Future profits vs short term cash: What's at stake in the

THE GREAT BRITISH SELL OFF

A report by We Own It and nef

economics as if people and the planet mattered

Report written by Duncan McCann
and Laurie Macfarlane, New Economics Foundation
With support from We Own It
May 2016

We Own It is an independent organisation that campaigns for public services for people not profit. The evidence shows that privatisation is failing, while public ownership is supported by a majority of the British public. We believe in transparent, accountable public services that belong to all of us.

Sign up to join us weownit.org.uk/people-not-profit
Support our work weownit.org.uk/donate
www.weownit.org.uk
01865 403 251 / 07923 271 431
Facebook @WeOwnItCampaign
Twitter @We_Ownit
We Own It, The Old Music Hall, 106-108 Cowley Road, Oxford, OX4 1JE

Report design: Angus Fisher
Photos: Flickr, creative commons

With thanks to the We Own It supporters who crowdfunded this report:
Aaron, Alan, Alexander, Alison, Alistair, Allan, Andrew, Andy, Anita, Anji, Ann, Anna, Anne, Annemieke, Anthony, Anya, Arthur, Augustin, Barrington, Benjamin, Bernie, Beth, Bev, Brenda, Brian, C.J, Carey, Carole, Carolyn, Catherine, Cecily, Charles, Chris, Christine, Christopher, Clare, Colin, Dan, Darrin, Dave, David, Debbie, Deepa, Denis, Denise, Derek, Dermot, Diana, Dilys, Dorothee, Edward, Elaine, Eleanor, Elizabeth, Eloise, Emil, Eric, Erica, Eveline, Evelyn, Fergus, Fran, Frank, Fred, G.S., Gabby, Gary, Geoffrey, George, Gerry, Gill, Gloranna, Glynn, Gordon, Graham, Guy, Heather, Helen, Henry, Hugh, I.D., I.M., Iain, Ian, Isabel, J.R., Jack, Jackie, Jacky, James, Jan, Janet, Jason, Jean, Jef, Jen, Jessica, Jill, John, Jon, Jonathan, Joseph, Joyce, J.S., Judith, Julia, June, Justine, K.M., Kahn, Kathleen, Kathryn, Kay, Ken, Kenneth, Kevin, Kim, Lawrence, Lee, Leonard, Lesley, Linda, Lindsey, Louis, Lucy, Lyn, Lynda, Lynn, Maggie, Malcolm, Margaret, Marilyn, Marin, Mark, Martin, Martyn, Mary, Maryvonne, Matt, Maura, Maureen, Mick, Michael, Michele, Monica, Morag, Muz, Nancy, Nicholas, Nick, Nicola, Nigel, Olive, Oliver, Owen, Patricia, Patrick, Paul, Paula, Peggotty, Penny, Per, Peter, Phil, Philip, Philippa, Ray, Raymond, Rich, Richard, Ricky, Robert, Robin, Roderick, Roger, Rona, Ronald, Rosalind, Rosemary, Sally, Sarah, Shellie, Simon, Sioned, Stefan, Stephen, Steve, Stewart, Stuart, Sue, Susan, Sylvia, T.J., T.M., Terry, Thomas, Tim, Timothy, Tom, Tony, Val, Victoria, Vivianne, W.J., W.R., Wendy, Willa, William, Win, Worth.

Contents

Summary

The government is planning to privatise the Land Registry, privatise the public stake in NATS, look at options for introducing private sector capital into Ordnance Survey and look at options for partial privatisation of Channel 4. As the consultation on privatising the Land Registry is about to close, this new analysis shows how selling off our public assets means we lose out in the long term.

This report looks at future profits of public assets and compares them to estimated sale prices. This gives a figure for when the short-term gains from selling off are wiped out by the losses on future revenue from profits. The key conclusions of the report are:

- In the next 10 years, the British public will be losing money as a result of the government's sell off of Royal Mail
- Selling off the Land Registry would mean the British public starts to lose money in 25 years' time
- If the public stake in National Air Traffic Services were sold, it would take just seven years for us to start losing money as a result of the sale
- Any move to sell Ordnance Survey would mean a loss of future revenue of over £910 million over the next 30 years at today's prices
- A conservative estimate says that Channel 4 contributes £1.1 billion a year to the economy
- If the Land Registry, NATS, Ordnance Survey and Channel 4 stay in public ownership they can be expected to directly contribute £7.7 billion in future profits over the next 50 years. If these assets are sold we lose that future income forever.
- The wider contribution of these assets to the economy and to our society is much bigger and privatisation would put it at risk

This report shows that the assets the government is planning to privatise or part-privatise are highly profitable, very innovative institutions that are working well in public ownership. Many of them have a history to be proud of but at the same time have adapted and developed over time to deliver world leading public services.

Selling off these assets for short term cash would provide just a drop in the ocean of Osborne's deficit, but we would all lose out forever on their future profits and wider benefits to the economy and society.

We should be proud of the Great British institutions we have baked, using well-worn recipes and innovative ideas, time tested methods and brand new technology. This report suggests that Chancellor George Osborne can't have his cake and eat it. It will outline exactly what is at stake in the Great British sell off, arguing that the Great British public should be the judge of what happens next.

What is a public asset?

Privatisation can take many forms. These can be divided into three main types: the one off sale of public assets to the private sector, the outsourcing of public services to private companies on a temporary basis, and the involvement of private capital in the public sector. This report will focus on the sale of public assets – the one off decision to transfer an asset wholesale (or in bits) from the public sector to the private. The report will also mention the involvement of private sector capital as this is being put forward as a halfway house policy for some public assets including Ordnance Survey and Channel 4. It may be a step along the journey to a full sale.

A public asset is any resource that is owned by a public entity and that can reasonably be expected to provide a future benefit, by provided an economic return or a social or environmental benefit. In this paper we will be focusing on discussing assets with reference to their economic performance.

Private companies generally like to hold on to assets that are valuable and provide a steady return. There are however many cases where successful firms are bought, often by a larger company. The prices paid for these kind of acquisitions are generally above the market value to reflect the quality of the asset and the increased value that it could produce inside the larger company.

In the public sector the reverse seems to be true in that public assets are often sold at below their market value despite being good profitable businesses.

What are they selling off now?

In April 2016 the Shareholder Executive was brought together with UK Financial Investments (UKFI) under a single holding company – UK Government Investments (UKGI). The creation of UK Government Investments was announced last year as part of the government's plan to deliver the biggest ever sale of publicly-owned corporate and financial assets in 2015-16.

"If we want a more productive economy, let's get the government out of the business of owning great chunks of our banking system – and indeed other assets that should be in the private sector. To help that happen I can tell you that we're merging UK Financial Investments and the Shareholder Executive into one organisation, to return government investments back to the private sector."

- George Osborne, May 2015

Mark Russell, the chief executive of UKGI, has said that only one or two companies owned by the government will never be privatised and that the government is looking at wholly or partly-privatising Companies House, the Land Registry, the Met Office and Ordnance Survey (all currently part of the Shareholder Executive, now part of UKGI) over the lifetime of this parliament.

"Unless there is a policy reason for government to own a business, it should look to divest its shareholding if it can realise value for money." [1]

- Mark Russell, chief executive of UKGI, 2013

Several publicly owned assets currently face privatisation or part-privatisation. The government is currently looking at options to 'move the operations of the Land Registry into the private sector from 2017'. It wants to 'explore the sale of the government's 49% shareholding' in National Air Traffic Services. And it plans to 'develop options to bring private capital into Ordnance Survey before 2020'. Channel 4's future is currently uncertain. While full privatisation now seems to be off the table, part privatisation, for example, through the sale of a minority stake, is being considered.

Why the arguments for sell offs don't apply

This section looks at three common arguments for privatisation and challenges their applicability to the organisations currently under threat. Firstly, the argument that the public sector cannot deliver profitably, and where they do it is less than a private sector operator would be able to deliver. Secondly that privatisation is a way of ensuring that there are healthy, competitive, free and open markets under which economies prosper most, whereas nationalised industries preferred inefficient monopolies. And finally that the private sector is best placed to modernise and innovate, through efficiency savings and investment, thereby ensuring their long term prosperity.

1. Profitability and efficiency

The idea that the private sector is inherently more efficient is simply wrong. A recent empirical study by the Public Services International Research Unit at the University of Greenwich concluded emphatically 'that the evidence shows no significant difference in efficiency between public and privately owned companies in public services. This is true both for privatisations by sale and privatisations through outsourcing or PPPs.' [2]

Despite weak empirical evidence, a strong association still exists in policy circles between public ownership and the need for state subsidies to support companies that are underperforming financially. Although historically this may have been true for some nationalised industries, this is clearly not the case for the current proposed privatisation of Ordnance Survey, the Land Registry, National Air Traffic Services and Channel 4. All of these companies regularly generate a profit and have large amounts of cash reserves available to meet the economic challenges or to invest in innovation and modernisation.

There are also clear examples of private companies failing. The most recent example is when National Express abandoned the East Coast Mainline train service because profits started to drop and it became clear they could not generate the return they needed and expected. Directly Operated Railways (DOR), a government owned company, stepped in to manage the line from 2009-2014. DOR managed to be one of only two rail franchisees that returned a net profit to the government, meaning it paid in more that it received in subsidies and grants[3]. However, despite this success, it was re-privatised at the earliest opportunity.
All of the assets under consideration in the paper are run profitably without the need for any government subsidy or support. What this shows is that public ownership, when properly run, can deliver regular net revenues to the government and should be embraced.

2. Open, free and competitive markets

Current economic theory, and that of the last forty years, outlines that most services are best provided through a privately owned for-profit-business that functions within an open, free and competitive market. Industries in public ownership were often seen to be the antithesis of this and so has ensured a strong preference for privatisation.

However, it is generally recognised that not all industries can be run on this basis. It makes little economic sense to have a competitive market operate in industries that would not benefit from having multiple entities all trying to provide the same service. For example, it would be economically inefficient to have ten water companies laying their own networks of pipes and sewers to compete for customers. Similarly there are advantages to having one, single Land Registry where all land ownership is recorded and can be enforced. It is questionable whether natural monopolies like these which serve an important public purpose are suited to privatisation.

Ordnance Survey and Channel 4 are different since they already operate in a competitive market. In Channel 4's case it is clear that the market is already open and competitive. The UK has literally 100's of channels that are delivered via a number of service providers. Channel 4 already competes on a commercial basis with other broadcasters for advertising revenues and it is highly debatable whether the part privatisation of Channel 4 would have any impact on the functioning of the wider market or the encouragement of more competition and therefore efficiency. Indeed it is the public service aspect of the channel that needs most protecting and is underrepresented in the competition. It is also likely that full or part privatisation would actually result in a loss of competition, as any buyer is likely to be an existing media provider seeking to grow or build a presence in the UK.

Ordnance Survey also operates within a market, albeit one with high entry barriers due to the resources required to generate mapping data. The OS's biggest competitor is Google who built their own map which is now used by many popular online platforms such as RAC, AA or Streetmap. The OS is unique among national mapping agencies – rather than trying to maintain a monopoly or stifling innovation, it is instead competing against SME businesses that are innovating how maps can be accessed online, by phone and other devices [4] The challenge for OS is not to stifle the SME community from utilising their data, while ensuring that it makes effective use of its valuable mapping data and global reputation.

3. Modernisation and innovation

The dominant narrative reinforces the link between inefficiency and an inability to modernise within the public sector. The perception persists that the private sector is almost uniquely able to modernise and innovate within a given structure. However the real world evidence is that it is not the status of the beneficial owner, public or private, that differentiates successful from unsuccessful businesses. It is instead the culture and practices within a given business and its wider market that are the key to their success.

The private sector is awash with examples of companies that have failed to innovate, leading to their ultimate downfall. One of the most graphic examples is Kodak, who went from employing over 120,000 people to being bankrupt within the space of a decade. This is despite inventing, and rejecting, the digital camera, which would ultimately spell its downfall.

Similarly examples like Ordnance Survey show that it is possible to fully modernise an existing service while adapting to the challenges and opportunities that the digital revolution offers. NATS, Channel 4 and the Land Registry have also shown that it is possible to embrace modernisation while continuing to deliver good quality of services while generated increased revenue and profitability. Channel 4, for example, was the first broadcaster in the world to launch an online on-demand service, as well as an advertising data strategy.

Indeed, empirical evidence outlined by economist Mariana Mazzucato suggests that high risk innovation in technology has been led by the state, with the private sector only getting involved at a later stage [5].

Raising money and austerity: the case for privatisation today

The Land Registry, NATS, OS and Channel 4 are clearly able to innovate and deliver a profit without needing to be privately owned. They are able to innovate and deliver a profit without needing to be privately owned. So what rationale is being presented in support of selling off these companies?

The context of austerity has now been leveraged to support the privatisation move. 'Without fixing the public finances so our country lives within its means there can be no economic security for businesses or working people.' [6] The new economic and political theory is about balancing the budget by reducing the deficit. This is while trying to avoid any additional public sector debt and starting to pay off some of it.

It is important to put the scale of these challenges into perspective. The national public debt currently sits at almost £1.6 trillion with a deficit of over £72 billion. This shows how the privatisation of the Land Registry, NATS, OS and Channel 4, estimated to raise no more than £3 billion [7], will barely dent the deficit figure while giving a up valuable assets and forgoing long term revenue streams.

These lost revenue streams are far greater than any potential savings from reducing government debt, when the yields on government gilts are at an all-time low of around 1.4%.[8] Nor can it be assumed that surpluses would continue to be a source of investment finance after asset sales, given the long term experience with earlier privatisations such as the water industry, where investment has been financed by debt while profits have been largely extracted.[9] Even the income from the sale may conceal a further loss, because, on the basis of past performance, the government is highly likely to undervalue the assets: the 2013 Royal Mail privatisation raised £2 billion, but should have raised an extra £1 billion, according to MPs, and a further £180 million even according to the government's own review.[10]

There are a number of issues with the government's narrative, particularly within the current economic climate. Firstly the idea that a government must always live within its means (i.e. spend less than it takes in taxes and other income) and is akin to a household is fundamentally flawed. In fact if a government runs a sustained surplus this means that people and businesses need to either run down their savings or take on more debt. This means that a sustained surplus, without a large export surplus (i.e. Japan or Germany) an economic crisis ensues.

This was outlined in a letter signed by 77 economists to the Guardian when they pointed out that 'if it chooses to try to inflexibly run surpluses, and therefore no longer borrow, the knock-on effect to the rest of the economy will be significant. Households, consumers and businesses may have to borrow more overall, and the risk of a personal debt crisis to rival 2008 could be very real indeed.' [11]

A consequence of running a sustained government surplus is a net transfer of wealth from the people and businesses to the government since it would be taking in more money in taxes and charges than it pays out.

Secondly the notion that in these challenging economic times we should be singularly focused on eliminating the deficit and paying down the debt is not the best use of resources today, which should be aimed at spending to stimulate more economic activity as the IMF and OECD have recently confirmed. [12]

Finally by trying to bring in additional revenue from privatisation, bringing forward some payments while deferring others to ensure he achieves his goal of a surplus for 2019-20, the Chancellor George Osborne makes a mockery of any commitment to long term sound financial management of the UK economy.

"The sale of government assets can hurt the public finances as much as help them….a fire sale would burn a hole in the public finances, not fix them" [13]
- The Economist

"Financial asset sales typically bring forward cash that would otherwise have been received in future revenues, in the shape of mortgage repayments and dividends, so they only temporarily reduce the debt-to-GDP ratio. In broad terms, financial asset sales leave the public sector's net worth unchanged" [14]
- Office of Budget Responsibility

"[Selling assets] does reduce cash debt but you're not really improving the indebtedness of the country.' [15]
- Carl Emmerson, deputy director at the Institute of Fiscal Studies

A note on methodology

In this paper we have estimated the value of long term revenue streams from public assets and compared them to the one off sale price of these assets. We wanted to see when the benefit of future profits starts to outweigh the cash injection provided by privatisation. In doing these calculations we have tried to make reasonable assumptions about the sale prices and profitability of the assets concerned, given the available public information and communication with some of the organisations involved. We have used standard accounting methodology to discount the value of future income compared to income in the present.

Valuations/sale prices

We used publicly available valuations for all assets which were in the public domain for all assets except Ordnance Survey. These valuations are £1.2 billion for the Land Registry, £300 million for the government's stake in National Air Traffic Services and £1 billion for Channel 4. For the Ordnance Survey, valuation is more complicated depending on the nature of a sale and whether the OS database would be included. Solely In order to be able to give an estimate of the total value of all the assets in the report we have made a rough estimate of £500 million for the sale but further information would be needed to be more precise. We do not know whether the publicly available valuations for the Land Registry and National Air Traffic Services take into account the cash reserves of the companies concerned – we have assumed that they do.

Profitability forecasts

Profitability figures are always taken as post tax and pre dividend. We have generally used the profit figures for the last 10 years to produce an average. However, there are some variations within this.

The Land Registry records surplus rather than profit in their annual reports - we are therefore using post tax pre dividend surplus. For the Land Registry, the figure that we have used for average profitability going forward uses the last 10 years of data but excludes the 2008/9 figure as being exceptional due to the nature and severity of the global economic crisis and its particular impact on the housing market. Transactions in the housing market are the source of revenue of Land Registry.

For the Royal Mail, the figure that we have used for average profitability going forward is the average of the last 4 years data. Up until 2011 the Royal Mail was in the process of restructuring the organisation in order to make it a profitable operation. It therefore is the period which best enables us to estimate future profitability.

We were informed by staff from Ordnance Survey that the most likely indication of future profitability would be recent years 2011-15 due to restructuring having been completed. The last 4 years shows steady profits above £30 million. We chose to take the lowest year's profitability from this period to estimate profitability going forward.

Discounting rate

In order to account for the time value of money, all forecasted figures have been discounted in line with the methodology set out in the HM Treasury Green Book in order obtain their present values. Discounting is a technique used to compare costs and benefits that occur in different time periods. It is a separate concept from inflation, and is based on the principle that, generally, people prefer to receive goods and services now rather than later. This is known as 'time preference'. Society as a whole also prefers to receive goods and services sooner rather than later, and this is known as 'social time preference'. The 'social time preference rate' (STPR) is the rate at which society values the present compared to the future. All figures in this paper have been discounted using the social time preference rate from the HMT Green Book for cases that are very long term and which involve substantial and irreversible wealth transfers between generations.

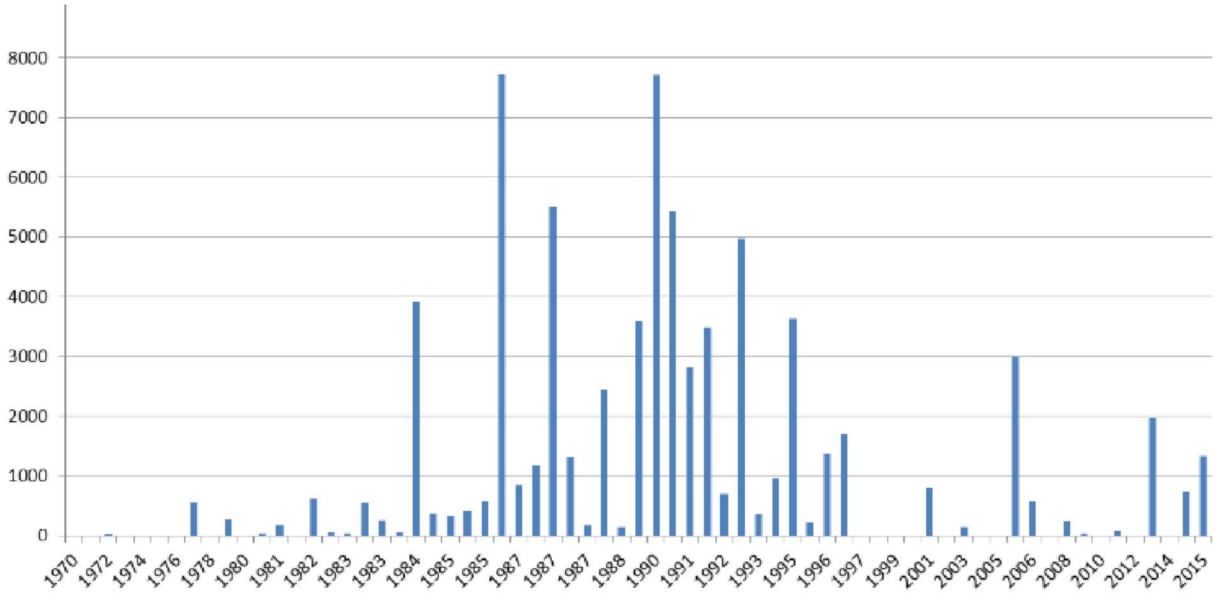
Time periods

We have used a range of long term time periods up to 100 years, depending on the information available. We wanted to show the long term perspective and value of public assets into the future.

Recent history: what the Royal Mail sale will cost us

Privatisations have over time raised a significant amount of revenue for the government as can be seen from the chart below. This did provide a short term injection of money, but it is important to remember that this was at the expense of forgoing a long term stream of revenue.

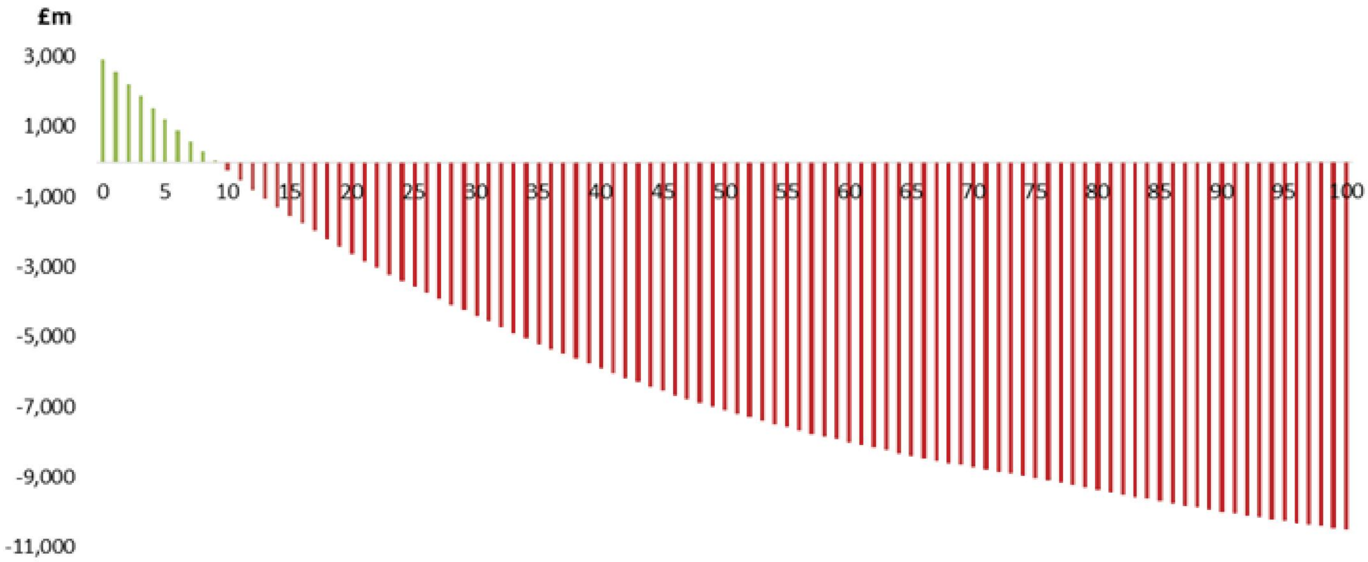
Figure 1: Revenue from Privatisation 1970-2015 (£ million) - in current prices [16]



Source: Privatisation (2014) House of Commons Research Paper 14/61, the Guardian

This can be illustrated by the sale of Royal Mail in 2013 and 2015 which raised a significant amount of revenue, over £3.3 billion. Our analysis shows however that based on recent profitability of £373 million it would take a mere 10 years for the forgone income to outweigh the cash boost. [17 18]

Figure 2: Cumulative gains/losses to the public from the privatisation of Royal Mail



Source: Annual Reports, own calculations

Public assets facing privatisation today:

Land Registry

The Land Registry was created in 1862 and is currently a non-ministerial department of the Government which reports to the Department for Business, Innovation and Skills. Its activities are governed by various pieces of regulation, most recently the Land Registration Act 2002. Its key responsibility is to register the correct ownership of land and property in England and Wales and currently employ over 4400 people.

A previous attempt to privatise the Land Registry was abandoned in 2014 when Vince Cable, the Business Secretary at the time, vetoed the plans. This followed action taken by the PCS union, representing the employees of the Land Registry, and the Law Society, who feared that any privatisation would fundamentally undermine the integrity of the register and potentially 'introduce conflicts of interest with potentially adverse economic results.' [20]

The volume of transactions that the Land Registry has to carry out is directly proportional to the amount of activity in the housing market. After a couple of slow years during the economic crisis years of 2007/8 last year 2014/15 was the busiest year ever for the Land Registry with on average 18,500 transactions per day including a rise of over 11% in more complex transactions, such as newly built flats.[21]

70% of the British public want the Land Registry to stay in public ownership [19]

In order to meet the increased volume of transaction, the Land Registry has already been reforming and modernising their services within their existing structure. Indeed the 2014/15 annual report notes that the reprieve from privatisation in 2014 allow the Land Registry to concentrate on implementing its 5 year plan along with an initiative to become a fully digital organisation.[22] The Land Registry has also seen significant productivity gains in the last few years. The internal metric used is that of 'units of work per person per day' and is almost 25% higher than just a few years ago.

The transition to a digital organisation has already produced some great results with 98% of information service applications arriving electronically along with over 75% of substantive applications. In addition 84% of titles are now held electronically. Even the post room now turns written applications into electronic documents.

Following the modernisation and productivity gains of digitising their processes, the Land Registry was able to pass on some of the savings to the end user who benefited from a 50% reduction in certain fees in March 2014, resulting in £117 million in saved fees.

Economic assessment

As stated above, the Land Registry's revenue is linked to the volume of transactions that it carries out, and this in turn is predominantly driven by the amount of activity in the housing market. Over the past ten years financial performance has varied significantly, ranging from generating pre dividend surpluses of above £130 million[23] in 2006–07 and 2013–14, to generating losses during the worst years if the financial crisis. On average the Land Registry has generated pre-dividend surpluses of £47 million (this increases to £67 million if 2008-09 is excluded as an outlier).

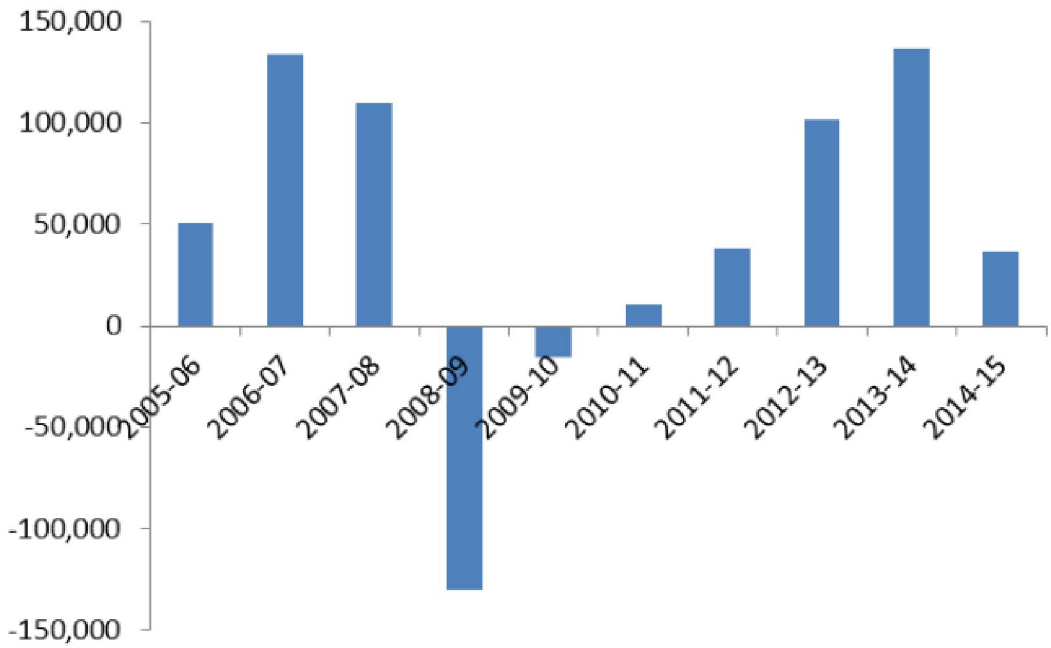


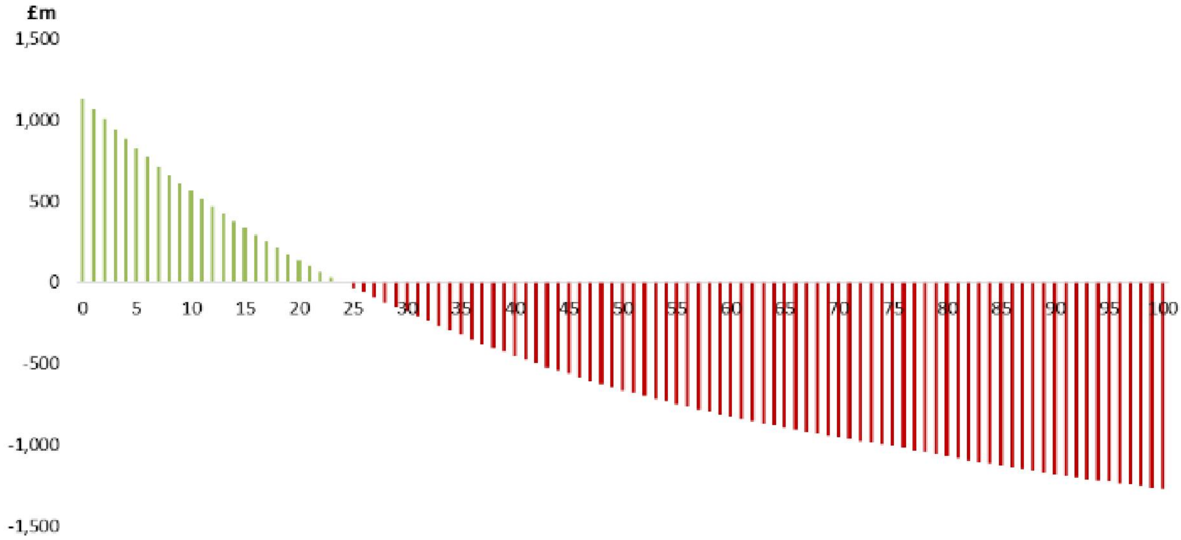
Figure 3:
Land Registry – pre-dividend surplus (in £mn) at 2014-15 prices

Source: Annual Reports

This strong financial performance has enabled the Land Registry to become a net-contributor to the public purse by paying regular dividends the Treasury. In 2014-15 it paid a normal dividend of £19.1 million in addition to a special dividend of £100 million from its cash reserves.

Civil servants believe the government could raise £1.225bn from entering a deal with a joint venture company, marginally higher than the previous £1.1bn GovCo evaluation. This decision would be extremely short-sighted and would be sacrificing future revenue streams in order to obtain a one off lump sum. Assuming that a similar level of profitability, about £66.9 million,[24] is maintained going forward, we estimate that within 25 years the Government and the taxpayer would be worse off, as the value of the sacrificed surpluses will have exceeded the value money received from the sale.[25] This would only get worse over time as surpluses continue to accrue to the new private buyers rather than the public purse.

Figure 4: Cumulative gains/losses to the public from the privatisation of the Land Registry



Source: Annual Reports, own calculations

“We are very concerned that the information about the property our clients own – their data- is at risk of being in the hands of a commercial entity motivated by profit. That’s why we are standing with other law firms, the PCS union, the property search agents and property owners in the campaign to stop the privatisation of the Land Registry”

- Joy Bassett, solicitor

What could be achieved under continued public ownership

The Land Registry has almost £400 million of cash on its balance sheet which it can draw on where necessary. This is a healthy pot of money to enable the transition to a complete and open Land Registry.

But to do this, the Land Registry needs to complete the record of land ownership in the UK. Although current legislation says that land only needs to be registered when it is transacted, this could be amended so that the Land Registry has a positive mandate to go out and uncover who owns the land and dwellings currently missing from the registry. At present there are 24.1 million registered titles covering 86% of land is registered in England and Wales.[26]

The Land Registry provides a number of different and distinct services, broadly divisible into legally securing titles and recording land ownership for public information. The unregistered land and dwellings do not necessarily need to register the title with the Land Registry so that they can adjudicate issues of ownership. What is really needed, is simply to record ownership, since this is useful information from a societal perspective. This should be implemented with a requirement to update the registry with any new owner, even those not usually defined as a transaction by the legislation.

Secondly the data needs to be made open. It is important to contrast the notion of free data, which the Land Registry already provides, with open data. The Open Data Institute (ODI) highlights this difference with their analysis of the recent Land Registry decision to release the details for almost 100,000 properties in the UK that are owned overseas as free data. Although this data is free 'accessing the free dataset is tedious, and what you can do with it is restricted because the UK's address data is not open.'[27] The government did commit in the last budget to provide a small amount of funding to start to investigate and produce an open address register that would enable the Land Registry data to become truly open.[28] The ODI highlight that a broad initiative across government to make data more open could increase GDP by 0.5%.[29]

This means that it is vital that the Land Registry build on its recent initiative to make more data freely available by working to make all of its data open.[30]

Risks of privatisation

There are also risks associated with the privatisation of the Land Registry. Private shareholders will want to extract a profit, even at a reasonable level, unlike recent corporate examples like BHS.[31] Under the rationale of privatisation this can normally be justified by the fact that the private sector is more efficient and thus the profit extraction does not necessarily come at a cost of future investment or current services. However in the case of the Land Registry, it is debatable how far future efficiency drives can go given the progress made in recent years in public ownership. The inability of the new owner to get the necessary productivity gains could lead to either unreasonable extraction at the expense of service quality and future investment or price increases to make up the projected shortfall.

In order to meet its projected profitability, there is a risk that the new owner might further restrict the use of data, or worse, place all data behind a paywall. This would be an issue for the myriad of services, apps and organisations that rely on the data as well as the wider economy. Jenni Tennison from the ODI highlighted this fact in a recent FT article by stating that 'we need to be thinking of data as infrastructure for the economy, in the same way that we see roads and bridges for the value they create.'[32]

The government will retain ultimate ownership of the data, and be responsible for any compensation claimed due to the inaccuracy of the data. But due to the critical nature of the service provided in ensuring property rights across England and Wales, there will also need to be detailed and robust supervision of the new owner and their operations. The cost and effectiveness of such supervision is uncertain and past examples have shown that as well as costs spiralling, the government can fail at properly managing the activities of the privatised company.

The close relationship between the Land Registry and Ordnance Survey and the way that these organisations cooperate to make data available publicly could be jeopardised as the new private sector owners seek to maximise return on the assets.
A minor but not unimportant issue is also that it remains uncertain whether NewCo would be subject to Freedom Of Information (FOI) requests. Any removal of Land Registry data and processes from the scope of FOI requests would a reduction in the transparency of access to vital information in the public interest.

"I worry about the security of the whole thing…We know from experience with other institutions that have been sold off by the government that our lives become more difficult because they've changed. The other thing that I really worry about is the fact that this is selling off the family silver, if you like. I feel very much that the information about the ownership of properties, it's our information, it belongs to us. I don't think that it's the government's even to sell.'
- Denise Watts, home owner

Public assets facing privatisation today:

National Air Traffic Services

Air traffic control for commercial flights was started in the 1920's, although the services provided were very basic. The National Air Traffic Control Services (NATCS) was then established in 1962 and became part of the Civil Aviation Authority in 1972 and shortened its name by removing 'control'. The entity was privatised by the Labour government under the Transport Act 2000 where a 51% stack was sold off. Today NATS is a public private partnership between the Airline Group, which holds 42%, NATS staff who hold 5%, UK airport operator LHR Airports Limited with 4%, and the government which holds 49%, and a golden share. The UK is unique in Europe and unusual internationally in having its air traffic control system managed by a private company.[33]

In the year 2014/15 NATS handled over 2.2 million flights carrying over 240 million passengers. NATS does not have a monopoly on all air traffic management in the UK and as a matter of fact operates in many other countries both within and outside the EU. NATS has a contract to manage all of UK airspace over 4000ft and competes with other operators of air traffic control systems for low altitude airport specific services. In 2014 Gatwick became the first major UK airport not to contract their air traffic management services to NATS, choosing the German state owned provider DFS instead.[34]

60% of us think we should keep our public stake in NATS, just 15% support a sell off [35]

A previous attempt to sell the remaining 49% stake in NATS by the government in 2012 ended when transport minister Justine Greening called off the sale. The deal was pulled as it emerged that the DFS were in the pole position to secure the shares, and there was a reluctance within the government, industry, and public about the sale of a strategic British asset to foreign public sector owners.[36]

The whole industry is being put under pressure by the European Union to drop prices and improve economic, financial and environmental services as part of the second phase of the Single European Sky Initiative.[37] Under the initiative NATS will need to deliver a reduction in charges of 21% while maintaining safety and environmental performance. The current chief executive is confident that these targets can be met but together with changing pension accounting costs and asset depreciation the level of profits for 2016 are likely to be lower than in previous years.[38]

A source close to the present deal to sell the remaining government stake in NATS confirmed that 'politically, it would not be acceptable to have the UK government replaced at the board table by a foreign government so whilst the UK government won't overtly stop governments bidding it's very unlikely that they will be allowed to cross the finish line due to the political embarrassment that would cause.'[39] This severely reduces the pool of potential buyers and means that the only really palatable candidates would be a small group of long-term institutional investors, who would not be too financially aggressive and remain politically neutral. The lack of suitable buyers could be a reason for the relatively low valuation of £300 million.

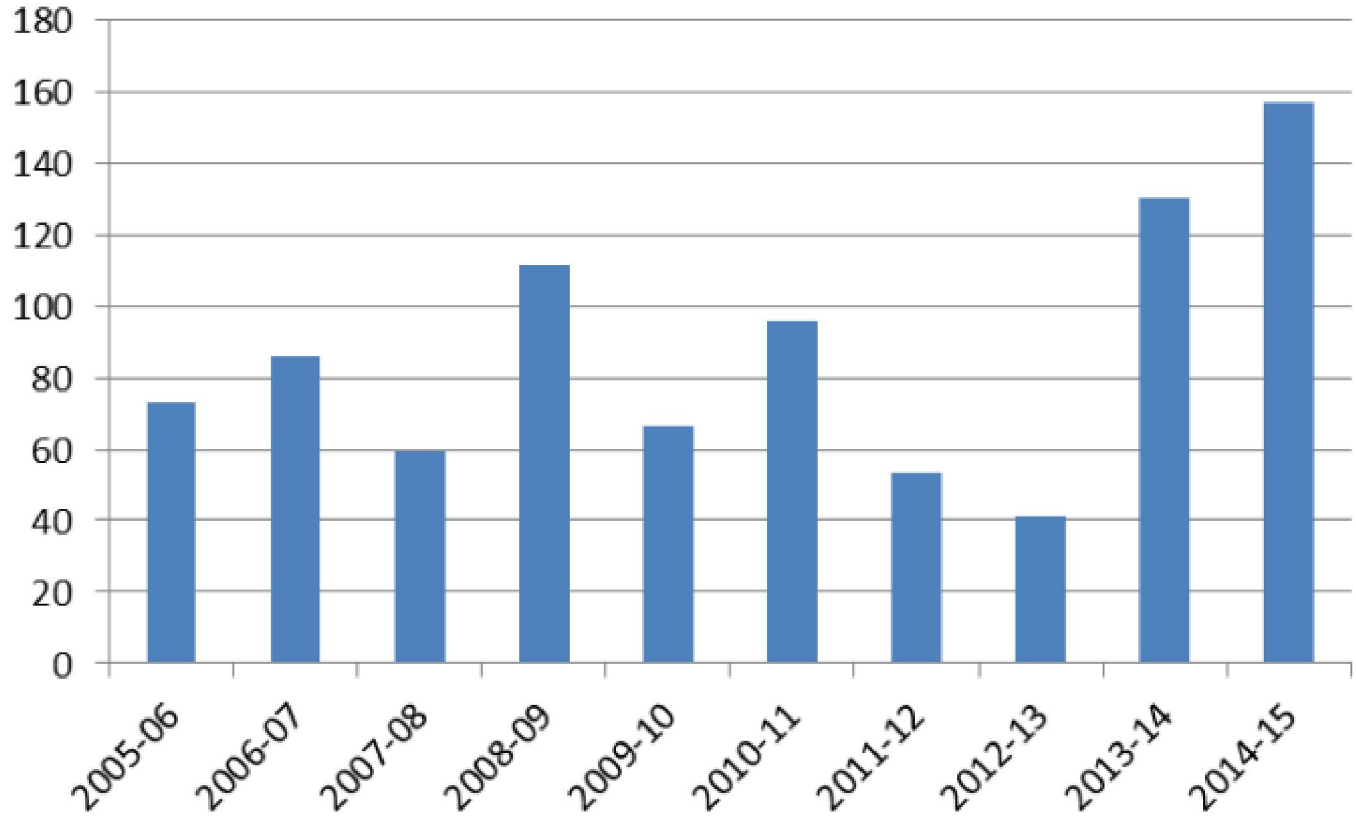
"We hold millions of lives in our hands every single day. Forecasting, planning, adapting and delivering. We're trusted by governments, enterprise, the military and passengers alike. Large scale data will help us become more proactive, more responsive, evolving from air traffic control to dynamic air traffic management…A future that's more efficient, quieter, faster, cleaner."

- National Air Traffic Services video 'Guardians of the sky' [40]

Economic assessment

NATS is a world leader in its field, selling its services to airports and airlines in 30 countries around the world. This has meant that over the past ten years NATS has consistently delivered strong financial performance, with after tax profits averaging £87.5 million.

Figure 7: NATS – profit (in £mn) for the year attributable to equity shareholders (2014-15 prices)

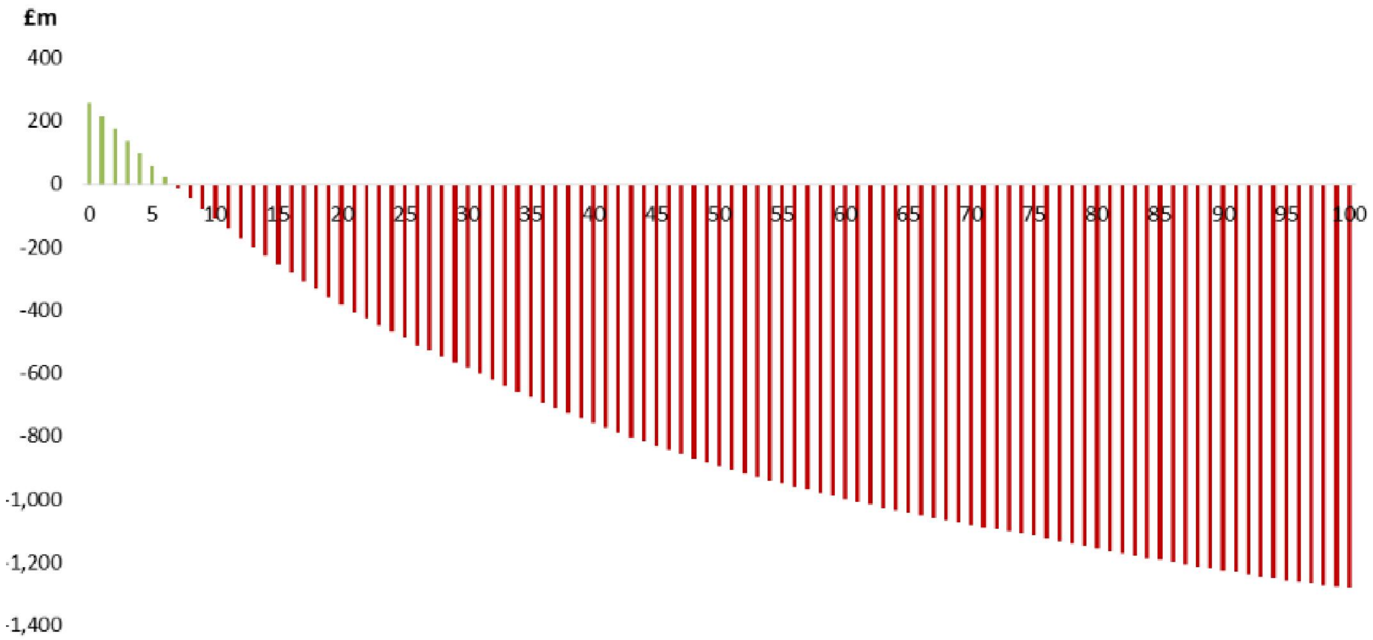


Source: Annual Reports

This strong financial performance has enabled NATS to become a net-contributor to the public purse by paying regular dividends the Treasury. In 2014-15 it paid a total dividend of £77 million, of which around £38 million was paid to the Treasury.[41]

It has been estimated that the government could raise £300 million from selling its 49% stake in NATS.[42] If the Government was to pursue this it would be sacrificing future revenue streams in order to obtain a one off lump sum. Assuming that a similar level of profitability, from the Government's share of NATS of £42.9 million,[43] based on 49% of the £87.5m total profits is maintained going forward, we estimate that within only 7 years the Government and the taxpayer would be significantly worse off, as the value of the sacrificed surpluses will have exceeded the value money received from the sale[44]. This would only get worse over time as surpluses continue to accrue to the new private buyers rather than the public purse.

Figure 8: Cumulative gains/losses to the public from the privatisation of NATS



Source: Annual Reports, own calculations

What could be achieved under continued public ownership

The purpose of managing air traffic has not changed since it was first started in the 1920's. Its goal was to ensure planes moved around the sky safely with minimal delay. Although the delay used to be conceived of as an inconvenience to passengers, today, in the context of climate change, every delayed minute a plane spends in the air results in additional CO2 emission being released into the sky. NATS should continue to focus on these two core functions whilst raising enough revenue through fees and contracts to cover all costs.

New technology has been a great enabler of safer skies and will continue to help drive improvements. The air control towers of today are a far cry from their origins in the 20's, with radar only being introduced in the 50's. Technological innovation will continue to be important in terms of helping maintain the excellent safety standards. There are a number of technologies that may have positive applications in air traffic control such as GPS data to offer even more accurate location information; more use of cameras at airports, to reduce blind spots and see things that human eyes cannot; fatigue monitoring devices to ensure operators are fully focused; and 3D displays to allow operators to better visualise the space in which planes fly. The considerable cash funds of over £260M at the disposal of NATS could be used to fund some of these should it be decided to be in the interest of passenger safety.

Airplanes contribute significantly to our global greenhouse gas emissions especially given the high altitude emissions are generally considered to have a greater warming effect than land based emissions, possibly by a multiple of three.[45] It should therefore be a key goal of NATS to ensure that they manage planes so as to reduce their time spent in the air to a minimum. NATS were the first air traffic control provider to have stated goals in this area which they managed to exceed in 2015 when they reduced the CO2 emissions per flight by 4.3% by using techniques such as continuous climbs and descents, reducing holding, and implementing multiple alternative routes. The measurement was pioneered via their 3Di methodology and NATS have been able to show consistent improvement in this area.[46]

Risks of privatisation

Those who fear that further privatisation of NATS may have adverse effects need look no further than what happened during 2001/2 when the Labour government first sold off 51%. NATS suffered two big computer crashes and racked up growing air-traffic delays as well as having to get additional capital injections from government and other investors and request for the price capping measures to be suspended.[47] This episode shows how hard it is to provide a regulatory framework that works and that a government is always at risk of needing to provide additional capital when dealing with strategic services.

This is also inherent risk in handing over key strategic role with huge safety and security implications, like managing skies to a fully private entity with a primary goal to generate profit. As we saw with BP and the Deep Water Horizon disaster the profit seeking motive can erode safety precautions, even when they have potentially major consequences. Other commentators have also highlighted the risk of the shares being traded on the open market with foreign buyers stepping in, which may 'put the UK in a uniquely vulnerable position.'[48]

The ability of the UK to influence European air traffic control policy would be reduced as highlighted in a letter in 2011 from the airlines that own NATS shares, which noted that 'It would be highly damaging if we were left on the sidelines to watch while others, notably France, Germany and Spain, decided the future of the air traffic control [ATC] industry. While evidence indicates a real risk that such an outcome would occur if the UK was the only country without a government shareholding in its national ATC company.'[49] In the letter the airlines also threatened to sell their stake should the government not retain a significant stake in NATS increasing the potential risks mentioned above.

Public assets facing privatisation today:

Ordnance Survey (OS)

The Ordnance Survey has its origins in the mid-18th century when there was a pressing need to map England's southern coast, which was vulnerable to attack by the French. Its official birthday, however, is recognised as 21st June 1791 with the first maps, deemed by many to be works of art, published in 1801. It has been always been under the control of the government and from 1999 was operating as a 'trading fund', meaning that all its revenue needed to come from the provision of goods and services. It was then converted in 2015 into a government owned company called Ordnance Survey Ltd.

OS has always played a strategic role for the UK. From its early role in helping to defend the nation from invasion, to supporting the war effort during the two world wars by mapping areas of France, Belgium and the Netherlands, to today where its information is used for emergency response in remote areas or to assist in the management of foot and mouth outbreak.

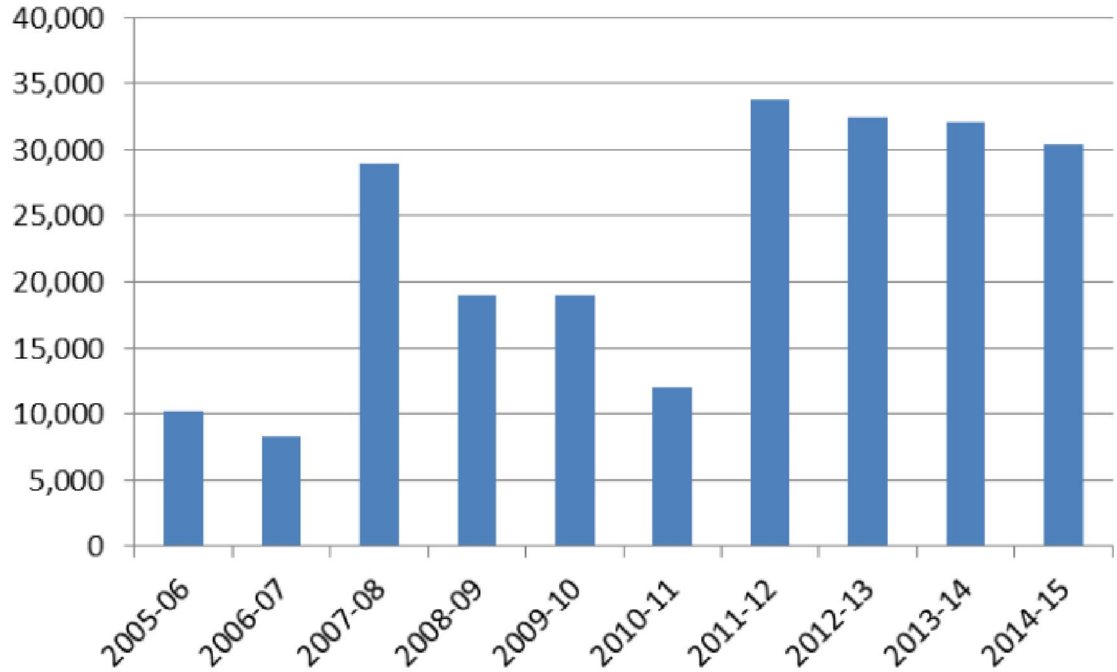
Although the OS continues to produce paper maps they now account for only 5% of its annual revenue. Over the last 15 years the OS has transformed itself from a producer of physical maps to a leading digital provider of maps to a whole variety of sources. Today they 'produce digital map data, online route planning and sharing services and mobile apps, plus many other location-based products.'[50] They generate revenue by licensing their digital maps to both businesses and the public sector as well as providing consultancy services abroad.

What is being proposed for the OS is not a wholesale privatisation, but a capital injection in order to fund its new strategy to generate more revenue and expand internationally. Although there is little detail on the proposal the assumption is that it would be in exchange for a portion of the equity in OS, since OS cannot take on debt without it being counted against the public sector borrowing, something that the government would not countenance given the current rationale for privatisation (see Appendix 2).

Economic assessment

Ordnance Survey is a world leader in its field, standing at the forefront of global advances in geospatial management. This has meant that over the past ten years OS has consistently delivered strong financial performance, with after-tax profits averaging around £23 million. Over the past four years profits have been particularly strong at over £30 million per year.

Figure 9: Ordnance Survey – Profit (in £ 000's) attributable to Public Dividend Capital Equity holders (2014-15 prices)



Source: Annual Reports

This strong financial performance has enabled Ordnance Survey to become a net-contributor to the public purse by paying regular dividends the Treasury – in 2014-15 it paid a total dividend of £21 million.

Ordnance Survey is also recognised as playing a key role in supporting the wider economy, with estimates suggesting that OS data is worth more than £100 billion a year to the UK economy. In particular, OS is helping to promote innovation in the digital economy – in February 2015 it announced a new GeoSpatial Innovation Hub to support developers and launched a range of new products including the world-leading OpenMap designed for the latest web and mobile platforms. The new open data products were downloaded 10,000 times in the first 24 hours.

Since there has been no publicly stated intention to fully privatise Ordnance Survey it is not possible to calculate when the public would be worse off due to the sale. It is clear, however, that it is a valuable public asset which is thriving under its current publicly owned status. Any move to sell the asset would result in revenue being forgone in the future which would amount to over £910 million over the next 30 years at today's prices, assuming the last year's profitability is indicative of future profitability.

Since there has been no publicly stated intention to fully privatise Ordnance Survey it is not possible to calculate when the public would be worse off due to the sale. It is clear, however, that it is a valuable public asset which is thriving under its current publicly owned status. Any move to sell the asset would result in revenue being forgone in the future which would amount to over £910 million over the next 30 years at today's prices, assuming the last year's profitability is indicative of future profitability.[48]

What could be achieved under continued public ownership

The OS has already demonstrated a strong track record on innovation and modernisation, evidenced by its position as a market leader internationally and its transformation from a producer of paper maps to delivering and maintaining a digital asset.

One example of this is offering free mobile downloads of all Landranger and Explorer paper maps purchased - thus creating a bridge between their old business model and the new.[51] The OS stays as up to date as possible by employing over 250 surveyors around Great Britain and using air photography to input over 10000 daily updates into their MasterMap database. The OS has also ensured that it provides a premium service compared to its main competitors like google which 'gets people using maps and seeing what there is, but then they see it's not up to date and they come to OS.'[52]

As well as being more up to date the OS is also more accurate and far more detailed making the data useful for a wide variety of activities, from detailed planning, to effective land management or disaster response services. In addition the OS has been effective at creating partnerships with the likes of the Land Registry to release more combined data. These types of relationship can best be fostered if both organisations remain public sector assets.[53]

Risks of privatisation

Under the logic of privatisation the private sector is better able to improve productivity and streamline or cease performing unprofitable activity. For the OS the mapping of rural and remote parts of the British Isles is expensive and would be hard to justify in purely commercial terms. Any move to give the private sector an equity stake could put pressure on the OS to reduce its mapping of rural and remote areas. This information is most valuable to governments especially during extreme events such as natural disasters or disease epidemics enabling effective emergency response.

Any part sale could also have an impact on the future of the public service mapping agreements, which enables all arms of government to use OS data for free. Access to the data is currently offered at a significant discount. The deal is negotiated centrally between the government and OS. As a private sector operator comes in and seeks to ensure that the OS receives maximum value for the products and services that it provides it could start to put pressure on the OS to negotiate with the government on purely commercial terms. This could lead to a significant extra cost, which experts contend could be more than double, especially if the new deal was negotiated individually by government departments. Products such as OpenMap would probably become charged for under any private sector operating model; stifling the use and innovation of geospatial data currently available free as a consequence of the OpenData agreement with Government.

"Having 224 years of history gives us an amazing trade craft. Having spent almost £900 million on digitisation, going from calligraphy to being totally digital, we have learned a lot of lessons."

- Andrew Loveless, Commercial Director, Ordnance Survey

Public assets facing privatisation today:

Channel 4

Channel 4 is a public service broadcaster established in 1982 by Parliament. Unlike the BBC, Channel 4 is publicly-owned under the Shareholder Executive portfolio of public assets, but is entirely commercially-funded and receives no public funding. It has a strong public service mandate that is contained in the Communications Act 2003 and the Digital Economy Act 2010. Its remit has 15 elements, including requirements for Channel 4 to be innovative and distinctive, stimulate public debate, reflect the cultural diversity of the UK, champion alternative points of view, inspire change in people's lives and nurture new and existing talent.

Channel 4 does not pay dividends but it has a significant direct impact on the UK economy. Channel 4 is a publisher-broadcaster under which it commits to buying or commissioning all its programming from production companies independent of itself. In fact it commissions about 70% of its programmes, mainly from small regional independent production companies, and only buys in 30%.[54] Channel 4 invests its revenues back into programmes and into the production sector. Its measured contribution to the UK Gross Value Added numbers has been conservatively estimated at over £1.1 billion annually.

Although the exact nature of the privatisation proposal has not been outlined the main rationale that is being discussed is firstly to raise as much revenue as possible and protect its public service remit. On the face of it these two goals may be working against each other. Most commentators work from the assumption that more money could be raised through the sale if the public sector remit was reduced or eliminated and that any safeguarding or enhancement of the public service remit will severely limit the interest from potential buyers. It is this uncertainly which means that figures as low as £500M and as high as £3Bn have been floated for the sale.

Any sale of Channel 4 would require an Act of Parliament and full parliamentary process. It has been reported that the government no longer plans a full scale privatisation but may sell a minority stake in the business or change its not for profit status.[55]

Economic assessment

Channel 4 is a unique and original entity. It is the only state and/or publicly owned broadcaster in the world that is solely commercially funded, while also being unique in that it has a special public service remit and not-for-profit model that lays heavy emphasis on diversity.

Channel 4 has a significant direct impact on the UK economy. In 2014 Oxford Economics estimated that its measured contribution to the UK's gross value added (GVA) was £1.1 billion per annum.[56] However, this can be considered a conservative estimate because it excludes other 'multiplier effects' that stem from Channel 4's activity on broadcasting ecology, creative industries and technology adoption. Examples of these include the benefits that flow from recruitment and development of talent, the growth of informal industry networks and the flow of new ideas which drive both content and commercial innovation.

Given that Channel 4 is deliberately managed and governed on a non-profit basis, its aim is to generate the earnings required to invest high levels in content and maintain a prudent level of reserves – rather than maximising profits for shareholders. Whenever it generates a financial surplus this is used to increase investment in programmes and innovation.[57]

As shown in figure 6, Channel 4 has followed a consistent trend of net surpluses in some years and losses in others. Over the last five years Channel 4 has generated an average annual surplus of £7 million, and over ten years the comparable figure is £12.7 million. Its significant cash reserves (around £220 million) have ensured that it has managed to sustain itself through challenging times.

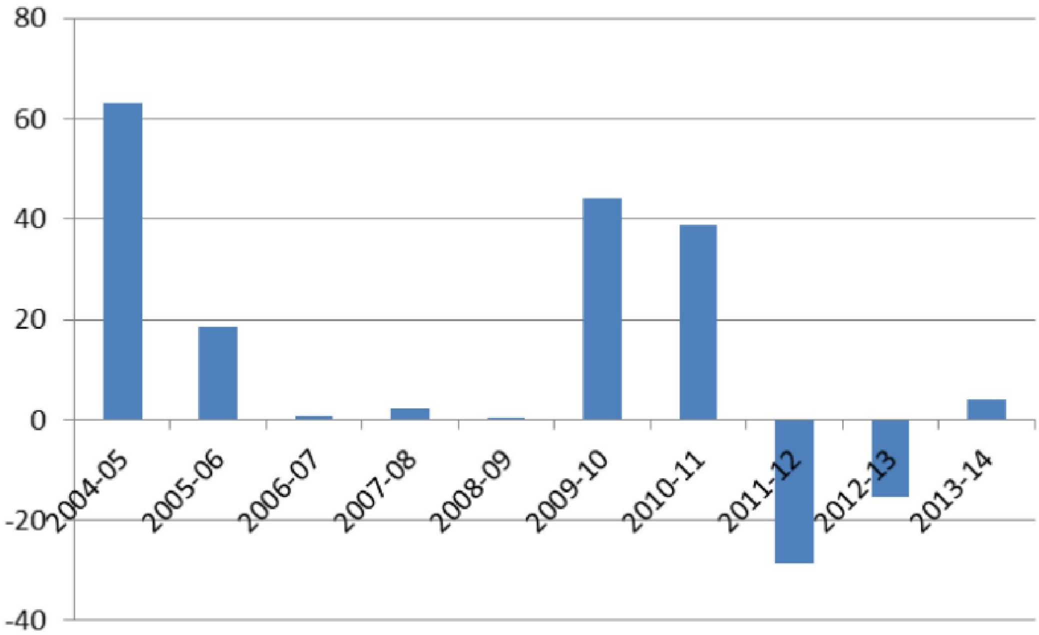


Figure 6: Channel 4 – Surplus (in £mn) for the year (2014-15 prices)

Source: Annual Reports

Given this unique structure, it is difficult to see how part privatisation or changing its not for profit status will not have significant social impacts. A recent report from Enders Analysis[58] showed that private investors and the government would only be able to achieve a commercial rate of return on their capital by taking money out of the programme budget and changing the channel remit. This was also recognised by Sir Michael (later Lord) Bishop, who warned then Prime Minister John Major against any idea of privatisation in 1996:

"When conventional shareholder pressures are applied to the TV industry...quality and choice are diminished...with new shareholders seeking to maximize profits, money for dividends would have to be taken from the screen"

This would likely have significant consequences on content. As an example, Figure 7 presents a simple comparison of the current Channel 4 remit with that of Channel 5, now owned by Viacom.

Figure 7: Comparing Channel 4 remit and Channel 5 licence

	Channel 4	Channel 5
High quality programming	✓	✓
Impartial news service	✓	✓
Diverse programming	✓	✓
Innovative, experimental, creative programming	✓	×
Programming appealing to a culturally diverse society	✓	×
Programming of an educational nature	✓	×
Programming with a distinctive character	✓	×
Programming and other materials for schools	✓	×
Required to commission programming from UK producers	✓	✓
Programming made in the Nations	3% (9% by 2020)	n/a

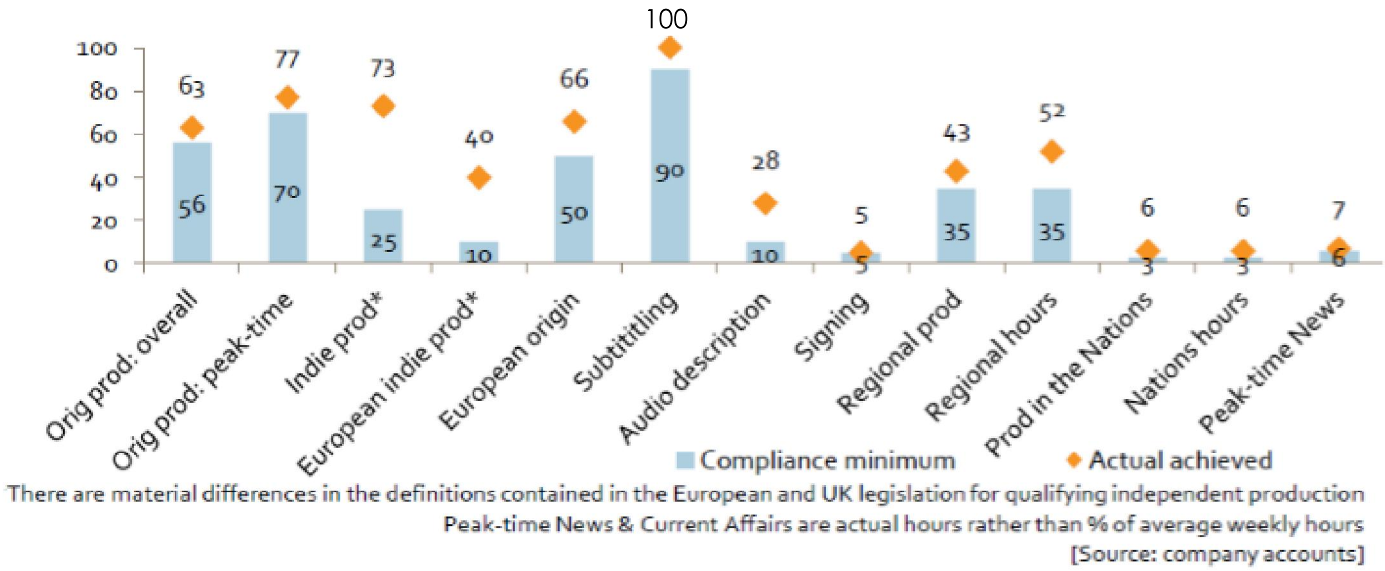
Source: Enders analysis

It can therefore be reasonably expected that part privatisation could have significant social impacts relating to minorities, independent film, investigative journalism, news plurality, comedy and innovative social documentaries.

What could be achieved under continued public ownership

The most important thing that Channel 4 should concentrate on is ensuring that the remit is protected within the existing structure, especially since it is the most respected public service broadcaster in a number of different areas as well as over-performing against its key metrics as outlined in the chart below.[59]

Figure 8: Channel 4 achievement of its programme obligations, 2014 (% of avg. weekly hours)[60]



It should also continue to innovate and think outside the box. For instance Channel 4 has recently started to use the large volumes of data that that it gathers on the individuals who watch Channel 4 online. Rather than use this data to introduce people to shows that they are very likely to be interested in following from what other users have watched, as most of these algorithm do on the internet. Channel 4 has pursued a totally different strategy because it sees one of its goals as increasing people's variety of television watching and engaging them with new issues. Channel 4 is therefore engaged in the 'antithesis of recommendation – normally you would recommend based on what you already know people love, but what we're trying to do is introduce the right opportunities for them to try something new.'[61]

Risks of privatisation

Part privatisation would almost certainly put the achievement of its public service remit under pressure. Channel 4 has always prided itself on engaging with a wide range of independent producers, especially those outside of London, who could be disadvantaged. There also reason to believe that it may impact the independent film industry which Channel 4 currently supports as well as long format news and hard hitting sometimes controversial documentaries and current affairs programmes. These often do not generate revenue but are considered important to the public and could be at risk under a private operator seeking to ensure a decent profit and revenue stream.

Should full privatisation be reconsidered in the future it may also have to loosen the 100% publisher-broadcaster model in order to attract credible buyers. This could lead to a reduction in the commission of shows as the new owner seeks to shift production towards its own internal company, and in all likelihood outside of the UK.

In addition unless there was a rigorous enforcement of the public service remit around engaging with minority groups and interests it is easy to imagine how shows with low viewing figures that did not attract high advertising revenues could be dropped in favour of more populist revenue generating content. data currently available free as a consequence of the OpenData agreement with Government.

“Every part of the model is working well. Revenues are at record levels, the audience is telling us we’re performing as strongly to the remit as ever. Programmes are winning audiences and awards. C4 is stimulating public debate, nurturing new talent, giving a voice to the otherwise unheard and taking risks…

The idea of privatisation really does feel like a solution in search of a problem…History tells us that part-privatisations are like crossing the Rubicon and realising you’re on a sinking ship – once you’ve started you can’t go back.”

- David Abraham, Channel 4 chief executive

Conclusion

There is clear economic evidence to support the financial viability of public ownership for the Land Registry, National Air Traffic System, Ordnance Survey and Channel 4, and that contrary to historical criticisms of this model the current organisations prove that innovation and creativity is possible. This has been achieved while delivering good quality services as well as ensuring that wider benefits to society are met. If all these assets were sold today the government would forego £7.741 billion over the next 50 years at today's prices.[62]

Decisions about assets are for the long term

Politicians tend to work on short term cycles. They discount the future at a very high rate. Yet these short term political cycles don't do justice to the long term needs of our economy and our public services, and to future generations. Selling off our assets would mean we lose out on all future profits for a one off cash injection. We can estimate the profits that will be lost if we sell off our assets now. It's harder to estimate the wider loss to the economy and the impact on already cash-strapped public services from this loss of public revenue. Simply by looking at profits though, we can see that selling assets today means we lose out on future income forever. The financial impact of the decision to sell only gets worse over time.

We can't have our cake and eat it

Once these assets are gone, they are gone. It is a decision that is very difficult to reverse. If these assets are sold off we will lose the structures and expertise and tacit knowledge that helps them achieve the success they have today. It would be very difficult to recreate these institutions, not to mention the financial cost of piecing them back together again.

There needs to be a public debate

This report outlines why the public assets at risk of privatisation are efficient, profitable, innovative institutions, and explains the long term financial cost of selling them off to the private sector. We suggest there is no clear rationale for the planned sell offs and that the burden of proof is on the government to prove why these sales would be a good idea. The public want to see these assets stay in public ownership. We need a proper public debate and full scrutiny of the government's motivations and arguments.

Our assets are precious

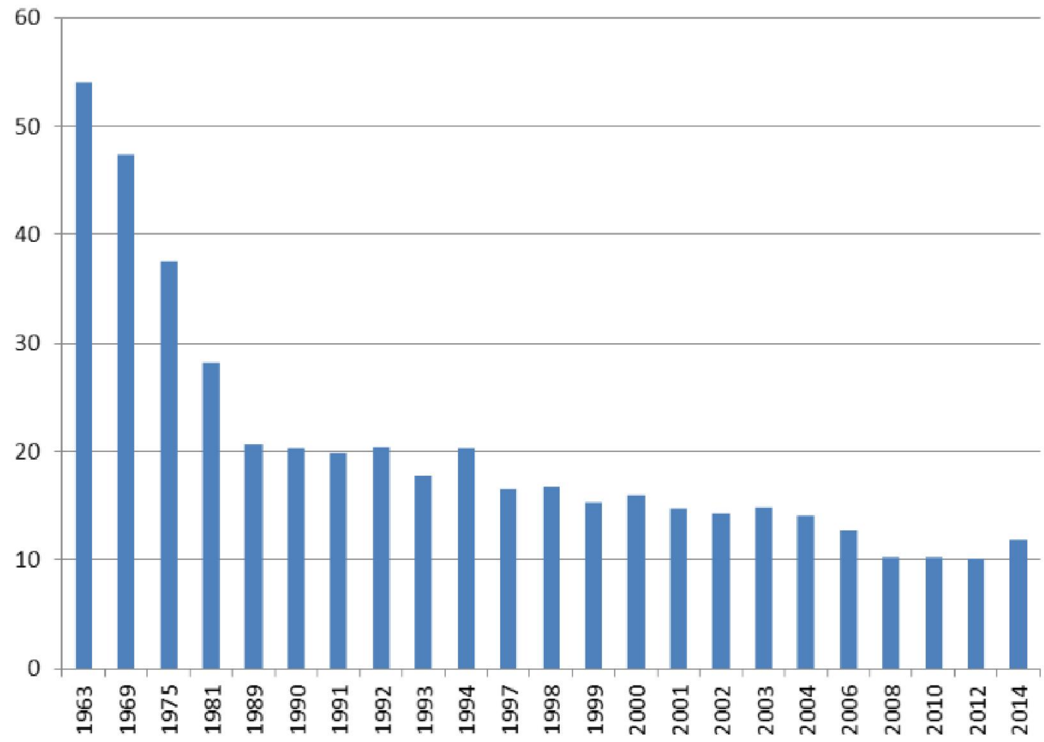
The assets discussed in this report are a special part of our heritage. They each have a unique and impressive history and have built up knowledge and know how over time. Royal Mail, sold off with little public debate, was nearly 500 years old. The Land Registry is 154 years old. Ordnance Survey is 225 years old. These institutions have learned and grown over time, adapting to changing circumstances. NATS is newer but has developed into a world leading organisation, while Channel 4 is a uniquely British creation that reflects and develops our national culture. All of these institutions are valued in other countries around the world and often export their expertise. Future profits aside, there is a lot at stake here, a lot to lose, and a lot to gain by keeping these institutions in public hands for the future.

Appendix 1: Whatever happened to the shareholder democracy?

Spreading share ownership more widely across society was seen as a major goal of the privatisation of public assets in the past, especially assets like British Gas which explicitly promoted individual ownership through the government's 'Tell Sid' campaign. This campaign alone resulted in 2 million individuals becoming share owners for the first time.

During the last 40 year however date from the ONS clearly shows that the % of the total capital value of the stock market has been steadily declining since the 60's and that the massive privatisations of the 80's, 90's and 00's have done nothing to reverse this trend. The biggest reason for the transition has been the huge investment from overseas into UK listed companies, which went from holding about 7% of the value of UK listed companies to over 50% today.

Figure 2: Percentage of UK stock market owned by individuals



Source: ONS

Whereas past privatisations specifically targeting people not currently holding any shares the modern iterations have sometimes functioned very differently. For the most recent Royal Mail share sell-off individuals did not even have the option to buy shares in the first place - institutional investors bought the shares overnight.

Appendix 2:
Public finances and public ownership, a complicated relationship

In both the public and the private sectors it is common to borrow money to invest in order to modernise and expand. Long-term public investment can significantly boost economic activity, creating jobs, raising productivity, increasing tax returns and reducing welfare spending, meaning healthier public finances. However, the current government's emphasis on deficit reduction has severely restricted the ability of public sector bodies to borrow and invest because of the effect this would have on the effort to eliminate the deficit. This is despite the fact that the public sector can borrow at lower costs, below 1.5% for a 10 year bond, compared to about 3% for a well performing private sector company to issue a corporate bond.

In the UK the Office for National Statistics (ONS) is responsible for assessing bodies and transactions against international rules to decide how they should be treated in the UK National Accounts, including whether a body should be classified as being in the private or public sector. If a body is classified as being in the public sector, then its finances are included as part of the UK National Accounts and Public Sector Finances, so any borrowings will contribute towards the fiscal deficit and public sector debt.

Network Rail is an example of this. Originally classified as a private sector entity, Network Rail was able to borrow to invest in its capital investment programme, without having any effect consequence the public finances. However, in 2014 the ONS reclassified Network Rail as a central government body in the public sector in light of new guidance from Eurostat which came into effect in the EU from 1 September 2014. This meant that Network Rail's net debt of around £30 billion was added to the government's balance sheet overnight, and the company was immediately stopped from taking out any new borrowing to prevent any further increase of the public debt. The anti-public investment stance of the government and its desire to get Network Rail's debt off the public books has been a key motive in the recent moves towards the privatisation of the company.

References

1. Civil Service World (2013) Russell signals massive privatisation - http://www.civilserviceworld.com/russell-signals -mass-privatisation

2. European Federation of Public Service Unions (2014) Briefing: Public and Private Sector Efficiency p.7

3. http://www.theguardian.com/uk-news/2015/mar/01/east-coast-rail-line-returns-to-private-hands

4. http://www.andyhowell.info/trek-blog/2014/01/15/more-chaos-at-the-ordnance-survey/

5. 'The Entrepreneurial State: debunking public vs private sector myths', Mazzucato, 2013

6. George Osbourne, CBI speech - http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/11618980/George-Osborne-to-privatise-23bn-of-taxpayer-assets.html

7. Based on publicly available valuations of £300 million for NATS, £1.2billion for Land Registry, £1billion for Channel 4 and an estimation of £500million for the sale of OS

8. FT 16 May 2016 'UK Gilt Rally tracks talks of interest rate cut' https://next.ft.com/content/08beb346-192a-11e6-b197-a4af20d5575eww

9. Bayliss, Kate (2014) The Financialisation of Water in England and Wales. FESSUD Working Paper Seriesno. 52

10. BBC 18 December 2014 'Royal Mail privatisation £180m underpriced, review says' http://www.bbc.co.uk/news/business-30527392

11. http://www.theguardian.com/politics/2015/jun/12/osborne-plan-has-no-basis-in-economics

12. OECD (2016) Global Economic Outlook and Interim Economic Outlook, downloaded at http://www.oecd.org/eco/outlook/economicoutlook.htm

13. http://www.economist.com/news/britain/21693968-sale-government-assets-can-hurt-public-finances-much-help-them-great-british

14. http://budgetresponsibility.org.uk/docs/dlm_uploads/July-2015-EFO-234224.pdf

15. http://www.theguardian.com/politics/2015/jun/04/chancellor-announces-extra-savings-royal-mail-stake-selloff

16. We have omitted the recent revenue generated from the sale of the recently bought shares in RBS and Lloyds

17. Profitability figures are always taken as post tax and pre dividend. The figure that we have used for average profitability going forward is the average of the last 4 years data. Up until 2011 the Royal Mail was in the process of restructuring the organisation in order to make it a profitable operation. It therefore is the period which best enables us to estimate future profitability.

References

18. In order to account for the time value of money, all forecasted figures have been discounted in line with the methodology set out in the HM Treasury Green Book in order obtain their present values. Discounting is a technique used to compare costs and benefits that occur in different time periods. It is a separate concept from inflation, and is based on the principle that, generally, people prefer to receive goods and services now rather than later. This is known as 'time preference'. Society as a whole also prefers to receive goods and services sooner rather than later, and this is known as 'social time preference'. The 'social time preference rate' (STPR) is the rate at which society values the present compared to the future. All figures in this paper have been discounted using the social time preference rate from the HMT Green Book for cases that are very long term and which involve substantial and irreversible wealth transfers between generations.

19. http://www.mirror.co.uk/news/uk-news/polls-shows-massive-opposition-george-6990108

20. http://www.lawsociety.org.uk/news/press-releases/law-society-warns-against-land-registry-privatisation/

21. Land Registry Annual Report 2014/15 p.13 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443249/Land_Registry_Annual_Report_2015_7_7_15_small.pdf

22. ibid.

23. All figures have been adjusted for inflation and are presented in 2014-15 prices. The Land Registry records surplus rather than profit in their annual reports. We are using post tax pre dividend surplus. The figure that we have used for average profitability going forward uses the last 10 years of data but excludes the 2008/9 figure as being exceptional due to the nature and severity of the global economic crisis and its particular impact on the housing market. Transactions in the housing market are the source of revenue of Land Registry.

24. The figure that we have used for average profitability going forward uses the last 10 years of data but excludes the 2008/9 figure as being exceptional due to the nature and severity of the global economic crisis

25. In order to account for the time value of money, all forecasted figures have been discounted in line with the methodology set out in the HM Treasury Green Book in order obtain their present values. Discounting is a technique used to compare costs and benefits that occur in different time periods. It is a separate concept from inflation, and is based on the principle that, generally, people prefer to receive goods and services now rather than later. This is known as 'time preference'. Society as a whole also prefers to receive goods and services sooner rather than later, and this is known as 'social time preference'. The 'social time preference rate' (STPR) is the rate at which society values the present compared to the future. All figures in this paper have been discounted using the social time preference rate from the HMT Green Book for cases that are very long term and which involve substantial and irreversible wealth transfers between generations.

26. Land Registry Annual Report 2014/15 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443249/Land_Registry_Annual_Report_2015_7_7_15_small.pdf

27. Tennison J (2015) When data is free but not open - http://theodi.org/blog/when-data-is-free-but-not-open

28. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508193/HMT_Budget_2016_Web_Accessible.pdf

29. Lateral Economics (2015) Permission Granted: The economic value of data assets under alternative policy regimes

30. http://landregistry.data.gov.uk

31. McCann D (2016) BHS Collapse: How capitalism is eating itself, downloaded at http://www.neweconomics.org/blog/entry/bhs-collapse-how-capitalism-is-eating-itself

References

32. http://www.ft.com/cms/s/0/c26b2f8c-1113-11e6-91da-096d89bd2173.html#axzz47roUiQDA

33. http://www.thisismoney.co.uk/money/news/article-3335582/Air-space-sale-threat-UK-Government-plan-offload-air-traffic-control-security-risk-say-experts-unions.html

34. http://www.airtrafficmanagement.net/2014/12/nats-backs-down-on-dfs-gatwick-win/

35. http://www.mirror.co.uk/news/uk-news/polls-shows-massive-opposition-george-6990108

36. http://www.airtrafficmanagement.net/2012/07/nats-sale-grounded-report/

37. http://ec.europa.eu/transport/modes/air/single_european_sky/ses_2_en.htm

38. http://www.airtrafficmanagement.net/2015/06/nats-faces-profit-drop-from-industry-challenges/

39. http://www.airtrafficmanagement.net/2015/11/uk-mulls-nats-sale-once-again/

40. https://www.youtube.com/watch?v=KxFnQsyTCL8

41. HM Government Shareholder Executive: Annual Review 2014-15

42. Hawkins N (2010) Privatisation Revisited p.25

43. Based on average of previous 10 years. We are using post tax pre dividend profits for all the calculations.

44. In order to account for the time value of money, all forecasted figures have been discounted in line with the methodology set out in the HM Treasury Green Book in order obtain their present values. Discounting is a technique used to compare costs and benefits that occur in different time periods. It is a separate concept from inflation, and is based on the principle that, generally, people prefer to receive goods and services now rather than later. This is known as 'time preference'. Society as a whole also prefers to receive goods and services sooner rather than later, and this is known as 'social time preference'. The 'social time preference rate' (STPR) is the rate at which society values the present compared to the future. All figures in this paper have been discounted using the social time preference rate from the HMT Green Book for cases that are very long term and which involve substantial and irreversible wealth transfers between generations.

45. https://www.mpimet.mpg.de/fileadmin/download/Grassl_Brockhagen.pdf

46. http://www.nats.aero/environment/3di/

47. http://www.wsj.com/articles/SB1028658704882405520

48. This methodology uses the projected future profits, £30.355 million, and multiplies it by the number of years to get the forgone income at today's prices. We are using post tax pre dividend profits for all calculations. We were informed by staff from the OS that the most likely indication of future profitability would be recent years 2011-15 due to restructuring having been completed. The last 4 years shows steady profits above £30million. We chose to take the lowest year's profitability from this period to estimate profitability going forward

49. https://www.theguardian.com/business/2011/feb/06/nats-airlines-government-stake-selloff

50. https://www.ordnancesurvey.co.uk/about/overview/what-we-do.html

51. This methodology uses the projected future profits, £30,355million, and multiplies it by the number of years to get the forgone income at today's prices.

52. https://www.ordnancesurvey.co.uk/shop/mobile-download-faq.html

References

53. http://www.theguardian.com/uk-news/2015/oct/09/why-the-centuries-old-ordnance-survey-is-still-going-places

54. Barwise P & Brooks G (2016) The Consequences of Privatising Channel 4 p.4

55. http://www.theguardian.com/media/2016/may/10/government-channel-4-privatisation-stake-nao

56. 'The Consequences of Privatising Channel 4', Patrick Barwise and Gillian Brooks

57. 'The Consequences of Privatising Channel 4', Patrick Barwise and Gillian Brooks

58. 'Channel 4: sustainability and privatisation', Enders Analysis

59. Channel 4: sustainability and privatisation', Enders Analysis

60. Reproduced from - Channel 4: sustainability and privatisation', Enders Analysis p.7

61. http://www.thedrum.com/news/2014/03/06/channel-4-data-strategy-antithesis-data-says-head-viewer-relationships-steve-forde

62. This methodology uses the projected future profits, Land Registry £66.9 million, NATS £42.9 million (halved to account for 49% ownership), OS £30.355 million and Channel 4 £12.7 million, adds them together and then multiplies it by the number of years to get the forgone income at today's prices.