*.

Pauly, M. (1987) Nonprofit Firms in Medical Markets. *American Economic Review*, 77(2), 257-262.

Preston, A. (1988) The Effects of Property Rights on Labour Costs of Non-Profit Firms: An application to the Day Care Industry. *Journal of Industrial Economics*, 36(3), 337-350.

Private action, Public Benefit: A Review of Charities and the Wider Not-For-Profit Sector; 2002.

Propper, C., Burgess, S. and Abraham, D.K. (2002) Competition and Quality: The NHS Internal Market 1991-1999. *CMPO Discussion Paper.*

Roomkin, Myron and Burton A. Weisbrod (1997), ‘‘Managerial Compensation in For-Profit, Nonprofit, and Government Hospitals,’’ Working Paper, Department of Economics, Northwestern University.

Rose-Ackerman, S. (1996) Altruism, Nonprofits, and Economic Theory. *Journal of Economic Literature*, 34(2), 701-728.

Rundall and Lambert (1984) The Private Management of Public Hospitals. *Health Services Research*, 19(4), 519–544.

Schlesinger, M., Gray, B. and Bradford, E. (1996) Charity and Compassion: The Role of Nonprofit Ownership in a Managed Health Care System. *Journal of Health Politics, Policy and Law*, 21, 697–751.

Sloan, F. A., Picone, G. A., Taylor, D. H. and Chou, S. Y. (1998) Hospital Ownership and Cost and Quality of Care: Is there a Dime’s Worth of Difference? *NBER Working Paper* No. W6706.

Weisbrod, B. A. (1997) The Future of the Nonprofit Sector: Its Entwining with Private Enterprise and Government, *Journal of Policy Analysis and Management*, 16(4), 541-555.

Weisbrod, B. A. (1983) Nonprofit and Proprietary Sector Behaviour: Wage Differentials Among Lawyers. *Journal of Labour Economics*, 1(3), 246-263.

Wilson, G. W. and Jadlow, J. M. (1982) Competition, profit incentives, and technical efficiency in the provision of nuclear medicine services. *The Bell Journal of Economics*, 82(2), 472-482.

Woolhandler, S., Himmelstein, D. U. (1997). Costs of Care and Administration at For-Profit and Other Hospitals in the United States. *New England Journal of Medicine,* 336, 769-774.