

Economic and Fiscal Impact on the Devolved Nations of the Nationalisation of the English Water Companies

A report to



4th October 2019



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1.

Foreword

Labour's proposals to nationalise the water companies in England could have significant economic consequences for the devolved nations. This report assesses these effects and proposes protections for the devolved nations. It explicitly does not assess the relative merits of the different ownership models.

The proposals to nationalise the water sector in England come at a significant cost, around £90 billion. Economically, this cost can be borne by taxpayers (if full compensation is paid), by investors in the companies (if reduced compensation is paid) or a combination of the two. It cannot be 'magicked away'.

The principal economic costs to the people of the devolved nations is that they will be helping to pay for nationalisation of water companies in England, without benefiting (or otherwise) from the change of ownership.

Taxpayers in Scotland, Wales and Northern Ireland would all be paying a contribution towards the £90 billion cost.

If the full cost was not met by taxpayers, then investors from the devolved nations – including personal, public sector and corporate pension funds – would be helping to pay.

Regardless of the merits (or otherwise) of the proposal to nationalise English water companies, the economic interests of the people living in Scotland, Wales and Northern Ireland could only be protected if:

- the Barnett Formula is deemed to apply in full, protecting taxpayers in the devolved nations; and
- full compensation was paid to the pension funds and other investors who own these companies (and whose savers would suffer if full compensation was not paid).

2.

Executive Summary

The Labour Party has proposed the nationalisation of the English water companies. This study considers the economic impact that the policy could have on taxpayers, savers, businesses and the fiscal position of the devolved governments.

2.1 Fiscal Impacts

If the industry was purchased at a value equivalent to its Regulated Capital Value (RCV) plus a 30% takeover premium, the cost to the UK Government would be **£90 billion**, or **5% of existing UK Sovereign Debt**.

If the **Barnett formula** were to apply to the nationalisation of the water companies, costs would rise up to **£105 billion**, or **6% of existing UK Sovereign Debt**.

While making the nationalisation of the industry more expensive, this would give to the **devolved governments** an additional **£14.2 billion** in funding of which:

- **£7.4 billion** would go to the **Scottish Government**;
- **£4.2 billion** to the **Welsh Government**; and
- **£2.6 billion** to the **Northern Irish Government**.

If the Barnett formula did not apply to the cost of nationalisation, there would be an opportunity cost to the devolved governments since the associated UK Government spending could have been on other projects that did have Barnett consequentials.

Application of the Barnett formula to annual capital investment in the water network post-nationalisation may result in up to:

- **£327 million** per year to the **Scottish Government**;
- **£188 million** per year to the **Welsh Government**; and
- **£115 million** per year to the **Northern Irish Government**.

Nationalisation of the industry could affect the rate at which the UK Government can borrow. A 0.10 percentage points increase in the interest on UK Government Debt (Gilts) may cost the **UK Government £10 million a year in interest payments**, for every £10 billion borrowed.

Higher interests on UK debt may spill over to the rates paid by the Scottish and Welsh Government and result in additional annual costs on capital borrowing of:

- **£0.45 million for the Scottish Government;** and
- **£0.15 million for the Welsh Government.**

2.2 Impacts on Savers

If the industry was bought at below its market value, this would result in a loss to pension fund holders and other shareholders across the UK and its nations. **The shortfall** between the estimated takeover value of the industry and the value at which it has been suggested that the industry could be bought is **£75 billion**. This would result in a capital loss for over 500,000 public sector employees in the devolved governments and to private sector workers employed by UK-level employers including Tesco, the BBC and Marks & Spencer.

A shareholder with shares valued at £10,000 in the water companies would face a **£670 annual opportunity cost** from holding Gilts instead of water companies' shares.

A fall in the value of Gilts as a result of the nationalisation of the water companies may also lead to losses of around **£100 per UK household**.

2.3 Impacts on Businesses

If, as a result of competing budgetary pressures, there was 10% less investment in the water industry post-nationalisation, there would be an annual loss to the UK economy of **£447 million GVA and 4,600 job-years**.

Additional impacts on businesses from the UK and the devolved nations may arise as a result of changes in the **retail business market for water**, that may be caused by nationalisation of water provision to households.

2.4 Key Policy Questions

This study contributes to the policy debate by highlighting areas where additional information about the policy proposal would be required to assess its full economic and fiscal impact, including:

- the cost at which the industry will be purchased;
- the future of the market for water serving businesses; and
- whether the Barnett formula will be applied.

3. Introduction

This section sets out the reasons behind this work, presents the policy being discussed and provides the structure for the remainder of the report.

BiGGAR Economics was commissioned by Severn Trent, United Utilities, South West Water and Anglian Water to undertake an analysis of the possible consequences on the devolved nations of the UK from the Labour Party's proposed nationalisation of the water industry in England.

This analysis focuses on the consequences on the devolved nations and the following effects are considered:

- fiscal impacts;
- impacts on savers; and
- impacts on businesses.

3.1 The Labour Party Proposal

The Labour Party proposed the nationalisation of the utilities (water and energy) in its 2017 Manifesto¹. The policy proposal was subsequently developed and presented at the 2018 Labour Conference. The policy document 'Clear Water'² describes how nationalisation would be carried out and how the sector would be administered.

Under the proposed nationalisation of the water companies in England, a network of regional publicly-owned companies (the Regional Water Authorities) 'run by local councillors, workers and customers'³ would be created. The nationalisation of the industry would take place through an Act of Parliament and would result in Parliament setting the level of compensation for existing shareholders. The policy proposal suggests that Parliament could make deductions on the basis of: 'pension fund deficits; asset stripping since privatisation; and state subsidies given to the privatised water companies'⁴. Under public ownership, existing debts would be honoured and taken over by the Government.

'Clear Water' does not include any reference to the price at which the companies may be purchased. When considering the impact on shareholders from if compensation

¹ Labour Party (2017), 'For the many not for the few', Labour Party Manifesto 2017. p.19

² Labour Party (2018), 'Clear water, Labour's vision for a modern and transparent publicly owned water system', available at: <https://www.labour.org.uk/wp-content/uploads/2018/09/Conference-2018-Water-pamphlet-FINAL.pdf>

³ Ibid. p.2.

⁴ Ibid. p.6.

was set at a value lower than the industry's takeover value, the analysis assumes that nationalisation would take place at £15 billion, as suggested by the Shadow Chancellor⁵. This figure, which is disputed, was based on an evaluation carried out by Moody's which set the value of the industry at £14.5 billion based on the book value of the shareholder equity (i.e. the value of assets once liabilities and debt are subtracted) of the 15 English water companies' shareholder equity⁶.

It is envisaged that the financial management of the companies would be similar to that of Transport for London (TfL) and, thus, they will be mostly responsible for their own funding, excluding occasional Government funding towards specific projects. It is also suggested that the water companies, once in public hands, would have access to credit at lower interest rates than at present⁷.

The proposal remains part of the policy portfolio of the Labour Party and has been part of a recent consultation on democratic public ownership⁸.

3.2 Report Structure

The remainder of this report is structured as follows:

- section 4 provides an overview of the context in which water companies operate across the UK;
- section 5 presents the methodology and approach that have been followed throughout the study;
- section 6 assesses the fiscal impacts of the policy;
- section 7 evaluates possible impacts on savers;
- section 8 considers the impacts on businesses; and
- section 9 provides appendix material on existing research over the nationalisation proposal.

⁵ Financial Times (2019), 'Labour to pay £15bn to renationalise water industry', available at: <https://www.ft.com/content/876e456e-6f42-11e9-bbfb-5c68069fbd15>

⁶ Ibid.

⁷ Labour Party (2018), 'Clear water, Labour's vision for a modern and transparent publicly owned water system', available at: <https://www.labour.org.uk/wp-content/uploads/2018/09/Conference-2018-Water-pamphlet-FINAL.pdf>, p.6.

⁸ Labour Party (2019), 'Labour Party consultation paper: democratic public ownership', p.2.

4.

Strategic Context

This section briefly outlines the existing framework for water and sewerage provision in England, alongside recent policy developments and industry performance.

4.1 The Water Industry

Piped water became available to most of the population across England and Wales from the 18th century. Until after the Second World War, the provision of water and sewerage occurred mostly through local providers, which meant that the market for water was highly fragmented, featuring more than 1,400 bodies responsible for the supply of water and even more in charge of the sewerage system.

Over the following decades the water industry underwent consolidation with, for instance, the creation of ten regional water authorities following the Water Act 1973⁹. Despite the consolidation of the industry, which allowed the formation of economies of scale (the efficiency gains that arise from the scaling up of a business), difficulties and constraints in financing investment expenditure remained.

In England, the current structure of the industry traces back to 1989 when, through the Water Act (1989), the industry was privatised and the distribution of water and the management of the sewerage system were transferred to the ten existing regional companies. The measure was accompanied by an injection of capital, the write-off of existing debt, provision of capital allowances and the listing of the companies on the London Stock Exchange.

Alongside the privatisation of the industry, there was the creation of regulators with mandates ranging from water quality to environmental protection. The Water Services Regulation Authority (Ofwat) became the economic regulator of the industry with a mandate to protect consumers and ensure competition in the water market.

4.2 Water Provision in England

Under the existing framework, in England water services to households are provided by 24 companies, including water and sewerage (9), water only (9) and local water

⁹ Ofwat (2019), Water sector overview, available at: <https://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/>

companies (6)¹⁰. The map below shows who the biggest operators are and where they provide services. These water providers include:

- Affinity Water Limited;
- Anglian Water Services Limited;
- Bristol Water plc;
- Dee Valley Water plc;
- Northumbrian Water Limited;
- Portsmouth Water Limited;
- Severn Trent Water Limited;
- South East Water Limited;
- Southern Water Services Limited;
- South Staffordshire Water (also trading as Cambridge Water);
- South West Water Limited;
- Sutton & East Surrey Water plc;
- Thames Water Utilities Limited;
- United Utilities Water Limited;
- Wessex Water Services Limited; and
- Yorkshire Water Services Limited¹¹.

¹⁰ A list of providers is available from Discover Water at: <https://discoverwater.co.uk/water-sector>

¹¹ Ofwat (2019) available at: <https://www.ofwat.gov.uk/households/your-water-company/map/>. Providers such as Bournemouth Water, Hartlepool and Essex & Suffolk have not been included in the list, since they are part of South West Water, Northumbrian Water and Anglian Water, respectively. In addition, households in Hereford receive water services from Dŵr Cymru.

Figure 4-1 Water and Sewerage Companies Operating in England



Source: Ofwat

The companies act as monopolies in the areas where they operate and, as a result, households cannot choose from which operator to be served. The boundaries of the nine sewerage and water companies broadly depend on rivers' catchment areas. This means that some households near the borders between England and Scotland, and England and Wales may be served by providers from across the border, though this remains a limited phenomenon.

Over time the provision of water services to households in the devolved nations of the UK has developed differently from England, with provision being now a devolved matter. In Scotland and Northern Ireland publicly-owned companies - Scottish Water and Northern Ireland Water – provide water services to households. In Wales there

are two providers Dŵr Cymru, a company limited by guarantee that reinvests all its financial surpluses¹², and Hafren Dyfrdwy, which is part of Severn Trent.

4.3 Strategic Context

4.3.1 Ofwat's Draft Determination for the 2019 Price Review

In July 2019, Ofwat, the market regulator, published its draft determinations for the 2019 Price Review¹³. The reviews take place every five years and see the engagement of the water companies, their customers and the regulator. This process determines the prices that each company is allowed to charge, its incentive package and service¹⁴. The draft determinations for the 2019 Price Review highlighted four priorities for the industry:

- affordable bills;
- great customer service;
- long-term operational, financial and corporate resilience; and
- innovation.

Among other targets, these priorities will translate in average bills falling on average by 12% before inflation, in the benchmarking of the industry's customer service with that in other industries, and in incentives to innovate and to reduce environmental impact. Ofwat also asked companies to decrease their debts¹⁵ in order to improve their financial resilience.

4.3.2 Industry Ownership

The ownership structure of the English water and sewerage companies, the largest providers and the ones this study is concerned with, ranges from publicly listed companies, through consortia to foreign-owned groups, as shown in Table 4.1. Three companies are listed, and four are part of consortia.

¹² Dŵr Cymru (2019), 'Glas Cymru', available at: <https://www.dwrcymru.com/en/Company-Information/Glas-Cymru.aspx>

¹³ Ofwat (2019), 'PR19 draft determinations, overview of companies' draft determinations', p.2. Final determinations by the regulator are expected in December 2019.

¹⁴ Ibid. p.4.

¹⁵ Ibid. p.2.

Table 4.1 Who Owns the Water Companies¹⁶

Company	Owner
Northumbrian Water	Cheung Kong Infrastructure Holding, Hong Kong
Yorkshire Water	Consortium
Anglian	Consortium
Thames	Consortium
Southern	Consortium
Wessex	YTL Group, Malaysia
Severn Trent	Listed
United Utilities	Listed
South West Water (Pennon Group)	Listed

Source: Severn Trent (2019)

The ownership structure of the industry has a range of implications in the context of this study. For instance, shareholders of the publicly listed companies, including pension-funds, will be affected by nationalisation if this happens at below the market price of the companies. Consortia will be similarly affected, as for example, the UK Universities Superannuation fund has a 10% share in Thames Water. Finally, foreign ownership of some of the companies may present the risk of legal challenges if these companies were reserved a different treatment compared to British-owned ones.

4.4 Industry Performance

In 2014, Deloitte conducted an economic impact assessment of the water industry on behalf of WaterUK, the industry body. The report found that in 2013/14 the water industry directly contributed £8 billion Gross Value Added (GVA) to the UK economy and an overall £15.2 billion GVA, once indirect and induced impacts were included¹⁷. The industry also supported around 127,000 jobs across the UK.

Since privatisation, once allowance has been made for changes in water quality, the water industry has experienced an average increase in productivity of 2.1%¹⁸. Over the period 1989-2017, it was estimated that total factor productivity increased by between 27% and 64%¹⁹. This report does not consider how changes in the structure of the industry may affect its productivity. However, it acknowledges that

¹⁶ Water companies for which information was made available.

¹⁷ Deloitte (2014), 'Tapping into growth. Economic impact of the water and sewerage sector in the UK'.

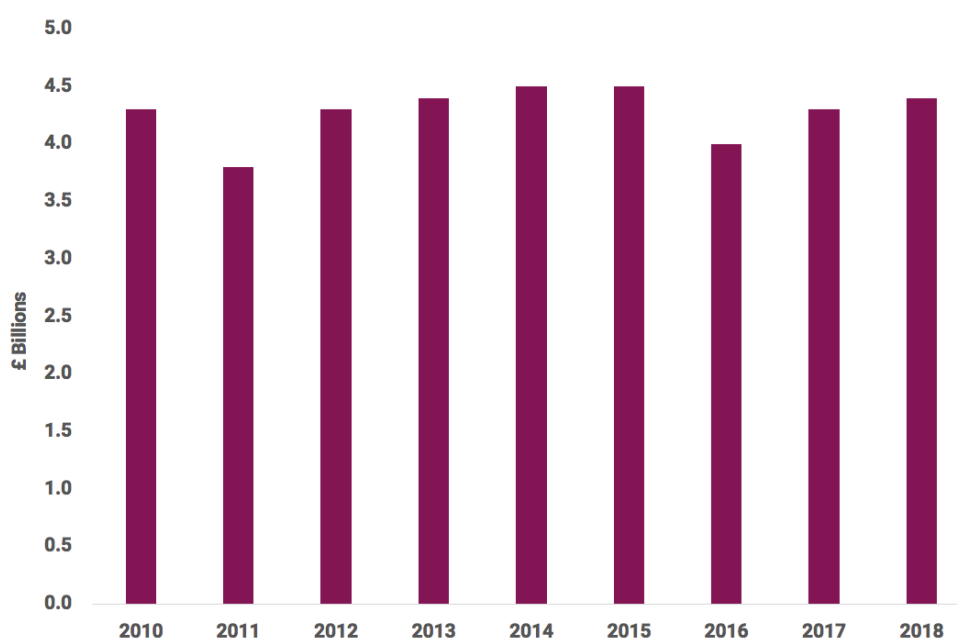
¹⁸ Frontier Economics (2017), 'Productivity improvement in the water and sewerage industry in England since privatisation', p.2

¹⁹ Ibid., p.3

nationalisation and a politicisation of the industry's management may have consequences on productivity and profitability²⁰.

Increased productivity could be attributed to a more stringent regulatory framework as well as to investment in capital, which followed a period of underinvestment prior to privatisation. Since 1989, over £140 billion have been invested in the water companies²¹ and it is estimated that over the next 25 years there will be around £100 billion in investment²². From 2010 capital investment has ranged between £3.8 billion and £4.5 billion in 2017/18 prices and averaged £4.2 billion per year, as shown in Figure 4-2.

Figure 4-2 Capital Expenditure - Water Industry in England 2010-2018



Source: Company Reports

4.5 The Retail Market

Alongside a market for water services for households, there exists a competitive non-household retail market for water. In England this side of the market was

²⁰ See for instance, Social Market Foundation (2019), 'The cost of nationalising the water industry in England' where it is argued that, depending on the ownership structure, there may be a politicisation of water price-setting.

²¹ Ofwat (2018), 'PN 17/18: OfWat boss says water companies must work harder to keep the trust of their customers', available at: <https://www.ofwat.gov.uk/pn-1817-ofwat-boss-says-water-companies-must-work-harder-keep-trust-customers/>

²² Social Market Foundation (2018), 'The cost of nationalising the water industry in England'.

liberalised in 2014 with the 2014 Water Act (though the market started operating in 2017), whereas in Scotland it had already been liberalised in 2008²³.

Ofwat estimates that this market involves around 1.2 million businesses, charities and public sector organisations²⁴. The market sees the participation of businesses that already operate in the provision of water services to households in England and to businesses from other regions of the UK. As it happens in other utility markets such as telecoms or gas²⁵, businesses are still provided services by their local water company but through a retailer that offers other services, including billing and water metering. This has the benefit of allowing a business operating in areas served by different providers to deal with only one retailer.

Given the time gap between the opening of the non-household retail market in Scotland and in England, it was possible for Scottish businesses to enter the English market. Among the companies operating in the English retail market for businesses, some come from the devolved nations, including:

- Water 71, from Wales;
- Business Stream; and
- Castle Water from Scotland.

Business customers in Wales and Northern Ireland do not have the possibility to switch providers and receive water services from their local monopoly.

²³ Deloitte (2017), 'The non-household retail water market, first impressions and future developments'.

²⁴ Ofwat (2019), 'Business retail market', available at: <https://www.ofwat.gov.uk/regulated-companies/markets/business-retail-market/>

²⁵ Ofwat (2018), 'Open for business: reviewing the first year of the business retail water market, summary note', available at: <https://www.ofwat.gov.uk/wp-content/uploads/2018/07/Open-for-business-summary-FINAL-1.pdf>, p.11.

5. Methodology

This section provides a short introduction to the methodology, the sources and the measures adopted in the analysis.

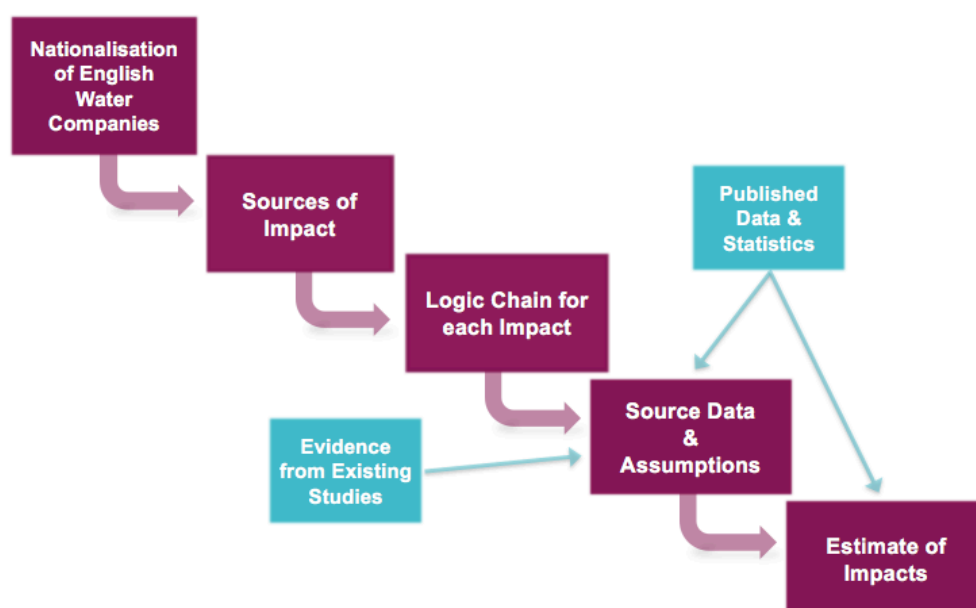
5.1 Approach

In order to isolate and, where possible, quantitatively estimate the impacts from the nationalisation of the English water companies, the approach illustrated in Figure 5-1 was followed. Impacts were divided into:

- fiscal impacts;
- impacts on savers; and
- impacts on business (industry and supply chain impacts).

For each group, sources of impact were identified and logic chains built to understand the way in which each effect would occur. In order to estimate impacts, assumptions were made based either on publicly available data or on evidence from existing studies. Where an impact was not quantifiable or considered negligible, it was qualitatively assessed.

Figure 5-1 Study Approach



Source: BiGGAR Economics Analysis

5.1.1 Geographical Areas of Impact

In contrast to previous studies this research considers the impact from nationalisation of the water industry in England on the devolved nations of the UK. Since UK-impacts may depend on the interplay between the policy and the funding arrangements for the devolved governments, where possible, analysis is conducted at the following geographical levels:

- UK;
- devolved nations as a whole;
- Scotland;
- Wales; and
- Northern Ireland.

5.1.2 How to Assess Different Types of Impact

Given the wide range of impacts and of those affected by them, a series of assumptions were made as to what may happen as a result of the nationalisation of the water industry in England. Different approaches were adopted, as needed.

This meant devising a nationalisation scenario to compare against a counterfactual (i.e. what the industry delivers or is expected to deliver in the future) or assessing impacts under different values at which the Government may nationalise the industry. For instance, the estimation of the net impact from a change in capital investment is based on comparing a scenario where nationalisation results in a fall in investment due to competing budgetary pressures and a situation where the Government will match existing expenditure plans. Where relevant, impacts will be assessed in the context of devolved governments' budgets.

The estimation of impacts arising from an increase in the interest rate on Government debt and from changes in the investment in the industry has mainly an illustrative purpose. Their aim is to show how, for instance, a small change in the interest paid by the UK Government to issue debt may have an impact large in scale.

For these reasons, the study does not provide a total figure concerning the overall effect of nationalisation over the different sources of impact.

5.1.3 Addressing the Study's Challenges

Following a similar approach, it was possible to mitigate some of the challenges associated with this study, including:

- areas not covered by the Labour Party's 'Clear Water' policy document: in particular, the cost of the policy and what impact nationalisation would have on the business retail market for water;
- uncertainty over the application of the Barnett formula; and
- inherent difficulty in predicting what the nationalisation of the industry may mean for the rates at which the Government can borrow and for future investment in the water network.

5.2 Sources and Measures

The analysis below relied for the most part on publicly available data, including data from the Office for National Statistics (ONS), Ofwat and previous research on the impacts from the nationalisation of the English water companies. The estimation of supply chain related impacts relied on Type1 and Type2 multipliers from the UK Input-Output (IO) Tables and on economic ratios from the Annual Business Statistics (ABS).

Apart from the implications of a change in the level of investment taking place in the industry, impacts were quantified in nominal terms. Supply chain impacts, in turn, were estimated using the following economic measures:

- Gross Value Added (GVA), a measure of the value that an organisation, company or industry adds to the economy through its operations; and
- Employment, expressed in terms of the number of jobs supported by an activity or project.

6. Fiscal Impacts

This section considers the fiscal impacts on the devolved governments from the proposed nationalisation of the water companies in England.

The proposed nationalisation of the water companies in England would have a series of fiscal impacts, including:

- change in the stock of UK Sovereign Debt;
- Barnett formula impacts and associated opportunity costs;
- effects from a change in the interest rate on UK Government Debt;
- effects from a change in the rates at which devolved governments can borrow; and
- capital investment in the water industry, its opportunity cost and Barnett implications.

6.1 Impact on UK Government Debt

The nationalisation of the water industry would affect the stock of UK sovereign debt. The Government's acquisition of the English water companies will not have an impact on the deficit, as defined in terms of net borrowing, since it will constitute a financial transaction where shares are exchanged for cash²⁶. However, the process will result in an increase in the stock of UK sovereign debt. This is because the Government will have to borrow money in order to acquire shares and ownership in the water companies.

The exact magnitude of the impact is dependent on the evaluation of the industry made by Parliament. In addition, the amount of debt that will have to be issued will depend on whether the nationalisation of the industry will require the payment of Barnett consequentials (see section 6.2) to the devolved governments.

Existing studies have provided a range of estimates of the likely value at which the nationalisation of the industry would take place, as listed in Table 6.1.

²⁶ House of Commons Library (2018), 'Public ownership of industries and services', p.16.

Table 6.1 Existing Evaluations of the English Water Companies

Study	Evaluation (billion)	Method
Macquarie	£100	
Social Market Foundation	£90	Enterprise Value + 30% premium
Centre for Policy Studies	£86	RCV + 25% premium
University of Greenwich	£14-37	
Moody's	£14.5	Disputed figure, it reflects the accounting book value of water companies

Source: BiGGAR Economics Analysis

The starting point in estimating the takeover value of the industry was to consider the Regulatory Capital Value (RCV) of the water companies in England. This measure includes the value of assets and debt at privatisation and of any investment in capital since then²⁷ and is considered by the regulator when establishing limits to the pricing of water services for each company²⁸.

Table 6.2 presents 2019 data from Ofwat on the RCV of the water companies operating in England. Data are expressed in 2019 money and exclude the RCV of Dŵr Cymru, which would not undergo nationalisation. In this way, it was estimated that the total RCV of the industry would be over £69 billion.

²⁷ Ofwat (2015), 'Regulatory capital values 2010-15', available at: <https://www.ofwat.gov.uk/publications/rd-0410-regulatory-capital-values-2010-15/>

²⁸ Ofwat (2019), 'Regulatory capital value updates', available at: <https://www.ofwat.gov.uk/publications/regulatory-capital-value-updates/>

Table 6.2 Regulatory Capital Value Water Industry, Excluding Welsh Water

Company Name	RCV (£ million)
Anglian Water	7,981
Northumbrian Water	4,272
Severn Trent Water	9,166
South West Water	3,505
Southern Water	5,035
Thames Water Utilities	14,274
United Utilities	11,404
Wessex Water Services	3,233
Yorkshire Water Services	6,687
Affinity Water Services	1,226
Bristol Water	530
Dee Valley Water	101
Portsmouth Water Limited	150
Sutton & East Surrey Water	260
South East Water	1,365
South Staffordshire Water	380
Industry Total	69,567

Source: Ofwat (2019), Regulatory Capital Values.*Values may not add up due to rounding

In order to estimate the likely takeover value of the industry, it was further assumed that a takeover premium of 30%²⁹. In this way, it was estimated that the cost of nationalising the water industry in England could be up to almost £90 billion, or 5% of existing debt³⁰. This would be the upfront cost of the policy and is similar in magnitude to what was estimated by the Social Market Foundation and the Centre for Policy Studies.

The debt that the UK Government would accumulate to carry out the nationalisation will also have annual impacts in terms of the interest payments that will be due to lenders.

²⁹ This assumption was also made in the Social Market Foundation's study.

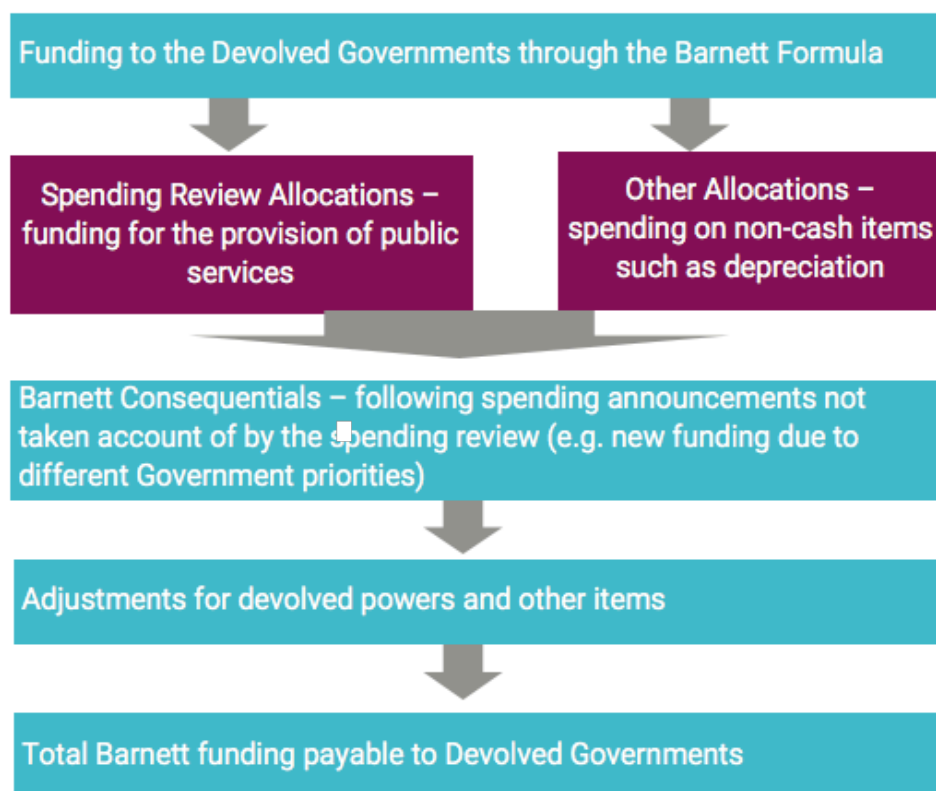
³⁰ The cost in terms of existing debt was estimated from the government debt for the financial year (FY) 2018/19, which stood at £1,821.3 billion or 85.2% of GDP according to: ONS (2019), 'UK government debt and deficit: March 2019', available at:

<https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/bulletins/ukgovernmentdebtanddeficitforeurostatmaast/march2019>

6.2 Barnett Formula Effects

UK Government spending in England on projects or policies that are devolved in the rest of the UK is generally subject to the Barnett formula, which determines compensatory allocations to the devolved governments. The block grant that is given to the devolved governments also depends on the application of the Barnett formula to UK Government departmental spending reviews. In this way, overall increases or decreases in departmental budgets are transferred to the block grant. The aspects of devolved governments' funding that are affected by the Barnett formula are summarised in Figure 6-1.

Figure 6-1 Barnett-Related Funding to Devolved Governments



Source: adapted from National Audit Office (2019), 'Investigation into devolved funding'.

The Barnett formula allocated funding to the devolved governments on the basis of their relative population shares and of the extent to which a given policy area is devolved, as shown in the figure below. The devolved governments can then spend the revenue received according to their own priorities. Past experience over the application of the Barnett leaves uncertainty as to what may happen to the devolved budgets in the case of the nationalisation of the English water companies.

Figure 6-2 How the Barnett Formula Works



Source: National Audit Office (2019)

This is illustrated by what happened in relation to the 2012 London Olympics and CrossRail.



2012 London Olympics

Initially considered UK-level, after an appeal Olympics spending was subjected to Barnett formula

The UK Government spent money on the organisation of the 2012 London Olympics since 2007³¹. This expenditure was initially considered as a UK-wide type of spending, which led to a successful appeal by the devolved governments. All the funding from 2010 was then treated as English spending and, as such, fell under the Barnett formula. Scotland received £16 million, Wales £8.9 million and Northern Ireland £5.4 million. Considering the total cost of hosting the Olympics – 8.77 billion³² – the benefits to the devolved governments would have been sizable, had the formula been applied from the outset.

Allocation of Barnett funding for the London Olympics exemplifies the difficulty that may arise in establishing whether the Barnett formula should be applied

³¹ House of Commons Library (2018), 'The Barnett Formula', p.9.

³² BBC (2013), 'London 2012: Olympics and Paralympics £528m under budget', available at: <https://www.bbc.co.uk/sport/olympics/20041426>



Crossrail

Crossrail was subjected to Barnett consequentials and resulted in £500 million funding to Scotland

Infrastructure spending and spending on transport are generally seen as contentious areas for the application of the Barnett formula. This is because a given project, while taking place in England, may have UK-wide strategic importance.

CrossRail³³, the railway line linking Reading to the East of London, was considered as being part of a local transport programme, made necessary by increasing passenger demand. The total project cost was £14.8 billion (of which £5 billion came from the Department for Transport³⁴) and the Barnett formula was applied given that local transport is within devolved governments' competences. This resulted in £500 million to Scotland and additional funding to Wales and Northern Ireland.

The application of the Barnett formula is deemed to come up whenever a large infrastructure project affecting England is concerned, as exemplified by recent debates surrounding the plans for High Speed 2 (HS2) and the uncertainty over the application of the Barnett formula to Wales³⁵.

In estimating the impact on the cost of nationalisation from application of the Barnett formula, a 100% comparability factor was assumed for each of the devolved nations and their shares of UK population were applied to the policy's expected cost.

Table 6.3 Barnett Formula Assumptions

Company Name	Comparability Factor*	% of UK population**
Scotland	100%	8%
Wales	100%	5%
Northern Ireland	100%	3%

Source: *BiGGAR Economics, **ONS (2018), Overview of the UK population: November 2018

³³ National Audit Office (2019), 'Investigation into devolved funding', p.23

³⁴ WhatDoTheyKnow (2015), 'Barnett Consequentials CrossRail London £5 billion public funds', available: https://www.whatdotheyknow.com/request/barnett_consequentials_crossrail

³⁵ Parliament (2019), 'Funding for Scotland, Wales and Northern Ireland', available at: https://publications.parliament.uk/pa/cm201719/cmselect/cmpubacc/1751/175107.htm#_idTextAnchor_015

If the Barnett formula was applied to the nationalisation of the industry the policy would cost around £105 billion, or 6% of existing UK Government debt.

The total revenue for the devolved governments could be around £14 billion and would be split as follows:

- £7.4 billion for Scotland;
- £4.2 billion for Wales; and
- £2.6 billion for Northern Ireland.

Given the proportionality of the Barnett formula, the revenue accruing to the devolved governments would be maximised if the UK Government were to acquire the industry at its 'fair' value.

If the spending on the nationalisation of the industry was not Barnettable, this would lead to an opportunity cost to the devolved governments, as opposed to a scenario where the same level of spending by the UK Government was undertaken on projects on which the Barnett formula would apply. The opportunity cost would correspond to:

- the combined Scottish Government proposed budget for Finance, Economy and Fair Work, Environment, Climate Change and Land Reform, and Culture, Tourism and External Affairs³⁶;
- twice as much as the Welsh Government's capital spending budget³⁷;
- almost the equivalent of non-ringed fenced spending in Northern Ireland on Education and Infrastructure³⁸.

6.3 Changes in UK Government Borrowing Costs

Nationalisation of the water industry in England and the resulting increase in the stock of UK Sovereign Debt could lead to an increase in the interest rate that the UK has to pay in order to borrow on financial markets. A higher interest rate may be the result of:

- the need to finance a larger nominal debt and to attract more funding; and/or

³⁶ Scottish Government (2019), 'Scottish Budget: 2019-20', Table 1.05 Total Proposed Budget 2019-20, p.10, available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/corporate-report/2018/12/scottish-budget-2019-20/documents/scottish-budget-2019-20/scottish-budget-2019-20/govscot%3Adocument/scottish-budget-2019-20.pdf>

³⁷ Welsh Government (2019), 'Final budget main expenditure group', available for download at: <https://gov.wales/final-budget-2019-2020>

³⁸ Department of Finance (2019), 'Northern Ireland budget 2019-20 – explanatory notes and tables', Table 1: 2019-20 Departmental Resource and Capital Expenditure Limit (DEL) Totals, available at: https://www.finance-ni.gov.uk/sites/default/files/publications/dfp/CED%20-%202019-20%20Budget%20-%20Tables%20for%20Publicationv3_0.pdf

- a change in the attitude of financial markets to the UK's ability to honour its borrowing commitments.

For illustrative purposes, if the effective average interest rate on UK Government debt was to increase from 2.03%³⁹ to 2.13% and the UK Government was to issue £10 billion of new debt, the net annual loss from the higher interest rate would amount to around £10 million.

The impact from changes in the interest rate of UK Government debt depends on how long the period of instability and the higher rates remain in place and how much debt comes to maturity and new debt is issued. The increase in the cost of public borrowing may offset the difference in the affordability of borrowing for public bodies as opposed to private entities, an argument put forward by proponents of nationalisation⁴⁰.

6.4 Impact on Devolved Capital Borrowing

Some of the devolved nations have borrowing powers for capital spending. The Scottish Government can borrow up to £3 billion over a five-year period⁴¹. Following the Welsh Act 2014, the Welsh Government has similar powers and can borrow towards capital projects for up to £150 million a year⁴².

Borrowing for capital expenditure takes place through a Treasury financial vehicle (the National Loans Fund) and in 2017/18 the Scottish Government was charged a 1.90% fixed interest on a 25 years loan⁴³. If the interest rate that the UK had to pay to issue new debt increased, as considered in the previous section, this could have knock-on implications for the rates faced by the devolved governments when borrowing via the Treasury.

For illustrative purposes, the same 0.10 percentage points increase in the interest rate considered above is assumed. In this way, it was estimated that the Scottish Government in order to borrow £450 million would have to pay an additional £450,000 in annual interest payments. The annual interest payments for a £150 million loan to the Welsh Government would increase by £150,000.

³⁹ The effective interest rate was estimated on the basis of the stock of debt and interest payments made in 2018/19.

⁴⁰ Centre for Policy Studies (2018), 'The cost of nationalisation'.

⁴¹ HM Government (2016), 'The agreement between the Welsh Government and the United Kingdom Government on the Welsh Government's fiscal framework' available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/578836/Wales_Fiscal_Framework_Agreement_Dec_2016_2.pdf

⁴² HM Government (2016), 'The agreement between the Welsh Government and the United Kingdom Government on the Welsh Government's fiscal framework'.

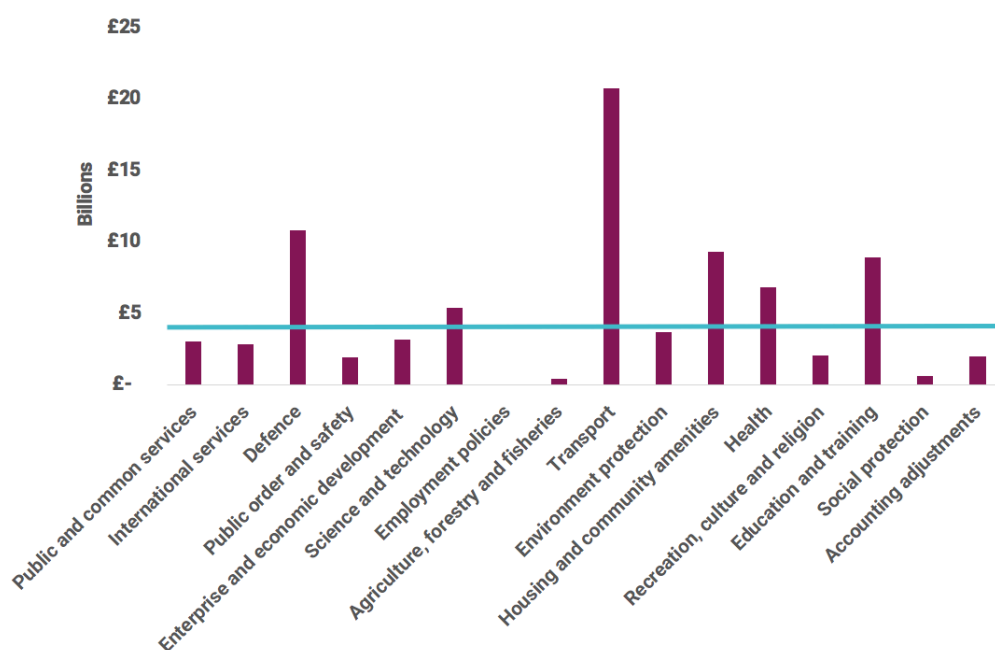
⁴³ Scottish Government (2018), Fiscal Framework: outturn report, available at: <https://www.gov.scot/publications/fiscal-framework-outturn-report/pages/6/>

6.5 Opportunity Costs of Annual Investment

When considering the fiscal implications of the nationalisation of the English water companies, it is helpful to put the level of spending required into perspective. A similar analysis relies on the economic idea of 'opportunity cost', that is, what is foregone by investing resources in something compared to the available alternatives. Once in public hands, investment in the water infrastructure network will depend on the Government.

Since privatisation, the industry has invested in capital around £140 billion. The SMF estimated that in the next 25 years the industry will have to invest around £100 billion⁴⁴. This would be equivalent to annual capital investment of around £4 billion, consistent with investment in the industry in the last few years. As shown in Figure 6-3, a similar level of capital expenditure would be around 59% of the capital spending in health by the UK Government in 2018/19.

Figure 6-3 Average Expected Expenditure over the next 5 years vs UK Capital Spend



Source: Scottish Government (2019), 'Government Expenditure and Revenue Scotland 2018-19', figures rely on HMT Public Expenditure Analyses (PESA)

The spending on the water network could end up competing with expenditure for other capital projects ranging from the construction of schools, through to infrastructure maintenance to spending in hospitals. This would be so, even if part of the investment could be financed out of the network's operations.

⁴⁴ Social Market Foundation (2018), 'The cost of nationalising the water industry', p.4.

The annual capital expenditure that would take place in the English water companies would be roughly the size of the capital funding to transport and housing in Scotland.

6.5.1 Barnett Formula and Investment

If annual capital investment in the water industry were to come from new funding, there would be scope for the Barnett formula to apply. If all the investment came from new funding, the cost of investment over the twenty five-year period would be £115.8 billion, instead of £100 billion. For every £1.00 of investment in the water companies, around £1.16 would be needed due to Barnett consequential.

The annual impact on the devolved governments from application of the Barnett formula could be of up to:

- £327 million in Scotland;
- £188 million in Wales; and
- £115 million in Northern Ireland.

This assumes that all capital expenditure would result from new funding. Lower cost estimates would be expected if part of the spending was financed through revenue. However, even assuming that 50% of this investment would be paid from the companies' operations (e.g. from user charges), the benefits to devolved governments from Barnett consequential would remain sizable:

- £164 million for Scotland;
- £94 million for Wales; and
- £58 million for Northern Ireland.

7. Impact on Savers

This section considers how shareholders may be affected by the nationalisation of the English water companies.

It is expected that the proposed nationalisation of the water companies in England will affect shareholders (i.e. savers including pension funds):

- by affecting their capital holdings;
- by affecting the future return of their savings; and
- through eventual changes in the value of Gilts.

7.1 Impact on Capital Holdings

This section considers the capital loss arising to shareholders if they were compensated below the market value of their assets. The change in the capital position of shareholders will be contingent upon the value at which the water companies were acquired by the UK Government.

Figure 7-1 Impact on the Water Companies' Shareholders



Source: BiGGAR Economics Analysis

Given its profitability, the water industry has attracted investors and pension funds, both from the public and the private sector. Across the UK, it is estimated that four million public sector workers have savings invested in the English water companies through public sector pension funds⁴⁵. The table below lists the public sector pension funds from the devolved nations that have shares in the water companies. In this way, it was estimated that around 500,000 public sector employees may see their savings affected in the case of nationalisation of the industry at a lower value than the industry's market value.

⁴⁵ Water UK (2019), 'Dramatic fall in support for water nationalisation after revelations on pension cuts', available at: <https://www.water.org.uk/news-item/dramatic-fall-in-support-for-water-nationalisation-after-revelations-on-pension-cuts/>

Table 7.1 Public Sector Pension Funds in the Devolved Governments with Investments in the English Water Companies

Name of the Scheme	Members
Falkirk Council Pension Fund	30,258
Lothian Pension Fund & Lothian Buses Pension Fund	78,856
Northern Ireland Local Government Officers Superannuation Committee (NILGOSC)	114,026
Strathclyde Pension Fund	233,312
Flintshire County Council Pension Plan (Clwyd Pension Fund)	44,961
Total	501,413

Source: WaterUK (2019)

In addition, savers from the devolved nations working for UK-wide employers including Tesco, the BBC, BT and Marks & Spencer are expected to be affected by the policy, since these companies' pension funds have shares in the English water companies.

As argued above, the value of the industry is likely to approximate the RCV plus a 'takeover' premium, or around £90 billion. While it will be up to Parliament to decide the value at which the industry would be purchased, the Shadow Chancellor has suggested that the cost could be around £15 billion. If that was the case, there would be a shortfall of £75 billion between the value at which the industry would be purchased and what would be considered as a 'fair' takeover value. This is the net capital impact on those who own the companies irrespective of their nationality. Since not all companies have UK owners and only a share of shareholders in the UK-owned companies are savers and pension funds, the impact on UK-shareholders is expected to be lower than these estimates suggest.

Nonetheless, the impact for UK shareholders is likely to be sizable and may have broader implications. For instance, for those pension funds that are invested in water companies, that are in deficit (e.g. the universities superannuation fund), a takeover at below market value would, all things being equal, result in higher deficit repair payments required from sponsors (such as Scottish universities and local authorities).

Even assuming that the industry was bought at its RCV, there would be a capital loss of around £21 billion. Assuming, as done in the research by NERA Economic Consulting, 20% UK household equity ownership, the shortfall would result in around £150 loss for the average UK household⁴⁶.

⁴⁶ ONS (2019), 'Families and Households 2018' estimated that there are 27.5 million households in the UK.

7.2 Opportunity Cost of Owning Shares Vs Bonds

Alongside a change in their capital position, which would take place as a result of the industry's nationalisation, shareholders may be negatively affected in the longer term. This would depend on the relative return of the shares that were held, in comparison to the returns offered by the bonds received in compensation.

Bonds are a form of credit where the bondholder borrows money to the Government or to a company and in exchange receives interests (coupons) and at maturity receives back the amount borrowed. Shares are claims to the ownership of a company, as such their returns depend on the company's performance. Given their higher volatility, shares are a riskier form of investment and present higher returns.

For this reason, if one of the water companies' existing shareholders kept the bonds with which he would be compensated, the difference between the returns on the shares and the bonds may lead to a capital loss, as opposed to a counterfactual where the companies were not nationalised.

The average return on shares for the three listed water companies – Severn Trent, United Utilities and Pannon⁴⁷ – was estimated and compared to the yield on 10-year gilts. The difference in the return between them was 7.25%.

Table 7.2 One-year Return of Listed Water Companies and Gilts

Company	Return
Severn Trent	6.70%
Pannon Group	2.78%
United Utilities	12.27%
10-year Gilt	0.46%

Source: Bloomberg 1-year return data (10/09/2019)

As an illustration of this impact, if an investor had £10,000 in water companies shares, he could face an opportunity cost of £679 in lost returns over a year.

7.3 Loss in Gilts Value

As highlighted above, a possible implication of a large-scale nationalisation programme under which the English water companies were bought at a lower value than their market value would be a loss of confidence in the financial markets in the UK Government's credibility as a borrower. This could lead to a fall in the value of UK

⁴⁷ Return over the last year were obtained through Bloomberg.

gilts. The capital value of the Government debt held by UK households would in such a way be affected.

In the context of a larger nationalisation programme, including energy and the Royal Mail, this impact was estimated as potentially costing the average UK household around £200⁴⁸. Assuming that nationalisation of the water industry would have an impact proportional to its size, the indirect loss to UK households was estimated to approach £100 per household.

⁴⁸ See NERA (2018), 'The impact of nationalisation of utilities on UK households' savings and pensions'.

8. Impact on Businesses

This section considers the impact of nationalisation on those businesses within the supply chain of the water industry and the effects on the market for retail water.

8.1 Capital Investment and the the Supply-Chain

Through its investment in infrastructure and capital, the English water companies contribute to the operations of those businesses across the UK that are part of their supply chain. In this way, they generate economic output and support employment across the UK.

As considered above, it is expected that the water companies will invest around £4 billion per year in capital over the next 25 years. The competing nature of capital commitments may result in a situation where the Government would not be able to match this investment. Indeed, it is generally acknowledged that prior to privatisation there was underinvestment in the water network⁴⁹. This section considers what an illustrative 10% fall in investment may mean for the supply chain of the water industry.

In order to estimate the impact of capital investment on the industry's supply chain, the expected investment was divided by the turnover/GVA and turnover/job multipliers for the 'Water collection, treatment and supply' sector. In addition to this direct impact, the indirect and induced effects of spending on infrastructure were estimated. The former captures the spending that suppliers of the water companies make on their own supply chains, whereas the latter considers the effect generated by the employees of suppliers spending their salaries and wages. The two impacts were estimated applying Type1 and Type2 multipliers.

The difference between a scenario with 10% less investment and the counterfactual provides an estimate for the net economic impact of lower investment than the one pledged by the industry. It was estimated that the shortfall from spending 90% of what is planned may amount to £447 million GVA and 4,600 job-years across the UK.

⁴⁹ Centre for Policy Studies (2018), 'The cost of nationalisation', p.10.

Table 8.1 Net Economic Impact from a 10% Fall in Capital Investment

	UK
GVA (£ million)	-447
Employment	-4,600

Source: BiGGAR Economics Analysis

There would be some likely impacts on suppliers from the devolved nations. These have not been quantified, since the information available suggest that the supply-chain of the water companies is predominantly local and, as such, some impact may arise only from the supply-chains of those companies operating close to the borders between England and the devolved nations.

8.2 The Retail Market for Water

As described in section 4.5, in addition to the market for water services to households, there exists another market that serves business customers. This section sets out possible unintended consequences from the nationalisation of the English water companies on this part of the water market. Given the uncertainty over what the nationalisation proposal would entail for this part of the market, the following scenarios are considered:

- the market structure of water provision to businesses goes unaffected, but there is a consolidation of the industry; and
- the whole water market in England is nationalised.

These developments would also affect water companies in the rest of the UK, as well as retail water markets across the UK.

8.2.1 Impact from a Less Efficient Retail Business Market

Given that some of the companies that provide water services to households also operate in the provision of water services to businesses, it may be that once forced out of the households' market, they may exit from the business side of the market altogether. Some of these companies operate in the business market in Scotland, as a result, there may be a reduction in this market's competitiveness, which may ultimately harm business customers in Scotland.

8.2.2 Impact from Nationalisation of the Retail Market

The business retail market for water in England has a series of providers that come from outside of England, as highlighted above. If the non-household market for water was also nationalised, these businesses would lose their share of the English market. This would result in a loss in the turnover of these non-English businesses, which would have additional knock-on effects for their supply chains.

9.

Appendix

This section provides a review of previous research on the nationalisation of the English Water Companies.

9.1 Social Market Foundation

In 2018 the Social Market Foundation⁵⁰ undertook an assessment of the likely economic impacts from the nationalisation of the water industry.

The main findings of the study include that:

- the takeover value of the industry would be around £90 billion;
- the UK Government would have to invest around £100 billion in 2016/17 prices over the next 25 years in order to match the investment committed by the industry;
- a takeover at less than market price would have implications for the shareholders of these companies, many of whom are UK pension funds; and
- changes to the ownership structure of the industry and its management may mean that a sector that is profitable at present may become less profitable or not profitable at all in the future.

9.2 NERA Economic Consulting

In 2018 NERA Economic Consulting carried out a study considering the impact that the nationalisation of utilities would have on households' savings and pensions⁵¹. The study found that the nationalisation of the water companies, energy networks and the Royal Mail could cost up to £182 billion. In addition to quantifying the potential loss to savers if the industry was purchased at less than its market value, the study considered the impact on UK shareholders from a fall in the value of Government bonds, as a result of an increase in debt and a fall in the UK's debt rating.

The study found that the nationalisation of utilities, if bought at their RCV instead of their 'fair price', could result in:

- a direct loss of £310 per household; and
- an indirect loss of £200 coming from a decrease in the value of UK Government bonds.

⁵⁰ Social Market Foundation (2018), 'The cost of nationalising the water industry in England'.

⁵¹ NERA (2018), 'The impact of nationalisation of utilities on UK households' savings and pensions'.

9.3 Centre for Policy Studies

In 2018 the Centre for Policy Studies (CPS)⁵² conducted a similar study on the Labour Party proposed nationalisation programme. While broader in its scope, the study reached the following conclusions:

- the cost of nationalising the water industry would be around £86.25 billion, based on a 25% premium over the RCV of the industry;
- underpayment of shares may result in an increase in interest payments on UK Sovereign Debt; and
- it is doubtful whether a change in the ownership structure of the industry will lead to benefits to consumers.

⁵²Centre for Policy Studies (2018), 'The Cost of Nationalisation'.

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