The IMF's Role in Ireland

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Introduction

On December 3, 2010 the Irish Government requested a three-year extended arrangement from the IMF in an amount of SDR 19.5 billion (about \$30 billion), equivalent to 2,322 percent of Ireland's Fund quota. The loan, agreed within the troika framework established earlier for Greece, was part of a package totaling roughly \$75 billion that included support from the European Financial Stabilization Mechanism (EFSM)/European Financial Stability Facility (EFSF) and bilateral partners.

The request by Ireland for emergency financial assistance followed two years of a deepening economic and financial crisis, one of the most severe endured by a post-WWII industrial country. It marked a dramatic reversal of fortune for Ireland. During the so-called "Celtic Tiger" years, from the mid-1990s onward the economy had enjoyed close to the fastest growth rates among OECD countries, an unprecedented boom in living standards, and the attainment of full employment. The budget had generally registered a surplus and the debt to GDP ratio reached an all-time low of 25 percent. This highly impressive macroeconomic record came to be widely admired within and beyond the shores of Ireland.

Beginning around 2002, however, the underlying nature of Ireland's economic performance success began to change significantly. Rather than relying on exports (up to then the main engine of growth), a property boom was reignited, fueled by fiscal incentives, which gradually metamorphosed into a full-scale bubble. The boom involved both residential housing and commercial property acquisition, including abroad (for example, in the London market). It was supported by a massive surge in bank lending for housing and construction which was in turn financed by large-scale recourse to low-cost external borrowing, mainly from the euro area and the United Kingdom. In parallel, soaring property-related revenues allowed the government to lower other taxes and boost spending very sharply (albeit in line with rapid GDP growth), while still maintaining the budget in balance or surplus. However, while Ireland continued to earn plaudits for continued high growth rates and apparent macrofinancial stability, beneath the surface the budget and the banking sector became deeply vulnerable.



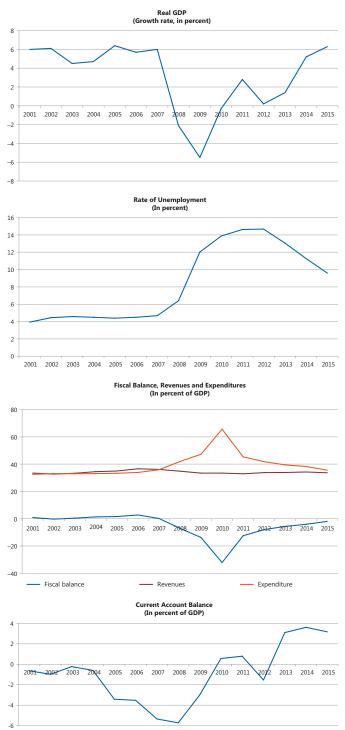
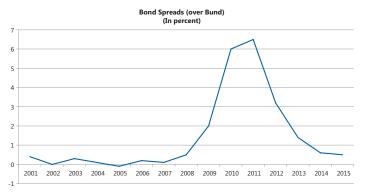


Figure 8.1. (Continued)



Sources: IMF, WEO (October 2015) and Ireland—Fourth Post—Program Monitoring Discussions (EBS/15/152).

From 2008 onwards, these vulnerabilities became starkly visible as the property bubble began to burst and financial fragilities worldwide intensified (see Figure 8.1). In the wake of the collapse of Lehman Brothers, in September 2008, faced with severe liquidity pressures, the Irish Government introduced a blanket state guarantee covering nearly all the liabilities of the domestic banks. This action—which proved to be highly controversial—provided only temporary respite. During 2009–10, the extent of the insolvency of the banks began to emerge while property-sector-related revenues collapsed and a severe recession turned the budget balance into a yawning deficit. As 2010 progressed, Irish sovereign bond yields started to soar, leading the authorities to withdraw from the markets. From October onwards, external pressures mounted and several informal contacts took place between the authorities and troika members. These culminated in the end-November decision by the government to seek an emergency bailout from official partners.

This chapter assesses the role played by the IMF vis-à-vis Ireland during the decade and a half from 2000 onwards. It is a story of a relationship involving two distinctly different phases. The first section of the chapter critically evaluates the workings of Fund surveillance during the pre-crisis years. The Fund—together with nearly all other external and domestic observers—did not adequately identify the underlying vulnerabilities that led to the massive economic and financial crisis that hit Ireland from 2008 onwards. Key elements of Fund staff analysis and policy advice contained in surveillance documentations (Article IV and Financial Sector Assessment Program reports) are assessed. Some broader "environmental" factors that appear to have influenced the effectiveness of surveillance in the case of Ireland—and probably of some other peripheral euro area countries—are also discussed. The second section takes up the story from 2009 onwards, when contacts with the Fund began to deepen, culminating in agreement on a program in late 2010. Pre-program preparations, ownership and communication, the design of the program and the attainment of program objectives are evaluated. This section also considers a number of key program-related issues including the role of external support, aspects of fiscal policy and financial sector reform, the treatment of risks, and the effectiveness of the troika framework. The final section contains conclusions relating to both the surveillance and program phases of the Fund's involvement with Ireland.

IMF Surveillance—The Irish Experience

This section critically examines the part played by IMF surveillance in Ireland between 2000 and 2008, a period during which economic and financial imbalances developed gradually but persistently before erupting into a full-blown crisis. Article IV consultations with Ireland took place annually, except for 2008 when, for reasons discussed below, the consultation scheduled for that year was postponed until 2009. The annual consultations were supplemented by a Financial System Stability Assessment (FSSA) report under the Financial Sector Assessment Program (FSAP) in 2000, followed, importantly, given its timing, by an FSAP Update in 2006.

For most of this period, that is, including up to the 2007 consultation and some way beyond, Ireland's overall economic performance and prospects continued to be regarded by the large majority of observers, including the Fund, in a very favorable light. The scale of the global financial crisis was unanticipated by all. However, there was no indication given of the extent of possible major "homegrown" problems facing the Irish economy. The assessment that follows tries to pinpoint the reasons for what amounted to major shortcomings in the surveillance process. First, the substantive content of the staff's analysis is evaluated, followed by consideration of some broader background elements—involving the perspectives of both the Fund and the Irish authorities—that played a significant role. These aspects were reflected in the decision not to hold a consultation in 2008 and, more generally, in the absence of substantive interaction between the staff and the authorities during a critical period between mid-2007 and early 2009.

The Analysis by the Staff

This assessment of the analysis and policy content of the surveillance process focuses on four areas that are key to understanding the causes of the eventual crisis: property price developments; fiscal policy; the state of the financial sector; and overall vulnerabilities associated with domestic macroeconomic interlinkages. By way of prelude, Ireland joined the euro area in 1999 as one of the 11 original members. As the adoption of the euro drew near, Fund staff did not provide a comprehensive analysis of the requirements and constraints imposed by euro area membership (this appears not to have been unique to Ireland's case). However, in 1999, reference was made to the asynchronized cycles of the Irish and other European Economic and Monetary Union (EMU) economies and the burden placed on fiscal policy due to the absence of monetary policy instruments (IMF, 1999). Also, in later reports, the assessment of external competitiveness indicators took into account the likelihood that Ireland entered the euro area at a somewhat undervalued exchange rate (see below).

Developments in the property sector

In view of what ultimately transpired, it is important to note that Article IV consultations did devote considerable attention to Irish residential property market developments. The dialogue with the authorities on the issue of house prices was persistent throughout the decade of the 2000s. From the mid-1990s onwards, residential house prices in Ireland began to increase very rapidly. Between 1995 and 2000, prices rose by almost 150 percent; over the 10 years ending in 2006 they more than quadrupled. Article IV staff reports from 2000 onwards (including Selected Issues Papers (SIPs)) contained quite comprehensive empirical analysis to support the prevailing staff theme that Irish house prices were very likely overvalued. The dialogue with the authorities on this topic covered: (i) whether "fundamental" factors were or were not driving the market; (ii) analysis of property boom and bust cycles elsewhere; and (iii) the impact of fiscal incentives.

Even by 2000, there were already significant fears that Irish residential property prices were overvalued. A common strand of much of the "give and take" between the staff and the authorities throughout was how to interpret the surge in house prices. Staff noted that the standard approach to this question was to distinguish between "fundamental" factors driving prices and that "beyond the influence of fundamental factors . . . sustained rapid price increases over several years may lead to self-fulfilling expectations-driven demand followed by price overshooting" (IMF, 2000a, p. 16). The authorities, on the other hand, tended to stress that changing "fundamentals" such as continued rapid growth in personal incomes (given Ireland's high growth rate and prospects), inward migration that boosted housing demand, prospective low and stable euro area interest rates, and the prevailing modest level of household indebtedness justified most, if not quite all, of the price surges that had occurred. While recognizing such factors, staff argued that these would not necessarily prevent a speculative element emerging. For instance, it was suggested that prospective purchasers would undertake their purchases earlier, a tendency that could be magnified by the low level of household debt and the high propensity to favor home ownership; this

implied that for many households, the operative decision was not whether but when to buy (IMF, 2000b). More generally, in 2003, the staff observed that "while the potential for fundamentals to justify the sustained rise in house prices [was] easy to recognize *qualitatively* . . . it [was] difficult to assess *quantitatively* the degree to which these factors explain Ireland's housing boom" (IMF, 2003, p. 28).

In support of the probable house price overvaluation hypothesis, staff cited examples of several industrial countries during the 1980s. While recognizing there were some exceptions, in 2000, staff argued that ". . . in fact no industrial country in the last 20 years has experienced price increases on the scale of Ireland without suffering a subsequent fall" (IMF, 2000a, p.16). The accompanying Selected Issues Paper concluded more precisely: "excluding Finland, episodes [among the almost 40 studied] characterized by real house price inflation of 14 percent per annum or more suffered on average a loss in the next four years of 40 percent of the cumulative price increase during the boom" (IMF, 2000b, p. 19). While accepting that "soft landings" were possible, staff suggested that the experiences of Hong Kong SAR and Singapore (a trebling of house prices over a decade) were more relevant and argued forcefully that "if property prices were to level off without a significant fall, it would be an event unprecedented in the last 20 years" (IMF, 2000b, p. 23).^{1,2}

Staff analysis also presented evidence from various supplementary indicators. While the ratio of house prices to rents had reached record levels by 2003, based on a model incorporating changes in fundamentals such as demographics, income, and real interest rates, an overvaluation of 16.5 percent was suggested. However, if the calculation was restricted to the 1976–97 period, i.e., excluding the subsequent "boom" years, the overvaluation was estimated at over 50 percent (IMF, 2003). In 2004, staff observed that rents had dropped over the previous two years, while prices had continued to rise; the price-earnings ratio (house prices divided by annual rental income) was estimated to be over 100 percent above its historical average (IMF, 2004). By 2005, this ratio had jumped to one-and-a-half times its 2002 level. Staff also noted that the fall in rents was accompanied by an acceleration in construction that had exceeded for some time the generally agreed sustainable rate. Some 40 percent of new houses were second homes and/or investment properties. It warned that some of this activity likely

¹ The staff's analysis found that Dublin house prices were above those of Paris and Berlin, albeit lower than in London. The ratio of house prices to disposable income in Ireland had reached its highest level since the 1970s and was substantially higher than in the United Kingdom, both then and during the earlier U.K. property boom.

² The OECD's 2006 *Economic Survey of Ireland*, in an exercise reminiscent of the earlier Fund staff analysis, concluded that "if a soft landing is defined as something that is both mild and gradual, there has not been a single case out of the 49 residential boom-bust cycles [examined for 23 countries between 1960 and 2004]" (OECD, 2006, p. 128).

involved the acquisition of property based on unrealistic expectations of future price increases.

Staff frequently criticized the key role that changing combinations of fiscal incentives were playing in fueling the property boom. Various tax measures had been introduced in 1998 in an attempt to deflate what appeared then to be an incipient housing bubble. A leveling off followed by a slight fall in prices occurred during 2001. As a result, and partly in fear of a looming domestic recession, the 2002 budget largely reversed these measures. This led to a sharp rebound in house prices and, indeed, helped set the stage for the bubble years thereafter. Staff expressed concerns that frequent policy reversals in the fiscal regime applicable to property would cause instability and distort the house buying decision-making process (IMF, 2003).

Unfortunately, the consultation reports did not contain any systematic analysis of the commercial property sector. In the wake of the crash it became apparent that the expansion in lending against commercial property development—much of which was eventually defaulted upon—had been even larger than that to the residential property sector and was a critical factor triggering the meltdown of the banking sector (see below).³ Although there were some qualitative references, especially in the earlier part of the decade, to potential vulnerabilities, staff reports did not evaluate price trends or related indicators (such as price/earnings ratios) within this sector.⁴ The Central Bank of Ireland (CBI) Financial Stability Reports did not refer to the commercial property issue until 2007 (and then only to a limited extent). According to staff observations subsequently, this omission was partly due to data limitations. However, at the time staff did not express concerns regarding data inadequacies or press the authorities to undertake any needed remedial steps.

From 2004 onwards, there was some move towards convergence of views as to the unsustainability of residential price increases that far exceeded real economic growth. The 2006 Article IV report stated that while the Fund staff had concluded that a significant overvaluation was present, the CBI considered prices to be somewhat overvalued, while Department of Finance officials viewed them to be in line with fundamentals (IMF, 2006a). Staff in 2007 indicated agreement—without reservations—with the authorities' (CBI) view that the most likely scenario would be a "soft landing" (generally understood to mean a price fall of around 15 percent, a decline that was thought to be manageable for the banks) (IMF, 2007).

Throughout the decade staff provided some policy recommendations to dampen the boom/possible bubble. Apart from urging a modest tightening of fiscal policy to counter general overheating (see below), staff consistently

³See Donovan and Murphy (2013).

⁴The 2003 Article IV Consultation report drew attention to the "concentration of large exposure to commercial property loans among a few institutions" (IMF, 2003, p. 26).

called for a phasing out of property-based tax incentives and subsidies, including via the introduction of a residential property tax and a reduction in mortgage interest tax relief. The 2004 consultation report recorded candid exchanges during which "the authorities noted the political, likely insurmountable difficulties of removing interest-deductibility of mortgages or introducing taxation on property given the electorate's long history of attachment to, and preference for owning property" (IMF, 2004, p. 20).⁵ In 2006, staff reported that "the authorities acknowledged the economic desirability of broadening the tax base, but pointed to popular opposition to increasing property-related taxes" (IMF, 2006a, p. 13). The staff did not address whether tighter financial regulatory policies would have been appropriate to help curtail the boom.

Should the risks of a looming property market crash have been recognized and highlighted sooner? Staff's broad assessment that house prices were somewhat overvalued was expressed more forthrightly at the beginning of the decade. However, the reports spanning 2001–03 were somewhat guarded in tone; partly reflecting the general absence of reliable methodologies to identify asset bubbles in general ex ante, the staff appeared more hesitant to suggest the existence of a possible "property bubble" and refrained from speculating as to the size or timing of a likely fall in prices. From 2004 onwards, there was some movement towards a convergence of view as to the unsustainability of continued price increases. However, the authorities' view at the time of the 2007 consultation—which was endorsed by the Fund staff—that a "soft landing" was the most likely outcome was later described by the official Honohan enquiry as a "triumph of hope over reality" (Honohan, 2010, p. 10).

Subsequent discussions with the staff suggest a number of reasons that help explain their relatively cautious stance. Difficulties in credibly challenging prevailing views as to the role of fundamentals were a factor inhibiting more clear-cut judgments, as were more general analytical problems in predicting the timing and extent of likely asset price busts. Also, a fear of being seen to "cry wolf" too often was present to some extent, especially after earlier predictions around the start of the decade of an extended fall in prices did not materialize.⁶ In addition, concerns of adverse market

⁵ The OECD also took issue with the fiscal regime favoring home ownership and the frequent policy reversals that had taken place. In 2006, it cited, among other things, the large (and, in the OECD's view inadequately taxed) capital gains accruing to some landowners as well as the underpricing of infrastructure in the property sector. It advised the government "to phase out the strong bias towards housing that is embedded in the tax system and to introduce a property tax" (OECD, 2006, p. 31). The European Commission (EC) published a number of short reports on Ireland during this period. However, these did not contain specific analysis of property price developments. Staff did not report any specific substantive contact between the Fund and European Commission staffs on this topic.

⁶ However, in retrospect the rebound in prices from 2002 onwards was due to a considerable extent to the reinstitution of fiscal incentives in the 2002 budget.

reactions may have played a role. Staff agreed that more should have been done to highlight the potentially crucial importance of lending against commercial property development. To the extent that informational/data shortcomings were a factor constraining analysis, the staff could have drawn the authorities' attention to these elements and highlighted them in consultation reports.

Financial sector surveillance

With property market developments as background, Article IV reports devoted significant attention to financial sector issues. The 2006 Article IV report, together with the 2006 FSAP Update,⁷ contained an extensive review of the outlook for the financial sector; this aspect was returned to in the 2007 report. These assessments are a crucial—perhaps the most crucial—element in Fund surveillance of the Irish economy prior to the crisis.

The overall staff message conveyed throughout was one of reassurance as regards the state of the financial sector. There was no indication of any significant disagreement between the authorities and the Fund staff nor did divergences of view emerge among Executive Board members on key issues. Staff did express concerns regarding house price developments (see above) and drew attention to some financial sector vulnerabilities. However, they did not provide any hint of the existence of major problems, let alone of the possibility of the crisis that was soon to befall the banking system. In what was fairly representative language, the 2005 Article IV report noted that "continued efforts are needed to maintain [italics added] financial stability" and that "banking system profitability and capitalization are strong" (IMF, 2005, p. 3). The 2006 FSAP Update concluded that "the outlook for the financial sector is positive" (IMF, 2006b, p. 1), while the parallel 2006 Article IV report stated that the "financial system continues to perform well" (IMF, 2006a, p. 3). A year later, the 2007 Article IV report reiterated that the "banking system is well-capitalized, profitable and liquid and that "stress

⁷An earlier FSSA/FSAP report was issued in 2000. This exercise took place following a suggestion by the staff in the 1999 Article IV Consultation report that the authorities undertake a peer review as a means of strengthening supervision. The Financial System Stability Assessment concluded that "Ireland's highly developed financial system had remained stable, even in times of international financial turmoil. . . and that the regulatory framework showed a high degree of observance of international codes and standards" (IMF, 2000c). It noted a number of policy challenges, including sustained rapid growth in credit and real estate and house prices, increased competition from abroad, and some supervisory issues relating to the International Financial Services Centre (IFSC), particularly as regards the reinsurance industry. Interestingly, the accompanying 2000 Article IV consultation report stated that "the sustained rapid growth in private sector lending calls for extreme vigilance, and supervisors should use all the tools at their disposal to ensure that the financial system remains sound" (IMF, 2000a, p. 36). This language was more forceful than that of subsequent consultation reports.

tests suggest that [banks' financial cushions] are adequate to cover a range of shocks" (IMF, 2007, p. 20).⁸

The 2006 Article IV Report and the 2006 FSAP Update both drew attention to the increased reliance by banks on external wholesale funding. The surge in lending by the banks had far exceeded deposit growth; according to ECB data, as of end-2004 Irish banks had the lowest deposits-to-assets ratio of all western European Union (EU) countries.⁹ Staff observed that such funding was more sensitive to confidence than were deposits and was generally more expensive. As against that, it was noted that wholesale funding had become increasingly diversified, that Irish banks' funding needs were small relative to the size of the liquid euro market and that the maturity mismatch of funding and loans had not changed over the last few years.¹⁰ Moreover, based on liquidity stress tests, a 30 percent reduction in private sector deposits would exhaust only 15 percent of liquid assets, while a 10 percent haircut on sales of securities and bonds would still leave bank capital at more than adequate levels. Staff concluded overall that the banks "appear to have generally appropriate contingent liquidity arrangements to address tightening of access to wholesale markets" (IMF, 2006b, p. 21).¹¹

Staff did not consider the possibility of substantially greater reductions in the availability of liquidity. This might occur, for example, via a widespread reluctance to roll over large wholesale deposits and/or a liquidation of bonds as their maturities fell due.¹² While mentioned in the 2007 Article IV report, the specific risks associated with the shortening of funding maturities that took place from 2005 onwards were not highlighted. However, the benefits of funding diversification proved to be of little solace when the external systemic crisis took place. The continued high reliance on U.K. funding sources ended up being particularly damaging when U.K. banks' financial positions began to weaken sharply.

The analysis of increased riskiness of banks' lending activities was grounded upon the assessment of the housing market outlook. A key element underlying the 2006 FSAP Update—consistent with the view of the accompanying Article IV report—was the conclusion that "the central expectation is for an orderly slowing of the housing market . . . a sharp correction cannot be ruled out, however" (IMF, 2006b, p. 13). As noted above,

⁸The precise range of shocks considered was not entirely clear from the report.

⁹ The ratio reported even as of August 2005 (prior to the peak of the boom) was 1.7, significantly above the euro area median of 1.3. Irish banks' exposure at the time to capital market funding, at 30 percent of assets, was among the highest in the EU.

¹⁰ However, the fact that 40 percent of funding came from the U.K. was not mentioned.

¹¹ The growth of complex financial products, including mortgage-backed securities, was a very minor feature of Ireland's banking crisis. As elsewhere, staff noted the emergence of these products with a mixture of approval and concern that the risks were not fully understood.

¹²According to staff, data distinguishing different categories of deposits were not available at the time of the 2006 FSAP mission.

the expectation of a "soft landing" was also the view of the CBI in 2006 and was reiterated in 2007.

The 2006 FSAP Update concluded reassuringly that "the banking sector has enough profit and capital buffers to withstand severe shocks on combinations of house price declines and default rates" (IMF, 2006b, p. 20). The precise meaning of "severe" was not spelled out explicitly. Nevertheless, staff stated that "the current value of provisions set aside for mortgage lending would cover a scenario of 25 percent fall in house prices" while "even if the mortgage NPL [non-performing loan] ratio was to increase from the currently low 0.45 percent to 5 percent after a 40 percent fall in house prices, the banks' existing capital buffer would adequately absorb the resulting loss" (IMF, 2006b, p. 20).¹³ In the event, however, NPLs (relating to both residential and commercial property) peaked post-crisis at almost 25 percent of total bank lending, a fifty-five-fold increase from the 2006 level.

These positive overall messages stemmed from a variety of stress tests. Stress tests referred to by the Fund staff (which were undertaken by the financial institutions themselves in consultation with the staff who requested, but did not receive, detailed supervisory data) appear to have gone some way beyond the "top down" versions undertaken by the CBI. However, the tests did not analyze the possible cumulative effect on likely loan losses (and hence banks' capital adequacy) of "worst case" possibilities, such as: first, a considerably greater fall in house prices (prices eventually fell by some 51 percent from peak to trough, while the drop in commercial property prices was even greater); and/or NPL ratios much greater than the assumed 5 percent that might result from the macroeconomic effects of a possible "hard landing." While "bottom up" tests were conducted by the banks themselves—the results of which were similarly reassuring—the FSAP team did not have the opportunity to discuss their findings directly with the banks while in Dublin.

The staff's favorable conclusions did not take into account major risks associated with commercial property lending (see earlier discussion). During the crash, the commercial market collapsed completely, leading to the insolvency of many developers. Large-scale lending to this sector played an even greater role than household mortgage borrowing in causing the financial demise of the banks. It emerged from later official inquiries¹⁴ that much of the lending in question—especially towards the end of the bubble—lacked adequate supporting financial documentation, including accurate information on borrowers' financial positions and the soundness of their personal guarantees, and also reflected weak internal control procedures by some banks.

These subsequent enquiries concluded that the supervisory authorities had exercised an unduly "arm's length" approach. The Financial Regulator, it later

¹³ It was clarified subsequently by the staff that the analysis did not imply that a 40 percent fall in prices would lead to only a 5 percent NPL ratio; the 40 percent number was referred to for illustrative purposes.

¹⁴See Honohan (2010) and Nyberg (2011).

transpired, had been reluctant to delve into the specific lending practices of the banks. Also, it had been hesitant to take effective decisive action whenever any specific problems came to light. However, the 2006 Article IV report and FSAP Update did not query or comment upon any of the underlying practices or procedures of the Regulator.¹⁵

Why were such positive reassurances conveyed as to the state of the banking system? The weak points underlying the favorable staff evaluation are evident. The sudden unprecedented collapse in liquidity worldwide in 2007–08 could only have been foreseen with the benefit of hindsight. On the other hand, the benign view of the banks' capital strength was driven by too ready an acceptance of the central scenario of a "soft landing" for the residential housing market. While staff stress tests went some way beyond those of the CBI, their scope fell far short of what actually transpired, nor did they take into account commercial property lending. Staff had an insufficient appreciation of the limitations associated with the interaction of the Financial Regulator with the banks that stemmed from the "principles based" approach to regulation. The staff did not call for any significant tightening of regulatory practices and its favorable assessment of the Regulator's performance in 2006 FSAP was echoed in market commentary at the time.

In subsequent interviews, staff involved acknowledged many of the above shortcomings. Not focusing on the commercial property market was a key omission, partly explained by data limitations; similar constraints had inhibited a more thorough in-depth assessment of the quality and robustness of the banks' "bottom up" stress tests. Fund staff constraints may also have militated against a meaningful appreciation of the operational problems associated with the Financial Regulator's approach that were later uncovered. Finally, staff felt that they should have expressed their view that the CBI and the Regulator were both significantly under-resourced as regards financial supervision and macro prudential oversight, respectively.

Undoubtedly, some key aspects of financial sector surveillance could and should have been done differently. Nevertheless, the Irish experience suggests that there were some inherent limitations to the FSAP process at that time, given resources and time constraints, including the extent of in-depth information available to outside experts (or even to the authorities themselves). Both the 2000 FSAP and the FSAP Update were "pilot exercises." That being said, as a minimum, the FSAP Update report for Ireland could have been more cautious and should have contained a "health warning" to accompany its positive assessment. The subsequent official inquiry into the banking

¹⁵ In 2006, the Regulator, after extended internal discussions spanning over a year approved an increase in the risk weighting assigned (for capital adequacy purposes) to certain kinds of nonresidential mortgage lending. This measure, which became fully effective only in 2007, was described subsequently as a "belated and relatively modest . . . warning signal" (Honohan, 2010, p.12). While Fund staff welcomed this policy action after it had been taken, earlier staff reports do not refer to it having been raised beforehand in the staff dialogue with the authorities.

collapse observed that "in hindsight such an unwarrantedly favorable report by an authoritative international body was clearly unhelpful" (Honohan, 2010, p. 10). This impression was shared more recently by several Irish officials who recalled the comforting impact of the FSAP Update report's overall conclusions at the time.^{16,17}

Fiscal policy

The extent and rapidity of Ireland's fiscal deterioration in the latter part of the 2000s was virtually unprecedented among post war industrial country experiences. After running overall budgetary surpluses in every year but one in the previous ten years, the small surplus recorded in 2007 turned into a massive deficit of 14.3 percent of GDP in 2009 (the even larger deficit of over 30 percent of GDP recorded in 2010-see Figure 8.1-is accounted for by the major one-off injection of state funds to recapitalize the banking system). Over the same two-year period, the debt to GDP ratio soared from 24 percent to 64 percent. The reasons for this dramatic reversal of fortunes are well known: the collapse of the property boom (and of construction) from 2007 onwards and the knock on effects on overall economic activity caused budgetary receipts to plummet. At the same time, the surge in spending, especially current spending, that had taken place in the preceding years could not be halted (let alone reversed), at least in the short term. Nevertheless, the Fund had characterized Ireland's fiscal policies throughout virtually all of the pre-crisis years as "prudent." As late as 2007, reference was made to what was described as Ireland's "strong underlying fiscal position" (IMF, 2007, p. 20).

What lay behind the Fund's relatively benign analysis of Ireland's pre-crisis fiscal situation? Article IV reports during 2001–07 did voice concerns about the pro-cyclical fiscal stance followed by the authorities and generally urged aiming for a somewhat larger overall surplus.¹⁸ The debate usually centered on the desirability of taking additional fiscal measures in the order of one to one-and-a-half percent of GDP. However, this discussion masked a key aspect—of a far more damaging order of magnitude—unrecognized at the time. In reality, contrary to the picture depicted by the staff at the time, Ireland was actually running a very large—and growing—underlying structural fiscal deficit. A failure to identify this explains the Fund's mischaracterization of the state of Ireland's fiscal health throughout the pre-crisis years.

¹⁶ See, for example, the recent evidence by Liam O'Reilly, former Chairman of the Regulatory Authority, to the Irish Parliamentary Inquiry into the banking crisis (*Irish Times*, June 11, 2015).

¹⁷ It is only fair to acknowledge that since the crisis there has been a sea change in thinking as to what constitutes good financial supervision.

¹⁸ This recommendation was usually, but not always, shared by all of the Board. The 2007 Executive Board assessment stated "*Many* [italics added] Directors, however, saw the planned reduction in the fiscal surplus as an undesirable pro-cyclical fiscal stimulus, while acknowledging Ireland's pressing need to increase infrastructure and social spending" (IMF, 2007).

This major weakness in surveillance stemmed from the analysis of the cyclically adjusted fiscal balance (CAB). Until the time of the 2009 Article IV discussions, the staff—and the authorities—had consistently estimated the CAB to be in *small surplus* in each of the preceding years. However, in 2009 the Article IV report concluded that in fact the CAB had registered *large (and rising) deficits*. For example, the original estimate for the 2007 CAB contained in the 2007 staff report was a surplus of 0.7 percent of GDP. However, the 2009 report re-estimated the 2007 CAB as a deficit of 8.7 percent of GDP—a difference of almost 10 percentage points of GDP for the same year.^{19,20} The authorities during 2008 had themselves come to a very similar conclusion. The portrayal of Ireland's underlying fiscal stance in the pre-crash years underwent a dramatic negative revision.

What led to such a radical reassessment? In the 2007 and earlier reports staff had noted that estimates of the structural balance were fraught with considerable methodological difficulties. In a technical sense, the earlier (pre-2009) calculations were based largely on the assumption that actual output was close to potential output. Estimates of the latter were derived using (broadly speaking) the methodology followed by the Irish authorities; this was based on an aggregate production function approach used throughout the EU and mandated by the EC. In Ireland's case, the approach implicitly assumed that the changes in the sectoral composition of output arising from the marked shift towards the construction sector and associated changes in asset prices were structural in nature. However, once this assumption was relaxed and account was also taken of the sensitivity of revenues to movements in asset prices, an entirely different picture of the CAB emerged. Already by 2008, this reality had become obvious and by 2009 a more appropriate methodology was employed.

In the pre-crisis years, the composition of overall budgetary revenues changed markedly and led to major fiscal vulnerabilities. A key feature was the shift in the burden of taxation away from income-taxes (via discretionary cuts in tax rates and upward adjustments in thresholds and tax credits) towards property-related revenue, i.e., capital taxes and stamp duties (a real estate transactions tax). During 2001–07, personal income taxes as a share of total revenue fell by over 6 percentage points while, according to Eurostat estimates, between 2000 and 2006 the share of revenue associated with the property sector rose from 8 percent to 18 percent. When the property market collapsed, the latter plummeted and total revenues fell precipitously.²¹ In the

¹⁹The estimate for 2007 in the 2007 Article IV report was partly a projection as it was prepared early in that year, based on the 2007 budget. However, for the previous year (2006), the difference was equally striking—a surplus of 2.7 percent of GDP (original) versus a deficit of 5.7 percent (revised).

²⁰ As noted above, the Article IV consultation originally scheduled to take place in 2008 was postponed until 2009.

²¹See Donovan and Murphy (2013).

meantime, expenditure—which, especially in the case of current expenditure, could not be easily cut back—had soared.

Staff commentaries mentioned, but did not highlight these vulnerabilities. Both Article IV reports and Executive Board assessments supported explicitly the thrust of the authorities' policies aimed at lowering the income-tax burden. Although on several occasions staff urged a widening of the overall tax base, the reduction in the base associated with changes in income-tax provisions was not called into question. Instead, the main staff recommendation—repeated in virtually every report—was to introduce a residential property tax and curtail and/or phase out property-related tax incentives. However, as indicated above, the authorities on several occasions explained that such measures were not likely to be politically feasible.²²

Staff reports were continuously mindful of the need to restrain current expenditure. Particular attention was paid to the major increases in public sector pay stemming from the benchmarking of pay against private sector comparators and broader public-private partnership political agreements. However, while urging that various mechanisms be put in place to limit outlays, the staff refrained from offering any direct judgments as to the possible sustainability of the growth in spending that was occurring. Thus, the link between the artificial—and unsustainable—rise in revenue and the seemingly more permanent boost in expenditure was largely missed.

Other recurrent fiscal policy recommendations by the staff included the introduction of a medium-term approach to budgetary planning. This recommendation was partly implemented in 2004, via the introduction of multi-year ceilings for capital spending. Staff also suggested the establishment of an external body to assess fiscal policies (such as a fiscal council) to help improve the quality of public debate on fiscal matters. The authorities disagreed strongly and some divergence of views emerged among Board members as to the merits of the proposal (IMF, 2005).²³

Could the misreading of Ireland's underlying fiscal position have been avoided? The pre-2007 staff calculations showing CAB surpluses had been based to a large extent on the "common EU approach" used by the Irish authorities. However, while the authorities may have felt constrained by this framework, the Fund staff were free to employ whatever country-specific methodology they felt to be appropriate for Ireland. As a minimum, the pre-2009 estimates should have spelled out the key assumptions underlying the staff's approach (in particular as regards the sensitivity of the overall budget to the revenue structure) and critically evaluated the suitability of their application to Ireland.²⁴

²² Measures of this type were introduced later as part of the troika-supported program.

²⁵ As part of the troika-supported program, an independent Fiscal Advisory Council was established in mid-2011.

²⁴ An earlier paper by Fund staff (Jaeger and Schuknecht, 2004) had assessed the implications for fiscal policy of boom-bust phases and applied their analysis to 16 previous cycles (including

Overall macro vulnerabilities

Staff reports frequently discussed indicators of external competitiveness. Throughout most of the decade, reflecting wage (both public and private) and service cost pressures, inflation in Ireland was consistently 1 percentage point to 2 percentage points higher than in EU trading partners. Staff did not generally see this as a source of concern, citing the likelihood that Ireland had entered EMU at an undervalued exchange rate and the presence of Balassa-Samuelson "catch up" effects on non-tradable goods prices. The 2007 Article IV report concluded that the exchange rate was "close to, but perhaps slightly above, its equilibrium value" (IMF, 2007, p. 20). The 2009 Article IV report was more critical, arguing that the serious deterioration in competitiveness that had occurred in previous years had contributed to a marked erosion in Ireland's export shares and suggesting a possible overvaluation relative to the equilibrium real exchange rate of about 15 percent. In common with general European Department practice vis-à-vis the euro area, staff reports during most of the period devoted relatively limited attention to analysis of the balance of payments.

Staff reports, especially in the two to three years prior to the outbreak of the crisis, did not tease out adequately the potentially self-reinforcing linkages between specific sectoral vulnerabilities. An overall scenario similar to that which unfolded eventually, namely, a plummeting in property prices associated with the collapse of construction, a deep recession, an associated dramatic drop in budgetary receipts that led to major fiscal cutbacks and further depressed demand, and last, but by no means least, an unraveling of the banks' financial position that could (and did) soon accelerate the downward economic and financial spiral, was not alluded to as a possibility. In 2007, staff observed that the long period of strong economic performance limited the ability to quantify other than first round effects associated with banks' stress tests (IMF, 2007).

Should the analysis have attempted to address, at least to some extent, such possible scenarios? While precise quantification of the overall impact undoubtedly would have been challenging, some key elements could have been explored, at least qualitatively. For instance, using approaches developed in the earlier work by Fund staff, the budgetary implications of a sharp downturn in property and construction should have been spelled out via sensitivity analysis and some likely knock-on effects considered. To the extent that such an exercise, if made public, would have been viewed as alarmist and highly market sensitive, it could have been discussed confidentially with

Ireland). A later paper published by the European Commission (Martinez-Mongay, Maza Lasierra, and Yaniz Igal, 2007) estimated that some 50 percent to 75 percent of the increase in Spain between 1995 and 2006 might be of a transitory nature and disappear with the asset boom. The methodology used by the Fund staff to calculate the CAB in 2009, while not outlined in the 2009 Article IV staff report for Ireland, was described in Kanda (2010).

the authorities. However, scenarios along these lines were not pursued by the staff. The consensus, perhaps reinforced by elements of "group think," was to stay with the "soft landing" hypothesis and its attendant comforting implications, albeit with some mild notes of caution. In subsequent reflections, some staff involved at the time remarked that it was "difficult to imagine" that a euro area member such as Ireland, whose economic performance had been so lavishly praised over many years, could undergo a disaster on the scale that eventually befell it. That being said, staff acknowledged that they should have taken a closer look at the experiences of some other industrial countries (for example, the Nordics) that had undergone financial crises in the not so distant past. For whatever reasons, what is often referred to as a major asset of the Fund, namely, its lengthy experience with different countries over long periods, did not feature in the staff analysis of Ireland's case.²⁵

The Surveillance Environment

The failure of the IMF surveillance process in Ireland to identify the deep-rooted nature and extent of the emerging weaknesses in the Irish economy partly reflected broader factors. As described above, staff did not undertake sufficiently comprehensive and rigorous analysis that could have recognized in advance the degree to which the Irish economy had become exposed. Consequently, the Fund's policy advice fell far short of what would have been needed to help avert the looming problems. However, there were also significant "environmental elements" that help explain these shortcomings, namely, the changing approach to surveillance of some euro area members and the prevailing climate within Ireland in which the dialogue with the authorities was occurring.

Following the establishment of the euro area, there appears to have been some—perhaps subtle, but nonetheless significant—change in the approach to IMF surveillance to individual euro area members. Some staff interviewed subsequently reported a sense that potential criticism of member countries' performance—especially in the macroeconomic and macro-financial areas—should be tempered by the view that the euro area authorities, rather than the Fund, were better placed on the front line to address some issues.²⁶ Later in the decade, in early 2008, the Fund embarked on a major downsizing of staff. This affected all departments, including the European Department, which underwent major restructuring and also involved extensive changes in senior staffing. Many countries (although not Ireland) were moved to a

²⁵ An exception, as noted above, was the comparative analysis of house price booms and busts in several countries at the start of the decade, which was not, however, repeated in following years.

²⁶ The review paper by Pisani-Ferry, Sapir, and Wolff (2011) prepared for the IMF's 2011 Triennial Surveillance Review concluded, in a somewhat similar vein, that "the IMF fell victim to a 'Europe is different'" mindset and that "eagerness to play a role in the complex European policy process... and close relationships between the Fund and the authorities... reduced the IMF's effectiveness as an independent and critical observer of the euro area."

24-month consultation cycle. Some consultations were conducted under "simplified procedures" (i.e., involving a significant shortening in the duration of the visit of the staff team and a sharp reduction in the size and coverage of topics), as occurred in the case of the 2007 consultation with Ireland. Some staff recalled Fund management at one stage wondering whether in fact consultations were needed in smaller euro area countries.

Some of these elements came into play in Ireland's case and, in particular, help explain the postponement of the 2008 Article IV consultation. Although Ireland continued to be on the 12-month cycle, no consultation took place in 2008. In December 2008, the Executive Board was informed that due to staffing constraints (as a result of staff downsizing and the restructuring of the European Department) and the authorities' preferences regarding timing, the consultation mission, which would normally have taken place around mid-2008 (the previous consultation had taken place in June 2007), had been delayed until April 2009. The staffing constraints referred to partly reflected the fact that a new mission chief for Ireland, after being appointed in the fall of 2007, was almost immediately thereafter reassigned to work full time on the United Kingdom. In the event, between mid-2007 and early 2009, there was no substantive contact between the Fund and the Irish authorities as regards the nature, extent, and policy implications of the economic and financial crisis that was starting to emerge. In the absence of a mission chief, staff work on Ireland was essentially limited to monitoring of developments by the desk officer.

As the major events of 2008 began to unfold, the Fund absented itself from the Irish stage. In the fall of 2008, the authorities implemented the second in a series of major fiscal adjustment packages to cope with a massive budgetary shortfall. In late September 2008, in the wake of worldwide financial turbulence and severe liquidity pressures, they provided a comprehensive state guarantee in respect of nearly all the financial liabilities of the six domestic banks. This decision—often described as the single most important policy measure taken by an Irish government—had far-reaching implications and was to prove, and to remain, highly controversial. Fund staff did not have any contact with the Irish authorities (nor was contact sought by the latter) in the period either before or after the guarantee decision.²⁷ A visit by senior European Department staff to several countries around that time to discuss unfolding developments did not include Ireland. It is evident that as the crisis began to emerge and intensify from late 2007 onwards, staff resources were prioritized towards what were considered to be "systemically important"

²⁷ A memo from the Monetary and Capital Markets Department (MCM) to management shortly after the granting of the guarantee described its main features and noted some of the associated uncertainties and risks. It did not suggest any proactive engagement with the Irish authorities by staff or management.

countries, some of which (such as the United Kingdom) were beginning to experience significant financial stress.²⁸

Finally, the prevailing climate in Ireland at the time does not appear to have been conducive to a more intensive surveillance dialogue. Both staff involved and the authorities have acknowledged that the Irish side would not have readily countenanced consideration of significantly more adverse scenarios than the "soft landing" hypothesis. This was consistent with the general political view-echoed by the markets and the media-that any hint of a major shock to come would have been unfounded and irresponsible. As late as 2009, the authorities firmly believed that, given their prior impressive track record, they could handle any problems that might arise. It is striking that at no stage during the tumultuous events surrounding the bank guarantee decision of September 2008 did the authorities think of seeking Fund advice. Overall, for whatever reasons, the Fund's role as a potential "trusted advisor," especially in times of difficulty, did not seem to have featured in the case of Ireland.²⁹ Together with a certain perception of reticence on the part of senior European Department staff to be too interventionist, this played a (perhaps unconscious) role in how far the staff might have been willing to go in querying the prevailing wisdom in Dublin.

The Program Phase, 2009 Onwards

Beginning in 2009 the IMF's role in Ireland started to enter a new phase. The June 2009 Article IV consultation mission (which followed an earlier short staff visit) highlighted the major economic and financial problems facing the government. The 2010 consultation took place against the background of a sharply deteriorating external and domestic environment. By mid-November 2010, the authorities had come to the conclusion that it was necessary to seek external financial assistance within the troika framework that had been established a few months earlier in the context of the Greek crisis.

On December 3, 2010, the Irish government requested a three-year extended arrangement under the IMF's Extended Fund Facility (EFF) in an

²⁸ Somewhat paradoxically, although Ireland was not considered a "systemically important" economy in 2008, in 2010, the provision of exceptional access to Ireland by the Fund was justified by the invocation of the "systemic exemption" provision because of a threat of spillover due primarily to the interlinkages of European banks and their exposure to sovereign debt. Moreover, during the program, whether or not the Irish authorities should impose haircuts on senior unguaranteed bondholders was thought to involve major systemically significant issues (see the section "Some Issues" below for further discussion of these aspects).

²⁹ The authorities appear to have been quite sensitive at times to whatever the conclusions of the staff consultation might be. Ireland was the only European member country that did not consent to the publication of the staff team's concluding statement until 2009. Staff also recall one occasion when the authorities contacted senior European Department officials directly to express concerns about the approach of the consultation mission.

amount of SDR 19.5 billion (2,322 percent of quota), or about \$30 billion, which was approved on December 16, 2010. The remainder of the total financing package of €85 billion (about \$113 billion) was provided jointly by the EU Financial Stabilization Mechanism/European Financial Stability Facility and bilateral partners (totaling about \$60 billion) and the government's own resources (€17.5 billion).³⁰

This section assesses the IMF's role from 2009 onwards under several broad headings: (i) pre-program preparations; (ii) ownership and outreach; (iii) overall program objectives and outcomes; and (iv) some key topics, namely, the role of external support within the European context, issues in fiscal policy and financial sector restructuring, the treatment of risks and the effectiveness of the troika framework.³¹

Pre-Program Preparations

Contacts between the staff and the authorities deepened from 2009 onwards. As early as a staff visit in early 2009, the possibility was raised with the authorities of Ireland requesting a precautionary credit line in the form of a Flexible Credit Line (FCL). It was suggested that such an arrangement-which might be made available on the basis of the authorities' track record and their policy plans-could help insulate Ireland from emerging market turbulence. The authorities took the view that any hint of Fund involvement could have a sharply negative effect on market sentiment and did not wish to pursue the matter further. In mid-2010, the possibility of a precautionary arrangement-which would likely at that stage to have involved some conditionality-was again raised; however, the authorities indicated that any discussion of a role for the Fund was premature. Neither the staff reports for the 2009 nor 2010 Article IV consultations made any reference to the possible need for external financial support. Nevertheless, the deepening policy dialogue from 2009 onwards which included, apart from the formal consultation process, many informal contacts, was to prove highly useful. The authorities observed that establishing a relationship of mutual trust-which can take some time-had been an important element facilitating successful program negotiations at a later stage.

As the summer of 2010 came to an end a series of events—the ongoing Greek crisis, the Deauville declaration espousing the principle of burden-sharing by private sector creditors, the announcement that yet more capital injections were needed for the Irish banks and the "funding cliff" associated with the pending expiration of the 2008 State banking guarantee—led

³⁰ Beginning in 2015, Ireland made early repayments to the Fund. As of March 31, 2016, outstanding Fund credit to Ireland amounted to SDR 3.8 billion, or 109 percent of quota.

³¹ Detailed information on all aspects of the program is contained in IMF (2010a); IMF (2011a, 2011b, and 2011c); IMF (2012a, 2012b, 2012c, and 2012d); and IMF (2013a, 2013b, 2013c, and 2013d).

to heightened market nervousness and major pressures on Irish bond spreads. On September 30, the Irish authorities indicated their intention to withdraw from borrowing on international markets. Around the same time, the Irish banks were facing a mounting crisis of confidence, necessitating large-scale emergency liquidity financing from the European Central Bank (ECB). The ECB, in a series of confidential communications to the Irish authorities (later made public) expressed major concerns about the state of the Irish banks; this culminated in a letter from then ECB President Trichet in mid-November indicating that emergency ECB funding could not be sustained in the absence of a program supported by external assistance.³²

Unknown to the general public a team from the troika had been present already in Dublin for some weeks beforehand. This followed unpublicized meetings with the troika in Brussels in October and again in mid-November 2010. The authorities observed later that these contacts—which had taken place discreetly and with due regard for the sensitivities involved—had helped significantly to resolve many key program-related issues that arose subsequently. By the weekend of November 13–14 pressures from various quarters had mounted to such an extent that external intervention appeared inevitable. On November 18, the authorities announced the arrival of a large troika team in Dublin and a few days later announced their intention to negotiate a comprehensive program that would form the basis for the authorities' request for financial assistance.

Program Ownership and Outreach

A high degree of ownership characterized the program from the outset. The broad elements of the program had already been announced prior to the negotiations. In particular, the government, as part of the National Recovery Plan issued in early November, had made a firm public commitment to reach the budget deficit target of 3 percent of GDP stipulated under the EU's Excessive Deficit Procedure (EDP) by 2014. During program negotiations, in line with the IMF staff's own views, agreement was reached between the troika and the authorities on extending the deadline for reaching this target from 2014 to 2015 and on the associated quantum of fiscal measures to be undertaken in 2011 and in subsequent years.

The authorities stressed throughout their strong adherence to this agreed deficit reduction path. Importantly, in the run up to the general election in early 2011, the main opposition parties—with whom the Fund staff had consulted at the time the program was agreed the previous November—also announced their commitment to the deficit reduction trajectory; the new government, after taking office, did not seek to alter this stance. The Fund staff team noted publicly—particularly in the earlier stages of the

³² It is not entirely clear as to whether the Fund staff may have been aware of or seen this letter at the time.

program—that provided the annual fiscal packages were credible and reasonably "growth friendly," the particular choice of specific measures was a matter for the authorities. Some representatives of the then opposition parties have observed, however, that the Fund staff should have been more vocal in disagreeing with occasional official pronouncements to the effect that particular unpopular measures had been "insisted upon" by the IMF/ troika. That being said, there was general agreement that the authorities took full ownership of the overall "austerity" strategy embodied in the program's fiscal consolidation.

The strategy for restructuring and rehabilitating the banking sector also had broad support. Although the approach to dealing with the banking crisis had received less public attention, the broad elements were already committed to by the authorities. The main contribution of the program was to delineate a detailed strategy and time bound plan for implementation. Staff from the Fund's Monetary and Capital Markets Department (MCM) played a key role, especially as regards the use of an outside third party to conduct asset quality reviews and the need to ensure that the stress test process applied to banks involved a high degree of transparency. While the degree of domestic ownership of the financial reform program thus was high, as discussed below, progress on some elements ended up being delayed by domestic factors or constrained by considerations associated with external partner support.

Public outreach was a key element. Early on it was decided, with the authorities' support, that the Fund team would engage in extensive outreach activities vis-à-vis the media and other stakeholders, including the opposition parties, trade unions and non-governmental organizations (NGOs). Joint press conferences (with the EC and ECB teams) were held at the end of both the negotiating mission and the first five review missions. Following a subsequent decision by the EC not to continue with this joint format, a conference call was held by the staff with the media at the end of each mission; the Fund mission chief also conducted a teleconference from headquarters with the Irish media when staff reports were published. On an ongoing basis, the Fund Resident Representative-at his own initiative and in response to many requests-met with various interested stakeholders. The authorities felt that these outreach activities had contributed to a better understanding of the program's content as well as the nature of the Fund's supporting role. They also remarked that while the broad domestic consensus underlying the program's overall strategy helped, the communications style of key members of the Fund mission teams had also been important.³³

³³ However, some senior Irish officials have indicated that some highly publicized (and interpreted as critical by the media) subsequent comments by a former IMF senior staff member who had been closely involved in program discussions had not been helpful.

Program Objectives and Broad Outcomes

The program focused on addressing the key problems that had caused Ireland's economic and financial crisis. The design of the program supported by the extended arrangement—and associated conditionality—highlighted the two critical elements: first, restoration of the banking system to health; and second, further major fiscal consolidation to promote debt sustainability and facilitate a return to market access.³⁴ Given the balance sheet nature of Ireland's deep recession, the impact of further fiscal drag and the far from bright external outlook (although the full effect of the crisis on the euro area was not yet evident), the prospects for a rapid return to growth were at best uncertain.³⁵ Although not subject to specific conditionality (Ireland's economy was relatively distortion-free), the program also addressed some perceived impediments to growth, including regulatory issues and labor market activation policies designed to encourage the take-up of jobs by the unemployed or those not participating in the labor force.³⁶

Despite the strong domestic and external headwinds, the overall macroeconomic outcome under the program was modestly positive. By 2012 real GDP had ceased to fall and signs of recovery appeared during 2013.³⁷

³⁴ Prior to the negotiations, there was discussion within the Fund as to whether a three-year Stand-By Arrangement (SBA), as opposed to an extended arrangement under the Extended Fund Facility (EFF), was appropriate (Ireland's was the first case involving exceptional access under an EFF). The large structural content of the program relating to the banking sector, as well as the uncertain prospects for debt sustainability argued for the more favorable maturity terms of an extended arrangement.

³⁵ Discussion of the architecture of the program did not address explicitly the question of the interaction between fiscal and Irish monetary conditions (i.e., developments in interest rates and credit). The 2012 Article IV consultation Selected Issues Paper contained a comprehensive analysis of whether the decline in credit extended by the banks-to small- and medium-sized enterprises, as well as to households-was driven primarily by demand or supply factors. Staff also frequently referred to the funding costs faced by Irish banks. While monetary policy for the euro area as a whole was determined by the ECB, monetary conditions in individual countries (such as Ireland) were influenced by, among other things, perceived sovereign credit risk as well as the Securities Markets Program (SMP) undertaken by the ECB. A question can be raised, which is not unique to the Irish case, of how, in such circumstances, the appropriate mix of fiscal and monetary elements (including the role played by the ECB's SMP) could or should be incorporated into program design. ³⁶ In internal documents the staff noted that technical discussions on several of these structural aspects (specifically, those relating to competition law and the legal, health and pharmacy sectors) were to be handled by the EC team—the Fund mission would only address their possible macroeconomic impact as needed. However, this distinction may have been lost from the point of view of perceptions. In practice, so far as most public opinion in Ireland were concerned (including many officials), there was just "one program." Moreover, given that completion by the EC of a program review was a prerequisite for continued disbursements by the Fund (due to the need for financing assurances), it can be argued that some "indirect" structural conditionality was present (see the section "Some Issues" below).

³⁷ Excluding the fall in value added of the multinational sector (due essentially to special factors associated with the "patent cliff" faced by the pharmaceutical sector), real GDP rose by 3 percent in 2013.

Unemployment, after peaking at almost 15 percent in 2012, declined to 13 percent by end-2013, while net emigration, which had risen sharply during the recession, began to slow. The targets for fiscal consolidation were observed in each year with some margin. The external current account began to register a significant surplus from 2010 onwards. Most striking, Irish bond yields, which continued to increase until mid-2011, declined steadily thereafter, reflecting the confidence boosting impact of sustained program implementation and important euro-wide policy initiatives. As of end-2013, spreads on sovereign 10-year bonds had fallen to just over 1 percent, compared to a peak of 6.5 percent in mid-2011, while from mid-2012 onwards Ireland was able to gradually re-enter the market. The authorities opted not to seek a follow up arrangement of a precautionary nature.³⁸

The measures to restore the banking sector to health achieved considerable success. The major up-front recapitalization of the two largest pillar banks, based on comprehensive in depth stress tests undertaken in early 2011, finally began to restore confidence. The extensive deleveraging exercise, involving phased asset disposals of non-core assets, often outside Ireland, and which were subject to safeguards against fire sales, helped downsize the banking sector towards a more sustainable level.³⁹ These measures were supported by comprehensive reforms of the financial supervision regime and an associated restructuring of the central bank. Less positively, as discussed below, tackling the problem of mortgage arrears and the associated reform of the personal insolvency regime proceeded more slowly than desirable. By end-2013, the two major banks had not been restored to profitability while the third, smaller, bank continued to face an uncertain financial future.⁴⁰

The envisaged fiscal consolidation was achieved. The EDP budget deficit targets and the performance criteria relating to the (adjusted) primary structural deficit and the debt stock were both met as were, in essence, all structural benchmarks.⁴¹ However, mainly reflecting lower growth, the debt/

³⁸ From early 2013 onwards the question of a subsequent arrangement was discussed extensively. Issues explored included the possible conditionality content of a program and monitoring modalities (these aspects would also have involved the EC). In the end the authorities opted for a "clean exit;" factors such as the improvement in bond spreads and uncertainties as to the extent of partner support for a further arrangement played a role in their decision.

³⁹ The Fund staff were not involved in earlier exercises (in 2009, March 2010, and September 2010) aimed at determining the true capital needs of the banks. While some observers have pointed to the costs associated with possible "overcapitalization," the general view of the authorities was that, given the limitations associated with the previous estimation exercises, regaining market credibility required, if anything, erring on the high side as regards possible capitalization requirements.

⁴⁰ However, the two banks were breaking even on an operational basis, i.e., excluding bad loan provisions.

⁴¹ One structural benchmark (further recapitalization of the banks) was observed with a slight delay owing to the change in government in early 2011, while the initial timing associated with a few other benchmarks was subject to ex ante modification as circumstances evolved.

GDP ratio remained high before starting to fall in 2013.⁴² Supporting structural fiscal measures, including the specification of medium-term expenditure ceilings and the establishment of an independent fiscal advisory council, were also implemented.

There was further major progress on all these fronts during the post-program monitoring period. Under Fund policies governing exceptional access, post-program monitoring (PPM), involving twice yearly visits by the Fund staff (together with other troika members) and the issuance of associated staff reports, continued while outstanding Fund credit to Ireland remained above 200 percent of quota.⁴³ During 2014–15, while PPM has been in effect, the positive macroeconomic trends observed in 2013 continued and strengthened, while additional progress was made on some "unfinished business." Growth rebounded very sharply to average around over 51/2 percent annually, while unemployment had dropped to 9.6 percent as of end-2015. The budget deficit, after falling to 4 percent of GDP in 2014, declined further in the following year to under 2 percent of GDP, comfortably below the specified 3 percent EDP limit for 2015. Both mortgage arrears and non-performing loans (NPLs) finally started to decline from 2014 onwards. The two pillar banks returned to profitability in 2014 and their financial position strengthened further in 2015.44

Some Issues

Although the program achieved considerable success overall, several important issues arose at various stages. Some of these can be viewed as having broader implications for the design of programs in the context of a currency union and the associated role of the Fund vis-à-vis the troika.

The role of external support in a European context

The extent of external support was a major and at times quite controversial element throughout much of the program period. The banking guarantee of September 2008, which had been introduced to forestall a possible bank run on one or more of the domestic banks, involved the assumption by the state of most of the liabilities of the domestic banking system, including all deposits and senior and junior bonds. This decision seriously complicated subsequent efforts under the program both to restructure the Irish banking system and attain a sustainable debt position for the sovereign. The guarantee, which transferred to the sovereign much of the losses that were later borne by

⁴² However, the debt outcome was lower than the original program projections, largely because the actual bank recapitalization cost ended up below that initially allowed for.

⁴³ Because early repayments to the Fund by Ireland in 2015 were in respect of the initial purchases under the arrangement, the envisaged time period covered by post-program monitoring was not affected.

⁴⁴ The government has commenced preparations aimed at beginning divestiture of the state's 99 percent shareholding in the second largest pillar bank.

the banks was a major factor underlying the need for the state to inject some €64 billion (about 40 percent of GDP) into the banking system. It remains a matter of intense debate.

Many felt—and continue to feel—that Irish taxpayers had ended up unfairly bearing most of the costs of imprudent creditor behavior. This view emphasized that the state banking guarantee had been introduced in late 2008 not only had safeguarded Irish banks but also had contributed to sustaining financial confidence within the euro area (and perhaps, by extension beyond). From this perspective, considerations of burden sharing and avoidance of moral hazard (lenders should be penalized for unwise decisions), as well as concerns about debt sustainability and regaining market access for Ireland, called for strong supportive actions by Ireland's external partners. These should have included, in addition to steps to address directly the burden on the Irish sovereign, a comprehensive European-wide plan to address sovereign banking debt linkage issues and help promote confidence and a sustained recovery. The importance—not only for Ireland but for the euro area as a whole—that the program turns out to be a demonstrable success was emphasized.

At the same time, the fact that the ECB had already extended unprecedentedly large financial assistance to the Irish banks by late 2010, as well as the possible systemic implications for the euro area and elsewhere of certain possible alternative courses of action to help lessen the Irish debt burden, was recognized. Addressing—at both Irish and European levels—the complex issues involved in the interaction between these various elements was a central part of the debate surrounding the Irish program, especially after a long period of continued "austerity" (including prior to the program commencing) began to take a domestic political toll.

Dealing with one aspect of the issue, namely, the burden associated with subordinated/junior debt owed by the banks proved to be relatively manageable. Although the original two-year banking guarantee of 2008 covered (dated) subordinated debt, its replacement (at end-September 2010) did not. Hence, under the program the authorities continued to implement a write down of subordinated debt of the two banks that were in resolution (Anglo and Nationwide). They also undertook "liability management exercises" aimed at ensuring a similar outcome for subordinated debt owed by the other pillar banks. These operations achieved considerable savings, of the order of 10 percent of GDP.⁴⁵

The treatment of senior unsecured unguaranteed bondholders raised considerably more difficult issues. The possibility of implementing a write down/ private sector involvement (PSI) on this category of debt was explored in discussions between Fund staff and the authorities during October–November

⁴⁵ However, subsequent rulings by the U.K. court authorities suggest that payments to some of the bondholders involved could end up being somewhat higher than anticipated originally.

2010. Although the size of the potential savings remained unclear (as did the possible legal and operational mechanisms to be employed, especially in the case of the pillar banks), the authorities came to the view that such an exercise should form part of the program.⁴⁶ It was felt that, as a minimum, a write down of the debt owed by the banks in resolution should occur. However, in late November, midway through program negotiations, the authorities were informed by the ECB and EC troika teams that bailing in senior bondholders was no longer an option, at least for the time being, in order for there to be agreement on a program; the Fund team conveyed the same message to the authorities. According to reports published later, this position followed a teleconference (in which the Irish authorities did not participate) that included G-7 Finance Ministers, the IMF Managing Director, and the President of the ECB.⁴⁷ The quantitative design of the program was finalized on the assumption of no senior bondholder PSI.

A more limited PSI proposal was again rejected by the ECB in early 2011. Following the change of government, in March 2011, the authorities, who had concluded meanwhile that involving pillar ("going concern") bank bondholders could harm future relationships with counterparts, proposed addressing only bondholders of the two "gone concern" banks. By this stage the amounts involved were relatively small—around €3 billion. However, from the Irish perspective there were important principles at stake that could impinge on the sustainability of the political consensus underpinning the program; by coincidence, the amount of fiscal consolidation planned for the 2012 budget was also €3 billion. This alternative option was again opposed strongly by the ECB on contagion grounds (the ECB also raised issues about the implications for the banks being able to retain their banking license-even the gone concern banks required a banking license in order to continue to receive Eurosystem funding). The ECB indicated that their public support for the latest CBI recapitalization plans for the banks was conditional on there being no mention of senior bondholder involvement. In their letter of intent for the third program review (in May 2011), the Irish authorities stated that they would proceed with any such initiative only in consultation with European partners. The issue does not appear to have been raised subsequently (the final payments to the bondholders concerned were made not long thereafter).

The central issue under debate—both within the Fund and elsewhere was the possible contagion impact of PSI and its implications. On the one hand, it has been argued (for example, by the IMF's ex post evaluation of the Irish program) that since the senior bonds in question were trading at a substantial discount, markets had already priced in a likely bail in; the

⁴⁶The judgment was that possible legal obstacles (including as regards differentiated treatment of depositors and senior bondholders) were not insurmountable.

⁴⁷ See the published accounts in Honohan (2014) and Cardiff (2016) from the Irish side and, from a G-7 perspective, Geithner (2014).

knock on contagion effects in other markets where such discounts were absent would thus be small (IMF, 2015). Furthermore, "firewall" arrangements could and should have been put in place elsewhere in the euro area, including via lender of last resort support, to contain possible adverse contagion fears.⁴⁸

Opinions continue to differ on this issue. As a counter argument to the above, ex ante market discounts prevailing beforehand may not be a reliable guide as to market reactions ex post following the actual occurrence of PSI.⁴⁹ Given the uncertainties following such a "regime change," the extent of possible contagion cannot be predicted with confidence; looking back, many among the Irish authorities indicated subsequently that they had not excluded the possibility of some contagion, especially in the case of the pillar banks. The ECB had voiced strong concerns on this score throughout. It was also noted that in spring 2011, euro area financial fragility was at a very high level (sovereign bond spreads were escalating rapidly) and even a limited haircut operation on senior debt could have had, in the ECB's view, unknown and potentially far-reaching consequences. While ideally adequate protective firewall arrangements should or could have been in existence, in reality at the time they were not viewed necessarily as sufficiently robust.⁵⁰ Nevertheless, while views continue to differ as regards the appropriateness of the decisions taken, there was general agreement that had the EU Bank Recovery and Resolution Directive (BRRD) agreed in late 2013 been in place at the time, the outcome in Ireland's case would most likely have been different.

A second linked issue was the replacement of the promissory note. In early 2009, the Irish government issued a promissory note (in an amount of \in 31 billion—about 18 percent of GDP). The promissory note was used to inject capital into the "gone concern" banks (Anglo and Nationwide) and was the means by which the state enabled banks to meet their financial obligations despite their losses. Payments due under the promissory note—which in effect represented the counterpart of the assumption by the state of the banks' obligations—was a particularly sensitive political issue, especially following the failure of the PSI initiative. Throughout 2012, the authorities worked closely with the ECB to explore possible solutions that would be compatible with the ECB's prohibition on the extension of monetary financing to

⁴⁸A range of views on these matters continues to be held by current and former Fund staff involved.

⁴⁹ As an analogy, the probabilities assigned by financial market participants to possible losses in other institutions were undoubtedly considerably higher following the Lehman's collapse compared to before the event occurred.

⁵⁰ Judging market reactions in advance is a hazardous exercise. As an example, it appears that at the time there was some tendency to downplay the positive market impact of the Promissory Note deal in early 2013 (see below), as it did not have an effect on the outstanding value of the debt in question. However, it was soon recognized that in fact markets had placed considerable weight on the implied improved time profile of Ireland's financing needs and accordingly had reacted very favorably.

governments.⁵¹ The IMF staff highlighted in program review documents the importance of a satisfactory resolution of the issue while the matter was raised by Fund management with high-level European partners on several occasions. In the end, the solution reached in early 2013 vis-à-vis the ECB did not alter the nominal size of the debt in question. However, the market financing needs of the government in coming years were reduced while there were some modest interest savings for the general government budget; the budget could benefit further substantially in outer years. Markets reacted favorably to the agreement, also taking into account the parallel extension of maturities of financing provided by the EFSE⁵²

Other ways of addressing Ireland's debt sustainability came into play at various stages of the program. Subsequent decisions taken in the context of the program with Greece to lower interest rates on EFSF debt (in 2011) and to extend the associated maturities (in 2012-both of which were applied to Ireland) had a significant favorable impact on the debt profile. However, staff, management, and the Executive Board consistently emphasized that enhanced and broader European support was key to achieving more fundamental and lasting success. The need to clarify Ireland's eligibility for the ECB's Outright Monetary Transactions (OMT) program and to put into practice EU leaders' commitment of July 2012 to improve "the sustainability of Ireland's well performing adjustment program" (including possible direct retroactive recapitalization by the European Stability Mechanism (ESM) of Irish banks) were highlighted from mid-2012 onwards (IMF, 2012c, p. 29). Staff reports also analyzed possible arrangements involving external institutions to deal with banks' legacy assets (including the loss making "tracker" mortgages) and improve banks' profitability. The recommendations relating to the specifics of the Irish program met with limited success. However, on a broader level, public statements by Fund management and senior staff frequently highlighted the urgent need for a more comprehensive euro-wide approach to the banking-sovereign debt problem.

Could the Fund have done more to address some of the debt-related obstacles to achieving debt sustainability? The Fund—the Executive Board, management and staff—did not hesitate to identify clearly what was needed by way of greater European support for the Irish program. And in the end, Ireland did succeed, via a combination of steadfast program implementation and the effect of (albeit delayed and partial) European initiatives in regaining market access. Nevertheless, for much of the program period, the prospects for achieving such an outcome were in doubt. Should the Fund have sought to insist on more progress earlier so as to better safeguard the program's

⁵¹ A temporary solution was found with respect to the first payment due in early 2012 which, however, was not possible to replicate.

⁵² The agreement was subsequent to the June 29, 2012 announcement by EU leaders to strengthen their commitment to safeguard the euro area and was seen by some as delivering (in Ireland's case) on that commitment.

objectives? The possibility of, for example, requiring agreement on PSI for some senior bondholders or a satisfactory outcome of the promissory note discussions, before completing a program review was discussed internally. However, in the end such an option was not pursued. A confrontation with partners ultimately might not have proved helpful or effective. The general view among the authorities was that the Fund used its influence to a broadly appropriate extent; in any case, they felt strongly that a collapse of the program due to disagreements among troika partners had to be avoided at all costs.

The options available under the program were constrained by Ireland's euro area membership. The constraints on program design arising from the need to seek external support could be viewed as in principle no different from those present in any case of financing assurances. External partners usually face some institutional and legal limitations on their ability to provide the degree of commitment desired. However, membership of the euro area involved particular constraining features. These included: the Irish banks' heavy dependence on euro system financing; perceptions of contagion effects (inevitably involving major judgmental elements as well as differing risk appetites); the fact that some financial sector restructuring measures require close consultation with European partners; and finally, the need for a political consensus at a European level before key systemic actions can be taken. These features impeded—as in most cases where constraints of one sort or another are present—applying what might otherwise have been considered, from a Fund perspective, "first-best" solutions. However, the Fund presumably knew-or should have known-such constraints and taken them into account at the time the arrangement for Ireland was approved. Thus, even as some of the limitations in question began to emerge more visibly, considering a possible interruption of the program on these grounds would likely have been viewed as an unreasonable change in "the rules of the game." Nevertheless, the question of whether the Fund sacrificed an undue amount of its independence in these particular circumstances can be legitimately raised.

Fiscal policy

Overall fiscal consolidation exceeded program targets. The targets for reducing the overall fiscal deficit were surpassed in each of the three program years and the annual quantum of fiscal measures specified at the program's outset was implemented more or less as planned.⁵³ The fiscal performance criterion (the primary balance adjusted for lower than anticipated revenue that largely reflected weaker growth) was observed throughout. Other favorable

⁵⁵Additional measures of about €0.4 billion were added in the 2012 budget while there was a shortfall of €0.4 billion in the 2013 budget relative to the originally specified amount. Both these adjustments had been agreed with the staff.

developments, in particular net interest savings, led to a somewhat larger than programmed fall in the overall budget deficit.

Should the program's fiscal stance have been tighter? This question was debated at various stages among the staff and vis-à-vis the authorities and troika partners. According to one view (which the EC and ECB-as well as some Fund staff-tended to advocate at times), given the ongoing risks to debt sustainability a faster pace of consolidation than that implied by the EDP targets would have been desirable.⁵⁴ This could have been achieved by, for example, placing a cap on the adjustor for revenue shortfalls or increasing the quantum of fiscal measures to ensure that some part of the unanticipated interest savings be used for debt reduction.⁵⁵ Counter arguments appealed to the fact that additional consolidation could be difficult to sustain politically, especially since the EDP adjustment path was widely understood and had gained broad public acceptance. Additional fiscal contraction could have been self-defeating, given the weak outlook for growth,⁵⁶ while applying interest savings (perceived by many as partial recompense for the absence of burden sharing on senior debt) to debt reduction would also have posed political difficulties. Account also needed to be taken of the major fiscal adjustment prior to the program and the frontloading of measures already envisaged. Irish officials stressed that the authorities' credibility had been significantly enhanced by their ability to deliver on their commitments to sustained fiscal adjustment. In the event, the original deficit reduction path in 2011–13 was retained unaltered. Although by the end of the program the debt ratio did not fall to the extent anticipated, this largely reflected weaker growth and the buildup of a "war chest" of liquid assets after the authorities' partial return to the markets.⁵⁷

Divergent views on the fiscal multipliers underlay some of the debate about the speed of fiscal consolidation. Apart from sustainability aspects, views differed somewhat on the likely size of fiscal multipliers and hence, the negative growth impact of additional consolidation. The openness of the Irish economy suggested that the multiplier was on the low side but its behavior

⁵⁴ The Irish Fiscal Advisory Council (IFAC) urged that in view of uncertainties surrounding growth and the potentially high costs associated with any shortfall from the EDP deficit reduction path, the 2013 budget should include additional measures so as to provide a "buffer." In the end, such a buffer arose from the savings associated with the agreement on the promissory note.

⁵⁵ However, there were no significant revenue shortfalls under the program so a cap on the revenue adjustor would have had no practical effect.

⁵⁶ It should be noted that the discussion of this issue within the Fund was not always in one direction. Some thought was given at one stage to applying fiscal stimulus by reducing the quantum of additional measures relative to the originally programmed amount. However, this option was not pursued, partly because of financing considerations and likely difficulties in obtaining support from troika partners.

⁵⁷ Thus, net debt—which was not a variable explicitly targeted under the program—was lower than anticipated.

during the adjustment process was subject to some debate.⁵⁸ The publication of research on fiscal multipliers in the Fund's *World Economic Outlook (WEO)* in 2012 led some critics of the authorities' adjustment strategy to argue that the Fund had in general underestimated the adverse effects of fiscal retrenchment on euro area growth. In response, the Fund mission chief for Ireland stated publicly that the multiplier estimate used in designing the Irish program (about 0.5) remained appropriate, a conclusion supported by Irish officials subsequently.⁵⁹

The use of different fiscal anchors could have complicated program implementation but in the case of Ireland in the end did not. Troika partners placed differing emphasis on alternative fiscal variables for monitoring purposes. The Fund staff approach was to concentrate on the Exchequer primary balance, a variable over which the authorities had most control and which was available on a monthly basis.⁶⁰ The EC (and, to some extent, the ECB), on the other hand, placed more emphasis on the general government balance expressed as a percent of GDP, the principal EDP-related variable and which was harmonized across the EU. However, the general government balance is on an annual basis and reported by Eurostat about four months after year-end so it could not be used for purposes of Fund conditionality; in addition, using this variable to determine the amount of annual fiscal adjustment required would have risked applying pro-cyclical measures if growth turned out to be weaker.⁶¹ Given strong overall performance under the program, possible inconsistencies associated with alternative fiscal anchors did not arise. However, in other circumstances, these differing approaches to fiscal monitoring, which reflected the Fund's need for operational quarterly review purposes of a high frequency and timely fiscal indicator relative to European partners' emphasis on comprehensiveness and cross-country comparability, might well have given rise to confusion and led to complications.

The Fund staff consistently supported improved targeting of fiscal measures and emphasized the need to protect the most vulnerable. From the outset, the program aimed at better targeting, especially as regards the very large expenditures on social protection. Staff urged means testing of certain

⁵⁸ In discussing the composition of adjustment between 2014 and 2015 (the budget for 2014 was a structural benchmark under the program) it was suggested that some back loading might be appropriate as the multiplier would likely be lower at a later stage in the cycle; also the "base level" of adjustment measures would be lower.

⁵⁹ However, the staff documents relating to Ireland did not contain analytical material in support of this conclusion.

⁶⁰ The target level for this variable was derived using a base ("no policy change") projection, to which was applied the agreed quantum of measures to be taken.

⁶¹ Deriving the general government balance/GDP measure from the Exchequer primary balance involved adjustments for net interest costs, deviations from anticipated costs associated with bank restructuring, several other transactions (including moving from a cash to an accrual basis), as well as the outcome for GDP. The EC was also concerned with the behavior of the structural budget balance which involved additional methodological complexities.

programs and tightening of access criteria for others, while emphasizing the avoidance of poverty and inactivity traps. The authorities indicated that highlighting these issues had proved helpful. It was recognized, however, that the final choice of measures would take into account a number of considerations, including the balance of views among the governing coalition parties and the need to ensure social cohesion and broad public support for the overall adjustment effort. Program review documents noted that the cumulative impact of fiscal measures during 2009–12 was assessed by external analysts as progressive rather than regressive, although equity issues were raised by some measures taken in 2011–12, for example, the introduction, on a temporary basis, of a flat household charge in lieu of a property tax related to value.⁶² Overall, however, it appears that a sharp rise in poverty rates was avoided.

Restructuring of the financial sector

The program went a considerable way towards restoring the Irish banks to health. The program's financial sector measures were exceptionally comprehensive and detailed and very substantial progress was achieved. The threats to financial stability were removed as the two major pillar banks were fully capitalized and passed the 2014 European Banking Authority stress tests.⁶³ The oversized banking system was reduced significantly mainly via deleveraging, while banks' dependence on Eurosystem financing had fallen sharply by the end of the program. Major reforms in bank supervision were introduced, the Central Bank of Ireland was restructured and organized and progress (albeit delayed) was achieved in tackling NPLs and mortgage arrears. The authorities observed that the technical experience of specialized Fund staff in several areas had been a very useful contribution. Some noted that solutions that might work well elsewhere needed to be tailored to take into account some Irish-specific political/social and institutional features, especially as regards repossession and loan resolution procedures.

Despite progress overall the banks remained in a fragile state. As had been largely anticipated, NPLs continued to climb throughout the first two-and-a-half years of the program as did mortgage arrears. The two major banks remained loss making (prior to provisioning) until the second half of

⁶² Staff observed, however, that this analysis, undertaken regularly by the Economic and Social Research Institute (an Irish policy think tank) using a specific model, captured the impact of only a subset of measures.

⁶⁵ During 2013, there was considerable discussion as to how to help ensure that the banks were in relatively sound financial shape as the program neared its end. The previous comprehensive Prudential Capital Asset Requirements (PCAR) exercise in 2011 had not been updated in the meantime. The authorities were anxious to avoid possible inconsistencies that could arise between a repeat of the PCAR-type assessment and a similar exercise planned by the European Banking Authority in the second half of 2014. The solution arrived at was to undertake a "point in time" Asset Quality Review (AQR), the main results of which were made available to the Fund's Executive Board prior to the last review of the program. The AQR essentially anticipated the results of the ECB's subsequent AQR.

2013 while the smaller bank, Permanent TSB (PTSB), was not expected to be restored to profitability until 2017. Bank lending fell throughout the program period. However, these negative trends had already bottomed out by the end of the program and during 2014–15 the momentum turned in a significantly positive direction.

Could more have been done under the program to address some of these issues and hasten a recovery in the quality of bank balance sheets? Dealing with mortgage arrears (in particular household arrears) and the related issue of NPLs proved very difficult. For a variety of reasons (including clearly inadequate levels of trained personnel to deal with a problem of an unprecedented scale), the banks were unwilling and/or unable to face up to reality and try to work out solutions with affected clients until well into the program. In addition, some necessary key elements were not under the direct control of the authorities (specifically, passage of bankruptcy/personal insolvency legislation bill and addressing legal obstacles in the foreclosure process-a particularly sensitive subject in Ireland). It was essential that the legislative process, albeit time consuming, be fully respected, as unless laws are well designed and adapted to local practices they will not be effective. An unduly hasty approach, arguably, could have led to the conclusion of arrangements that might not have been in the best long term interest of the taxpayer. During 2013, progress began to be finally achieved via the setting of quantitative targets for the banks by the CBI. It was agreed by staff and the authorities that adoption of a more aggressive stance somewhat earlier may have been desirable. However, given the exceptional breadth and complexity of the financial sector program some prioritization was inevitable with the attendant risk of there being some substantial "unfinished business" at the end of the program.

As in other areas, the search for ideal solutions encountered constraints involving troika partners. Several avenues were explored for accelerating the process of rehabilitating the banks. Against the background of the need to reduce sharply financing from the Eurosystem, the speed of bank deleveraging, via the sale of foreign non-core assets, was a subject of debate and compromise. Various financial engineering schemes to address the "tracker mortgage" problem and improve bank profitability were explored but in the end did not command sufficient support, including at European level. In the case of PTSB, it was argued that in the absence of prospective medium-term viability, the appropriate solution was to move towards resolution. However, such an option, which would leave only two Irish banks in existence, was opposed by the EU Competition Directorate;⁶⁴ moreover, staff noted that speedy resolution would have entailed sizable fiscal costs. Nevertheless,

⁶⁴ On the other hand, Fund staff argued that the ability of foreign banks to enter the Irish market freely would provide contestability. Some other possible solutions for PTSB would have required additional funding from external sources that was not available at the time.

although various constraints prevented possibly "more optimal" solutions, taking into account the scale of the problem and continued substantial progress in the post-program period, the overall outcome can, in most respects, be regarded as very satisfactory.

Risks to the Fund and the involvement of the Executive Board

Risks to the program were spelled out consistently. Program documentation (both the initial request and review papers) highlighted the range of risks that could threaten the program's success. These included growth disappointments (arising both from weak domestic and global demand and delays in euro area policy initiatives), possible shortfalls in sustaining fiscal consolidation, the impact of the far-reaching financial sector restructuring, and difficulties in restoring market access. Political risks were also spelled out in the request for the arrangement. However, before program approval the main opposition parties provided assurances to Fund management that, if elected to government, they would adhere to the main program objectives, including the fiscal consolidation path. Concerns about the sustainability of domestic political support were also noted by staff in the context of the ongoing debate on debt burden sharing.

Exceptional access by Ireland involved particular financial risks for the Fund. The arrangement represented over 2,300 percent of quota. Availing of exceptional access to the Fund's resources required that four criteria be satisfied. While three of the four criteria did not raise major issues, one of them, the existence of a high probability that the member's public debt is sustainable in the medium term, in the staff's judgment was not met and hence the "systemic exemption" clause was invoked.⁶⁵ This clause justified Fund support for Ireland at the level proposed, given the high risk of international systemic spillover effects in the absence of a program.

Detailed justification for availing of the systemic exemption clause to justify exceptional access was provided only at the time of program approval. The staff paper in support of the request for the arrangement contained detailed analysis of potential spillover effects, citing country-specific conditional cross-correlations vis-à-vis Irish sovereign spreads, an increasing joint probability of distress in a set of nine large European banks, and a rising probability of distress in at least one other European bank given distress in the Irish banks. Under Fund policies, continued satisfaction of the criteria governing exceptional access is required throughout the period of an arrangement. However, this aspect was not referred to in the staff papers for the following six reviews. From the seventh review onwards staff reaffirmed explicitly the justification for using the systemic provision, although an updating of the analysis undertaken at the time of the request for the arrangement was not

⁶⁵Some senior Irish officials noted subsequently that they were not fully aware at the time of the agreement on the program of this assessment by the staff.

provided. This issue was not discussed during subsequent Board reviews of the program.⁶⁶ From the eighth review onwards, staff stated that a major risk to the program related to the implementation of European-wide policy plans and that exceptional access continued to be justified on the basis of "systemic international spillover risks given euro area fragility" (IMF, 2012d, p. 24; IMF, 2013a, p. 28; IMF, 2013b, p. 25; IMF, 2013c, p. 26). The general use of the systemic exemption clause throughout the program period was subject to considerable debate subsequently and the policy was removed in January 2016, although some flexibility was retained.

The effectiveness of the troika framework

The troika was an efficient structure for interaction among the external partners and vis-à-vis the Irish authorities. The tripartite arrangement involving the IMF, the EC, and the ECB followed the precedent set with Greece in May 2010 (described in the later staff paper on Ireland as "established practice"). Prior to the late summer of 2010 there had been relatively little interaction among the three institutions on Ireland-related matters. The more structured troika framework within which pre-program discussions and subsequent negotiations took place was considered both at the time and in retrospect as an effective way to share information and policy thinking. Given the complexity and comprehensiveness of the program and the constraints on time and resources, this was felt by all parties to have been a major advantage.

However, the arrangement involved considerably more than practical and procedural aspects. The troika framework could also be viewed as an efficient structure to address the "financing assurances" needed to support the program. In more traditional situations, external partners/lenders whose support is required typically are not themselves involved in directly negotiating the program. However, a key feature of the troika was that all three financing partners were party to the negotiations. In particular, the content of each Memorandum of Policies attached to the authorities' letters of request sent to the Fund and the EC had to be agreed with both these institutions. Although no analogous request letter was sent to the ECB, it was generally understood that given the large-scale liquidity it was providing, continued ECB endorsement of the program was also needed. If either of the other two troika partners were not to find the proposed memorandum acceptable, the Fund would have faced difficulties in completing the review, assuming that financing assurances were still required. Thus, although the concept of cross-conditionality was not involved explicitly, endorsement by each member of the troika of the content of the authorities' program was in practice necessary.

Efforts to resolve differences among troika members met with varied results. As discussed above, members of the troika, not surprisingly perhaps, at

⁶⁶ However, at the time of the tenth review, one Executive Director noted, without comment, the staff's continued justification for invoking the systemic exemption clause.

times held somewhat different views on important program aspects, including the need for external support (both Ireland-specific and more comprehensive European-wide approaches); the need for and/or advisability of further fiscal consolidation; the speed of deleveraging; and the treatment of PTSB. In some of these areas, either compromises were arrived at (in the case of fiscal policy and deleveraging) or actions were eventually taken (e.g., EU-debt initiatives). All parties were aware of these divergences of view which in part reflected different mandates and institutional or legal constraints. Even in the absence of a troika structure these differences would have had to be resolved somehow.⁶⁷

Nevertheless the troika framework may raise more fundamental issues of an architectural nature. The Irish authorities felt that having the three parties together "in the room" had greatly facilitated the process of reaching a joint agreement. They also considered that the Fund's presence may have promoted a more reasonable compromise outcome on some program aspects. That being said, a question can be raised as to whether the ECB, which, ultimately, is "Ireland's central bank" should not have formed part of the Irish side in the negotiations.⁶⁸ Relatedly, the situation whereby the ECB representatives from Frankfurt sat on one side of the table and the Governor of the Central Bank of Ireland, a member of the ECB's Governing Council, sat on the other, could be viewed as somewhat anomalous.⁶⁹

Was the Fund a "junior partner" in the troika? Since it contributed only one-third of the total official financing excluding the ECB, in a financial sense, the Fund was a "junior partner." However, the support of all three troika institutions for the program was required throughout. Equally, if not more important, all parties (including the Irish authorities, other troika members and different stakeholders) were emphatically of the view that the IMF had not been a junior partner in helping design the program. According to senior Irish officials, the Fund team had brought to the table high-quality expertise and a wealth of experience from other countries, a thorough understanding of the economy and a pragmatic approach to searching for solutions appropriate to the particular Irish context. This contribution was considered highly important when differences of view emerged vis-à-vis other troika partners on some important policy matters. However, in the case of one key issue, namely,

⁶⁷ The (now retired) IMF staff member with lead responsibility for the IMF's work on Ireland during 2010–13, in recent testimony before the European Parliament criticized the ECB's views on some key issues. He has also observed that Ireland and other crisis countries could have had bailouts with "fewer constraints" if the ECB had not been involved in the troika (*Irish Times*, December 3, 2015).

⁶⁶ Consider a situation in a program country where the national central bank has extended major financing to the domestic banks. While addressing this issue would likely be part of any program supported by the Fund, the central bank would clearly sit only on the authorities' side of the table.

⁶⁹ It was indicated that under the ECB framework, a number of unspecified "other matters" are the responsibility of the national central bank. Representing the authorities in negotiating with external partners was deemed to fall under this category.

the decision not to seek a restructuring of senior unsecured bondholders, the views of the ECB and the EU prevailed over those of the Fund staff.

Conclusions

The IMF's role in Ireland over the last decade and a half is a drama in two acts. During the first phase (2000–07) the relationship between Ireland and the Fund was based on surveillance at a time when the economy was widely perceived as continuing to turn in a stellar performance. However, the surveillance process failed to identify sufficiently or highlight the deep-seated vulnerabilities underlying the continuing boom, including the emergence of a massive property bubble, the financial fragility of the banks, and a major underlying structural budget deficit. By 2008, as global financial pressures mounted, these weaknesses began to rapidly emerge and the authorities increasingly began to move towards crisis mode. However, the Fund was absent from mid-2007 onwards; the Article IV consultation scheduled for mid-2008 regrettably did not take place as originally planned.

The second phase of Fund involvement started in 2009 when the staff's dialogue with the authorities resumed and intensified. Faced with a steady worsening of domestic economic and financial conditions, in December 2010, the government requested an extended arrangement under the troika framework established earlier for Greece.

The failure of Fund surveillance (both annual Article IV staff reports and the FSAP process) prior to the crisis was due to several interrelated factors. In the first place, staff did not undertake sufficiently comprehensive and rigorous analysis that could have recognized in advance the looming Irish problem and provided policy advice commensurately. Although staff did raise concerns about property market developments and aspects of the banks' financial situation, the overall message, especially in 2006–07, was one of reassurance. Nor were the linkages between the underlying fragile budgetary position performance (in particular, the dependence on property-sector-related revenues) and the macroeconomic impact of a potential collapse in construction explored. Some staff involved at the time have remarked that it was "difficult to imagine" a euro area member such as Ireland, whose economic performance had been praised so lavishly experiencing a disaster on anything like the scale that eventually happened. It was also acknowledged that staff should have looked more closely at the experiences of some other industrial countries (for example, the Nordics) that had undergone financial crises in the not so distant past. What is often said to be an important feature of the Fund staff, namely, its extensive cross-country experience, seemingly was not brought to bear in this case.

"Environmental" factors also played a significant role. Following the establishment of the euro area there appears to have been a sense among at least some Fund staff that potential criticism of individual countries' macroeconomic or financial performance should be tempered by the view that the euro area authorities were regarded as being in the "front line" when it came to addressing some issues. Coupled with staff downsizing and restructuring of the European Department this view tended to imply that smaller countries were given a lower priority. Many consultations (although not with Ireland) were moved to a 24-month consultation cycle, while several took place under "streamlined" procedures. Some staff recalled Fund management wondering at one stage whether consultations were actually needed with some euro area members.

These shifts impacted significantly surveillance of Ireland. The postponement of the 2008 consultation with Ireland (by all accounts not at the initiative of the authorities) was regrettable. Staff originally assigned to Ireland were redeployed to work on systemically more important countries, some of which were experiencing financial stress. During a critical two-year period (mid-2007–early 2009) in Ireland's economic fortunes, the Fund was entirely absent; there was no substantive contact between the staff and the authorities.

Neither was the prevailing climate within Ireland conducive to a more robust dialogue. Both staff and the authorities acknowledge that the Irish side would not have willingly countenanced any explicit consideration of more adverse downside scenarios than the "soft landing" hypothesis. This was consonant with the general political, market, and media view in Ireland at the time that any hint at a risk of a widespread crash to come was unfounded and irresponsible. The authorities firmly believed, as late as 2009, that, in light of their impressive track record, they could handle any problems that might arise themselves. It is striking that at no stage during the tumultuous events surrounding the September 2008 granting of the state banking guarantee decision did the authorities seek Fund advice (nor were any contacts initiated by the staff). Thus, for whatever reasons, the Fund's role as a potential "trusted advisor" in times of difficulty did not feature in this case. Undoubtedly, this had a, perhaps subconscious, impact as to how far the Fund staff might have been willing to go in querying the prevailing wisdom in Dublin at the time.

Nevertheless, once the severity of Ireland's problems became apparent the nature and depth of the dialogue quickly shifted to a more proactive stance. From early 2009 onwards, the staff engagement stepped up. The 2009 and 2010 consultation reports contained a much more extensive analysis of the mounting difficulties and offered advice as to the most appropriate policy responses. The deepening dialogue served to build up relationships of trust and confidence that were to help significantly at the later negotiating stage. During this period, on two occasions the staff raised the possibility of Ireland requesting some form of precautionary arrangement to help provide some protection against increasing global financial turbulence. However, the authorities, fearful of the impact of any hint of Fund involvement on market and public sentiment and, quite possibly, cognizant of the broader costs of a perceived policy failure, chose not to pursue such an avenue. This reluctance highlights a general issue. Once market sentiment becomes a factor, the involvement of the Fund, even in a precautionary or supporting role, may be viewed as exacerbating, rather than alleviating, financial pressures.

The program eventually negotiated in late 2010 in the face of severe external pressures rightly focused on the root causes of the Irish crisis. Addressing the enormous problems facing banks was the centerpiece of the program, supported by continued fiscal consolidation. Fund conditionality was not applied to other structural aspects, which were not central to overall program objectives (although this may to some extent have been lost on the general public). The high degree of program ownership by the authorities throughout was key and extensive outreach to stakeholders also helped. The authorities subsequently gave high praise to the Fund staff involved for their technical expertise, their understanding of the Irish situation, including the political constraints present, and their readiness to seek pragmatic solutions to achieve overall program objectives. On the Fund's side the risks to the program at various stages were outlined clearly by the staff.

Judged by the yardstick of experiences elsewhere, the program achieved very considerable success. By the end of the program, the banking system was in a much healthier state and incipient threats to macro-financial stability had been removed, while fiscal consolidation targets were met or exceeded. These achievements, aided by an eventual improvement in the external environment in Europe and elsewhere as well as the underlying structural strengths of the Irish economy, helped restore confidence. Growth picked up significantly from 2013 onwards and unemployment declined steadily while bond yields fell sharply and Ireland was able to return to the market. This economic and financial turnaround occurred in the absence of major domestic social unrest, despite the extended period of harsh adjustments in living standards. After weighing up carefully various considerations, the Irish authorities concluded that a "clean exit" from the program at end-2013 was appropriate. As of March 2016, following renewed market borrowing by Ireland, all but the equivalent of 109 percent of quota of the amounts outstanding to the Fund had been repaid.

There was nevertheless continued debate as to the content and timeframe of some key measures. At various stages, a number of issues arose, including, within the staff, whether the speed of fiscal adjustment should be accelerated, the appropriate strategy and timetable for dealing with mortgage arrears and non-performing loans and the treatment of the third, smaller bank, PTSB. Staying with the degree of fiscal consolidation specified at the outset of the program was adjudged by both the authorities and the Fund to be the right course, given continued weak growth, the credibility that had been hard won by the authorities and the risk that calling for additional measures might undermine the political consensus underlying the overall strategy. The mortgage arrears issue could have been addressed more forcefully at a somewhat earlier stage. However, this required the prior passage of major new legislation and the buildup of sufficient skilled resources by the banks to deal with an unprecedentedly large problem; arguably an unduly hasty approach at a time when the economy remained very weak might have led to restructuring arrangements that were not in the best public interest. Finally, while there was a case for moving to resolve PTSB, the "wait and see" approach adopted in

practice by the staff also had merit. Crucially, the approaches adopted in the above areas did not affect realization of the program's overall objectives. This suggests the importance of selectivity in deciding the key issues for program conditionality to focus upon. It is noteworthy that substantial progress on these outstanding matters continued to occur in 2014–15 on the basis of the framework established during the program.

The issue of whether or not private sector bondholders could or should have been bailed in continues to provoke major controversy. Although the possibility of applying PSI to senior bondholders had been explored actively with the authorities, in the end, faced with strong opposition by the ECB and the EC, the Fund concluded that such an initiative could not be included as part of the program. In March 2011, a more limited proposal, supported by the Fund staff, to apply only to the two "gone concern" banks, was again rejected by the ECB. Advocates of imposing haircuts cite moral hazard, burden sharing considerations, and the need to contain fiscal costs, while arguing that contagion effects would not occur as the bonds in question were already trading at a significant discount; moreover, to the extent there might be some contagion, it was the responsibility of the euro area as a whole, not Ireland, to put in place appropriate arrangements to limit the adverse impact. Those opposed emphasized that actual implementation of haircuts would represent a major regime change that could significantly affect default probabilities on other instruments and hence the broader market in bank funding. All euro area members, it has been argued, had a common responsibility to try to avoid such an outcome, especially since in reality adequate firewall arrangements were not perceived as having been in place at the time.

Reasonable people can differ as to the relative merits of the above arguments. Given the counterfactual and speculative nature of what might have happened in the wake of a bail in operation, it is difficult to be definitive as to what was the best course of action at the time. Risk appetites in a highly volatile situation may differ depending on institutions' responsibilities and perspectives. In the end, the Irish authorities concluded that given European partner views the possible costs of pursuing the PSI option would likely outweigh the benefits. There is general agreement, however, that if the European-wide Bank Recovery and Resolution Directive (BRRD) and related measures had been in place in November 2010, the outcome in Ireland's case could have been quite different.

The broader issue of the external support needed to help achieve debt sustainability and to regain market access by Ireland was a continuing concern. Apart from PSI, the treatment of the promissory note and related schemes for improving the quality of the Irish banks' balance sheets were studied intensively; Fund management engaged in high-level contacts with European partners on the promissory note issue. Fund management and staff also called continuously for broader European-wide initiatives to restore banking confidence. These initiatives bore considerable fruit in the end although for much of the period the prospects for Ireland attaining debt sustainability were in considerable doubt. Despite the uncertainties and associated fragilities, there was, rightly, little support for the Fund taking a more interventionist stance by, for example, requiring progress on some issues before completing a review. Arguably, the constraints surrounding European partner support should have been well recognized at the time the arrangement was approved. The Irish authorities were strongly of the view that any initiative that might have led to open dissent among the troika would have been counterproductive and seriously undermined their hard won gains.

The troika framework was effective in an operational sense but raised some important "architectural" issues. Given the prevailing circumstances there was general agreement that the troika structure was an effective framework to address issues of common concern. Good working and personal relationships prevailed among troika staff despite some significant differences of view at times. However, several issues deserve consideration. First, given the ECB's key role in providing financing to the Irish banks, it was essential for it to be closely involved in the process. That being said, the question of "which (if any) side of the table the ECB should sit on" can be raised, given that the ECB, ultimately, is Ireland's central bank. Second, was the Fund a "junior partner" among the troika? Although the Fund contributed less than one-third of official program financing, in practice agreement by all three troika members to continue to support the program was required. Moreover, there is general agreement that reflecting its background and expertise, the Fund staff took the leading role in helping design critical elements of the program. It was suggested that whatever new and different arrangements might conceivably replace the troika structure in the future this key contribution of the Fund in this area should not be lost.

Finally, did the Fund "compromise its independence" by engaging in the troika lending framework, particularly as regards the question of debt burden sharing? The Fund's lending decisions should be independent and, in the first instance, be based on what is in the best interests of the member. In the end, the Irish authorities concluded that they did not wish to engage in a confrontation with other external partners on the debt issue. However, a broader question is raised. According to Fund policies, Fund-supported programs should avoid recourse to "measures destructive of national or international prosperity." In a case such as that of Ireland, where fears of contagion were openly expressed, inconsistencies could well have arisen between what may have been in the best interest of the member and considerations of systemic financial stability.

In the end, the program with Ireland was largely successful, partly reflecting some features specific to Irish circumstances. Nevertheless, this might not have ended up being the case, given the fragilities and uncertainties present, including the particular constraints associated with Ireland's membership of the euro area. The Irish experience with the troika lending framework—and some of the issues it gave rise to—suggest that notwithstanding the favorable outcome, a comprehensive review of the legal, institutional and economic aspects associated with the Fund's lending to a common currency area such as the euro area is warranted.

References

Cardiff, Kevin, 2016, Recap: Inside Ireland's Financial Crisis (The Liffey Press).

Donovan, Donal John, and Antoin E. Murphy, 2013, *The Fall of the Celtic Tiger: Ireland and the Euro Debt Crisis* (Oxford University Press).

Geithner, Timothy F., 2014, Stress Test Reflections on Financial Crises (Crown Publishers).

Honohan, Patrick, 2010, "The Irish Banking Crisis: Regulatory and Financial Stability Policy, 2003–2008—A Report to the Minister of Finance by the Governor of the Central Bank."

——, 2014, "Brian Lenihan and the Nation's Finances," in *In Calm and Crisis: Essays In Memory of Brian Lenihan*, ed. by Brian Murphy, Mary O'Rourke and Noel Whelan (Irish Academic Press).

International Monetary Fund (IMF), 1999, "Ireland—Staff Report for the 1999 Article IV Consultation," SM/99/176 (Washington).

—, 2000a, "Ireland—Staff Report for the 2000 Article IV Consultation," SM/00/163 (Washington).

——, 2000b, "Ireland's Property Boom from an International Perspective," in "Ireland—Selected Issues and Statistical Appendix," SM/00/176 (Washington).

—, 2000c, "Ireland—Financial System Stability Assessment" FO/Dis/00/88 (Washington)

—, 2003, "Ireland: 2003 Article IV Consultation—Staff Report; Staff Supplement, and Public Information Notice on the Executive Board Discussion for Ireland," IMF Country Report No. 03/242 (Washington).

——, 2004, "Ireland: 2004 Article IV Consultation—Staff Report; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Ireland," IMF Country Report No. 04/348 (Washington).

—, 2005, "Ireland: 2005 Article IV Consultation—Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion," IMF Country Report No. 05/369 (Washington).

, 2006a, "Ireland: 2006 Article IV Consultation—Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion," IMF Country Report No. 06/293 (Washington).

, 2006b, "Ireland: Financial System Stability Assessment Update," IMF Country Report No. 06/292 (Washington).

, 2007, "Ireland: 2007 Article IV Consultation—Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion," IMF Country Report No. 07/325 (Washington).

——, 2010a, "Ireland: Request for an Extended Arrangement—Staff Report; Staff Supplement; Staff Statement; and Press Release on the Executive Board Discussion," IMF Country Report No. 10/366 (Washington).

———, 2010b, "Ireland: Extended Arrangement—Interim Review Under the Emergency Financing Mechanism," IMF Country Report No. 11/47 (Washington).

——, 2011a, "Ireland: First and Second Reviews Under the Extended Arrangement and Request for Rephasing of the Arrangement—Staff Report; Letter of Intent; Memorandum of Economic and Financial Policies; Technical Memorandum of Understanding; Letter of Intent and Memorandum of Understanding on Specific Economic Policy Conditionality (College of Commissioners); Staff Supplement; and Press Release on the Executive Board Discussion," IMF Country Report No. 11/109 (Washington).

—, 2011b,"Ireland: Third Review Under the Extended Arrangement—Staff Report; Letter of Intent; Memorandum of Economic and Financial Policies; Technical Memorandum of Understanding; Letter of Intent and Memorandum of Understanding on Specific Economic Policy Conditionality (College of Commissioners); Staff Supplement; Press Release on the Executive Board Discussion," IMF Country Report No. 11/276 (Washington).

—, 2011c, "Ireland: Fourth Review Under the Extended Arrangement and Request for Rephasing of the Arrangement—Staff Report; Letter of Intent; Memorandum of Economic and Financial Policies; Technical Memorandum of Understanding; Letter of Intent and Memorandum of Understanding on Specific Economic Policy Conditionality (College of Commissioners); Staff Supplement; Press Release on the Executive Board Discussion," IMF Country Report No. 11/356 (Washington).

—, 2012a, "Ireland: Fifth Review Under the Extended Arrangement—Staff Report; Staff Supplement; Press Release on the Executive Board Discussion," IMF Country Report No. 12/48 (Washington).

—, 2012b, "Ireland: Sixth Review Under the Extended Arrangement—Staff Report; Staff Supplement; Press Release on the Executive Board Discussion," IMF Country Report No. 12/147 (Washington).

—, 2012c, "Ireland: 2012 Article ĪV and Seventh Review Under the Extended Arrangement—Staff Report; Informational Annex, Staff Supplement; and Public Information Notice," IMF Country Report No. 12/264 (Washington).

—, 2012d, "Ireland: Eighth Review Under the Extended Arrangement—Staff Report; Staff Supplements; and Press Release on the Executive Board Discussion," IMF Country Report No. 12/336 (Washington).

—, 2013a, "Ireland: Ninth Review Under the Extended Arrangement," IMF Country Report No. 13/93 (Washington).

—, 2013b, "Ireland: Tenth Review Under the Extended Arrangement," IMF Country Report No. 13/163 (Washington).

—, 2013c, "Ireland: Eleventh Review Under the Extended Arrangement," IMF Country Report No. 13/305 (Washington).

—, 2013d, "Ireland: Twelfth Review Under the Extended Arrangement and Proposal for Post-Program Monitoring," IMF Country Report No. 13/366 (Washington).

——, 2015, "Ireland: Ex Post Evaluation of Exceptional Access Under the 2010 Extended Arrangement," IMF Country Report No. 15/20 (Washington).

- Jaeger, Albert, and Ludger Schuknecht, 2004, "Boom Bust Phases in Asset Prices and Fiscal Policy Behavior," IMF Working Paper No. 04/54 (Washington: International Monetary Fund).
- Kanda, Daniel, 2010, "Asset Booms and Structural Fiscal Positions: The Case of Ireland," IMF Working Paper No. 10/57 (Washington: International Monetary Fund).

Martinez-Mongay, C., L. A. Maza Lasierra, and J. Yaniz Igal, 2007, "Asset Booms and Tax Receipts: The Case of Spain, 1995–2006," *European Economy Economic Papers*, No. 293 (Brussels).

Nyberg, Peter, 2011, "Misjudging Risk: Causes of the Systemic Banking Crisis in Ireland," Report of the Commission of Investigation into the Banking Sector in Ireland (Dublin).

- Organisation for Economic Co-operation and Development (OECD), 2006, *Economic Survey of Ireland* (Paris).
- Pisani-Ferry, Jean, André Sapir, and Guntram B. Wolf, 2011, "TSR External Study—An Evaluation of IMF Surveillance of the Euro Area" (Washington).