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Politics and Markets: the case of UK Municipal Waste Management

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Abstract

From a service owned and provided by local government, UK municipal waste management has become one increasingly provided by large multinational companies. A series of political decisions laid the basis for the shift. It began with the programme of deregulation, contracting out and privatisation introduced by the Conservative governments of the 1980s. New Labour continued this process with the cumulative result that a new market in municipal waste exists today. Its development has also influenced the shape of the already existing wider waste management market with the result that this too has seen a process of concentration. A vertically integrated sector under municipal ownership was broken up and now appears to be heading for a vertical reintegration of the sector on the basis of private sector ownership. With the UK government's rejection of a public sector option, it is obliged to make a series of complicated interventions to attempt to further shape the market in order to meet environmental policy goals. The reliance on the market illustrates the difficulties in implementing major policy shifts through that medium.

Keywords

United Kingdom
Waste management
Privatisation
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Globalisation
Concentration

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Politics and Markets: the case of UK Municipal Waste Management

1 Introduction

In the UK, municipal waste management is like a referee at a sports event – nobody notices until something goes wrong. But when that happens, it grabs the headlines. During the ‘Winter of Discontent’ in 1978/79 just before the fall of the Callaghan government and the election of Mrs Thatcher’s Conservatives, pictures of uncollected piles of rubbish in the streets served as media shorthand for the collapse of government control and the descent into chaos.

This paper makes two main contributions. The first is to outline the development of the municipal waste management market in the UK over the last twenty years; the second is to illustrate the interplay between politics and the market through the prism of one public service. It argues that the connection between UK municipal waste management and politics is not just as an episodic indicator of social disorder. Particularly over the last twenty years, politics has played a critical role in changing the structure, actors and priorities of the sector. A series of political decisions laid the basis for the reshaping of municipal waste management in the UK from a sector almost completely owned and run by municipal authorities into a new market in which private sector companies have become increasingly active.

This paper examines those political decisions and the legislation at both UK and European level which influenced the restructuring. It considers the intentions (social, political and environmental) of the legislative changes and their actual cumulative impact. It shows how the changes in the sector from an industry dominated by municipal provision into one opened up to the private sector, led to the entry of foreign multinationals and a rapid growth in concentration in the industry.

The interaction of state and market in one sub-sector of the economy (municipal waste management) not only restructured the sub-sector but acted as a lever to reshape the wider UK waste management sector. The municipal waste management sector is relatively small – both in terms of finance and employment. However it is relevant to a wider discussion of public sector reform in the UK for three reasons: the high profile asset sales of state industries and utilities of the 1980s and 1990s are effectively over and have been replaced by various forms of private sector provision of public services and municipal waste management is just such an example of a public service that has been opened up to the market; the reforms have been in place for long enough to observe developments following the creation of a new market; and, it is a sector in which the government is trying to indirectly manage major policy objectives. The paper begins by placing the industry in its present day context in terms of the generation of waste in Britain. It then examines the developments within the sector over the last two decades, highlighting the drivers of change, and analysing the effects of political intervention. The paper examines how the sector was first broken up and then, under the impact of market forces, how it has begun to reintegrate under private sector ownership. It concludes with a review of the interplay between state and market and how the government is attempting to direct the development of the sector to meet its environmental goals.

2 Municipal Waste Management in the UK today

The municipal waste sector is a sub-sector of the larger waste management industry. This is an area in which there are several problems of definitions. 'Waste' is a social construct influenced by time and place. What is waste today may not be tomorrow, and what is thrown away in the UK may not be in the Philippines. It is complicated further by the fact that it is reported in terms of its source (such as household, industrial or commercial waste), the type of material, and in terms of processes or characteristics (Hicks et al., 2004).

The EU Framework Directive on Waste (OJ L 78, 1991) defines waste as 'any substance or object that the holder discards, or intends or is required to discard'. The UK Environmental Protection Act 1990 uses the term 'waste' to cover most unwanted materials, including any scrap material, effluent or unwanted surplus substance or article that requires to be disposed of because it is broken, worn out, contaminated or otherwise spoiled. Explosives and radioactive wastes are excluded (Department for the Environment, Food and Rural Affairs, DEFRA, 2005).

In the UK, household waste is defined by the Environmental Protection Act 1990 as including waste from household collection rounds, waste from services such as street sweeping, collection of bulky waste, hazardous household waste, household clinical waste, separate garden waste and litter, waste from civic amenity sites and wastes separately collected for recycling or composting through bring/drop off schemes, kerbside schemes and at civic amenity sites (Emery et al, 2003; DEFRA, 2005). Local authorities have a statutory duty to ensure that household waste is collected and disposed of. (Bello and Szymanski, 1996).

Municipal waste is a hybrid. The EU Landfill Directive (Article 2(b)) defines 'municipal waste' as:

'waste from households, as well as waste which, because of its nature and composition, is similar to waste from households' (OJ L 182, 1999).

The UK government has interpreted this to encompass all waste under the control of local authorities (DEFRA, 2004b). This includes household waste and any other wastes collected by a local authority (including its agents) such as municipal parks and gardens waste, beach cleansing waste, commercial or industrial waste and waste resulting from the clearance of fly-tipped materials (DEFRA, 2005). Most local authorities also collect some commercial or industrial waste, and although it is usually a small proportion of the waste that they deal with, it is categorised as municipal waste (DEFRA, 2004b).

So, of the estimated 335 million tonnes of waste produced each year in the UK, about 220 million tonnes of this is controlled waste (household, industrial and commercial, including construction and demolition wastes) (DEFRA, 2007). In 2005/06, total municipal waste in England amounted to 28.7 million tonnes (of which 89% or 25.5 million tonnes was household waste) - this equates to about 505 kilos of household waste per person per year (DEFRA, 2007a).

Overall, municipal waste is only about 9% of the total waste stream (DEFRA, 2007) but it has a significance beyond this (Hazell, 2005) for several reasons: a lower proportion of it is recycled than other waste; it is regarded as a major contributor to the production of gases that affect global warming; it continues to increase at a rate that is regarded as unsustainable; and, there is a limit to the amount of landfill space available. Because of these environmental concerns, it

is the focus of the EU Landfill Directive which requires the UK to reduce the amount of biodegradable municipal waste that is landfilled.

In 2005/06 in England, 17.8 million tonnes of municipal waste were landfilled (62%), 10% burned in incinerators to produce electricity and 27.1% recycled or composted (DEFRA, 2007a). By 2020 the UK has a target of sending just 6.39 million tonnes of municipal waste direct to landfill (Hansard, 2005), so there will have to be a massive increase in the tonnage of waste recycled, composted, incinerated or treated.

The governance of municipal waste in the UK is not straightforward. Municipal waste management has been under the control of local councils since the 1875 Public Health Act. However, as it is a devolved issue it is the responsibility of the devolved administrations in Scotland, Wales and Northern Ireland, and the role of local government varies slightly in the different parts of the UK. DEFRA is responsible for setting waste policy in England and the Department for Communities and Local Government (DCLG) for funding and the regulation of local authorities. The regulation of waste is a function of the Environment Agency in England and Wales (a part of central government) and the Scottish Environmental Protection Agency in Scotland. In England responsibility is usually split: waste collection is dealt with by district councils (designated as Waste Collection Authorities, WCAs) while county councils have responsibility for waste disposal (Waste Disposal Authorities, WDAs). However, the London borough councils, and the metropolitan and unitary councils in England, Scotland and Wales are responsible for all services. In Northern Ireland, the district councils are also responsible for all services. This split between collection and disposal is unique in Europe to England and is increasingly seen as a problem by the Government in its efforts to coordinate action to meet its targets.

Despite its relatively small size, the municipal waste sector is financially important. Between 2001-02 and 2005-06 waste spending by English local authorities increased from £1.65 billion to £2.44 billion (DEFRA, 2007) equivalent to about 1.5 % of total expenditure (Hazell, 2005). It is expected to rise by another 9% in 2006/07 to £2.6 billion (Local Government Association, 2007). Expenditure on waste is funded through the Environmental, Protective and Cultural Services allocations of the revenue support grant, council tax receipts, Private Finance Initiative (PFI) credits and DEFRA's Waste Performance and Efficiency Grants. This paper concentrates on England (unless specified) as the largest component of the UK. The issues raised in relation to England are broadly the same as those throughout the UK.

3 Drivers of change in UK municipal waste management

The developments in municipal waste management in the UK are linked with two separate movements: the wider push to extend the role of private companies and introduce markets into the public sector; and growing environmental concerns driven by pressure on the UK from the European Union. Both are highly politically charged, both have spawned various legislative action and both have impacted on the other, together transforming the way municipal waste management operates. This section briefly identifies the key legislative landmarks in that process – both at European and UK level.

European environmental legislation: the Landfill Directive

European Union waste strategy has been a key influence on the UK. The most important directives relating to waste management are the Waste Management Framework (75/442/EEC)

and, because of the UK's reliance on landfill as the prime method of disposal, the Landfill of Waste Directive (99/31/EC) (EU, 2005). It came into force on 16 July 2001 with the declared aim of preventing, or reducing as far as possible, the negative effects of landfilling waste on the environment and on human health. The Directive sets mandatory targets for the reduction of biodegradable municipal waste sent to landfill. After taking account of the UK's derogations under the directive, the targets are:

- By 2010 to reduce biodegradable municipal waste landfilled to 75% of the 1995 volume;
 - By 2013 to reduce biodegradable municipal waste landfilled to 50% of the 1995 volume;
 - By 2020 to reduce biodegradable municipal waste landfilled to 35% of the 1995 volume.
- (OJ L 182, 1999)

The Directive also bans the landfilling of tyres, liquid waste and infectious clinical waste and bans the co-disposal of hazardous and non-hazardous waste. A number of UK policy mechanisms have been set up to assist in the shift from landfill. A landfill tax escalator raises the cost of landfilling annually. Each local authority is set an annual limit of the amount of biodegradable municipal waste that they can send to landfill under the Landfill Allowance Trading Scheme (LATS). Every tonne over the limit triggers a fine unless the authority can buy additional allowances from authorities with a surplus (slightly different systems operate in Wales, Scotland and Northern Ireland). English councils have also been set mandatory recycling and composting targets.

UK legislation

Several pieces of UK legislation have influenced UK municipal waste management – both under the Conservative administrations up until 1997, and since under Labour. Some of the legislation simply transposed European directives into UK law. Of more interest for the purposes of this paper is that which relates to government attempts to restructure the municipal waste sector and strengthen the market. The three most important initiatives are two Acts passed under the Conservatives (the Local Government Act 1988 and the Environmental Protection Act 1990) and Labour's Local Government Act 1999, which covered Best Value.

The Conservative push to involve the private sector

Although influenced by principal-agent and public choice theories and enthusiastically embracing both contracting out and its cousin privatisation, the Conservative governments of 1979-97 imposed their own pragmatic limits on their crusade. Happy to sell off state owned enterprises and to contract out support services in the public sector, they stopped short at what was seen as the politically risky option of large-scale private sector involvement in the clinical side of the National Health Service or core activities in other public services (ironically, it took a Labour government to make that step).

Not only was contracting out of public services in line with the latest management consultancy orthodoxy (Peters and Waterman, 1982; Osborn and Gaebler, 1992), but it also fitted with the government's desire to cut public spending to enable tax cuts and weaken the unions (local government was a well-organised sector). It struck at the core of what Mrs Thatcher saw as the twin props of 'socialism' - public ownership and strong unions. She described privatisation as:

... one of the central means of reversing the corrosive effects of socialism... Just as nationalisation was at the heart of the collectivist programme by which Labour governments sought to remodel British society, so privatisation is at the centre of any programme of reclaiming territory for freedom (Thatcher, 1993).

The doctrine of privatisation and the contracting out of public services is now seen as one of the defining features of late 20th century British Conservatism. But it began very modestly. As Shaoul (1997) notes, in 1979 there was not a coherent and explicit set of objectives, these gradually evolved. When Mrs Thatcher first came to power there was no mention of competitive tendering or contracting out in the Conservative manifesto of that year. It simply claimed that 'the reduction of waste, bureaucracy and over-government will [also] yield substantial savings', referred to the waste of 'local direct labour schemes' and pledged to 'provide safeguards against unfair competition from direct labour' (Conservative Party, 1979).

The 1983 election manifesto contained references to tendering for services in the National Health Service (NHS), central government, local government and transport, but still referred to encouraging rather than requiring local authorities to contract out (Conservative Party, 1983). At the time, the *Economist* noted: The real purpose of contracting out... is as much to weaken the unions' monopoly grip as to save money' (17 September 1983, cited in Sachdev, 2001).

What may have begun as a pragmatic way of meeting a number of different but related objectives (cutting public expenditure, reducing staffing levels in the public sector, weakening public sector unions) came to be seen as part of the emergence of neo-liberal ideology at governmental level in the UK (Grimshaw et al, 2002). Buckland (1987) describes contracting out as one of the then Conservative government's 'three interlocking mechanisms' used in its attempt to shift the boundary between public and private sector activity (the other two being asset sales of nationalised industries and the transfer of property ownership through council house sales).

As Fairbrother and Poynter (2001) commented, public service reform had two related themes: the introduction of new sets of market relations and new management approaches designed to make these new market relations work. The Conservatives applied this approach throughout those public services that were not appropriate for asset sales (for example, Compulsory Competitive Tendering (CCT) and the internal market in the NHS; Local Management of Schools and CCT in local government; contracting out, the Financial Management Initiative and Next Steps Agencies within the Civil Service; and the Private Finance Initiative (PFI) across the public services). There is no evidence that ministers deliberately aimed for and engineered a situation which would result in the entry of foreign multinationals and the rapid concentration of the waste management sector. On the other hand, despite the rhetoric about encouraging SMEs, neither is there any evidence that they were too upset at this outcome.

Local Government Act 1988

In local government, the most significant initiative was CCT. Although it eventually applied to a wide range of municipal services, it was first introduced for construction, maintenance and highways work under the Local Government, Planning and Land Act 1980. It was later extended to other services. As Brown et al (2007: 616) point out, refuse collection is often regarded as the 'quintessential public service ripe for contracting' because it involves few specific assets, and has tasks, outcomes and outputs that are relatively easy to identify. So it

was no surprise that the Local Government Act 1988 extended CCT to blue collar services such as refuse collection and ground maintenance.

By this time some Conservative ministers had a much clearer view of where this policy should lead. Nicholas Ridley said:

I can foresee a much more diverse pattern of provision in the future by a variety of different agencies working alongside local authorities. The role of the local authority will no longer be that of the universal provider. But it will continue to have a key role in ensuring that there is adequate provision ... (Ridley, 1988).

Under CCT, designated services had to be put out to tender by local authorities. While the UK was not the only country to attempt to encourage a 'culture of competition' (Boyne, 1998), it is unusual in that it was the only OECD country to introduce a compulsory model of competitive tendering (Walsh and O'Flynn, 2000). In 1982 the Conservative government denounced ILO Convention No. 94 on Labour Clauses (Public Contracts), which required contracts to include clauses ensuring that pay and working conditions are not less favourable than those established for work of the same character in the trade or industry concerned. This was followed in 1983 by the abolition of the Fair Wages Resolution, which obliged contractors carrying out work for the public sector to abide by the wage rates of the equivalent public sector worker. The unions (Wing, 2003) saw this as a precursor to the introduction of CCT. It had effectively operated as a disincentive for contractors to undercut wages and conditions as a way to compete for contracts with in-house teams. Consequently, it also acted to dissuade contractors from bidding for public sector work more generally.

When the Local Government Act 1988 extended CCT, it meant that a municipal authority could only retain an in-house provision if its own Direct Labour Organisation (DLO) or Direct Services Organisation (DSO) won the tender in open competition. The tendering took place at fixed periods and was subject to national guidelines. It became unlawful for local authorities and other public bodies to use 'contract compliance'. Part II of the Act identified a series of 'non-commercial matters' that were not permitted to be considered in evaluating bids, including the following in section 17 (5):

The terms and conditions of employment by contractors of their workers or the composition of, the arrangements for the promotion, transfer or training of or the other opportunities afforded to, their workforces. (HMSO 1988)

Local authorities were not permitted to engage in 'anti-competitive behaviour'. This was interpreted as meaning that in awarding a contract, local authorities were not allowed to act in a manner having the effect, or intended or likely to have the effect, of restricting or preventing competition. The burden was on local authorities to demonstrate that they had taken steps to avoid having such an effect. So for example, they were expected to consult with the private sector on the packaging of contracts (OECD 2000). The Secretary of State had wide ranging powers to step in and act if contractors, 'the public', opposition councillors or the Secretary of State felt that there had been a breach of CCT rules, particularly if the contract had been awarded to the in-house provider (the DSO). DSOs were expected to break even thereby preventing them undercutting private sector contractors. There was (and is) no regulation of prices, nor of ownership of firms able to bid for tenders (OECD 2000).

Environmental Protection Act 1990

The other significant piece of legislation was the 1990 Environmental Protection Act. One of its provisions was that local authorities were obliged to reorganise their waste disposal operations into arms-length, wholly-owned Local Authority Waste Disposal Companies (LAWDCs). Waste disposal contracts had to be put out to tender and LAWDCs were obliged to compete for them with private sector companies. So, just as with refuse collection, waste disposal was separated and contractorised.

New Labour – Continuity not change

As Deakin and Walsh (1996) pointed out, under the Conservatives the market did not completely replace hierarchical control in the public sector although the balance shifted towards a contract-based service. To the disappointment of many of its supporters and the surprise of some academics (Boyne, 1998) the election of the new Labour government in 1997 saw a process of continuity and development rather than change. Shortly after the election, the new local government minister, Hilary Armstrong explained that although CCT was to end, there would be no wholesale return to public provision: 'Our approach to improve local services is a pragmatic one. What matters is what works. The form of service delivery must not be determined by ideology' (cited in CBI, 2004). This is a theme that is repeated throughout the Blair years, i.e. the Government is committed to a pragmatic, non-ideological approach of supporting 'what works' (Labour party, 1997). The Conservative initiatives identified by Deakin and Walsh (1996) – purchaser-provider split, development of contracts and quasi-contracts, and trading systems based on prices and user choice – all continued under Labour and have been developed further. In one of his first public speeches as Prime Minister, Tony Blair contrasted his objectives with those of his predecessors, saying that Government needed to be 'pragmatic and rigorous about what does and does not work', that New Labour would 'find out what works, and we will support the successes and stop the failures' (Blair, 1997). More recently, in a passage strongly reminiscent of the Conservative minister Nicholas Ridley, eighteen years earlier (see above), the current Secretary of State for Business, Enterprise and Regulatory Reform, John Hutton (2006), explained that:

government must be ever sharper and more adept at creating and managing contestable forms of service delivery. Alternative providers, whether in the private, public or third sectors, should be the norm, not the exception

What Le Grand and Bartlett (1993) called public service 'quasi-markets', continued - albeit with some amendments. This reinvention of government model (Osborn and Gaebler, 1992) around an 'enabling state' using markets and contracts has the state focus on its 'core' activity, leaving peripheral activities to the private or voluntary sector - 'sticking to the knitting' (Peters and Waterman, 1982). The language of new Labour is less hostile to the public sector and there is more public money available for investment. However, despite the talk of first, stake-holding (Hutton, W., 1995), and then partnership, the fundamental line of march remains the same: private sector solutions are required for public sector problems (Grimshaw et al, 2002).

Labour's relatively new enthusiasm for markets also allowed it to develop what Burnham (2001) describes as a governing strategy of 'depoliticisation', or the adoption of a rule-based system in contrast to a discretion-based or 'politicised' system of economic management. Such a strategy does not remove politics from the stage, but places 'at one remove the political character of decision-making' (Burnham, 1999) leaving the state with arms length control but with the

supposed benefit of being able to distance itself from the impact of the decision. Contracting out is a part of such an approach with a diminishing of direct state control of the provision of public services, the use of markets and reliance on semi-independent or independent regulatory or audit bodies. Public sector reform through competition and markets is now part of the received wisdom of both major UK parties. Although the details may be disputed, 'modernisation' is bipartisan. 'What matters is what works' (Blair, 1998) has joined the other clichés like 'steering not rowing' (Osborn and Gaebler, 1992) in the lexicon of public sector managers and politicians.

Best Value replaces CCT

The new Labour government ended the 'compulsory' element of Compulsory Competitive Tendering (CCT), replacing it with the Best Value system in the Local Government Act 1999, but contracting out has continued. The 1998 White Paper explained Labour's reasoning:

'... the current framework for service delivery has proved inflexible in practice, often leading to the demoralisation of those expected to provide quality services and to high staff turnover. Concentration on CCT has neglected service quality and led to uneven and uncertain efficiency gains. In short, this framework has provided a poor deal for local people, for employees, and for employers.' (Department of the Environment, Transport and the Regions, DETR 1998)

But it was the 'compulsory' element of CCT that appeared to distress Labour ministers rather than the contracting element, so its replacement – Best Value – retained contracting out as an essential component. The Best Value regime came into effect in England in April 2000. The arrangements were slightly different in the devolved government areas of the UK (Wales, Scotland and Northern Ireland). Under the new regime, Best Value Performance Indicators (BVPIs) - a national measure of performance - are set by central government, and national league tables of performance are then published. There are BVPIs for 90 local authority functions (covering about 25% of council services) including nine in waste (ODPM, 2003). The government defines Best Value as 'the duty of continuous improvement for local authorities as set by the Local Government Act 1999' (Office of the Deputy Prime Minister, 2005). Best Value has a wider reach than CCT, applying to all services. Although municipal authorities are no longer obliged to put designated services out to tender, they must seek continuous improvements in economy, efficiency and effectiveness. All services must be regularly reviewed (a 5 year cycle) using the 4 'C's' (DETR 1999):

- Challenge purpose
- Compare performance
- Consult community
- Compete with others

So although the *obligation* to tender has been removed, there remained a heavy emphasis on competition. Under new legislation currently going through Parliament (the Local Government and Public Involvement in Health Bill), there are likely to be some further changes. The government intends to:

relax those more prescriptive process requirements [such as BVPIs], whilst sharpening the focus on two key areas where best value has not had the impact envisaged – citizen engagement and competition.

(DCLG, 2006: 120)

Part of this will be 'to stimulate new markets in order to secure alternative provision and enable both commissioner and user choice in areas of local government which are currently uncontested or not fully contested' and to 'increase the capacity and competitiveness in existing supply markets' (DCLG, 2006: 145).

The Private Finance Initiative

The second mechanism of relevance was the revamped Private Finance Initiative (PFI). Having campaigned against PFI while in opposition, the new Labour government made a swift U-turn. After consultation with the private sector, the procedures were changed and PFI enthusiastically embraced. Ministers saw it as a painless means of financing public sector infrastructure investment without incurring debt on the government accounts. There remains some reluctance among local authorities because of its impact on revenue budgets (APSE, 2007). However, despite PFI attracting a great deal of opposition and controversy with critics arguing that it is an extremely expensive way of borrowing money (Pollock, 2004), it has played an important part in the construction of hospitals, prisons, schools and roads and now a growing role in the waste management sector.

4 The private sector enters municipal waste management

The various measures taken by the Conservative and Labour governments since 1988 served to create a market in municipal waste management and encourage the entry of private contractors. Different forms of privatisation contributed to, and ran in tandem with, a process of rationalisation and concentration in the UK waste management industry. Two other factors played a role in the reconfiguration of the market: the expansionist policies of the newly privatised water companies and the withdrawal of two very large American multinationals from the UK. At about the same time that CCT was brought in and local authorities obliged to divest themselves of their disposal operations, the newly privatised UK water companies began to look for acquisitions. Severn Trent bought Biffa in 1991; South West Water (Pennon) took over Haul Waste and, with later acquisitions, created Viridor Waste; and Yorkshire Water (Kelda) merged its waste interests into Waste Recycling Group (WRG) in return for a 46% share in the new WRG. Thames Water also had a waste management unit. The French parent companies of Sita and Veolia Environmental Services (respectively Suez and Veolia) are also primarily water companies, although they have extensive interests in both waste and energy.

According to Biffa, there were several reasons for this link between water and waste companies:

- common ground in operational and technical practices and considerable scope for joint ventures, especially in the field of liquid waste.
- in the interest of water companies to have influence and control over landfill and liquid waste disposal.
- the waste industry was moving into a more mature phase where the leading companies had the potential for an enormous gain in the share of a highly fragmented market

(Biffa, 2005a)

In an unconnected development at the end of the 1990s, the two dominant world waste management companies, Waste Management Inc and BFI both withdrew to North America,

selling their assets throughout the world – including those in the UK. Their successors remain enormous companies but today they no longer have a presence outside North America. BFI sold most of its non-North American operations to Sita in 1998. In the UK, Sita picked up BFI's operations and Biffa bought WMI's subsidiary, UK Waste.

Dr Cathy O'Brien, president of the Chartered Institution of Wastes Management, has commented that:

'the speed of change within the waste management world has been faster in the last 10 years than the previous 90 and the rate of change at the moment seems exponential' (IWM, 2001).

This continuing process of change has been particularly marked within municipal waste management with accelerated consolidation or shakeout. Several factors lie behind this, the most crucial being the introduction of CCT. Driven by a combination of privatisation measures and environmental legislation, the market favoured larger companies with the benefits of economies of scale. Many smaller firms became less viable and either went out of business, merged or were bought by the larger companies. These developments played out slightly differently in municipal waste collection and municipal waste disposal.

Waste collection

In UK municipal waste collection, there is competition *for* the market rather than *in* the market. In other words, residents do not face an array of contractors competing to collect their household waste. Rather a local monopoly is usually established on the basis of some form of competitive tender for the market. By contrast, there is competition *in* the market for commercial and industrial waste collection (at least for the larger customers). Waste collection is a more labour intensive operation than waste disposal, and it is common for collection tenders to attract a relatively small number of bids (usually up to six) while the bigger disposal contracts may attract larger numbers (OECD 2000). Compared to waste treatment and disposal, the regulatory burden of waste collection is light and entry costs are low. However, profit margins are also lower than treatment and disposal, usually achieving margins of 3% to 7%, for high value contracts up to 10% (OFT, 2006).

Before CCT, the private sector consisted of a large number of small firms mostly regionally based or specialising in a particular waste management expertise (Health and Safety Executive, 2004). For example, in 1974 one of today's main companies – Biffa – had just three depots, three landfills and under 100 employees (Biffa, 2005). Today Biffa has revenue of £742.7 million, 64 industrial and commercial, and 23 municipal collection depots, 42 treatment and operating centres, 32 landfill sites, over 1,500 collection vehicles and over 5,000 UK employees (Biffa, 2007).

In addition, very few local authorities contracted out refuse collection. In 1981 there were only two councils using private contractors (Maldon and Mid-Bedfordshire), while Southend contracted out that year and a further twenty nine followed in the period to 1986 (Domberger et al, 1986). Progress remained slow before the introduction of the legislation. Between 1981 and 1986 only 55 authorities even tendered their refuse services, and as late as 1984/85, only 38 out of 403 local authorities did so (Domberger et al, 1986). The introduction of CCT in 1988 made the UK waste management market very attractive for large multinationals. By 1994, the market for contracted out services in local government (including waste management) was

worth about £2.5 billion compared with a figure of just £50 million a decade earlier (Domberger, 1998). It is no coincidence that two French multinationals active in the waste management sector, Sita and Onyx*, entered the UK after the introduction of CCT (Sita entered in 1989 and Onyx began serious operations in the UK in 1990).

However, despite the impact of CCT, not all municipal collection has been contracted out. According to the government, as recently as 1998, the percentage of collection services delivered by Direct Service Operations (DSOs) was 90%, falling to 60% today (DCLG, 2006a). By weight, DSOs have 53% of municipal contracts (Office of Government Commerce, OGC, 2006) and this position does not seem to vary by region (Office of Fair Trading, OFT, 2006). A survey of local authorities carried out for the OGC revealed that in 2005, the key private sector players in municipal waste collection contracts were Onyx, Cleanaway (now owned by Veolia), Sita and Biffa. These four companies (now three) had 27% of the collection contracts by tonnage (OFT, 2006). Another three larger suppliers (Shanks, Viridor and WRG) also held significant contracts and the rest were distributed among SMEs, many of which hold a single collection contract with just one local authority (ibid).

Waste disposal

Waste disposal is capital intensive and contracts are generally longer than those for collection. This reflects the companies' desire for a return on their capital investment in infrastructure. Like collection, municipal waste disposal is also usually based on competition for the market through tendering. Profit margins for treatment and disposal contracts are typically between 7% and 10% and up to 15% for high value contracts (OFT, 2006).

The effect of divestment of municipal disposal

The Environmental Protection Act 1990 obliged local authorities to divest themselves of their waste disposal function and many initially formed arms-length Local Authority Waste Disposal Companies (LAWDCs) to take over this function. However, the pressure to sell these companies was intense and most waste disposal is now controlled by the private sector (Energie, 2002). UNISON (2003) estimate that by 1998, 21 of these LAWDCs had been taken over by private waste companies. Since then the trend has continued with almost all of the major waste management companies (including Biffa, Cory, Sita, Veolia Environmental Services, Viridor and WRG) buying up LAWDCs. The obligation on councils to divest themselves of waste disposal was repealed in October 2005 but today there are just nine LAWDCs left and for five of them the parent WDA is beginning or about to begin long term PFI procurements for waste disposal and two others are undertaking PPP procurements (DEFRA, 2005b).

Eight or nine suppliers manage around 78% of waste treatment and disposal by weight and most have a regional rather than a national presence (OGC, 2006). The Institution of Civil Engineers (ICE, 2004) estimate that before 2020 the UK will need between 1500 and 2300 new recycling, reprocessing, treatment and disposal facilities if it is to meet its obligations under the Landfill Directive for diversion of biodegradable municipal waste from landfill. This could cost between £10bn and £30bn. ICE told the House of Commons Environment, Food and Rural Affairs Committee (2005) it was sceptical as to whether the waste management industry had the capacity for that level of investment. A study carried out for DEFRA which examined the

* Onyx changed its name to Veolia Environmental Services in 2006

experience of other European countries, noted that barriers to investment had 'often been overcome by the waste management services being financed through higher internal taxes and central government' (AEA Technology, 2007:11). The scale of investment perceived to be necessary and the financial constraints felt by local authorities also act as an encouragement for local authorities to sell the remaining LAWDCs. As one commentator noted: 'Investments of this size, however worthy, are likely to be given a low priority by almost all local authority shareholders whose capital spending is under critical government control. It is not that they are barred from tendering, it is simply just too much to take on' (Holmes, 1998).

Waste Management PFI

In some respects waste disposal was a perfect area for proponents of the Private Finance Initiative (PFI):

- Local authorities required considerable investment to meet targets for moving away from reliance on landfill, but central government blocked traditional financing methods;
- central government was, however, prepared to fund PFI projects in waste disposal;
- central government faced a tight schedule because of European legislation and needed a quick solution;
- PFI schemes were seen by companies as ideal for large industrial construction projects such as incinerators because they provide guaranteed long term income streams;
- many of the large waste companies already had experience in other countries in building or running incinerators;
- some argued that energy from waste offers the opportunity for meeting EU requirements on renewables as well as landfill diversion and that energy prices could make this an attractive market for investors.

Borrowing restrictions have been eased on local authorities with the Prudential Capital Scheme brought in with the Local Government Act 2003. However there remains a 'sizeable gap' in infrastructure investment needs estimated at £8 billion over ten years 'which represents a major investment opportunity for the private sector' (DEFRA, 2004a).

The Institution of Civil Engineers and the Renewable Power Association commissioned a joint report (Lee et al, 2005) highlighting what it saw as the huge potential for generating energy from waste. Lee et al (2005: 6) suggest that 'as much as 17% of (UK) electricity generation can be satisfied through energy from waste in 2020'. Many environmentalists would question whether energy from waste incineration should ever be classified as renewable energy (Friends of the Earth, 2006) and others (e.g. Hogg, 2006) have challenged both the methodology of this report and argue that whether or not energy from waste could contribute to climate change benefits 'is dependent upon the assumptions used in the analysis and the performance of the relevant technologies' (Hogg, 2006: 7).

The combination of PFI and its use for the construction of large incinerators has a twin impact on the trend towards consolidation. In the first place, it opens up new areas for the private sector and secondly, the capital investment required tends to exclude all but the largest companies. In DEFRA's view (2005b) there are only eight waste management companies that can realistically bid for major, long term PFI contracts. And because of the large sums involved in the PFI schemes, the companies expect long term contracts to justify their expenditure. This in turn provides a guaranteed revenue stream for the companies over 25, 30 or more years.

However, these long term PFI contracts in waste management are open to the same sort of criticism that those in health have received. The Audit Commission (2001) expressed reservations:

'twenty-five year contracts need critical consideration. For example, technology is constantly developing and it would be counter-productive if authorities were held to a contract for one method of disposal when a more environment-friendly and cost-effective method is subsequently developed. A number of PFIs in waste under consideration involve the building of an energy from waste plant.'

This is especially true if part of the contract requires the local authority to guarantee a tonnage of waste (or a tonnage of a particular type of waste) to be sent to the incinerator (Bulkeley et al, 2005). Critics argue that any such contractual arrangement will cut across attempts to move to a regime of greater recycling. The Chartered Institution of Wastes Management (CIWM, 2005) has drawn attention to a potential loosening of the rules of qualification for Renewable Obligation Certificates (ROCs) thereby easing the path to further incineration projects. Many of the PFI schemes are already generating opposition from environmental groups and others concerned about both cost and the negative impact on recycling (Theobald, 2002). The Audit Commission (2001) drew attention to the House of Commons Select Committee's view that incineration should play only a 'moderate role' in PFI bids, with PFI being used for long-term improvements in recycling and composting. 'If not, we recommend that the role of PFI funding for waste management should be progressively reduced' (House of Commons Committee on Environment, Transport and Regional Affairs, 2001).

New guidance was issued in October 2000 by DETR on PFI for waste projects (Ares and Bolton, 2002). This attempted to answer the Select Committee's criticism that PFI favoured incineration. The Government's response to the Select Committee's criticism argued:

'We anticipate [...] that PFI funding will help to fund long-term improvements in recycling and composting. There is no reason why a PFI bid coming forward should necessarily include incineration. The Government has already approved one large scheme which includes no energy from waste.' (Environment, Transport and Regional Affairs Committee, 2002).

That may be so, but the experience so far is that PFI *has* favoured large industrial style developments – primarily incinerators, but occasionally big Materials Recycling Facilities (MRFs), and virtually all the PFIs in place or in procurement have been awarded to the large waste companies. The government's Strategy Unit report (2002) recommended that 'DEFRA should accelerate the programme of work to improve delivery of PFI waste projects'. In 2006 the Treasury noted that just nine PFI projects had been signed with a further eleven in procurement. The Treasury (explained the slow progress by reference to planning problems, 'a constrained market of bidders for end-to-end services (encompassing collection, treatment and disposal) and affordability pressures relating to the costs of disposal' (HM Treasury, 2006: 32).

The OECD reports that increasing incineration would be a cheaper way of meeting EU targets than recycling 'but would mean building more than 100 additional incineration plants' (OECD 2002). The authors noted that public opposition might make this unfeasible and added that a reduction in the production of municipal waste would be far more cost-effective than increasing either disposal or treatment capacity. However, this is unlikely to be a very attractive policy

option for the main waste multinationals. 'Big is beautiful' in waste disposal as far as the multinationals are concerned, and that primarily means incineration plants funded by PFI..

5 Consolidation and concentration

The rhetoric of the Conservative party (e.g. Conservative party, 1976) stressed the importance of small businesses, the entrepreneurial spirit and how its deregulatory and privatisation policies would benefit small firms. Yet waste management is a good example of how the opposite occurred in practice during the Thatcher and Major governments. Here was a sector dominated by small businesses (with the municipal side served by local authorities themselves), which liberalisation and privatisation helped to transform into one increasingly dominated by large companies. It may not have been the objective of ministers, but such an outcome should surely have come as no surprise.

According to Biffa, one of the major companies, in 1992 none of the five largest companies had more than a 6% share of the UK waste market - not just municipal waste (Biffa, 2005). Biffa estimate that in 1992 the market was worth £3.0 billion and that the top 5 companies had 16% of the market, the next 15 had 14% and over two thirds (70%) was split among the other companies. By contrast, it estimated that in 2001, the market had grown to £4.6 billion, the top 6 companies had almost half (48%) of the market, the next 9 had 12% and the rest just 40% (Biffa, 2005b). In 2004 the government reported the market to be worth £8 billion with the expectation that it will double again by 2015 (CEED, 2006). Most companies in the wider waste management sector are still SMEs with 90% of companies employing fewer than 50 staff (HSE, 2004), but the top eight waste companies have around 65% of the total turnover of the sector (CEED, 2006).

The current government is struggling to resolve its commitment to competitive markets as the driver of efficiencies with the fact that the infrastructure demands of policy decisions and competitive pressures in waste management have resulted in market concentration and less competition. Several government reports have pointed to the lack of competition identifying eight or nine firms as accounting for more than 70% of non-DSO waste collection by weight (CEED, 2006). Although there are a large number of suppliers country-wide, many of them are regionally or locally based without a national presence, and competition in some regions is particularly weak. Because of the relatively small number of suppliers (for collection, treatment *and* disposal) the OGC (2006: 15) warned that there is a danger 'that public sector contracts will be competing against one another to attract the attentions of suppliers'. DCLG (2006: 59) assesses the municipal waste market – in both collection and disposal - as 'relatively mature' but one which has 'over concentrated'.

Further consolidation, and more to come

Henri Proglio, Chairman and Chief Executive of Veolia Environnement, describes the UK waste sector as 'consolidating and fast-growing' (letsrecycle.com, 2006). Consolidation has continued with the virtual exit of the UK water companies from the waste management sector. Furthermore, what Miller-Blackwell (2000) described as the 'hunter gatherers' have been busily competing with each other for acquisitions. Saur (part of the large French multinational, Buoygues) sold Ecovert to a small company; Cory was sold by its UK owner to Montague Private Equity, who then sold it on two years later in March 2007, to a group of private investors led by ABN AMRO's Global Infrastructure Fund (Montagu Private Equity, 2007), and Thames Water sold its waste management operation to Viridor. At the end of 2005 Shanks bought

Cleanaway's Scottish operation (Letsrecycle.com, 2005a) and sold some of its landfills to WRG. Serviceteam was acquired by Cleanaway, but having already sold its German division and announced it intended to completely withdraw from waste management (Letsrecycle.com, 2005), Cleanaway's owner, Brambles, sold its British operation to Veolia, boosting the latter's total UK annual turnover to €1.6 billion (letsrecycle, 2006). Biffa bought Hales, demerged from water company Severn Trent (Biffa, 2007) and sold its Belgian operations to Veolia (Veolia Environmental Services, 2006). In turn, Veolia sold its interests in the company which indirectly controlled Spanish construction and services company FCC (Veolia Environment, 2004), which then bought WRG (apart from its energy from waste operation) from Terra Firma, another private equity organisation - again after only a few years ownership, (The Times, 2006).

It is unlikely that the latest bout of acquisitions represents the end of the process of consolidation. Economies of scale available to the larger companies in big landfill or incineration contracts, together with their easier access to financing 'appear to be important factors in the process of shake-out and consolidation now occurring in the UK waste industry' (Nevin, 2000). As the market has expanded, the number of leading firms has declined and the leading firms have a growing share of this growing market. Turnover provides a rough and ready measure of the current position of the different firms.

◆ Table I: UK turnover of large operators

Company (Parent)	Country of parent	UK Turnover (£m)	No. of UK employees
Veolia Environmental Services (Veolia Environment)	France	£1,100 (proforma revenues following acquisition of Cleanaway, y/e 311206)	13,000
Biffa	UK	£742.7 (y/e 300307)	5,147
WRG and Focsa (FCC)	Spain	£620 (y/e 311206)	N/K
Sita (Suez)	France	£604.25 (y/e 311206)	5,055
Viridor (Pennon)	UK	£298.9 (y/e 310306)	1,388
Cory	Consortium of Dutch, Spanish and Portuguese financial groups	£180 (y/e 311206)	1,000
Shanks	UK	£126 (y/e 310306)	706

Sources:

Biffa (2007) Annual Report and Accounts 2007. High Wycombe: Biffa; Cory Environment (2007) About Us <http://www.coryenvironmental.co.uk/about/>; FCC (2006) Acquisition of Waste Recycling Group: Creating a European Leader in Waste Management, 18 July, 2006 http://www.fcc.es/fcc/corp/informe/20060718_WRG_eng.pdf; Letsrecycle.com (2006a) WRG projects moving ahead despite sale, 18 July, 2006. http://www.letsrecycle.com/info/waste_management/news.jsp?story=5845 Montagu Private Equity 130307 Montagu Private Equity announces the sale of Cory Environmental. <http://www.montaguequity.com/news/?id=1734>; Pennon Group (2006) Annual Report and Accounts 2006. Exeter: Pennon Group; Shanks Group plc (2007) Annual Report and Accounts 2007. Milton Keynes: Shanks; Sita (2007) SITA UK key figures 2006. <http://www.sita.co.uk/news/key-figures>;

Veolia Environmental Services (2007) Report and Financial Statements 2006. London: Veolia Environmental Services.

The outcome of this complicated series of acquisitions and sales is that the UK municipal waste market is even more concentrated than before, with four key players – Veolia, Biffa, FCC and Sita.

Integrated waste management

The changes in the market outlined in the previous section have taken place side by side with the move towards a more integrated approach from the private sector companies. All of the larger waste management companies are highly integrated. This contrasts with most waste SMEs that tend to be single service/product companies (CEED, 2006). Developments in the UK have been part of a European pattern. The major companies share a view on the future direction of the waste management industry. The two large French multi-utility multinationals that own two of the leading UK waste companies, Veolia Environnement (parent of Veolia Environmental Services) and Suez (parent of Sita) have put similar models before their respective investors (Vivendi, 2001; Suez, 2001), emphasising an environmental services industry approach. And this is a view shared by many of the other main UK waste companies. Companies are aiming to provide a range of waste management services rather than concentrate on just collection or disposal. Offering an integrated service provides economies of scale and lower costs (Health and Safety Executive, 2004). It also serves to further ensure that the smaller companies are pushed to the sidelines by the larger companies.

Integrated or disaggregated?

There are indications that the government believes further integration with private sector provision is a desirable outcome. Within the broader context of public service reform, the new Labour government sees the integration of private and third sectors in public service provision as an important part of its concept of 'joined-up government' (Clark, 2002). As detailed earlier, the previous Conservative government split *responsibility* for waste collection and disposal (at least in many parts of England). This was part of the strategy of bringing in the private sector to run disposal. There are now signs that the current government may wish to end the division.

The Number 10 Strategy Unit has recommended that DEFRA consider combining district and county councils into single 'resource management authorities' over the next three to five years in order to increase recycling and waste reduction (Strategy Unit, 2002). But this would be the integration of *responsibilities* under one municipal body, not in-house service provision.

The government has identified the need to move to integrated waste management contracts (DEFRA, 2004a) in order to meet its commitments under the Landfill Directive. However, it has also highlighted as one of the 'key challenges that face the sector' (DCLG, 2006: 59), the integration of services within integrated waste strategies, thereby creating barriers to entry for niche providers, SMEs and third sector bodies. The Office of Government Commerce (OGC, 2006) now recommends that large, end-to-end contracts are the exception rather than the norm as they not only squeeze out SMEs but ultimately lead to a restricted market. To resolve this dilemma, the government now encourages 'disaggregated contracts' (DEFRA, 2007a: 81) for integrated services. It acknowledges that this is not easy, citing the fact that although incentives have been established to encourage joint working, 'real integration is difficult to achieve in practice' (DCLG, 2006: 71).

The Office of Fair Trading (2006) has also warned the government of the dangers of market domination by the larger private firms able to supply integrated waste services. The OFT points out that in some regions a single company may have a very high market share due to its ownership of assets in the region. It warns of the threat of collusion and urges councils to find 'mechanisms to deliver bids from a number of suppliers, both within and outside the region' to reduce the danger of regional monopolies. Unfortunately this appears to ignore both the high cost of the transportation of waste and its undesirability (contrary to the 'proximity principle' of treating waste as near as possible to where it is generated). Interestingly, given the virtual elimination of LAWDCs and the concerns about the emergence of regional private monopolies, DEFRA speculated whether a local monopoly caused by a successful LAWDC bid might not be a more 'benign' monopoly than if the LAWDC were transferred to a PFI contractor as 'the owner of the LAWDC (the WDA) would be less inclined to exploit its monopoly position to ensure increased financial returns at the potential expense of the local community (both social and business)' (DEFRA, 2005: 21).

The growth of local authority responsibility without direct control has been a feature of the marketisation of municipal waste. Options available to councils increasingly depend on how private companies respond to regulatory and legislative requirements imposed at national and European level (Bulkeley et al, 2005). Ambitious interventionist policy goals now 'have to be realised through the orchestration of fragmented networks of providers' (Entwistle, 1999). This has proved to be a problem which the government is trying to resolve by encouraging new approaches, including examining the role of local government as a strategic commissioner (DCLG, 2006a) with a broader responsibility beyond municipal waste. It urges partnerships and presses the claimed benefits of joint working on local authorities (DCLG, 2006), so much so that some commentators argue that this policy 'push' should be considered alongside legislative drivers (Slater et al, 2007: 647). However, the same writers caution that 'policy rhetoric promoting partnerships for delivering sustainable resource management and as a local governance mechanism is not borne out in practice and should be treated with caution' (ibid: 643-644). At times, the government appears to rest a great deal on a rather naïve faith in the private sector cavalry riding over the hill, such as when the 2007 Waste Strategy declares that 'all parts of society will have to share responsibility' and 'the waste management industry will *have* [my emphasis] to invest in facilities to recycle and recover waste, and provide convenient waste services to their customers to recycle and recover their waste' (DEFRA, 2007: 10). Their shareholders may have a different view.

6 Discussion and Conclusion

If, as Burnham (1999) observes, political economy concerns the nature of the relationship between political authority and market power (or states and markets) then UK municipal waste management offers a case study of the practical impact of politics on markets. Liberalisation and privatisation led directly to the creation and then restructuring of a market from what was previously a service largely provided by the municipal sector. In the last twenty years, the UK waste management sector has grown for two main reasons. First, the higher environmental standards imposed by the European Union and secondly, the growth of privatisation, which has resulted in the increasing absorption of municipal waste management into the wider UK waste market.

Over a twenty year period, we can distinguish two phases. The first ten years saw the introduction of markets into municipal services as an end in itself (with a series of subsidiary aims such as the reduction of taxes and public expenditure). The second period saw the further

development of marketisation as a means to meet policy objectives on the environment. The government's experience of some of the problems associated with this has led it to the view that it needs 'a more proactive approach to market shaping and development' (DCLG, 2006: 98). In a distorted echo of Polanyi's double movement (1944), we see an attempt to create a self-regulating market in municipal waste management followed by government intervention in response to the failures of the market to meet the wider environmental policy goals of society. As Entwistle (2005: 201) observes, 'principals operating in a hierarchy have access to a greater range of instruments of control than do principals operating through markets'.

◆ **Table II: Change in waste management 1988-2007**

	1988	2007
Ownership of municipal waste operations	Almost wholly publicly owned (municipal)	Increasingly privately owned
Profile of private sector provision	Large number of SMEs (dispersed ownership)	Dominance of small number of large firms (concentration)
Level of multinational activity	Low	High
Integration of municipal waste management (collection, treatment and disposal)	Integrated on municipal basis	Increasingly integrated on private sector basis

Today the industry is increasingly dominated by a relatively small number of large companies. They are attempting to continue their growth through a combination of acquisition and the push to contract out remaining municipally-owned service provision. From 1988 onwards, the municipal waste management sector was aggressively opened up to the private sector. In order to facilitate this, an integrated (but poorly funded) waste management service was broken up. Large foreign multinationals were attracted to the UK waste market on the basis of opportunities offered by CCT. The entry of these companies and the changes in the municipal waste sector have had a knock-on effect in the commercial and industrial waste sector as well. A period of frantic consolidation through mergers and acquisitions followed and today a small group of companies dominate the UK market.

But their involvement has also influenced public policy in municipal waste management. The increasingly important private companies are attracted to mechanisms such as PFI (because of the reliable long term revenue streams) and large industrial projects such as incineration facilities (because of the returns on investment). This inevitably squeezes options for recycling as a response to the government's obligation under the EU directive to reduce the amount of waste sent to landfill. The length of many of these contracts means that these effects will be long lasting. The restructuring of the sector has highlighted the problems in coordinating major policy shifts through markets.

Finally, concentration has assisted the reintegration of the industry on a private sector basis – both in terms of the service offered to municipalities (collection, disposal and treatment) and

that offered by the very same companies to their large commercial and industrial customers. The British market reforms broke up an integrated waste system provided by the public sector and, after a brief period of relative competition, laid the basis for the re-integration of the industry – in the private sector. Throughout this period of change, political decisions have, directly and indirectly, transformed the sector. Rather than disinterested spectators of market development, politicians were central to the process, and remain so as they continue to attempt to shape the market.

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