

Brendan M. Walsh (1940-2016): The Economist at Work*

J. Peter Neary

University of Oxford

Cormac Ó Gráda

University College Dublin

Physically as well as intellectually, Brendan Walsh (BMW) bestrode the narrow world of Irish economics like a colossus for decades. In part this reflected his calm debating style, and his common-sense ability to synthesise a vast range of knowledge of the Irish economy. But it also reflected the fact that he published consistently and voluminously throughout his career. He was particularly productive in its early stages, in the wake of his return to Ireland from the United States in 1969 at the age of 29, and was still very much an active researcher when he passed away suddenly in May 2016. BMW's scholarly publications are listed in the appendix below.¹ About two-thirds of the total appeared in Irish journals (including nineteen in *The Economic and Social Review* between 1970 and 2017) and in other Irish outlets; the rest in places as varied as *The European Economic Review* and *The Journal of Regional Science*; *Demography* and *Political Studies*; *The Journal of Biosocial Science* and *Explorations in Economic History*. Those titles convey a sense of both the quality and the broad interdisciplinary range of BMW's research, spanning micro and macroeconomics, health and labour economics, political science, demography, economic history, and moreover nearly half a century. In what follows, we will attempt to give a flavour of the most original and influential of his publications. We discuss in turn his contributions to demography, labour economics, macroeconomics and exchange rates, political behaviour, and economic pedagogy.

* Our thanks to John FitzGerald, Patrick Honohan, Morgan Kelly, Tony Leddin, David Madden, Dorren McMahon, Brendan Whelan, and the late Dermot Walsh for comments and guidance.

¹ This updates and corrects omissions from an earlier list published in *The Economic and Social Review* in 2006.

I PSYCHIATRIC ILLNESS, ALCOHOL, AND DEMOGRAPHY

BMW grew up in the 1940s and 1950s, a period of mass emigration and population decline, and so it is not so surprising that demography was a foundation of so much of his subsequent research. An early interest in psychiatric illness clearly had a demographic dimension, and it is not implausible to link this in turn to BMW's research on alcohol and alcoholism. Research into the labour market, and particularly on specific groups such as women and young people, also had a strong demographic dimension.

From the outset, the bulk of BMW's output was policy-driven. Moreover, several of the issues that concerned him in his early days continue to have a lot of resonance today. A good place to start is BMW's statistical analysis of psychiatric hospital admissions in the 1960s, joint research with his older brother Dermot, a very eminent psychiatrist, who survived him by less than a year, passing away in February 2017 [1; 2; 14]. Dermot's studies in the UK in the early 1960s had led to an interest in the determinants of the very high rate of institutional mental illness in Ireland. As he explained:²

Short of the necessary expertise to explore the underlying influences, I sought help from such sources as I could identify. These included Dr Michael Flynn, County Medical Officer for Westmeath, who had done some good epidemiological work on tuberculosis in Ireland, and personnel at the Medical Research Council. I also remember having discussion with Dr R C Geary in the ERI³ in Baggot Street while he cranked away, between pinches of snuff, at a whirring mechanical calculator.

These were tentative steps and it was not until Brendan came to the ESRI from the US in 1969 that serious application to the relevant issues evolved. By now I was working in the Medico-Social Research Board in the same Baggot St building where I had met Roy Geary earlier. Now too, having, at the behest of the Department of Health, set up the National Psychiatric Reporting System, a lot more and better data on hospital residents, admissions and discharges had become available. It was in this setting that I enlisted Brendan in analysis of the data that had been collected. A number of publications in British and Irish journals emerged.

Written at a time when mental illness was a taboo issue and hospitalisation rates very high, a disturbing highlight of those papers was the finding that in Ireland 'the age-structure of a county's population influences its hospitalisation rate at all age

² Email communication to authors, December 2016.

³ Founded in 1960, the Economic Research Institute (ERI) was renamed The Economic and Social Research Institute (ESRI) in 1966.

groups' [2: 20]. The groups most at risk of increased hospitalisation were the elderly, and the unmarried and widowed, suggesting that the fundamental issue was demographic and social rather than medical, and that 'socio-economic variables exert[ed] a considerable influence upon mental illness in Ireland' [1: 676]. A related topic on which Dermot and Brendan wrote several papers over the years was suicide. That collaboration also stemmed from work by Dermot, who in 1965 had published two studies of suicide in Dublin based on a ten-year survey of coroners' records (McCarthy and Walsh 1965a, 1965b).⁴

BMW never lost sight of the welfare implications of Ireland's peculiar demographic regime. His classic short monograph *Some Irish Population Problems Reconsidered* [4] covered the spectrum from birth and marriage to migration and mortality. Written when Ireland was still very much a demographic outlier, it highlighted the 'archaic' character of Ireland's means of controlling births: a low marriage rate coupled with a level of marital fertility higher than 'even the fertility of many underdeveloped countries'. BMW pointed to the social costs that this regime entailed in terms of high celibacy and age dependency ratios as well as reduced social mobility. Moreover, these costs were borne disproportionately by the less well-off. And his analysis of the marital prospects of Dublin males in the late 1960s hinted at another cost of high birth rates: earlier births held a distinct advantage in the marriage stakes over the later, and the most likely of all to marry were only sons [23].

BMW returned to the study of suicide and alcohol consumption – and potential links between them – throughout his academic career ([34]; [121]; [122]; [127]), often in collaboration with Dermot. While Walsh and Walsh [22] confirmed the relatively high incidence of alcoholism among the emigrant Irish in the 1970s, the picture in Ireland itself was more complicated. On the one hand, admission rates for alcohol-related conditions were high by international standards; on the other hand, death rates from cirrhosis and alcoholism were low, and alcohol consumption per head was 'among the lowest in the world'. The reason for this contrast was that the aggregate figures concealed a bi-modal distribution: the Pioneer total abstinence movement encouraged a high degree of teetotalism, but consumption per head among drinkers was relatively high. Much has changed in half a century. BMW published a great deal on the economics of alcohol consumption, both in Ireland and elsewhere ([13]; [51]; [57]; [58]; [66]; [75]; [78]; [95]; [99]; [101]). Although always happy to enjoy a drink in convivial company, his research convinced him that the links between alcohol consumption and alcohol-related problems were of public policy concern,⁵ and he hoped that 'less experienced policy makers' would not turn a deaf ear to the findings of experts in the field [66: 44]. He was the first

⁴ Walsh (2008) provides an excellent overview of the topic.

⁵ Earning him the sobriquet 'the Swede' from one of his more bibulous colleagues.

to estimate an Irish demand function for alcohol – low price elasticity, high income elasticity – and to spell out its implications for likely future consumption levels ([13]; see too [27]). BMW's findings were soon corroborated by O'Riordan (1976) and Conniffe and Hegarty (1980), using more sophisticated estimation methods.

BMW's analyses of evolving marital patterns were informed by both a demographic historian's curiosity and an economist's perspective. One of his earliest publications was a survey of Irish population history [126]; a few years later in [8] he focused on the apparent reluctance of women at that time to marry older males as a measure of the reduced bargaining power of males in the marriage market, while in one of his last papers [124] he addressed the issue of whether in the late nineteenth and early twentieth centuries marrying 'out', i.e. marrying outside one's own religion, implied marrying 'up' or 'down' the socioeconomic scale. In another early paper [46] he argued that the apparent disadvantages of Irishwomen in the life expectancy stakes in the 1960s and earlier were the product of relative underdevelopment, not gender discrimination.

The impact of culture as proxied by religious affiliation on demographic behaviour was another abiding interest ([11]; [55]; [85]; [87]; [124]). BMW's most comprehensive treatment of Irish religious demography [11] discussed trends in the share of Catholics and other denominations (OD) in the population, North and South, and in the proximate determinants of those shares: birth rates and marital fertility, nuptiality, emigration rates, socioeconomic status as reflected in occupational distributions, and mixed marriages in the wake of the 1907 papal encyclical *Ne Temere*. BMW attributed the low OD birth rate to the high proportion of the offspring of mixed marriages who were raised as Catholics. The paper included a projection of the Catholic and OD population shares in Northern Ireland at five-year intervals to 2006, assuming equal net emigration rates and 1961 birth rate differentials. BMW's prediction for 2006 – 49.6 per cent Catholic, compared by only 34.9 per cent in 1961 – would prove to be not far off to the mark, when the proportions 'No religion' and 'Religion not stated' are factored out [11, p. 23].⁶ BMW would return to the issue of mixed marriages, albeit in an earlier historical context, in [124].

In the early 1970s BMW worried that marriage rates would rise faster than marital fertility would decline, and linked the variation in net emigration rates to that in the birth rate. It followed that for planning forecasts of full employment – in vogue at the time – to be meaningful, they would have to factor in emigration for as long as Ireland continued to be a labour surplus area.

Over time, the distinctive demographic features of the Irish economy waned, and a more benign pattern emerged. In 'Wealthier and Healthier' [120] BMW drew

⁶ Although his predicted OD population total of 2.2 million was considerably higher than the true figure of 1.8 million. Later in his career, BMW would become more sceptical of the value of long-range demographic forecasts.

attention to the dramatic downward ‘kink’ in Irish mortality rates at all ages in the 1990s. The reasons for this were not yet fully understood, but BMW highlighted the coincidence in timing of improved health care, improved environmental conditions, and the dramatic reductions in poverty and unemployment associated with the Celtic Tiger.

II MIGRATION AND UNEMPLOYMENT

BMW would return again and again to the topic of emigration ([4]; [15]; [30]; [72]; [74]; [77]; [86]). He was the first to model Irish emigration rigorously as a form of labour supply [4: 18-22; 15: 119-23], and to highlight the importance of relative unemployment rates in Ireland and the UK, providing an important application of the ideas of Sjaastad (1962) and Harris and Todaro (1970).⁷ In [4] he showed that in the 1950s and 1960s the level of net migration out of Ireland rose by 5,000 for every one percentage point rise in the Irish non-agricultural unemployment rate and fell by 10,000 with every one percentage point rise in the UK unemployment rate; in [30], one of his most cited papers, he offered a state-of-the-art econometric model of the determinants of Irish net migration. [72] and [77]⁸ focused more on the economic consequences of emigration. Both questioned claims that emigration inflicted significant damage on the economy in the long run; both made the awkward point that ‘it is hard to justify public subsidies to expensive courses when most of the graduates do not contribute to the Irish economy or exchequer’ ([72]; see too [77: 256-274]).

The economics of labour supply and unemployment were an abiding interest. BMW’s research in those areas was both truly pioneering and highly influential. Some of the findings reported in Walsh and O’Toole [24] were subjected to ‘an econometric approach to the question of the “determinants” of female labour force participation [FLFP]’ by Walsh and Whelan [25]. They derived a series of linear probability functions to estimate the effects of various factors on FLFP. As Whelan modestly recalls, ‘I believe this was one of the earliest applications of micro-econometric methods to Irish survey data.’⁹ Walsh and Whelan [38], [42] applied a similar approach to issues of pay, redundancy, and re-entry into the labour force; they rightly described the former as ‘a first attempt to analyse Irish earnings data at the level of the individual... based on a human capital approach’. Their

⁷ The link between unemployment and migration would feature prominently in subsequent analyses of the Irish labour market: e.g. Geary and McCarthy (1976); Honohan (1984).

⁸ According to co-author Dorren McMahon (email communication, 29 September 2016), besides being responsible for Chapters 2, 3, 5, and 8, BMW was ‘the guiding light behind the whole report’. His ‘broad knowledge in the cognate disciplines’ also contributed significantly to Chapters 1 and 9. The other authors were Damian Hannan and J. J. Sexton.

⁹ Private communication, May 2016.

application of the approach pioneered by Mincer (1962) found that about half of the variation in individual earnings could be explained by factors such as age, education, occupation, membership of a trade union, health and marital status. In this paper they also provided an early estimate of the gender gap in the returns to schooling. The gender gap in earnings was also the main focus of [17] and [18]. A recurrent theme of research in the 1990s with Anthony Murphy ([92]; [94]; [97]) was the link between unemployment and non-participation in the labour force: factors associated with both included poor education, being single, and living in social housing with lots of young children and other unemployed adults. However, remarkably perhaps, the dramatic reduction in unemployment during the ‘Irish Hare’ years that followed was not accompanied by any ‘radical structural reforms’ [199].

BMW was a meticulous scholar who always worried about data. An early paper [7] drew attention to how the under-registration of births distorted nineteenth and early twentieth century Irish demographic data, and this is also a theme of the last paper he wrote just before his death [125]. Part of the goal of [87] was to plug the gap caused by a reluctance to report religious affiliation in the Northern Ireland censuses in the 1980s and 1990s. Joint papers with Dermot Walsh ([34]; [22]) described the difficulties of defining suicide and alcoholism in Ireland in the 1970s, and in the case of the former highlighted the gap between clinical and legal criteria and their bearing on official data. In [114] – and repeatedly in lectures in UCD – BMW addressed the need for timely and high quality data on unemployment. BMW’s research sharpened his appreciation of reliable and timely macroeconomic data, and would enhance his tenure as chairman of the National Statistics Board in 2004-2009.

III RIDING THE CELTIC TIGER, CHASING THE IRISH HARE

BMW’s PhD thesis (published in part in [12]) was the first macro-econometric model of the Irish economy, but this was an outlier in his first decades of research, which mostly focused on micro questions. However, it became harder over time for an economist interested in applied issues to ignore the macroeconomy. BMW returned to Ireland in 1969 in the middle of a golden era for the Irish economy, but the late 1970s and much of the 1980s were years of disappointment and misguided economic policy. BMW soon became an active and critical participant in debates about fiscal and monetary policy.¹⁰

¹⁰ BMW’s contribution on local authority rates (Walsh and Copeland 1975) is an early example. That paper highlighted the huge cost of abolishing local authority rates, despite which the Fianna Fáil government of 1977 abolished them a few years later.

Like other leading economists at the time (e.g. Paddy Geary, Colm McCarthy, and other members of what came to be known as the ‘Doheny and Nesbitts School of Economics’) he was highly critical of the ‘vulgar Keynesianism’ underpinning fiscal policy from the mid-1970s on, and stark about the choices facing governments in its wake.¹¹ He and others highlighted the implications of an alternative perspective, more appropriate to a small open economy like Ireland: a high marginal propensity to import, combined with external determination of most prices, implying that the fiscal multiplier was low and inflation was largely imported.

BMW was also increasingly involved in serving on policy-related commissions. He played a leading role as a member of the Committee on Costs and Competitiveness in 1981, the National Planning Board [a seven-member body appointed by the government in 1984 to prepare a draft stabilisation and structural adjustment programme for Ireland], and the second Public Sector Pay Benchmarking body in 2006.¹² All embodied ‘fiscal rectitude’ and a concern for competitiveness. His eminence, his geniality, and his measured way of speaking truth to power made him a household name in Ireland, a role he did not seek but which greatly amused him. For many years, visitors to his office were greeted by a newspaper clipping with the headline ‘Professor Walsh still gloomy’.

From 1982 onwards this broadening of his interests began to show up in his academic work with a growing stream of papers on exchange rate policy and Irish macroeconomic performance (e.g. [59]; [60]; [65]; [69]; [76]; [80]; [82]; [83]; [84]; [90]; [93]; [104]; [105]). As well as charting the Irish experience, an important paper with Rodney Thom [110] contributed to a broader debate on the effects of monetary union on trade volumes. Rose (2000) looked at a large sample of countries and concluded that adopting a common currency had a major effect on stimulating trade. Thom and Walsh provided persuasive evidence against this view on two fronts. First, they showed that the abandonment in 1979 of a long-established common currency between Britain and Ireland had no discernable effect on their mutual trade. Secondly, they pointed out that, in many of the data points in Rose’s sample, the end of a currency union coincided with major upheavals, often linked to post-colonial war or disruption.

Another major paper [111], joint with Patrick Honohan, provided a masterly overview of the Irish growth miracle of the 1990s. They rejected the “Celtic Tiger” explanation, which suggested a parallel between the Irish economy and the East Asian tigers where growth had come from opening up to trade and had taken the form of a major increase in productivity. Instead, they proposed the metaphor of

¹¹ Colm McCarthy and Brendan Walsh, ‘The coming crisis in the public finances’. *Irish Times*, 29-30 September 1980.

¹² Jim O’Leary, who had resigned in disgust from the first benchmarking exercise in 2002, praised the second: now ‘the ATM machine that was benchmarking is, it seems, temporarily out of service’, *IT*, 12 Jan 2008.

the “Irish Hare”, held back by poor policy-making in the late 1970s and 1980s, but enjoying a delayed catch-up as favourable external conditions coincided with prudent macro policy and an increased focus on competitiveness.

Beyond his interest in the Irish economy, BMW also worked on Harvard Institute for International Development-related projects in Iran in the mid-1970s and in The Gambia in the early 1990s. Although these did not yield much published work (see, however, [88]; [133]; [134]), his expertise informed a collaborative study of the economics of Irish foreign aid with Vincent Hogan and Alan Matthews [135]. They estimated that the benefits to the Irish economy amounted to 10-20 per cent of the foreign aid budget in 1992, but warned that ‘similar or greater benefits could be obtained through programmes of domestic expenditure or through local taxation’ and that devising an aid budget that benefitted the Irish economy more ‘would almost certainly entail a reduction in its value to the recipient countries’ (p. 5).

BMW’s last published works were against the backdrop of the post-2007 economic collapse. On the basis of data up to 2010 he concluded, somewhat against the grain, that the impact of the recession on a range of indicators of wellbeing was much weaker than might have been anticipated based on the experience of the 1980s. The rise in unemployment seemed linked, it is true, to a rise in male suicide rates in one or two age-groups, but overall the impact was ‘surprisingly small’ [122].¹³

IV POLITICAL BEHAVIOUR

Robson and Walsh [26]; [32] were the products of the first of Brendan’s two ventures into voting behaviour. They showed that the Irish practice of listing candidates’ surnames in alphabetical order on electoral ballot papers advantaged those with surnames beginning with A to C relative to others belonging to the same political party (compare Miller and Krosnick 1998; Regan 2012). Politicians, not surprisingly, were wise to this, and so the Dáil had a disproportionate share of members whose surnames began with A to C. (The same holds today, albeit to a lesser extent; 28 per cent of TDs, 20 per cent of the population). Finally, Robson and Walsh also measured the advantage of having a surname beginning with A to C: nearly one thousand first-preference votes. Their sensible suggestions for electoral reform fell on deaf ears.

Sinnott, Walsh, and Whelan [128] analysed the results of Ireland’s three-pronged referendum on abortion in November of 1992, in which citizens were

¹³ See too Brendan Walsh and Dermot Walsh, ‘Re: Health and the economic crisis’, *British Medical Journal*, 26 June 2013. BMW also blogged along these lines frequently on www.irisheconomy.ie: see ‘Some cheerful demographic statistics’ (28 July 2011); ‘Suicide and the recession – again’ (18 September 2013); ‘Some very positive labour market numbers’ (28 February 2014).

invited to vote on (i) the right to travel to have an abortion, (ii) the right to information about termination options, and (iii) the ‘substantive issue’ of whether a woman could choose to have an abortion in Ireland, though only where there was a threat to her “life as distinct from [her] health”. The voters accepted the first two with sizeable majorities, but rejected the third. By solving a set of simultaneous equations imposed by the outcome Walsh and his co-authors estimated the percentages of ‘conservatives’ (rejected all three), ‘liberals’ (rejected only the last), and ‘pragmatists’ (voted for all three) in the electorate. The outcome produced three roughly equal blocks of voters, ranging from 31 per cent (‘conservative’), through 29 per cent (‘liberal’), and 27 per cent (‘pragmatist’). The study also looked at the variation across constituencies in these categories, and identified a strong inverse correlation between the proportion of those who voted against (iii) for ‘liberal’ reasons and support for Fianna Fáil.

V THE TEXTBOOK

In the late 1980s Anthony Leddin of the University of Limerick drew BMW’s attention to a gap in the market for ‘a macroeconomic text book for Irish students based on Irish data’. This led to the collaboration that produced a hugely successful textbook [76], with three further editions culminating in ‘The EMU Edition’ of 1998.¹⁴ In the preface to the latter the authors predicted that the prospect of Ireland becoming part of a European currency union (about which BMW, like many Irish economists at the time, was rather sceptical¹⁵) would soon render their work irrelevant, as it eroded the scope for independent monetary and fiscal policy. Indeed in their preface to the 1998 edition they predicted that “the tools of a regional economist, rather than those of a macroeconomist, will be more relevant at the national level in the future” [76 (4th ed.)]. Nonetheless, in 2003 they produced a new version, with the title significantly altered to *The Macroeconomy of the Eurozone* and geared towards explaining how economies adjusted to economic shocks within a monetary union [116]. The aim now was to present the theory and the data required by Irish students to understand “how the Irish economy functions as a member of the Eurozone” (p. xiii). Then the events of 2007-2008 made ‘national economics’ fashionable again and justified yet another edition devoted to Irish exceptionalism [123]. Thus the focus of *Macroeconomics: An Irish and*

¹⁴ This section draws on BMW’s slides for ‘Reflections on Writing a Macroeconomic Textbook for Ireland’, a lecture he gave at the Cork Institute of Technology on 15 May 2014. Our thanks to Tony Leddin for sharing this with us.

¹⁵ Barry O’Keeffe, ‘Economist warns of the risks in monetary union’, *Irish Times*, 24 May 1996; Cliff Taylor, ‘Time to debate the benefits of the single currency’, *Irish Times*, 12 July 1996; Anthony Leddin and Brendan Walsh, ‘Euro-zone club can offer comfort but at a price’, *Irish Times*, 19 December 2008.

European Perspective (2013) is on those features that make the Irish economy unusual and interesting: the unique demographic regime that BMW had written about from the beginning of his career; the extremely open character of the Irish economy as reflected in its huge migration and trade flows, its multinationals, and the big gap between GNP and GDP; the speed of the catch-up in the 1990s; the size of the credit bubble in the 2000s; and the severity of the recession.

VI CONCLUSION

BMW's research output is remarkable for its diversity in many dimensions. He wrote on a wide range of topics, both within and beyond the boundaries of economics: he was genuinely interdisciplinary before the term became fashionable. His work was informed by theory and he was happy to use the latest econometric techniques, but he was suspicious of the blind application of either. His role in advocating fiscal restraint during the profligate 1980s sometimes led to ill-informed criticisms of heartlessness, but on the contrary much of his work stemmed from genuine concerns about the social ills of Irish society such as low life expectancy, unemployment, migration, mental illness and suicide. His writings maintained the highest academic standards, but always engaged with the policy issues of the day, and in many cases his advice was implemented and contributed to making Ireland a better place.

Had BMW remained in the US and written on that country's local economic problems, his fame would have been worldwide. Instead, his scholarship illuminated an amazing range of topics on the Irish economy. The chair he held at UCD from 1980 to 2005 had the unwieldy title of "Professor of Applied Economics and the National Economics of Ireland": a reflection of some long-forgotten academic-political compromise, and a source of great amusement to BMW himself.¹⁶ Ironically, that title is an excellent summary of his life's work.

VII WORKS CITED (EXCLUDING WORK BY BMW)

- Conniffe, Denis and A. Hegarty, 1980. 'The Rotterdam and Irish Models of Consumer Demand', *The Economic and Social Review*, Vol. 11, No. 2, pp. 99-112.
- Frankel, Jeffrey, and Andrew Rose, 2002. 'An Estimate of the Effect of Common Currencies on Trade and Income', *Quarterly Journal of Economics*, Vol. CXVII, No. 2, 2002, pp. 437-466.
- Geary, P. T. and C. McCarthy, 1976. 'Wage and Price Determination in a Labour-exporting Economy: The Case of Ireland', *European Economic Review*, Vol. 8, No. 3, pp. 219-33.
- Harris, John R. and Michael P. Todaro, 1970. 'Migration, Unemployment and Development: A Two-sector Analysis', *American Economic Review*, Vol. 60, No. 1, pp. 126-142.

¹⁶ He liked to point out that "National Economics" was a rare example in the English-speaking world of the German *Nationalökonomie* tradition, associated with the protectionist ideas of Friedrich List.

- Honohan, Patrick, 1984. 'The Evolution of the Rate of Unemployment in Ireland 1962-1983', *Quarterly Economic Commentary*, May, pp. 41-58.
- Madden, David and J. Peter Neary, eds., 2006. 'Macroeconomic Perspectives: Special Issue in Honour of Brendan M. Walsh', *The Economic and Social Review* vol. 37, no. 2.
- McCarthy, P. D. and D. Walsh, 1965a. 'Attempted Suicide in Dublin'. *Journal of the Irish Medical Association*, Vol. LVII, No. 337, pp. 8-13.
- McCarthy, P. D. and D. Walsh, 1965. 'Suicide in Dublin', *British Medical Journal*, 1, 1965b, pp. 1393-1396.
- Miller, Joanne M. and Jon A. Krosnick, 1998. 'The Impact of Name Order on Election Outcomes', *Public Opinion Quarterly*, Vol. 62, No. 3, pp. 291-330.
- Mincer, Jacob, 1962. 'Labour force participation of married women: a study of labour supply' in H. Gregg Lewis, ed. *Aspects of Labor Economics*, Princeton: Princeton University Press, pp. 63-105.
- Neary, J. P., 2006. 'Interview with Brendan Walsh', *The Economic and Social Review*. Vol. 37, No. 2, pp. 295-302.
- O'Riordan, W. K., 1976. 'Consumer Response to Price and Income Changes'. *JSSISI*, Vol. 23, 65-89.
- Regan, John, 2012. 'Ballot Order Effects: An Analysis of Irish General Elections', UCD Centre for Economic Research Working Paper, 12/16, April.
- Rose, A.K., 2000. 'One money, one market: Estimating the effect of common currencies on trade'. *Economic Policy* 30, 7-46.
- Sjaastad, Larry A., 1962. 'The Costs and Returns of Human Migration', *Journal of Political Economy*, Vol. 70, No. 5, Part 2, pp. 80-93.
- Walsh, Dermot, 2008. *Suicide, Attempted Suicide and Prevention in Ireland and Elsewhere*. Dublin: Health Research Board.

PUBLISHED WORKS BY BRENDAN M. WALSH

1. "Hospitalized Psychiatric Morbidity in Ireland: A Suggested Approach", *British Journal of Psychiatry*, 1967, Vol. 113, No. 449, pp. 675-676 (with D. Walsh).
2. "Some Influences on the Inter-County Variation in Irish Psychiatric Hospitalization Rates", *British Journal of Psychiatry*, 1968, Vol. 114, No. 506, pp. 15-20 (with D. Walsh).
3. "The Relation of Exports and Economic Growth: A Note", *Kyklos: Internationale Zeitschrift für Sozialwissenschaften*, 1968. Vol. XXI, No. 3, pp. 541-545 (with R. Syron).
4. *Some Irish Population Problems Reconsidered*, Dublin: The Economic and Social Research Institute, General Research Series, No. 42, 1968.
5. "Influences on Mobility and Employment in Irish Family Farming", *Irish Journal of Agricultural Economics and Rural Sociology*, 1969, Vol. 2, No. 1, pp. 13-24.
6. "Another look at the Concept of 'Overpopulation'", *Economic Development and Cultural Change*, 1969, Vol. 17, No. 1, pp. 95-101.
7. "Marriage Rates and Population Pressure: Ireland 1871 and 1911", *Economic History Review*, April 1970, Vol. 23, No. 1, pp. 148-162.
8. "A Study of Irish County Marriage Rates, 1961-66", *Population Studies*, 1970, Vol. XXIV, pp. 205-216.
9. "An Empirical Study of the Age Structure of the Irish Population", *The Economic and Social Review*, 1970, Vol. 1 No. 2, pp. 148-162.
10. "Wages and Labour Mobility: An Inter-Industry Study", *The Economic and Social Review*, 1970, Vol. 1, No. 4, pp. 555-566.

11. *Religion and Demographic Behaviour in Ireland with Appendix*, Dublin: The Economic and Social Research Institute, General Research Series No. 5, May 1970 (with R. C. Geary and J. G. Hughes).
12. "Econometric Model Building in an Irish Context", *Quarterly Economic Commentary*, Dublin: The Economic and Social Research Institute, June 1970, pp. 16-26.
13. "Economic Aspects of Alcohol Consumption in the Republic of Ireland", *The Economic and Social Review*, 1970, Vol. 2, No. 1, pp. 115-138 (with D. Walsh).
14. "Mental Illness in Ireland – First Admissions", *Journal of the Irish Medical Association*, 1970, Vol. 63, No. 400, pp. 365-370. (with D. Walsh).
15. "Economic and Demographic Adjustment of the Irish Agricultural Labour Force", *Irish Journal of Agricultural Economics and Rural Sociology*, 1971, Vol. 3, No. 2, pp. 113-124.
16. "Aspects of Labour Supply and Demand, with special reference to the employment of women in Ireland", *Journal of the Statistical and Social Inquiry Society of Ireland*, 1970/71, Vol. XXII, Part III, pp. 88-123.
17. "Price Change Calculations based on Three Forms of the Input-Output Model: An Illustration from Estimates of the Impact of Equal Pay on Irish Industry", *The Economic and Social Review*, 1971, Vol. 2, No. 3, pp. 329-336 (with E. Henry).
18. "The Economics of Equal Pay", *Journal of the Statistical and Social Inquiry Society of Ireland*, 1971/72, Vol. XXII, Part IV, pp. 112-125. (with P. Geary).
19. "Ireland's Demographic Transformation, 1958-70", *The Economic and Social Review*, January 1972, Vol. 3, No. 2, pp. 251-275.
20. "Trends in Age at Marriage in Post-War Ireland", *Demography*, 1972, Vol. 9, pp. 187-202.
21. *Poverty in Ireland: Research Priorities – Account of a One-Day Conference held in ESRI*, Broadsheet Series No. 7, Dublin: The Economic and Social Research Institute. Oct 1972.
22. "Validity of Indices of Alcoholism", *British Journal of Preventive and Social Medicine*, 1973, Vol. 27, No. 1, pp. 18-26 (with D. Walsh).
23. "Marital Status and Birth Order in a Sample of Dublin Males", *Journal of Biosocial Science*, 1973, Vol. 5, No. 2, pp. 187-193.
24. *Women and Employment in Ireland: Results of a National Survey*. Dublin: The Economic and Social Research Institute, General Research Series, No. 69. 1973 (with A. O'Toole).
25. "Determinants of Female Labour Force Participation: An Econometric Analysis of Survey Data", *Journal of the Statistical and Social Inquiry Society of Ireland*, 1973, Vol. XXIII (i), pp. 1-33 (with B. J. Whelan).
26. *Alphabetical Voting: An Analysis of the 1973 General Election in the Republic of Ireland*, General Research Series No. 71, Dublin: The Economic and Social Research Institute, 1973 (with C. Robson).
27. "The Demand for Beer and Spirits in Ireland", *Proceedings of the Royal Irish Academy*, 1973, Vol. 73, Section C, No. 13, pp. 669-711. (with K. Kennedy and L. Ebrill).
28. "Income Maintenance Payments in Ireland, 1953-71 – Cyclical Variations and Long-Term Growth", *The Economic and Social Review*, January 1974, Vol. 5, No. 2, pp. 213-225.
29. "Ireland" in *Population Policy in Developed Countries*, Bernard Berelson (ed.), New York: McGraw-Hill, 1974, pp. 8-41.
30. "Expectations, Information and Migration: Specifying an Econometric Model of Irish Migration to Britain", *Journal of Regional Science*, April 1974, Vol. 14, No. 1, pp. 107-120.
31. *The Structure of Unemployment in Ireland, 1954-72*, General Research Series No. 77, Dublin: The Economic and Social Research Institute, October 1974.

32. "The Importance of Positional Voting Bias in the Irish General Election of 1973", *Political Studies*, Vol. XXII, No. 2, 1975, pp. 191-203 (with C. Robson).
33. *Population and Employment Projections 1971-86*. Dublin: The National Economic and Social Council, 1975.
34. "Suicide in Dublin: II. The Influence of some Social and Medical Factors on Coroners' Verdicts", *British Journal of Psychiatry*, 1975, Vol. 126 (April), pp. 309-312 (with D. Walsh and B. Whelan).
35. "The Cost of Capital to Irish Industry," *The Economic and Social Review*, April 1975, Vol. 6, No. 3, pp. 299-311 (with P. Geary and J. Copeland).
36. *Economic Aspects of Local Government Finance and Expenditure*. Dublin: The Economic and Social Research Institute, 1975 (with J. Copeland).
37. "Trends in the Religious Composition of the Population of the Republic of Ireland, 1946-1971", *The Economic and Social Review*, July 1975, Vol. 6, No. 4, pp. 543- 556.
38. "A Micro-Econometric Study of Earnings in Ireland", *The Economic and Social Review*, January 1976, Vol. 7, No. 2, pp.199-217 (with B. Whelan).
39. "Migration Flows between Ireland, the United Kingdom, and the Rest of the World", *European Demographic Information Bulletin*, 1976, Vol. 7, pp. 125-149 (with J. G. Hughes).
40. "The Labour Market and the Problem of Unemployment" in *Economic Activity in Ireland*, N. Gibson and J. Spencer (eds.), Dublin: Gill and Macmillan, 1977, pp. 79-103.
41. "Unemployment, Vacancies, and 'Full Employment' in the Irish Manufacturing Sector", *Quarterly Economic Commentary*, Dublin: The Economic and Social Research Institute, June 1977, pp. 25-35.
42. "Redundancy and Re-Employment in Ireland," Dublin: The Economic and Social Research Institute, General Research Series No. 89, 1977 (with B. J. Whelan).
43. *Population and Employment Projections 1986: A Reassessment*. Dublin: The National Economic and Social Council, 1977.
44. *The Unemployment Problem in Ireland: Background Analysis and Policy Options*. Dublin: Irish Council of the European Movement, 1978.
45. "Labour Market Strategies" in *Irish Economic Policy: A Review of Major Issues*, B. Dowling and J. Durkan (eds.), Dublin: The Economic and Social Research Institute, 1978, pp. 207-232.
46. "The Male/Female Life Expectancy Differential in Ireland: A Note", *Journal of the Irish Medical Association*, 1978, Vol. 71, No. 14, pp. 475-480 (with D. Walsh).
47. "Unemployment Insurance and the Rate of Unemployment: The Irish Evidence" in *Unemployment Insurance: Global Evidence of its Effect on Unemployment*, H. Grubel and M. Walker (eds.), 1978, Vancouver BC: The Fraser Institute, pp. 172- 200.
48. *Regional Policy and the Full Employment Target*, Policy Research Series No. 1, Dublin: The Economic and Social Research Institute, June 1979 (with M. Ross).
49. "Economic Policy and Economic Growth" in Ireland since the War: 1945-70, J. Lee (ed.), Dublin: Gill and Macmillan, 1979, pp. 27-37.
50. *Internal Migration Flows in Ireland and their Determinants*, General Research Series No. 98, Dublin: Economic and Social Research Institute, 1980 (with G. Hughes).
51. *Drinking in Ireland: A Review of Trends in Alcohol Consumption, Alcohol-Related Problems, and Policies towards Alcohol in Ireland*, Broadsheet Series No. 20, Dublin: The Economic and Social Research Institute, 1980.
52. *Some Issues in the Methodology of Attitude Research*, ESRI Policy Research Series No. 3, Dublin: The Economic and Social Research Institute, Nov 1980. (with E.E. Davis, R. Sinnott, T.J. Baker, D.F. Hannan, D.B. Rottman, and B.J. Whelan).

53. "Health Education and the Demand for Tobacco in Ireland", *The Economic and Social Review*, Vol. 12, No. 1, 1980, pp. 147-151.
54. "Population, Employment and Economic Growth in Ireland," *Irish Banking Review*, June 1981, pp. 17-23.
55. "The Demographic Constraints: A Comment" in *The Constitution of Northern Ireland*, David Watt (ed.), London: Heinemann, 1981, pp. 93-99.
56. "A Study of Labour Market Flows, 1961-80", *Quarterly Economic Commentary*, Dublin: The Economic and Social Research Institute, May 1982, pp. 51-62. (with J. Sexton).
57. "The Economics of Alcohol Taxation" in *Economics and Alcohol*, Marcus Grant, Martin Plant, and Alan William (eds.), London: Croom Helm, 1982, pp. 173-189.
58. "The Demand for Alcohol in the UK: A Comment", *Journal of Industrial Economics*, June 1982, pp. 439-446.
59. "The Effects of a Change in Exchange Rate Regime: Ireland and the European Monetary System" in *International Economic Adjustment: Small Countries and the European Economic System*, Marcello de Cecco (ed.), Oxford: Basil Blackwell, 1982.
60. "The Effects of the European Monetary System on Ireland" in P. Drudy and D. McAleese (ed.), *Ireland and the European Community*, Cambridge: Cambridge University Press, 1983.
61. "Unemployment Duration, Aggregate Demand and Unemployment Insurance: A Study of Irish Live Register Survival Probabilities, 1967-78", *The Economic and Social Review*, Vol. 14, No. 2, January 1983, pp. 93-118 (with J.G. Hughes).
62. "Unemployment and the Labour Market in Ireland", *The Economic and Social Review*, Vol. 14, No. 2, January 1983, pp. 73-76.
63. "Marriage in the Twentieth Century" in Art Cosgrove (editor), *Marriage in Ireland*, Dublin: College Press, 1983.
64. *Natural Resource Allocation and State Enterprise: Nitrigin Eireann as a Case Study*. Resource and Environmental Policy Centre, University College Dublin, 1983 (with J. Blackwell, F. Convery, and M. Walsh).
65. "Employment and Competitiveness in the European Economy", *The World Economy*, Vol. 7, No. 1, March 1984, pp. 47-62.
66. "Production of and International Trade in Alcoholic Drinks: Possible Public Health Implications," M. Grant, ed. *Alcohol Policies*, WHO, 1985, pp. 23-44.
67. *Aspects of Youth Unemployment in Ireland*. Dublin: Irish Council of the European Movement and European League for Economic Cooperation, 1985.
68. "Why is Unemployment so High in Ireland Today?" in C. Ó Gráda and R. Thom (eds.), *Perspectives in Economic Policy*, 1987, Centre for Economic Research, University College Dublin, pp. 3-42.
69. "Fiscal, Monetary, and Exchange Rate Policy" in J. O'Hagan (ed.), *The Irish Economy*, Fifth Edition, Dublin: Irish Management Institute, 1987 (with J. O'Leary and A. Leddin).
70. "Commercial State-Sponsored Bodies in Ireland", *Irish Banking Review*, Summer 1987, pp. 27-36.
71. "Ricardian Equivalence and the Irish Consumption Function: A Comment", *The Economic and Social Review*, October 1988, Vol. 20, No. 1, pp. 49-52.
72. "Emigration: Some Policy Issues", *Irish Banking Review*, Summer 1989, pp. 3-14.
73. "Exchange Rate Policy and Competitiveness" in D. McAleese (ed.), *Competition and Industry: The Irish Experience*, Dublin: Gill and Macmillan, 1989, pp. 60-69.
74. "Tests for Macroeconomic Feedback from Large-Scale Migration based on the Irish Experience 1948-87", *The Economic and Social Review*, April 1989, Vol. 20, pp. 257-266; and "A Rejoinder," pp. 278-279.

75. "Alcoholic Beverages in Ireland: Market Forces and Government Policy", *British Journal of Addiction*, 1989, Vol. 84, pp. 1163-1172.
76. *The Macroeconomy of Ireland*. Dublin: Gill and Macmillan. First Edition, 1990, Second Edition, 1992, Third Edition 1995, Fourth Edition 1998 (with A. Leddin).
77. *The Economic and Social Implications of Emigration*, Dublin: National Economic and Social Council, 1991 (with J. Sexton, D. Hannan, and D. MacMahon).
78. "Issues for Irish Alcohol Policy: A Historical Perspective with Some Lessons for the Future: Discussion," *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 26, No. 4, 1991-92, pp. 34-40.
79. "Real Convergence, the European Community and Ireland: Discussion," *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 26, No. 4, 1991-92, pp. 262-65.
80. "Appropriate Policy Changes" in A. Gray (ed.), *Responses to Irish Unemployment: The Views of Four Economists* Dublin: INDECON, 1992, pp. 79-104.
81. "Labour Force Participation and the Growth of Female Employment: Ireland 1971-1991," *The Economic and Social Review*, Vol. 24, No. 4, July 1993, pp. 369-400.
82. "Irish Exchange Rate Policy in the Aftermath of the Currency Crisis," *The Irish Banking Review*, Autumn 1993, pp. 3-12.
83. "Credibility, Interest Rates, and the ERM: The Irish Experience," *Oxford Bulletin of Economics and Statistics*, Vol. 55, No. 4, pp. 439-452, Nov. 1993.
84. "The Irish Pound and the ERM: Lessons from the September Crisis and its Aftermath," in Christopher Johnson and Stefan Collignon, (eds.), *The Monetary Economics of Europe*, 1993, London: Pinter Publishers, pp. 39-60.
85. "Demographic Structure in Northern Ireland and Its Implications for Constitutional Preference: Discussion," *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 27, No. 1, 1993-94, pp. 210-214.
86. "The Economic Effects of Emigration: Ireland," in Beth J. Asch (ed.), *Emigration and its Effects on the Sending Country*, Santa Monica, California: RAND, Center for Research on Immigration Policy, 1994, pp. 97-152 (with C. Ó Gráda).
87. "Trends in Fertility and Population in Ireland, North and South", *Population Studies*, Vol. 49 (1995) pp. 259-279 (with C. Ó Gráda).
88. "The Programme for Sustained Development" in M. F. McPherson and S. C. Radelet (eds.), *Economic Recovery in The Gambia: Insights for Adjustment in Sub-Saharan Africa*, Harvard University Press, Harvard Studies in International Development, 1995, pp. 281-92.
89. "Time-Period vs. Generation: How Should Trends in Fertility Be Measured? Discussion," *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 27, No. 3, 1995-96, pp. 276-79.
90. "Stabilization and Adjustment in a Small, Open Economy: Ireland, 1979-95", *Oxford Review of Economic Policy*, Vol. 12, No. 3, October 1996, pp. 74-86.
91. *Exports and Employment: The Irish Experience, 1985-1995*, Dublin: The Irish Trade Board, 1996 (with P. Bacon).
92. "Male Non-Employment in Ireland: A Microeconomic Study", *The Economic and Social Review*, Vol. 25, No. 5, October 1996, pp. 433-456 (with A. Murphy).
93. "Economic Stabilisation, Recovery and Growth: Ireland 1979-96", *Irish Banking Review*, Summer 1997, pp. 2-18 (with A. Leddin).
94. Aspects of Employment and Unemployment in Ireland (with A. Murphy), Research Report to the National Economic and Social Forum, Dublin, May 1997.
95. "Trends in Alcohol Production, Trade and Consumption," *Addiction*, Vol. 92 (Supplement 1), March 1997, pp. S61-S66.

96. "The Later Applied Work of R. C. Geary," Chapter 8 in *Roy Geary 1896-1983: Irish Statistician*, Dennis Conniffe (ed.), Dublin: Oak Tree Press, 1998, pp. 199-207.
97. "Unemployment, Non-Participation and Labour Market Slack among Irish Males", (with A. Murphy), in Charles Clark and Catherine Kavanagh (eds.), *Unemployment in Ireland: Alternative Perspectives*, Ashgate Press, 1998, pp. 21- 42.
98. "The Economic Returns to Education", *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 27, Part 5, 1997-98, pp. 99-128.
99. "Economic Issues and the Emerging Global Alcohol Market" in Marcus Grant (ed.), *Alcohol and Emerging Markets*, Brunner/Mazel, Philadelphia, PA., 1998, pp. 311-333.
100. "Corporate Profitability in Ireland: Overview and Determinants: Discussion", *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 28, 1998- 1999, p. 79.
101. "What's in Store for the Celtic Tiger?" *Irish Banking Review*, Spring 1999, pp. 2-15.
102. "The Persistence of High Unemployment in a Small Open Labour Market: The Irish Case", in Frank Barry (ed.), *Understanding Irish Economic Growth*, Macmillan, 1999, pp 193-226.
103. "Labour Market Reform and Employment: The Irish Experience," in *Möglichkeiten und Grenzen der Geldpolitik*, National Bank of Austria, Vienna, 1999, pp. 196-205.
104. "The Irish Economic 'Miracle'. How Do We Explain the Timing of the Boom?", *New Economy*, Vol. 6, No. 4, December 1999, pp. 223-228.
105. "Volatility and the Euro: An Irish Perspective: Discussion," *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 29, 1999-2000, pp. 113-114.
106. "Cyclical and Structural Influences on Irish Unemployment", *Oxford Economic Papers*, Vol. 52, 2000, pp. 119-145.
107. "Urbanization and the Regional Distribution of Population in Post-Famine Ireland", *The Journal of European Economic History*, Vo. 29, No. 1, 2000, pp. 109- 127.
108. "The Role of Tax Policy in Ireland's Economic Renaissance", *Canadian Tax Journal*, Vol. 48, pp. 3, 2000, pp. 658-673.
109. "From Rags to Riches: Ireland's Economic Boom", *World Economics*, Vol. 1, No. 4, 2000, pp. 113-134.
110. "The Effect of a Currency Union on Trade: Lessons from the Irish Experience", *European Economic Review*, Vol. 46, 2002, pp. 1111-1123 (with R. Thom).
111. "Catching up with the Leaders: The Irish Hare", *Brookings Papers on Economic Activity*, Vol. 33, No. 1, 2002, pp. 1-77 (with P. Honohan).
112. *After the Celtic Tiger*. Dublin: The O'Brien Press, 2002 (with Peter Clinch and Frank Convery).
113. "Taxation and Foreign Direct Investment in Ireland" in H. Grubel (ed.), *Tax Reform in Canada: Our Path to Greater Prosperity*, Vancouver, B.C. 2002, The Fraser Institute, pp. 221-245.
114. "How 'Live' is the Live Register and Other Puzzles in the Measurement of Unemployment", *Quarterly Economic Commentary*, Dublin: The Economic and Social Research Institute, Spring 2003, pp. 78-86.
115. *The Economic Appraisal System for Projects Seeking Support from the Industrial Development Agencies*, Dublin: Forfás: The National Policy and Advisory Board for Enterprise, Trade, Science, Technology, and Innovation, 2003 (with A. Murphy and F. Barry).
116. *The Macroeconomy of the Eurozone: An Irish Perspective*. Dublin: Gill & Macmillan, 2003 (with A. Leddin).
117. "The Transformation of the Irish Labour Market: 1980-2003", *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. 33, 2003-2004, pp. 83-115.
118. "Ireland's Economic Renaissance: the Success of a Peripheral Economy" in Jacques Poot (ed.), *On the Edge of the Global Economy*, Cheltenham, UK: Edward Elgar, 2004, pp. 265-286.

Omissions from and additions to the 2006 List:

119. "When Unemployment Disappears: Ireland in the 1990s" Chapter 8 in Martin Werding (ed.), *Structural Unemployment in Western Europe: Reasons and Remedies*, Cambridge Mass., MIT Press, 2006, pp. 197-208.
120. "Wealthier and healthier: Ireland's economic catch-up" *Journal of the Statistical and Social Inquiry Society of Ireland*, 2007/8, Vol. 37, pp. 95-112.
121. "Suicide in Ireland: The influence of alcohol and unemployment", *The Economic and Social Review*, 2011, Vol. 42, No. 1, pp. 27-47 (with Dermot Walsh).
122. "Adjusting to the crisis: well-being and economic conditions in Ireland", *International Journal of Happiness and Development*, 2012, Vol. 1, No. 1, pp. 28-48.
123. *Macroeconomics: An Irish and European Perspective* Dublin; Gill & Macmillan 2013 (with Anthony J. Leddin).
124. "Intermarriage in a divided society: Ireland a century ago", (with Alan Fernihough and C. Ó Gráda, *Explorations in Economic History*, 2015, Vol. 56, No. 1, pp. 1-14.
125. "Life Expectancy in Ireland since the 1870s", *The Economic and Social Review*, 2017, Vol. 48.
126. "A Perspective on Irish Population Patterns." *Eire-Ireland*, Vol. IV, 1969, pp. 3-21.
127. 'Suicide in Dublin: I. "The Underreporting of Suicides and the Consequences for National Statistics"', *British Journal of Psychiatry*, 1975, Vol. 126 (April), pp. 301- 308 (with D. Walsh).
128. 'Conservatives, Liberals and Pragmatists: Disaggregating the Results of the Irish Abortion Referendum of 1992', *The Economic and Social Review*, 1995, Vol. 26, No. 2, pp. 207-19 (with Richard Sinnott and Brendan Whelan).
129. *Report of the Committee on Costs and Competitiveness* Dublin: Stationery Office. 1981 (co-authored with Terry Baker and Dermot McAleese).
130. *Report of the National Planning Board*. 1984. Dublin: Government Publications (BMW was one of the seven co-authors).
131. *Report of the Public Service Benchmarking Body* Dublin: Government Publications Office. 2007 (co-authored with Dan O'Keeffe, Bill Attley, Olive Braiden, John Malone, Tom McKeivitt, and Willie Slattery).
132. Comhar Sustainable Development Council. 2007. 'Shaping the macro-economy and quality of life: towards sustainable growth', in *Proceedings of the Comhar National Conference: Towards Sustainability in the National Development Plan 2007–2013*, Dublin: Comhar, pp. 13-37.
133. 'The Gambia's Exchange Rate System, 1986-90', Harvard Institute for International Development, Development Discussion Paper No. 366, January 1991.
134. 'Exchange rate liberalization and market efficiency in The Gambia', UCD Centre for Economic Research Working Paper, 1993.
135. *The Impact of Ireland's Official Development Assistance on the Irish Economy*: Dublin: Irish Aid Advisory Committee (with Vincent Hogan and Alan Matthews), October 1994.
136. 'Did (and does) the Irish border matter?' (with C. Ó Gráda). Institute of British Irish Studies Working Paper No. 60, 2006.

