A case study of deep retrofit in mixed tenure (rented and owned) UK social apartment blocks

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Keywords

governance, deep renovations, social housing

Abstract

Apartments in multi-occupancy buildings account for 40 % of Europe's homes. Levels of refurbishment in apartment blocks are often lower than in single-family houses, in part because of the complexity of reaching agreement and sharing the costs between the multiple owners of a typical block. Governance arrangements - the way ownership is structured and building management is undertaken – have a direct impact on what is possible in terms of low energy retrofit but have been underanalysed by energy efficiency researchers. This paper provides a case study of how the legally constituted governance arrangements impact on a deep retrofit of one type of building – social housing tower blocks in England.

In social housing blocks in England, the social housing provider typically owns the building and rents out most of the flats to tenants on low incomes. However, it is also usual for some of the flats to have been sold into the private sector as 125 year "leases", thus sprinkling privately owned flats in with rented flats. Under the terms of these leases, the private flat owners (leaseholders) have to pay service charges for the upkeep works to the building carried out by the social housing provider. These service charges can be challenged at a tribunal if the leaseholders consider them unreasonable.

Oxford City Council are carrying out a refurbishment programme that includes significant energy efficiency improvements on five tower blocks, but the substantial service charge bills have led to opposition from some leaseholders and has received national press attention. This paper assesses the governance arrangements in the five Tower Blocks and how they are affecting the delivery of the planned energy-related measures. As well as the legal issues we discuss how the council and leaseholders (who have to pay their share of the costs) perceive the benefits of the upgrade and the legal arrangements.

Article 19 of the Energy Efficiency Directive requires EU member states to address split incentives for energy efficiency between the multiple owners of buildings. Our paper will conclude with pointers as to how the law in England and in other European countries could better meet the needs of mixed tenure building co-owners in the context of refurbishment projects. We will also argue that much more legal analysis and empirical work is needed to understand and address governance barriers to energy efficiency in Europe's apartment blocks.

Introduction

The EU recognises that the building sector provides one of the greatest potentials for energy savings. Buildings represent 40 % of the EU's final energy demand (EED 2012 para 16) and heating and cooling constitutes the largest single source of energy demand in Europe, with only a small percentage generated from renewable energy (Energy Union Package, 2015). The 2030 30 % target for energy efficiency in the 2016 Clean Energy Package (European Commission, 2016) will require substantial alterations to Europe's building stock, particularly major improvements to insulation and heating and cooling systems. As such, the Clean Energy Package puts higher rates of refurbishment as a policy priority, to be driven by a recast, and more robust, Energy Performance of Buildings Directive. Across Europe, 40 % of households live in apartment blocks (Eurostat 2015), whether purpose built apartment blocks, single family homes converted into apartments or mixed use commercial/residential buildings. Usually, these blocks are in co-ownership. Delivering deep renovations of these buildings will require the co-owners to work together extensively to plan and pay for the upgrades to their buildings.

The Energy Efficiency Directive (2012) already requires member states to prepare a strategy for "cost-effective deep renovations ... leading to a very high energy performance' and Article 19 recognises that where a building is tenanted there may be particular 'regulatory and non-regulatory' barriers to energy efficiency. Article 19 requires member states to 'evaluate and if necessary take appropriate measures to remove' barriers - relating to cost sharing, that individuals may not obtain full benefits from improvements, or problems with decisionmaking processes, as well as 'the split of incentives ... among owners [of a building].' These difficulties are not, however, confined to tenanted buildings but are also present in multi-owned properties (MoPs). The conception of a nearly zero energy building, central to European policy thinking, requires a plan for refurbishment at building scale, even if the individual steps in the retrofit are staged, yet the multiplicity of stakeholders, the dimension of owning 'part within a whole', and the interaction of technology with property law all add to the physical and technical challenges of achieving this goal.

Matschoss et al (2013) suggest that the particular problems of implementing energy renovations in MoPs are not 'very visible in the policy discourse' targeting buildings and the environment, which tends to focus 'on barriers to energy investment at a relatively generic level' (p1493). Recent work has begun to map out some of the challenges in more detail. Matschoss et al argue that the main problem with energy improvements in MoPs lies in the 'organization of owners' decision making' and related financial problems. The LEAF project (2016) identified the reasons for apartment blocks often having lower energy efficiency ratings compared to other kinds of buildings as falling into four categories: technical issues (for example, hard to treat solid wall construction); agreement issues; financial issues; and the behaviour of residents. Bright and Weatherall (JEL, 2017) suggest that the problem needs also to be understood through a building governance framework that takes account both of property law 'as a technology which in itself shapes energy related outcomes in the social and material world of MoPs' and of the complexity of decision making arising from the multiple parties involved and the interaction with legal regulation of decision-making. Underlying these practical challenges, Weatherall, McCarthy, and Bright (2016) argue that the 'individualistic view of ownership which has so much traction within the various European legal traditions' overlooks the 'fundamentally interdependent relationship with every other owner in the building'. They argue, therefore, that a reconceptualisation of property law to focus on collective responsibilities rather than individual rights may help to minimise these complexities, but that further empirical work is essential to understand extent of the barriers.

This paper presents a case study by researchers of a refurbishment project taking place in Oxford, England, being undertaken by Oxford City Council (OCC): the retrofit of five residential Tower Blocks (TB) in multiple ownership, at a total cost of £20 million (€23 million). It provides an opportunity to examine, in particular, how the building governance framework impacts on the refurbishment of MoPs. It is important to note that this is independent research: the researchers have no connection to the council or other parties involved in the refurbishment project and the research work is funded through the Oxford University John Fell Fund.

The Oxford Tower Blocks (OTBs) were built by OCC in the 1960s as social housing. OCC owns the whole TB buildings and rents most of the apartments ("flats") to tenants on an affordable basis. However, a significant number of individual flats have been sold to private owners. This tenure mix (of a public sector building owner, public ownership of most of the flats and private ownership of some flats) has added greatly to the challenges facing OCC in refurbishing the buildings. The focus of the case study is to understand how building governance in a mixed tenure site impacts on the ability to deliver a refurbishment programme that includes energy upgrades.

The OTB refurbishment works include a mix of general repair and maintenance, various improvement works for aesthetic and safety reasons, as well as significant energy efficiency upgrades, notably the installation of external wall insulation across all five blocks. A key challenge for OCC in delivering the refurbishment has been in dealing with the private flat owners in the blocks, particularly in terms of agreeing the level of their contribution to this project and this has now become the subject of a legal dispute between OCC and the private flat owners.

The OTB project and the ongoing legal process between the private flat owners and the OCC raises significant issues of principle for the delivery of deep retrofit projects in MoPs: firstly, how are apartment owners consulted in planning a refurbishment and, secondly, how should costs be allocated between different owners? These issues in turn link to questions of how the direct and wider benefits and therefore the costs of energy efficiency projects are recognised and allocated.

Although English property law presents particular difficulties for refurbishment projects not found elsewhere in Europe (Weatherall, Bright and McCarthy, 2016), these issues of consultation, planning and the allocation of costs and benefits are relevant to refurbishment projects in any MoP, particularly where there is a mix of private and public ownership (which is not uncommon throughout Europe).

This case study uses mixed methods: detailed legal analysis of relevant law and of the title deeds for the privately owned flats; analysis of a sample of Energy Performance Certificates of ground, mid and top floor flats in each block to understand the baseline energy performance; review of published council documents and interviews with various professionals to understand (a) the planned refurbishment programme and (b) the negotiation process with leaseholders; interviews with flat owners and renters to understand their views of the refurbishment project; review of public and press commentary on the refurbishment programme; and observation of Tribunal proceedings concerning the Council's ability to recover costs from the flat owners.

As the project is still underway, and the legal challenges are yet to be heard, this paper can provide only preliminary findings. "Introduction and Context" outlines how ownership of blocks of flats operates in English law. "The Oxford Tower Blocks" provides information about the OTB refurbishment, outlining the history of the project, and the complications arising from the mix of rental tenants and private owners. "Energy Efficiency" discusses the energy efficiency condition of the tower blocks prior to the refurbishment and the main objectives of the renovations, and "Building Governance" explores some of the building governance issues. The paper concludes with emerging findings; although tentative, the study provides some key insights into the difficulties of deep retrofit of MoPs, particularly those in joint public/private ownership.

Introduction and Context

PROPERTY LAW AND CO-OWNED RESIDENTIAL PROPERTY IN ENGLAND

The English law in relation to flats is hugely complex, and is very different to systems prevalent in the rest of Europe. This paper gives only an outline so as to set the context for the OTB study, and the detail is explained in Weatherall, Bright and Mc-Carthy (2016). Flats that are owned (rather than rented) are sold on a long leasehold basis. Although in practical terms most purchasers think of themselves simply as 'owners', in law what they own is effectively a tenancy (a right to occupy the flat and known as a "lease") for a period of, typically, 99, 125 or 999 years. In the case of flats bought from local councils (as in the OTB) the leases are for 125 years. The flat owner ("leaseholder") owns the inside walls of the flat but the exterior, the foundations, the roof, the entrance halls, landscaped areas etc all constitute 'communal parts' and belong to the building owner. In the case of the OTB, the block itself, and flats that have not been sold to private owners, belong to OCC.

It is the block owner who has the responsibility and power to carry out work to the communal parts of the building, including the structure, exterior, and roof. The block owner will pass the costs of running the building (for example energy bills for communal services, as well as costs incurred on repair and maintenance) to the flat owners through a 'service charge'. What items can be recovered through the service charge, and how the costs are apportioned between co-owners, depends on the wording of the lease - common arrangements involve costs being apportioned amongst the flat owners according to the size of the flat. As this can result in very large bills to the flat owners, particularly when major works are undertaken, legal disputes between block owners and flat owners are common. In one recent reported case, for example, the leaseholder was challenging a repair bill for more than £55,000, which was over 60 % of the value for which the flat itself was insured (Waaler v London Borough of Hounslow, 2015 - in this case the works involved a replacement roof and windows). Similar sums are involved in the OTB. The ability to recharge costs, and regulation, is discussed further below.

SOCIAL HOUSING ENERGY EFFICIENCY STANDARDS IN ENGLAND

As the Oxford tower blocks were built as – and are still principally – social housing, it is important to understand social housing in the UK context. Average home energy efficiency in the UK social housing sector is higher than in the private sector (English Housing Survey, 2013). Partly this is due to the nature of the stock: social housing tends to be of more modern (and therefore energy efficient) construction than UK private housing. More significantly, social housing providers have undertaken higher levels of refurbishment than private home-owners: they are (often large) businesses with an ability to raise finance and manage long term budgets for retrofit, and may be motivated by 'mission' to undertake refurbishment to deliver warmer homes for their rental tenants, and to consider the wider community benefits of refurbishment projects. The ability and motivation of social housing providers to undertake energy efficiency retrofit has been reinforced by policy measures: the Decent Homes Policy (1997–2010) provided national government financing for social housing improvements, and put in place minimum standard for key aspects of a "decent home" in social housing including requirements for basic insulation and effective, affordable heating systems.

As a result many social housing providers have now completed installation of most of the basic, highly cost effective energy efficiency measures. This leaves challenges of 1) tackling harder to treat properties, where installing insulation and heating system upgrades is expensive and difficult and 2) moving towards advanced, deep retrofit, which can deliver long terms gains for occupiers but often requires high upfront investment with long payback terms. The OTB project is of this type, involving significant and costly improvements to buildings that are harder to insulate than most UK homes.

THE RIGHT TO BUY

Most of the flats in the Oxford study are still owned by OCC and rented to their social housing tenants, who will have longterm security of tenure (the right to stay in occupation). The privately owned flats were sold by the council under the statutory 'right to buy' (RTB), a national government policy which gave tenants of local authority owned social housing the right to purchase their home at a substantially discounted price. Although the rates of discount have fluctuated with changing policy, the discount at times could be as much as 50 % from the market value. This explains why a significant number of flats in the OTB are now privately owned.

Before a flat is bought under the RTB, the local authority has to serve a notice on the purchaser (known as a section 125 notice) that sets out the price that the tenant will have to pay and the terms and conditions of the sale, including estimated service charges and improvement costs for the next five years. Thus, RTB owners are effectively protected from large, unexpected bills for the upkeep of the building in the first five years of their ownership. After five years there are no such restrictions and the landlord can recover 'reasonable' costs towards 'repair' works: if major works are undertaken, RTB flat owners can – like any other private flat owner – be hit by very substantial service charge bills, occasionally tens of thousands pounds.

RECHARGING THE COSTS OF WORKS

The UK government has passed extensive regulations designed to protect flat owners from unreasonable and unexpected costs. These provisions, contained in sections 19 and 20 of the Landlord and Tenant Act 1985, are designed to ensure 'that tenants of flats are not required (i) to pay for unnecessary services or services which are provided to a defective standard, and (ii) to pay more than they should for services which are necessary and are provided to an acceptable standard.' (Lord Neuberger in *Daejan Investments Limited v Benson*, 2013). The twin aims – of protecting owners from paying for inappropriate or poor quality work, or of paying too much – are supported by a requirement that the building owner consult with the flat owners before committing to major items of expense.

The building owner's ability to recover costs is also - importantly - constrained by the wording of the lease. A deep retrofit project will involve aspects of repair and sometimes renewal of building elements but primarily it will involve building improvement, for example the installation of wall insulation where previously no insulation was in place. The terms of leases usually allow the block owner to recharge the costs of repair (and sometimes renewal), but not improvements. This can make the planning and financing of retrofit in English MoPs extremely difficult. It also means the distinction between what is a "repair" and what is an "improvement" is a critical issue, but it is far from straightforward. 'Repair' does not include 'improvement' or even fixing 'design faults' unless this is necessary in order to conduct the repair (for example, if the windows need replacing because they are rotten, and building regulations require replacement of single glazing with double glazed units).1

The RTB leases in the OTB allow recovery for 'repair and renewal' but not 'improvement'. This introduces a further distinction, between 'renewal' and 'improvement', which is again unclear. There is discussion in law reports of the difference between 'repair' and 'renewal' which turns, according to Buckely LJ in *Lurcott v Wakely and Wheeler*, on the extent of the work required, and suggests that renewal involves 'reconstruction of the entirety, meaning by the entirety not necessarily the whole but substantially the whole subject-matter under discussion.² Something that involves more than 'reconstruction' would not, therefore, appear to be either repair or renewal.

The Oxford Tower Blocks

The five OTB consist of 348 flats, housing about 900 people. They are all high rise; ranging from 16 floors to seven floors. Each block is still mainly occupied by social tenants but has a minority of privately owned flats, acquired initially under the RTB. Some of these flats are still owned by the original RTB purchaser but most have been sold to new owners, some of whom are 'buy to let' investors renting out the flats in the private rental market but the majority of the re-sold flats are owned by owner-occupiers.

THE HISTORY OF THE REFURBISHMENT PROJECT

To understand how building governance impacts on the delivery of the OTB project, it is necessary to see how the story unfolds, and particularly, the balance between 'repair and maintenance' work and improvement work.

In 2007 a *Strategy for Tower Blocks* was prepared by the Head of Oxford City Homes for the Council's executive board. This reported a recent review of the Tower Blocks that concluded that the 'blocks could have a further life of at least 30 years providing that a number of structural and design faults were remedied.' A number of specific problems were identified. There was cold bridging leading to condensation

and associated black mould. With the current PVCu double glazed windows, a 'number of weather seals have deteriorated and double-glazing panels failed' and the recommendation was to 'replace the windows at the same time as the installation of external insulation' in order to save on future scaffolding costs. The storage heating systems were dated and new controllable storage heating should be installed. "Communal lighting needs to be more energy efficient." The report presented a wide range of options, from a limited programme of works through to asset disposal to finance a full programme. The total cost was estimated as being a little over £15 million, with a possible £1.3 million contribution from leaseholders (depending on whether improvement works were recoverable). The report also discussed the connection of the tower blocks to a combined heat and power (CHP) heating system. Of the total, £4.962 million was noted as being attributable to structural repairs (a figure that has been an important headline figure for the flat owners as costs have since risen). The recommendation at that time was for work to be done to bring the tower blocks up to the Decent Home standard (the minimum regulatory standard at that time), and to undertake a feasibility study for fuller redevelopment.

The Council eventually gave approval for the fuller project in 2012 at a cost of a little over £16 million, and it was anticipated that work would begin the following year (though the idea of CHP was not taken forward as it was realised there was insufficient plant room in the buildings). In the event, the project was delayed, with the contractor being appointed in 2015, and costs have increased to around £20 million. There does not appear to be any grant funding that is financing the work and the project is being funded from the Housing Revenue Account (effectively by Council rental streams). Work is currently underway at each Tower Block, and by the end of 2017 it should be completed on all.

The 2007 report identified there were 50 leaseholders (a number that has slightly increased since then). It stated that 'works will not be undertaken to flats subject to RTB or lease agreements' but also noted (presumably in reference to the communal works) that 'the cost of some improvements, such as insulation, upgrading communal areas and even the installation of new lifts may not be rechargeable'. The report clearly anticipated that the mixed tenure arrangement was likely to complicate progress: '... leaseholders charges are likely to be high and therefore resisted by the leaseholder. This could slow down the work programme considerably unless the Council has a robust strategy for addressing recharges'.

INVOLVING THE FLAT OWNERS (LEASEHOLDERS) AND DISQUIET

At this stage of our project we know little about whether the Council had a 'robust strategy' for addressing recharges but it is clear that there has been a degree of 'consultation' in the form of advising residents – both rental tenants and private flat owners – of the plans and enabling them (collectively) to express preferences in relation to aesthetic issues, such as the colour of cladding. There have been on site meetings, newsletters, dedicated websites, and tower block representatives have been appointed. What is less clear is the extent to which particular attention was paid to the private flat owners in particular and informing them about likely costs. The issues for rental tenants are quite different: they do not have to pay for the works (other

^{1.} See Quick v Taff Ely BC [1986] QB 809 (CA).

^{2. [1911]} KB 905 (CA) 924. See also Brew Bros v Snax [1970] 1 QB 612 (CA) 640.

than in a very indirect way through rents³). There has been statutory consultation (as required by statute under s 20 of the Landlord and Tenant Act 1985) and, although the researchers have not seen this, it appears that this followed a common process for local authority refurbishment projects, with an initial consultation in 2015 relating to the 'long term' appointment of the contractor, and a later consultation in relation to the 'major works'. Through this process information about the works, together with the expected contribution from flat owners, was given in January 2016. According to one owner, the estimated charge to each owner was, in 2012, £9,500 but in 2016 they were told that they would pay in the region of £50,000-60,000 (€57,000-€68,000) - a very high proportion of the flats' overall value (for comparison, the website Rightmove reports that one bedroom flat in one tower block was recently (Aug 2016) sold for £130,000).4 Until that point, one owner describes the process as 'non-transparent and non-informative'; residents (renters and owners) had been largely supportive of the project because they were told not to worry about the costs.

When the costs became known in 2016, leaseholders became concerned. Press stories appeared; flat owners started getting in touch with other flat owners; and the Oxford Leaseholders Tower Block Association (OLTA) was formed with more than half of the owners joining. One press story reports this association as warning that the charges could bankrupt some owners, and another radio interview has a flat owner saying that payment is 'impossible' and that although she had wanted to sell the flat she is now stuck (BBC Radio 5 Live, 2016). A number of flat owners contributed to a fund to obtain legal advice (Race, 2016).

The Council has reportedly offered to assist with payment, through 'interest-free payments spreading the cost over 12, 24 or 36 months, a five-year payment plan with three years interest free, an equity share purchase option where the council takes a share of the market value of the property, paid only when the property is sold, or an equity loan, repayable with interest over a long period such as 20 years.' (Oxford Mail, 2015).

Energy Efficiency

BASELINE ENERGY EFFICIENCY CONDITION

The Energy Performance Certificates (EPCs) of the individual flats provide some picture of energy use and potential for energy saving measures prior to the refurbishment, and we have looked at a sample of 13 EPCs across the five blocks from ground, mid and top floor flats.

The OTB flats – pre-refurbishment – are notably less energy efficient than the average social housing flat in England. Of the thirteen EPCs analysed and using the A–G energy efficiency scale used in the UK, 3 flats were banded D, 5 E, 4 F and 1 G. By comparison, 52 % of English social housing flats are in the C band, 37 % D, 6 % E and 2 % F or G (English Housing Survey, 2013). The presence of a significant proportion of F and G rated flats in the tower blocks is therefore striking, particularly as we



Figure 1. March 2017 view of one of the Oxford Tower Blocks showing insulation and building ties being installed (left) and partially installed over-cladding (right). The Council describes the objectives of the refurbishment as, inter alia, to "improve visual appearance," "improve thermal performance" and "structural maintenance." Photo taken by the authors.

found in our small sample one G-rated – extremely energy inefficient – flat: in the English Housing Survey of 1,882 social sector homes only 5 G-rated homes (0.27 %) were found, none of which were in tower blocks (ibid.). UK regulation identifies homes in the F and G band as being below a decent, safe standard for rented properties.⁵

In our EPC sample, annual energy bills for heating, lighting and hot water were estimated at an average of £1,077 for the ground floor flats, £852 for the mid floor flats, and £1,398 for the top floor flats. The specific areas of low energy efficiency identified by the EPCs for the individual flats are: uninsulated walls (the tower blocks being of uninsulated reinforced concrete construction); uninsulated roofs (for top floor flats); uninsulated floors (for ground floor flats and flats situated above unheated spaces); electric immersion hot water heating with limited controls and underinsulated hot water tanks; electric storage heaters with manual controls; and some flats lacking low energy lighting.

EPC assessments do not review the condition of the installed energy related features. Thus, the EPCs identify the windows in all flats as being double glazed and therefore not a priority for

^{3.} And the ability of OCC to increase rents for social tenants are strictly limited by national legislation.

^{4.} In April 2016, one leaseholder claimed that "£60,000 makes for over a half of the typical market value of affected properties (in my case 65% of the actual purchase price)." See Oxford City Council 2016a.

^{5.} From 2018 the rental of F and G banded properties will be restricted on the private rental market in the UK. Further, English environmental health practice and official documents identify most F&G banded homes as constituting a serious health and safety hazard because of the risk of excess cold: see Energy Saving Trust, 2010.

upgrade but, old, poorly fitted double glazing is a problem in the OTB flats (as identified in the Head of Oxford City Homes' 2007 Strategy Report) and the windows are being replaced as part of the refurbishment project. The EPC therefore provides no useful information on a key issue in the context of recharging to the OTB flat owners: whether replacement is necessary for 'repair and renewal' or is an 'improvement'.

THE PLANNED REFURBISHMENT

The Council summarises the project as involving: "repairs to the communal structure; over-cladding and additional insulation; replacement of windows; new heating systems; upgrading of the communal electrics and fire safety systems, and refurbishment of lifts. There will also be work to improve the grounds, car parks, fencing, landscaping and front entrances" (Oxford City Council, 2015). The details of the work differs according to the configuration of the blocks. The overall design objectives for two of the Tower blocks are explained in a landlord newsletter as being to: 'create vertical emphasis, create an interesting roof profile, improve visual appearance, improve thermal performance, maintain fire safety, structural maintenance, heating and electrics upgrade' (Oxford City Council, 2013). On one of the towers, 3 solar photovoltaic panels are being installed on the south facing elevation (BM3 Architecture Ltd., 2017).

There is, therefore, a mix of repair work, overall improvement works (including to aesthetics), as well as energy efficiency works and one installation of a renewable energy measure. Internally to flats the works include installation of ventilation systems in each flat (the new ventilation does not include heat recovery), changing storage heaters to panel heaters (optional for leaseholders), installation of sprinkler systems, and enclosure of balconies to create 'garden rooms'. The council further identifies the benefits of the refurbishment as follows: "When completed the work will extend the life of the flats by a minimum of 30 years, improve energy efficiency by reducing heat loss, cut fuel bills, and reduce fire risk. The quality of life for residents will also increase with the improved look and feel of the tower blocks." The refurbishment will "ensure the buildings are 10 % above current building regulation requirements to ensure the building is comfortable and durable for the foreseeable future." (Oxford City Council 2016). Certainly, improved energy efficiency is therefore part of the overall objective. The managing director for the lead contractor, Willmott Dixon⁶, has commented that: "... our work to install energy efficiency improvements at the tower blocks will help residents reduce their fuel bills and live in warmer, healthier homes." [Wilmott Dixon 2015]. One resident has said: "The improvements cannot come quick enough. We often suffer from chest problems which the doctor has said is from the damp in the flat". [ibid].

The key energy efficiency measures for the individual flat owners are the installation of the external wall insulation and the replacement of the windows. The Council were not able to make an overall assessment of the energy savings the project will deliver as there was no baseline data on the blocks' historic energy performance to allow this. The Council have expressed the energy efficiency ambition in two forms:

- A KPI on U-Values: a minimum target to improve on building regulations by 10 % only applicable to building elements being refurbished, based on the minimum U values for refurbished elements specified in the Building Regulations relevant to refurbishment of a domestic dwelling
- A KPI of a planned increase in the average SAP rating for ground, mid and top floor flats.

The SAP rating target has not been communicated publicly as it was felt this would be hard to understand and/confusing for residents. The 10 % figure has been communicated to tower block residents and stakeholders.⁷

As an indication of the type of bill savings that may be achieved from the refurbishment project for each of the flats, the Energy Saving Trust estimates that a one-bedroom mid-floor flat in a 1960s, system built block would save £300 a year on energy bills and 1.8T of carbon dioxide, as a result of the installation of solid wall insulation⁸.

COMMUNICATION OF THE ENERGY SAVING AMBITIONS OF THE PROJECT

As seen above, flat owners and residents seem – from our analysis of the publicly available information to date – to have been given limited information about the energy-saving aims of the OTB project. The 10 % above building regulations target is referred to, but published information does not explain what this means in terms of lower energy bills for flat owners. In addition, the SAP rating (EPC) targets for individual flats do not feature in public communications. Communications to private flat owners could have highlighted how better SAP ratings mean lower energy bills, and the evidence from other parts of the UK that a property with a higher SAP rating has a higher sale value (Fuerst, 2013).

In the absence of this information from the council, leaseholders have turned to their EPCs to attempt to understand the energy-related ambitions of the project, and have challenged OCC on the basis of the information their EPC contains. For example, one leaseholder is quoted in the national press as saying that 'my EPC certificate states the potential to shed about £100 of my annual energy bill by improving thermal insulation. Given that windows and wall improvements total £30,000, the return to profit of 300 years appears ridiculously poor value' (Lunn, 2016).

However, the EPC has major limitations in helping leaseholders understand the benefits of the OTB project. EPCs for flats without wall insulation do not provide figures on the potential from wall insulation (the EPC excludes this information because it is not normally in flat owners' control to install this measure) – thus the EPC provides no information about the benefit of the largest single energy saving action in this project.⁹ EPC assessments do not account for the physical condition of building elements and a key element of the OTB project is the replacement of the windows on the basis that these are in poor

^{6.} Wilmott Dixon sold off their energy services division in the course of this project The new company is known as Fortem.

^{7.} Statements in this paragraph from Oxford City Council, direct communication, March 2017.

Calculation from the Energy Saving Trust online Home Energy Check tool available at http://www.energysavingtrust.org.uk/resources/tools-calculators/home-energy-check.

^{9.} Though the leaseholder quoted in the Guardian claims that their EPC provides an overall estimate for the savings from improving thermal insulation, none of the 13 OTB EPCs reviewed by these researchers identify the savings from installing wall insulation.

physical condition. EPCs (in England) only cover the individual flat and do not cover the potential for and benefits of energy saving improvements in communal areas (in the OTB project, for example, lift refurbishment). Such energy saving measures benefiting communal areas will deliver lower service charges for individual flat owners.

Building Governance

The current position is one of great uncertainty about the liability of flat owners to contribute to the project. The title deeds (leases) appear to be in the same form for all flats and require the owners to pay for the 'repair maintenance decoration and renewal' but there is no specific mention of improvements. As foreshadowed by the 2007 Strategy for Tower Blocks Report, this has, therefore, become a serious issue. Flat owners regard themselves as liable only to pay for repair, not improvements, but OCC has not provided a breakdown as to how costs are accounted for as between works of repair and works of improvement. In so far as information has been given, it has not been clearly presented. OCC has now made an application to the First Tier Tribunal (Property Chamber) which has jurisdiction to determine how much of these costs are payable. The dispute is costly: lawyers have been instructed, there has been a preliminary case management hearing with a further Tribunal hearing scheduled for February 2017, and it is likely that there will be further issues before the Tribunal thereafter. It is also costly in other ways, being undoubtedly a huge drain on management time for everyone involved, as well as being a worry.

The OTB experience is not an isolated one. In Sheffield, a leaseholder, Ms Oliver, challenged service charges in a staged refurbishment project. The initial challenge, to a bill of £6,147.59 for replacement windows, led to both a Leasehold Valuation Tribunal decision, and an appeal to the Lands Tribunal (Sheffield City Council v Oliver (2008) LRX/146/2007). Ms Oliver later challenged a bill of £9,378.72 for replacement cladding and structural strengthening. The case involved a number of legal arguments, and again led to an initial Tribunal decision, an appeal to the Upper Tribunal (Oliver v Sheffield CC, [2015] UKUT 229 (LC)) and is being further appealed to the Court of Appeal later this year. Similar issues have also been raised in the case of Edozie v Barnet Homes [2015] UKUT 0348. These cases illustrate the difficulties that the building governance issues arising from mixed tenure create; and the work and costs involved in mounting and defending challenges before Tribunals is enormously resource intensive.

This explains why the communication and consultations processes can be so important. A review of residential service charges conducted by the London Assembly in 2012 notes the shock that large bills can cause to owners and the importance of 'advance consultation' through, for example, the organisation of leaseholder forums. Although extensive consultation does lead to increased costs (which will have to be recovered through increased service charges) it suggests that 'better consultation and involvement in decision making can result in higher satisfaction levels overall' and is beneficial to landlords in 'securing the buy-in of those who will have to pay the charges' (London Assembly, 2012).

Organising collective action amongst the flat owners in the OTB has not been straightforward. OCC does not appear to

have organised "leaseholder forum" to enable communication with their RTB leaseholders in the tower blocks. The five OTB sites are some way distant from one another and it is not easy for leaseholders make contact with others affected. As the project has progressed, initial shared purpose amongst the owners to challenge the high cost of the OTB project appears to have become divided as differing 'strategies' are advocated and personal relationships have become strained. Some are readier than others to spend money on lawyers. There also appears to be a division emerging between owner-occupiers (living in the tower blocks) and private landlords.

Further, although the more obvious legal issues are those referred to earlier - which works constitute repair and renewal (covered by the lease wording) AND whether the costs are 'reasonably incurred' – a number of other legal arguments are also being put forward by some flat owners. Questions have also been raised about the aesthetic impact of the work being done to the interior of the flats. Photos from the block in which the work is most advanced show large ventilation ducting being attached to the ceiling of the flat, with the chair of the OLTA commenting that no attention has been paid to aesthetic and that this will decrease the flats' value (Somerville, 2016).

There is also an issue about whether some of the work might constitute trespass and interference with property rights, as there are plans to demolish some external stores owned by flat owners. Another issue is access. The first newsletter (October 2103) mentioned that the asbestos contractor had had problems accessing some flats and reminded tenants of their tenancy obligations. In relation to improvements within privately owned individual flats, however, there may be questions of access rights as the leases permit the landlord and relevant professionals access in connection with repair and renewal works, but this does not extend to improvement works.



Figure 2. Some owners have expressed concern that the new ventilation system is aesthetically unappealing and will reduce the flats' value. Photo taken by authors.

Discussion of early findings, the governance issues and implications

As the work is not yet completed, the Tribunal process is still underway, and we are still conducting interviews, this section can only include only preliminary thoughts. Nonetheless, it is clear that this very large project has been made even more complex by the building governance issues that have arisen.

MIXED TENURE ARRANGEMENTS

This case study shows how governance issues can impact on the progress and financing of retrofit projects. Government policies to smooth decision making, financing and management of retrofit in mixed tenure buildings will be an important component of national policy packages to deliver on the EU's proposed 30 % by 2030 energy efficiency ambition. The split between public and private ownership is particularly challenging for the delivery of deep retrofit projects - as we explore below, public owners are more able to consider wider benefits of energy efficiency projects while private owners are inevitably more focused on the direct financial benefits. As the "quick wins" of the most cost-effective building energy efficiency improvements are completed and there is increased focus on deep and nZEB retrofit, this divergence of interest will become more acute. Also likely to exacerbate this problem are government policies: housing policies often encourage mixed tenure buildings, in the interest of social integration.

Building governance is a complex area of law and practice where there is very little harmonisation between member states. This case study engages with the detail of English property law, and similar, detailed engagement with the specifics of building governance rules and practices will be required in each member state if barriers to deep retrofit in apartment blocks are to be effectively tackled.

PROPERTY LAW

There are specific problems posed by English property law for the delivery of deep refurbishment. The principal problem highlighted through this case study are that the wording of leases usually do not allow recharge of improvement costs, and – more broadly – that the system does not encourage block owners and private flat owners to work together collaboratively on a bulding improvement strategy. The current authors have been part of a campaign that would partially address the first of these issues: the campaign proposes that new legislation should "infer a term" into all extant leases to allow block owners to recharge the costs of cost-effective building energy efficiency improvements as well as repair and maintenance (see Weatherall, 2016).

The broader issue of how building co-owners reach agreement for deep retrofit is one that affects all European jurisdictions. In some other countries, laws have been changed relating to the proportion of co-owners that are needed to actively agree before an energy efficiency improvement can proceed (eg France and Scotland, see Weatherall, Bright and McCarthy, 2016). Reaching agreement is one part of the problem; deciding how financing should be raised is a separate issue. Best practice here is in countries (Matschoss *et al* discuss Finland) which require co-owners of building to maintain a building improvement (and not just upkeep) strategy and actively plan and raise financing to deliver these.

COST BENEFIT

The OTB, like any large refurbishment project, delivers both immediate and wider benefits: 1) direct benefits to the flat owner/resident from reduced energy bills and increased comfort – particularly from reduced heat loss through the better-insulated walls; 2) benefits to the collective of flat owners/residents in the tower block, such as reduced nuisance and mess from pigeons due to improvements to the fascia of the building; 3) benefits to the wider community beyond the tower blocks, such as reduced levels of anti-social behaviour as a result of improved security in the buildings.

The direct return to leaseholders in terms of enengy savings from the measures being installed in the OTB is likely to take a very long time to realise: even assuming a generous £500 bill saving per property, it would still be 100 years payback, which in some cases will be longer than the remaining period of the owner's lease. Although there may be some gain to the capital value of individual flats, estate agents report that this is likely to be in the region of £10,000 (much less than the current per unit costs being charged) (Somerville 2016a). Few private houseowners would be likely to choose to spend this kind of money for such gains, especially when some of the savings could be achieved with much lower cost measures, for example window repair rather than replacement.

At the same time it is clear that OCC's motivation in delivering the project is a long term strategy in the wide interests of the current and future residents of the building and in the wider community's interest. The divergence between the private flat owners and the councils' perspective is expressed in a 2016 statement from a leaseholder to a meeting of the Council:

... Oxford City has increased the budget to £20M and widely advertised improvements and regeneration aspects under slogans such as "Building a world class city for everyone" [but] ... neither improvements or 'building cities' are chargeable leaseholder obligations ... (leaseholder statement recorded in Oxford City Council, 2016a).

This points to an important equity question for the upgrade of any block in primarily public ownership. Should private co-owners have to pay the full per unit cost of a project that has been introduced by a local authority on the basis of wider social benefits not only to residents but also those in the wider community? This is a question that the UK and probably other member states have not addressed.

COMMUNICATION, CONSULTATION AND ENGAGEMENT

Based on our initial review of the information provided by OCC to private flat owners, the governance issues in this project may have been exacerbated by the manner in which communications and consultation around the project have been carried out. While we are still investigating aspects of the communication strategy, the private flat owners do not appear to have understood the direct benefits of the energy efficiency dimensions of the project in terms of reduced occupier energy bills, or even in terms of broader/longer term benefits such as comfort. It has also not been made clear to the private owners – including in the initial bills sent out – which aspects of the project will count as non-recoverable improvements, and which as recoverable repairs. In this context it is unsurprising that when very substantial bills were sent out to pay for the project, disquiet quickly turned to active opposition. The receipt of such large bills was like a 'red rag to a bull' and galvanised the flat owners to act collectively against the required contribution to the project. There is an obvious learning here around the delivery of large refurbishment projects in any similar setting of the need to involve all co-owners in the project and to ensure that information about the benefits are fully communicated.

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Acknowledgements

The research underlying this paper has received ethics approval from CUREC, University of Oxford, Ref No: R46808/RE001. Financial support for the project is provided by the Oxford University John Fell Fund.

David Weatherall's work on this project is supported by an Oxford University Knowledge Exchange Fellowship.