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# **Economic Stress and the Great Recession in Ireland: The Erosion of Social Class Advantage**

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## **Abstract**

In this paper we address claims that the impact of the Great Recession in Ireland has led to increased class polarization with the burden of the adjustment being disproportionately borne by the vulnerable. Rather than observing social class polarization, we find evidence for 'middle class squeeze' involving the self-employed and a significant erosion of the advantage associated with the higher social classes. The changing impact of social class was related to a change in the distribution of persons across classes but more importantly to a weakening of the degree of association between social class and income group and a changing pattern of interaction between them. The cumulative impact of these changes meant that by 2012 social class had no impact on economic stress net of income group. Our findings are consistent with an erosion of the buffering role of social class within the lower income categories associated with the pervasive effects of the economic crisis. Our analysis elaborates on the reasons why what from an income perspective can appear as deterioration in the position of the income poor can from a social class perspective reappear as middle class squeeze. In our conclusion we consider why our findings seem so much at variance with most of the commentary on the distributional impact of austerity in Ireland.

## **Economic Stress and the Great Recession in Ireland: The Erosion of Social Class Advantage**

### **Introduction**

In the countries most severely affected by the Great Recession, considerable debate has continued as to where the heaviest burden has fallen. In this paper our focus is on Ireland and the changing distribution of economic stress by social class. Ireland provides an interesting case first because of the severity of the recession there. The immediate contraction in national output and income was greater than in any other OECD country, so that by 2010 GNP per head in real terms was back to levels seen a decade earlier. This went together with a bursting of the property bubble, a banking crisis of unprecedented proportions, and a ballooning fiscal deficit and debt-to-GDP ratio, so that by 2010 a 'bail-out' by the EU and IMF was required. The most striking impact was on unemployment, which soared from 5% to 15%. The initial impact on household incomes was less than that on national output, but by 2012 median equivalent disposable household income had fallen by 14% in real terms.

Ireland is also of particular interest because of an ongoing and heated debate regarding the distributional consequences of the economic crisis which spans academic, policy and political spheres. Despite modest changes in conventional measures of income inequality and poverty, and evidence that the welfare system and a highly progressive tax system had substantial success in buffering the effects of the economic recession (Callan et al 2014, 2016), claims relating to increased polarization have been made by a variety of analysts and commentators who have argued that "austerity" policies have involved the imposition of additional sacrifices on the most vulnerable (O'Connor and Staunton, 2016, Social Justice Ireland, 2016).

At the same time as polarization arguments have figured prominently in Irish debates, notions of 'middle class squeeze' have also come to have considerable resonance in popular and political debate (Whelan and Maître, 2014, Whelan, Russell Maître, 2016). This development must be viewed in the context of increased taxation and a broadening of the tax base with the introduction of new income and household charges, increasing

household debt levels, the emergence of negative equity in housing, public sector redundancies and pay cuts and particular difficulties experienced by the self-employed.

Arguments relating to the need to distribute the burden of the recession more fairly figured prominently in the 2015 Irish general election campaign across a broad political spectrum. However, detailed empirical analysis supporting any of the competing interpretations has been in relatively short supply. Arguments relating to polarization in Ireland have tended to assume that the impact of the Great Recession in Ireland can be understood by drawing on the evidence from authors such as Piketty (2014) relating to long-term trends in income inequality, and from authors such as Wilkinson and Pickett (2009) regarding the negative social impacts of such inequality. However, comparative analysis relating to the impact of the Great Recession by Jenkins *et al* (2013) and Nolan *et al* (2014) showed that its initial distributional effects varied widely across countries, reflecting not only differences in the nature of the macroeconomic downturn but also the effectiveness of cash transfers and direct taxes in buffering its impact on households. In a broader context Atkinson and Morelli's (2011) comprehensive analysis of the historical relationship between economic crisis and income inequality concludes that there is no hard and fast pattern, crises differ greatly from each other in their causes and outcomes in terms of inequality. In what follows we will seek to assess the extent to which the available evidence relating to peak to trough changes in Ireland supports competing interpretations.

While our focus in this paper is on the Irish case, in order to highlight distinctive aspects of the Irish experience we will locate our discussion in the context of earlier work by Whelan, Nolan and Maître (2016) on 16 economically advanced European countries which showed that Ireland, Iceland and Greece exhibited distinctive change profiles relating to household income, material deprivation and economic stress. Our focus will be on changing patterns of variation in economic stress in Ireland while seeking to locate some of the key aspects of the Irish experience, particularly in relation to the changing impact of social class, in comparative context in order to see if and where it differs from the other countries most severely affected by the economic crisis.

Whelan, Nolan and Maître (2016), focusing on the changing impact of income category, concluded that in Ireland a restricted form of class polarization did not exclude an

element of middle class squeeze, while the latter was most evident in Iceland and the former in Greece. Here, we seek to show that taking into account the changing role of social class in addition to income group offers distinctive insights into the Irish case. Our analysis will focus on three key elements of the changing role of social class: the changing distribution of social class, changes in the association between social class and income group and changing patterns of interaction between the former and the latter.

The theoretical conception of social class employed in this paper is that developed by Goldthorpe (2006) and is based on two main principles of differentiation. The first is that of employment status. The second relates to the regulation of employment as a viable response to weaker or stronger presence of monitoring and asset specificity problems in different work situations. Individuals are understood to possess certain resources and experience varying degrees of security, prospects for advancement and constraints by virtue of the social class positions that they occupy. Atkinson and Brandolini (2013) have shown that while social stratification by the class categories of the Goldthorpe schema and clustering by income are clearly correlated the match is very far from perfect. Goldthorpe and Jackson (2007: 528) stress that while there is no inherent reason why income and social class positions should produce similar results, where economists' notion of 'permanent income' can be measured only in a 'one-shot' fashion, social class may provide important information relating to longer term command over resources.

The impact of the economic crisis, particularly on households made vulnerable by increased debt levels and affected by declining asset values (notably) property that accompanied it, is not likely to be fully captured by focusing purely on incomes. In the analysis reported here we focus on economic stress as our key outcome which we expect to be influenced not only by current income but also by wider command over resources, financial obligations, coping capacities and reference groups.

## **Data and Measures**

Our analysis draws on data from the 2008 and 2012 waves of the European Union Survey of Income and Living Conditions (EU-SILC). We exclude individuals in households where the Household Reference Person (HRP) has never worked, is 65 or older and where annual equivalent household income is zero or below. Given our

interest in the impact of the Great Recession and the fact that income refers to that in the year prior to the survey we concluded that the most appropriate comparison was between the 2008 and 2012. Comparative analysis of a range of more developed European counties shows that in no case was a decline in incomes observed before 2007. For those counties experiencing the sharpest falls these were observed between 2007 and 2011 (Whelan et al 2016)<sup>1</sup>.

### **Social Class**

Since EU-SILC coding of occupations is restricted to one-digit International Standard of Classification of Occupation (ISCO), our analysis operates with an aggregated 5-class European Union Socio-Economic Classification (ESeC) (Rose and Harrison (2007)). The main loss of information deriving from the restricted ISCO coding relates to our ability to distinguish between ESeC classes 1 & 2 – higher & lower professional & managerial and between intermediate non-manual and higher grade technicians – ESeC classes 3 & 6, and farmers & other self-employed – ESeC classes 4 & 5. Our focus is on the social class HRP which was allocated to all individuals located in the relevant households.

The social classes distinguished are set out below>

ESeC 1 & 2 Higher & Lower Professional & Managerial

ESeC 3 & 6 Intermediate/Technician

ESeC 4 & 5 Self-employed

ESeC 7 & 8 Lower Services/Technical

ESeC 9 Routine

### **Income Class**

In distinguishing income groups or what we will refer to from now on as ‘income classes’, we start with a relative income poverty threshold set at the conventional 60% of median equivalent income. We then follow Atkinson and Brandolini (2013) in setting the lower endpoint of the ‘middle income class’ at an income significantly above that

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<sup>1</sup> Earlier analyses of the changing impact of social class in Ireland by Whelan and Maître (2014) and Whelan, Russell and Maître (2016) focused on a comparison of boom (2004-2008) and recession (2008-2011) periods rather than on the impact of the recession per se,



poverty level, with a precarious class occupying the interval between 60-75%. As Atkinson and Brandolini (2013) suggest, we then distinguish a “lower middle class,” comprised of people whose income is in the range of 75–125 % of the median and who are neither poor nor precarious. We could analogously postulate that there is an “upper middle class” between the “lower middle class” and the rich or affluent by taking 125% of the median as lower cut-off, a quarter less than a “richness line” of 167% of the median identifying a top income class. Thus we are partitioning the population into five groups or ‘income classes’, facilitating our examination of the relationships between both income and social classes and economic stress.

We employ the conventional measure of household disposable income adjusted for household size, employing the “OECD-modified equivalence scale” which gives a value of 1 for the first adult, 0.5 for each additional adult and 0.3 for each child. We also adjust for inflation over the period. The income class variable we employ distinguishes 5 income categories as set out below.

- Less than 60 % of median equivalized income—income poor
- 60–75 % —precarious income class
- 75–125 % —lower middle income class
- 125–166 % —upper middle income class
- 167 % + — affluent class

We have chosen to label those between 60 and 75 % of equivalized income as the “precarious income class” because of the evidence that this group are highly likely to experience frequent transitions into and out of poverty (Jenkins 2011).

### **Economic Stress**

Our key dependent variable is a measure of economic stress, which encompasses over-indebtedness while going beyond it. It is widely recognized that the concept of over-indebtedness is multidimensional. The models employed for measuring consumer over-indebtedness include objective and subjective versions (Ferreira, 2000; Finlay, 2006; Betti et al., 2007). The former is based on the notion of unsustainable spending behaviour (consumption/income ratio) or unsustainable level of debt (debt/asset ratio) or inability to service debt (debt payment/income ratio). However, there is no

established methodology for determining the critical level of these ratios. The subjective approach classifies as over-indebted all those who judge themselves to be unable to repay their debts without reducing their remaining expenditure below their normal minimal levels. The implication is that the debt has become unsustainable. One difficulty with this measure is that tolerance for debt may vary across countries, time, socio-economic groups and individuals and therefore may be an unstable indicator if used in isolation.

A consortium of researchers appointed by the European Commission to develop a common operational definition of over-indebtedness proposed a mix of objective and subjective indicators (Davydoff et al 2008). They included payment commitments that push the household below the poverty threshold, structural arrears on at least one financial commitment, a burden of monthly commitment payments considered to be heavy for the household, limited payment capacity, and illiquidity.

Drawing on the items available in EU-SILC our proposed indicator of economic stress includes items relating to structural arrears, burden of housing costs, illiquidity in terms of inability to meet with unexpected expenses and adds items relating to debt experiences in the past 12 months and experiencing difficulty in making ends meet.

The full set of items we employ is as follows:

- 1 Households were defined as having a structural problem with arrears where they were unable to avoid arrears relating to mortgage or rent, or utility bills or hire purchase instalments (in the past 12 months). Those households experiencing such problems were given values of 1 while the remainder were scored as 0.
2. Focusing on illiquidity, individuals in households indicating that they were unable to cope with unexpected expenses were scored 1 while all others were scored 0.
3. Respondents indicating that housing costs were a “heavy burden” or “somewhat of a burden” were scored as 1 while the remaining category was assigned a value of 0.
4. A further indicator of debt was captured by the question “Has the household had to go into debt within the last 12 months to meet ordinary living expenses such as

mortgage repayments, rent, food and Christmas or back-to-school expenses?” A positive answer was scored as 1 while a negative one was assigned a value of 0.

5. Respondents indicating that the household had “great difficulty” or “difficulty” in making ends meet have been given a value of 1 while the remaining categories have been scored as zero.

For the Irish sample, on which the subsequent analysis is based, highly satisfactory levels of Cronbach’s alpha 0.75 in 2008 and 0.77 in 2012 were achieved..

Each item is weighted by its prevalence weight in the population at the time the survey was undertaken. The weighted items are summed to produce a continuous variable which has then been ‘normalized’ to produce scores ranging from 0 to 1. A score of zero means that the individual is not stressed on any of the items while a score of 1 means that the individual is stressed.

### **Changing Levels of Economic Stress in Ireland**

In Table 1 we employ these measures to set out the overall levels of economic stress in 2008 and 2012 in the Irish case, averaged across the survey samples. A significant increase in the overall stress level was observed from 0.213 to 0.344. This absolute increase of 0.131 was similar in scale to those seen in Iceland and Greece the other countries most severely affected by the economic crisis (see Whelan, Nolan and Maitre, 2016).

*Table 1: Mean level economic stress year of survey for Ireland*

	Economic Stress
2008	0.213
2012	0.333
Eta <sup>2</sup>	0.045
F	890.64
N	18,839

### The Changing Distribution of Economic Stress by Income Class and Social Class

From Table 2 we can see that in 2008 in Ireland just over one third of individuals were found in the professional and managerial classes and one-sixth in the intermediate/technician classes. Just over than one half were located in one of the above classes. Just over one in ten were found in the self-employed class. Just less than four out of ten of the Irish respondents were found in the three classes at the bottom of the hierarchy compared. Changes in the distribution of social class in Ireland primarily involved reductions in the numbers in the professional/managerial and self-employed classes. However, the scale of the change over time was modest with the index of dissimilarity, which captures the extent of the changes required to produce identical distributions across time, reaching 6%.<sup>2</sup> It is clear that, to the extent that social class contributes to explaining changed stress levels in Ireland, our focus must be on the changing impact of social class rather than its changing distribution.

Table 2: ESeC Class Distribution in Ireland by Year of Survey

	Ireland	
	2008	2008
	%	%
Professional & Managerial	35.0	32.0
Intermediate/Technician	17.0	19.3
Self-employed	10.9	7.4
Lower Services/Technical	22.0	21.5
Routine	15.1	19.8
Total	100	100
N	10,152	8,788
Index of dissimilarity	6.0	

In Table 3 we look at variation in stress levels by social class in Ireland over time. In 2008 social class differences in Ireland accounted for 12.1% of the variance. This was somewhat higher than in Greece where the figure was 9.0% and substantially higher than in Iceland where social class played a very modest role with the proportion of variance explained reaching only 1.4%. Over time the explanatory power of social class in Ireland declined substantially to 4.9%. In Greece little change was observed with the 2012 figure declining very slightly to 8.7% while for Iceland it increased slightly. Among the counties most severely affected by the Great Recession, Ireland thus constitutes a

<sup>2</sup> The corresponding figures for Iceland and Greece were 6.1% and 2.8%.

distinctive case in that, while social class played an important role in accounting for economic stress at the beginning of the recession, a substantial reduction in its impact was observed by 2012. Accounting for the erosion of the role of social class in relation to stress levels over the course of the economic crisis is the central challenge we address in the remainder of the paper.

The changing pattern of social class effects is set in Table 3. In 2008, with the exception of the self-employed, there was a clear pattern of hierarchical variation, with stress levels ranging from 0.121 for the professional/managerial class to 0.331 for the routine class with a clear contrast between the white collar and manual classes. For the self-employed the stress level of 0.155 was lower than for all social classes other than the professional and managerial class. Over time the explanatory power of social class declined in accounting for only 4.9% of the variance by 2012. By far the largest increase of 0.209 was observed for the self-employed. For the white collar classes and the lower services/technical class the average increase was 0.125. For the routine class the increase fell to 0.074. Thus we observe a combination of middle class squeeze and a reduction in social class polarization relating to those at the bottom of the social class hierarchy.

*Table 3: Economic Stress By Social Class by Country by Year*

	<i>Ireland</i>		
	<i>2008</i>	<i>2012</i>	<i>Increase</i>
Professional & Managerial	0.121	0.247	0.126
Intermediate/Technician	0.224	0.346	0.122
Self-employed	0.155	0.364	0.209
Lower Services/Technical	0.297	0.424	0.127
Routine	0.331	0.405	0.074
Total	0.213	0.343	0.130
Eta <sup>2</sup>	0.121	0.049	
F	252.7	112.4	
N	10,152	9,263	

## **The Changing Impact of Income Class and Social Class on Economic Stress in Ireland**

At this point we focus our attention on the changing impact of social class in Ireland while also taking into account the role of income class. In line with our earlier observation on the modest nature of changes in the distribution of social classes, we find that controlling for this factor results in a slight reduction in stress levels in Ireland from 0.131 to 0.123 or 6% per cent<sup>3</sup>. To the extent that social class contributes to explaining changed stress levels in Ireland, it must stem primarily from changes in the impact of social class rather than its distribution.

In Table 4 we focus on such change.<sup>4</sup> Our analysis considers the changing gross and net impact of social class and income class. Equation (i) reveals a hierarchical pattern of social class effects in Ireland in 2008. Relative to the benchmark of the professional and managerial class, economic stress was 0.034 higher for the self-employed, 0.103 higher for the intermediate/technical group, 0.176 for the lower services/technical group and 0.210 for the routine class. Social class accounts for 9.1% of the variance in economic stress. Shifting our attention to income class in equation (ii) we again observe a distinct pattern of hierarchical differentiation with the only deviation being that the coefficient for the income poor category is slightly lower than for the precarious class. The additional level of stress relative to the affluent class increases gradually from 0.070 for the upper middle class to 0.180 for the lower middle to 0.323 for the precarious class. Income class accounted for 15.1% of the variance in economic stress.

When we enter income class and social class simultaneously in equation (iii), the coefficients for the former are reduced by an average of 0.4. For social class the impact of self- employments is reversed with the coefficient going from 0.034 to -0.030. For the remaining social classes the coefficients are approximately halved but remain significant. The combined impact of income class and social class accounts for 17.8% of the variance. The respective unique contributions for the former and the latter are 8.7% and 2.7% while the shared portion is 6.4%. Thus in 2008 social class had a significant impact on economic stress that was independent of income class and a significant influence that was shared with the latter.

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<sup>3</sup> See equations (i) & (ii) Table 5.

<sup>4</sup> Significance levels are corrected for clustering of individuals within households

By 2012 substantial changes were observed in the relative impact of social class and income class. Focusing on social class, in equation (i) we find that for the intermediate and lower services/technical group there was no significant change. For the self-employed class, on the other hand a substantial increase of 0.083 was observed. In contrast, the impact of being in the routine class was significantly reduced by 0.052. The proportion of variance accounted for by social class fell to 4.9%. Shifting our attention to income class in equation (ii), we find that stress levels increased substantially for all income classes. For the affluent class and the upper middle class the increase was 0.076. The gap between these classes and the remaining classes widened over time but the pattern of change did not involve a clear hierarchical outcome. Instead the largest increases in the gap of 0.080 was observed for the lower middle class followed by of 0.067 for the income poor and a lesser increase of 0.036 for the precarious class. This produced a reversal of the positions of the poor and precarious classes. At this point in time the percentage of variance in economic stress accounted for by income class increased to 18.0%.

Unlike the situation in 2008, entering income class and social class simultaneously has a negligible impact on the coefficients relating to the former. However, controlling for income class led to substantial reductions in all of the social class coefficients. Thus for the self-employed the coefficient became insignificant while the remaining coefficient were reduced by approximately three quarters. As a consequence the net gap between the self-employed and the professional managerial class, as reflected in the coefficient of 0.041, increased while that for the remaining classes declined, as indicated by negative coefficients respectively of  $-0.026$ ,  $-0.040$  and  $-0.079$  for the intermediate/technical, lower services/technical and routine classes. Thus we observe a clear reduction in the net impact of social class. The combined impact of income class and social class accounted for 18.3% of the variance. The unique contributions of the former and the latter were respectively 13.4% and 0.3% respectively while the shared variance was 4.6%. Thus by 2012 social class added nothing to our ability to predict economic stress once we take income class into account.

In combination these findings provide somewhat more support for notions of middle class squeeze accompanied by a reduction in hierarchical differentiation rather than an accentuation of class polarization. In 2008 both income class and social class

contributed significantly to explaining economic stress with the pattern of effects being interpretable in a relatively straight forward hierarchical fashion. The former played a somewhat stronger role in mediating the effects of the latter but the net effects of both were highly significant. Over time stress levels increased significantly for all income and social classes. For income classes the pattern of change involved an increase in the gap between the affluent and upper middle classes and the remaining classes. This was true in relation to both net and gross effects. Income class effects remained highly significant overtime. However, the pattern of change did not involve unambiguous class polarization. Instead the largest increase was observed for the lower middle class followed by the income poor with the precarious class occupying an intermediate position. So we observe elements of both polarization and middle class squeeze.

The pattern of change in relation to social class was significantly different. In this case, contrary to claims relating to polarization, what we observe is in large part an attenuation of class differences. The self-employed experienced a significant deterioration in their circumstances and the lower service/technical and routine classes experienced a significant improvement relative to all other classes. The scale of the change was such that by 2012 social class contribute almost nothing in the way of additional explanatory power once income class differentiation is taken into account.<sup>5</sup>

The somewhat different pictures presented by income class and social class analysis is consistent with the evidence from Savage et al (2015) that in comparisons of adjacent years at each point in time during the recession those experiencing the sharpest falls in income constituted a transient individuals rather than a permanent group and are likely to have comprised a significant number of the self-employed<sup>6</sup>. Consistent with this in 2008 16% of the self-employed were found in the income poor category and 41% in the lower middle class while by 2012 the respective figures were identical at 27%. Changes in the numbers in the remaining income classes, including the precarious class, were extremely modest. So the shift over time was almost entirely from the lower middle class to the income poor. Thus what from an income class perspective can appear as

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<sup>5</sup> This pattern is consistent with the corresponding set of changes relating to percentage reduction in household equivalent income. The largest reduction of 30% was for the self-employed, the smallest of 14% for the routine class with the average for the remaining classes being 18%

<sup>6</sup> Serious issues relating to levels of attrition in the panel element of EU-SILC make it unreliable to go beyond such comparisons.



deterioration in the position of the income poor and serve as evidence of polarization from a social class perspective can reappear as middle class squeeze

Table 4: Multiple Regression of Economic Stress with Income Class and Social Class for Ireland<sup>7</sup>

	2008			2012			2012-2008		
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	(i)	(ii)	(iii)
Constant	.121	.057	.043	.247	.133	.125	.126 ***	.076 ***	.082 ***
Poor		.307 ***	.257 ***		.384***	.365***		.067 **	.108 ***
Precarious class		.323***	.260 ***		.359 ***	.338***		.036 ns	.078 ***
Lower middle		.180 ***	.144 ***		.260***	.244 ***		.080 **	.100***
Upper middle		.070 ***	.054 ***		.070 ***	.061***		.000 ns	.007 ns
Intermediate/Tech	.103 ***		.050 **	.099 ***		.024 ns	-.004 ns		-.026 ns
Self-employed	.034 ns		-.030 ns	.117 ***		.011 ns	.083 **		.041 *
Lower Services/Technical	.176 ***		.090 ***	.177 ***		.050*	.001 ns		-.040 *
Routine	.210 ***		.107 ***	.158 ***		.028*	-.052 **		-.079 ***
R <sup>2</sup>	0.091	0.151	0.178	.049	0.180	.183			
N	10,064	10,064	10,064	8,775	8,775	8,775			

\* p < .1, \*\*p < .01, \*\*\*P < .001

### Changing Patterns of Interaction between Social Class and Income Class

The foregoing analysis assumes that the changing pattern of association between social class and income class was uniform across income classes. In order to further develop our understanding of the changing impact of income and social class and the manner in which they interact, in Tables 5A and 5B we set out the impact of social class within income categories for 2008 and 2012. From Table 5A we can see that in 2008 social class contributed significantly to accounting for variation in economic stress within income classes, particularly towards the bottom of the income hierarchy. For the three lowest income classes the average percentage of variance explained was 5.6%. For the upper middle and affluent classes this fell to 2.1%. Within the income poor class a clear social hierarchy emerged with the only deviation being the distinctive advantage enjoyed by the self-employed. Among the precarious class, the self-employed enjoyed the most favourable position while all other classes were advantaged relative to the routine class. For the lower middle class stress levels were least for the self-employed followed by the professional and managerial class. Among the upper middle and affluent income classes social class variation was a good deal more modest and the distinctive

<sup>7</sup> The significance levels for changes over time are derived from the appropriate equation including interactions of time of survey with income class and social class as in the analysis in Table 6

advantages conferred by membership of the professional/managerial and self-employed classes were much less in evidence.

Table 5A: Economic Stress by Income Class by Social Class by 2008

	Mean	Mean	Mean	Mean	Mean	Eta <sup>2</sup>	F	N
	Poor	Precarious	Lower Middle	Upper Middle	Affluent			
Prof & Mang	0.200	0.333	0.170	0.120	0.048	0.094	91.6	3,530
Inter/Tech	0.373	0.345	0.250	0.095	0.109	0.139	68.1	1,697
Self-employed	0.316	0.215	0.120	0.125	0.056	0.119	36.7	1,095
Low Sec/Tech	0.383	0.348	0.304	0.179	0.039	0.075	45.0	2,218
Routine	0.418	0.478	0.283	0.134	0.028	0.154	69.1	1,524
Total	0.364	0.364	0.233	0.126	0.057			
Eta <sup>2</sup>	0.044	0.066	0.057	0.013	0.029			
F	15.10	20.62	58.07	6.26	13.4			
N	1,320	1,170	3,855	1,933	1,835			

By 2012, as can be seen from Table 5B, a substantially different picture emerged with social class offering little in the way of explanatory power within income classes with the average percentage of variance explained across income classes barely exceeding 1%. Thus by 2012 the role of social class in buffering the impact of location in the lower income classes, and in particular the benefits of membership of the professional and managerial and self-employed classes had been largely eroded.

While the command over longer term resources enjoyed by those social classes had acted to partially insulate them against the consequences of lower income class positions at the earlier date, the impact of the recession, which clearly went substantially beyond its consequences for income in its implications for debt, asset erosion and security, produced a situation where they were no longer distinguishable from their low income counterparts in terms of levels of economic stress.

Viewed from an income class perspective, we observe an increasing impact over time within the three highest social classes. Income class comes to matter more for economic stress. For the professional and managerial class the eta<sup>2</sup> more than doubled from 9.4% to 19%. For the self-employed it went from 11.9% to 17.1%. For the intermediate/technical class the increase is more modestly from 13.9% to 16.4%. For the lower service/technical the increase is marginal going from 7.5% to 8.5%. Finally for the routine class the percentage of variance declined from 15.4% to 11.4% as income class differentiation came to matter less

Table 5B: Economic Stress by Income Class by Social Class by 2008

	Mean	Mean	Mean	Mean	Mean	Eta <sup>2</sup>	F	N
	Poor	Precario us	Lower Middle	Upper Middle	Affluent			
Prof & Mang	0.449	0.544	0.370	0.178	0.126	0.194	164.9	2,808
Inter/Tech	0.542	0.501	0.392	0.198	0.136	0.164	82.6	1,690
Self-employed	0.546	0.390	0.388	0.188	0.142	0.171	33.4	654
Low Sec/Tech	0.508	0.527	0.415	0.274	0.193	0.085	43.9	1,885
Routine	0.533	0.460	0.397	0.224	0.145	0.114	55.6	1,738
Total	0.517	0.492	0.394	0.203	0.133			
Eta <sup>2</sup>	0.010	0.021	0.002	0.016	0.006			
F	3.27	5.37	1.96	6.59	2.33			
N	1,289	996	3,393	1,628	1,477			

To this point, in order to facilitate communicating our findings involving 2 and 3 way interaction between year of survey, social class and income class with effects that are not always interpretable in a hierarchical fashion, we have presented our analysis of variance and regression results separately for 2008 and 2012. In Table 6 we present a set of nested regression models which capture successively the effects relating to the changing distribution of social class, the changing association of social class and income class and the changing patterns of interaction between the former and the latter.<sup>8</sup> Equation (i) show the gross impact of change over time which accounts for 4.5% of the variance in economic stress. In equation (ii) we control for the changing distribution of social class which produced a reduction of 6% in the estimate of changeover time and leads to an increase in the R<sup>2</sup> to 10.7%. In equation (iii) we enter the interaction of social class with year of survey. This confirms the reduction in the gradients between the routine class and all others and in particular the self-employed and leads to an increases in the R<sup>2</sup> to 11.0%. In equation (iv) we add the dummy variables for income class and their interaction with year of survey. This equation confirms the substantial reductions in impact of social class in 2008 when controlling for income class and the further reductions observed in 2012. Entering the 8 additional terms increases the R<sup>2</sup> to 21.7%. In equation (v) we enter 12 additional dummies which are intended to capture the changing patterns of interaction between the professional and managerial and self-employed classes and the three lowest income classes. The first six terms relating to the set of interactions for 2008 are negative in all cases. They thus capture the role of

<sup>8</sup> In Table 3 in order to maintain hierarchical consistency between the social class and income class variables, the professional and managerial class was chosen as the reference category. In Table 6 in order to bring out the importance of interactions involving the professional/managerial class in accounting for change over time we have chosen the routine class as the benchmark.

membership of the professional and managerial and self-employed classes in buffering the impact of being in the bottom three income classes in 2008. The set of six coefficients relating to the changing patterns of interaction are all positive and capture the erosion of the buffering role of membership of these social classes within the lower income classes over time. The  $R^2$  for this final model is 22.2%. At each point the inclusion of additional terms lead to a statistically significant increase in the F statistic. For the final model we observe an increase in the F value of 185.9 for an additional 12 degrees of freedom.

Table 6: Multiple Regression of Economic Stress by Social, Income Class and Year of Survey

	(i)	(ii)	(iii)	(iv)	(v)
2012	0.131***	0.123 ***	0.073 **	0.003 ns	0.055
Professional/Managerial		-0.183 ***	-0.210 ***	-0.107 ***	-0.052 *
Inter/Tech		-0.082 ***	-0.107 ***	-0.057 *	-0.049 *
Self-employed		-0.118 ***	-0.176 ***	-0.137 ***	-0.045 *
Low Sec/Tech		-0.006 ns	-0.034 ns	-0.017 ns	-0.018*
Professional/Managerial*2012			0.052 ns	0.079 **	.0016 ns
Inter/Tech*2012			0.048 ns	0.053 *	0.044 ns
Self-employed*2012			0.136 ***	0.120 ***	0.018 ns
Low Sec/Tech*2012			0.053 *	0.040 *	0.040 ns
Poor				0.257 ***	0.308 ***
Precarious class				0.260 ***	0.309 ***
Lower middle				0.144 ***	0.202 ***
Upper middle				0.054 ***	0.063 ***
Poor*2012				0.108 ***	0.051ns
Precarious class*2012				0.078 ***	0.021 ns
Lower middle*2012				0.100 ***	0.034 ns
Upper middle*2012				0.007 ns	-0.003 ns
Professional/Managerial*Poor					-0.159 **
Professional/Managerial*Precarious					-0.028 ns
Professional/Managerial*lower middle					-0.084 **
Self-employed*poor					-0.051 ns
Self-employed*precarious					-0.153 **
Self-employed*lower middle					-0.142 ***
Professional/Managerial*Poor*2012					0.127 ns
Professional/Managerial*Precarious*2012					0.119 ns
Professional/Managerial*lower middle*2012					0.095 *
Self-employed*poor*2012					0.107 ns
Self-employed*precarious*2012					0.081 ns
Self-employed*lower middle*2012					0.161 *
Constant	0.213	0.305	0.331	0.150	0.104
$R^2$	0.045	0.107	0.110	0.217	0.222
N	18,839	18,839	18,839	18,839	18,839
Incremental F	890.639	453.3	259.3	307.9	185.9
Additional degrees of freedom	1	4	4	8	12

\*  $P < .1$ , \*\*  $P < .01$ , \*\*\*  $P < .001$

## Conclusions

In this paper we have sought to address claims that the impact of the Great Recession in Ireland has led to increased class polarization with the burden of the adjustment being disproportionately borne by the vulnerable.

Rather than observing social class polarization, we found evidence of 'middle class squeeze' involving the self-employed and a significant erosion of the advantage enjoyed by the higher social classes, in particular relative to the routine class. For income classes the pattern of change involved an increase in the gap between the affluent classes and all others, but elements of both middle class squeeze and polarization were involved.

The changing impact of social class was related to a change in the distribution of persons across the social classes. Of more importance, however, was a weakening in the degree of association between social class and income class and a changing pattern of interaction. The first element involved a reduction in the numbers in the professional/managerial and self-employed classes. The second involved a shift in the numbers of the self-employed found in the income poor class. The final component involved an increasing degree of homogeneity in stress levels across social classes within the lower income classes, particularly in relation to the professional/managerial and self-employed classes. Viewed from an income class perspective, this involved increased heterogeneity across these classes, particularly within the professional and managerial and self-employed classes. The cumulative impact of these changes meant that by 2012 social class had no additional impact on economic stress net of the effects of income class. Our findings are consistent with an erosion of the buffering role of social class associated with the pervasive effects of the economic crisis relating to debt, erosion of assets, collapse of businesses redundancy and increasing levels of insecurity

The somewhat different picture presented by income class and social class analyses is consistent with the evidence that during the recession those experiencing the sharpest falls in income constituted a transient rather a permanent group, and are likely to have comprised a significant number of the self-employed. The shift in the distribution of the self-employed across income classes was primarily from the lower middle class to the income poor. What can present itself as deterioration in the position of the income poor can from a social class perspective reappear as middle class squeeze.

Who will benefit most from recovery remains an open question: will the higher social classes reassert their traditional advantages? As far as the recession is concerned, though, our findings are not reflected in much of the commentary about the distributional impact of austerity in Ireland, with its frequent reference to an inequitable distribution of the burden of fiscal adjustment and failure to protect the vulnerable (though the counterfactual is not always well-articulated). A crucial factor in responses to fiscal adjustment is likely to be the extent to which the austerity programme is considered part of an essential economic adjustment or a consequence of neo-liberal ideology (McHale 2016). Themes of increased inequality, failure to protect the vulnerable and lack of “fairness” clearly had considerable public resonance.

The role played by the welfare and taxation systems in buffering the effects of the crisis does not appear to have been generally appreciated, while budgetary choices about tax and social welfare spending figured prominently in political and popular debates despite the evidence that these were progressive in the immediate response to the Crisis and broadly proportional overall (Savage *et al*, 2015). The recent general election resulted in a fragmentation of electoral support and the emergence of a significant legitimacy gap between a large proportion of the electorate and the established parties (Hardiman *et al*, 2016) purely in terms of inequality and direct redistribution. In addition recent efforts to deal with public sector pay issues while favouring the lower paid and sustaining social welfare arrangements have faced their sternest opposition from groups such as teachers, nurses and members of the police force. It is difficult to account for political and electoral consequences of the economic crisis involving purely in terms of increased inequality and direct redistribution.<sup>9</sup> Instead, we would argue that it is necessary to focus on how reductions in real living standards, unemployment, business failures, increased debt levels and cuts in public services led to pervasive and unprecedented increases in levels of economic stress, substantially changing the profiles of those exposed to such outcomes.

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<sup>9</sup> For development of the argument that the Irish government displayed a capacity to navigate between the domestic and the external and to implement a successful recovery programme of recovery but at cost of a legacy of “fractured and fractious politics” see Laffan (2016).

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