

SM/12/227  
Correction 1

September 10, 2012

To: Members of the Executive Board

From: The Acting Secretary

Subject: **Ireland—Selected Issues**

The attached corrections to SM/12/227 (8/28/12) have been provided by the staff:

**Factual Errors Not Affecting the Presentation of Staff's Analysis or Views**

**Page 3, para. 1, line 4:** for “However, from its peak in the first quarter of 2008, real private consumption fell 10.8 percent by the first quarter of 2012, making a substantial contribution to the 8.5 percent decline in GDP in that period”

read “However, from its peak in the fourth quarter of 2007, real private consumption fell 14.6 percent by the first quarter of 2012, making a substantial contribution to the 9.4 percent decline in GDP in that period”

**Page 3, para. 2, line 5:** for “mostly related to real estate such as moving into higher quality housing, investment property (“buy-to-let”), and home improvement”

read “mostly related to real estate, such as newly built housing and home improvements”

**Page 16, para. 16, line 7:** for “Rejection rates on loan applications have somewhat improved since the previous survey and are only marginally worse than in the rest of the euro area.

These results are similar to those obtained by Mazars (2012) from surveying a much larger sample of Irish firms. In addition, the Mazars study finds that reduced or impaired collateral values have a negative impact on the ability for SMEs to obtain bank financing.”

read “Rejection rates on loan applications have somewhat improved since the previous survey and are only marginally worse than in the rest of the euro area, although other studies point to higher rejection rates when including loan overdraft applications and using different samples.<sup>6</sup> At the same time, a survey by Mazars (2012) finds that reduced or impaired collateral values have a negative impact on the ability for SMEs to obtain bank financing.”

**Page 16, para. 16:** footnote 6 added to read “For example, Holton and McCann (2012) find that the Irish SME rejection rate is double the euro area average and second only to Greece.

Their analysis considers bank loans and overdrafts as well as a wider range of credit constrained firms as rejected. Similarly, Mazars (2012) surveys a much larger sample of Irish firms and finds a rejection rate of 28 percent when considering bank loan and overdraft applications.” Subsequent footnotes renumbered.

**Page 17, para. 22, line 3:** for “Moreover, most mortgages have been issued with variable interest rates, reducing net interest margins as monetary conditions loosened.”  
read “Moreover, around half of mortgages have been issued with rates that track the ECB benchmark rate, reducing net interest margins as monetary conditions loosened.”

**Page 18, para. 23:** footnote 8 added to read “It should be noted that the number of banks responding to the BLS in each quarter in Ireland is very small.” Subsequent footnotes renumbered.

**Page 24, line 9:** “Holton, S. and F. McCann, (2012), “SME Credit Supply and Demand: Comparisons Across Surveys and Countries,” Central Bank of Ireland Economic Letters No. 8.” added

**Page 30, para. 7, line 5:** for “translating into general government deficits above 9 percent of GDP over 2009–11”  
read “translating into underlying (i.e. excluding impact of direct banking support measures) general government deficits above 10 percent of GDP over 2009–10”

**Page 31, para. 9, line 4:** for “a 9 percent cut in welfare rates”  
read “an 8 percent cut in welfare rates”

**Page 37, footnote 8, line 2:** for “PRSI contributions do not bear a strong link to welfare benefits, notwithstanding recent efforts to change that, so that it is acceptable to combine”  
read “PRSI contributions do not bear a strong link to welfare benefits, so that it is acceptable to combine”

**Page 41, para. 26, bullet 1, line 1:** for “(with no exemptions); and 1% (2%) stamp duty on residential transactions up to €1 million (on the balance above €1 million).”  
read “(with minimal exemptions) since 2012; and 1% (2%) stamp duty on residential transactions up to €1 million (on the balance above €1 million) since 2011.”

**Page 41, para. 26, bullet 1, line 3:** for “The combined collection from these stamp duties amounted to about €0.8 billion in 2010.”  
read “The combined collection from these stamp duties in 2010, i.e. before these lower rates were introduced, amounted to about €0.2 billion.”

**Page 43, para. 30, line 1:** for “value-based property tax on owners on principal private residences”  
read “value-based property tax on principal private residences”

**Page 47, line 3:** for “The Irish Association of Pension Funds has suggested”  
read “It has been suggested”

**Page 53, para. 41, line 7:** for “Overall, staff estimates that realistic percentage reductions in these spending areas (noted in the final column of Table 7) can yield permanent annual savings of about around 2 percent of GDP.”

read “Overall, staff estimates that realistic percentage reductions in these spending areas can yield permanent annual savings of around 2 percent of GDP.”

**Page 55, Table 8:** for “Sources: Departments of Public Expenditure and Reform, Health and Education; OECD Health at a Glance (2011); OECD Education at a Glance (2011); and IMF staff estimates.”

read “Sources: Factual information underpinning staff analysis was provided by the Departments of Public Expenditure and Reform, Health and Education. Other sources consulted include: OECD Health at a Glance (2011) and OECD Education at a Glance (2011).”

**Page 66, para. 22, line 3:** for “Upon becoming unemployed, a person that has made enough social security contributions is entitled to the Jobseeker’s Benefit (JB) paid for 6 to 12 months, with the amount based on previous income, but capped for high earners.”

read “Upon becoming unemployed, a person that has made enough social security contributions is entitled to the Jobseeker’s Benefit (JB) paid for 6 to 12 months. Reduced, or graduated rates, are payable where the average weekly earnings are under a certain threshold.”

Questions may be referred to Mr. Beaumont (ext. 37411) and Mr. Bhatia (ext. 37626) in EUR.

This document will shortly be posted on the extranet, a secure website for Executive Directors and member country authorities.

Att: (14)

Other Distribution:  
Department Heads



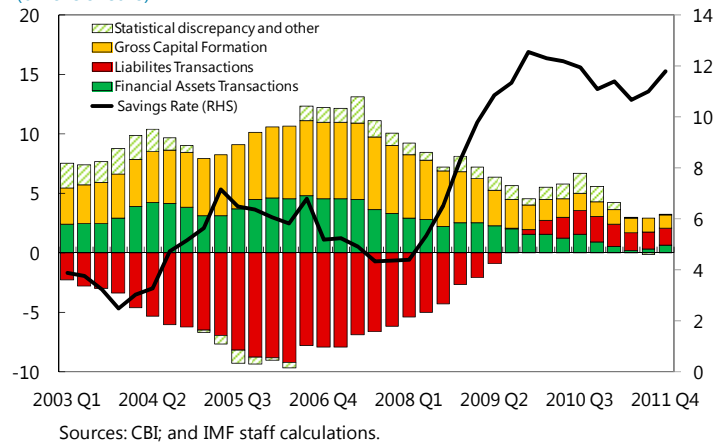
## I. HOUSEHOLD CONSUMPTION, WEALTH, AND SAVING<sup>1</sup>

### A. Introduction

1. **Household consumption is a key component of domestic demand which has yet to recover.** Household consumption constitutes about half of Ireland's GDP and about 65 percent of domestic demand. Real private consumption growth averaging about 7 percent in 2005–07 contributed to the boom in this period. However, from its peak in the ~~first~~<sup>fourth</sup> quarter of ~~2008~~<sup>2007</sup>, real private consumption fell ~~10.8~~<sup>14.6</sup> percent by the first quarter of 2012, making a substantial contribution to the ~~8.5~~<sup>9.4</sup> percent decline in GDP in that period. As of the first quarter of 2012, private consumption continues to decline at a pace of 2.2 percent year-on-year, which dampens the prospects for a broad-based recovery of domestic demand.

2. **Household consumption and investment patterns during the boom were enabled by accumulating high debt.** Figure 1 shows the increase in households' net borrowing ("liabilities transactions") during the boom which funded a large increase in household capital formation, mostly related to real estate such as ~~moving into higher quality housing, investment property ("buy-to-let"), and home improvement~~<sup>newly built housing and home improvements</sup>. As credit conditions further eased in the mid-2000s, and as households' confidence was boosted by their rising net wealth, additional borrowing allowed households to reduce their saving rate and allocate a larger share of their disposable income towards consumption. As consequence, many households' balance sheets became riddled with debt.

**Figure 1: A Credit-Fuelled Boom and Its Unwinding**  
(billions of euro)



3. **Despite a rise in household saving in recent years, debt burdens remain high.** With the end of the property boom in 2007–08, lending slowed sharply. Figure 2 shows how slowing household lending coincided with sharp falls in household net wealth from the collapse in house prices. In response, households started to save a larger portion of their income. The resulting decline in consumption reinforced the fall in disposable incomes which started with the collapse of the construction sector and was later accelerated by fiscal consolidation among other factors. As a result of falling incomes, households achieved only

<sup>1</sup> This paper was prepared by Jochen Andritzky. The analysis benefitted greatly from comments and data provided by the Irish authorities. Vizhdan Boranova provided excellent research assistance.

modest reductions in debt relative to income by 2012 despite nominal debt reductions from higher savings.

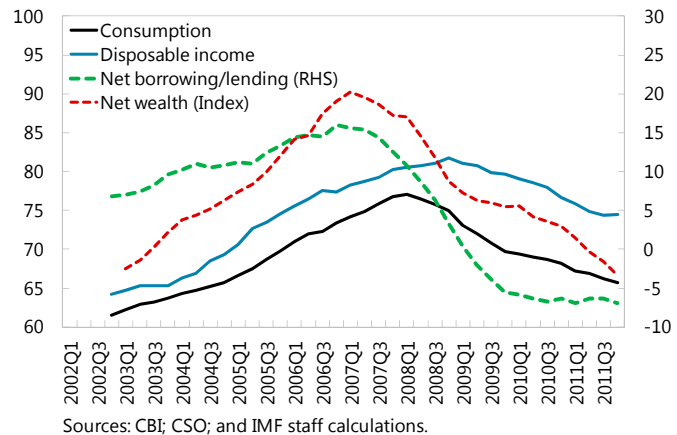
4. **The sizable overhang of household debt is expected to be a drag on the recovery of consumption over the medium term.** This paper describes the nexus between household wealth, saving, and consumption and provides estimates for the medium-term path of household saving and

consumption. Under current macroeconomic assumptions, the savings rate is expected to decline gradually from 14 percent in 2011 to 12 percent by 2017. During the same period, household debt would decline from about 210 percent to 185 percent of disposable income. Alternative scenarios show how an accelerated speed of deleveraging could in part become self-defeating as lower demand depresses growth and incomes, whereas slower deleveraging could support growth but requires additional new lending.

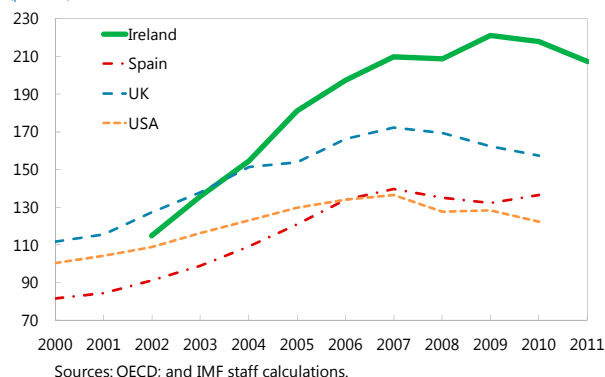
## B. The Consumption-Balance Sheet Nexus

5. **The extent of households' indebtedness distinguishes Ireland from comparators.** During the last decade, households' debt-to-income and leverage (debt-to-assets) ratios deteriorated markedly: households rapidly accumulated debt during boom times whereas household incomes and asset values declined severely during the crisis. The amplitude of debt accumulation and, subsequently, of income and house price declines has been more pronounced than in comparator countries where strong house expansions were also followed by a correction (Figures 3 and 4). As debt overhangs are known to take time to work off, households' consumption-saving decisions may be affected in a more lasting manner.

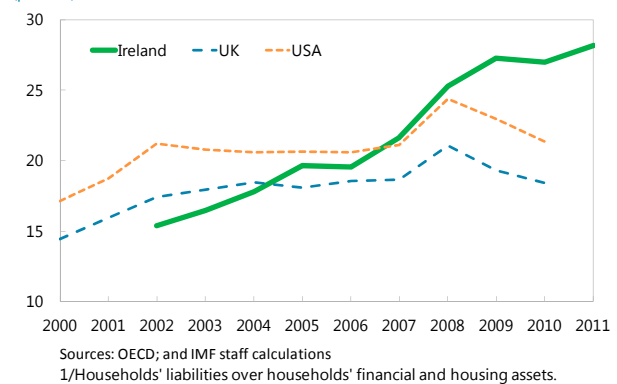
**Figure 2: The Turn of the Credit Cycle**  
(Billions of 2002 euros)



**Figure 3. Household Debt to Gross Disposable Income**  
(percent)



**Figure 4. Household Leverage Ratio 1/**  
(percent)



**Table 1. Financial Constraints, Firm Size, and Banking Crisis, 2002–10 1/**

Dependent variable: $I/K_{it}$	(1)	(2)	(3)
	Unconstrained firms	Constrained firms	Constrained and Crisis
$I/K_{it-1}$	0.228*** (0.0577)	-0.187** (0.0891)	-0.187** (0.0893)
$(I/K)_{it-1}^2$	-0.102 (0.0798)	0.0758 (0.154)	0.0773 (0.155)
$S/K_{it-1}$	-0.00049 (0.00125)	-0.00271 (0.00182)	-0.00278 (0.00184)
$CF/K_{it-1}$	0.0261* (0.0141)	0.0510** (0.0205)	0.0498** (0.0212)
$(D/K)_{it-1}^2$	-0.0000515 (0.000128)	0.000175 (0.000174)	0.000183 (0.000178)
$CF/K_{it-1} \times Crisis_{t-1}$			0.00579 (0.0297)
Number of observations	903	235	235
Number of firms	293	99	99
Arellano-Bond test for zero autocorrelation in first-differenced errors (H0: no autocorrelation):			
--First-order (p-value)	0.00	0.00	0.00
--Second-order (p-value)	0.70	0.69	0.69
Sargan test of overidentifying restrictions (H0: overidentifying restrictions are valid):			
--Chi-squared (p-value)	0.23	0.10	0.10

**Source:** Author's calculations based on firm-level data from Bureau Van Dijk's Amadeus database.

1/ Regressions estimated using the Arellano-Bond (1991) one-step GMM estimator for models with lagged dependent variables and fixed effects. Regression in column (1) restricts sample to unconstrained firms, defined as firms with total assets in a given year in the top seven deciles of the annual asset size distribution, while the regressions in columns (2) and (3) restrict sample to constrained firms, defined as firms with total assets in a given year in the bottom three of the annual asset size distribution. Regression in column (3) also includes an interaction between the ratio of cash flow to fixed assets and a banking crisis dummy variable that takes a value of one for the years 2008 onwards and zero otherwise. Regressions include year-fixed effects. Standard errors are reported between brackets. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively.

14. **Estimates based on this dynamic investment model show that small firms are particularly financially constrained but not more so during the crisis.** Estimates of the dynamic investment model with financial factors and debt suggests that financial factors such as cash flow play an important role in the investment decisions of especially small firms (Table 1). This suggests that small firms in Ireland are financially constrained. Differential estimates for the crisis period since 2008 indicate that these financing constraints for small firms have not become more severe during the crisis. These results suggest that the decline in investment by especially small firms during the crisis is primarily driven by demand factors.

15. **Small firms finance reduced investment predominantly with internal finance.** Firm level data also indicate that firm indebtedness came down since the crisis. At the same time, investment and operating cash flow also shrunk markedly, reflecting lower aggregate demand (Table 2).

**Table 2. Firm investment, sales, cash flow, and debt: 2002-2010 1/ (median values across firms)**

Year	I/K	S/K	CF/K	D/K
2002	0.066	4.657	0.173	1.435
2003	-0.013	4.459	0.180	1.364
2004	-0.043	4.604	0.236	1.450
2005	0.072	5.263	0.344	1.468
2006	0.109	6.126	0.347	1.655
2007	0.108	5.929	0.375	1.754
2008	0.091	5.601	0.243	1.542
2009	0.064	4.805	0.167	1.292

**Source:** Authors' calculations based on firm-level data from Bureau Van Dijk's Amadeus database.

1/ I/K is investment to fixed capital, S is net sales, CF is operating cash flow, and D is total debt. Median values across firms. Sample of 392 manufacturing firms.

16. **Survey data show that lack of demand for products, not access to finance, is the most pressing problem for SMEs.** Results from the Survey on the Access to Finance of small and medium-sized Enterprises (SAFE) show that the inability to find customers is the most pressing problem for SMEs. Access to finance follows as the second most pressing problem. Access to finance is particularly problematic for SMEs and comparable to other euro area economies and has deteriorated somewhat since the previous time the survey was conducted. Rejection rates on loan applications have somewhat improved since the previous survey and are only marginally worse than in the rest of the euro area, although other studies point to higher rejection rates when including loan overdraft applications and using different samples.<sup>6</sup> At the same time, a survey by Mazars (2012) finds that reduced or impaired collateral values have a negative impact on the ability for SMEs to obtain bank financing. At the same time, a survey These results are similar to those obtained by Mazars (2012) from surveying a much larger sample of Irish firms. In addition, the Mazars study finds that reduced or impaired collateral values have a negative impact on the ability for SMEs to obtain bank financing. Overall, these survey results suggest that demand factors play an important role in the lack of credit for SMEs, although collateral constraints and balance sheet distress from property exposures may also be undermining the availability of credit.

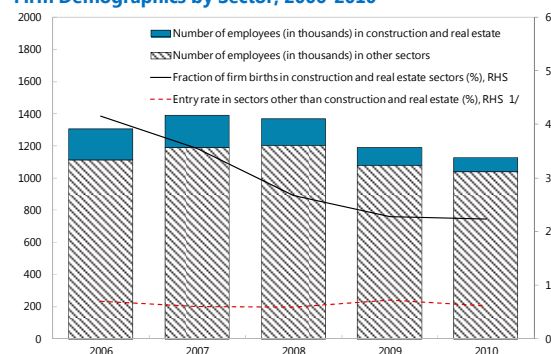
**Table 3. Access to finance of SMEs, April 2011 to March 2012**

Country	Firm type	Period	Most pressing problem (%)					Loan application in past 6 months (%)		
			Number of firms	Finding customers	Competition	Access to finance	Production /labor costs	Skilled staff	Regulation	Applied but was rejected
Ireland	SMEs	Oct 2011 – Mar 2012	485	35.3	12.5	24.7	10.1	5.9	5.1	17.1
Ireland	Large	Oct 2011 – Mar 2012	15	34.0	33.6	2.8	12.2	2.8	12.2	0.0
Euro area	SMEs	Oct 2011 – Mar 2012	6969	26.9	12.5	17.3	13.8	13.7	7.4	13.2
Ireland	SMEs	Apr 2011 – Sep 2011	484	35.9	12.3	20.6	10.5	4.0	5.0	22.6

Source: ECB, SAFE survey.

17. **And firm creation outside property-related sectors remains robust.** National statistics on firm demographics indicate that there are increasingly fewer new firms. This is especially the case for small firms, firms that tend to be more financially constrained. Moreover, there have been an increasing number of firm deaths, especially among small firms. With depressed home prices it has become more difficult to finance a new firm using home equity, which has hampered job creation. However, while the firm entry rate has come down somewhat since 2009, it is relatively stable outside the construction and real estate sectors.

**Firm Demographics by Sector, 2006-2010**



Source: CSO.  
1/ Number of firm births divided by total number of firms.

## Household sector

18. **As house prices have halved from their peak, housing affordability indicators have returned to their historical level.** House prices have halved from their 2007 peak and

<sup>6</sup> For example, Holton and McCann (2012) find that the Irish SME rejection rate is double the euro area average and second only to Greece. Their analysis considers bank loans and overdrafts as well as a wider range of credit constrained firms as rejected. Similarly, Mazars (2012) surveys a much larger sample of Irish firms and finds a rejection rate of 28 percent when considering bank loan and overdraft applications.

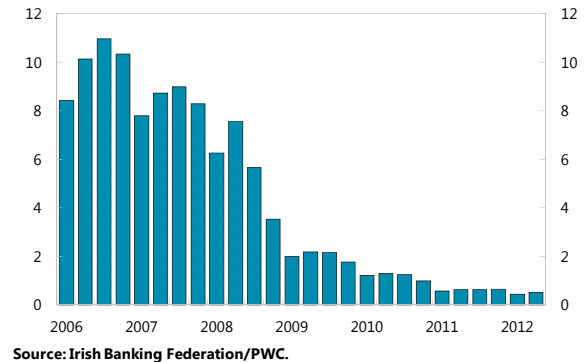


are now back at 2001 levels. Such steep declines in house prices are rare, but they have previously occurred following real estate busts even in advanced economies.<sup>7</sup> While affordability indicators indicate that house prices have reached historical levels, with house prices about ten times per capita disposable income, some overshooting of house price declines is normal following real estate boom-bust cycles.

19. **But while interest burdens have improved, the household debt overhang remains severe, with household debt high in international comparison.** Interest payments on household debt have fallen markedly relative to disposable income, mainly because of reduced ECB interest rates. Nevertheless, household debt remains high, also by international standards, at about 220 percent of disposable household income, having decreased only marginally from its peak.

20. **As a result, new lending for house purchases has halted.** Demand for mortgage loans has been curtailed due to a debt overhang—especially affecting first-time buyers and buy-to-let investors during the 2004–08 boom—and expectations of further house price declines. Supply of mortgage loans has also been limited by legacy problems and the high cost of funding at banks.

Loans for House Purchases  
(Billions of euros)



21. **The malaise in the property market is also negatively affecting some SMEs.** A large fraction of SMEs have been active in property-related sectors, e.g., commercial real estate such as retail space as well as buy-to-let residential property. Following the decline in commercial property and house prices, many of these SMEs are in financial distress. The viability of a large number of SMEs in Ireland is therefore dependent on a revival of the property market or on some workout of their property-related debt.

### Banking sector

22. **On the supply side, bank lending has been curtailed due to legacy problems and high funding costs.** Bank asset quality has deteriorated with a growing number of mortgage loans and SME credits in arrears, increasing provisioning for bad loans. Moreover, around half of most mortgages have been issued with variable interest rates that track the ECB benchmark rate, reducing net interest margins as monetary conditions loosened. Indeed, banks' cash flow from net interest revenues is currently insufficient to cover provisioning expenses. At the same time, banks' funding costs

<sup>7</sup> For example, Norway experienced similar house price declines during its crisis in the early 1990s (Drees and Pazarbasioglu, 1998).

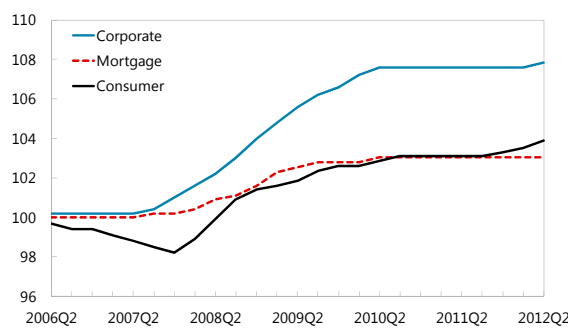
remain high, with high deposit interest rates and fees on the Eligible Liabilities Guarantee (ELG) scheme, increasing the marginal cost to lend.

### C. Lending Standards and Credit Conditions Disentangled

23. **Lending standards are stable but credit demand conditions remain weak, suggesting that the reduced lending activity is primarily demand driven.** Data from the ECB bank lending survey show that lending standards for corporate and households have stabilized, while credit demand especially for corporate continues to fall.<sup>8</sup> But, as lending standards and credit demand conditions are driven by common factors, such as economic conditions, it is difficult to infer a causal interpretation based on lending survey data (in the absence of exogenous shifts in the supply of credit).

**Changes in Credit Standards**

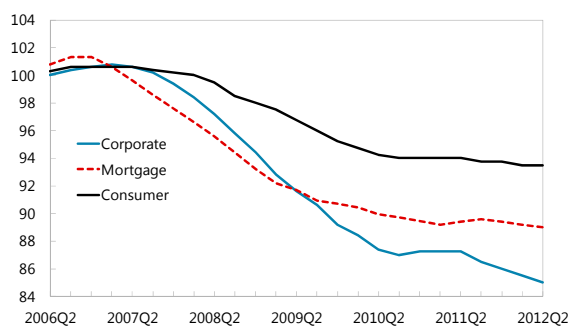
(2006Q1=100, + = tightening)



Source: Central Bank of Ireland.

**Changes in Credit Demand**

(2006Q1=100)



Source: Central Bank of Ireland.

24. **To disentangle whether changes in lending standards or credit demand conditions are driving loan growth, regression analysis of bank lending survey responses is used.**<sup>9</sup> To gauge the importance of supply-side constraints for credit growth, regressions of loan growth are estimated where demand is purged from supply factors, and vice versa. These regressions use ECB bank lending survey responses to changes in lending standards and credit demand conditions as proxies for changes in supply and demand factors, respectively. These regressions are estimated separately for lending to corporates and households. Purging demand from supply factors, and vice versa, allows for an estimate of upper and lower bounds of the effect of supply-side factors on credit growth. While this approach is subject to criticism, primarily because it assumes that the loan survey responses are accurate and exogenous, it offers some guidance on the relative importance of supply and demand factors.

25. **Regressions are first estimated using data on the bank lending survey for corporations.** The basic regression model is

<sup>8</sup> It should be noted that the number of banks responding to the BLS in each quarter in Ireland is very small.

<sup>9</sup> This approach is similar to that in Valencia (2012).

on such securitizations given the low sovereign credit rating, imply that, at least for the moment, the market for securitization of SME loans is limited.

### E. Conclusions

38. **The analysis presented indicates weak lending is mostly demand-driven, although supply factors play in role in mortgage lending and pockets of SME lending.** While analysis points to a tightening of lending standards and significant financing constraints at SMEs, the sharp decline in household and corporate lending appears primarily demand driven.

39. **A small-scale and well-targeted credit guarantee program can help SME financing.** This would relieve financing constraints for SMEs with profitable growth opportunities. But care is needed that guaranteed credit does not flow to SMEs that do not need it or that have alternative sources of finance.

40. **The restructuring of bad loans needs to be speeded up.** More intense efforts by banks to work out distressed loans are urgently needed. This will repair private sector balance sheets and reduce debt overhang, improve prospects for economic recovery and sound lending opportunities, and ultimately help restore the viability of banks.

### References

Arellano, M. and S. Bond (1991), “Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations,” *Review of Economic Studies*, vol. 58(2), pp. 277–97.

Bannock and Partners (1997), *Credit Guarantee Schemes for Small Business Lending: A Global Perspective*. London: Graham Bannock and Partners.

Bond, S. and C. Meghir (1994), “Dynamic Investment Models and the Firm’s Financial Policy,” *Review of Economic Studies*, vol. 61(2), pp. 197–222.

Claessens, S., S. Djankov, and A. Mody (2003), *Resolution of Financial Distress: An International Perspective on the Design of Bankruptcy Laws*, WBI Development Studies, World Bank.

Dell’Ariccia, G., D. Igan, and L. Laeven (2012), “Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market,” *Journal of Money, Credit and Banking*, vol. 44(3), pp. 367–84.

Drees, B. and C. Pazarbasioglu (1998), “The Nordic Banking Crisis: Pitfalls in Financial Liberalization,” IMF Occasional Paper No. 161, International Monetary Fund, April 20, 1998.

Hagan, S., E. Kalter, and R. Weeks-Brown (2003), “Corporate Debt Restructuring in the Wake of Economic Crisis,” In: *Managing Financial Crises: Recent Experience and Lessons for Latin America*, IMF Occasional Paper No. 217, pp. 84–100.

Hoelscher, D. and M. Quintyn (2003), “Managing Systemic Banking Crises,” IMF Occasional Paper No. 224, 2003.

Holton, S. and F. McCann, (2012), “SME Credit Supply and Demand: Comparisons Across Surveys and Countries,” Central Bank of Ireland Economic Letters No. 8.

Kennedy, B. (2011), “Using the Bank Lending Survey to Understand the Recent Disruption to Financial Markets: An Overview,” Central Bank of Ireland *Quarterly Bulletin* 03, pp. 83–108, July 2011.

Laeven, L. and T. Laryea (2009), “Principles of Household Debt Restructuring”, IMF Staff Position Note No. 09/15, June 26, 2009.

Laeven, L. and F. Valencia (2012), “Systemic Banking Crises Database: An Update”, IMF Working Paper No. 12/163, International Monetary Fund.

Laryea, T. (2010), “Approaches to Corporate Debt Restructuring in the Wake of Financial Crises”, IMF Staff Position Note No. 10/02, January 26, 2010.

Lawless, M. and F. McCann (2011), “Credit Access for Small and Medium Firms: Survey Evidence for Ireland,” Research Technical Paper No. 11/RT/11, Central Bank of Ireland.

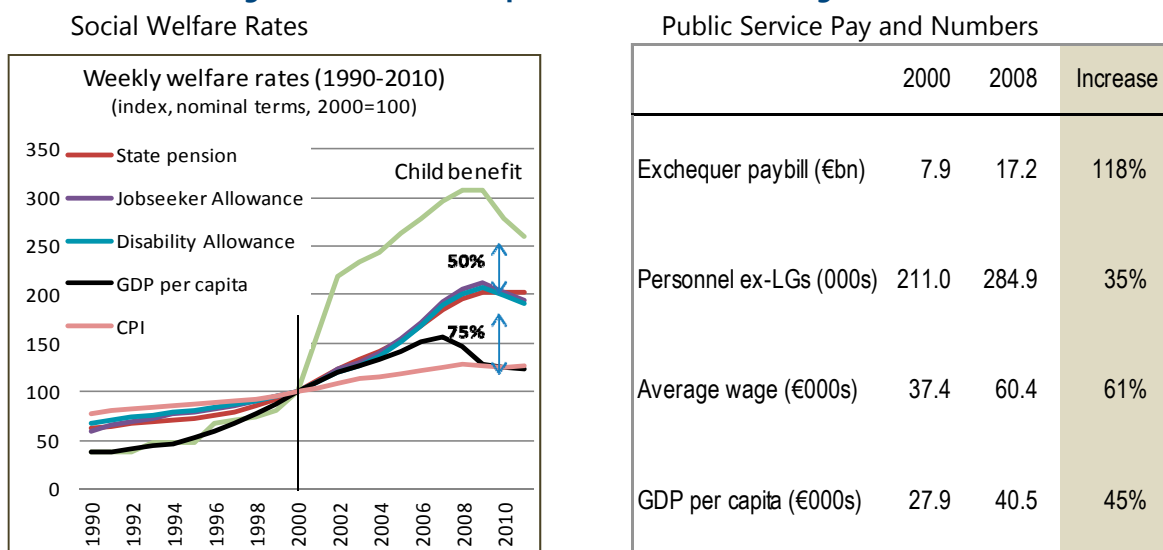
Lawless, M. and F. McCann (2012), “Determinants of Default: Evidence from a Sector-Level Panel of Irish SME Loans,” CBI Research Technical Working Paper No. 3/RT/12, Central Bank of Ireland.

Lawless, M., F. McCann, and T. McIndoe Calder (2012), “SMEs in Ireland: Stylised Facts from the Real Economy and Credit Market,” Mimeo, Central Bank of Ireland.

Levitsky, J. (1997), “Credit Guarantee Schemes: An International Review,” *Small Enterprise Development*, vol. 8(2), pp. 4–17.

Mazars (2012), “SME Lending Demand Study,” July 2012.

Valencia, F. (2012), “Credit Developments in the Euro Area: Demand vs. Supply,” mimeo, International Monetary Fund.

**Figure 2. Sources of Expenditure Increase During the 2000s**

Source: Departments of Public Expenditure and Reform, and Social Protection.

6. The late 1990s/early 2000s were also a turning point for the income tax. As Figure 3 reveals, Ireland's 1980s configuration of a narrow income tax base with high marginal rates had been considerably reformed by the late 1990s. In the 2000s, policy focus shifted toward returning to the old-narrow tax bases, but unlike in the past, further cutting statutory rates. Thus, by 2009, the already high entry point for the income tax (at 25 percent of per capita GDP in 1998) had risen to over 50 percent of per capita GDP, while marginal rates had fallen to 20/41 percent, from 26/48 percent in 1998.

**Figure 3. Income Tax Bands and Statutory Rates: 1985–2012**

(bands in percent of per capita GDP; rates in percent)



Source: Department of Finance.

7. The very large deterioration in the underlying strength of the fiscal position implied by these spending increases and income tax cuts during the 2000s remained largely hidden under a flood of property-related revenues in the boom period of 2004–07. When the crisis erupted in 2008, boom revenues disappeared, output fell back sharply, and a structural primary deficit of over 10 percent of GDP emerged by end-2008, translating into underlying (i.e. excluding impact of direct banking support measures) general government deficits above 910 percent of GDP over 2009–~~11~~10.

8. Figure 4 documents the dramatic rise of Ireland's expenditure-to-GNP ratio from one of the lowest in the OECD in 2000, to one of the highest by 2011, while the revenue ratio has remained broadly unchanged. End-2011 current primary spending was 47 percent of GNP, 17 percentage points higher than in 2000: social benefits rose by 11.5 percentage points and public compensation by about 5 percentage points.<sup>2</sup> Table 1 indicates that Ireland's expenditures resemble those of English-speaking economies, as a share of GDP, but those of small European economies as a share of GNP. In other words, Ireland is either a low-tax/medium-spend economy (when scaling to GDP), or a medium-tax/high-spend economy (when scaling to GNP).<sup>3</sup>

**Table 1. Ireland's Expenditure and Revenue Ratios vis-à-vis Comparator Groups**

percent of GDP, GNP; 2011	Primary current	Compens- ation	Social benefits	Capital	Interest	Total Expenditure	Revenue
Ireland							
2000	25.8	7.9	8.8	3.4	2.0	31.2	35.9
2011	37.7	11.2	17.5	3.3	3.3	44.3	35.1
2000, % of GNP	30.2	9.3	10.3	4.0	2.3	36.5	42.1
2011, % of GNP	47.2	14.1	21.9	4.2	4.1	55.5	44.0
English-Speaking	37.6	10.6	14.6	2.9	3.1	43.6	36.3
Small European	49.2	13.7	21.3	2.1	2.1	53.4	51.6
Large European	45.0	10.6	24.1	2.2	3.4	50.5	47.2
OECD average	39.7	10.8	17.0	2.8	2.7	45.3	41.9
OECD EU	42.2	11.1	19.5	2.8	2.6	47.6	44.4

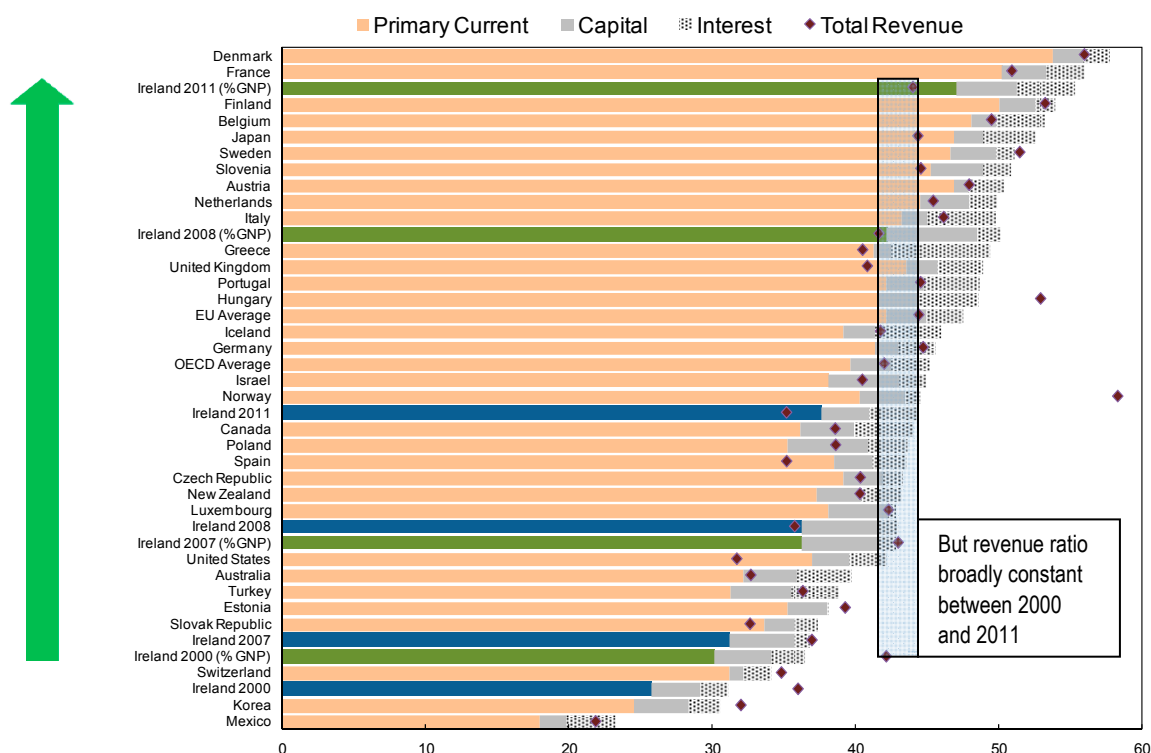
Source: OECD and IMF staff estimates.

Note: "English-Speaking economies" include U.K., U.S., Australia and New Zealand. "Small open European" economies include Austria, Belgium, Denmark, Finland and Sweden (all these economies were sized between US\$100–500 billion and had trade/GDP ratios above 80 percent over 2007–11); "Large European" economies include France, Germany and Italy (economies sized above US\$2 trillion). OECD definitions for general government revenue and expenditure are used, which differ slightly from Eurostat definitions.

<sup>2</sup> The bulk of this increase in the primary current expenditure-to-GNP ratio occurred between 2007 and 2011, given the crisis-induced peak-to-trough collapse of 18 (24) percent in nominal GDP (GNP). However, absent a commensurate expected boom in output, the very high spending ratios today are largely structural.

<sup>3</sup> Given the unusually large and expanding wedge between GNP and GDP in Ireland, it is instructive to scale fiscal variables to both measures of economic activity. Ratios to GNP may, in fact, be more relevant, insofar as GNP is more closely linked to tax revenue.

**Figure 4. Expenditure-to-GDP, GNP ratios - Ireland Vs OECD**  
(2011, percent of GDP, GNP)

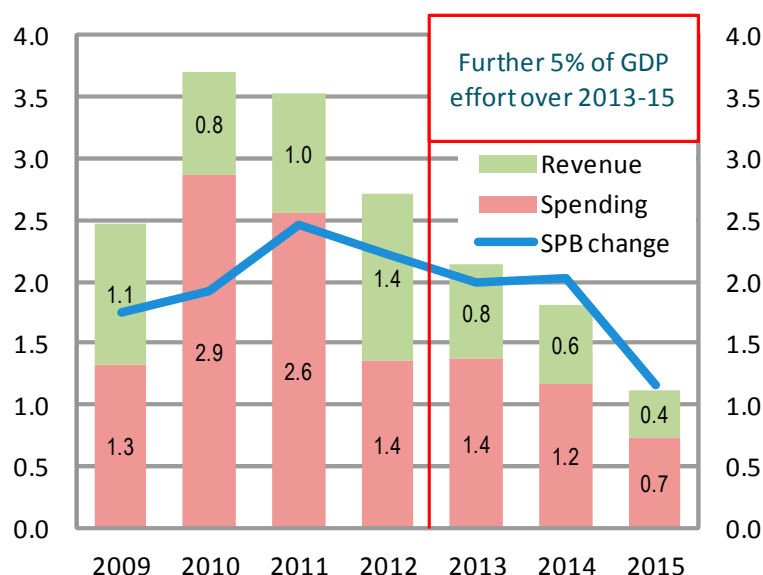


Source: OECD; and IMF staff estimates.

### *The Revenue-Expenditure Mix of Post-Crisis Consolidation*

9. The crisis has prompted a sharp fiscal course correction in Ireland, with budgetary consolidation measures producing an 8 percent of GDP improvement in the structural primary balance over 2009–12. As Figure 5 shows, this large effort has been expenditure-led (two-thirds of total adjustment), combining a 14 percent cut in public wages; an ~~89~~ 89 percent cut in welfare rates (except pensions); an almost 10 percent reduction in public service numbers from their 2008 peak; and savings in the non-pay current and capital budgets (17 and 63 percent, respectively, in nominal terms). Revenue contributions have included personal income tax (PIT) base broadening (10 percent reduction in income tax bands, introduction of universal social charge, elimination of Pay-Related Social Insurance (PRSI) reliefs and exemptions); higher taxes on capital and savings; and an increase in indirect taxes, most notably, the 2 point hike in the standard VAT rate to 23 percent in 2012. Progressive design and careful sequencing of this major consolidation, implemented during a deep economic slump, has helped preserve social cohesion, protect key public services and industrial peace, and maintain Ireland's relatively strong poverty indicators within Europe.

Figure 5. Mix of Consolidation Measures, 2009–15



Source: IMF staff estimates. SPB denotes structural primary balance ratio

10. With the overall deficit expected to still exceed 8 percent of GDP in 2012, the authorities are preparing for significant further consolidation over the medium term. The [Medium-Term Fiscal Statement](#) (November 2011) set out the parameters for a 5 percent of GDP consolidation over 2013–15 to deliver a deficit below 3 percent of GDP in 2015.<sup>4</sup> The plan envisages a continuation of the expenditure-led approach (maintaining the two-thirds share), which can be justified given Ireland's very high primary expenditure ratio in the OECD. Section D identifies significant scope for further expenditure savings, especially in health, education and social protection.

11. At the same time, it is important to recognize that the total expenditure effort envisaged is larger than that implied by the MTFS consolidation measures. As shown in the text table, and clear from Figure 6, the MTFS implies a reduction in primary expenditure-to-GDP ratio of 6.7 percentage points between 2012 and 2015, only half of which is to come from MTFS-announced measures; the remaining half is expected to arise from nominal freezes on welfare and pay rates.

Ireland: General Government Finances, 2007–15  
(percent of GDP, excl. bank support costs)

	2012	2013	2014	2015
Revenue	34.5	34.5	34.8	34.7
Expenditure	42.8	42.1	39.8	37.7
Primary	38.8	36.7	34.3	32.1
Current	36.1	34.2	32.0	29.9
Capital	2.7	2.5	2.3	2.2
Interest	4.0	5.4	5.5	5.5
Overall balance	-8.3	-7.5	-5.0	-3.0
Primary balance	-4.3	-2.1	0.5	2.5
Structural balance	-6.3	-5.5	-3.6	-2.3

Source: IMF staff projections, based on MTFS consolidation path.

<sup>4</sup> The authorities expect to update this statement in October 2012 in preparation for Budget 2013.



## Personal income taxation<sup>7</sup>

17. Personal income taxes in Ireland comprise the income tax – which, in turn, is a combination of a core income tax (IT) and a universal social charge (USC) – and employee pay-related social insurance (PRSI).<sup>8</sup> The IT accounts for about two-thirds of total personal income taxes, with the rest split roughly evenly between the USC and PRSI. The PIT structure and associated average and marginal taxes for a single PAYE taxpayer is summarized in Table 3.<sup>9</sup>

**Table 3. Ireland's Personal Income Tax Structure**

Structure of Personal Income Taxes: Rates, Thresholds and Average and Marginal Tax Rates

Annual income (Euros)		Universal social charge		Core income tax		Employee PRSI		Total PIT (USC+IT+PRSI)		
		Rate	USC payable	Rate	IT payable	Rate	PRSI payable	Combined tax liability	Average tax rate	Marginal tax rate
10,035	USC exemption threshold							0.00	0.0%	20072%
10,036	2% USC on first 10,036	2%	200.72					200.72	2.0%	4%
10,037	4% USC on income above 10,036, till 16,016	4%	200.76					200.76	2.0%	4%
16,016		4%	439.92					439.92	2.7%	7%
16,017		7%	439.99					439.99	2.7%	7%
16,499		7%	473.73					473.73	2.9%	7%
16,500	Entry point for income tax	7%	473.80	20%				473.80	2.9%	27%
18,303		7%	600.01	20%	360.60			960.61	5.2%	46827%
18,304	PRSI exemption threshold	7%	600.08	20%	360.80	4%	468.00	1,428.88	7.8%	31%
21,708	0.67 * Average wage	7%	838.36	20%	1,041.60	4%	604.16	2,484.12	11.4%	31%
24,908	PRSI allowance exhausted	7%	1,062.36	20%	1,681.60	4%	732.16	3,476.12	14.0%	31%
32,400	Average wage	7%	1,586.80	20%	3,180.00	4%	1,031.84	5,798.64	17.9%	31%
32,800	Higher IT rate	7%	1,614.80	41%	3,260.00	4%	1,047.84	5,922.64	18.1%	52%
40,000	Illustrative	7%	2,118.80	41%	6,212.00	4%	1,335.84	9,666.64	24.2%	52%
54,108	1.67 * Average wage	7%	3,106.36	41%	11,996.28	4%	1,900.16	17,002.80	31.4%	52%
64,800	2 * Average wage	7%	3,854.80	41%	16,380.00	4%	2,327.84	22,562.64	34.8%	52%
97,200	3 * Average wage	7%	6,122.80	41%	29,664.00	4%	3,623.84	39,410.64	40.5%	52%

Source: Department of Finance

<sup>7</sup> Issues related to pension tax reliefs and PRSI base broadening to unearned income are discussed under “Other”, toward the end of this section.

<sup>8</sup> The Irish welfare system does not differentiate significantly between social insurance and social assistance, or between contributory and non-contributory state pensions. Accordingly, PRSI contributions do not bear a strong link to welfare benefits, ~~notwithstanding recent efforts to change that~~, so that it is acceptable to combine (employee) PRSI with income tax and USC when looking at personal income taxation in Ireland.

<sup>9</sup> Note that Table 3 uses the term “exemption threshold” to connote the level of income that, if one earns below it, no tax is incurred. In this sense, both the USC and PRSI have exemption thresholds: i.e. those earning below €10,036 pay no USC, and those earning below €18,304 pay no employee PRSI. However, those earning above these levels pay the said tax on *all* income, including the income below the threshold, implying a jump in the effective tax schedule around the threshold. By contrast, the “entry point” for income tax refers to the amount of income on which there is no tax payable at all. Thus, a person earning €16,499 pays zero income tax, a person earning €16,500 pays 20 percent of €1 (= €16,500-16, 499) or €0.2 in income tax, while a person earning €30,000 pays 20 percent of €13,501 (= €30,000-16, 499) or €2,700 income tax (which is 9 percent of the gross income of €30,000).

18. As can be seen, Ireland has a fairly progressive personal income tax, with two characteristics that stand out and warrant further analysis:

- (i) high marginal rates that kick in at fairly low income levels;
- (ii) low average tax rates for most taxpayers, most notably for those earning between 67 and 167 percent of average wage.

#### *High marginal rates*

19. The first anomalous feature of the PIT system is the relatively low income level at which the top marginal rate kicks in. The higher income tax rate of 41 percent (and the corresponding top marginal rate of 52 percent, including the 4 percent USC and 7 percent employee PRSI) applies at €32,800, which is just above the average wage of €32,400. In this, Ireland is closer to the smaller European economies than the English-Speaking or Large European countries.

20. At end-2011, the level of the top marginal rate (52 percent) was high relative to the average for OECD and English-Speaking economies, but comparable to levels in the smaller European economies and the U.K., although in the latter, the rate will be reduced to 45 percent in 2013. Apart from generating efficiency concerns, the high top marginal rate in Ireland relative to the U.K. could also be problematic in terms of maintaining Ireland's attractiveness as a location for high-earning professionals. On the other hand, it has to be noted that (i) location decisions are more a function of average, not marginal rates, which are not so out-of-line in Ireland for high-earners; (ii) the U.K. top rate will continue to kick in at a higher income level than in Ireland; and (iii) the distortionary effects of high top marginal rates are believed to be relatively small for high income-earners ([Coady et al., 2012](#)).

<i>2011 levels</i>	Top marginal PIT rate (%)	Income threshold for higher rate (multiple of average wage)
<b>Ireland</b>	<b>52</b>	<b>1.0</b>
Australia	46	2.6
New Zealand	33	1.4
United Kingdom	52	4.4
United States	43	8.3
<b>English-Speaking</b>	<b>44</b>	<b>4.2</b>
Austria	44	2.1
Belgium	59	1.0
Denmark	56	1.1
Finland	56	1.8
Sweden	57	1.5
<b>Small European</b>	<b>54</b>	<b>1.5</b>
France	51	2.7
Germany	47	5.9
Italy	51	2.9
<b>Large European</b>	<b>50</b>	<b>3.8</b>
<b>OECD</b>	<b>46</b>	<b>3.2</b>

Source: OECD.

#### *Low average (or effective) rates*

21. A comparison of average PIT rates over time below shows that Ireland's current effective rates are in line with 2000 levels and that the sharp reduction in bands and credits through 2008 has since been clawed back. However, relative to most English-Speaking economies, and certainly the OECD average, the effective rates for an average-wage or

ensure that tax burdens do not rise for those earning below 67 percent of the average wage.

- c) The income ceiling at which the top marginal rate kicks in could be increased somewhat to partly compensate those earning around the average wage, taking due regard of the scope that exists to ensure more equitable tax treatment of married couples vs. individual payers.
- d) In addition, the PRSI could be better aligned with the income tax by (i) reducing the PRSI exemption threshold which, at €18,304 is 11 percent above the income tax entry point of €16,500; and (ii) phasing out the universal entitlement to an allowance on first €6,604 of income between the minimum wage and average wage, similar to what is proposed for the PAYE tax credit.
- e) Finally, the interaction of the USC, income tax and PRSI could be reviewed to iron out large kinks in the average tax schedule at the USC and PRSI exemption thresholds.

### Property taxation

26. Ireland currently maintains four types of property tax (the first is a transactions-based tax and the following three are recurrent):<sup>14</sup>

- 2% stamp duty on non-residential transactions (with ~~minimal~~ exemptions) since 2012; and 1% (2%) stamp duty on residential transactions up to €1 million (on the balance above €1 million) since 2011.<sup>15</sup> The combined collection from these stamp duties in 2010, i.e. before these lower rates were introduced, amounted to about €0.28 billion in 2010.
- Commercial rates, which are collected by local governments, are based on the annual rental value of commercial premises (multiplied by a rate that is set by each local authority). The combined collection from these is around €2½ billion.
- A non-principal private residence (NPPR) charge of €200 per NPPR, which yields a modest €65 million a year, although this is because the rate is low, not because of weak compliance. This charge was introduced in 2009.

<sup>14</sup> Like most other OECD economies, Ireland does not have a net wealth tax.

<sup>15</sup> These rates have been brought down significantly from the 7-8 percent prevailing before the crisis.

- A €100 household charge on principal private residence, introduced in Budget 2012, and initially expected to yield €160 million per year. Low compliance has meant the collection may fall short this year.<sup>16</sup>

27. The recent EC report on [Taxation Trends in the European Union](#) appears to suggest that, relative to Europe, Ireland has high taxes on property. However, comparisons with the OECD sample in Table 4, which includes English-Speaking economies with a tax structure more similar to Ireland's (i.e. with low direct taxes), show a low level of property taxation in Ireland, especially for recurrent taxes on immovable property. For instance, in 2010, Ireland's property tax take was 1.6 percent of GDP, compared with 1.8 percent of GDP for the OECD, and 3 percent of GDP for the four English-Speaking economies; the share of recurrent property taxation in total property taxes was 56.6 percent, well below the 83.3 percent in these economies.<sup>17</sup>

**Table 4. The Level and Structure of Property Taxation—Ireland vs. OECD**

	Total (% of GDP)	Total (% of tax revenue)	share in property taxes:	Recurrent (immovable)	Recurrent (net wealth)	Estate, inheritance & gift	Financial & capital transactions	Other
<b>Ireland</b>	1.6	5.6		56.6	0	9.9	33.5	0
Australia	2.5	9.6		58.5	0	0	41.5	0
New Zealand	2.2	6.9		98.0	0	0	1.9	0
United Kingdom	4.2	12.1		80.8	0	4.3	14.9	0
United States	3.2	12.9		95.8	0	4.2	0	0
<b>English-Speaking</b>	3.0	10.4		83.3	0	2.1	14.6	0
Austria	0.5	1.3		43.4	0	2.2	53.6	0.6
Belgium	3.0	6.9		41.3	2.2	21.7	33.0	1.8
Denmark	1.9	4.0		71.7	0	11.2	17.1	0
Finland	1.2	2.7		56.0	0	18.6	25.5	0
Sweden	2.4	2.4		72.3	0	0	27.7	0
<b>Small European</b>	1.8	3.5		57.0	0.4	10.7	31.4	0.5
France	3.6	8.5		67.5	6.3	10.9	15.3	0
Germany	0.8	2.3		53.9	0	21.0	25.2	0
Italy	2.0	4.7		29.4	0	1.5	54.7	14.4
<b>Large European</b>	2.2	5.2		50.3	2.1	11.1	31.7	4.8
<b>OECD</b>	1.8	5.3		59.2	7.0	7.2	23.7	2.9

Source: OECD Revenue Statistics

<sup>16</sup> Ireland had a recurrent property tax on principal residence of 1.5 percent till 1997, when it was abolished. This tax was levied on the excess of the market value of all relevant residential properties of a person over a market value exemption limit and was payable provided the income of the household exceeded an income exemption limit.

<sup>17</sup> The 2010 data suggests a high share of transactions taxes in Ireland (mainly stamp duties), but these have been brought down since then.

28. There are several arguments in favor of higher recurrent property taxation on immovable property (see Norregaard, forthcoming).<sup>18</sup> First, they are a relatively stable source of revenue, which is important in small open economies with volatile tax bases such as Ireland. Second, they can promote efficient land use by imposing a “tax cost” on land ownership or use that to some degree may be independent from the actual use of the land (particularly if market price valuation is applied). Third, they can neutralize other distortions, such as more favorable income tax treatment of owner-occupied housing – e.g., due to mortgage interest reliefs – although this may not be as relevant in Ireland, as these reliefs are being phased out, and will be eliminated by 2017. Fourth, and perhaps most important, is the general acceptance of recurrent property taxes on immovable property as the least distortionary form of taxation in terms of reducing long-run GDP per capita, followed by taxes on consumption (and transactions), personal income and corporate income ([OECD 2010](#)).

29. The property tax was found to be regressive in its incidence by the earliest studies on the topic.<sup>19</sup> However, more recent analysis finds the incidence of a property tax to be primarily on land and capital which, because they are owned predominantly by higher-earning individuals, implies progressivity. This view sees a property tax as a user charge for local public services (or their capitalized value, if market values are used), and thus as fair. Another aspect of fairness relates to the apportionment of property taxes between central or local governments. Because property values, in part, reflect services supplied by local governments, it is reasonable that they be allocated primarily to finance local activities.

30. The Irish authorities plan to introduce in 2013 a value-based property tax on ~~owners~~ principal private residences. Key design and implementation issues are:

- **Rate level:** There would be little point in introducing the tax at a level below 0.2 percent. Given the importance of this reform for the future stability of public finances, and its relative growth-friendliness, consideration could be given to setting a rate comparable to levels in English-Speaking economies; for example, the average rate across the various states in the United States is 1.38 percent.<sup>20</sup> A tax rate around 0.5 percent could yield annual revenue of €1 billion.
- **Rate setting:** The power to set the rate could lie with the central government, or local government, or could be a mix of the two (perhaps central government setting a base rate, with local governments allowed to add a small top-up). That said, the property tax base should be clearly defined in *central* legislation, without any local discretion.

<sup>18</sup> “Taxing Immovable Property: Revenue Potential and Implementation Challenges”, IMF Staff Discussion Note.

<sup>19</sup> These studies saw a property tax as a combination of a tax on mobile capital and a tax on immobile land (the former got shifted to renters, consumers, and labor, while the latter borne by landowners).

<sup>20</sup> Based on U.S. property tax rates, as reported in [State-by-State Property-Tax Rates](#).

- **Exemptions and waivers:** These should be kept to a minimum, although some allowance (perhaps in the form of a deferral, rather than outright waiver) for distressed mortgages could make sense.
- **Register:** It would be critical to assemble a unified register of properties with details on who owns which property so that the liable taxpayers can be linked with Revenue's database on tax numbers.
- **Collection:** The local government's challenges with the household charge, which had a lower-than-expected compliance rate, tilts the case in favor of central collection. In that case, the pros and cons of a PAYE-based deduction approach would need careful consideration due to the perceived impact on labor incentives, and administration cost and complexities for businesses.<sup>21</sup>
- **Apportionment of proceeds:** Although details on revenue apportionment between the center and local governments are ultimately a matter for government, it would seem fair that a significant portion of the revenue intended for local governments go directly to the respective locality, while a sufficient amount be retained for equalization purposes (i.e. to be distributed to less-less-well-off local administrations).
- **Property valuation:** As there is no up-to-date cadastre of property values in Ireland, and in an illiquid market many properties would be difficult to value in any case, the authorities may have to rely on a self-assessment regime initially. Although this is not a common approach, it has been implemented with some success in Latin America (Bogota City). Once the system is up and running, computer-assisted mass appraisal (CAMA) systems could be used for property revaluations.

## Environmental taxation

31. Ireland's environmental taxation comprises two types of *energy taxes*: excise taxes on motor fuels and a carbon tax that operates as a top-up on motor fuel excises, and applies separately to non-transport fuels used in industry and natural gas used in homes; and two types of *vehicle taxes* (increasing in CO<sub>2</sub> emissions/km): one-off registration charges and annual motor taxes. In 2010, revenues from these taxes amounted to about 2½ percent of GDP in Ireland (down from 2.8 percent in 2000), compared with a weighted average of 1.7 percent for OECD countries as a whole. As a share of total tax revenues, environmental taxes were about 9 percent in Ireland, compared with a weighted average of 5½ percent of revenue for the OECD economies (Figures 8 and 9).

---

<sup>21</sup> Persons on pensions/welfare would presumably require such deduction to be implemented by the Department of Social Protection, which could undermine somewhat the perceived benefits of collection by a single central agency.

650,000) so that the consequences of a large behavioral response that drives down long-term savings, could be quite negative.

*Approach 2: Cap the cumulative amount of tax-relief-benefitting contributions.* ~~The Irish Association of Pension Funds has~~ It has been suggested that instead of Approach 1, a cap on cumulative contributions of €1.5 million be set, “equivalent” to an annual pension payout in retirement of about €60,000. About 30,000 high-income pensioners would likely be affected in this case.

Overall, it is not clear why a combination of the two suggested approaches is not possible. First, the rate of tax relief could be consolidated for everyone at around 30 percent. This would have a relatively small effect on incentives to save for higher income taxpayers (subject to 41 percent tax rate), but could significantly raise the incentive to build retirement savings for those on lower incomes (subject to 20 percent tax rate). At the same time, a cap on cumulative relief-benefitting contributions seems fair. Whether €1.5 million cap is appropriate or is too generous, would have to be determined. It would be administratively easier, nonetheless, to apply the cap to new contributions, rather than retroactively.

## (ii) PRSI Base Broadening

At 4 percent, Ireland’s employee PRSI rate is low compared with the mean average marginal employee social security contributions rate for OECD economies of about 8 percent in 2009. Relative to English-Speaking economies, the Irish rate is more comparable: the average of the marginal rates in the United Kingdom and United States was about 5 percent (Australia and New Zealand do not charge social security contributions). Given the large and widening deficit in the social insurance fund, however, the level of employee PRSI collections may have to be raised over the medium-to-long term (unless the state pensions are cut greatly). Given the already-high top marginal tax rate and the low threshold at which it kicks in, PRSI rate increases may be counterproductive and base-broadening should be the preferred course. Some of this broadening has already been done through the removal of the *employer* PRSI exemption on private pension contributions.

On the *employee* PRSI side, Budget 2012 signaled the possibility of extending PRSI to unearned income (i.e. rental, dividend or interest income), which would be a progressive base broadening measure. One concern is that the move would render the PRSI more like a tax, inducing adverse labor market incentive effects, and less like a hypothecated charge linked to some public or social benefit provision. However, as [FAD \(2012\)](#) notes, this issue is less pertinent in countries where the contributions-benefits link is tenuous. Ireland appears to one of these countries, as (i) entitlement to the full contributory pension (€230/week) is relatively easy to obtain (notwithstanding the more recent tightening of eligibility requirements); and (ii) even those not entitled to contributory pensions can get a non-contributory pension that is only marginally lower (€219/week). Overall, therefore, the broadening of the PRSI base to

include un-earned income would not be expected to have significant adverse labor market effects given the *de facto* tax status of the PRSI.

### (iii) VAT Base Broadening

Although Ireland's collections from VAT are on the high side, and its 23 percent tax rate at the 75<sup>th</sup> percentile level in advanced economies, scope may exist for base-broadening. This is because the 23 percent standard rate applies to only about half of consumption. Ireland presently has three lower-tier rates (13.5 percent, 9 percent and 0 percent), in addition to two agriculture-related rates around 5 percent. The 9 percent rate was introduced in May 2011 as part of the government's Jobs Initiative aimed at the services sector, including tourism, and it is scheduled to expire at the end of 2013. That would be a good opportunity to review the appropriateness of all lower-tier rates including the "zero" rate, which covers essential items like food, medicines and children's clothing etc., as it is not efficient to give untargeted subsidies to everyone (rich and poor alike) through the VAT system.

## **D. Options for More Targeted and Efficient Expenditure**

*Ireland provides several expensive universal supports and subsidies, which are difficult to justify under present budgetary circumstances. Better targeting of spending, including the child benefit, medical cards, the household benefits package, subsidies on college fees, and non-means tested state pensions can generate significant immediate savings and contain demographics-related pressures over the longer-term, while effectively protecting the poor. While recognizing the benefits of the Croke Park Agreement, continued monitoring of the adequacy of savings in the net pay and pensions bill, and of service provision, is required, given the relatively high level of the public sector paybill. Longer-run reforms in health and education to ensure more cost-effective delivery of clearly-identified service priorities would be an essential compliment to ensure durability of savings over the medium-term.*

35. Given recent staff analyses of social welfare spending and public pay and pensions (Box 3 and Box 5, respectively, in the IMF staff reports for the 5<sup>th</sup> and 6<sup>th</sup> EFF Reviews for Ireland), this section will briefly look at the following: (i) a discussion of service outcomes vs. 2010 expenditure levels in health, education and social protection; (ii) a brief overview of the expenditure effort thus far and planned; and (iii) an analysis of where targeting can generate significant immediate savings, while containing demographics-related pressures; and (iv) identification of longer-term reform priorities, leveraging the discussion in (i).

### **(i) Public Expenditure versus Outcomes**

36. An analysis of Ireland's expenditure on health and education (which account for more than half of total government expenditure) reveals a mixed picture regarding effectiveness (Tables 5 and 6). Spending on health grew rapidly between 2000 and 2010 to second highest in the OECD, and is now outsized relative to outcomes, which are mostly near the OECD



and household types (single vs. families), including due consideration of pre-crisis spending increases and relative adjustments since then. Table 6 lists key spending items where targeting can deliver substantial, durable and progressive savings. Among these are three universal supports and subsidies (child benefit, household benefits package and subsidy on student fees) which amount to 2½ percent of GDP. Although medical cards are means-tested for everyone, almost 95 percent of persons over 70 years old qualify, given a significantly more generous means test for this group. Overall, staff estimates that realistic percentage reductions in these spending areas (~~noted in the final column of Table 7~~) can yield permanent annual savings of about around 2 percent of GDP. Critically, these savings will contribute directly to containing the impact of demographics-related changes to the spending profile. Table 8 details further the rationale for better targeting of spending in these areas.

**Table 7. Selected Expenditure Items Offering Scope for Targeting/Savings**

	2011 outlay		Possible savings		Assumption
	€bn	% GDP	€bn	% GDP	
Public pay	14.4	9.0	0.7	0.5	5% save
Public service pensions	2.5	1.6	0.1	0.1	5% save
Contributory pensions	3.6	2.3	0.2	0.1	5% save
Household benefits package	0.5	0.3	0.4	0.3	80% save
Medical cards	1.6	1.0	0.3	0.2	20% save
Child benefit	2.1	1.3	1.1	0.7	50% save
Subsidy on college fees	1.2	0.8	0.6	0.4	50% save
Total	25.9	16.2	3.4	2.1	

Source: Revised Estimates Volume (2012), and IMF staff estimates.

#### (iv) Need for Longer-term Reforms

42. In parallel to achieving near-term targeted savings, reforms of key public services are needed to underpin savings in the medium term. As noted earlier, despite spending substantially more than the OECD average on health, Ireland's performance indicators are only at/or marginally above OECD average, with similar results in education while spending is modestly above OECD average. Hence, there is need for deeper reforms in these areas to identify service priorities and deliver them more efficiently, including by fully utilizing the flexibility provided by the Croke Park agreement. For example, new working models to minimize premium and overtime payments, and a substantially greater use of primary vs. hospital care and generic vs. branded drugs, can significantly reduce the public cost of healthcare while preserving outcomes.<sup>29</sup> To better focus health spending on programs and outcomes, it will be important to extend performance budgeting to the sector, and implement

<sup>29</sup> Generic drugs account for only one-fifth of all prescriptions, which compares poorly to four-fifth in neighboring United Kingdom.

governance reforms that enable cost priorities set at the center to be reflected in decisions at the local and hospital level.<sup>30</sup>

43. Similarly, a new funding model for higher education, that (i) better takes into account emerging skills priorities/shortages, with some linkage of college fees to cost/earnings potential of courses (and supported by affordable loans and grants for poor students), and (ii) strikes the appropriate balance between degree and vocational education (where the latter's share is just 10 percent, one-third the OECD average), can deliver broad access to high-quality education that underpins Ireland's competitiveness without additional public investment. While savings from these health and education reforms can take time to realize, they are important to help ensure the consolidation can be sustained by enabling the growing needs for these services to be met at manageable cost.

**Table 8. Rationale for Targeting Reforms in Selected Expenditure Items**

	<i>2011 outlay € billion (% of GDP)</i>	<i>Rationale</i>
<i>Public pay</i>	<i>14.4 (9.0)</i>	<i>The net paybill/GNP ratio at end-2011 was still above 2008 levels. Average public pay/GNP per worker is one of the highest among advanced European economies, which is suggestive of a public wage premium over private pay (OECD surveys document high salaries in Ireland's public health and education sectors, which account for three-fourth of public employment and compensation). It may be possible to achieve paybill reductions within the framework of the Croke Park Agreement through allowances, sick pay and reduction in premium/over-time payments. However, if significant progress within the CPA framework proves elusive, pay rate adjustments may be necessary.</i>
<i>Public service pensions</i>	<i>2.5 (1.6)</i>	<i>The 4 percent average levy on public pensions in 2011 appears to have generated relatively small savings in the public pension bill. With a 53 percent increase in pensioner numbers between 2008 and 2011, including partly due to early retirements and redundancies, the net public service pension bill has risen by 49 percent since 2008, offsetting one-third of the savings in the net pay bill. Moreover, the single public pension scheme reforms currently in train will apply only to new entrants and will not help contain the rising public service pension burden for almost 30 years. The need to rein in this burden (given population ageing) as well as equity considerations (the average public service pension is roughly double the state pension) warrant a review of the scope for further savings in the pension bill, and the appropriateness of the extent of grandfathering allowed under the single pension scheme reforms.</i>

<sup>30</sup> The recent HSE Governance Bill should be helpful in this context.

<i>Contributory state pensions</i>	3.6 (2.3)	<i>The rate for contributory pensions (paid to about 80 percent of state pensioners) is 5% above the rate for non-contributory pensions. These rates could be equalized as the link between PRSI contributions and pension entitlements appears weak; and contributory pensioners more likely have occupational pensions.</i>
<i>Household benefits package</i>	0.5 (0.3)	<i>These universal in-kind benefits (excluding fuel allowance) comprise free TV license, telephone, electricity and travel for the elderly. Although the current outlay is small, the cost of these schemes is rising rapidly due to ageing. If abolished, a means-tested offset could be provided via the means-tested pension. There would still be considerable net savings, as only one-fifth of pensioners receive means-tested pensions.</i>
<i>Medical cards</i>	1.6 (1.0)	<i>The means test for persons over-70 is more generous than that for the under-70s, such that coverage is near universal, with 95 percent of the over-70s population having medical cards. A standard means-test for all beneficiaries could be considered. This will help contain the rising cost of medical cards in respect of the over-70s who account for one-fifth of medical cards, but likely a much larger share of the scheme's cost. In addition, more graduated medical card coverage (like GP-only medical card) and co-pay options to lower costs (including by incentivizing greater generic drug usage) should also be considered.</i>
<i>Child benefit</i>	2.1 (1.3)	<i>This universal payment has been cut 15 percent over last 3 years. An equitable way of further reducing the still-substantial budgetary impact would be to treat it as taxable income. Alternatively, the universal component of the payment could be reduced, with offsetting increases in qualified child allowances and family income supplement which are means-tested.</i>
<i>Universal subsidy on college fees</i>	1.2 (0.8)	<i>The annual cost of subsidizing college fees for 160,000 students in 2010 (numbers could double by 2030) was about €1.2bn (based on average estimated cost of €10,000 per student, and a student contribution of €2,250). The student contribution is 10-32 percent of actual course cost, representing a substantial untargeted subsidy. Total (public and private) expenditure per college student is €9,800 in Ireland as opposed to €7,700 in the OECD, but the private share is relatively low (14 percent in Ireland as opposed to 33 percent in the OECD) despite degree-holders earning a 15 percentage point higher wage premium than the OECD average. Reintroducing fees that vary by course—as existed till 1995—would generate substantial progressive savings which could be deployed to supporting low income students.</i>
	25.9 (16.2)	

Sources: [Departments of Public Expenditure and Reform, Health and Education; OECD \*Health at a Glance\* \(2011\); OECD \*Education at a Glance\* \(2011\); and IMF staff estimates.](#) [Factual information underpinning staff analysis was provided by the Departments of Public Expenditure and Reform, Health and Education. Other sources consulted include: OECD \*Health at a Glance\* \(2011\) and OECD \*Education at a Glance\* \(2011\).](#)

## IV. AVERTING STRUCTURAL UNEMPLOYMENT IN IRELAND<sup>1</sup>

### A. Introduction

1. **The economic crisis that engulfed Ireland since 2008 brought about a rapid reversal of labor market gains made since the mid-1990s.** As real GDP fell 8 percent between 2007 and 2010, almost 15 percent of jobs were lost, half of which from the construction sector. The rate of unemployment tripled from pre-crisis levels to almost 15 percent in 2012, and even higher among certain population cohorts. Participation rates dropped and migration patterns reversed, with outflows of non-Irish citizens at first, and then increasingly net emigration of Irish citizens.
2. **Faced with soaring unemployment, the Irish authorities have initiated a range of measures and labor market reforms:**
  - **Labor cost and demand:** to promote job creation, the [May 2011 Jobs Initiative](#) halved the pay-related social insurance (PRSI) rate of 8½ percent on jobs paying up to €356 per week (5.5 percent above the minimum wage) to reduce labor costs, and, to stimulate labor demand, gave a 4½ percentage point VAT rate reduction on items subject to the lower VAT rate of 13½ percent, which are mostly labor-intensive services.<sup>2</sup> The [Action Plan for Jobs](#) released in February 2012 specified a set of measures to support job creation, including support for indigenous start-ups and fast-growing mid-size firms, further enhancing SME credit and R&D incentives, and pursuing targeted growth opportunities in the green economy and the ICT sector.
  - **Activation and training policies:** the [Pathways to Work](#) initiative of February 2012 is a comprehensive reform agenda for the support provided to unemployed persons in regaining employment, to bring it in line with international best practice.
  - **Sectoral wage setting:** The Industrial Relations (Amendment) Act passed in July 2012 reforms the special wage setting framework applied in certain sectors, with the aim of increasing the responsiveness of labor costs to economic conditions, to increase employers' willingness to hire and facilitate the cross-sectoral adjustment.
3. **Nonetheless, unemployment may remain high for a number of years, risking an increase in structural unemployment.** Already over 60 percent of the unemployed have been without work for over a year, and Ireland's recovery would be constrained if

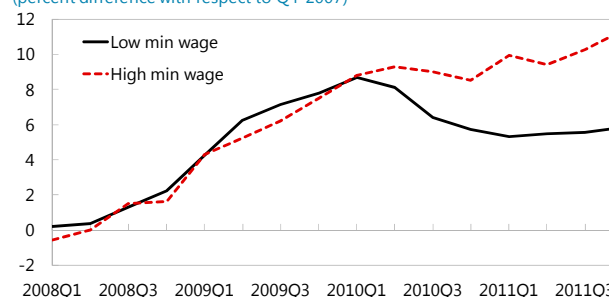
---

<sup>1</sup> Prepared by Emilia Jurzyk. The author would like to thank Craig Beaumont and Ali Abbas for many helpful comments and suggestions. Vizhdan Boranova provided outstanding research assistance. The author is also grateful to the Irish authorities for providing data and for many useful discussions.

<sup>2</sup> The items are mostly services, and include catering, restaurants, hotels, cinemas, theatres, museums, art galleries, fairgrounds, amusement parks, sporting activities, printed matter and hairdressing.

17. **Limited wage adjustment can also be linked with policies regulating the minimum wage.** Given that the minimum wage constitutes a floor for remuneration, firms are prohibited from setting wages below the minimum wage even during crisis periods. A majority of academic studies point to a negative relationship between the level of minimum wage and employment (Neumark and Wascher (2006)).<sup>7</sup> The effects can be particularly strong for low-skilled workers and for youth as high minimum wages decrease the flexibility of wage setting decisions at the lower end of the distribution, increasing job losses and preventing job creation in response to shocks. During the recent crisis, increases in youth unemployment were significantly higher in countries with high minimum wages than in countries where minimum wage was below the median (Ahrend *et al.* (2011)). While a minimum wage can be seen as a social protection tool that protects the most vulnerable groups, it can reduce employment if set on a too high a level (OECD, 2012). Although lowering a high minimum wage could increase income inequality, the effect should be at least partially alleviated over time through higher total employment (Koske *et al.* 2012).

**Youth unemployment rates in EU countries with high and low minimum wage 1/**  
(percent difference with respect to Q4-2007)

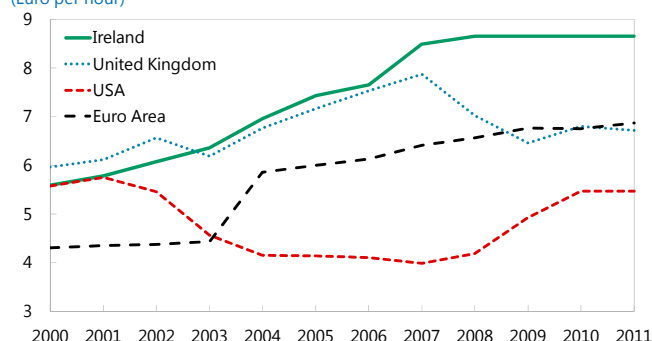


Sources: Ahrend *et al.* (2011), OECD, and IMF staff calculations.

1/ Countries with minimum wage rates below those of the median country (the sample includes countries with no statutory minimum wage) are classified as low/no minimum wage countries (Austria, Czech Republic, Denmark, Estonia, Finland, Germany, Italy, Sweden). Correspondingly, countries with minimum wage rates above the median are classified as high minimum wage countries (Belgium, France, Greece, Hungary, Ireland, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, and United Kingdom).

18. **Ireland's minimum wage has becoming relatively high during the crisis.** Up until 2006, Ireland's minimum wage was broadly aligned with that in the U.K. However, the minimum was raised by €1 in 2007 to €8.65 per hour. Nominal increases in the U.K. increase were smaller, and in euro terms there was a significant decline owing to sterling depreciation. By 2011, Ireland's minimum wage exceeded the U.K. by 30 percent, with a similar premium over the euro area.<sup>8</sup> Even though the minimum wage directly affects only a limited share of workers, it sets the floor for the EROs and REAs, which have a much broader take-up, at almost one-quarter of total employment.

**Minimum Wage 1/**  
(Euro per hour)



1/ The EA minimum wage is calculated as an average of the minimum wages in Belgium, Estonia, France, Greece, Ireland, Luxembourg, the Netherlands, Portugal, Slovakia, Slovenia, and Spain.

Sources: OECD; IMF WEO; and IMF staff calculations.

<sup>7</sup> Doucouliagos *et al.* (2009) note that these results may stem from a publication bias as papers presenting results that showed a negative relationship were more likely to be published.

<sup>8</sup> A decision to lower the minimum wage back to €7.65 per hour in late 2010 was reversed effective July 2011.

19. **Aiming to reduce labor costs, the authorities have temporarily lowered employer's social security contributions for low wage workers.** Under the 2011 Jobs Initiative, the Pay-Related Social Insurance for weekly wages up to €356 (5.5 percent above the minimum wage) has been lowered from 8.5 percent to 4.25 percent until end-2013. The regular rate continues to apply to weekly wages above €356. Together with lowering the VAT rate on tourism-related services (like hotels and restaurants) from 13.5 percent to 9 percent, the lower PRSI rate aims to increase employment in low-skilled sectors.

### Participation Rates

20. **A decline in labor participation rates during the crisis will need to be unwound to maximize employment recovery.** Since the peak in Q3-2007, the participation rate fell by almost 5 percentage points, to below the euro area average. Withdrawal from the labor market was highest among young people and men—likely related to the collapse of the construction sector—and can be linked to a return to education. Female participation also declined below the euro area average, though the fall has been smaller.

Participation rates by age group and gender			
	Q3-2007	Q1-2012	Change
15-19	33.4	14.8	-18.6
20-24	79.2	61.9	-17.3
25-34	85.7	83.1	-2.6
35-44	80.8	81.0	0.2
45-54	78.1	76.9	-1.2
55-59	62.7	65.0	2.3
60-65	46.5	43.0	-3.5
Average	64.6	59.8	-4.8
Male	74.3	67.5	-6.8
Female	55.0	52.4	-2.6

Source: CSO

21. **Although much of the decline in participation reflects reduced job opportunities, the structure of the welfare system may reinforce this impact.** Unemployment benefits with a long duration (Elmeskov and Pichelmann, 1993), more generous unemployment benefits for older workers (Tatsiramos, 2010), or sickness, disability or early retirement schemes (Nickell and Van Ours, 2000; Autor and Duggan, 2003) can all decrease the size of the labor force. A high tax wedge for certain population cohorts (e.g. employees that are low-skilled or families with children) can also result in unemployment traps. Lack of affordable child care can reduce female participation rates (OECD, 2012).

22. **In contrast to most countries in Europe, unemployment benefits in Ireland do not vary with duration of the unemployment spell.** Upon becoming unemployed, a person that has made enough social security contributions is entitled to the Jobseeker's Benefit (JB) paid for 6 to 12 months, ~~with the amount based on previous income, but capped for high earners~~ Reduced, or graduated rates, are payable where the average weekly earnings are under a certain threshold. Upon exhaustion of the JB, they are entitled to the means-tested Jobseeker's Allowance (JA). Total benefits are increased if the person has a child or an adult dependent, or if they qualify for the rent supplement, mortgage interest supplement or a medical card.

23. **This structure can create work disincentives for a minority of job seekers.** Replacement rates for most of the newly unemployed on the Live Register fall below the