

Using the Earnings and Employees Study 2011 to estimate Catholic-Protestant wage differentials

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Date: 19/07/2023

Summary

The Earnings and Employees Study (EES) 2011 links wage and employment data from the Annual Survey of Hours and Earnings (ASHE) for 2011 with detailed individual and household characteristics information, including religious denomination and community background, from the 2011 Census. Analysing this linked data, we find no evidence of either a Catholic wage penalty or premium in 2011, with estimated wage gaps small in magnitude and statistically insignificant in unadjusted and adjusted models.

What we did

We used the EES data to estimate wage regressions, for working age individuals, to estimate Catholic/Protestant wage differentials, both:

- unadjusted: not accounting for other measured differences between Catholics and Protestants in the data, and
- adjusted: accounting for differences in relevant measured individual, household, and job characteristics between Catholics and Protestants in the data.

Here, we present the main unadjusted and adjusted regression estimates for the overall sample. In the full paper¹ we present further statistical analysis, including: Oaxaca-Blinder decomposition analysis, quantile regression analysis, and regression analysis separately by sex, age group, and sector.

Background

There is extensive historical literature on unemployment differentials between Catholics and Protestants in Northern Ireland. However, a lack of suitable data has meant that very little detailed evidence has ever been presented on wage differentials.

Newly available EES data for 2011, however, offers a valuable opportunity to examine this question for 2011. Compared to the Labour Force Survey, this data offers advantages in terms of sample size and in the quality of wage data.

What we found

The table below presents the key wage regression estimates for the EES sample. Coefficients show the estimated log percent difference between Catholic and Protestant wages at the mean.

In the unadjusted model (model 1) and the model adjusted for individual and household characteristics, but not job characteristics (model 2), the estimated wage gap is zero.

The estimate is slightly larger in the fully adjusted model (model 3, which adjusts for job characteristics as well as individual and household characteristics). This suggests an imprecisely estimated Catholic wage penalty of 1.4 log percent. However, because this estimate is not statistically significant, we cannot be confident it is not zero (the 95% confidence interval contains zero).

In other words, regardless of the extent to which we control for differences in measured characteristics between Catholics and Protestants in the EES sample, we find no clear evidence of a Catholic-Protestant wage differential in Northern Ireland as of 2011.

Regression Estimates of the Catholic Wage Gap, EES 2011, All Employees

Model	1	2	3
Catholic	-0.002	-0.003	-0.014
Robust SE	(.015)	(.012)	(.011)
95% Confidence Interval	[-.032, .028]	[-.027, .021]	[-.035, .007]
Individual and Household Characteristics	No	Yes	Yes
Job Characteristics	No	No	Yes
Number of Observations	3,998	3,998	3,998

Notes: This data relates to EES2011 working-age individuals, born in Northern Ireland, identifiable as either Catholic or Protestant, excluding those with loss of pay in the reference period and those earning less than the adult minimum wage rate at the time. The table shows the estimated effect of being Catholic rather than Protestant on wages, with 95% confidence intervals in brackets showing upper and lower estimates of this effect. The estimates are progressively adjusted for religious differences in individual and household characteristics as well as job characteristics which affect wages (no adjustment in model 1, partial adjustment in model 2, and full adjustment in model 3). Individual and household characteristics include gender, age group, qualification level, marital status, activity-limiting disability, long-term health condition, dependent children, and unpaid carer status; job characteristics include occupation, industry, public/private sector, covered by collective agreement, contract type, part-time status, and work location (2014 Local Government District).

Why it matters

This study provides the most comprehensive analysis to date of communal wage inequalities in Northern Ireland, enabled by the newly available EES data for 2011.

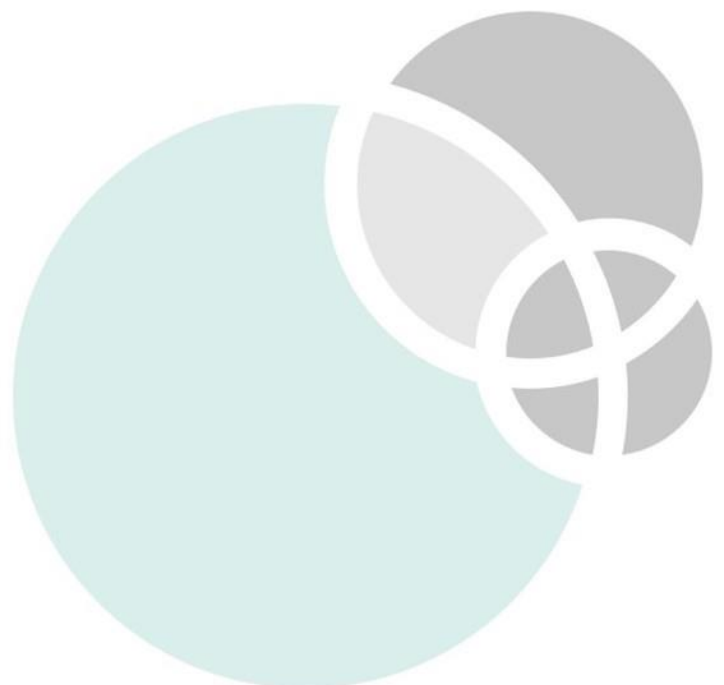
The null finding makes sense given the many structural changes in Northern Ireland's society and labour market since the late 1980s. It is consistent with the historic easing (if not complete eradication) of Catholic-Protestant unemployment differentials since that time³.

This is important because it adds to our understanding of the Northern Ireland labour market, a domain which has been an arena for sectarian dispute, but also conflict reduction and management², and for which academic literature has been dominated by analysis and discussion of unemployment differentials³.

Similar analyses of linked census and ASHE data for other years – an EES 2021 is currently planned and could be extended into subsequent years – can contribute to labour market monitoring and help inform policy on an ongoing basis.

What next?

In addition to the planned construction of an EES 2021 dataset, similar data linkages for 2001 and perhaps even 1991 would offer a valuable data source for analysis of Catholic-Protestant (and other) wage differentials earlier in Northern Ireland's transition to a post-conflict society. This was at a time when Catholic-Protestant differentials in other labour market outcomes, such as unemployment, were larger.



Acknowledgements

Administrative Data Research Northern Ireland (ADR NI) takes privacy protection very seriously. All information that directly identifies individuals will be removed from the datasets by trusted third parties, before researchers get to see it. All researchers are trained and accredited to use sensitive data safely and ethically, they will only access the data via a secure environment, and all of their findings will be vetted to ensure they adhere to the strictest confidentiality standards. The help provided by the staff of Administrative Data Research Centre Northern Ireland (ADRC NI) and the Northern Ireland Statistics and Research Agency (NISRA) Research Support Unit is acknowledged. ADR NI is funded by the Economic and Research Council (ESRC). The authors alone are responsible for the interpretation of the data and any views or opinions presented are solely those of the author and do not necessarily represent those of the ADR NI. NISRA's data has been supplied for the sole purpose of this project.

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