NEW PUBLIC MANAGEMENT AND CITIZENS’
PERCEPTIONS OF LOCAL SERVICE
EFFICIENCY, RESPONSIVENESS, EQUITY
AND EFFECTIVENESS

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About COCOPS

The COCOPS project (Coordinating for Cohesion in the Public Sector of the Future) seeks to comparatively and quantitatively assess the impact of New Public Management-style reforms in European countries, drawing on a team of European public administration scholars from 11 universities in 10 countries. It will analyse the impact of reforms in public management and public services that address citizens’ service needs and social cohesion in Europe. Evaluating the extent and consequences of NPM’s alleged fragmenting tendencies and the resulting need for coordination is a key part of assessing these impacts. It is funded under the European Commission’s 7th Framework Programme as a Small or Medium-Scale Focused Research Project (2011-2014).

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Abstract

We examine the relationship between a range of New Public Management (NPM) practices and citizens' perceptions of service efficiency, responsiveness, equity and effectiveness in English local governments. We find that public-private relationships have a negative relationship with citizens’ perceptions of all four dimensions of local service performance, but that an entrepreneurial strategic orientation exhibits a positive association with all four. Performance management is also likely to positively rather than negatively influence citizens’ perceptions of local public services. Further analysis revealed that the impact of NPM practices varies according to the level of socio-economic disadvantage confronted by local governments.

Keywords

*New public management, efficiency, responsiveness, equity, effectiveness*
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1. Introduction

The belief that large and monopolistic public bureaucracies are inherently inefficient was a critical force driving the emergence of the New Public Management (NPM) in the 1980s. To reconfigure the state along more cost-efficient (and effective) lines, NPM protagonists recommended that the public sector be opened up to greater private sector influence (Hood, 1991). This was to be achieved through the implementation of a panoply of practices which reflected these arguments, ranging from the promotion of various forms of relationships with private firms, such as contracting-out or later partnerships, to the development of complex performance management systems and a customer service orientation. Although the high tide of the NPM phenomenon has arguably passed, the relationship between NPM practices and the performance of public organizations remains an extremely timely concern. In seeking out ways to cut back public sector budgets, governments are once again searching for tools and techniques that can enable public managers to deliver quality services at a lower cost. To date, however, scant research has actually examined the effects of NPM on multiple dimensions of public service performance within the same study. Still fewer focus on the effects of those practices on citizens’ perceptions of the achievements of local public services.

The aim of this paper is to examine whether the effects of NPM practices vary for citizens’ perceptions of efficiency, responsiveness, equity and effectiveness. To answer these questions, we examine the relationship between selected NPM practices and citizens’ perceptions of the efficiency, responsiveness, equity and effectiveness of a sample of English local governments. These organizations represent an interesting test case for examining the impact of NPM. Firstly, the origins of many NPM practices lie in the recommendations of public choice theorists for the restructuring of local government (Boyne, 1998). Secondly, in the past twenty years, local governments in England have been subject to a wide-ranging and comprehensive programme of NPM-inspired reforms, such as compulsory competitive tendering, Best Value and Comprehensive Performance Assessment. In many cases these reforms have been forerunners for similar initiatives in other parts of the UK public sector and in other countries. Thirdly, although, historically, local governments in England have been amongst the largest in the world (John, 2010), there has been a shift towards larger local governments in Europe and elsewhere (Dolley & Robotti, 2008), making the English case an especially relevant one. In addition, by focusing on a single case we are able to benefit from measures that precisely fit the study setting and can control for several factors, such as...
central-local relations and macro-economic cycles, which can be sources of unmeasured heterogeneity in cross-country designs (see Nicholson-Crotty & Meier, 2002).

In the first part of the paper, we review the literature about the anticipated benefits (and costs) of NPM practices for public service performance. Next, we reflect upon how those practices might have a distinctive influence on citizens’ perceptions of local public services. In the following section, we introduce our data and methods. Our dependent variables are drawn from a large-scale national survey of citizens across England and our measures of NPM practices from a large-scale survey of managers in English local governments. All other independent and dependent variables come from secondary data sources. Seemingly Unrelated Regressions modelling the impact of NPM on local service efficiency, responsiveness, equity and effectiveness are presented, before the theoretical and practical implications of the findings are discussed in the conclusion.

2. NPM and public service performance

Despite the omnipresence of NPM-style innovations in public sector, few overall evaluations exist. A great deal of the criticism directed at NPM is inspired by ideological positions or incidents of seriously dysfunctional outcomes. A common failure in much of this research is the tendency to take reform announcements and reform rhetoric for real, without assessing whether a certain reform has actually taken place, let alone whether it has made any difference (Pollitt, 2002). Academics have repeatedly emphasised the need for evaluating NPM, and have provided models and frameworks for doing so (Wollmann, 2003). Empirical assessments, however, are scarce, which is surprising given NPM’s emphasis on evaluation and evidence (Peters & Savoie, 1998; Pollitt & Bouckaert 2004). Where such evaluations exist, they have tended to focus on specific types of reforms in specific kinds of sectors, such as the effects of utility liberalisation on price and satisfaction levels (Brau, Doronzo, Fiorio & Florio, 2010), or the introduction of pay for performance (Perry, Engbers & Jun, 2009). Other research has taken the opposite position, and has focused on macro-level results of NPM-style reforms on government outlays, employment etc. (Kettl, 2000; Ferlie, Ashburner, Fitzgerald & Pettigrew, 1996; Goldsmith & Page, 1997). There also is a substantial body of research using reform talk, rhetoric and policy as input for analysis (Gualmini, 2008; see also Gregory, 2003). More remarkable, still, is the wide availability of non-scientific analyses, often (government) documents, masquerading as evaluations of NPM reforms, but without actually investigating anything in a rigorous or systematic way (Pollitt & Dan, 2011). At the local level, slightly more material is available (Kuhlmann, Bogumil & Grohs, 2008; Walker & Boyne, 2006).
An important challenge in evaluating NPM reforms is that many reforms have been labelled ‘NPM’ reforms without actually being based on public choice diagnosis and solutions. In order therefore to assess the effect of the NPM, one needs to look at its constituting features and at the specific practices inspired by NPM ideas, such as performance management, working with the private sector, agencification, contractualisation of employment et cetera. This is the approach we take in this paper.

**Criteria for evaluating NPM**

Many evaluations have focused on just one type of reform effects, e.g. on prices or productivity, without at the same time also looking at other effects, such as e.g. equity (Pollitt, 2002:281). It has been argued that certain positive outcomes of NPM reforms may have come at the cost of other effects (see e.g. the overview in Pollitt, 2002). The supposed trade-off between managerial efficiency and equity takes a central place in discussions about effects of reforms, both in general, and in a public sector context (see e.g. Le Grand, 1991; Okun, 1975; Lane, 2000).

Whereas efficiency improvements featured prominently in the management discourse promoting NPM-style reforms, equity was initially mentioned less often. Where it was, equity was often used as an argument against implementing those reforms. NPM, it was claimed, would undermine solidarity and lead to services that mainly benefit vocal citizens through a focus on individual customers instead of one on universal service delivery. Criticism was especially levelled as specific NPM-related innovations such as outsourcing, privatisation, fee-based pricing and choice-based consumerism (see e.g., Le Grand, 2007 and Clarke, Newman, Smith, Westmarland & Vidler, 2007 for an overview). Unions feared more fragile employment conditions in public services as well as worse and less resilient services for citizens as a result (Bach, Bordogna, Della Rocca & Winchester, 1999). Yet, critics have also claimed that broad concerns about social justice and equity remain unproven, and the NPM-style reforms may indeed in many cases have improved equity in service delivery (Harrow, 2002). Other arguments would highlight the need for first strengthening market efficiency and expanding and reinvesting the surplus in order to deliver social justice.

Improved responsiveness has also been one of the main objectives of NPM, through providing services that correspond to individuals’ wishes, and through improving customer friendliness. At the same time, critics argue that NPM-style reforms have stimulated the wrong type of responsiveness - a market-driven individualistic model of responsiveness,
rather than collective responsiveness - and may therefore be a threat to substantive democracy (Box, Marshall, Reed & Reed, 2001).

Still, most empirical research with an explicit NPM focus has tended to assess efficiency-related outcomes (see Andrews, 2010 for an overview), or general performance (Boyne, 2003), with evaluations concentrating on equity being much less widely available, or framed in a critical rather than in more empirical terms. Evaluating effectiveness is even harder. Unlike assessments of efficiency, judgements about effectiveness require looking beyond matters of process and organisation and taking a long term view about the outcomes of a reform.

In this paper, we argue that focusing on different effects of NPM simultaneously is a precondition for any evaluation study. Such a focus on different criteria and values in public service delivery corresponds to a wider tradition in the discipline to avoid monofunctional approaches to public services. Indeed, ‘public administration faces a serious and seemingly irresolvable problem in continually seeking to maximize the attainment of mutually incompatible values’ (Rosenbloom, 1983:219). Most authors in Public Administration have not attempted to reconcile these tensions, but have instead promoted this value competition to the core of the discipline. One well-known example is Hood and Jackson’s work in which they distinguished between three families of administrative values or doctrines, and the difficulty of achieving all standards of success at the same time (frugality, rectitude and resilience). In more concrete terms, savings, efficiency, robustness, adaptivity and fairness may not go very well together (Hood & Jackson, 1991). Indeed, ‘Administrative doctrines are often contradictory’ (Hood, 1991:18). Rosenbloom likewise contrast three different traditions in public administration, the managerial, the political, and the legal (Rosenbloom, 1983:219), each with their own logic and values. The managerial tradition emphasizes values such as economy, efficiency, and effectiveness; the political tradition is concerned with representativeness, responsiveness and accountability; and the legal tradition has due process, equity, and the safeguarding of individual substantive rights as criteria of success.

**Using citizen perceptions to assess reform effects**

Effects of (NPM-style) public sector reforms can be established in different ways. A large number of studies have relied on public officials’ and managers’ evaluations of reforms (Worrall, Cooper & Campbell-Jamison, 2000; Emery & Giauque 2003; Lægreid, Roness & Rubecksen, 2006; Christensen & Lægreid, 1999). The logic for using such self-evaluation is that officials, politicians and managers can be considered experts and have first-hand and in-
In this paper, we rely on citizen perceptions to evaluate the performance of local services. Using citizen perceptions has become increasingly common in public administration research to assess the performance of public services (Kelly & Swindell, 2003). Political research has been quite ambivalent towards using citizen opinions about government because citizens do not always appear to be well informed (Banducci, Karp, Thrasher & Rallings, 2008), and the relationship between improved government performance and more positive public perceptions is far from straightforward (Cowell, Downe, Martin & Chen, 2012; Van de Walle & Bouckaert, 2003). There is an active debate about the differences between using objective or subjective evaluations, or between agency- and citizen-generated data (Lauer Schachter, 2010), and about content and methodological factors that determine these perceptions (James, 2009; Van de Walle & Van Ryzin, 2011; Van Ryzin, 2004). Yet, citizen evaluations have been proven to be quite useful and reliable to evaluate public services (Charbonneau & Van Ryzin, 2011; Van Ryzin, Immerwahr & Altman, 2008; Swindell & Kelly, 2000). An additional advantage is that using citizen perceptions is often one of the few ways available to assess service outcomes rather than service outputs. Using citizen perceptions also helps overcome some criticism about the artificial selection of sets of objective output and outcome indicators in models. Still, it would be incorrect to consider citizen perceptions as the ultimate performance evaluation, because citizens do normally not evaluate performance based on a full set of information, but use shortcuts or cues (James, 2011). Such cues, in the context of this paper, could be published performance data, star ratings or league tables.

Yet, there is still also a more substantive reason for using citizen perceptions. This reason can be found in the very essence of the NPM philosophy. NPM-style reforms have from their very beginning been presented as reforms that would ultimately benefit citizens. NPM reforms were, therefore, not reforms with an internal orientation, but reforms aimed at making public services more responsive to the public’s needs. NPM adapts and the wider public choice movement regarded ‘old-style’ public services as services run to the benefit of rent-seeking politicians and bureaucrats (see e.g. Lane, 2000 for an elaboration). According to this logic, asking these politicians and bureaucrats how they would evaluate the reforms would thus make little sense. Likewise, using performance indicators established by public services themselves would impose the government’s logic onto citizens. One of the reasons to introduce market mechanisms in local services was precisely the presumed inability of public officials to really know what citizens want and value. Using citizen perceptions, therefore,
comes closest to what the NPM-philosophy itself would suggest as its main criterion for success. A further added advantage of using citizen perceptions is that, in effect, it illustrates that the trade-offs between the different values and effects of managerial practices in the public sector should be made with reference to citizens, whereas such choices are made by the policy-maker and researcher when ‘objective’ performance indicators are used.

3. The impact of NPM practices on efficiency, responsiveness, equity and effectiveness

Although evidence on the efficiency gains from NPM practices remains mixed (Andrews, 2010) and there is little to suggest that they have enhanced the effectiveness or equity of service provision, policy-makers across the world continue to laud the merits of NPM. Is a commitment to NPM practices associated with gains across multiple dimensions of performance? More particularly, are the putative benefits of those practices, appreciated by the recipients of local public services? Evaluating the impact of NPM-style reforms requires a disaggregation of both reforms and effects into their constituent parts (Pollitt, 2002). In this paper, we distinguish between four types of effects, and we also look at the impact of different specific NPM-style reforms rather than at the effect of NPM as a whole. In selecting criteria for the evaluation, we follow Boyne, Farrell, Law, Powell and Walker (2003), who, in evaluating public management reforms in health care, housing and education, distinguished between three main criteria: efficiency, responsiveness and equity. We add effectiveness as an indicator of the likely long-term impact of NPM on citizens’ perceptions of performance. Based on the literature discussed above, we expect to find positive effects of NPM-style reforms on efficiency, responsiveness and effectiveness, yet negative effects on equity. We select six specific NPM practices: public-private relationships, performance management, an entrepreneurial strategic orientation, a strong customer focus, the extent of capital charging, and the use of temporary staff. The selection of practices is by no means comprehensive, but covers a substantial range of NPM-style reforms.

4. Data and measures

The units of analysis for our study are English local governments. These organizations are elected bodies, operating in territorially bounded geographical areas, which employ professional career staff, and receive over two-thirds of their income from the central government. They are multi-purpose governments delivering services in the areas of education, social care, land-use planning, waste management, public housing, leisure and culture, and welfare benefits. In England at the time of the study there were 386 local governments of five types. 32 London boroughs, 36 metropolitan boroughs, and 46 unitary authorities mostly in urban areas delivering all of the services listed above; and in rural areas
34 county councils administering education and social services, and 238 district councils providing welfare and regulatory services. Local governments are very suitable units of analysis because there are a relatively large number of units, and because the units are relatively homogeneous – especially compared to other public sector bodies. Data availability is a further reason why we have chosen to focus on local authorities. The relatively high degree of centralisation in the English system makes England fertile soil for research because of the quantity of comparative data this generates.

**Dependent variables**

To gauge citizens’ perceptions of the performance of local public services we draw upon measures from the *Place Survey* carried out by all English local governments in 2008, which asked respondents a series of questions about the quality of life in their local area. The survey was based on a demographically representative random sample of 1,100 residents in each local government. The data were collected by local governments using a standard questionnaire, independently verified by the Audit Commission (a central government regulatory agency), and later published by the Department of Communities and Local Government. The published figures show the percentage of respondents in each area agreeing with the survey statements.

**Efficiency** To gauge citizens’ perceptions of the efficiency with which services are provided by local governments we draw upon a survey measure, which asked respondents whether they agree that their “local council provides value for money”. This captures the extent which service users are content with the price/quality ratio of the services that they receive, and so closely mirrors the classic definition of technical efficiency as a ratio of outputs over inputs.

**Responsiveness** The responsiveness of local governments was tapped by utilising a survey question asking informants whether they had been “treated with respect and consideration by your local public services”. This captures how well local governments are meeting the personal expectations of service users.

**Equity** Equity refers to how well public organizations are able to tailor service provision to meet the needs of the diverse groups of citizens that they serve. To gauge the extent to which citizens’ perceive the services provided by local governments to be distributed in this way we draw upon a survey item asking respondents to indicate if they agreed that local public services “treat all types of people fairly”.
Effectiveness Citizens’ perceptions of the overall effectiveness of their local government was measured by drawing upon a Place Survey question which asked respondents how satisfied they are with the way that their council “runs things”. This measure serves as a proxy for the extent to which respondents believe their local government is effective in performing its core tasks.

Independent variables

NPM practices Data on NPM practices were drawn from three sources: firstly, data on public-private relationships, performance management, entrepreneurial strategy and customer focus were drawn from an email survey of managers in English local governments; secondly, financial statistics collected by the Chartered Institute of Public Finance and Accountancy were used to gauge the extent to which local governments had divested themselves of capital assets; and thirdly, the contractual status of local government employees was evaluated using public sector employment statistics collected by the Office for National Statistics.

The survey of local government managers was administered by email in late 2007 to the entire population of senior and middle managers in English local government. Multiple informant data were aggregated from senior and middle managers in each organization to overcome sample bias problems associated with surveying a higher proportion of informants from one organizational level (Walker & Enticott, 2004). The number of informants surveyed varied across each type of local authority due to the differing role and responsibilities of single and two-tier authorities. The total number of potential informants was 6,975, and the number of actual respondents was 1,082, yielding a response rate of 15.5 per cent. Responses were received from 28 London boroughs, 36 Metropolitan boroughs, 45 unitary authorities, 31 county councils and 188 district councils.

Since only governments from which there were responses from each of the two echelons (senior and middle management) were included in our analysis, some cases could not be matched when we aggregated these echelons up to the organizational level due to missing data. As a result, our statistical analysis of the relationship between NPM practices and citizens’ perceptions of public service performance was conducted on 175 (out of a population of 386) single and upper-tier local governments. To establish the representativeness of our sample, we tested for differences between included/omitted authorities by undertaking independent sample t-tests on our control variables. No statistically significant differences between our sample of local authorities and the population of local governments were found, indicating that our sample are representative of the population of
governments on key distinguishing characteristics such as deprivation, population, population density and age, ethnic and social class diversity.

We draw upon three measures of public-private relationships to construct an index of commitment to the involvement of the private sector in public service provision. First, the extent to which local government’s contract services out to private sector providers was gauged by asking survey respondents to indicate on a scale of 1 (strongly disagree) to 7 (strongly agree) that their organization pursues “a policy of contracting out/outsourcing”. This provides a good proxy for the prevalence of contracting-out in the absence of published accounts of the proportion of services contracted out. Second, the extent to which local governments externalise service provision was gauged by asking respondents whether their organization pursued “a policy of externalisation”. Third, we asked respondents whether their organization “works in partnership with the private sector” to capture the variety of alternative arrangements with the private sector which respondents may associate with partnership-working (O’Toole, 1997). We then constructed an index of public-private relationships using principal components analysis, which demonstrates strong inter-item reliability (Cronbach’s Alpha (α) score of .73; see Nunnally, 1978).

We measure the commitment to performance management using four survey measures. First, we asked respondents to indicate the extent to which their organization has “a well developed framework of clear performance measurement and targets”. Next, we invited respondents to rate whether “our management information systems enable the authority’s senior management team to judge progress towards meeting goals and targets”. We also asked whether the organization’s “management systems enable service managers to judge their progress towards meeting goals and targets”. Finally, we utilise a survey item, which asks whether the informant’s organization uses “rewards and sanctions to motivate staff (e.g. performance-related pay)”. This gauges the extent to which managers are incentivised to enhance organizational performance. The index of performance management we construct also demonstrated strong inter-item reliability (α .73).

We utilise two measures of an entrepreneurial strategic outlook, which reflect Miles and Snow’s (1978) classic definition of a prospector type of strategy i.e. one that is focused on innovation, and attempts to identify and develop new markets and services. The first question asked respondents to indicate the extent to which they believe their organization to be “at the forefront of innovative approaches”. The second asks them to rate whether “searching for new opportunities is a major part of our strategies”. These survey questions have been show to exhibit high scale reliability in several different settings, including English and Welsh local
government, Texas school districts and Danish schools. Nevertheless, on this occasion, they exhibit no more than an acceptable degree of scale reliability (Cronbach’s Alpha of 0.57).

A single survey item is used to capture the customer orientation of each local government: “satisfying service users is a high priority”. This measure has strong face value as a proxy for the commitment of each local government to delivering more customer-focused services, which aim to meet citizens’ expectations.

To gauge the extent to which the introduction of capital charging had forced local governments to rationalise their asset portfolio, we utilised figures indicating local government expenditure on capital charges per capita. This measure captures the relative size of the asset portfolio, with higher charges indicative of a larger asset portfolio and hence a lower commitment to the NPM practice of asset rationalization (Heald & Dowdall, 1999).

The use of temporary employees by government has become ever more apparent in the wake of New Public Management reforms across the globe (Pollitt & Bouckaert, 2004). The proportion of the staff in each local government employed on temporary contracts is therefore measured to capture this shift toward job insecurity in the public sector. This measure is also a proxy for the proportion of employees adhering to a transactional rather than a relational psychological contract which some commentators claim is characteristic of employment relations in the wake of NPM (Noblet & Rodwell, 2009).

Control variables

Seven measures were used to control for the effects of external circumstances, which may influence citizens’ perceptions of the efficiency, responsiveness, equity and effectiveness of local public service provision. First, we include the average ward score on the indices of deprivation in 2007. This is the instrument UK central government uses to gauge levels of socio-economic disadvantage in an area based upon a combination of: income, employment, health, education, housing, crime, and environment. Earlier research by Haubrich and McLean (2006) and Gutiérrez Romero, Haubrich and McLean (2010) on English local authorities showed that the level of deprivation is negatively related to local government performance. We thus anticipate that areas with higher levels of deprivation will have correspondingly lower levels of citizen satisfaction with local public services. An alternative argument could be that in more deprived communities, expectations about local government performance are lower, and therefore perceptions more positive. Next, we include three measures of demographic diversity: age, ethnic and social class (see table 2 for further
details). The proportions of the various sub-groups within each of the different categories identified by the 2001 national census within a local authority area (e.g. ages 0-4, Black African, Small Employers and Own Account Workers) was squared and the sum of these squares subtracted from 10,000. The resulting measures give a proxy for ‘fractionalisation’ within an area, with a high score on the index reflecting a high level of diversity (see Trawick & Howsen, 2006). We expect that more diverse areas will evince lower levels of satisfaction with the performance of local public services because a commitment to public goods in general is often lower in such areas (Alesina & La Ferrara, 2000: Andrews, Boyne, Law & Walker, 2005).

Differences in citizens’ perceptions of local public services are also likely to arise from variations in the size of the population they serve. On the one hand, citizens may feel closer to or more involved in the service production of smaller local governments, and thereby evince a correspondingly positive perception of their efforts. On the other hand, local governments serving big populations can accrue economies of scale, and so may be able to invest more resources in improving service quality, which has a direct impact on citizens’ perceptions. The relative size of local governments was measured using population figures for each local area from the 2001 national census.

Related to scale arguments, it is also suggested that public organisations in urban areas can reap scope economies by offering multiple services from the same site, though those in rural areas may be unavoidably constrained to do the same due to limited resources (Grosskopf & Yaisawang, 1990). In either case, it is possible that citizens are more satisfied with the quality and accessibility of multi-service provision, including the availability of a single contact point for all services, such as one-stop shops - though it also conceivable that they prefer separate dedicated contact points. Population figures were therefore divided by the area of each local authority to measure density.

In addition, we enter a dummy variable coded 1 for district councils and 0 for all other councils to control for the possibility that smaller disaggregated administrative units are better placed to positively influence citizens’ perceptions because they are closer to the communities that they serve than larger units (Sharpe, 1970). This also captures the idea that the benefits of inter-organizational competition are more likely to emerge in smaller units of government (Boyne, 1996).1

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1 We also explored the potential effects of local government structure further by including a dummy variable coded 1 for the two large county councils subject to disaggregation in the English local government restructuring that
The descriptive statistics and data sources for all our variables are listed in Table 1.²

Table 1 Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>S.D.</th>
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<td>60.60</td>
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<td>Perceptions of effectiveness</td>
<td>44.87</td>
<td>27.60</td>
<td>70.30</td>
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<td>Perceptions of responsiveness</td>
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<td>57.50</td>
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<tr>
<td>Perceptions of equity</td>
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<td>55.90</td>
<td>79.90</td>
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<td>Contracting out</td>
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<td>1.00</td>
<td>7.00</td>
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<tr>
<td>Externalisation</td>
<td>4.08</td>
<td>1.00</td>
<td>7.00</td>
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<td>3.00</td>
<td>7.00</td>
<td>.86</td>
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<tr>
<td>Management systems assist service managers</td>
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<td>2.50</td>
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<td>7.00</td>
<td>.90</td>
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<td>2082.54</td>
</tr>
<tr>
<td>District council</td>
<td>.50</td>
<td>.00</td>
<td>1.00</td>
<td>.50</td>
</tr>
</tbody>
</table>

² Before running the models, skewness tests were carried out to establish whether each independent variable was distributed normally. High skew test results for population (1.85) and population density (1.76) indicated non-normal distributions. To correct for positive skew, logged versions of these variables were created.
### Data sources

<table>
<thead>
<tr>
<th>Category</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>diversity, population,</td>
<td>for England and Wales. London: ONS. Age diversity comprised 12 groups:</td>
</tr>
</tbody>
</table>
| population density, social| 0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-44, 45-59, 60-64, 65-74, 75-84, 85+.
| class diversity           | Ethnic diversity comprised 16 groups: White British, Irish, Other White, |
|                           | White and Black Caribbean, White and Black African, White and Asian,    |
|                           | Other Mixed, Indian, Pakistani, Bangladeshi, Other Asian, Caribbean,   |
|                           | African, Other Black, Chinese, Other Ethnic Group. Social class        |
|                           | diversity comprised 12 Socio-Economic Classifications: Large Employers  |
|                           | and Higher Managerial Occupations, Higher Professional Occupations,     |
|                           | Lower Managerial and Professional Occupations, Intermediate Occupations,|
|                           | Small Employers and Own Account Workers, Lower Supervisory and Technical|
|                           | Occupations, Semi-Routine Occupations, Routine Occupations, Never      |
|                           | Worked, Long-Term Unemployed, Full-time Students, Non-Classifiable.     |
| Temporary staff           | Office for National Statistics (2007) *Public Sector Employment*      |
|                           | Survey. ONS: London.                                                   |

### 5. Methods

We draw on Seemingly Unrelated Regression (SUR) to control for the possibility that the error terms are correlated across separate regression models for different dimensions of performance. The error terms from four separate equations (for perceived efficiency, responsiveness, equity and effectiveness) are likely to be correlated for a variety of reasons, such as unmeasured explanatory variables or data imperfections. Thus, as Martin and Smith (2005:605) argue, “there is obvious prima facie relevance of methods to estimate systems of equations with correlated disturbance terms when analysing organisations that produce multiple outputs”. Separate Ordinary Least Squares (OLS) equations for our dependent variables revealed the following: a near perfect correlation between the residuals from the models of perceived efficiency and effectiveness (.91), a very strong positive correlation between those from the models of effectiveness and equity (.65), and positive correlations ranging from .45 to .53 for the residuals for all the other models.

In such circumstances, Ordinary Least Squares (OLS) is inefficient as separate estimations are unable to utilise relevant information present in the cross-regression error correlations (Zellner, 1962). SUR remedies this by determining the parameters for all relevant equations in a single iterative procedure. SUR regressions therefore give us coefficients for the independent variables in each separate equation that are purged of any association with the tendency of an organisation that does well on one dimension of performance to do well on another. We have, in effect, a “pure” model of citizens’ perceptions of efficiency, responsiveness, equity and effectiveness.
6. Results

We present the results of our SUR regressions in the following sequence. Three models are presented in table 3: model 1 regresses the independent and control variables on to the measure of perceived efficiency; model 2 regresses the same variables on to the perceived responsiveness measure; model 3 on to the perceived equity measure; and model 4 on to perceived effectiveness. The average Variance Inflation Factor (VIF) score for the independent variables in models 1-3 is about 1.8, with no measure exceeding 3.5. These VIF scores suggest the results in table 2 are not likely to be distorted by multicollinearity (Bowerman & O’Connell, 1990). White’s (1980) test revealed that the data are homoscedastic, so it was not necessary to correct for the presence of nonconstant error variance.
Table 2 NPM practices and citizens’ perceptions of efficiency, responsiveness, equity and effectiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 (efficiency)</th>
<th>Model 2 (responsiveness)</th>
<th>Model 3 (equity)</th>
<th>Model 4 (effectiveness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public-private relationships</td>
<td>-1.134*** .443</td>
<td>-0.657*** .271</td>
<td>-0.657*** .260</td>
<td>-1.368** .492</td>
</tr>
<tr>
<td>Performance management</td>
<td>0.958* .494</td>
<td>0.480* .302</td>
<td>0.094 .290</td>
<td>1.239** .549</td>
</tr>
<tr>
<td>Entrepreneurial strategy</td>
<td>0.706+ .510</td>
<td>0.636* .312</td>
<td>0.471+ .300</td>
<td>0.872+ .567</td>
</tr>
<tr>
<td>Customer focus</td>
<td>0.475 .823</td>
<td>0.498 .503</td>
<td>0.873* .484</td>
<td>0.697 .915</td>
</tr>
<tr>
<td>Capital charges</td>
<td>0.020+ .013</td>
<td>0.010 .008</td>
<td>0.002 .007</td>
<td>0.014 .014</td>
</tr>
<tr>
<td>Temporary staff</td>
<td>0.014 .047</td>
<td>0.020 .029</td>
<td>0.045* .028</td>
<td>0.033 .052</td>
</tr>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deprivation</td>
<td>-.141* .059</td>
<td>-.354** .036</td>
<td>-.282** .035</td>
<td>-0.304** .066</td>
</tr>
<tr>
<td>Age diversity</td>
<td>-.007* .004</td>
<td>-.001 .003</td>
<td>-.003 .002</td>
<td>-0.009* .005</td>
</tr>
<tr>
<td>Ethnic diversity</td>
<td>.004 .000</td>
<td>-.0004* .0002</td>
<td>.0003 .0002</td>
<td>.0006+ .0004</td>
</tr>
<tr>
<td>Social class diversity</td>
<td>-.014** .006</td>
<td>-.007* .003</td>
<td>-.013** .003</td>
<td>-0.019** .006</td>
</tr>
<tr>
<td>Population (log)</td>
<td>-.606 .888</td>
<td>-.313 .543</td>
<td>.036 .522</td>
<td>-1.432+ .987</td>
</tr>
<tr>
<td>Population density (log)</td>
<td>.755* .449</td>
<td>-.698** .275</td>
<td>.112 .264</td>
<td>1.215** .500</td>
</tr>
<tr>
<td>District council</td>
<td>3.585* 1.589</td>
<td>-0.034 .971</td>
<td>.411 .933</td>
<td>-.492 1.766</td>
</tr>
<tr>
<td>Constant</td>
<td>208.400** 63.576</td>
<td>159.499** 38.844</td>
<td>214.802** 37.357</td>
<td>291.439** 70.660</td>
</tr>
<tr>
<td>Chi² statistic</td>
<td>67.08** 300.38**</td>
<td>142.41** 80.42**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.28 .63</td>
<td>.45 .32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: number of observations = 175. + p ≤ 0.10; * p ≤ 0.05; ** p ≤ 0.01 (one-tailed tests).
The findings in Table 2 indicate that our analysis uncovers a range of important statistically significant relationships between NPM and citizens’ perceptions of performance, and that our models explain between about 30% and 60% of the variation in those perceptions. In terms of our general expectations, we do not find that the model for equity is considerable different from the models for effectiveness, responsiveness and efficiency: the statistically significant coefficients in the equity model point in the same direction as in the other models. The model for responsiveness works best in terms of explained variance, though this is in large part due to the local authority characteristics captured in the control variables – something to which we return later.

Turning to the results for the independent effects of the NPM practices, the most striking of our findings is that a commitment to public-private relationships is consistently associated with worse perceptions of local service performance. This directly contradicts the mantras of many NPM protagonists about the virtues of private sector involvement in public service delivery. However, it does reflect the evidence from a range of research which suggests that the involvement of the private sector in public service provision may lead to a deterioration of service quality due to high transaction costs and poor contract specification (e.g. Knapp, Hallam, Beecham & Baines, 1999; Amirkhanyan, Kim and Lambright, 2008).

In contrast to our findings for public-private relationships, the table illustrates that a commitment to performance management is positively related to all but one of the measures of citizen satisfaction (equity). This evidence chimes with Boyne’s (2010) recent literature review, which established the goal clarity provided by performance management has a positive influence on public service performance. In terms of the absence of a link with equity, it is conceivable that the performance management and measurement systems used by English local governments at this time were less attuned to the equity with which services are provided, but were instead designed to improve the input/output ratio of service production, as well as the effectiveness of local service delivery.

The results for an entrepreneurial strategic orientation indicate that it is positively related to each performance measure, thereby corroborating previous work on the benefits of actively seeking new ways of working in the public sector (e.g. Boschken, 1988; Andrews, Boyne, Law & Walker, 2011). However, the strategy measure exhibits a strong statistical influence only for the measure of responsiveness. This implies that local governments that pursue innovation and seek out new ways of working may be especially well placed to identify initiatives that are closely matched to service users’ needs.
The results in table 2 highlight that the other NPM practices we analyse have a much weaker overall relationship with citizens’ perceptions of performance. A customer focus has a positive influence on citizens’ perceptions of local public service equity; a finding that mirrors the private sector literature on customer satisfaction, which suggests there is a strong link between good customer care and perceptions of fair treatment (e.g. Bies & Moag, 1986). However, a customer focus appears to have no relationship with any other dimension of performance. A connection with equity is also revealed for the percentage of temporary staff employed by local governments. This may reflect the possibility that due to ‘anticipatory socialisation’ temporary employees sometimes exhibit higher organizational commitment than their permanent counterparts (McDonald & Makin, 2000). The finding may also be attributable to the likelihood that the temporary workers employed by local governments are often more representative of the full range of social groups within the local population (see Conley, 2011).

Contrary to the prescriptions of protagonists of NPM accounting reforms, the maintenance of a larger capital asset base is positively associated with citizens’ perceptions of efficiency. Local citizens may regard a wide portfolio of assets as representing a better return for their taxes than a narrow and less visible one, especially as they are unlikely to be aware of the actual cost of maintaining that portfolio. However, capital charging has no observable relationship with any other performance measure.

In terms of external influences on citizens’ perceptions of performance, we find that most of the control variables have the expected signs in each model, and in many cases are statistically significant. Deprivation and social class diversity, in particular, both exhibit a strong negative relationship with all four measures of citizens’ perceptions. Age diversity is negatively related to perceived efficiency and effectiveness, ethnic diversity to perceived responsiveness – though this variable is, somewhat surprisingly, positively related to perceived effectiveness. The size of local governments seems to make very little difference, but the density of the population appears to matter, with perceived efficiency and effectiveness higher in more densely populated areas, but perceived responsiveness lower. Finally, a positive connection with efficiency is also observed for the district council variable.

Given the salience of deprivation for citizens’ perceptions of performance, we carried out a preliminary exploration of its potential influence on the relationship between NPM practices and performance, thereby giving due accord to Boyne et al.’s (2003) exhortation to consider the role of context in evaluations of public management reforms. We hypothesise that some NPM practices may prove more resource-intensive and complicated to implement in deprived...
areas because those areas are plagued with more complex and intractable social needs, which seriously constrains the potential for citizens to participate in coproduction. In particular, we anticipate that those NPM practices that are externally facing, such as an entrepreneurial strategy, will be especially difficult to implement where coproductive capacity is weaker and will therefore be less likely to positively influence performance (Scott, 2002).

To assess this possibility, we split the sample between local governments with above and below the median level of socio-economic deprivation (16.21) and re-ran our analysis. The results (available on request) confirm our hypothesis: the negative relationship between public-private relationships performance is stronger in more deprived areas and the positive relationship between prospecting and performance weaker. By contrast, the positive relationship between performance management, which is largely an internal facing practice, and performance is stronger in such areas. All of which illustrates, that the impact of NPM practices is at least partly contingent upon the organizational environment in which they are implemented. This is an issue that merits extended consideration in subsequent studies of the effects of NPM.

7. Conclusion
We presented arguments in this paper on the effects of NPM practices on citizens’ perceptions of four key dimensions of public service performance. These arguments were in some cases confirmed and in others contradicted through statistical analysis of citizens’ perceptions of efficiency, responsiveness, equity and effectiveness of a large sample of English local governments. We find that public-private relationships have a negative relationship with citizens’ perceptions of all four dimensions of local service performance, but that an entrepreneurial strategic orientation exhibits a positive (albeit weaker) association with all four. At the same time, performance management is also likely to positively rather than negatively influence citizens’ perceptions of local public services. We also find that these relationships are partly contingent upon the circumstances in which local governments operate, with externally facing practices proving likely to have fewer benefits than internally facing ones in organizations confronting more challenging socio-economic circumstances. These results have both theoretical and practical implications.

The analysis expands on existing work on NPM and public service performance in at least three important ways. First, it tests for the impact of several important NPM practices. Previous quantitative studies have so far largely focused on the impact of a single practice, especially some element of public-private relationships (e.g. Amirkhanyan, Kim & Lambright, 2008). Second, the analysis draws upon measures of multiple dimensions of
public service performance, whereas most extant research is focused solely on costs or efficiency (e.g. Hansen, 2010). Finally, by theorizing and empirical testing the possibility that the impact of NPM practices is contingent upon the organizational environment in which they are implemented, we offer a substantial extension of existing theory and evidence of the effects of NPM on performance, and illustrate how context matters for public service reform.

Our analysis shows that public-private relationships seem to have few benefits for citizens’ perceptions of the performance of local public services (especially in more economically deprived areas), yet there are other NPM practices which do; in particular, performance management and (to a lesser degree in more deprived areas) an entrepreneurial strategy. These findings illustrate the complex and often contradictory nature of the impact of NPM practices, and point to the difficulty faced by public organizations subject to large-scale reforms comprising multiple new initiatives, such as the modernization programme imposed upon English local governments by the Labour government during the study period (Laffin, 2008). The statistical results we present therefore provide considerable food for thought for policy-makers about the merits of specific targeted reforms versus whole-of-government approaches. They also indicate that there is a need to determine whether a given reform is likely to be a good fit for the context in which it is to be introduced. Our results suggest, for example, that performance management can be especially effective in socio-economically deprived areas, but that an entrepreneurial strategy may be ineffectual and public-private partnerships extremely detrimental.

Another important consideration is how much discretion organizations can, do and should exercise over the priority accorded to different elements of a reform programme. For example, the local governments in our sample exhibit considerable variation across the six NPM practices, which we study, highlighting that, even in a centralized state like the UK, the implementation of central reforms at the local level is invariably uneven. Further qualitative and quantitative research could cast light on the extent to which adoption of alternative NPM practices is influenced by local managers’ and politicians’ interpretation of the social, economic and political needs of their locality. Such further research could also help to assess whether the findings can be generalised to other types of organisations or local governments in other countries. This would require controlling for the specific details of each NPM practice, and the implementation process of the practice. Indeed, it may emerge that it is not the presence of an NPM practice in itself that leads to certain perceptions, but the process followed for introducing the practice and the time since the practice has been implemented. More research is therefore required to identify precisely what types of management and organizational actions are associated with an apparent commitment to NPM practices.
Finally, the effects of NPM practices point in the same direction for all four dimensions of performance that we study. Contrary to much of the literature on the topic, this suggests the absence of an equity trade-off vis-à-vis other performance dimensions. Still, our statistical model provides a much stronger explanation of equity than of the other dimensions of performance. Thus, we conclude that, in the minds of citizens at least, the impact of NPM appears most likely to influence their sense of how fairly public services are delivered.
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