

The Domestic Economy

Forecast Highlights

- The level of activity in the Irish economy has continued to contract this year. Following an annual rate of decline of 8.4 per cent in the first six months, the pace of decline in GDP is likely to ease in the second half of the year reflecting a gradual improvement in external markets which should offset to some extent the continued decline in domestic demand. For 2009, as a whole, the level of GDP is forecast to decline by 7.8 per cent while GNP is likely to contract by 10.6 per cent.
- The moderation in the rate of decline in output is likely to continue into the first half of next year with the prospect of stabilisation followed by some recovery in the second half of the year. For 2010 as a whole the levels of GDP and GNP are projected to decline by 2.3 and 3.1 per cent, respectively.
- The main risk to this outlook relates to the sustainability of the recent incipient recovery in world demand which remains fragile. A sustained recovery in external markets, should it emerge, would support a modest recovery in underlying export growth. In the domestic economy, however, the contraction in activity is set to continue through next year with the weak outlook for disposable income weighing on consumer demand and leading indicators pointing to a further decline in fixed investment.
- With the rebalancing in the composition of output likely to have run its course by the end of next year and, assuming a resilient recovery in world demand, there is a reasonable prospect of a return to a moderate and balanced expansion in the Irish economy from that point.
- Labour market prospects over the next year are closely linked to the outlook for economic activity. Employment is likely to continue to decline at a moderating pace through the second half of this year and for much of next year with a reasonable prospect of some stability in the level of employment by the end of the year. Unemployment is likely to average 12 per cent in 2009 rising to an average of 14 per cent in 2010.
- Inflation has declined considerably since last year. The average rate of inflation, as measured by the Harmonised Index of Consumer prices (HICP,) is forecast to decline to about -1.5 per cent in 2009 while the Consumer Price index is forecast to decline by 4.2 per cent over the same period.
- Inflationary pressures overall are likely to remain subdued into next year as consumer demand continues to contract sharply. Accordingly, inflation in both the HICP and CPI of about -0.5 per cent and -0.4 per cent, respectively, is forecast for 2010. Inflation is forecast to be significantly lower in Ireland than for the euro area indicating a marked improvement in price competitiveness with respect to our main trading partners.

Overview

The Irish economy is set to record a second successive year of negative economic growth this year with GDP and GNP projected to decline by 7.8 per cent and 10.6 per cent, respectively. The main driver of the decline in output is a severe contraction in domestic demand, with both consumption and investment expenditure declining sharply. Exports, although likely to decline in real terms this year, have performed quite well given the weak external environment. Following an exceptionally weak first half, there are clear signs of a moderation in the rate of decline in activity in the second half of this year both here and internationally. This improvement should continue during the first half of next year with a stabilisation in the level of activity followed by modest positive growth in the second half of the year. For 2010 as a whole, however, the economy is again likely to record negative growth, of about 2.3 per cent in GDP terms with GNP declining by about 3.1 per cent. At this stage, on the basis of a sustained recovery in activity internationally and assuming that the adjustment in the domestic demand has run its course, the economy has a reasonable prospect of returning to sustainable, if modest, positive growth in 2011.

Against a background of severe disruption to international financial markets, the Irish economy has faced a difficult external environment over the last year. A marked slowdown in world demand during the course of last year turned to contraction by the turn of the year with virtually all of Ireland's main trading partners in recession at that stage. Following a significant contraction in the first quarter of this year, the pace of decline in most advanced economies moderated significantly in the second quarter, and available indicators point to a resumption of growth in the second half of this year. However, the resilience of the incipient international recovery remains uncertain with much of the momentum arising from the impact of significant monetary and fiscal stimulus and from a recovery in inventories following exceptional rates of destocking during the previous year. The consensus outlook from international agencies such as the OECD, IMF and EU Commission is

for a relatively modest rebound in world demand over the next two years. Real GDP in Ireland's main trading partners, weighted by their shares in Irish exports is projected to decline by 3.8 per cent this year with a muted recovery to growth of about 0.3 per cent in 2010.

The overall performance of Irish exports has been quite robust this year given the exceptional weakness in world demand. On a seasonally adjusted basis, exports of goods and services increased by 0.2 per cent in the second quarter following a decline of 0.7 per cent in the first quarter. This represents a much stronger performance than that of most of Ireland's trading partners where export volume declines over this period have typically been in double digits. However, looking behind the strong headline number, the performance of individual sectors has been mixed. While the broad chemical sector, and in particular pharmaceuticals, performed exceptionally well, other sectors, such as IT and the more traditional labour intensive sectors with a large exposure to the UK market, experienced export volume declines on a par with international norms. For the year as a whole, and into next year, the underlying trend in Irish export volumes should show some improvement in line with the expected modest recovery in external demand. However, sector specific factors in the IT sector will weigh on overall export volume growth which is expected to remain negative both this year and next. For this year overall, export volumes are forecast to decline by 2.7 per cent with the rate of decline easing to 0.3 per cent in 2010.

Although exports are forecast to decline both this year and next, import volumes are expected to decline to a much greater extent, reflecting, in the main, the contraction in domestic demand. As a result, net exports (exports minus imports) are forecast to make a significant positive contribution to the level of GDP over this period and lead to a rapid correction in the balance of payments from a deficit position of 5.2 per cent of GDP in 2008 to about 1.5 per cent of GDP in 2010.

The emergence of a significant deficit on the Current Account of the Balance of Payments in

recent years was a clear manifestation of the unbalanced nature of economic growth which was primarily accounted for by rapid growth in domestic demand. The correction of these imbalances has again been driven, in the main, by a significant contraction in domestic demand which has outstripped the decline in exports. The process of adjustment, which appears likely to continue for about another year, will result in a significant reorientation in the composition of Irish GDP with exporting sectors taking a more prominent role and domestic demand accounting for a much smaller share.

Within domestic demand, the largest adjustment has been in the level of investment activity and in the housing sector in particular. Housing output is likely to decline by almost 60 per cent this year to about 22,000 units. A further decline to about 10,000 units next year seems likely on the basis of the trend in housing starts this year. Such an outturn would represent a decline of about 90 per cent from the peak level of housing output in 2006. Although the housing sector has seen the most dramatic reductions in output, other components of fixed investment including commercial construction and machinery and equipment have also contracted significantly. Overall investment expenditure is projected to decline by almost one-third in real terms this year and by a further one-fifth in 2010.

Consumer expenditure has declined sharply this year reflecting the negative trend in household disposable incomes arising from adverse labour market conditions, an increase in the effective tax burden on current incomes and an increase in precautionary behaviour by consumers. For the year as a whole, real consumer expenditure is forecast to decline by 7.6 per cent. Recent surveys point to a gradual recovery in consumer confidence which should give some support to consumer demand in the year ahead. However, given the likelihood of a further decline in disposable incomes, it is likely that consumption will decline further next year, albeit at a slower pace than in 2009 — at this stage a decline of about 4 per cent in real terms seems likely.

The contraction in economic activity this year has been reflected in extremely adverse labour market trends with employment declines across almost all sectors of the economy. The most significant job losses have occurred in the construction sector and in other sectors orientated towards the domestic economy such as retail, distribution and hotels and restaurants. Overall employment is projected to decline by about 7.9 per cent this year with a further decline of about 4.4 per cent forecast for next year. The impact of employment declines on the rate of unemployment has been mitigated to some extent by a decline in labour supply reflecting both lower participation rates among younger and older age cohorts in particular and a significant reversal in migration trends. While the monthly trend in the Live Register points to some moderation in the rate of increase in recent months, a further rise in unemployment is likely during the remainder of this year. For the year as a whole, the unemployment rate is forecast to average 12 per cent. Taking account of the outlook for output and employment, and assuming a further decline in labour supply, a further rise in unemployment to an average of 14 per cent is forecast for 2010.

Consumer price inflation declined considerably after the peak of June last year, with base effects linked to the volatility in international commodity prices, particularly for oil, heavily influencing the profile of headline inflation. Recently, core inflation indicators, which exclude more volatile components such as energy prices and unprocessed foods, were also in the main negative suggesting more generalised price declines as domestic demand contracted sharply. The average rate of Irish Harmonised Index of Consumer Prices (HICP) inflation is forecast to fall to about -1.5 per cent in 2009, significantly lower than the corresponding Eurosystem staff projection for the euro area of between 0.2 per cent and 0.6 per cent. The Irish Consumer Price Index (CPI), meanwhile, is forecast to decline by 4.2 per cent this year. The difference between the CPI and the HICP forecasts mainly reflects the large decreases in mortgage interest rates between November of last year and June of this year. Although the base effects from oil

Table 1: Expenditure on Gross National Product 2008, 2009^f and 2010^f

	2008		% change in		2009 ^f		% change in		2010 ^f
	€ million	Volume	Price	€ million	Volume	Price	€ million		
Personal consumption	93,863	-7.6	-2.7	84,405	-4.0	-0.8	80,389		
Public consumption	28,901	-0.5	-3.2	27,849	-1.5	-1.3	27,073		
Gross domestic fixed capital formation	39,474	-32.1	-8.7	24,467	-19.0	-4.4	18,939		
<i>of which:</i>									
• Building and construction	29,997	-36.0	-12.7	16,764	-23.2	-6.7	12,013		
• Machinery and equipment	9,477	-20.0	1.6	7,703	-10.0	-0.1	6,926		
Value of physical changes in stocks	317			-900			200		
Statistical discrepancy	367			367			367		
Gross domestic expenditure	162,922	-13.0	-3.9	136,188	-5.4	-1.4	126,968		
Exports of goods & services	151,896	-2.7	1.0	149,326	-0.3	-0.5	148,015		
Final demand	314,818	-8.0	-1.4	285,514	-2.8	-1.0	274,983		
Imports of goods & services	-133,002	-8.2	0.6	-122,741	-3.3	0.3	-118,997		
Gross domestic product	181,816	-7.8	-2.9	162,773	-2.3	-1.9	155,986		
Net factor income from rest of the world	-27,218			-29,697			-29,822		
Gross national product	154,598	-10.6	-3.7	133,076	-3.1	-2.2	126,164		

prices movements will begin to disappear and despite signs that external price pressures are beginning to rebound, inflationary pressures overall are likely to remain subdued into next year as consumer demand continues to contract sharply. Accordingly, modest deflation in both the HICP and CPI of about 0.5 per cent and 0.4 per cent is forecast for 2010.

The weaker inflation rate relative to our trading partners has helped to improve the economy's international price competitiveness, and there are also tentative signs of an improvement across a range of cost competitiveness indicators. Although there is some uncertainty regarding the extent of nominal wage cuts in the private sector, overall pay trends this year are likely to be significantly weaker in Ireland than in our trading partners in view of the sharper rise in unemployment and the effective cut to public sector pay following the introduction of the pension levy. The outlook for competitiveness developments in 2010 is also favourable, but much will depend on the projected rebound in productivity growth and labour market developments. Ireland's domestic cost base is high following the substantial deterioration in the competitiveness position of the Irish economy since the early part of this decade. Lowering the costs of

doing business in Ireland, which may contribute to the contraction in domestic demand in the short-term, represents a necessary adjustment to Irish cost competitiveness and will help to support a sustainable export led recovery in aggregate demand when external conditions improve.

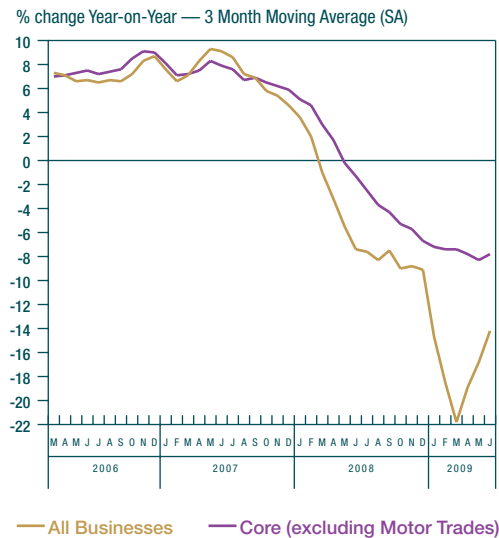
Demand

Consumer Spending

The level of consumer expenditure has been on a strong downward trend over the last year. The latest National Accounts data show a quarterly decline of 6.8 per cent, year-on-year, in the second quarter of this year following a decline of 9.6 per cent, year-on-year, in the first quarter when exceptionally weak car sales had a significant impact. The decline in consumption over the last year has more than reversed the cumulative increase over the previous three years, bringing it back to its level at the end of 2005.

Available indicators of consumer demand while, showing some tentative signs of improvement of late, remain quite subdued. Retail sales, which declined precipitously in the first quarter of this year on foot of exceptionally weak sales of cars and other consumer durables, found some ballast in the second

Chart 1: Index of Volume of Retail Sales



quarter but were nevertheless down by 13.9 per cent year-on-year. The weakness in retail sales was reflected in a significant shortfall in VAT receipts, which were down 21.6 per cent year-on-year to end-August.

The decline in consumer expenditure since the beginning of 2008 has been driven by a combination of falls in disposable incomes arising from declines in employment income and a rise in income taxes and levies. In addition, the erosion of personal wealth due to declining asset prices, together with increased uncertainty as reflected in the indicators of consumer confidence, has prompted an increase in precautionary saving by consumers. While recent consumer confidence indices have moved above their lows of the early months of the year, they remain below the critical 50 percent threshold suggesting a further decline in consumer expenditure for the remainder of the year. For 2009 as a whole, it now seems likely that consumer expenditure will decline by about 7.5 per cent in volume terms.

Taking into account the outlook for income and employment next year, a further decline in the volume of consumption of about 4 per cent seems likely in 2010. While the prospect of a modest recovery in the economic outlook may

contribute to improved consumer sentiment, the effect of further erosion in disposable incomes is likely to be the dominant influence on consumer demand next year. In this regard, the offsetting impact of falling consumer prices, which played an important role in supporting disposable income in 2009, will be less significant next year.

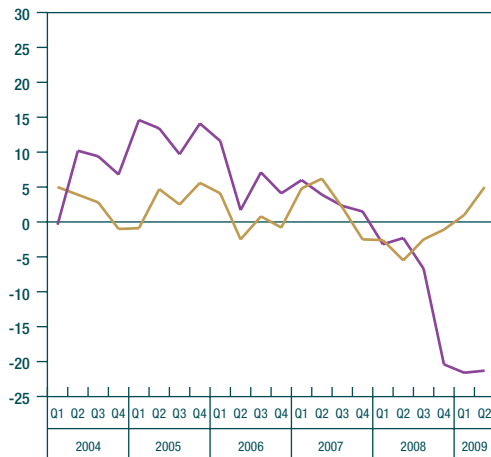
Investment

The current unprecedented contraction in investment continues to dominate developments in overall GDP according to the latest National Accounts. Activity in the residential construction sector slowed in the first half of the year, although not yet to the extent necessary to reduce the size of the current excess in supply — an important factor in re-establishing equilibrium in the market. Available house-building statistics and forward-looking indicators suggest that there will be approximately 22,000 new house completions this year, as developers finish existing projects. Indeed, the headline figure may even exceed this as houses that were built in 2008 are eventually sold, or rented, and connected to the electricity grid (on which the statistics are based). While there are no official data available, estimates of market transactions would suggest that, while affordability is improving, demand for housing is running significantly below this level. Statistical models based on new house registrations suggest that new builds will slow further next year — to somewhere in the region of 10,000 units — with one-off housing accounting for an increasing proportion of the total as commencements on new schemed housing and apartments decelerate rapidly. With demand likely to remain muted for some time to come, output may remain at about this level for a number of years before the excess supply of housing, the subject of some uncertainty, is cleared.

On the commercial front, while there is anecdotal evidence of less speculative building than in the residential sector, activity remains depressed, as curtailed bank lending and a lack of clarity regarding values impacts the market. A recent market report (from CB Richard Ellis (CBRE)) indicates that the total value of commercial investment deals signed in the first half of 2009 reached just €41.6 million,

Chart 2: Value of External Trade

% change Year-on-Year (SA)



— Exports — Imports

compared with €392 million in the first half of 2008. Falling capital values and rental income (see the section on commercial property prices) and credit constraints are likely to see significant fall-offs in commercial investment spending both this year and next.

Taken together, in addition to cuts on capital infrastructural spending implemented as part of the fiscal consolidation programme, investment in building and construction is forecast to decrease by almost 36 per cent in 2009, followed by a further reduction of about 23 per cent in 2010.

In conjunction with the downsizing of the construction sector and a weak manufacturing sector outlook, investment in machinery and equipment is forecast to decrease by 20 per cent this year and 10 per cent in 2010. These forecasts are, however, tentative in nature given the uncertainty surrounding the timing and magnitude of aircraft purchases. Together with the outlook for construction and machinery and equipment investment, overall investment is forecast to contract by 32.1 per cent and 19 per cent in 2009 and 2010, respectively.

Stock Changes

Stocks made a positive contribution to the change in GDP last year of about 0.2

percentage points, reflecting a build-up in inventories in the first three quarters of the year which was followed by a significant decline in the fourth quarter of the year, depressing overall growth. Inventory levels continued to decline in the first half of this year. Stock levels are expected to decline further during the remainder of 2009. Some recovery in inventory levels is assumed next year in line with improving prospects for output growth.

Government Consumption

On the basis of expenditure plans as set out in the April 2009 Supplementary Budget and taking account of trends in the first three quarters of the year, the volume of Government consumption is projected to decline in real terms by about 0.5 per cent this year. A further decline in real government consumption of about 1.5 per cent is forecast for 2010.

External Demand and the Balance of Payments

Merchandise Trade

Merchandise exports continued to contract during the second quarter of 2009 with a year-on-year decline of 3.7 per cent in volume terms. As highlighted in the previous Bulletin, the relative performance of Irish merchandise exports amid the collapse in global trade flows has been impressive. A marked decline in the demand for durable goods characterised the contraction in world trade volumes during late 2008 and early 2009 and, as a result, countries most reliant on such exports witnessed the sharpest falls. The resilience of Ireland's recent merchandise trade performance essentially arises from product effects and, specifically, the dominance of the broad chemicals sector, which has proven to be less exposed to the recent contraction in external demand. However, the broad-based weakness outside of the chemicals sector persisted into the second quarter of 2009. Considerable downward momentum is expected to arise from these sectors during the remainder of 2009 due, most notably, to firm-specific factors in the ICT sector. As regards the chemicals sector, there is some uncertainty regarding the sustainability of its recent buoyant performance given the inherent volatility of output in this sector,

Table 2: Merchandise Trade (Adjusted) 2008, 2009^f and 2010^f

	2008	% change in		2009 ^f	% change in		2010 ^f
	€ million	Volume	Price	€ million	Volume	Price	€ million
Merchandise exports	82,693	-3.3	1.7	81,304	-1.7	-1.5	78,749
Merchandise imports	-58,428	-21.4	1.4	-46,559	-10.8	-0.0	-41,390
Merchandise trade balance (adjusted)	24,265			34,745			37,359
(% of GNP)	15.7			26.1			29.6

reflecting factors such as product cycles and patent expiries. On balance, merchandise export activity is expected to contract further during the second half of the year, yielding a decline of around 3.3 per cent in volume terms for 2009 as a whole. Such an outlook represents an upward revision relative to that of the previous Bulletin due, in particular, to the robust performance of the broad chemicals sector during the first half of 2009.

Merchandise exports are expected to continue to decline next year, with a fall in the region of 1.7 per cent.

The fall-off in merchandise imports decelerated somewhat in the second quarter of 2009, with an annual decline of 22.3 per cent in volume terms. This was, in part, accounted for by an increase in transport equipment imports (planes), which has as its counterpart an increase in machinery and equipment investment during the quarter. The backdrop of contracting domestic demand seems set to continue to place significant downward pressure on merchandise import flows during the second half of 2009, and as a result a contraction of around 21.4 per cent is envisaged for the year as a whole. Demand for merchandise imports is expected to dampen further in 2010 as weakened domestic demand conditions persist, with a projected decline of around 10.8 per cent.

Services, Factor Incomes and International Transfers

While services exports continued to contract during the second quarter of 2009, the pace of contraction eased somewhat with a year-on-year decline in volume terms of 0.9 per cent. Much of the weakness in services exports relates to sector-specific issues specifically to the ongoing fallout for the financial and insurance services sectors of financial market turmoil. The Services Purchasing Managers

Index (PMI) new export orders index provides tentative evidence of stabilisation during the third quarter as the seasonally adjusted index for August reached 49.9, with 50 marking the boundary between expansion and contraction. Based on the Services PMI and the outturn observed for the first half of 2009, it would appear that services exports will stabilise sooner than may be the case on the merchandise side. Nevertheless, services exports are expected to continue to contract during the second half of the year due, in particular, to the continuation of sector specific weakness in the financial and insurance services. A somewhat muted recovery in services export performance is anticipated in 2010, with a modest increase in volume terms. It is important to note that the outlook for 2010, particularly in the area of computer services, will depend upon the timing and strength of the recovery in external demand. Services imports increased by 5.3 per cent in volume terms annually, in the second quarter. The bulk of this jump related to Business Services, with an annual increase in value terms of 9.4 per cent. Services imports are projected to increase further during the remainder of 2009, with an increase of about 2.1 per cent projected for the year as a whole. Services imports are expected to increase by about 1.3 per cent in 2010.

Net factor income outflows increased in the second quarter of 2009, rising by 20.9 per cent annually. This largely reflected a falloff in income inflows. Net income outflows are projected to rise somewhat for 2009 as a whole. The international transfers component of the current account was negative in the year to the second quarter of 2009. The negative contribution to the current account arising from this component is projected to continue throughout 2009 and 2010. Combining the prospective trends across the various current account components, a deficit of around

Table 3: Balance of Payments 2008, 2009^f and 2010^f

€ million	2008	2009 ^f	2010 ^f
Current account			
• Merchandise trade balance	23,820	33,752	36,366
• Services	-5,371	-8,160	-8,341
• Net factor income from rest of the world	-26,771	-29,250	-29,375
• Current international transfers	-1,115	-1,035	-935
Balance on current account	-9,437	-4,693	-2,285
(% of GNP)	-6.1	-3.5	-1.8
Capital and financial account	2008^f	2009^f	2009
	Full year	Quarter 2	First Half
Balance on capital account	68	12	7
Financial account			
• Direct investment	-22,892	6,831	6,834
• Portfolio investment	-39,352	-15,559	-19,322
• Other investment	78,378	18,185	17,857
• Reserve assets ^a	-78	-62	-21
Balance on financial account	16,057	9,396	5,349
Net errors and omissions	-6,690	-8,204	-1,610

^a Change in reserves on a transactions basis, i.e. excluding valuation adjustments. A minus figure equals a net increase in reserves. Note: The CSO have not yet incorporated measurement of FISIM into Balance of Payments data. As a result, the data in this table will differ from the National Accounts data in Table 1.

3.5 per cent of GNP is expected in 2009. Some further improvement is anticipated in 2010, with a current account deficit of 1.8 per cent of GNP.

Capital and Financial Account Q2 2009

The Capital Account, which primarily covers capital transfers, recorded a €12 million surplus in the second quarter of 2009, a decrease compared with a surplus of €52 million in the same quarter last year. Net inflows of €9.4 billion were recorded on the Financial Account in the second quarter of 2009, reflecting greater acquisitions by foreign residents of Irish liabilities, than purchases by Irish residents of foreign assets. Net errors and omissions, the item inserted to account for statistical discrepancies in the Balance of Payments' Accounts, was a debit of €8.2 billion in the second quarter of 2009. The Central Statistics Office is continuing its investigation of the potential causes in the financial markets for the consistently large errors and omissions.

Net direct investment amounted to inflows of €6.8 billion into the Irish economy, which was the most significant net inward direct investment since the fourth quarter of 2007. The increase in inward direct investment largely

arose from reinvested earnings of €4.8 billion, and loans of €7.2 billion advanced to IFSC enterprises, specifically treasury operations, from their inter-affiliates located abroad. Irish direct investment abroad, predominately by IFSC enterprises, amounted to €5.7 billion, a substantial increase in outward direct investment, compared with the previous five quarters.

A rebound in the securities markets is reflected in the acquisition of foreign securities, mainly money market instruments, by IFSC enterprises of €16.4 billion in the second quarter of 2009. Non-resident net transactions of Irish securities, reflected equity acquisitions of €5.4 billion exceeding redemptions in debt securities of €4.5 billion.

The other investment component, comprising transaction in external assets and liabilities, not recorded under direct or portfolio investment, accounted for net inflows of €18.2 billion. Redemptions of €23 billion by Irish residents in their foreign assets significantly affected the net inflow of these funds. Official external reserves increased by €62 million in the second quarter of 2009 to €796 million at end-June. This included a quarterly valuation adjustment, a write-down of €8 million.

Supply

Industry and Services Output

The manufacturing sector has proven resilient with volume output estimated to have contracted by 0.1 per cent in the seven months to July relative to the same period last year. This modest overall fall, however masks very different performances by the modern and traditional sectors over the period, which grew by 8.2 and contracted by 15.0 per cent, respectively. Output in the modern sector has been shouldered almost exclusively by the buoyancy of the pharmaceutical subsector, which is estimated to have expanded by 24.6 per cent in annual terms in the seven months to July, in marked contrast to the contraction of 14.8 per cent in the chemicals subsector over the period.

Qualitative evidence from the NCB Purchasing Managers Index (PMI) suggests that production of Irish manufacturing firms has contracted in each of the past eighteen months. New business orders and new orders from overseas continued to contract sharply in August, although the rate of contraction has shown signs of easing.

Reflective of continuing contraction in demand both domestically and internationally, output in manufacturing is expected to fall by 3.0 per

cent in 2009 driven principally by sustained difficulties in the traditional sector. An even greater contraction in the manufacturing sector as a whole, for both 2009 and 2010, is expected to be mitigated somewhat by a continuing strong performance in the modern sector.

In addition to the manufacturing sector, services sectors are also experiencing a contraction in output. In particular, the latest Quarterly National Accounts show that output in the Distribution, Transport and Communications sub-sector was down 8.6 per cent in annual terms in the second quarter of the year, with output of Other Services and that of Public Administration down 2.8 per cent and 4.2 per cent, respectively. The August NCB Purchasing Managers Index for Services (which excludes the retail and wholesale sectors) signalled a continued reduction in activity in the Irish services sector, although the rate of decline posted was the slowest since March 2008. While all services sub-sectors contracted in August, financial services contracted at the steepest pace. However impending optimism in the sector was captured by the sustained improvement in the confidence index, suggesting that the rate of decline in the sector is moderating. Input costs and charges continue to ease in the sector, which augurs well for potential future improvements in competitiveness.

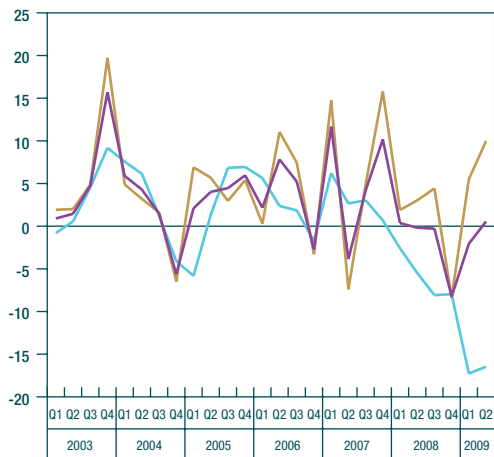
Table 4: Industry and Manufacturing Output, Annual Percentage Change

	Industrial Output			
	Modern	Other	Manufacturing	Total Industry
1998	30.1	12.0	21.3	19.7
1999	21.3	9.2	15.0	14.8
2000	19.1	9.7	14.6	14.3
2001	16.3	5.5	11.4	11.0
2002	13.0	2.6	8.5	8.2
2003	7.0	4.0	5.6	5.7
2004	0.3	2.5	1.1	1.2
2005	5.2	2.3	4.1	4.0
2006	3.8	1.6	3.1	2.9
2007	6.6	3.0	5.3	5.0
2008	0.4	-4.1	-1.9	-1.8
2009 ^f	2.9	-12.5	-3.0	-2.8
2010 ^f	-2.4	-1.6	-2.5	-2.1
Average 1998-2010	9.5	2.6	6.4	6.2

Note: As output data produced by the CSO now conforms with NACE Rev2 categorisation practices, and has been re-based to 2005, these figures no longer correspond directly with the industrial sector figures referenced in previous Quarterly Bulletins.

Chart 3: Volume of Industrial Production

% change Year-on-Year



— Modern — Manufacturing — Other Manufacturing

Agricultural Output

Price data from the CSO show that, in the first six months of 2009, output prices fell by 15.3 per cent in annual terms, while input prices fell by 4.7 per cent. Price falls took root in early 2009 and are largely reflective of base effects, following substantial output price increases throughout 2008. While the rate of contraction in output prices has outpaced those of input prices, this points to a worsening in the terms of trade facing farmers.

In terms of output in the sector, the Quarter 2 2009 National Accounts reveal that output in the Agriculture, Forestry and Fishing sector (broader than the activities implicitly captured in Table 5) contracted by 0.4 per cent relative to the same period last year.

The outlook for the sector for the year as a whole is predicated on a number of factors. Harvest production for 2009 is expected to be well down compared to 2008, reflecting lower than expected yields due to poor weather conditions. In contrast, there have been tentative signs of recovery in the dairy sector with milk prices registering an upward turnaround since August albeit from a very low base. Overall, prices are expected to continue to stabilise, with operating surplus anticipated

to decline, reflective of the rising farm debts and the closure of REPS4 payments, together with proposed cuts across a number of government grant sources.

The Labour Market

Based on the most recent data from the Quarterly National Household Survey (QNHS), the downward momentum in the labour market continued during the second quarter of 2009, as employment contracted by 1.8 per cent while the unemployment rate rose to 11.6 per cent, when seasonally adjusted. Nevertheless, the pace of deterioration in labour demand slowed relative to that of the first quarter. At a sectoral level, the contraction in employment was quite broadly based, with a year-on-year decline in eight of the fourteen economic sectors. Available indicators, namely, the Live Register and redundancy statistics, suggest that the pace of job losses slowed further during the third quarter. The number of persons on the Live Register, in seasonally adjusted terms, rose by an average of around 8,000 persons per month during July and August. This represents a substantial improvement on the average monthly rise of 26,000 in the first quarter of 2009 and 14,000 in the second quarter. It is, however, important to note that other factors may be behind the recent falloff in new claimants (See Box). A further indicator of the stabilisation of labour demand conditions has been the deceleration in redundancies — the number of redundancies in August amounted to 5,900, the smallest monthly total since December 2008. In line with such signs of slowing job losses, it is anticipated that a further contraction in employment will take place during the second half of 2009, albeit at a reduced pace to that of the first two quarters of 2009. Total employment is projected to fall by around 7.9 per cent for 2009 as a whole, with the construction sector expected to account for around half of this decline. The employment outlook for 2009 represents a somewhat better picture relative to the projection published in the previous Bulletin as the deceleration in labour demand during the second quarter proved to be somewhat less marked than previously anticipated.

Box: The Live Register

One of the most noticeable aspects of the current recession has been the scale and speed of the deterioration in labour market conditions. Owing to the absence of monthly International Labour Office (ILO) data, it has become useful, over recent times, to supplement analysis of the Quarterly National Household Survey (QNHS) with an analysis of the more timely Live Register series. While it is important to bear in mind that the Live Register is not an official measure of unemployment¹, its timeliness has meant that its relative importance as a labour market indicator has increased somewhat. This box provides a brief overview of unemployment trends, as suggested by the Live Register focusing, in particular, upon the profile of new claimants in terms of gender, age and nationality.

Analysis of the gender profile of the Live Register suggests that males have been unduly affected by the current contraction in labour demand, dominating the monthly rise in claimants since the recession began. For instance, males accounted for almost two-thirds of the net monthly increase in the Live Register during August 2009, when adjusted for seasonal factors. Correspondingly, the proportion of males relative to females signing on the Live Register has risen, increasing from 63 per cent to 65 per cent, year-on-year, in

August 2009 [See Figure A]. Such an increase is consistent with the fact that a higher proportion of males are employed in the economic sectors most severely affected by the recession.

The sharp rise in male claimants appears to have been accompanied by some deterioration in the labour market position of the young — the number of claimants aged 25 and under increased by 54 per cent during the first eight months of 2009. Such a rise is consistent with the fact that unemployment amongst younger cohorts tends to be quite cyclical.

Developments in the age profile of claimants

¹ The Live Register is not designed to measure unemployment as it includes part-time workers (those who work up to three days a week), seasonal and casual workers who are entitled to Jobseekers Benefit or Jobseekers Allowance.

Figure A: Live Register — Gender

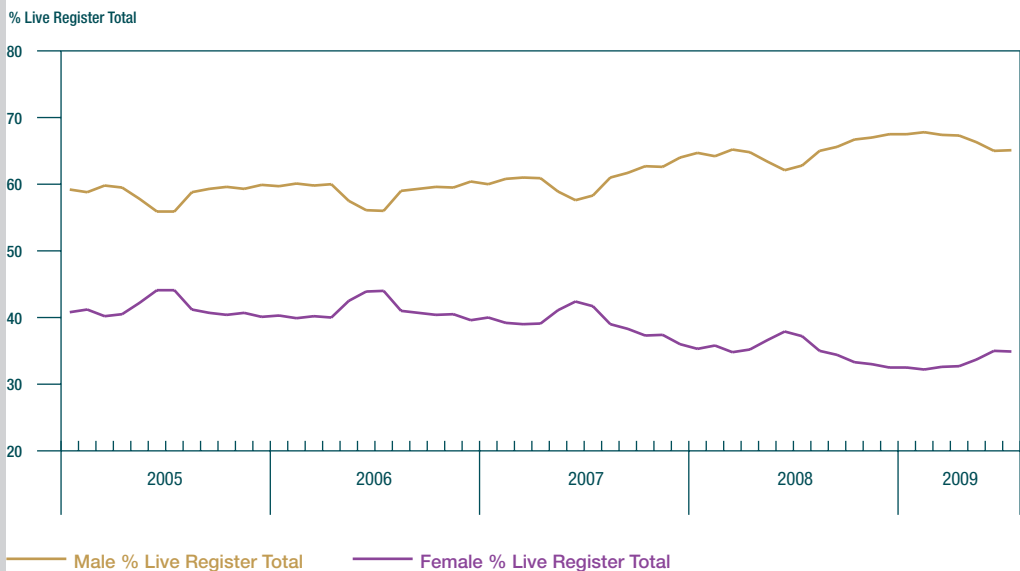


Figure B: Live Register — Casual and Part-time Workers

does not, however, suggest that youth unemployment has increased more sharply than prime age unemployment, with a broadly similar rise for workers aged 25 and over during the first eight months of 2009.

Given the significance of inward migration flows over recent years, a key consideration is the Live Register breakdown by nationality, which provides some insight into the incidence of unemployment by nationality. According to the Live Register, the composition of claimants by nationality has evolved somewhat during the third quarter of 2009, with an average month-on-month decline in the number of non-Irish nationals of 300 during July and August. This compares with an average monthly increase of 4,400 persons during the first half of 2009. As a result, the rise in the Live Register during both July and August 2009 was solely attributable to Irish nationals. The falloff in non-Irish nationals is indicative of a pickup in outward migration.

A noticeable aspect of recent developments in the Live Register has been the dramatic rise in part-time, seasonal and casual workers, as evidenced by the 169 per cent increase, year-on-year, in August 2009. Accordingly, the share of part-time, seasonal and casual workers has shifted upwards, rising from 10.8 per cent to 16.0

per cent, annually, in August 2009. To put this shift into perspective, it is useful to briefly consider the development of the part-time, seasonal and casual workers as a proportion of overall claimants over recent years. As illustrated in Figure B, the share of part-time, seasonal and casual workers remained within a tight range of 11 to 13 per cent throughout the period under consideration. The increase in part-time, seasonal and casual workers evident in Live Register partly stems from an increase in flexible working arrangements, whereby, firms increase their use of short-time working arrangements and temporary plant shutdowns as demand for their output falls. A key consideration related to the increase in the number of part-time, seasonal and casual workers has been its impact on the gap between the ILO² and the Live Register measure. The rise in the Live Register has outpaced that of the ILO measure during recent times and, as a result, the gap between the two measures has widened. During the second quarter of 2009, 259,500 people were classified as ILO unemployed, while the Live Register totalled 400,000 persons.

² The ILO measure is the internationally recognised definition of unemployment. Based on the ILO measure, a person is defined as unemployed if they were without work and available for work within the next two weeks, and had taken specific steps, in the preceding four weeks, to find work.

Table 5: Summary of Agricultural Output and Income 2008, 2009^f and 2010^f

	2008	% change in			2009 ^f	% change in			2010 ^f
	€ million	Value	Volume	Price	€ million	Value	Volume	Price	€ million
Goods output at producer prices ^a	5,853	-5.1	2.3	-7.2	5,554	-3.4	-0.2	-3.2	5,366
Intermediate consumption	4,577	-4.2	-0.7	-3.5	4,385	-2.6	0.2	-2.8	4,272
Net subsidies plus services output less expenses	1,885	-2.8			1,839	-5.1			1,720
Operating surplus	2,263	-7.2			2,100	-6.8			1,958

^aIncluding the value of stock changes.

The labour force continued to contract during the second quarter of 2009, with a year-on-year decline of 1.6 per cent. This decline arose from a fall-off in labour force participation together with net outward migration. The fall in participation is held to reflect an increase in the discouraged worker effect, as people stop searching for work together with an increase in the numbers opting to stay on longer in education. The other factor applying downward pressure on labour supply is migratory flows, with the most recent QNHS providing tentative evidence of a net outflow of migrants in the year to the second quarter of 2009. The deterioration in employment prospects has clearly had a dampening effect on the inflow of migrants, as evidenced by the 66 per cent fall, year-on-year, in the allocation of Personal Public Service (PPS) numbers to migrants from the Accession States in June 2009. Assuming the continuation of such a combination of developments during the second half of the year, the labour force is expected to contract by around 2 per cent during 2009. As the contraction in labour demand is projected to considerably outpace the fall-off in the labour force, the unemployment rate is set to rise sharply this year, averaging around 12 per cent.

Looking ahead to 2010, some further deterioration in labour market conditions is envisaged. Employment is expected to continue to contract, with a projected decline of about 4.4 per cent. Such an outlook is based on the assumption of broad based weakness at a sectoral level. The labour force is projected to fall by 2.2 per cent during 2010 reflecting a

further negative contribution from participation effects together with a net outflow of migrants. It is important to note that the outlook for the labour force in 2010 will depend heavily upon the migratory response, which is surrounded by a considerable degree of uncertainty. Taking account of the projections for employment and the labour force in 2010, the unemployment rate is expected to continue to rise, averaging around 14 per cent.

Pay

Official pay data for 2009 are at present limited to the industrial and financial intermediation sectors. Average weekly wages in both of these sectors decelerated, year-on-year, in the first quarter of 2009. Considerable variation exists, however, as regards the magnitude and direction of the change in average weekly pay — in the financial intermediation sector, average weekly pay declined by 12.8 per cent annually in the first quarter of 2009 while an increase of 3.4 per cent was recorded in the industrial sector over the same period. As regards the financial intermediation sector, the weakness in average weekly wages solely related to a sharp cut in irregular or bonus payments. A breakdown of average weekly industrial wages suggests that firms reduced labour costs by adjusting weekly hours worked; average hourly pay increased. The outturn for industrial wages contrasts sharply with anecdotal and other survey evidence, with the latter suggesting that nominal wage reductions have been taking place since the first quarter of 2009. One possible explanation for such an inconsistency relates to compositional shifts. Such effects arise as initial layoffs are often

Table 6: Employment and Unemployment 2008, 2009^f and 2010^f

(annual average '000)	2008	2009 ^f	2010 ^f
Agriculture	115	100	99
Industry (including construction)	520	419	384
Services	1,465	1,414	1,364
Total employment	2,100	1,933	1,847
Unemployment	141	263	301
Labour force	2,241	2,196	2,148
Unemployment rate (%)	6.3	12.0	14.0

Note: Figures may not sum due to rounding.

concentrated amongst less skilled, lower paid workers, resulting in an increase in average wages per employee, *ceteris paribus*. A cautious interpretation of the outturn for the first quarter is also warranted as sectoral wage data tend to be quite volatile and prone to significant revisions. In addition, it is important to note that the industrial and financial intermediation sectors, when combined, only account for around one fifth of total employment. Therefore, developments in these sectors may not be representative of other economic sectors.

Labour market slack and falling prices are expected to somewhat reduce employee bargaining power during 2009 and 2010, applying downward pressure on wages. In view of this and incorporating the public sector pension levy, average nominal compensation per non-agricultural employee is projected to decline by 2.4 per cent this year, followed by a further fall of 1.3 per cent in 2010. When combined with the projected decline in the number of non-agricultural employees, it suggests a fall in the non-agricultural pay bill of 10.1 per cent and 5.7 per cent in 2009 and 2010, respectively. Considerable uncertainty, however, surrounds the timing and scale of the adjustment in pay rates. The wage outlook has been revised upwards relative to the previous Quarterly Bulletin to partly incorporate the stronger than anticipated outturn for the first quarter of 2009.

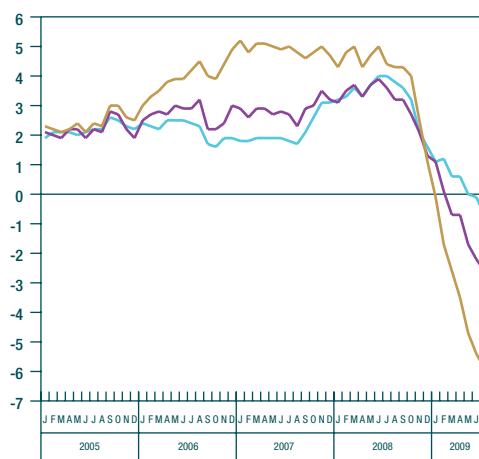
Inflation

Consumer Prices

Annual HICP inflation, at -2.4 per cent in August this year, is now likely to be close to a

Chart 4: Consumer Prices

% change Year-on-Year



— Ireland: Consumer Price Index

— Ireland: Harmonised Index of Consumer Prices (HICP)

— Euro-16: Monetary Union Index of Consumer Prices (MUICP)

trough following a considerable easing in inflationary pressures since the middle of 2008. Overall goods prices fell by about 5.1 per cent, year-on-year, in August, with non-energy industrial goods prices and energy prices contributing -2.7 percentage points and -2.1 percentage points, respectively, to this fall. The historical downward trend in clothing and footwear prices was steeper recently, reflecting intensified competitive pressures, but there were also particularly sharp price falls in other non-energy industrial goods. Discounting has gathered momentum in recent months, especially for prices of motor cars, household equipment and luxury goods, as retailers

attempt to stimulate sales. Food and non-alcoholic beverages declined by 3.2 per cent in the three months to August, with prices falling for a wide range of food and non-alcoholic produce. Consumers are markedly more price-conscious and the unwinding of the sharp sterling exchange rate depreciation enhanced the scope for domestic price reductions. However, there are signs that some external price pressures are beginning to rebound. For instance, petrol and diesel prices increased, month-on-month, by 1.7 per cent and 1.2 per cent, respectively, as the crude oil prices increases of the summer filter through to pump prices.

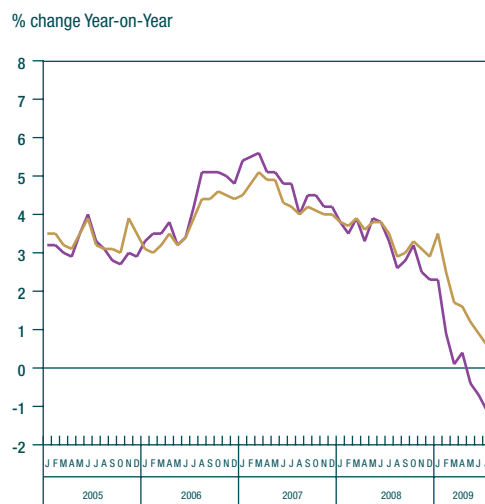
HICP services prices were 0.4 per cent higher, year-on-year, in August. Despite significant increases in insurance premiums and non-administered education costs, core services made a negative contribution of 0.4 percentage points to annual HICP services inflation due largely to substantially lower travel and accommodation costs. However, in the remaining services categories, the trend in prices is still generally upwards. Indeed, administered services and alcohol-related services prices made contributions of 0.9 percentage points and 0.3 percentage points, respectively, in August this year. While the positive contribution of alcohol-related services prices will likely fade rapidly in the coming months, as it arises from the carryover of price

increases in the final months of last year, the contribution of administered services is set to remain large and positive at least until the turn of the year. It is worth keeping in mind, however, that price changes in services generally may be overstated due to the challenges of adequately adjusting for quality changes in services.

The average rate of Irish HICP inflation is forecast to fall to about -1.5 per cent in 2009, significantly lower than the increase projected for the euro area HICP of between 0.2 per cent and 0.6 per cent, while the CPI is forecast to fall by 4.2 per cent on average this year.

Average mortgage interest repayments recorded an annual fall of 48.2 per cent in August due mainly to the large monthly falls recorded between November of last year and June of this year on foot of sharp reductions in ECB rates and the mortgage interest repayments component made a contribution of about -4.3 percentage points, in August. According to market expectations, there are likely to be increases in ECB base interest rates from the third quarter of next year and these have been factored into our projection for CPI inflation in 2010 as part of the Bank's standard technical assumptions for interest rates.

Chart 5: Services Sector Inflation

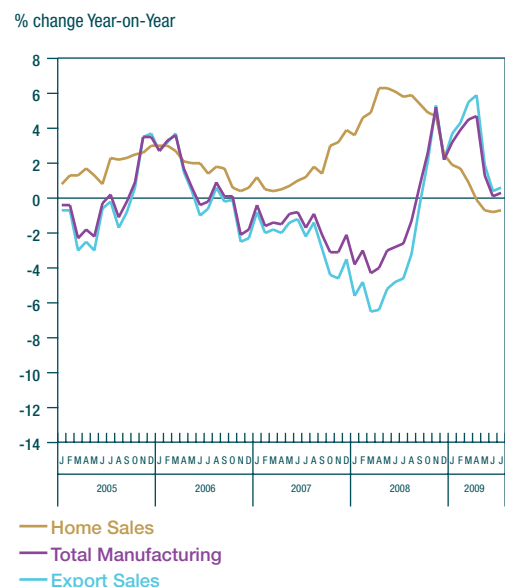


— HICP Core Services

— HICP Services (Overall)

Note: Core Market Services equals HICP services excluding telecommunications, alcohol and administered services.

Chart 6: Manufacturing Producer Price Inflation



— Home Sales

— Total Manufacturing

— Export Sales

Allowing for seasonal factors, monthly HICP inflation will likely remain broadly flat well into next year. Labour market weakness, further subsiding of supply chain inflationary pressures and also disposable income constraints will apply further downward pressure on prices, but will be offset by positive contributions to headline inflation from energy prices and administered services. As a result, the average price level is projected to fall only modestly next year and this will largely reflect the carryover from 2009. With the CPI and the HICP annual inflation rates likely to converge to about -0.4 to -0.5 per cent in 2010, significantly lower than the corresponding projection for the euro area of between 0.8 per cent and 1.6 per cent, there is set to be a notable improvement in price competitiveness with respect to our trading partners in the euro area over the course of this year and next.

Property Prices

According to the ptsb/ESRI house price index, residential property prices fell by a cumulative 24.4 per cent in nominal terms between their peak of February 2007 and August this year. As pointed out in previous Bulletins, there are several reasons why the true extent of the fall may be larger. Although affordability pressures have eased considerably, weak sentiment has been the prevailing influence on demand, with potential buyers continuing to postpone large

purchases. The persistent significant overhang of supply will continue to weigh on house prices. Private rents in August were 2.4 per cent lower than in May; this compares with quarterly falls of 4.2 per cent in May and 6.8 per cent in February. Private rents peaked in February 2008 and have now fallen by 22.2 per cent since then. With a significant oversupply of rental accommodation remaining and signs of migration outflows strengthening, a continuation of the decline in rents may persist for some quarters yet.

Commercial property prices have fallen by a cumulative 52.3 per cent in nominal terms between their peak of early 2008 and the second quarter of this year, according to data from the Society of Chartered Surveyors/ Investment Property Databank. The quarterly decline in commercial property capital values moderated only slightly during the second quarter of this year, falling by 7.8 per cent, compared with a fall of 10.9 per cent during the first quarter of this year. The Jones Lang LaSalle Irish Rental Index suggests that the quarterly decline in commercial rents, which began with a modest fall in the first quarter of this year, picked up significantly in the second quarter, with rents falling by 7.1 per cent. Despite upward-only rent reviews for many existing contracts, rents in the retail and office sectors still fell by a cumulative 9.2 per cent

Chart 7: permanent tsb / ESRI House Price Index

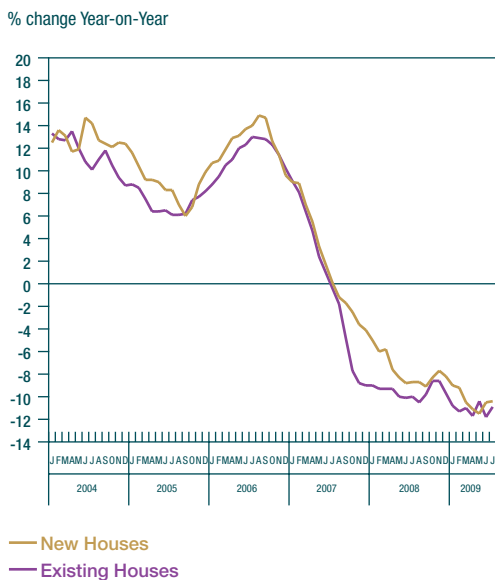
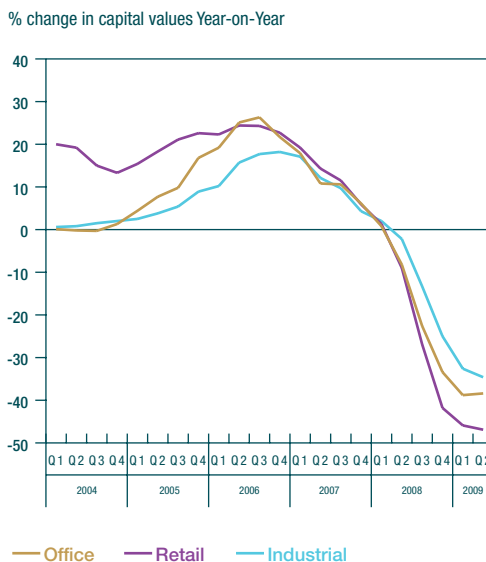


Chart 8: SCS / IPD Irish Property Index



and 10.2 per cent, respectively, during the first half of this year. With domestic economic activity continuing to contract sharply into next year, there is likely to be a further softening of commercial rents.

Competitiveness

On foreign exchange markets, recent movements in the euro exchange rate have been mixed. In the three month period to end-August, the euro was 6.2 per cent higher, quarter-on-quarter, against the dollar, whereas the euro fell by 4.5 per cent against sterling over the same period. More generally, movements in the euro exchange rate against Ireland’s major trading partners can be summarised by the Harmonised Competitiveness Indicator (HCI), which can be interpreted as an effective exchange rate. In the first seven months of the year, the nominal HCI fell by 0.5 per cent year-on-year, whereas the consumer price deflated HCI declined by 2.2 per cent. The stronger decline in the latter reflected lower inflation in Ireland relative to our main trading partners and points to an improvement in price competitiveness, following three successive years of increases in the real HCI.

Reflecting weak economic activity last year, productivity growth, as measured by GDP per

person employed, fell by 2.0 per cent in annual terms. This reflected, in part, some labour hoarding in the early stages of the economic downturn. The latest quarterly National Accounts data point to a modest recovery in productivity growth in the second quarter of the year although this may partly reflect adjustments underway in the labour market, with perhaps an end to labour hoarding by many firms. Despite this recent improvement however, for 2009 as a whole, productivity growth is likely to remain broadly flat. In 2010, productivity growth is expected to return to positive territory with growth of 2.2 per cent forecast, although much will depend on the performance of the high-technology manufacturing sector and internationally-traded services sector and the extent of the pick-up in the international economy.

The modest improvement in productivity growth and the outlook for wages should see a decline in unit labour costs this year and next. Unit labour costs, a key indicator of international competitiveness, are expected to fall by 2.5 per cent and 3.4 per cent in 2009 and 2010, respectively, compared with projected increases in our main trading partners. This anticipated decline in unit wage costs in Ireland follows a 5 year period between 2004 and 2008 in which unit labour costs increased

Chart 9: Harmonised Competitiveness Indicators

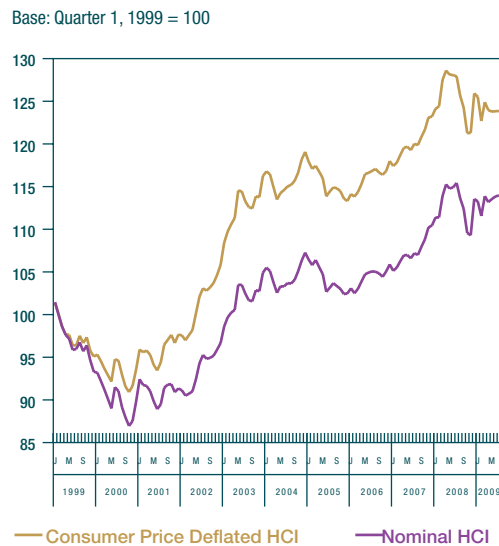
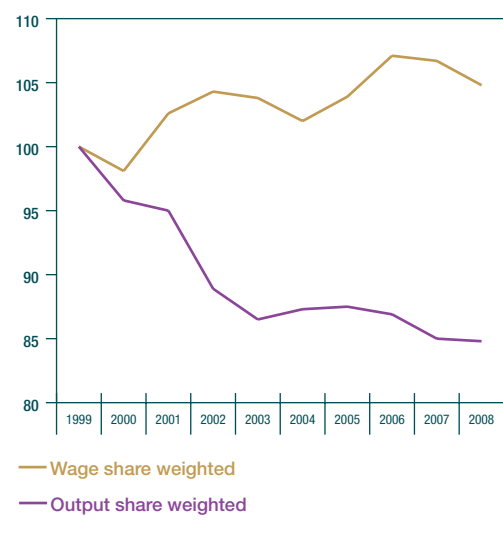


Chart 10: Unit Wage Costs in Manufacturing



sharply both in absolute terms and relative to our main trading partners. In terms of international competitiveness and attracting inward foreign direct investment, a period of either stable or declining unit labour costs would leave Ireland well placed to benefit from a global economic upturn. Ultimately, given that devaluation is not longer a policy option and in the context of an extremely challenging fiscal environment, labour market flexibility will be of central importance in the years ahead.

The latest Annual Competitiveness Report by the National Competitiveness Council (NCC) provides a broad overview of competitiveness developments in the Irish economy. The NCC Report noted that Ireland's competitiveness position had not changed significantly during 2008. In terms of cost competitiveness, the Report noted that non-pay costs in Ireland compared quite poorly with other countries, particularly for utilities and certain professional service categories. As regards the latter, the Report highlighted the high cost of legal, accountancy and IT fees in Dublin relative to competitor cities such as London and Singapore. In this context, recent reductions in State payments in the areas of legal and pharmaceutical services, along with cuts in prices for both gas and electricity, will assist in bringing costs more into line with our trading

partners. It is imperative that Ireland's cost base is reduced to attract and sustain high value added foreign direct investment and to facilitate an export led recovery in growth.

Public Finances

End-August Exchequer Returns

The ongoing deterioration in the domestic economy is reflected in the Exchequer Returns data, which show a €10.3 billion widening in the Exchequer Deficit to €18.7 billion in the first eight months of 2009 relative to the same period of last year. The sizeable increase in the deficit was related to a sharp fall off in tax revenues, which have collapsed in the face of an unwinding of structural imbalances in the economy and a marked contraction in consumer demand. In addition, increased current expenditure relating to higher unemployment, and significant outlays associated with banking sector recapitalisations and a payment to Anglo Irish Bank, have contributed to the higher Exchequer deficit.

Tax revenues have fallen sharply over the course of 2009, with ever increasing annual rates of decline registered until recent months. In the first eight months of the year, tax revenues, at €20.8 billion, were behind the Department of Finance's profile set earlier in the year and were down by 16.1 per cent in annual terms. Excluding corporation tax receipts however, which have been buoyed in recent months by a change in the payment schedule, total tax revenue was down by 20.3 per cent year-on-year over the period. Within this, the two largest tax heads, VAT and income tax, were down significantly by 21.6 per cent and 8 per cent in annual terms, respectively. Transaction taxes such as stamp duties and capital gains have also declined sharply, mainly as a result of a collapse in housing related activity.

On the expenditure side, overall voted spending in the first eight months of the year, at €30.8 billion, was down by 0.8 per cent in annual terms. However, this decrease was due entirely to lower capital spending over the period. Current voted expenditure, at €26.9 billion in the year to end-August, was up by 1.6 per cent annually. On the other hand, non-voted spending increased sharply to reach

Chart 11: Irish Unit Wage Costs Relative to Main Trading Partners (in Common Currency)

Base: 1999 = 100

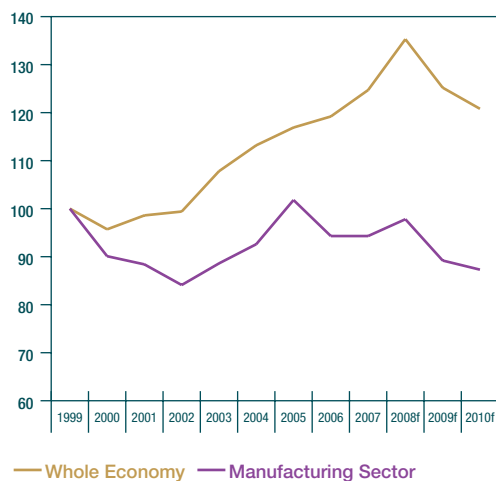


Table 7: Exchequer Returns, end-August 2009

	2008 Outturn €m	2009 End-August Outturn		
		€m	% Annual Change	% Supplementary Budget Estimate
Current Expenditure				
— Central Fund Services ^a	3,936	3,870	19.3	66.1
— Net Voted Expenditure ^b	40,757	26,852	1.6	66.3
Total	44,693	30,722	3.5	66.3
Current Revenue				
— Tax revenue	40,777	20,792	-16.1	60.4
— Non-tax revenue ^c	847	573	-1.4	67.2
Total	41,624	21,364	-15.7	60.6
Current Budget Balance	-3,069	-9,358		
Capital Budget Balance	-9,645	-9,375		
Exchequer Balance	-12,714	-18,733		
Source and Application of Funds				
Total (Borrowing)/Repayments	-30,311	-28,325		
Total Increase in Exchequer Deposits	17,597	9,592		
Exchequer Balance	-12,714	-18,733		

^aDebt servicing, judicial salaries and pensions and EU Budget contribution.

^bGovernment current expenditure on areas such as Social Welfare, Health, etc.

^cCentral Bank surplus income, National Lottery surplus, interest and dividends, etc.

€10.7 billion in the first eight months of 2009, though most of this was accounted for by the €7 billion outlays for the banking sector.

Exchequer Financing

Government borrowing, at €28.3 billion in the first eight months of 2009, more than doubled relative to the same period of 2008 (Table 7). The bulk of the borrowing in the year took the form of the issuance of bonds (€18.5 billion) and commercial paper (€9.1 billion).

Ireland currently has an excessive General Government Deficit with a European Council recommendation to correct the situation by 2013 at the latest. In this respect, over the past year the Government has undertaken a series

of consolidation measures to stem the deterioration in the public finances. While the latest Exchequer returns show that the annual rate of decline in several tax heads has stabilised in recent months, nonetheless the continued widening in the Exchequer deficit is a source of serious concern. To deal with this, the Government has signalled that additional measures amounting to €4 billion will be delivered in both 2010 and 2011. The Minister for Finance has already stated that the majority of the budgetary adjustment in 2010 must be borne on the expenditure side. The recent reports from the Commission on Taxation and the Special Group on Public Service Numbers and Expenditure Programmes provide the Government with a wide-ranging set of options to achieve these targets.

