
Raising the minimum wage: economic and fiscal impacts

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Executive summary

The Government of Jersey is reviewing the impact of raising the minimum wage to £7.88 per hour, based on 45% of mean weekly earnings, or to £8.40 per hour, based on 60% of median earnings. Oxera has been asked to estimate the potential consequent economic and fiscal impacts.

Raising the minimum wage would have the direct impact of increasing wages for a significant number of low-paid employees, which could in turn reduce poverty, improve welfare, and increase spending in the economy. At the same time, raising the minimum wage could impose higher costs on businesses, which could ultimately lead to negative impacts on employment, and higher inflation, as businesses pass these costs on in the form of higher prices.

Using official statistics, surveys, and detailed income data from Jersey, we have estimated the likely impacts on the Jersey economy. Overall, within the framework we have used, we have assumed an **increase in incomes for nearly one-quarter of employees at the bottom of the income distribution**. The impact on government revenues would be slightly positive—there would be higher government spending, which is more than offset by higher revenues.

There would be an **increase in firms' costs**, following which we would expect a **number of job losses, reduced hours, increased prices for consumers**, and lower firm profits (i.e. a **reduction in shareholder value**). The job losses would be concentrated in the hospitality, agriculture, and retail sectors.

The combination of these direct and indirect effects would be likely to result in **lower economic activity** overall, with a level-shift reduction in gross value added (GVA).

This report sets out, and quantifies, the likely impacts of an increase in the minimum wage in Jersey. There is significant uncertainty in estimating the impact of policy changes. We have sought to show the likely outcomes from the proposed changes, although these outcomes are predicated on a series of assumptions. The assumptions we have used, together with the evidence base used to inform them, are set out clearly. The estimates presented in this report should therefore be seen as indicative of the likely magnitude and direction of the impacts.

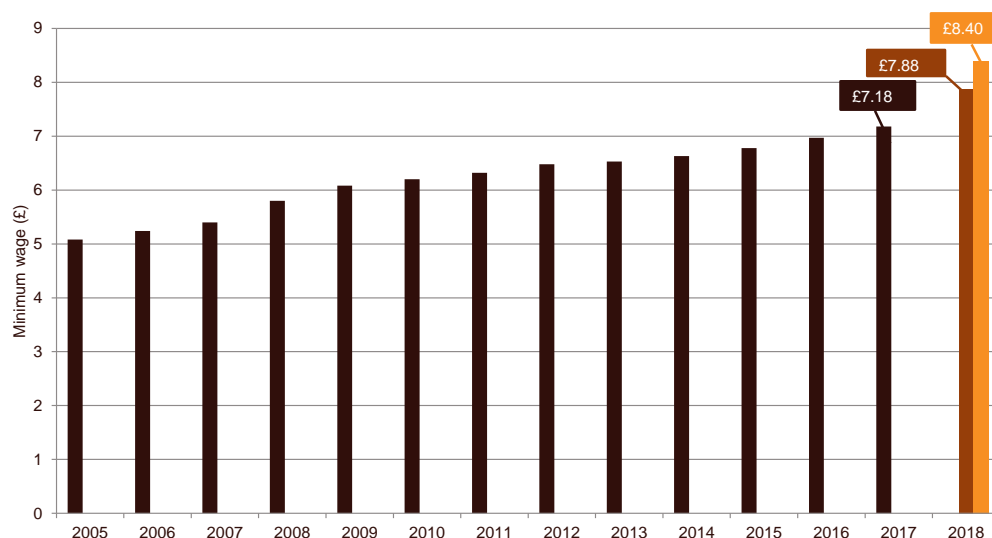
1 Introduction

1.1 Background

Jersey's employment law gives employees in Jersey the right to receive a minimum wage (or a trainee wage) for each hour worked.¹ The Government of Jersey asked Oxera to consider the economic impact of a higher minimum wage on employment, firms, and the wider economy, as well as the fiscal impact on government finances.

As of April 2017, the minimum wage in Jersey is £7.18 per hour. Oxera has been asked to consider the impact of increasing this to £7.88 per hour, based on 45% of mean weekly earnings, or to £8.40 per hour, based on 60% of median earnings. This represents a 10% and a 17% increase in minimum wage respectively, from the current level, as compared to the 3% increase between 2016 and 2017—a significantly larger change. For modelling purposes, we assume that both rates would take effect from April 2018. Figure 1.1 shows historical changes in Jersey's minimum wage since 2005, alongside the two higher rates considered in this analysis.

Figure 1.1 Minimum wage (£ per hour)



Note: The minimum wage shown from 2005 to 2017 is the standard minimum wage per hour. Different rates apply for trainees. The rates presented for 2018 show the two higher rates considered in this analysis.

Source: Government of Jersey, <https://www.gov.je/Working/EmploymentRelations/Pages/MinimumWage.aspx>, accessed March 2017.

This report sets out the likely impacts of an increase in the minimum wage in Jersey, and seeks to explain the consequent direct and indirect effects. There is significant uncertainty in estimating the impact of policy changes. We have sought to show the likely outcomes from the proposed changes, although these outcomes are predicated on a series of assumptions. The assumptions we have used, and the likely impacts based on them, are set out clearly (together with the evidence base used to inform them). The estimates presented in this report should therefore be seen as indicative of the likely magnitude and direction of the impacts.

¹ Employment (Jersey) Law (2003), Part 4, 'Minimum Wage', <https://www.jerseylaw.je/laws/revised/Pages/05.255.aspx>, accessed May 2017.

1.2 Impacts

Increasing the minimum wage by 10% to £7.88 (or 17% to £8.40, for the higher proposed rate) reflects a significant change to the labour market, with economic and fiscal impacts:

- economic impacts—the direct effects on employees and employers, as well as the broader macroeconomic effects on economy-wide prices, consumer spending and productivity in the economy;
- fiscal impacts—the impact on taxation revenues and government spending as a result of the change in the minimum wage.

This report seeks to estimate the general magnitude and direction of these impacts, in a ‘steady state’—i.e. after an adjustment period to allow the impacts to take their full effect. In reality, it may take a number of years for all of the mechanisms to take their full effect, but this analysis assumes that these impacts all occur immediately (in 2018), and are shown in 2017 prices.

The impacts are explored in more detail in sections 3 and 4. In section 5, we look at what alternative net migration policy scenarios might imply for the impacts, and discuss the effect of a shift in activity across sectors.

1.3 Broader uncertainties

Estimating the size of these impacts requires certain assumptions about how employees, firms, and consumers might behave, as well as about the wider policy environment. Our assumptions are detailed in section 3.1.

2 Background

To understand the impact of the proposed minimum wage increases, we need to consider the specific features of Jersey's economy. Important structural features include the following.

- High gross value added (GVA, the sum of employment income and profit) per person: the average GVA in Jersey per person is £40,000 in 2015, compared with £25,200 in the UK.² This is driven partly by the dominance of high-value sectors, and partly by low levels of unemployment and high levels of economic activity.
- Relatively low unemployment: the unemployment rate in Jersey was approximately 4% from April 2014 to May 2015 compared with 5.3% in the UK and 9.4% in the EU in 2015.³
- Employment in Jersey is concentrated in a small number of sectors: Jersey is heavily focused on export industries—in particular, financial services, which involves competition with firms on an international scale, and which may limit the extent to which any additional costs can be passed on.
- Given Jersey's remote location, employment in service sectors satisfies predominantly local demand, and such businesses may find it easier to pass on additional costs than businesses serving the export market.
- Seasonal variations in labour, with employment increasing in the summer and decreasing during the winter months.⁴
- The population in Jersey is increasing, having risen by 13% to 102,700 between 1995 and 2015.⁵
- Labour constraints in Jersey are different from those elsewhere due to housing and to migration controls, which are compounded by Jersey's remoteness and physical size.

Using GVA allows economic activity to be measured at the sector level. Figure 2.1 shows the reliance of Jersey's economy on the financial services sector, which contributes 42% of GVA.

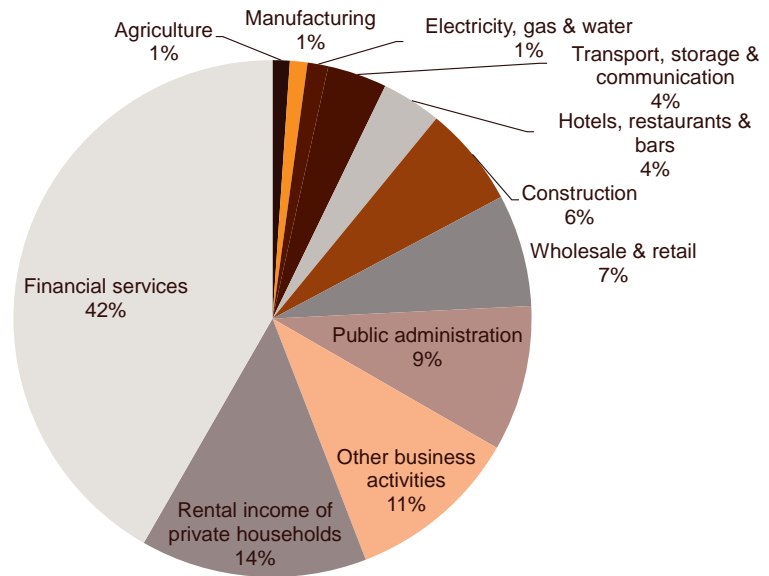
² States of Jersey (2016), 'Measuring Jersey's Economy: GVA and GDP – 2015', <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20GVA%20and%20GDP%202015%2020160927%20SU.pdf>, accessed May 2017.

³ See <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Oct%202016%20Registered%20ASW%2020161108%20SU.pdf>, accessed March 2017. OECD (2017), Unemployment rate (indicator), doi: 10.1787/997c8750-en, accessed May 2017.

⁴ <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

⁵ States of Jersey (2016), 'Jersey Resident Population 2015 Estimate', June, <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Population%20Estimate%202015%2020160621%20SU.pdf>, accessed May 2017.

Figure 2.1 GVA by sector according to current income, 2015



Note: GVA statistics have not yet been published for 2016.

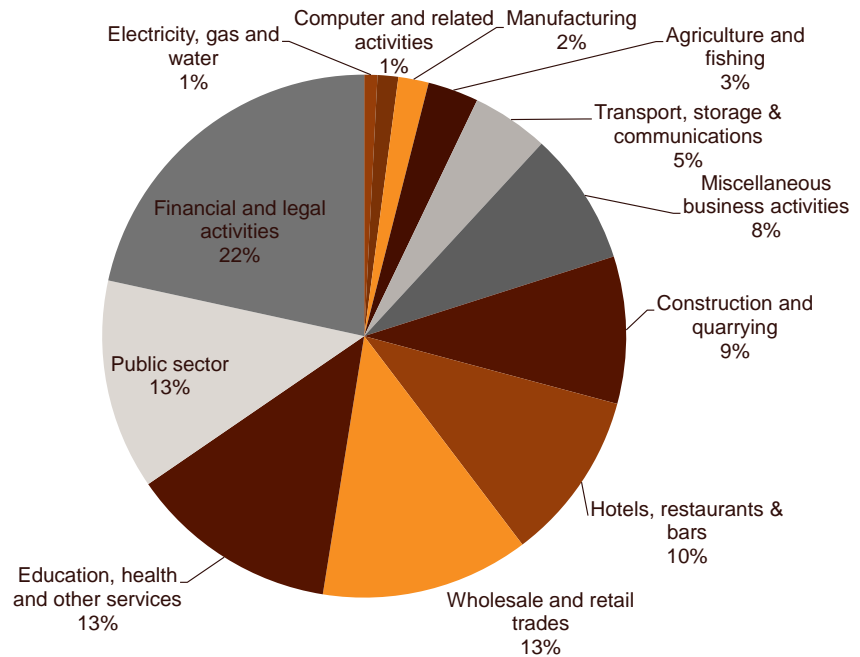
Source: Government of Jersey,

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20GVA%20and%20GDP%202015%2020160927%20SU.pdf>, accessed March 2017.

While GVA in Jersey is dominated by the financial services sector, employment shows a more balanced picture across sectors. Financial and legal services employ 22% of all employees, followed by education, health and other services, wholesale and retail trades and the public sector, which each account for 13% of total employment.⁶ Figure 2.2 shows the employment composition of the Jersey economy.

⁶ Government of Jersey (2016), 'Labour market report June 2016', <https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=2358>, accessed May 2017.

Figure 2.2 Employment by sector, 2016



Source: Government of Jersey,

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

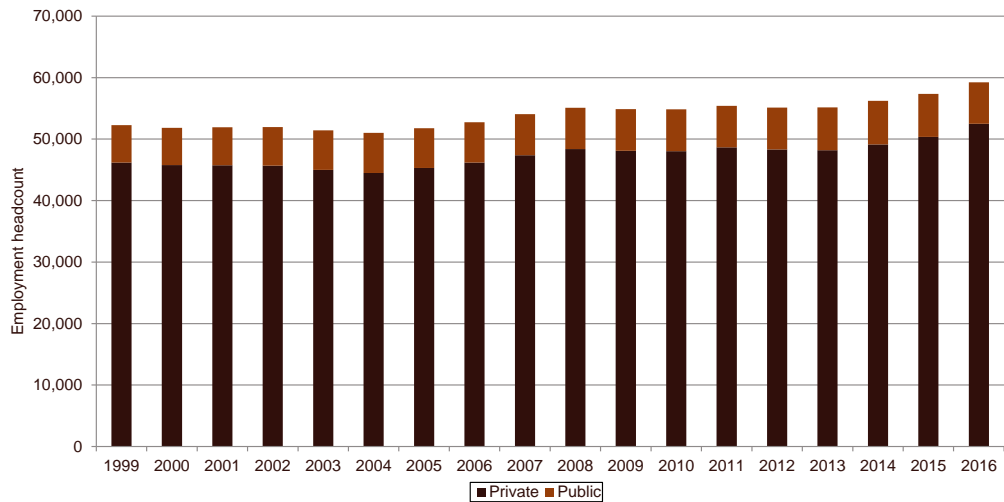
As of June 2016, total employment in Jersey stood at 60,320,⁷ of which 87% were employed in the private sector. In June 2016, almost three-quarters (72%) of all jobs were full-time and one-sixth (16%) part-time.⁸ The unemployment rate in Jersey was approximately 4% from April 2014 to May 2015, compared with 5.3% in the UK and 9.4% in the EU in 2015.⁹

⁷ Measured as the total number of jobs filled; this is not a count of unique individual employees.

⁸ Government of Jersey (2016), 'Labour market report June 2016', <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

⁹ See <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Oct%202016%20Registered%20ASW%2020161108%20SU.pdf>, accessed May 2017. OECD (2017), Unemployment rate (indicator), doi: 10.1787/997c8750-en, accessed May 2017.

Figure 2.3 Employment levels, June 1999–June 2016



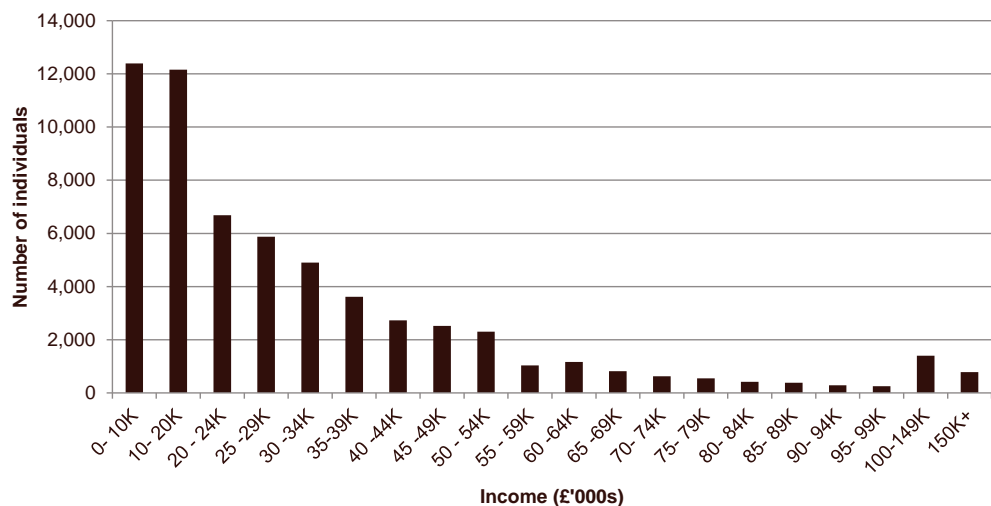
Note: Public sector headcount numbers are core States of Jersey staff. Annual figures represent the average headcount (measured as the number of jobs filled) between June and December.

Source: Government of Jersey,

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

The distribution of income from employment, shown in Figure 2.4, shows that around two-fifths of employees in 2016 have income less than £20,000 per annum, and three-quarters have employment income below £40,000 per annum. As this distribution is made up of income tax returns, it could be skewed to the left. This is because it will include many workers who will not earn income for the full 12 months, for a number of reasons (e.g. new employees, retiring employees). Lower-income employees are likely to be made up of those with low hourly wages and part-time employees: in June 2016, 15% of private sector jobs and 16% of all jobs (including private sector jobs) were part-time.¹⁰

Figure 2.4 Distribution of employment income, 2016



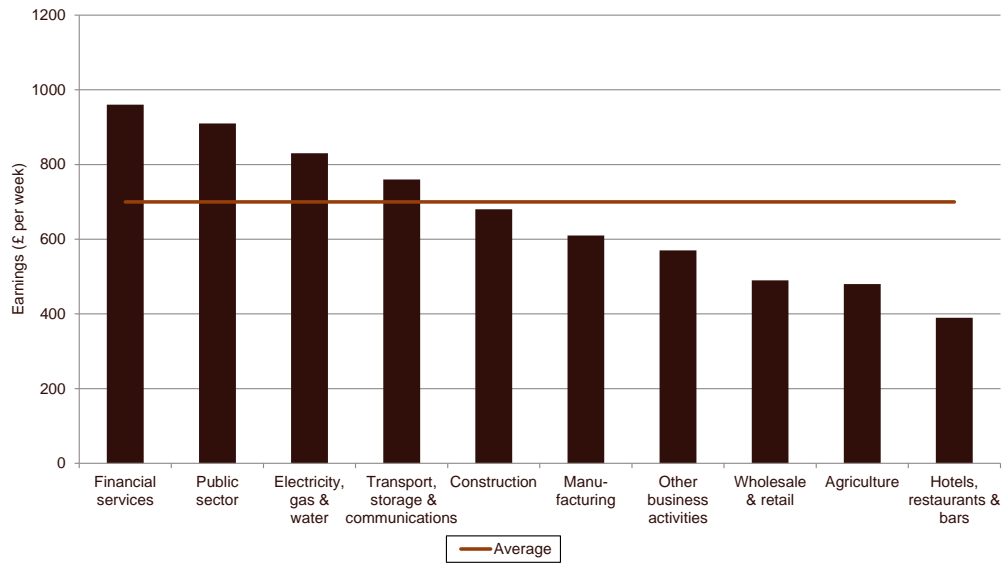
Note: The chart shows raw data on incomes. Throughout the calculations, we adjust for part-time workers by making a sector-specific assumption about hourly wages based on annual incomes. Source: ITAX individual income data received from the Government of Jersey.

¹⁰

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

Figure 2.5 shows mean weekly earnings by sector, with an overall weighted average of £700 per week based on full-time equivalent employment (FTE). The financial services sector has the highest average weekly earnings (£960), while those working in hotels, restaurants and bars have the lowest average weekly earnings (£390), followed by those working in agriculture, and wholesale and retail. The greatest effect of any change to the minimum wage is likely to be seen at the lower end of the income distribution, and would therefore affect sectors differently.

Figure 2.5 Average weekly earnings per FTE post by sector, 2016



Note: Part-time staff are converted into FTEs based on the number of hours worked. For more information on FTEs, see footnote 9, p. 10 of <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

Source: 'Index of Average Earnings June 2016', <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Average%20Earnings%202016%2020160825%20SU.pdf>, accessed May 2017.

3 Economic impacts

A change in the minimum wage is likely to have a range of economic impacts, from the direct effect on employees and employers through the implications for the number of hours worked, employment and wage levels, and on the economy more broadly through potential changes to the price level. We discuss these economic impacts below, quantifying them with available data where possible. The assumptions required to estimate the impacts are first presented (section 3.1), with the methodology for each of the economic impacts then described (in section 3.2). Section 3.3 presents the quantified findings.

3.1 Assumptions required

To assess the impact of the proposed minimum wage increase on the Jersey economy, we first need to make some assumptions about the behavioural responses of employees, firms, and consumers, as follows.

1. **The new earnings distribution**—which employees would see an increase in their wage rate?
2. **The response of firms**—how would firms respond to higher labour costs? Would they increase prices, reduce labour, accept lower profits, or reduce other costs?
3. **Changes in disposable incomes**—some employees would receive higher wages; others might see a reduction in hours worked, bonuses may be reduced or unemployment might increase. In these cases, how would disposable incomes change?
4. **Consumer spending response**—where consumers see a change in disposable incomes, how would they respond, in terms of spending and saving?
5. **Other**—for simplicity, we assume that employers would be fully compliant with the minimum wage, and that the wider policy setting would not change significantly.

The assumptions we have made in relation to these questions are set out below.

Assumption 1: the new earnings distribution

Any increase in the minimum wage would raise the wages of those between the current rate and the proposed rate, to at least that of the proposed minimum wage. Those earning more than the current minimum wage, including employees who are above the proposed minimum wage, might seek to preserve their 'wage premium' over the lowest-paid employees, and therefore negotiate higher wages. The extent of these 'spillover effects' would be likely to diminish the further away an employee's current wage is from the proposed minimum wage, such that those on the current minimum wage would be likely to see the largest monetary increase in their wages.

It is difficult to predict exactly how an increase in the minimum wage would affect the earnings distribution. We have assumed that the spillover effect of the increase in the minimum wage would extend to the 25th percentile (i.e. the lowest quarter) of the earnings distribution. This is in line with the assumption

made by the Office for Budget Responsibility (OBR),¹¹ derived from a discussion paper on the UK's minimum wage commissioned by the Low Pay Commission.¹²

Assumption 2: the response of firms

Higher minimum wages for employees result in higher wage costs for employers and firms. These higher wages would also attract additional employer social security contributions, which are borne by firms. Absent any response from firms, and any significant effect on individual productivity and demand for products, this would result in a loss of profits for firms, equal to the additional labour costs.

However, once the economy has fully adjusted to all of the impacts of the higher minimum wage, it is not realistic to assume that there would be no response from firms. In the face of increased costs, firms can respond by a combination of the following:

- reducing the number of hours worked by existing employees, or reducing overtime;
- reducing the number of people employed, by freezing recruitment or making redundancies;
- limiting pay increases or reducing bonuses, or reducing other employee benefits or pension contributions;
- cutting costs in other areas—for example, by outsourcing work;
- increasing prices in order to pass on the costs to customers;
- recruiting more trainees (rather than other employees);¹³
- reducing margins;
- reducing the use of labour and substitute with capital where possible.

Businesses that serve demand in Jersey (which cannot be easily substituted by imported inputs) would be more likely to be able to increase prices without a significant reduction in demand than those businesses serving the export market. For example, some local retailers might be able to increase the price of their goods without suffering a large reduction in demand (and therefore this action would be likely to preserve the retailer's profitability), whereas those retailers or other businesses facing competition from international firms (or from Internet sales) would be likely to be more restricted in the extent to which they could increase prices.

Results from the Business Tendency Survey, sent to 500 randomly sampled businesses in Jersey, can help us to determine what the likely 'average' response of firms would be, across Jersey.¹⁴ In March 2016, the Business Tendency Survey asked: 'If the minimum wage was increased to £7.65 in April 2017 for all staff aged 25 or over, would you take any of the following actions to manage increased wage costs?' 53% of firms responded that they would raise

¹¹ Office for Budget Responsibility (2015), 'Economic and Fiscal Outlook, July 2015'.

¹² Butcher, Manning and Dickens (2012) 'Minimum Wages and Wage Inequality: Some Theory and an Application to the UK', Discussion Paper (Low Pay Commission; University of Sussex; London School of Economics).

¹³ Employers can pay a trainee rate to those doing approved training in a new job. This rate is lower than the standard minimum wage.

¹⁴ Results from the March 2016 Business Tendency Survey, received from the Government of Jersey.

prices. This suggests that 53% of firms would pass on, in the form of higher prices, some of the increase, but potentially not all of it

The OBR in the UK assumes an elasticity of demand for labour of -0.4. This means that a 1% increase in hourly wages is assumed to result in a fall of 0.4% in total hours worked, which encompasses a reduction in both hours and headcount.¹⁵ This suggests that the two impacts together account for 40% of the total impact. The OBR also uses a pass-on rate of roughly 50% to prices, with around 10% of the cost being absorbed by firms.

We have combined the information from the Business Tendency Survey with the methodology used by the OBR to produce a range of likely responses by firms. Considering that Jersey might face high competition from imports for certain consumer goods, the pass-on for additional wage costs might be slightly lower in Jersey than in the UK, and firms may therefore absorb more of the additional costs. We have therefore made the following assumptions:

- **increasing prices in order to pass on the higher wage costs to customers**—accounting for 40–50% of the additional wage costs;
- **reducing the number of hours worked by existing employees** (leaving employees as ‘underemployed’), through reduced overtime, and reduced bonuses (which might trigger reduced effort from employees)—accounting for 20% of the additional wage costs;
- **reducing the number of people employed, either by direct redundancies or through a recruitment freeze**—accounting for 20% of the additional wage costs;
- **lower firm margins per unit**, as firms absorb some of the price increase—accounting for 10–20% of the additional wage cost. This would directly result in lower profits for firms.

In addition, the higher prices faced by consumers might lead to a fall in demand, which would lead to an overall reduction in profits for firms. This would be offset by the extent of higher profits from higher sales volumes, resulting from increased incomes for some individuals. This is estimated by looking at the change in real incomes—that is, incomes after the increase in the minimum wage, and after the effects of economy-wide inflation from increased prices. The impact of this on firms is discussed further in assumption 4.

The estimates in this report are based on this range of the likely firm response, to capture the uncertainty around this assumption.

Assumption 3: distributional impact and changes to disposable incomes

The responses of the firms noted above describes the impact on employees at an aggregate level; how this would be distributed across different sectors and income groups is also important when assessing the impact on disposable incomes.

The impacts of the increase in minimum wage are unlikely to be felt evenly across the Jersey economy. To assess the impacts, it is important to analyse the distributional impact across Jersey’s sectors, as well as the general income distribution.

¹⁵ Office for Budget Responsibility (2015), op. cit.

As explained in assumption 1 above, lower-income employees are likely to experience the greatest impact from changes to the minimum wage, in the form of a wage increase. However, as described in assumption 2, some employees might see a reduction in income, through reduced hours or through unemployment.

Those currently working at the 2017 minimum wage of £7.18, and who remain in employment, would see a 10% increase in their income under the proposed £7.88 wage, and a 17% increase with the £8.40 proposed level. It is also these employees at or near the current minimum wage who would be most likely to feel the potential negative repercussions of the minimum wage through changes in the number of hours worked, or unemployment.

As such, we assume that:

- the loss of jobs would be most likely to affect the income groups that are most affected by the increase in the minimum wage—i.e. the lowest-paid employees;
- the reduction in hours would also affect the income groups that are most affected by the increase in the minimum wage.

There would therefore be a limited impact on those at higher income levels, in terms of the first-order effects from firms.¹⁶ These assumptions are consistent with those used by the OBR for modelling the impact of the National Living Wage, and there is no evidence to suggest that the impact would take a different form for Jersey.

Assumption 4: consumer spending response

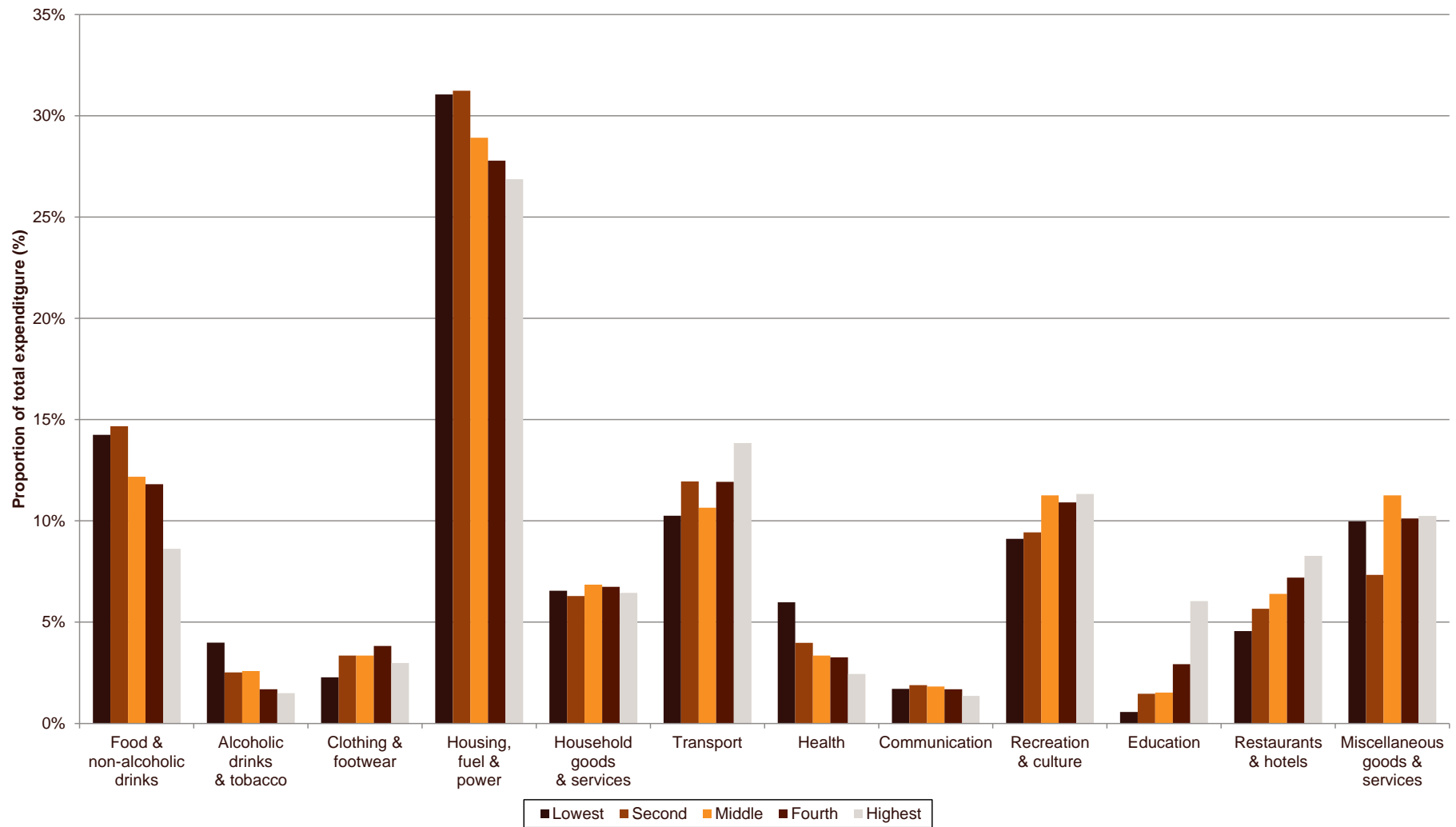
Any changes in income would also have indirect effects: consumer spending would change, which could have consequent fiscal impacts on government revenues. To assess the indirect effects of a change in incomes, we can use information from the Jersey Household Spending statistical publication. This provides details on the spending of households across the income quintiles, and allows us to estimate where additional spending would go (or where spending would fall when the households' income falls), and how much would be saved. We can apply the change in real incomes to this distribution of spending, to estimate the increase in consumer spending, and the consequent change in firms' profits.¹⁷

Figure 3.1 presents the proportion of spending on household category for each income quintile in Jersey. It shows that the spending profiles (as measured by the percentage of income spent per category) of the lowest and second quintile are similar in composition. We therefore assume that any additional (or lost) income would occur in the same proportion as the spending in these groups.

¹⁶ There would be second-order impacts on higher-income employees: both as consumers, in that they would face higher prices, and as employees, whose wages might be affected if businesses are no longer competitive and look to cut their wages, and hence reduce costs. There may be firms that are no longer competitive and exit the market, potentially enabling other firms to grow as a result; in these cases, there would also be second-order impacts on higher-income employees.

¹⁷ We assume that there is a real income elasticity of 1—i.e. for a 1% increase in income, there would be a 1% increase in consumption. At the relevant income bands, savings are likely to represent a small proportion of income, and therefore we assume that all of the additional income would be spent. This is broadly consistent with the real labour income elasticity used by the OBR for the UK.

Figure 3.1 Expenditure by income group, 2016



Source: Government of Jersey (2015), 'Jersey Household Spending 2014/15', <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Spending%20survey%20report%202015%2020160526%20SU.pdf>, accessed May 2017.

Other required assumptions

While assessing the impacts of the minimum wage, we might need to make simplifying assumptions about the policy setting. For example, where tax thresholds, levels or exemptions might, in general, rise in line with inflation, we can assume that this policy continues for relevant years. However, where more active policy might be required—for example, in terms of labour migration—we discuss the relevant uncertainties around the modelled impacts.

For simplicity, we assume that there is full compliance with the existing minimum wage, and that this would continue with the proposed minimum wage. While, in practice, non-compliance might be concentrated in specific sectors, or sometimes at younger ages, we do not take this account into the modelling.

3.2 Methodology used for estimating impacts

3.2.1 Direct effects: employees

In the previous sub-section, we described the direct effects on employees resulting from an increase in minimum wages. Broadly speaking, these can be grouped into three categories: a) **wages**, which would increase for those at the lower end of the distribution;¹⁸ b) **job losses**—where firms now face higher labour costs, some firms would freeze hiring or make redundancies; and c) **a reduction in the hours worked**, as firms try to manage their increased labour costs.

In line with the assumptions in the previous sub-section, we have modelled the overall impact of increasing the minimum wage to £7.88 and £8.40 on the wage distribution and on employees in general. Figure 3.2 shows the extent to which the proposed increases in minimum wage shift the wage distribution to the right.

Figure 3.2 Estimated distribution of wages before and after the introduction of the proposed minimum wage rates



Note: The wage distribution illustrated is before the impact of any firm response.

Source: Government of Jersey and Oxera calculations.

¹⁸ If other employee benefits fall as a result of firms facing higher labour costs, these might dampen the effect of an increase in the minimum wage.

Absent any impact from the reduction in employment and hours, we estimate that the average weekly pay for those within the 25th percentile across the economy would increase by an estimated £7.20 under the £7.88 proposed minimum wage, and £12.60 under the £8.40 proposed minimum wage, on an FTE basis.¹⁹ This corresponds to increases in average wages across the 25th percentile income distribution of 2.1% and 3.7%. Taking into account working hours, we estimate that the average weekly pay for those in the 25th percentile would increase by £5.80 (£10.10). This corresponds to an increase of 1.7% (3.0%) across the 25th percentile income distribution. Approximately 2,250 (4,000) people would be uprated to the £7.88 (£8.40) minimum wage, while approximately 13,000 (11,250) would experience some sort of wage increase to maintain a degree of wage differential.^{20 21} This is before factoring in any response by firms. This estimation takes into account the mix of part- and full-time workers.

This increase in wage varies considerably by sector, the highest increase being in sectors that employ a greater proportion of low-wage employees. Data on average weekly earnings suggests that the employees most affected would be those employed in the hotel, restaurant & bar sector, followed by agriculture and then wholesale and retail.²² Those employed in the financial services and the public sectors would, on average, experience the smallest increase in wages due to the relatively low proportion of low-paid employees employed (see Table 3.1).

Table 3.1 Average increase in FTE weekly earnings for 25th percentile, by sector, excluding any impact from a reduction in labour costs

Sector	Number of people affected	£7.88 minimum wage	% increase	£8.40 minimum wage	% increase
Hospitality	2,700	7.90	2.4%	13.80	4.2%
Agriculture & horticulture	1,000	7.70	2.3%	13.40	4.0%
Retail	1,500	7.40	2.2%	13.00	3.8%
Education	200	7.80	2.3%	13.70	4.1%
Other	6,300	7.00	2.1%	12.20	3.6%
Building trades and construction	1,000	6.70	2.0%	11.70	3.4%
Other business services	500	7.60	2.2%	13.30	3.9%
Public sector	1,200	6.90	2.0%	12.00	3.5%
Finance	800	6.80	2.0%	11.90	3.5%

Note: The increase in weekly earnings is expressed in FTE; this excludes any firm response, and therefore any impacts from a reduction in employment or hours worked. Estimates have been rounded. The sector categories used by Oxera in the analysis are based on the industry coding stored in ITAX. Source: Oxera analysis.

¹⁹ Based on a 36-hour week.

²⁰ The £8.40 minimum wage results in fewer workers seeing a wage increase relative to £7.88. This is due to a greater number of individuals who face a reduction in hours and unemployment under the higher proposed wage.

²¹ The number of people likely to see an increase in their wages is calculated using income tax data, rather than headcount data. Headcount data refers to the number of jobs, rather than individuals, and may therefore include double-counting of individuals who have more than one job.

²² States of Jersey (2016), 'Index of Average Earnings: June 2016', <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Average%20Earnings%202016%2020160825%20SU.pdf>, accessed May 2017.

The figures in the table above do not take into account the likely response of firms. In line with assumption 2, once firms have fully adjusted, they would be likely to respond to increases in their wage bills by reducing the hours of some of their employees and the number of employees.

Under our assumption of around 20% of the impact arising from job losses, and 20% from fewer hours, firms would need to reduce hours to recapture this gap from employees for example, through a reduction in overtime or working hours. To estimate the number of reduced hours, we would expect to see from existing employees, we apply these assumptions to the relevant wages observed across sectors.

There would also be further second-round effects on employees from the changes in the competitiveness of firms; these effects are discussed in more detail below.

3.2.2 Direct effects: employers

As described in section 3.1, there would be a trade-off for employers. A higher minimum wage generates higher labour costs through higher social security contributions and higher wage costs.

The size of any effect on costs, profits and any subsequent investment decisions would depend on the extent to which firms would be able to offset the increased labour costs. We assume that, once firms have fully adjusted, they are able to offset 80–90% of the increased wage costs by passing costs on to consumers, reducing headcount, and reducing hours, in line with Assumption 2 described above. Firms would therefore see the remaining 10–20% through a reduction in profits as a result of lower profit margins.

There would be an increase in nominal wages: once factoring in the effect of economy-wide inflation on prices, there would still be an increase in real wages. At the relevant income bands, most of this additional income would be likely to be spent, and therefore some of the impact to firms' profits could be mitigated.

In our framework, we expect firms to offset some of the changes in total costs once the full effect of the change has been observed. There might also be some short-term impact on firms' costs as they adjust in the short term. The extent of this would depend on the ability of firms to change their prices often and to change working hours or reduce the number of employees in the short term. **If firms cannot adjust at all**, they would see an impact on profits of £4.9m (for the £7.88 proposed level) and £8.5m (for the £8.40 proposed level, which compares to economy-wide non-finance profit (estimated using gross operating surplus) of £0.4bn in 2015. This therefore represents the maximum cost impact that firms would be likely to face in the short term.

We assume that firms would be able to adjust by passing on 80–90% of costs, and, as such, that the impact on profits would be smaller than this. With no accompanying increase in individual-level productivity, less output would be created for the same level of total wage costs. In addition, margins being cut by 10–20% would reduce firms' profits overall (although this would be slightly offset by an increase in consumer spending resulting from higher incomes).

These impacts are presented as an aggregate impact on firms across the economy. In reality, individual firms would respond differently to the assumptions described here, and some might find it easier to pass on costs to consumers or to reduce other costs in order to preserve their level of profits. Similarly, as some firms would not be able to pass on higher costs, they might become

uncompetitive relative to others—for example, if they face competition from international or Internet-based firms that might not be facing the same increase in input costs. Although not specifically modelled in the analysis, the minimum wage adjustments have the potential to create disproportionate impacts on some sectors, such as the agriculture and tourism sectors, which are dependent on exports. If some firms go out of business, this would have larger effects on the employees and the profits of these firms and there may be more marked effects in these areas and certain geographies; at the same time, this might provide opportunities for some domestic firms that are able to absorb the resulting ‘released’ market share.

The ‘framework we have used does not capture these specific effects at a sector level, although the impacts are shown as ‘average’ economy-wide impacts, which demonstrates that, while some firms might see a larger-than-average loss of profits (or, for example, employees), others might see a relatively small impact, or even a gain from the ‘released’ market share.

3.2.3 Indirect effects: macroeconomic impacts

An increase in the minimum wage has three main macroeconomic impacts: the impact on economy-wide prices; the impact on consumer spending through changes in wages and following any price increase; and a change in overall productivity in the economy. The assumptions used here are discussed in turn next.

Economy-wide prices

An increase in the minimum wage could lead to a one-off increase in the price level in the economy if firms are able to pass on the increased labour cost to consumers.

We assume that firms would pass through 40–50% of the additional wage cost to consumers in the form of higher prices.

Annual inflation in Jersey to March 2017 was 2.9%.²³ In general, any increase in prices would lead to a reduction in demand from consumers. However, the estimated effect of the minimum wage on the overall price level would be small in comparison to the general inflation rate, we estimate an increase in the price level of 0.05–0.06 (or 0.08–0.10) percentage points. While there might be larger effects on demand at a firm level, we expect there would be only a small response to consumer spending at the aggregate level, and we have therefore not included the impact of higher prices in the estimations.

Consumer spending in the economy

We can use data from the Jersey Household Spending Survey report 2014/15 to identify the likely impact on consumer spending across different income groups. We assume that the direct increase in wages would affect those in the lowest quartile of the hourly wage distribution, and that any job losses or reductions in hours would occur for this part of the income spectrum too.

The additional wages for those in employment would increase consumer spending in the economy. This is because those earning the lowest incomes usually have a high marginal propensity to consume, which is observed through the low savings ratio from the Household Spending Survey (HSS) for this income group, which captures the average spending. Some of this additional spending

²³ See <https://www.gov.je/Government/JerseyInFigures/BusinessEconomy/Pages/Inflation.aspx>, accessed May 2017.

would be offset by the reduced spending from those who see a fall in their wages. The changes in income support are also captured here.

Some low-income earners will be in tied accommodation with their meals provided, for example—this is likely to relate to around 1,000 jobs.²⁴ We do not know whether these earners behave in the same way as the average for the low-income group. For example, they may save more in the face of increased salaries (e.g. for remittances), or spend more locally. It may even be the case that employers withdraw some of the benefits offered. We do not know how the marginal effects from these employers differ from the average of the income group, and therefore not adjusted for this.

Productivity

For employees experiencing an increase in wage following the rise in the minimum wage, we do not expect to see an increase their productivity. This is consistent with the OBR's methodology.²⁵ We do, however, expect total economy-wide productivity to increase, through the change in composition of employment across sectors.

3.3 Quantifying economic impacts

Overall, we expect incomes of employees to increase, and therefore consumer spending to rise, with the benefits concentrated at the lower end of the income distribution. However, there would also be job losses within this segment of the income distribution, which would disproportionately affect low-skilled employees.

Some businesses might close if they are unable to tolerate the higher costs; at the same time, there might be opportunities for some businesses to capture some of this released market share. On the whole, however, firms' profits would be lower due to a margin squeeze, despite some additional spending by consumers. This implies that there would be a transfer of income from shareholders to those at the lower end of the income distribution, but also a transfer of income from those who lose their jobs or work fewer hours to others at the lower end of the distribution. All consumers and households would be likely to face higher prices, although this would be likely to affect different sectors to differing degrees—with the hospitality and agriculture sectors facing higher costs, and therefore passing these on in the form of higher prices to the extent the external market allows them to do so.

We have estimated the impacts for both of the proposed increases (to £7.88 and to £8.40), with the latter shown in brackets below. We have shown the impacts across the range of firm response scenarios described above. Using this framework, the main impacts can be summarised as follows.²⁶

- Employees on the current minimum wage would see up to a weekly increase in wage of £25.20 (or £43.92), which corresponds to 10% (or 17%) pay increase.

²⁴ The maximum offsets against the minimum wage are £78.58 per week for accommodation and £104.76 per week for food and accommodation. See Employment Forum (2016), '[Recommendation- Minimum wage rates for April 2017](#)', 23 September, p. 43, accessed June 2017.

²⁵ Advocates of the National Living Wage often argue that higher wages lead to increased productivity; however, there is little empirical evidence to suggest that this is the case.

²⁶ The impacts described here are annual impacts, other than the impacts on inflation and productivity, which are one-off impacts.

- Those within the lowest income quartile would experience, on average, a weekly increase in wages of £5.80 (£10.10).
- Combining the increase in wages for employees who remain in employment with the loss of jobs and reduction in hours, the total increase in income for employees overall would be approximately £2.9m (for the £7.88 proposed level) and £4.9m (for the £8.40 proposed level).²⁷
- Of the total of 61,000 employees, 14,800 would see an increase in their incomes, with 14,600 for the higher proposed increase.²⁸ An estimated 400 (or 700 for the higher proposed increase) would see a decrease in their incomes.^{29 30}
- There would be around 60 (or 100) net job losses³¹ in aggregate, concentrated in the hospitality, agriculture and retail sectors, an effective increase in the unemployment rate of 0.10 percentage points (0.16 percentage points). This compares to the 1,180 individuals who are currently registered with the Social Security Department as actively seeking work (ASW).³² It is important to note that these figures capture aggregate job losses once the economy has adjusted. For example, a particular firm might not be able to bear the additional costs and might look to make a larger number of job cuts or even exit the market, while other firms might be able to capture some of this released market share, subsequently hiring some of the displaced employees. As such, these are the net, not the gross, job losses.
- Figure 3.3 shows the increase in the wage bill for each sector (based on the wage distribution in each sector), and the corresponding estimated job losses per sector. It indicates that the hospitality sector would see an increase in wage bill of 1.2%, and a corresponding 0.2% fall in jobs in the sector, for the £7.88 increase (2.1% and 0.4% respectively for the £8.40 increase).

²⁷ These estimates are not affected by the alternative assumption scenario (which reflect different assumptions on the level of price pass through and firm margins) as the assumptions on reducing the number of hours worked and number of people employed would be the same.

²⁸ Under the higher minimum wage, the number of employees with increased wages would be lower as there would be more people who experience job losses and reduced working hours.

²⁹ These estimates assume that the reduction in hours would be spread across employees, with an average of six hours per employee who is facing a reduction.

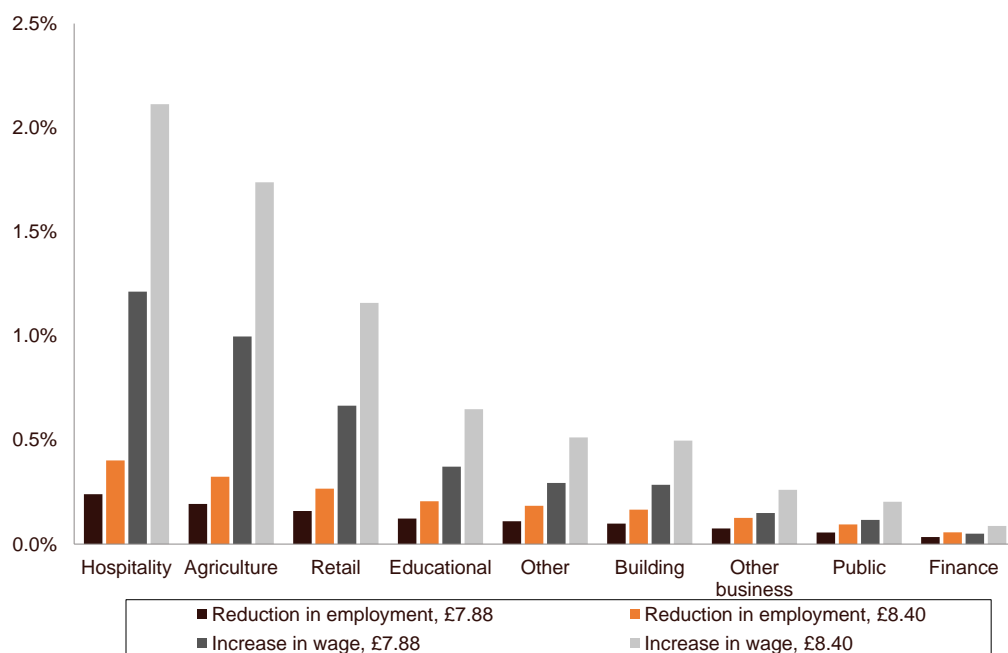
³⁰ See footnote 27

³¹ These figures are broadly in the same order of magnitude as the estimates from the OBR when assessing the impact of introducing the National Living Wage. The OBR found that an increase in the effective minimum wage of 13% gives rise to 60,000 job losses (equivalent to a 0.2 percentage point increase in the unemployment rate).

³² ASW number as of 31 March 2017. States of Jersey (2017), 'Registered Actively Seeking Work First Quarter 2017',

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Mar%202017%20Registered%20ASW%2020170412%20SU.pdf>, accessed May 2017

Figure 3.3 Estimated job losses per sector



Source: Oxera analysis.

- In addition to the job losses, there is likely to be a further increase in the unemployment rate from increased labour market participation due to those who were previously not in the labour market but would now be actively searching for employment given the higher wages.
- We would see lower working hours from lost jobs, and from reduced hours. We estimate that 116,000 working hours would be lost for those who remain in employment (or 194,000 lost hours).³³
- In general, we would expect to see a higher share of part-time employees affected than full-time employees, with 67% of those within the 25th percentile working part time. This is in line with the findings of the Low Pay Commission.³⁴
- Firms would be likely to see a fall in profits of around £0.4m–£0.9m (or £0.7m–£1.5m) in the long run.³⁵ This corresponds to around 0.03–0.07% (or 0.05–0.11%) of economy-wide gross operating surplus, which affects shareholders through shareholder value and dividend yield. This includes a small offsetting increase in firm profits, arising from higher spending, from higher consumer wages. The sectors most affected are those that observe the highest increase in labour costs. As Jersey has a large export sector and competes internationally, shareholders would be likely to lose out overall, as the extent to which firms could pass on the increase in costs would be limited in these cases.

³³ These estimates are not affected by the alternative assumption scenario (which reflect different assumptions on the level of price pass through and firm margins) as the assumptions on reducing the number of hours worked and number of people employed would be the same.

³⁴ Low Pay Commission (2016), 'National minimum wage: Low pay commission report spring 2016', March, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571631/LPC_spring_report_2_016.pdf, accessed May 2017.

³⁵ This compares to the immediate, short-run impact of £4.9m (for the £7.88 proposed level) and £8.5m (for the £8.40 proposed level),

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- Prices in the economy are likely to increase by 0.05–0.06 (or 0.08–0.10) percentage points. Annual inflation in Jersey from March 2016 to March 2017 was 2.9%.
 - Consumer spending in the economy would increase by approximately £2.4m (or £4.0m), which relates to around 0.1% (or 0.2%) of earned income for employees in 2017.^{36 37}
 - Economy-wide productivity is likely to increase by 0.1% (0.2%) as a result of sectoral shift, not due to an increase in individual-level productivity, as employment losses would be greater in hospitality, agriculture and retail, and lower in the financial services and public sectors.³⁸
 - With no change in individual-level productivity, and a reduction in the total number of employees, an increase in minimum wage would lead to a level-shift reduction in economic activity (i.e. lower GVA).

³⁶ This assumes that pre-tax incomes increase, as described, from which income tax is subtracted. We assume a 0% savings ratio for the individuals in the affected income bracket, and that all money would be spent in Jersey, which might not be the case. The savings ratio is taken from the Jersey Household Spending 2014/15,

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Spending%20survey%20report%202015%2020160526%20SU.pdf>, accessed May 2017.

³⁷ These estimates are not affected by the alternative assumption scenario (which reflect different assumptions on the level of price pass through and firm margins) as the assumptions on reducing the number of hours worked and number of people employed would be the same.

³⁸ See footnote 37

4 Fiscal impacts

Changes to the minimum wage would have an impact on taxation revenues, as well as government spending. Using the economic impacts described in section 3, we estimate the corresponding fiscal impacts.

Some of these impacts are the direct result of raising wages (such as increased income tax), while others are indirect (for example, additional Goods and Services Tax revenues from additional spending in the economy, arising from higher wages).

4.1 Income tax

As described above, the total increase in employment income of employees is estimated to increase by £2.9m, or £4.9m as a result of the increase in the minimum wage. The impact of this on income tax revenues is not linear since the increase in incomes would be concentrated among lower-paid employees, who would be likely to pay a lower effective tax rate. We have therefore calculated this effect by applying the effective marginal rate of taxation in 2015 (12.5%), to the increase in employment income. This effective rate reflects the fact that not all additional income will be subject to taxation due to exemptions that exist under the tax system, which would see some people pay 0% tax.

Taking this into account, we estimate the impact on income tax to be £0.4m (£0.6m).^{39 40}

4.2 Social security contributions

Employees and employers are also required to make social security contributions, equal to 6% and 6.5% of gross salaries respectively. There are several offsetting impacts here, as described below:

- Lost jobs: where employees see their jobs lost, there are no more social security contributions, resulting in lower contributions of £91,000 (£145,000), relating to 60 (100) employees.
- Reduction in hours worked: a reduction in salaries will result in a decrease in social security contribution. This results in a lower contribution of £85,000 (£144,000), relating to 335 (555) employees.
- Increase in salaries: some employees will see an increase in their salaries, resulting in an increase in social security contribution of £538,000 (£899,000), relating to 14,840 (14,570) employees,

The net effect would be an increase in government revenue from social security contributions of £0.4m (£0.6m).⁴¹

4.3 Corporate tax revenues

Changes in profits and investment following a change in the minimum wage would also have an impact on corporate tax receipts. The size of any effect would depend on the extent to which firms would be able to offset the impact of

³⁹ The effective rate for the marginal tax system has been used, rather than the effective standard rate.

⁴⁰ These estimates are not affected by the alternative assumption scenario (which reflect different assumptions on the level of price pass through and firm margins) as the assumptions on reducing the number of hours worked and number of people employed would be the same.

⁴¹ There would also be a small increase in revenues to the long-term care fund. Assuming a yield of 5% of income tax, the revenues are likely to be around £20,000–£30,000.

increased labour costs through the mechanisms described in section 3. Specifically, we assume that, once firms have fully adjusted, firms would be able to offset 80-90% of the increased wage costs by passing costs on to consumers, reducing headcount, and reducing hours.⁴² The speed at which this effect occurs depends on firms' ability to change their prices often, and to change working hours and staff churn.

If firms are unable to respond quickly, the short-term impact on firm profits and investment combined could be as high as a reduction in annual profits of £4.9m (for the £7.88 proposed level) and £8.5m (for the £8.40 proposed level).⁴³ Once firms have adjusted, the long-run impact on profits is estimated to be a fall of around £0.4m–£0.9m (or £0.7m–£1.5m) resulting in a small decrease in corporate tax receipts of £7,000–£13,000 (£12,000–£23,000). This is based on applying the appropriate tax rates to the sectors that do not face the 0% rate.⁴⁴

4.4 Goods and Services Tax revenues

The Goods and Services Tax rate in Jersey, which is charged on the majority of goods and services, is 5%. Some goods are zero-rated or exempt, and businesses below the turnover threshold do not need to register for the tax. Using this information, we estimate that the effective tax rate on marginal expenditure by those in the lowest income quintile would be 3%—i.e. GST makes up 3% of all spending for this group.⁴⁵ Using this, we can estimate the additional taxation revenue generated by the additional consumer spending at £73,000 and £122,000 for the £7.88 and £8.40 minimum wage respectively.⁴⁶

4.5 Income support

The level of income support paid out by the Government of Jersey would be affected by two factors:

1. those people who lose their jobs or see a reduction in their hours would see an increase in income support paid out, depending on eligibility;
2. those people currently claiming income support who see an increase in their wages would be likely to see a reduction in the amount of income support they are claiming.

Jersey labour market statistics provides a breakdown of the residential status of private sector headcount by sector.⁴⁷ This shows whether an individual is entitled, licensed, registered or exempt. We assume those who are entitled are

⁴² We assume that firms face a margin squeeze of 10% and 20%

⁴³ This captures the effect on firm profits if they are unable to pass on any of the impacts of the higher minimum wage, which includes not being able to pass on higher prices or offset the increase in wage costs by reducing hours/cutting employment.

⁴⁴ The standard rate of corporate tax is 0%, with the exceptions of financial services companies, utility companies and income specifically derived from Jersey property rentals and property development. As such, corporate tax revenue has been estimated by applying the financial services corporate tax rate to the financial services sector component of profit reductions, as well as the utility companies tax rate to a proportion of the 'Other' sector, the category under which utility companies are captured. Corporate tax rates are taken from <https://www.gov.je/LifeEvents/MovingToJersey/Pages/Tax.aspx#anchor-3>, accessed May 2017.

⁴⁵ Based on States of Jersey (2015), 'Jersey Household Spending 2014/15, <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Spending%20survey%20report%202015%2020160526%20SU.pdf>, accessed May 2017.

⁴⁶ These estimates are not affected by the alternative assumption scenario (which reflect different assumptions on the level of price pass through and firm margins) as the assumptions on reducing the number of hours worked and number of people employed would be the same.

⁴⁷ Jersey labour market statistics available from: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Dec%202016%202070427%20SU.pdf>, accessed April 2017.

also eligible for income support, and we apply these sector-specific proportions to the number of employees affected by the minimum wage increase.⁴⁸ We then adjust this to reflect that income support is a household benefit, and that, as a result, those who lose their jobs or face reduced wages could be second-income earners and therefore may not qualify for such support.

We therefore estimate that approximately 25 (45) of those made unemployed will now receive income support and 140 (230) of those who face a reduction in income would receive income support (either as an increase in the level of current support or as new recipients). The cost to the Government of Jersey would be £420,000 a year (£702,000). This assumes that income support-entitled employees made unemployed claim the same amount on average per person as those who claimed in 2015⁴⁹, and that those who face a reduction in income due to reduced hours will receive income support that appropriately offsets their wage loss.⁵⁰

This estimate assumes that the claimants would have the same household composition and characteristics on average as the existing claimants; and would be eligible according to the average eligibility of the sector (e.g. they pass the residence test, and are looking for work). This also assumes that these individuals do not choose to leave Jersey in search of employment elsewhere, which therefore suggests this is likely to be a higher-end estimate.

This impact would be offset to some extent by the potential saving on spending on income support for lower-income employees, driven by the overall increase in wages. Income support is calculated according to specific individual factors, which makes it difficult to estimate the reduction in spending on income support. Extrapolating the annual income support savings reported by the Social Security Department results in an estimate of £360,000 (£625,000).⁵¹

We estimate that there would be a net increase in income support payments from the Government of Jersey of £60,000 (£77,000). This is consistent with the OBR, which found that the higher unemployment associated with the increased minimum wage in the UK would lead to higher spending on jobseeker's allowance, tax credits (for low-income workers) and housing benefit; which would outweigh the reduction in benefits due to those whose incomes increase.

4.6 Social security supplementation

The Government of Jersey provides an annual grant to the Social Security Fund to top up the social security contributions of employees earning below the standard earnings limit (SEL) but higher than the lower earnings limit (LEL), such that all participants' contributions correspond to the SEL. The grant is fixed in cash terms until 2020, and its value from 2020 onwards is likely to be agreed through active policymaking. In the absence of this active policymaking, the

⁴⁸ 84% estimated eligibility based on Table A4, <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Labour%20Market%20Jun%202016%2030161006%20SU.pdf>, accessed May 2017.

⁴⁹ For the 6,194 income support claims in payment on 31 December 2015, the mean weekly claim rate was £227. See

<https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/Social%20Security%20Department%20Minister's%20Report%202015.pdf>, accessed May 2017.

⁵⁰ This calculation reflects the decrease in wage for those who face a reduction in hours and adjusts for disregard and social security contribution. It also makes an adjustment to reflect that not all individuals who face reduced hours will move on to IS as a consequence of the drop in wages, and of the ones that do, not all the loss will be compensated by IS.

⁵¹ States of Jersey (2016), 'Minimum wage: revised hourly rate from 1st April 2017', November, p. 4. <http://www.statesassembly.gov.je/AssemblyPropositions/2016/P.115-2016.pdf>, accessed May 2017.

legislation would default the government position to topping up contributions to the level of the SEL at that time, via a formula.

The States Grant to support the cost of supplementation acts as a transfer between the Consolidated Fund and the Social Security Fund. As such, a change in the value of the States Grant has no net impact on overall government finances. Section 4.2 above has already accounted for changes in the income from social security contributions received as government revenue.

If the States Grant returns to being calculated on the formula-basis from 2020 then the value of the transfer could change in the following ways:

- For those who lose their jobs, the government would no longer be required to supplement social security contributions. This would relate to approximately 45 (75) employees, reducing supplementation by £176,000 (£296,000).
- For those who see a reduction in hours such that their incomes fall below the LEL, the government would also no longer be required to supplement social security contributions. This would relate to approximately 15 (30) employees, reducing supplementation by £58,000 (£112,000). While supplementation will be reduced for those falling below the LEL, in some circumstances (e.g. compulsory redundancy) a claim on the Social Security Fund will still be built up, yet no payment will be received into the Fund. This will (marginally) bring forward the date at which the Fund drops below the breakeven point (the Fund currently runs a surplus).
- For those who see an increase in their wages from below the LEL to above the LEL, the government would now need to supplement contributions, where they did not previously. This would relate to 85 (120) employees and additional supplementation costs of £365,000 (£510,000).
- For those who currently earn above the LEL, and see an increase in their wages, the government's supplement would be lower, resulting in lower supplementation of £402,000 (£671,000) relating to 10,700 (10,500) employees.
- For those who currently earn above the LEL, but see a decrease in their wage due to a reduction in hours, (but still maintained above the LEL), the government's supplement would increase by £46,000 (£77,000), relating to 245 (400) employees.
- Around 4,000 (3,900) employees will see an increase in their salaries, but remain below the LEL. This would result in no additional supplementation.

The net effect on the size of the transfer (if it is calculated on the formula basis) would be a decrease of £224,000 (or £491,000).

Another scenario could be that the government maintains the current level of cash grant to the Social Security Fund. In this event, there would be no change in the government contribution to the Social Security Fund.

4.7 Government wage bill

The assumptions above describe the response of firms to an increase in the minimum wage. While the majority of the civil service and public sector pay

scales begin some way above the minimum wage, the public sector is still affected due to the umbrella effect of maintaining wage differentials across all sectors. As such, we have assumed that the lowest quartile of hourly wages within the public sector would also be affected to some degree.

We have assumed that government would respond to the increased wage bill in the same way as firms would. That is, of the additional cost borne by employers, half would be passed on to consumers (taxpayers in this case, through lower quantity of outputs, for example), a quarter to employees through a reduction in headcount, and a quarter to employees through reduced hours.

Applying this to the distribution of employees reported as public sector workers (according to income tax returns), we estimate that the proposed minimum wage increase would therefore result in an estimated impact of around £0.4m on the government wage bill, and £0.7m for the higher proposed rate.

4.8 Summary

The modelling suggests that there is a gain in government revenues of £0.8m (£1.3m), which corresponds to 0.12% (0.20%) of total government revenue.^{52 53} Positive gains would be seen from income tax, and Goods and Services Tax, driven by higher incomes and higher spending from employees.

There would be an increase in government spending of £0.5m (£0.8m), driven by higher income support payments and from a higher government wage bill.

Overall, the impact of the minimum wage on the government's fiscal position results in a **net increase in the government revenues of £0.3m (£0.5m)**. As described in the section above, while there would be an increase in government revenues, this represents a transfer of wealth from shareholders and those who have lost their jobs to those who see a gain in revenues.

Table 4.1 Summary of fiscal impacts (£m)

	Proposed minimum wage	
	£7.88	£8.40
Government revenues		
Income tax	+£0.4m	+£0.6m
Social security contributions ¹	+£0.4m	+£0.6m
Corporate tax	-£0.0m	-£0.0m
Goods and services tax	+£0.1m	+£0.1m
Government spending		
Income support	-£0.1m	-£0.1m
Government wage bill	-£0.4m	-£0.7m
Net impact on government finances	+£0.3m	+£0.5m

Note: Numbers have been rounded to the nearest £0.1m and therefore may not total the net impact displayed. Positive numbers indicate increases in the government's revenue or money saved. ¹ The social security contributions from employees and employers capture the contribution to both the Social Security Fund and the Health Insurance Fund. ²

Source: Oxera analysis.

⁵² Total income of £673m in 2015, <https://www.gov.je/Government/JerseyInFigures/GovernmentAccounts/Pages/StatesIncomeExpenditure.aspx>, accessed May 2017.

⁵³ Estimates under the alternative scenario are the same when rounded.

5 Looking at uncertainties: scenarios

5.1 Sectoral shifts

The analysis presented in this report looks primarily at the first-round effects of an increase in the minimum wage: where a sector experiences an increase in costs and firms in that sector must respond.

Wider ‘second-order’ impacts would also occur—for example, employees who have been made unemployed following the change in policy might now be available to work in other sectors of the economy. The sectors they leave (primarily agriculture, hospitality and retail) might begin to shrink as they find it increasingly difficult to pass on the additional costs. These employees may be able to switch into other sectors, relevant retraining and skills permitting. This would allow competitive industries to thrive, through access to more labour, at the expense of some firms in other industries.

Alternatively, the sectors facing a high increase in wage costs might look to use increasing amounts of capital, to substitute with labour. This shift could allow firms to increase the productivity of the labour they continue to employ, but this would require upfront costs for businesses and might take a number of years for the transition.

5.2 Net migration assumptions

A particular feature of the Jersey economy is the low unemployment rate and the limitations on permission to employ migrant labour. The estimations presented in this report assume that the change in policy has no significant effect on net migration. Those who lose their jobs would remain in Jersey, and there is no resulting change to net migration.

To the extent that any reduced labour demand from the agriculture, hospitality and retail sectors releases migrant permissions that can be used in other, higher-productivity, sectors, economy-wide productivity and output in the economy might increase. However, this depends on whether those who are no longer employed in the sectors with reduced labour demand choose to stay in Jersey. The employees who have lost their jobs, and subsequently leave Jersey, would release not only migrant permissions, but also housing, making housing cheaper for any new migrants (and existing employees). Lower housing costs might allow employees to accept slightly lower wages, which could increase the competitiveness of various sectors in light of the lower labour costs. However, the extent of ‘released’ housing would be likely to be lower than the number of those who leave Jersey, as some lower-paid jobs in farms and hotels usually include tied accommodation.⁵⁴

This type of dynamic impact would require active policymaking by the Government of Jersey to award certain sectors additional migrant permissions, in order to allow the shift in sectors towards the higher-skilled, higher-productivity sectors. This could increase the benefits from raising the minimum wage.

⁵⁴ Approximately 1,000 minimum wage and trainee employers are provided with accommodation. Employment Forum (2016), ‘Recommendation- Minimum wage rates for April 2017’, 23 September, p 43. Available from: www.gov.je/SiteCollectionDocuments/Working%20in%20Jersey/ID%20Minimum%20wage%20recommendation%2020170524%20JM.pdf [Accessed June 2017]

6 Summary

The minimum wage in Jersey is £7.18 per hour from April 2017. Oxera has been asked to consider the impact of increasing this to £7.88 per hour, based on 45% of mean weekly earnings, or to £8.40 per hour, based on 60% of median earnings. This represents a 10% and 17% increase in minimum wage respectively, from the current level.

Raising the minimum wage has the direct impact of increasing wages for a significant number of low-paid employees, which could reduce poverty, increase welfare, and increase spending in the economy.

However, raising the minimum wage could impose higher costs on businesses, which could ultimately lead to negative effects on employment, and to higher inflation as businesses pass these costs on through higher prices.

Using national statistics, surveys, and detailed income data from Jersey, we have estimated the likely impacts on the Jersey economy. In particular, the following impacts have been estimated:

- employees would see up to £25.20 (or £43.92) weekly increase in wage, which corresponds to 10% (or 17%) pay increase;
- combining the impact from employees who remain in employment who see an increase in their wages, employees who may lose their jobs and employees who see their working hours reduced, total employees' incomes would increase overall by approximately £2.9m (for the £7.88 proposed level) and £4.9m (for the £8.40 proposed level);
- of the 61,000 employees in Jersey, 14,800 would see an increase in their incomes (and 14,600 for the higher proposed increase). An estimated 400 (or 700) would see a decrease in their incomes;
- around 60 (100) net jobs would be lost, concentrated in the hospitality, agriculture and retail sectors. This compares to the 1,180 individuals registered with the Social Security Department as ASW in March 2017;
- a higher share of part-time employees would be likely to be affected than full-time employees due to the greater proportion of part-time employees working at or near the minimum wage;
- firms would be likely to see a fall in annual profits of around £380,000–£860,000 (or £650,000–£1.5m) in the long run. This corresponds to 0.03–0.07% (or 0.05–0.11%) of economy-wide profit. This in turn affects shareholders through shareholder value and dividend yield;
- prices in the economy would be likely to increase by 0.05–0.06 (or 0.08–0.10) percentage points. Annual inflation in Jersey from March 2016 to March 2017 was 2.9%;
- consumer spending in the economy would increase by £2.4m (or £4.0m), which relates to around 0.1% (or 0.2%) of earned income for employees in 2017;
- economy-wide productivity would be likely to increase by 0.1% (0.2%) as a result of sectoral shift, as employment losses would be greater in hospitality, agriculture and retail, and lower in the financial services and public sectors;

- the increase in minimum wage results in a net increase in the government fiscal position, where the government receives £0.3m (£0.5m) more in overall revenue than it spends.

Overall, within this framework, we assume there is an **increase in incomes for nearly one-quarter of employees, at the bottom of the income distribution**, giving rise to **an increase in the net government fiscal position**.

However, there would be an **increase in firms' costs**, following which we would expect **a number of job losses, reduced hours, increased prices for consumers**, and lower firm profits (i.e. a **reduction in shareholder value**). The job losses would be concentrated in the hospitality, agriculture, and retail sectors.

The combination of these direct and indirect effects would be likely to result in **lower economic activity** overall, as measured by GVA.

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