Modelling the Impact of an Increase in Low Pay in the Republic of Ireland

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Outline

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2. Motivation
3. Data
4. Methodology
5. Who is Effected?
6. What will be the effect on the Wage Bill and Employment Levels?
7. Conclusion

Context

- Low Pay is back on the agenda
- Introduction of National Living Wage in the UK for those aged 25+ as part of the intention to “tackle low pay and ensure that lower wage workers can take a greater share of the gains from growth”
  - 2016 – 55% of 25+ median wage
  - 2020 – 60% of 25+ median wage
- Eurostat (2012) define someone who is on low pay as an employee earning a wage that is below two thirds of the median hourly wage in that country.

Motivation/Aim

- To model an increase in the minimum wage to a level equivalent to the low pay threshold by 2020
  - A level that has a bite of 66.6% of the 2020 median wage for all employees - €12.50
  - This proposed increase equates to a 36.6% increase in the minimum wage or an increase of €3.35 an hour

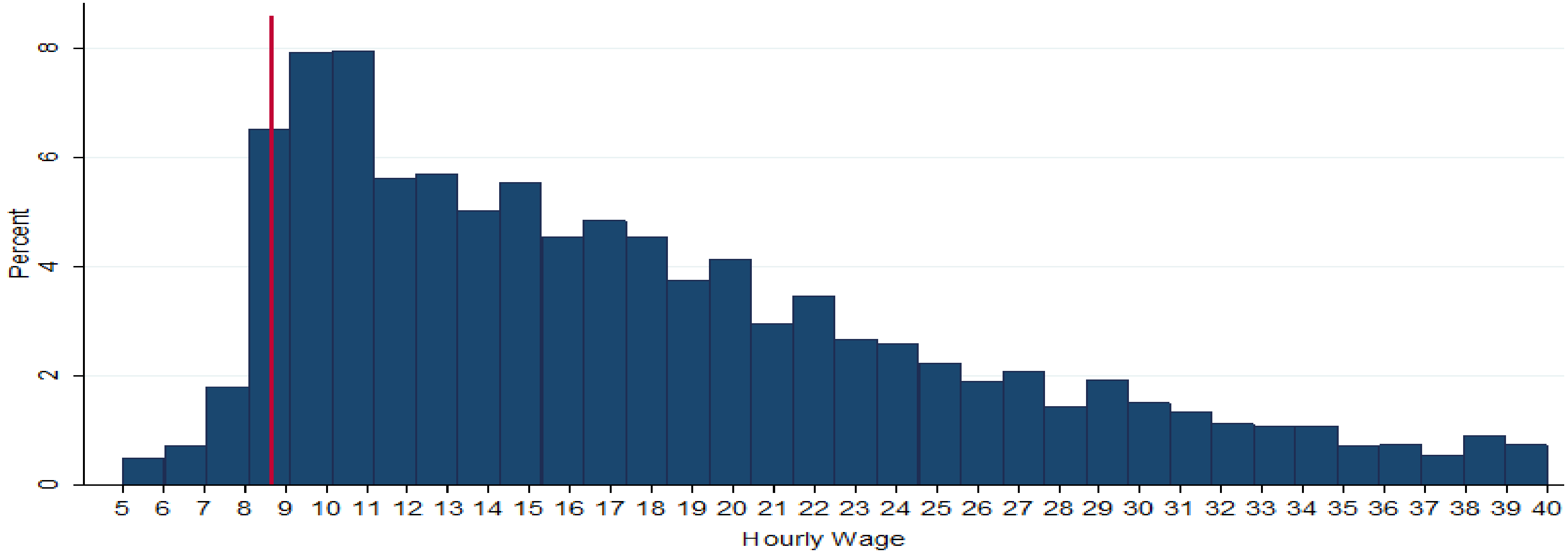
- Equivalent to the previous increase in the minimum wage between October 2002 and July 2007 – 36.2% increase in the wage floor

Data

- CSO's 2013 EU Survey on Income and Living Conditions
  - 4,922 Households and 12,663 Individuals
- Detailed data on income, earnings and living conditions
  - Income data cross checked with tax and welfare records
  - Sampling frame and weighting procedures are designed to ensure the sample is representative of the population
- Employees
  - 3,369 employees
  - PES=at work
  - Detailed personal and household characteristics
  - Hourly wage

Methodology

Chart 1: Distribution of Hourly Earnings and Selected Pay Thresholds, Ireland 2013 (% of employees)



Source: EU Survey on Income and Living Conditions

Notes: 2013 Earnings distribution compiled using EU-SILC 2013 data. The red line represents the minimum wage of €8.65. There are some entries with spurious values where the hourly wage is very low; earnings less than €5 an hour are dropped to give a more robust data basis

The earnings graph only shows the earnings for those earning a wage less than €40 an hour. 6.9% of employees earn a wage above €40 an hour

2013 → 2016 → 2020

1. Forecast 2016 hourly wage distribution after the minimum wage increase from €8.65 to €9.15 that was implemented on 1st January 2016
   - Assume size and composition of the workforce remains constant at 2013 levels
   - Incorporate average wage growth from 2013-2016
   - Increase wages of minimum wage workers and those on sub-minima rates
   - Incorporate spillover effects to those earning a wage just above the new minimum

2. Forecast the 2020 hourly wage distribution after the proposed minimum wage increase from €9.15 - €12.50 is implemented
   - Incorporate average wage growth from 2016-2020
   - Increase the minimum wage to €12.50 which has a bite of approx. 2/3rds of the 2020 median wage (€18.85)
   - Increase the wages of those earning a wage between €9.15-€12.50 to the €12.50 wage floor
   - Increase sub-minima wages by the nominal increase in the minimum wage
   - Incorporate spillover effects to those earning a wage just above the new minimum

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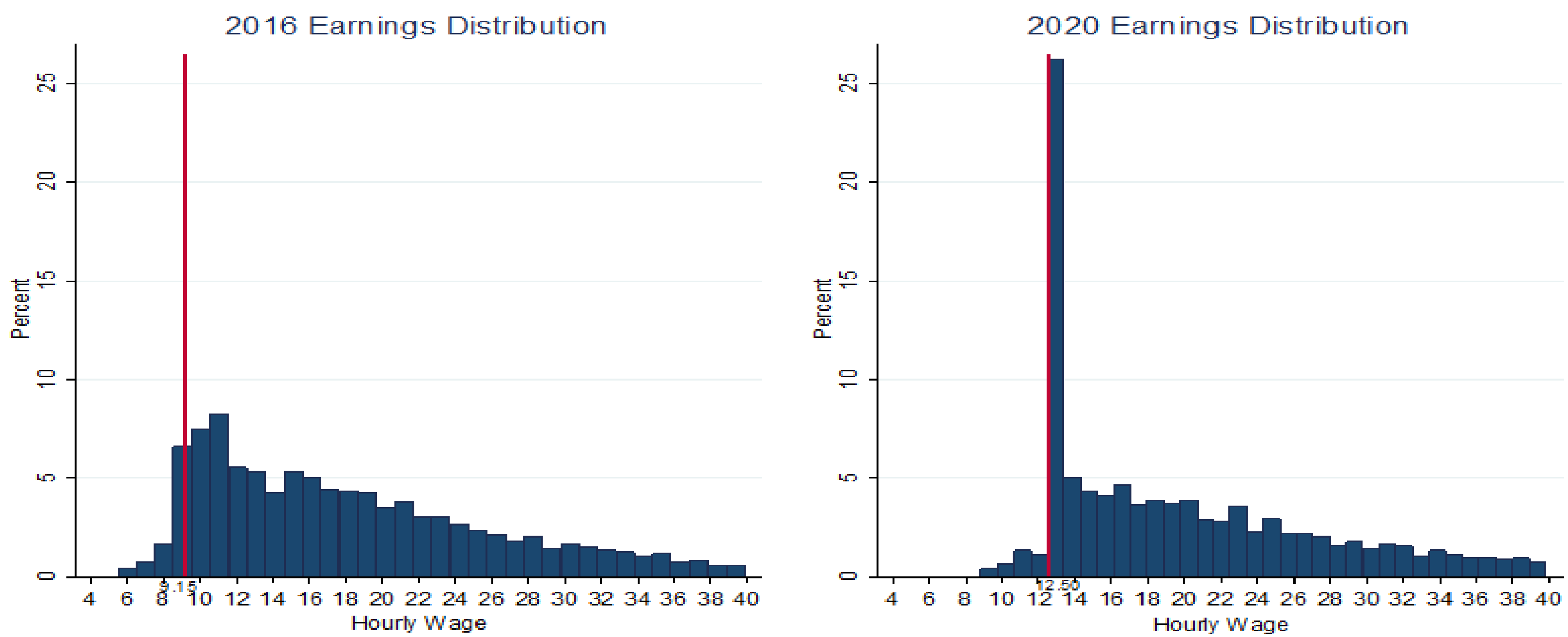
2016 2020

Chart 2: Projected Distribution of Hourly Earnings, Ireland 2016 and 2020 (% of employees)



Notes: The 2016 earnings distribution is modelled to account for the direct and indirect effects of the increase in the minimum wage to €9.15.
The 2020 distribution includes a further increase in the minimum wage to €12.50 and includes both the direct and indirect effects resulting from this increase. We assume there are no changes in the minimum wage between 2016 and 2020 and the composition and size of the workforce remains constant at 2013 levels.

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Who is Effected?

Table 3: Projected Distribution of Earnings per Selected Pay Threshold in 2020 (% of employees)

Threshold	% above	% at each category	Average Hourly Increase	Average Annual Increase
Below €12.50	96.63%	3.37%	€3.35	€4,599
At €12.50	76.04%	20.59%	€2.28	€3,345
Benefit from Spill-overs	69.05%	6.99%	€1.16	€1,876
Other Employees	0%	69.05%	€2.19	€3,948

Notes: The first three rows split those employees who receive an increase in their wages due to the minimum wage increase by the type of increase the receive.
The forth row contains all other employees who's wages are not affected by the increase in the minimum wage.
Average Hourly and Annual Increase measures the gross increase employees receive as a result of both wage growth and the increase in the minimum wage between 2016 and 2020.

Table 6: Increase in Earnings due to the Minimum Wage Increase

Threshold	% at each category	Average Hourly Increase	Average Annual Increase
Below €12.50	3.37%	€3.35	€4,599
€12.50	20.59%	€1.64	€2,358
Benefit from Spill-overs	6.99%	€0.15	€247
Other Employees	69.05%	€0.00	€0

Notes: Average wage increases include only the direct and indirect increases in wages received as a result of the increase in the minimum wage to €12.50 in 2020.
The small percentage of employees earning a wage below €12.50 are sub-minimum wage workers.

Table 7: Characteristics of those who Directly Benefit from the Minimum Wage Increase

	Share of Employees Affected (%)	Share of all Affected (%)	Average Hourly Gain	Average Yearly Gain
Total	20.59	100	€2.28	€3,345.2
Gender				
Male	17.87	41.30	€2.17	€3,784.5
Female	23.07	58.70	€2.36	€3,072
Age group				
18-29yrs	39.40	33.30	€2.36	€3,541.4
30-39yrs	19.26	30.56	€2.29	€3,502.1
40-49yrs	13.96	16.80	€2.31	€3,305
50-59yrs	14.06	13.28	€2.13	€2,839.1
60+yrs	22.01	6.06	€2.19	€2,917.3
Hours				
Full-time	14.60	51.17	€2.23	€4,516.5
Part-time	36.18	48.83	€2.35	€2,215.6
NACE Sector				
Agri, Forestry/Fishing	-	-	-	-
Industry	14.14	11.07	€2.41	€4,335.3
Wholesale and Retail	33.94	23.31	€2.28	€3,132.7
Accommodation and Food	49.78	18.22	€2.45	€3,145.3
Admin & Support Services	43.60	5.84	€2.24	€3,160.1
Health and Social Work	18.86	14.30	€2.13	€2,938.9
Pub Adm. Defence & Education	7.41	6.26	€2.10	€2,661.8
All Other Sectors	14.37	17.61	€2.27	€3,627.9

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Effect on the Economy's Wage Bill?

Table 10: Increase in the Total Wage Bill as a Result of the Minimum Wage Increase

	Increase in Wage Bill	% Increase in Wage Bill
Strict Direct Effects	€748,694,317	1.19%
Direct Effects (sub-minima and minimum wage increases)	€987,262,626	1.56%
Total Effect (including spillover effects)	€1,013,857,530	1.60%

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Effect on Employment?

- Contrasting views in the literature
- Negative employment effects in previous literature is limited
  - Only minor increases in the minimum wage
- We are modelling a substantial increase in the minimum wage so it is likely to have some impact on employment levels
  - The extent to which employment levels are effected will depend on the economic environment at the time of its increase
  - Employment effects are likely to vary from sector to sector and from firm to firm
- Likely to be first round and second round effects of the minimum wage increase in firms
- May have an affect on the wider economy
  - Increase in minimum wage increases disposable income and consumption
  - Increase in consumption may increases consumer demand that may result in an increase in sales for firms, increasing profits

Effect on the Wage Distribution

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Chart 4: Distribution of Wage Changes across the Quartiles, 2016-2020

Conclusions

- Models an increase in the Minimum Wage to the Low Pay Threshold in 2020
  - It is modelled as a once of increase. In reality it should be implemented incrementally over a couple of years, as in the UK

- An increase in the Minimum Wage by 36.6% to €12.50 results in:
  - 31% of employees benefitting in total with 24% benefitting directly while 7% benefit indirectly
  - Reduces wage inequality by pushing the wages of the bottom third of the wage distribution closer to the median
  - A likely increase in the wage bill of between 1.19%-1.60%
  - Likely employment and wider economic effects

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