Thriving communities, affordable homes

Homes & Communities Agency

UNDERSTANDING UNIT COSTS OF HOUSING PROVIDERS – REGRESSION ANALYSIS

Summary Report

July 2012

Introduction

The new Regulatory Framework for Social Housing that came into place from April 2012 outlines a system of co-regulation in which providers are responsible for managing their businesses and meeting the regulatory standards. The framework includes a standard on Value for Money which makes providers responsible for articulating and delivering a comprehensive approach to value for money in meeting their objectives. Amongst other things, this requires an understanding of the costs and outcomes of delivering particular services. Providers' boards need to demonstrate how they are meeting the Value for Money standard and publish this in a first annual self-assessment by October 2013.

This report summarises regression analysis by the Homes and Communities Agency (the regulator) to understand unit costs of social housing providers. This report is being published with the aim of adding to the body of contextual information that can inform boards and stakeholders on value for money. It is providers' responsibility to define objectives against which value for money is assessed. Unit costs do not equal value for money, but are an important part of it. The focus of this work is on understanding costs at a sector level; understanding the costs at a provider level is a task for individual providers and their boards.

Regression analysis is one way to understand unit costs. This analysis, especially as it can be sensitive to the data and techniques used, should be seen as a robust contribution to understanding costs in the sector rather than the final word. Some of the findings are challenging for providers. It is hoped this document will promote debate and dialogue in the sector, and ultimately contribute to robust self-assessment of value for money.

Overview of regression analysis

Costs of social housing providers are driven by a number of factors. Without controlling for a sufficient range of factors, the value of simple comparisons of costs across groups of providers is likely to be limited. Regression is a statistical method designed to overcome this: it estimates the average effect of a particular factor on costs, holding all other factors constant.

The regulator has conducted extensive regression analysis to estimate the effect of different explanatory factors on the costs of providers of social housing. This analysis involves drawing together data on costs and potential cost drivers for every Private Registered Provider[1] with over 1,000 homes. This includes data held by the regulator (accounts returns, Regulatory Statistical Return) and national datasets (e.g. CORE[2] lettings data, regional wages, deprivation and rural areas). This is a more extensive exercise than those previously commissioned for the sector[3], incorporating over 170,000 data points from 2005 to 2011.

This analysis updates and extends work previously included in the 2010 Global Accounts of Housing Associations. It uses cost data presented in the 2011 Global Accounts of Housing Providers.

Regression is based on average effects of different factors on costs and can be sensitive to the particular data and techniques used. The analysis presented here is the result of careful and extensive testing of seven years of data. It should be seen as a robust contribution to understanding costs in the sector, rather than being the final word.

The results of this analysis are summarised in this report and set out in more detail in a Technical Report.

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[1] Private Registered Providers do not include local authority providers.

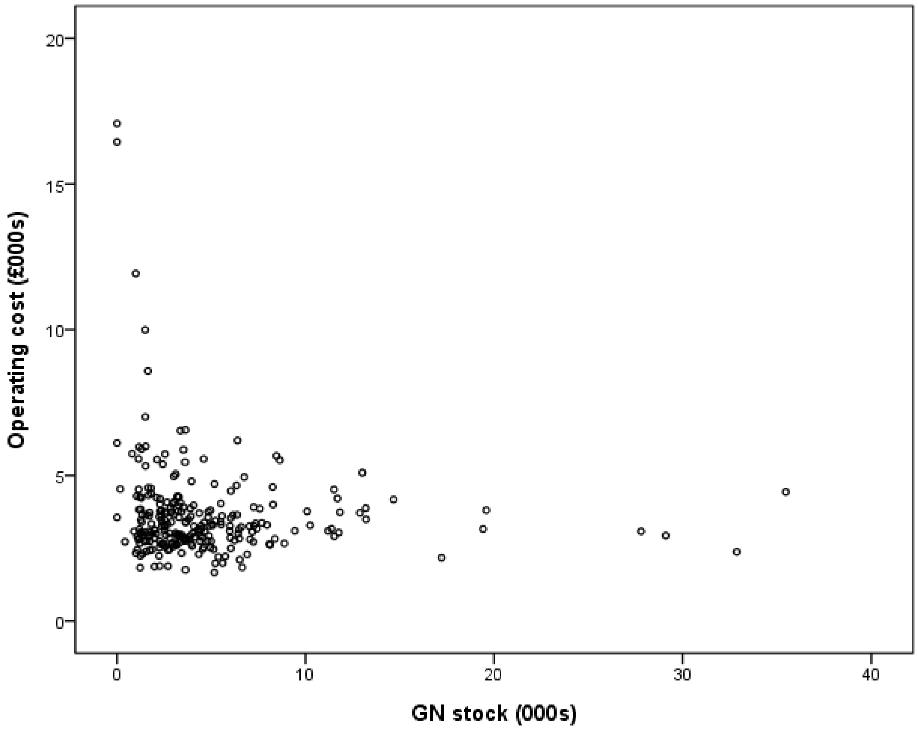
[2] Continuous Recording system of social housing lettings, currently administered by the Department for Communities and Local Government (DCLG).

[3] Indepen's Operating Cost Index (OCI) study conducted for the Housing Corporation.

Overview: costs of providing social housing

On average, providers recorded net operating costs per social housing unit at £3,440 during 2010/2011. There is considerable variance around this mean figure between providers: for two thirds of providers operating costs per unit range between £1,200 and £6,800. One of the aims of this regression analysis is to test how much of this cost variation can be explained by measured factors.

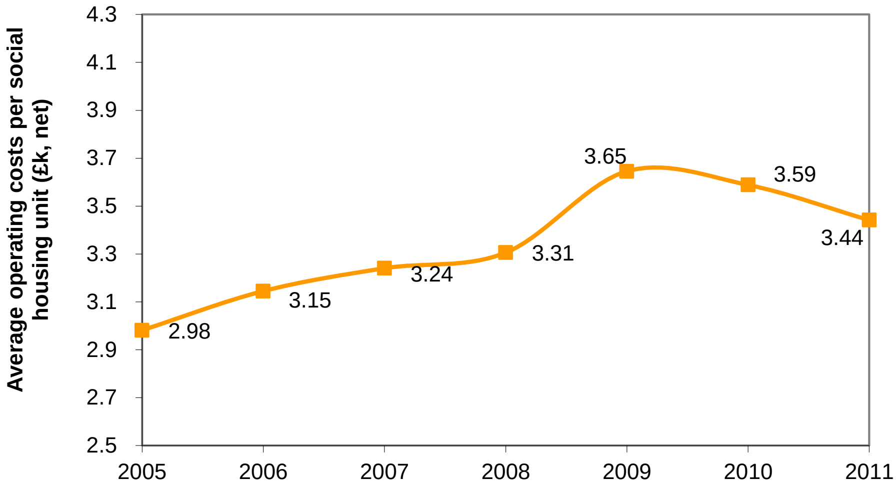
Figure 1: Operating costs per unit and size (General Needs stock) of each provider for an illustrative year



Over the seven years between 2005 and 2011, average unit operating costs increased at an average rate of 2.4% pa, slightly slower than headline CPI inflation for the same period. Over this period some of the pressures on provider costs have eased. In particular, there has been a reduction in Decent Homes activity as providers complete their major investment programmes (although investment in existing stock was still £2.3bn in the 2011 Global Accounts), a slowdown in new stock transfers and, for the providers analysed, a falling proportion of Supported Housing stock. Accounting for changes in measured factors, providers' cost inflation is estimated to be more than the general rate of inflation between 2005 and 2011.

This highlights two potential challenges for the sector. First, sector risks such as welfare reform or increased interest rates are likely to put upward pressure on the net costs of providers. These risks are explored in the Sector Risk Profile. For many providers these risks are likely to mean cost control will become increasingly important. Second, as part of their value for money self-assessments, providers' boards are expected to set out evidence for how value for money gains have been and will be realised. It is important that these assessments of value for money gains over time account for any changes in the activities of social housing providers.

Figure 2: Average operating costs per unit (2005-11)



Results: factors that explain cost variation

The following factors, listed in order of approximate importance, are important in explaining differential costs:

Supported Housing

It will surprise few providers that Supported Housing in the most important factor that explains differences in costs. Each unit of Supported Housing is on average associated with additional social housing lettings costs of £7,000 pa on top of those for a General Needs unit. There is some evidence that Housing for Older People units, tested separately, have higher social housing lettings costs than General Needs (by £1,400 pa on average).

Most of this additional cost is associated with support services paid for by external revenue funding such as Supporting People. The vast majority of providers with over 1,000 units hold some Supported Housing, and almost two thirds received Supporting People funding in 2010/11[4]. The nature of Supported Housing and support services is likely to explain a large part of the cost differential between many providers.

Regional wages . . . or rent levels?

There is strong evidence that costs vary with regional wage effects. Using a bespoke provider wage index based on regional administrative and construction wages, the difference between wage bases in London and the North East is 31% for 2009. Regression analysis finds a one-to-one relationship between percentage differences in wages and percentage differences in costs for General Needs stock. Controlling for all other factors costs for providers operating solely in London, for example, are on average 36% higher than for those operating in the North East.

[4] HCA Financial Forecast Return Analysis.

Rents levels were tested as an alternative to regional wages as a predictor of costs. The analysis showed rents are a much stronger predictor of costs than regional wages. There is a close link between rents and regional wages: regional wages are typically correlated to local earnings and property values, two of the three factors that determine target rents (the third is property size). There are several potential explanations for the finding that costs are more closely linked to rental income than regional differences in the cost base. Higher rents may reflect cost factors not picked up in the model. Overall, this finding underlines the challenge for providers to demonstrate that higher operating costs above and beyond those accounted for by differences in regional and local context represent value for money.

Stock transfers

Stock transfer providers have higher costs than traditional ones in their early years, usually associated with major improvement programmes. On average stock transfers have operating costs (plus capitalised major repairs) of £1,600 per unit (36%) above similar non-stock transfer providers in their first six years, falling to a slight difference (£600 per unit, 14%) in the next six. Beyond the first twelve years, this cost differential disappears. The slow-down in the flow of new stock transfers should depress the sector's average costs.

Neighbourhood deprivation

Moving from a provider operating in a neighbourhood ranked as having an average index of multiple deprivation to one operating in the most deprived areas is associated with increased operating costs plus of around £750 per unit (19%). This is after controlling for factors such as Decent Homes activities or stock transfers, and is likely to be due to factors such as regeneration initiatives and greater housing management and estate management costs.

Decent Homes activity

The sector has seen substantial expenditure associated with major repairs programmes to meet the December 2010 target data for all housing to meet Decent Homes Standard (DHS). Achieving DHS is associated with estimated operating costs plus of £11,900 per unit made decent, a cost that is typically incurred over several years. Around half of estimated additional costs are associated with revenue costs. Estimated average costs of achieving DHS have increased over time, due mainly to higher per unit repair costs for the small residual stock of non-decent stock homes. Overall, given the small amount of residual non-decent stock, falling Decent Homes activity is likely to have eased pressure on costs between 2005 and 2011.

Results: factors where evidence of influence on costs is weaker

For other factors the evidence of a link with costs is weaker. This does not necessarily mean there is no relationship; rather the regression analysis did not provide strong unambiguous evidence of one. These factors are as follows:

Geographically dispersed or rural stock

There is mixed evidence on the effect of geographically dispersed stock on costs. The streamlined model presented in the Technical Paper showed little evidence that stock held in dispersed pockets geographically, or stock in rural areas, is associated with higher costs. A broader model, including all providers where there is full data for at least one year, shows some evidence that social housing letting costs are higher for General Needs units held in local pockets of less than 100 units.

The lack of strong evidence of a relationship between geographical dispersal and costs does not mean that providers should not consider all their options as part of their management strategies.

Group structures

On balance, there is no strong evidence that being in a group structure affects unit costs. Inter-group transfer payments make it difficult to assess the relationship using entity-level data. Entity-based analysis apparently shows lower cost per unit for subsidiary organisations. However this is likely to be due to some level of costs incurred by parents and other entities with less than 1,000 units outside the entity-level analysis, rather than cost reductions associated with group structures. Group-level accounts analysis, where inter-group transfer payments are aggregated into group accounts, found no significant evidence that groups have different costs on average.

Size of organisation

The analysis did not generate strong evidence for a simple relationship between scale of General Needs stock holdings and costs. Data for 2010-2011 suggests providers with between 10,000 and 20,000 General Needs units had lower average costs, controlling for the other factors in the model. However this relationship is not evident in the other six years. Overall, the relationship between size and cost is far from deterministic.

This apparent lack of link between size and costs implies either that economies of scale are not being realised, or that any realised savings are recycled to support operating costs.

New development and other factors

There is no evidence of any clear effect of provider growth or new build rates on operating costs. There is no significant evidence that providers with increasing stock or high new build rates have higher operating costs than other organisations.

Previous analysis presented in 2010 Global Accounts could not find clear evidence of any effect of voids, lettings, anti-social behaviour measures, repairs or contracting out of management.

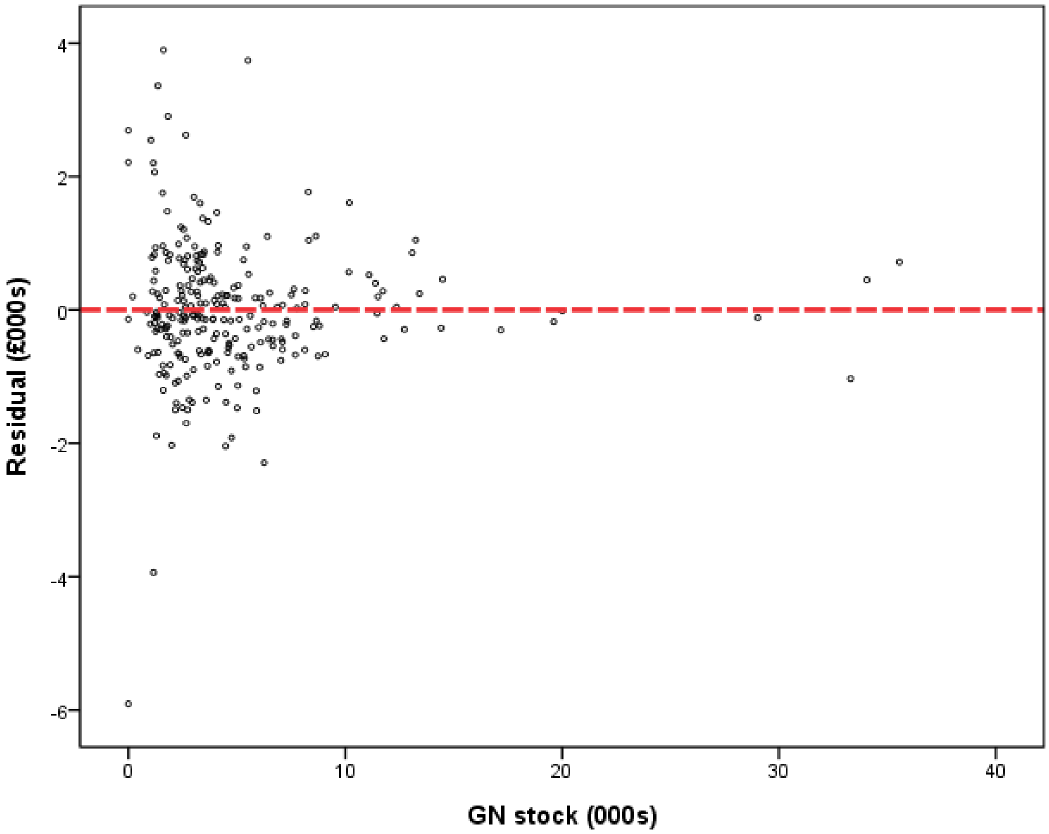
How much cost variation can the analysis explain?

Cost variation between providers

Measured explanatory factors explain a large part of cost variation between providers. The main regression model used can explain around 50% of the variation in unit costs between providers each year. However, as shown in the figure below, even after controlling for the range of factors in the regression, there is still considerable residual variability in costs. This variability reduces sharply for larger providers, but is still considerable for those with 10,000 units or more.

As part of their approach to value for money, providers need to understand the costs and outcomes of delivering specific services and the underlying factors that influence these costs. As part of this, providers should understand and communicate the reasons for differences between their unit costs and those of their peers. Clearly, the factors covered in this report only represent part of the explanation.

Figure 3: Residual values (difference between predicted and actual operating costs) and size of providers (General Needs units)



Conclusions

Under the new Value for Money standard, providers are responsible for articulating and delivering a comprehensive approach to value for money in meeting their objectives. Providers' boards need to demonstrate how they are meeting the Value for Money standard and publish this in an annual self-assessment by October 2013.

This report aims to add to the body of contextual information that can inform boards and stakeholders on value for money. It provides evidence of how factors such as supported housing, regional wages, deprivation, Decent Homes activity, stock transfers, size of provider, group structures, geographical dispersal and rural stock influence costs on average.

Activities such as supported housing or Decent Homes improvements, and the costs associated with them, are generally well understood by providers and funders. Providers' activities to support deprived neighbourhoods, and the costs and outcomes associated with them, are probably less widely understood. This analysis provides evidence that operating in deprived neighbourhoods is associated with increased costs of around £750 (19%) per property. These costs are likely to reflect a range of activities such as enhanced housing management, estate management or regeneration initiatives to support neighbourhoods. Several findings from this analysis underline the challenges to providers in assessing and delivering value for money:

- Between 2005 and 2011, underlying pressures on provider costs from measured factors have eased on average. Accounting for changes in measured factors, providers' cost inflation is estimated to be more than the headline rate of inflation between 2005 and 2011. Many sector risks over the next few years are likely to put upward pressure on net costs meaning cost control will be become increasingly important for many providers.
- The factors modelled here can explain around half of the variation of costs between providers based on average effects. Understanding costs and outcomes at a provider level, and what accounts for differences with peers, is a task for individual providers and their boards. Providers need to be able to demonstrate how higher operating costs are linked to underlying cost drivers and delivery against their objectives.

Regression analysis is one way to understand unit costs at a sector level. This analysis should be seen as a robust contribution to understanding costs in the sector rather than the final word. It is hoped this document will promote debate and dialogue in the sector, and ultimately contribute to robust self-assessment of value for money.

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