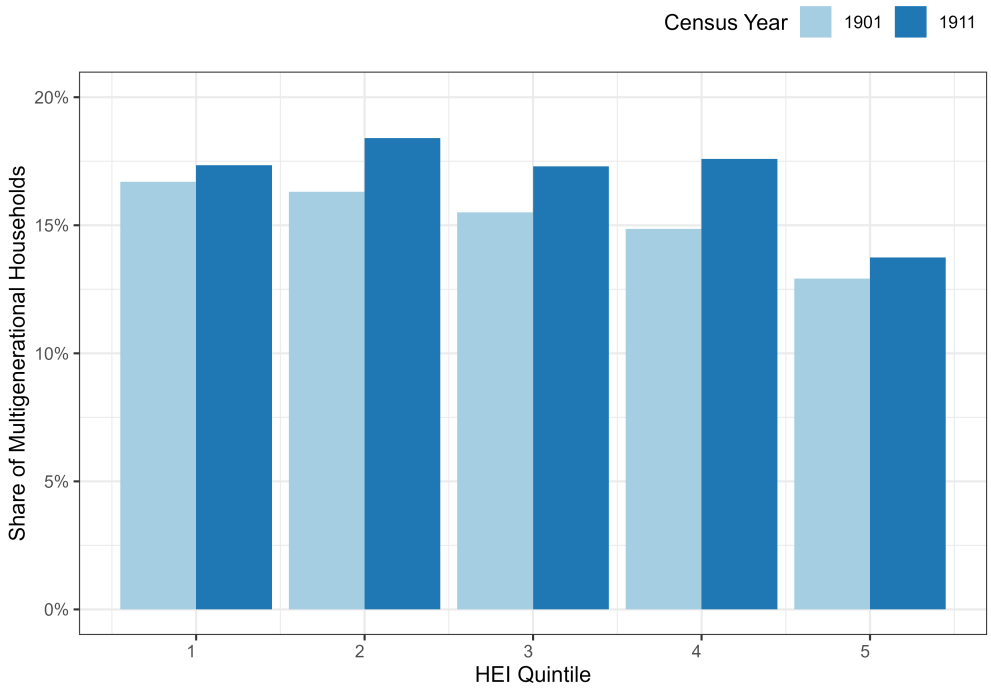
Online Appendices

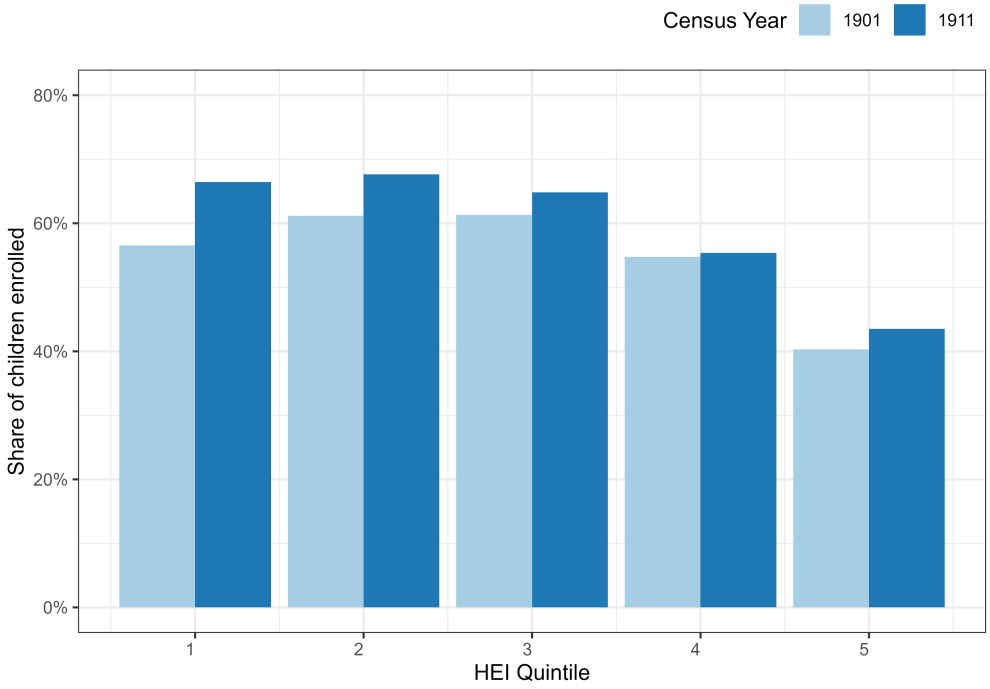
A Additional Visualisations and Robustness Tests

Figure A.1: Frequency of multigenerational household by income quintile



Note: Share of multigenerational households increases modestly. For quntiles 1—5 change is 0.65 pp, 2.09 pp, 1.75 pp, 2.74 pp and 0.82 pp respectively.

Figure A.2: Share of children enrolled in school by income quintile



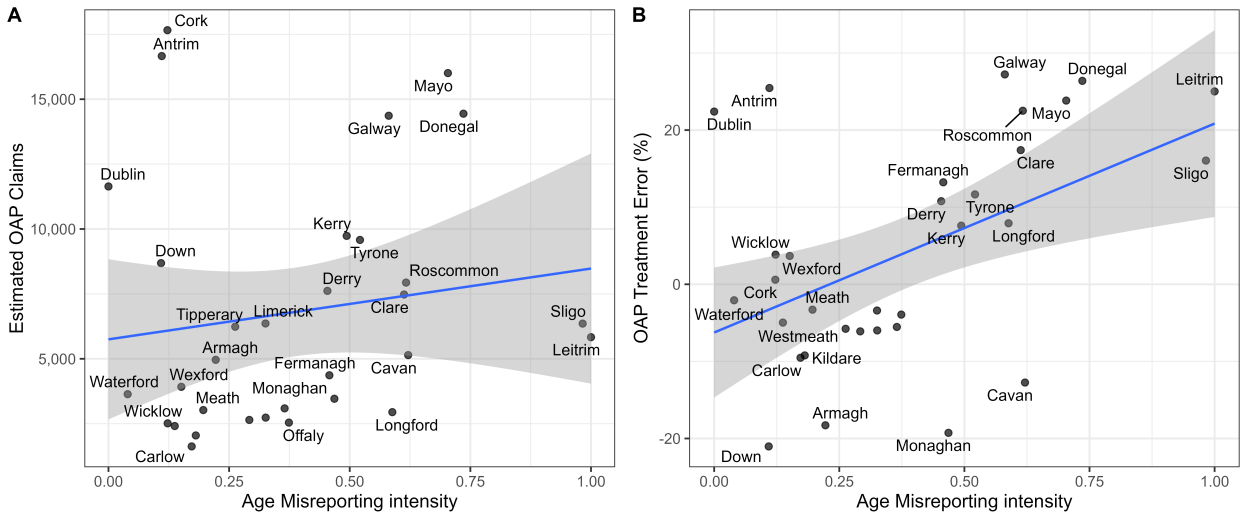
Note: School enrolment declines with household income. By focusing on older children aged 13 to 16, I capture those no longer compelled to attend school. In wealthier households, schooling was less disrupted by the agricultural calendar, and children were more likely to complete schooling by the age 14.

Table A1: Correlation between treatment and covariates before screening

	Pension (1)	70 y/o (2)	13 y/o (3)	14 y/o (4)	15 y/o (5)	16 y/o (6)
Pension		0.756***	0.039**	0.002	-0.011	-0.029
		(0.015)	(0.018)	(0.019)	(0.019)	(0.018)
Household Income	-0.010***	0.010***	-0.003	-0.004	-0.002	0.010***
	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
1911 Census	0.134***	-0.082***	-0.015***	-0.005	0.011***	0.010**
	(0.001)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Child Enrolled in School	0.003***	0.000	0.275***	0.093***	-0.095***	-0.273***
	(0.001)	(0.002)	(0.003)	(0.004)	(0.004)	(0.003)
Child Age: 14	-0.001	-0.001				
	(0.001)	(0.003)				
Child Age: 15	-0.002**	-0.005*				
	(0.001)	(0.003)				
Child Age: 16	-0.003**	-0.003				
	(0.001)	(0.004)				
Sex: Female	0.000	-0.002	0.001	-0.010***	-0.001	0.010***
	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Illiterate	0.002	0.018**	0.062***	0.015	0.000	-0.077***
	(0.002)	(0.007)	(0.010)	(0.012)	(0.012)	(0.012)
Bilingual	-0.003**	-0.001	-0.021***	-0.006	0.014**	0.013***
	(0.001)	(0.004)	(0.005)	(0.006)	(0.005)	(0.005)
Farming Household	0.000	-0.002	-0.008*	-0.005	0.006	0.007
	(0.001)	(0.003)	(0.004)	(0.005)	(0.004)	(0.004)
Roman Catholic	0.004***	0.003	0.000	0.009	-0.005	-0.004
	(0.001)	(0.004)	(0.005)	(0.006)	(0.006)	(0.006)
Household Head Illiterate	0.008***	0.009***	0.016***	0.015***	-0.013***	-0.019***
	(0.001)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Eldest Child	0.004***	-0.001	-0.286***	-0.175***	0.182***	0.279***
	(0.001)	(0.002)	(0.004)	(0.005)	(0.004)	(0.003)
Urban Household	-0.003	0.014*	0.002	0.010	-0.007	-0.005
	(0.003)	(0.008)	(0.010)	(0.011)	(0.011)	(0.010)
Age of Eldest	0.003***	0.051***	0.005***	-0.001	-0.002	-0.003**
	(0.000)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Age of Eldest^2	0.000**	0.000***	0.000***	0.000	0.000	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Household Size	0.000***	0.001*	-0.010***	-0.006***	0.009***	0.007***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
Eligible Female	0.087***	0.252***	0.010**	0.002	-0.004	-0.007*
	(0.001)	(0.003)	(0.004)	(0.005)	(0.004)	(0.004)
Full Specification	✓	✓	✓	✓	✓	✓
R^2	0.596	0.783	0.242	0.088	0.093	0.240
Observations	67,472	67,472	67,472	67,472	67,472	67,472

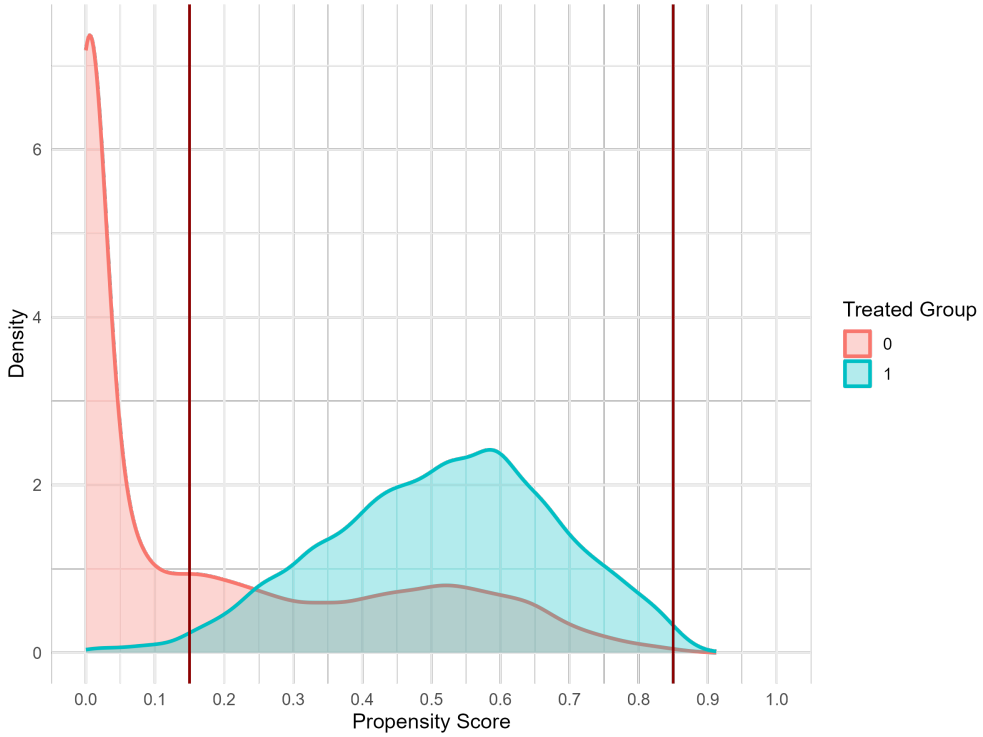
70, 13, 14, 15, and 16 y/o are dummies that indicate whether households contain an over 70 year old or a 13, 14, 15 or 16 year old child. Significance levels: ***p<0.01, **p<0.05, *p<0.1

Figure A.3: Bivariate regressions of estimated OAP claims and error $\sim$ age misreporting intensity



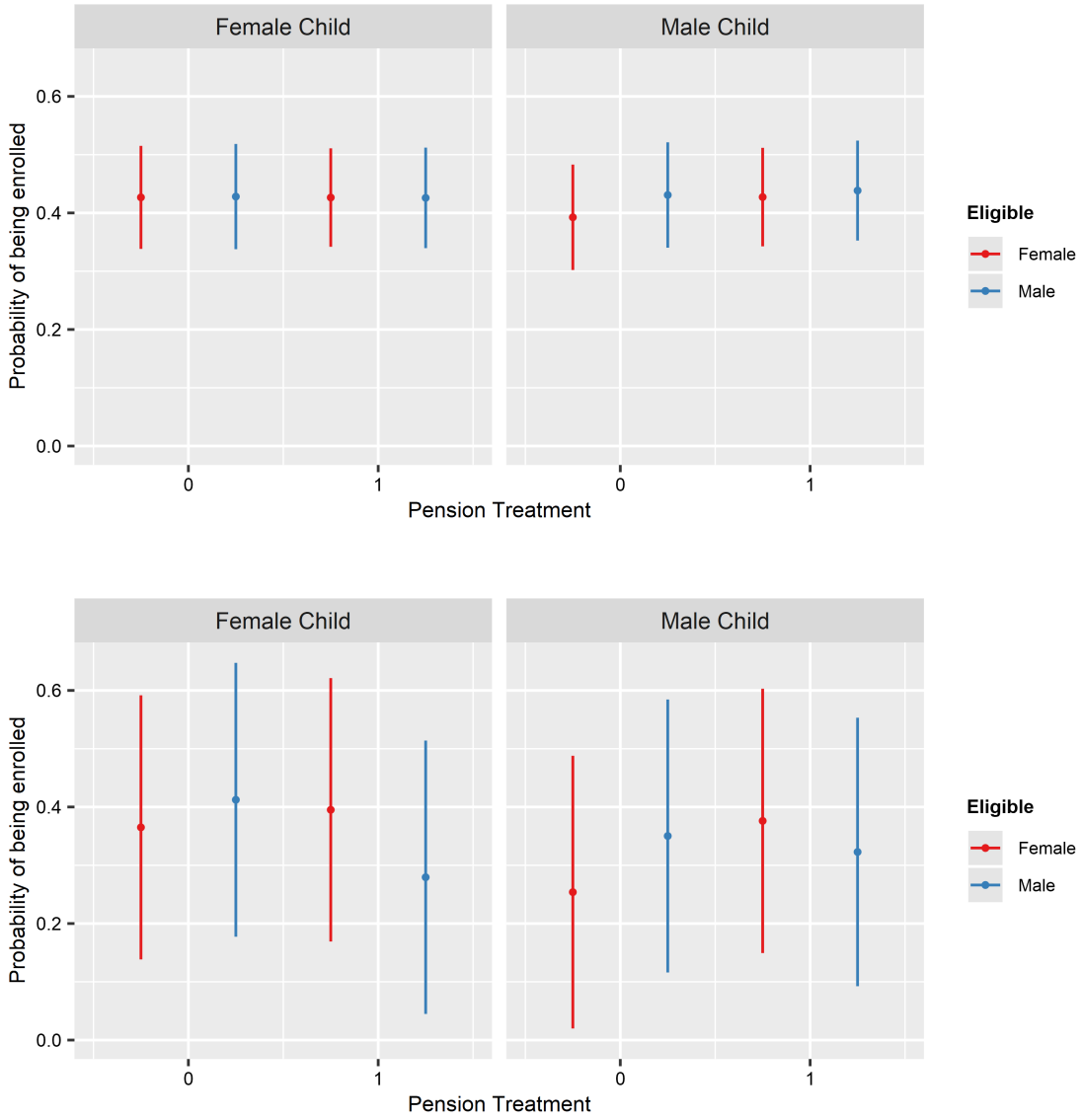
Note: Panel A shows no obvious correlation between estimated OAP claims and age misreporting intensity at county level. Panel B shows a modest positive correlation between the extent that treatment is assigned erroneously. This suggests that treatment is over-assigned to counties with higher instances of age misreporting.

Figure A.4: Propensity score density plot by treatment status



Note: Treated Group 1 indicates children residing with an OAP recipient in 1911 and 0 are all untreated multigenerational households. Vertical lines represent the screening threshold where $0.15 < p(X_i) < 0.85$.

Figure A.5: Point estimates likelihood of enrolment by treatment status, sex of child and sex of eligible person.



Note: Top panel uses full propensity score screened sample and bottom panel uses the richest 20% of households only. 95% confidence intervals shown around point estimates.

Table A2: Heterogeneity by age cohort and sex

	Child Enrolled in School				
	(1)	(2)	(3)	(4)	(5)
Pension	0.152***	0.115**	0.111	0.211**	0.209**
	(0.035)	(0.053)	(0.078)	(0.090)	(0.088)
Pension × Female Child	-0.126***	-0.122**	-0.081	-0.127	-0.206**
	(0.032)	(0.054)	(0.075)	(0.087)	(0.082)
Female Child	0.026***	0.014	0.005	0.048***	0.048***
	(0.007)	(0.012)	(0.016)	(0.018)	(0.016)
Age Cohort	All	13 y/o	14 y/o	15 y/o	16 y/o
Full Specification	✓	✓	✓	✓	✓
R^2	0.358	0.325	0.330	0.398	0.394
Observations	38,400	10,276	10,460	9,035	8,629

Control group mean enrolments for ages 13 - 16 are 86%, 67%, 45% and 26% respectively. Standard errors clustered at household level. Significance levels: ***p<0.01, **p<0.05, *p<0.1.

Table A3: Robustness to alternative matching techniques

	Child Enrolled in School					
	(1)	(2)	(3)	(4)	(5)	(6)
Pension	0.127***	0.149***	0.111***	0.127***	0.139***	0.314**
	(0.028)	(0.036)	(0.038)	(0.035)	(0.034)	(0.152)
Pension × Female Child	-0.129***	-0.126***	-0.137***	-0.137***	-0.144***	-0.148
	(0.025)	(0.032)	(0.033)	(0.030)	(0.030)	(0.131)
Female Child	0.023***	0.026***	0.026***	0.026***	0.028***	0.035
	(0.004)	(0.007)	(0.007)	(0.006)	(0.006)	(0.029)
Matching	None	P-Screen	NN	NN + C	Mah	Exact
Full Specification	✓	✓	✓	✓	✓	✓
R^2	0.331	0.358	0.361	0.355	0.353	0.563
Observations	67,472	38,400	34,772	38,074	38,074	3,887

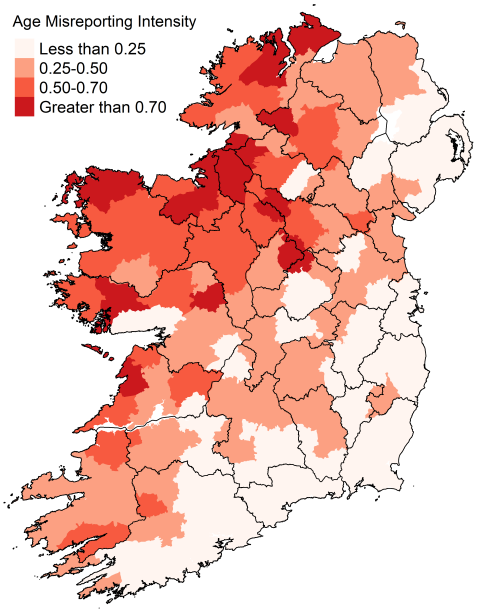
Matching for (2) - (5) conducted using identical observables. (6) differs and uses a dummy to indicate if an over 70 year old in household rather than age of eldest relative. Caliper is 0.01. Standard errors cluster at the household level. Significance levels: ***p<0.01, **p<0.05, *p<0.1.

Table A4: Robustness to age misreporting, cities and Irish speaking areas

	Child Enrolled in School					
	(1)	(2)	(3)	(4)	(5)	(6)
Pension	0.149***	0.119***	0.141***	0.139***	0.129***	0.111**
	(0.036)	(0.040)	(0.037)	(0.039)	(0.040)	(0.043)
Pension × Female Child	-0.126***	-0.119***	-0.126***	-0.100***	-0.100***	-0.104***
	(0.032)	(0.034)	(0.032)	(0.034)	(0.034)	(0.037)
Female Child	0.026***	0.031***	0.027***	0.020***	0.021***	0.025***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
Sample	Baseline	AMR	Irish	City	City/Irish	Drop all
Full Spec	✓	✓	✓	✓	✓	✓
R^2	0.358	0.354	0.359	0.360	0.361	0.361
Observations	38,400	33,010	37,893	32,571	32,085	28,533

AMR drops all high age misreporting areas, Irish drops areas with a high number of census returns in Irish, City drops all children residing in urban areas. Significance levels: ***p<0.01, **p<0.05, *p<0.1.

Figure A.6: Map showing age misreporting intensity at Poor Law Union level.



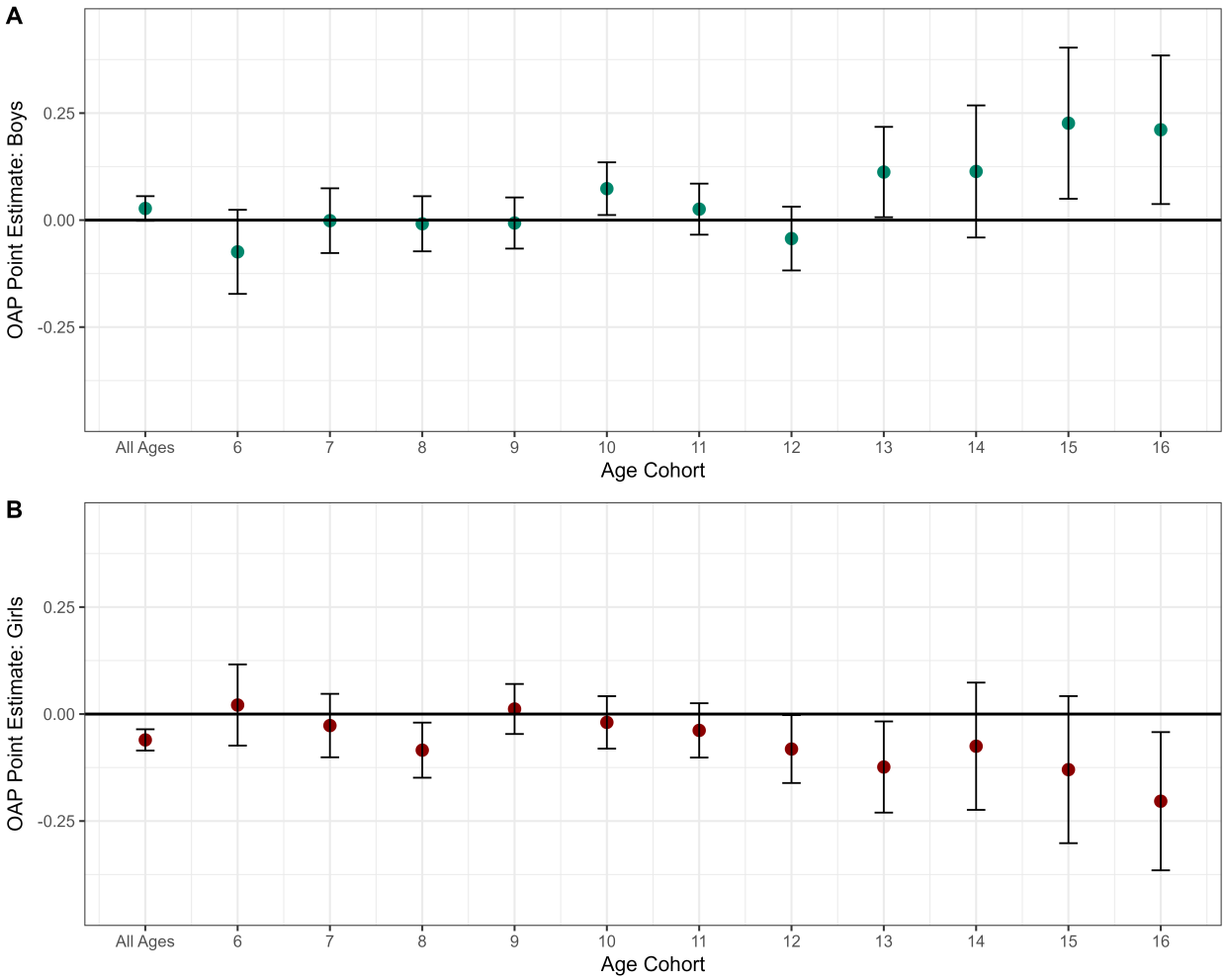
Note: Age misreporting is the difference between the share of the population aged between 55 and 64 in 1901 and the share of the population aged 65 to 74 ten years later in 1911. This measure is normalised between 0 and 1 where 1 indicates the area with the most occurrences of age misreporting. Children residing in the darkest red areas are dropped as part of my robustness exercises.

Table A5: Robustness tests for treatment group contamination

	Child Enrolled in School			
	(1)	(2)	(3)	(4)
Pension	0.149***	0.162***	0.148***	0.162***
	(0.036)	(0.038)	(0.038)	(0.039)
Pension × Female Child	-0.126***	-0.129***	-0.131***	-0.135***
	(0.032)	(0.032)	(0.033)	(0.034)
Female Child	0.026***	0.029***	0.025***	0.028***
	(0.007)	(0.007)	(0.007)	(0.007)
Sample	Baseline	No Down	No Cork	No Down/Cork
Full Specification	✓	✓	✓	✓
R^2	0.358	0.356	0.361	0.359
Observations	38,400	36,674	35,015	33,289

Enrolment rate of control group is 58%. Significance levels: ***p<0.01, **p<0.05, *p<0.1.

Figure A.7: All children of school age 6–16 cohort estimates



Note: Panel A is the effect of the OAP for boys and Panel B is the interaction between the OAP and the presence of a female child showing the treatment difference when the child is a girl. Policy only begins to positively affect older boys. The effect for girls is lower, with this effect increasing with age.

B Wage Data Sources and Generation Procedures

Table B1: Wage Data Sources

Statistic	Description	Source
Crop Yields and Acreage	Crop yields (weight) by Poor Law Union. Limited to crops with available price data: wheat, oats, barley, rye, flax, and potatoes.	British Parliamentary Papers (1911a, 1912b).
Livestock	Animal counts by age and Poor Law Union. Limited to stock with available price data: cattle (bulls, milch, heifers, calves), sheep (rams, ewes, lambs), and pigs (boars, sows, piglets).	As above.
Crop and Livestock Prices	Price data in GBP (£) for all crops and livestock above. Crop prices by weight and animal prices by headcount.	British Parliamentary Papers (1912a).
Milk Prices	Average milk price per gallon in GBP (£), paid by creameries 1897–1918.	McLaughlin et al. (2023).
Farm sizes	Average farm size in acres by Poor Law Union.	British Parliamentary Papers (1913a).
Marketable Share of Product	Estimates of the marketable share of agricultural production.	Barrington (1927) and Turner (1987).
Agricultural Commodity Income	Production and prices of auxiliary agricultural commodities: milk, wool, hides, turf, poultry, horses, and slaughter of spent animals.	Turner (1987) and British Parliamentary Papers (1913c).
Domestic Servants	Average wages in GBP (£) of female domestic servants across 359 households in Dublin, Belfast, Cork and Limerick. Includes cooks, dairymaids, kitchen maids, lady's maids, laundry maids, parlour maids, house maids, nurses, and housekeepers.	Collet (1899).

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Statistic	Description	Source
Spinners, Weavers, and Winders	Weekly starting and maximum salaries for female textile workers in the Belfast Linen industry.	British Parliamentary Papers (1908).
Railway Workers	Average salaries of railway workers across three major Irish rail networks by age, sex, and occupation. Includes inspectors, drivers, porters, brakemen, engineers, van-men, draymen, watchmen, signalmen, firemen, cleaners and stokers.	British Parliamentary Papers (1893).
Postal Workers	Rubric describing starting wages, annual pay progression, and maximum salaries of postal workers employed by the General Post Office of Ireland (Dublin). Includes postmen, sorters, porters, messengers, labourers, and carriers.	As above.
Tradesmen	Hourly wages, weekly hours worked, and weekly income of tradesmen in 43 Irish towns/cities. Includes carpenters, bricklayers, masons, slaters, plumbers, plasterers, smiths, turners, fitters, pattern–makers, brass moulder/finishers, iron founders, platers, shipwrights, riveters, bookbinders/printers, and compositors.	British Parliamentary Papers (1901b,a).
Urban Labourers	Average weekly wages by sex of general labourers and stone–breakers.	Ó Gráda (1994).
Farm Labourers	County average weekly wages of farm labourers (men and boys) and ploughmen. Minimum and maximum wages also reported by accommodation status: full–board, half–board, and money wages only.	Fitzpatrick (1980) and British Parliamentary Papers (1911b).

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Statistic	Description	Source
National School Teachers	Rubric describing starting wages, triennial pay progression, and maximum salaries by sex and occupation. Includes assistant teachers, teachers (various grades), head teachers, and class monitors.	Dale (1904).
Royal Irish Constabulary (RIC) and Dublin Metropolitan Police (DMP)	Rubric describing starting wages, annual pay progression, and maximum salaries by occupation and police force. RIC includes district inspectors (various grades), head constable major, head constable, sergeant, acting sergeant, and constables. DMP includes chief superintendent, superintendent, inspectors, station sergeant, sergeant, constables, supernumeraries and detective officers.	British Parliamentary Papers (1914) and Constabulary (Ireland) Act (1908).
Medical Doctors	Individual level wage data for 808 medical doctors employed by the Irish Poor Law by dispensary district. Includes starting wages, pay progression, and maximum salaries.	British Parliamentary Papers (1911c).
Public Sector Clerks	Various rubrics describing starting wages, annual pay progression, and maximum salaries of clerks employed in Government departments, Includes clerks (various classes), assistant clerks, and temporary clerks employed by the Irish National Health Insurance Commission, Local Government Board, and Land Commission.	British Parliamentary Papers (1913b, 1897).

Table B2: Wage Data Generation

Statistic	**Description**	**Geography** (n)
Labourer's Wages	Farm labourers assigned average weekly wage at county level. Urban labourers assigned national average by sex.	County (32) and National (1).
Farmer Crop	Annual crop yields adjusted for markable share of produce and converted into income using 1911 prices.	Poor Law Union (158).
Farmer Livestock	Disappearance rate of animals between 1910–1911 proxies livestock slaughter rate. Disappearance adjusted for natural mortality rates of cattle and sheep (5 and 12 per cent respectively) as per Turner (1987). Number of "disappeared" animals converted into income using 1911 prices.	Poor Law Union (158).
Farmer Milk	Working dairy cows is total milch cows minus heifers, and a further 5 per cent for animals that have been allowed to go dry. Each cow is allowed to produce 375 gallons (1704 litres) of milk annually as the mid–point of Turner (1987) and British Parliamentary Papers (1913c). 35 gallons is subtracted from total production for each calf and 5 gallons for each piglet in line with Turner (1987). Milk production converted into income using average price per gallon.	Poor Law Union (158).
Farmer Auxiliary Commodities	As per Turner (1987), adult sheep produce one 11b (5kg) fleece annually and 95 per cent of adult poultry produce 50 eggs annually each. Commodities converted into income as before. To account for missing production (turf, horses, poultry, hides, etc.), a final 5 per cent mark–up is applied to every item of production.	Poor Law Union (158).

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Statistic	**Description**	**Geography** (n)
Farmer's Wages	Income per acre is estimated by dividing the total income from crops, livestock, milk, and auxiliary product by total agricultural acreage. This is multiplied by average farm size to estimate income per agricultural holding. Wages are assigned to the first farmer in each household via areal interpolation using their District Electoral Division of residence.	Poor Law Union (158).
Domestic Servants	Average salaries assigned by occupation. Male domestic servants receive a 16 per cent salary bonus in line with the gender pay gap in teaching.	National (1).
Textile Workers	Average starting salaries assigned by occupation and sex to all weavers, spinners, and winders. Annual pay progression assigned by calculating an arbitrary measure of work experience $(age_i - 18)$, where negative values are coded to zero. As before, male wage progression is 16 per cent larger than females and is assigned until the relevant maximum salary is reached.	National (1).
Railway Workers	The three historical railway networks are matched to their nearest county. Railway worker wages are assigned by network, occupation, age, and sex. In County Dublin, where the networks converged, workers are assigned the average wage by occupation across all three networks.	County (32)

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Statistic	**Description**	**Geography** (n)
Tradesmen	An average tradesman wage is calculated across 43 localities and aggregated to Poor Law Union. Wages are extrapolated to Unions without any wage data using inverse distance weighting and distance to the nearest Union where tradesman wages are known. Wages are assigned to individuals by areal interpolation using District Electoral Division of residence.	Poor Law Union (158).
National School Teachers	Wages are assigned by occupation, sex, and age. As before, triennial pay progression is assigned using approximated work experience until the relevant maximum salary. All teachers are treated as Second Grade Teachers due to missing class/qualification data. Head Teachers are assigned First (higher) Grade wages following Dale (1904).	National (1).
Police Forces	Royal Irish Constabulary and Dublin Metropolitan Police wages assigned by occupation and age. Annual pay progression is assigned using approximated work experience $age_i - 19$ to account for recruitment age until the relevant maximum salary. Any individual that does not specify their rank is assigned a Constable salary. Finally, female police wages are re–coded to zero as these are errors (females banned).	National (1).
Postal Workers	Wages are assigned by age and occupation. Annual pay progression assigned using an arbitrary measure of work experience $age_i - 18$ until the relevant maximum salary.	National (1).

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Statistic	**Description**	**Geography** (n)
Clerks	Clerks referencing a Government Department in their Census return are classified as public sector and assigned 2nd Class Clerk salaries (Local Government Board). Assistant clerks are assigned their respective Local Government Board wages. Work experience and annual pay progression is calculated as before. Other clerks are assigned private–sector wages with a 30 per cent discount to reflect the public–private wage gap.	National (1).
Other Skilled Workers	Remaining Skilled Workers are assigned the average wage of all known skilled workers by age.	National (1).
Other White Collar	Remaining White Collar workers are assigned the average wage of all known White Collar workers by age.	National (1).
Retirees and Unemployed	White Collar retirees are assigned 58 per cent of their equivalent working income in line with retirement schemes of teachers and police officers. All other retirees, as well as those who describe themselves as "out of work" or "unemployed", are assigned zero income	National (1).
Other Female Workers	Wages for female workers who do not have a sex–specific wage are discounted arbitrarily by 16 per cent in line with the institutionalised gender pay gap in teaching.	National (1).
Literacy	Wages for individuals who are "illiterate" are arbitrarily discounted by 20 per cent. Wages for individuals who can "read only" is discounted by 10 per cent.	National (1).

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