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November 2004
IMF Country Report No. 04/349

# Ireland: Selected Issues

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**International Monetary Fund**
**Washington, D.C.**

INTERNATIONAL MONETARY FUND

IRELAND

**Selected Issues**

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Approved by European Department

September 22, 2004

Boxes



Figures



Tables

# I. Potential Growth After the Boom[1]

## A. Introduction

1. **Ireland experienced a period of unprecedented growth in the 1990s, catching up and even overtaking other industrial countries on a per capita income basis** (see Table 1). Between 1993 and 2003, real income per capita rose by a cumulative 71 percent (94 percent), when GNP (GDP) is used as a measure of aggregate income. As a result of this impressive growth, Ireland's income levels mostly converged to those of other industrial countries on a per capita basis. In 2003, real GNP per capita in Ireland was about 99 percent of the EU average, while real GDP per capita was almost 20 percent above it.

Table 1. Average Annual Growth Rate of GDP per Capita 1/

| | 1961-70 | 1971-80 | 1981-90 | 1991-2000 |
|---|---|---|---|---|
| Australia | 3.4 | 1.5 | 1.5 | 2.3 |
| Austria | 4.1 | 3.5 | 2.1 | 1.9 |
| Belgium | 4.3 | 3.2 | 1.9 | 1.9 |
| Canda | 3.3 | 2.7 | 1.5 | 1.9 |
| Denmark | 3.9 | 1.6 | 1.6 | 1.9 |
| Finland | 4.4 | 3.5 | 2.6 | 1.6 |
| France | 4.5 | 2.7 | 2.0 | 1.5 |
| Germany | 3.5 | 2.6 | 2.0 | 0.5 |
| Iceland | 3.2 | 5.2 | 1.7 | 1.7 |
| **Ireland** | **3.8** | **3.2** | **3.3** | **6.4** |
| **Ireland (GNP)** | **3.6** | **2.2** | **2.8** | **5.8** |
| Italy | 5.0 | 3.2 | 2.2 | 1.4 |
| Japan | 9.0 | 3.3 | 3.4 | 1.2 |
| Netherlands | 3.7 | 2.1 | 1.7 | 2.3 |
| New Zealand | 1.8 | 0.7 | 1.2 | 1.5 |
| Norway | 3.4 | 4.3 | 2.2 | 3.1 |
| Spain | 6.3 | 2.5 | 2.6 | 2.4 |
| Sweden | 3.9 | 1.6 | 1.9 | 1.7 |
| UK | 2.3 | 1.9 | 2.4 | 2.2 |
| US | 2.9 | 2.2 | 2.2 | 2.3 |

Sources: AMECO, and staff calculations.
1/ In 1995 PPPs, US dollars.

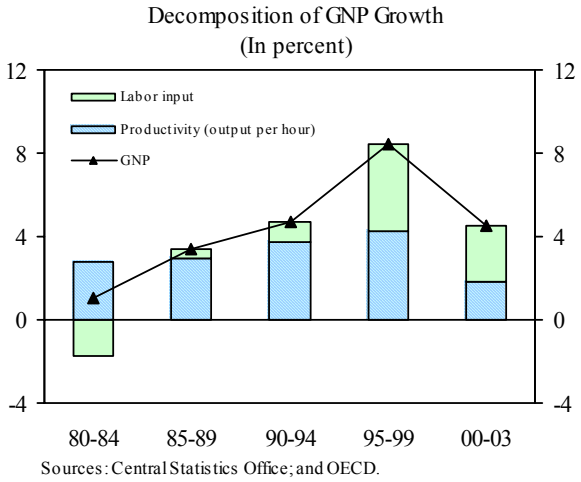
2. **The main question addressed in this paper is how fast will Ireland grow in the future.** With the convergence process mostly complete, this is a difficult question to answer, as the past may not be the best guide to the future. Nevertheless, the approach of this paper is to consider the catch up in labor productivity and utilization and use independent demographic projections and other considerations in order to make reasonable assumptions about labor productivity and utilization growth in the future.

[1] Prepared by Petya Koeva and Marialuz Moreno Badia.

3. **The rest of the paper is organized as follows.** Using a simple growth-accounting framework, Section B discusses the trends in labor utilization and productivity per hour in the past. Section C presents our baseline projections for labor productivity growth and the components of labor utilization growth in the future. Section D concludes.

## B. Decomposing Past Output Growth

4. **Ireland's impressive economic performance over the past decade raises the question of whether such a boom can be repeated in the future.** Although productivity growth (measured as output per hour worked) was strong throughout the period peaking at 4.2 percent a year during the mid-1990s—well above the productivity growth in most industrial countries—what set Ireland apart was the extraordinary increase in labor utilization during those years. Therefore, whether Ireland could replicate the remarkable boom of the 1990s largely depends on future trends in labor utilization. This section introduces a simple growth accounting framework to examine the sources of Ireland's growth in the late 1990s .




### Growth-accounting framework

5. **Output growth can be decomposed into several components.** Using a simple identity, one can express output per capita (1) as the product of labor productivity per hour (2), average hours worked (3), the employment rate (4), the participation rate (5), and the inverse of the dependency ratio (6):

$$\frac{Y}{N} \equiv \left(\frac{Y}{L*h}\right)*\left(\frac{L*h}{L}\right)*\left(\frac{L}{Lf}\right)*\left(\frac{Lf}{Wp}\right)*\left(\frac{Wp}{N}\right)$$

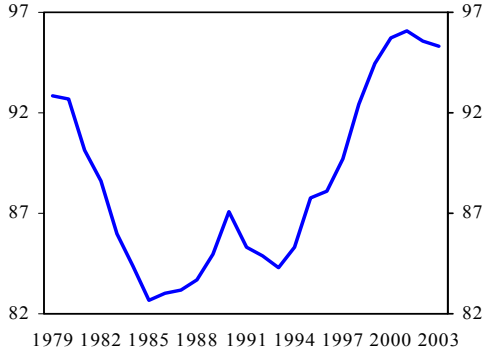
(1) (2) (3) (4) (5) (6)

where $Y$ is output, $N$ is total population, $Wp$ is working-age population, $Lf$ is labor force, $L$ is total employment, and $h$ is average hours worked per employee. Therefore, per capita output growth is equal to the sum of labor productivity growth and the growth in the above four components of labor utilization (see (3)-(6)). By the same token, output growth can be calculated as the sum of labor productivity growth and the five components of labor utilization growth (average hours, employment rate, participation rate, inverse of dependency ratio, and population).

**Past growth in labor utilization**

6. **Similar to other industrial countries, average hours worked in Ireland have fallen steadily since the mid-1970s, which can be attributed to several factors** (see Figure 1). First, the rise in female participation, especially during the mid-1990s, led to a shift from full-time to part-time employment and was associated with fewer hours worked. Second, faster growth in services relative to the industrial and agricultural sectors has also contributed to the decline, given the greater use of part-time employment and fewer average hours worked in the service sector. Third, strong preference for leisure and the Working Time Act may help explain the decline in the average hours worked by full-time workers.[2]

7. **After sluggish performance during most of the 1980s, the employment rate started rising sharply in the early 1990s**. While a number of factors contributed to the lack of job creation during the 1980s, poor demand management policies are often cited as the primary reason, resulting in high taxes and interest rates.[3] Faced with unemployment rates of over 16 percent, the social partners—employees, employers and the government—decided to adopt a cooperative approach to wage setting in the late 1980s, based on trading wage moderation and industrial peace for tax cuts and social welfare improvements. While not the only factor, the social partnership contributed significantly to the increase in the employment rate since the early 1990s, which averaged 2.1 percent per annum during the second half of the 1990s.



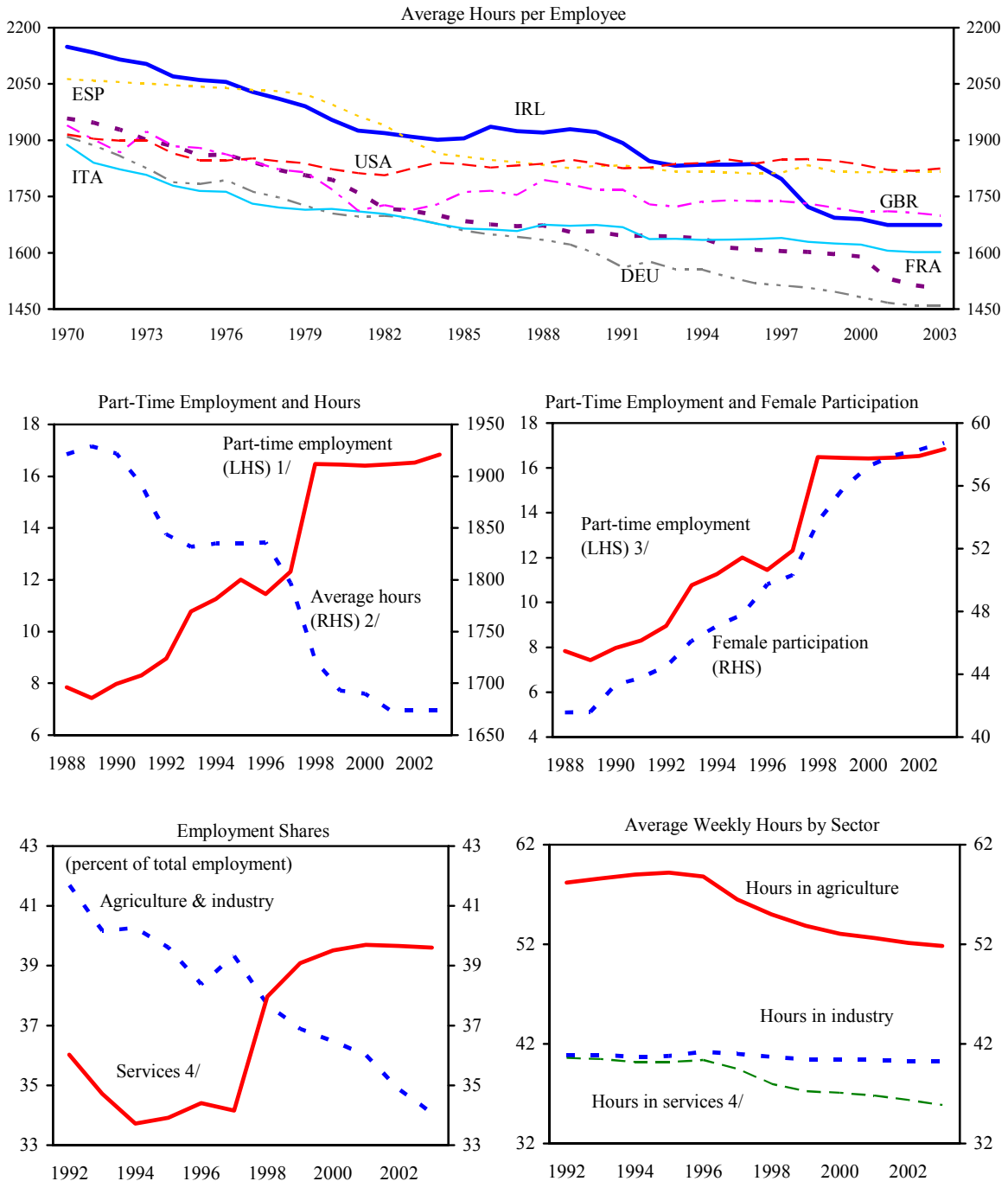
Source: Central Statistics Office.

8. **The participation rate also picked up, mainly reflecting higher female participation**. Following a steady decline from the mid 1960s to the late 1980s, the participation rate started increasing in the early 1990s. This increase was mainly driven by

[2] The Organization of Working Time Act was introduced in 1997 to provide for the implementation of Directive 93/104/EC of 23 November 1993 of the Council of the European Communities concerning certain aspects of the organization of working time. It established a maximum of 48 hour working week averaged over a reference period; a minimum daily rest period of 11 consecutive hours a day; a rest break where the working day is longer than four hours; a minimum rest period of one day a week; a statutory right to annual paid holiday of four weeks; and a maximum night working time of eight hours a night, on average.

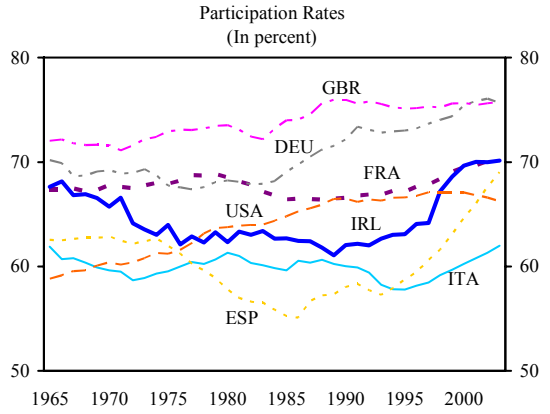
[3] See Honohan and Walsh (2002).

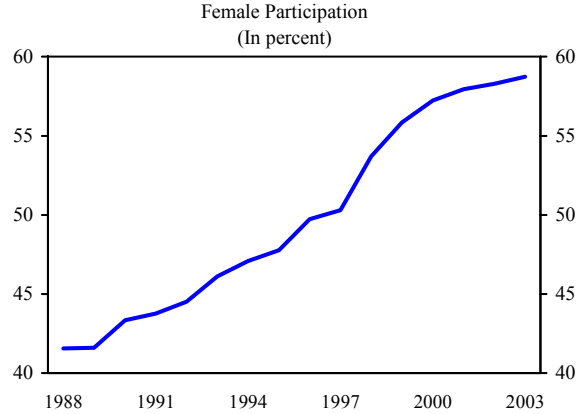
Figure 1. Ireland: Factors Explaining Average Hours




Sources: CSO, Eurostat, and OECD.
1/ Share of part-time in employment in percent.
2/ Average hours worked per employee.
3/ Share of part-time employment in percent.
4/ Services excluding public administration.

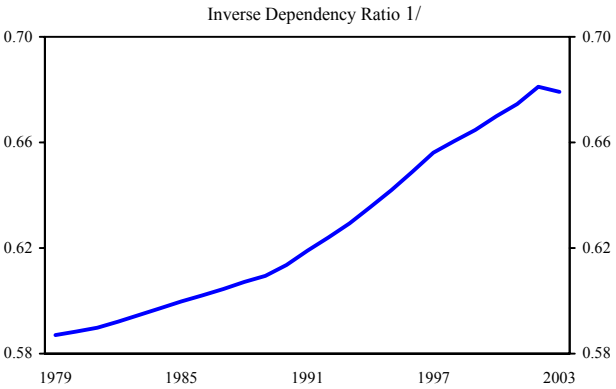
higher female participation, which, in turn, reflected better job opportunities as a result of the improving economy. Male participation also rose in the 1990s, albeit at a much slower pace.

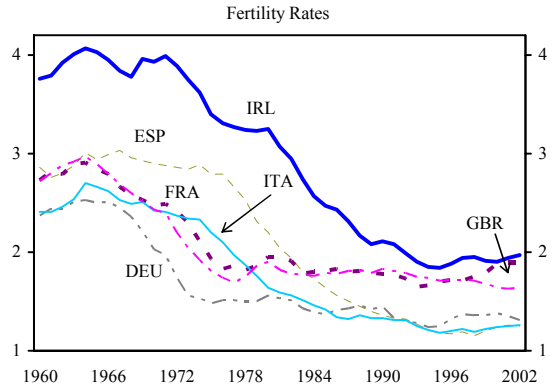



Sources: Central Statistics Office; and OECD.

9. **Providing an additional boost to economic growth, the inverse dependency ratio increased substantially, reflecting favorable demographic factors**. In contrast to other European countries, fertility rates in Ireland were very high in the 1960s and 1970s. As a result, the working-age population increased significantly in the 1980s and 1990s, prompting a steady rise in the inverse dependency ratio.




Sources: Central Statistics Office; and staff calculations.
1/ Working -age population over total population.

Source: Eurostat.

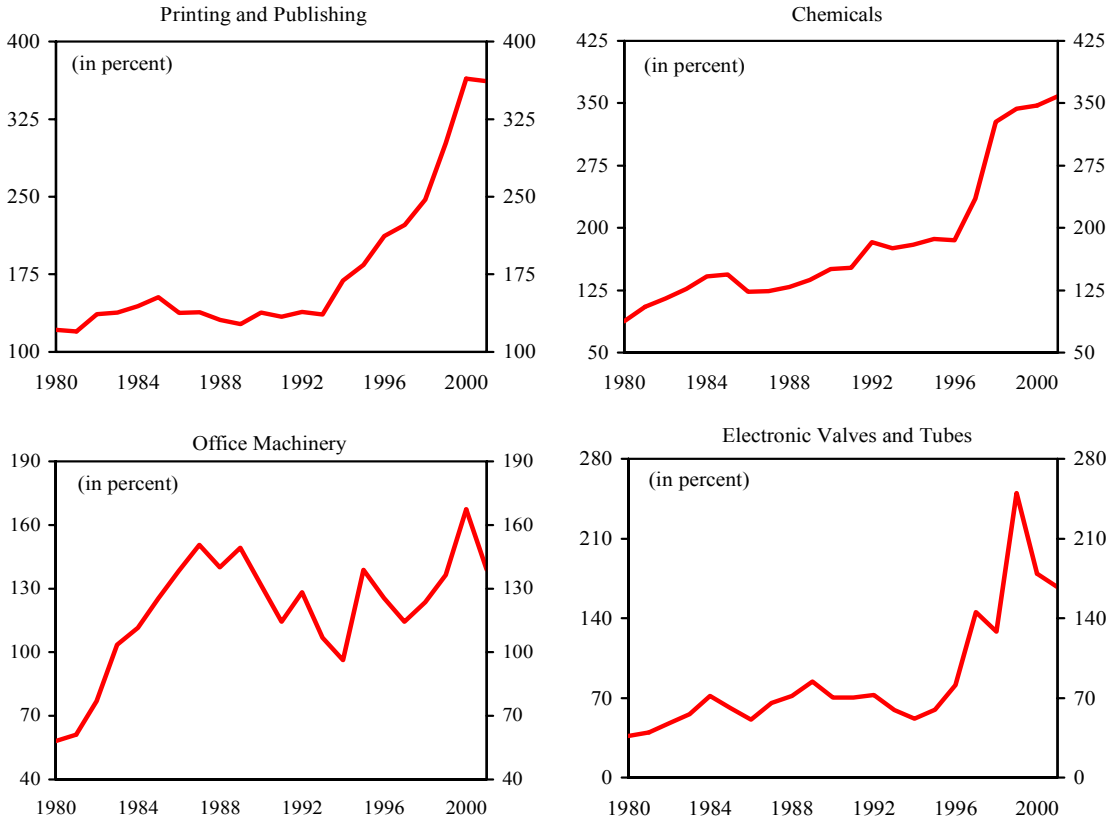
10. **Population growth also supported the increase in output, helped by a reversal of migration flows**. In addition to Ireland's higher fertility rates, the turnaround in migration flows also played an important role in boosting population growth, starting in the mid 1990s. The net inflow of migrants to Ireland between 1996 and 2003 was close to 0.2 million (compared to a total population of about 4 million in 2003).

**Past growth in labor productivity per hour**

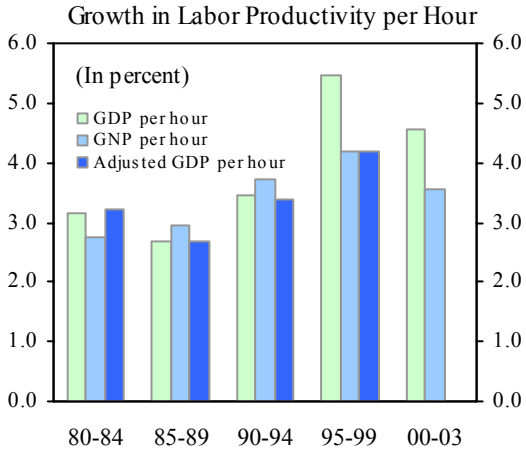
11. **In Ireland, labor productivity is notoriously difficult to measure, given the distortions to sectoral output caused by the operations of multinational companies.** It is a well known fact that the level and growth in labor productivity in Ireland has been higher in industries dominated by foreign companies. And while this superior performance during the 1990s also reflected true productivity improvements (as a result of the surge in FDI and the associated technology transfer), a nontrivial part of it was due to monopoly (or patent-related) profits of multinational companies that were booked in Ireland, given its low corporation tax rate regime. In other words, as Honohan and Walsh (2002) point out, *"...in many cases, the huge profits recorded by the Irish affiliates* [had] *very little to do with the manufacturing activities being conducted in Ireland"*, but rather emerged as a consequence of transfer pricing. In this context, it is not surprising that capturing true productivity growth in Ireland has been a major challenge. In this section, we consider three measures of aggregate labor productivity—GDP per hour, GNP per hour, and adjusted GDP per hour. The unadjusted GDP measure includes the profits of foreign-owned firms operating in Ireland, while the GNP measure excludes them. The construction of the adjusted GDP measure is described below.

12. **How can we make an adjustment for the impact of the multinational sector on measured productivity?** To start, we compare Ireland's labor productivity levels in four industries dominated by multinationals—*chemicals*, *printing and publishing*, *office machinery*, and *electronic valves and tubes*—to the average productivity levels of the same industries in the EU.[4] As expected, productivity levels in these industries— particularly in *chemicals* and *printing and publishing*—rose much faster in the 1990s than in any other country. For example, measured labor productivity in Ireland's chemical industry, which exceeded the EU average by about 150 percent in 1990, shot up to over 350 percent in 2001! The corresponding figures for the printing and publishing industry are similar. Then, to adjust for labor productivity distortions, we assume that in the absence of the multinational sector in the second part of the 1990s, Ireland's productivity per hour in these two industries would have grown at the highest rate observed across all other countries in the sample.

[4] We use the *Industry Labour Productivity Database* by O'Mahony and van Ark (2003), which contains data on labor productivity per hour in EU countries and the US from 1979 to 2001. The database covers 57 industries, including services.




13. **Labor productivity growth depends on which measure of productivity is used to construct it**. Prior to the mid-1990s, the difference between the alternative measures does not, on average, exceed 0.5 percentage points. However, in the period from 1995 to 1999, the gap between the growth rates of GNP per hour (4.2 percent) and adjusted GDP per hour (4.2 percent) and the growth rate of GDP per hour (5.5) is particularly stark. In other words, the GNP and adjusted GDP measures indicate a substantially lower productivity growth in the second half of the 1990s than the GDP measure.

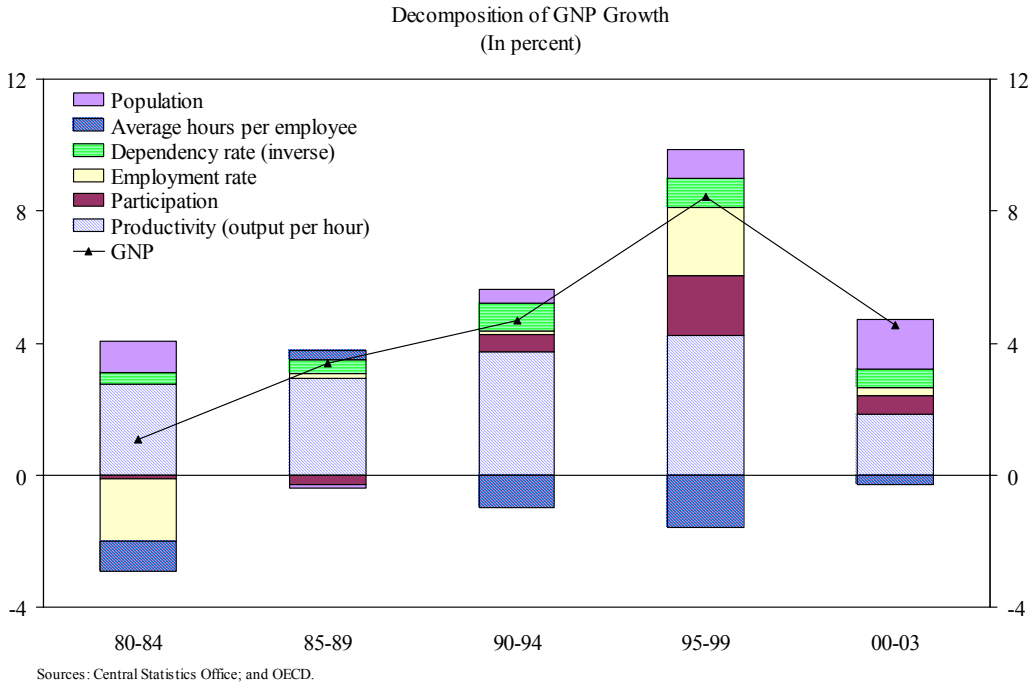



14. **In the remaining part of the paper, we focus on GNP per hour as the most appropriate measure of productivity, given the problems associated with the other two measures**. The use of unadjusted GDP is clearly inappropriate as already suggested in para 10. As far as adjusted GDP is concerned, there are a number of other assumptions that

one could make about counterfactual developments in the industries dominated by multinational companies. Unfortunately, the adjusted GDP measure is not robust to the specific assumption of what Irish productivity growth would have been in the multinational-dominated industries if the foreign companies had not entered the Irish market, as the magnitude of the adjustment could change substantially under alternative assumptions. Hence, we are left with GNP per hour as a more suitable measure of productivity than its two alternatives.

**Past growth in output**

15. **The decomposition of GNP growth illustrates that higher growth in both labor productivity and labor utilization explain Ireland's boom in the 1990s**. Putting together the components of output growth discussed in this section shows the relative contributions to GNP growth of the variables discussed in this section. During the second half of the 1990s, productivity growth accounted for slightly higher than ½ of the overall growth rate, while the sharp rise in employment and participation rates was mainly responsible for the rest.




Sources: Central Statistics Office; and OECD.

## C. Aggregating Future Output Growth

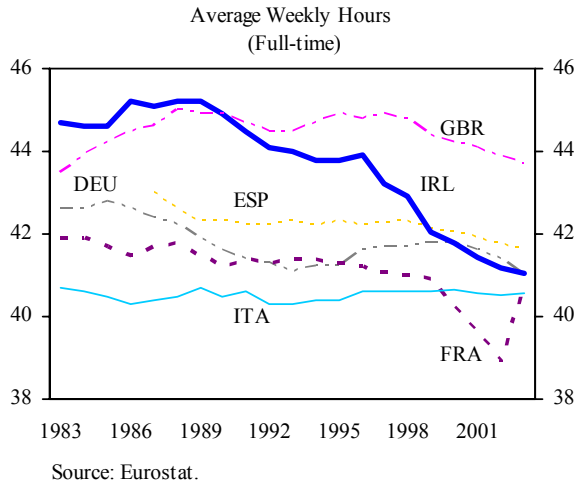
### Future growth in labor productivity per hour

16. **Using the appropriate measure of output, Ireland's hourly productivity level still has room to catch up with those of the leaders**. In 2003, GNP per hour in Ireland was about 90 percent of the corresponding level in the US.[5] Therefore, it is reasonable to allow for a further convergence in the Irish productivity level and assume that the country's productivity growth would continue to exceed that of the US during the next decade.

17. **To allow for further convergence in labor productivity levels, we assume a prospective growth rate in trend productivity of 3 percent**. This is based on the expectation that prospective hourly labor productivity growth in the US is 2 percent (which is consistent with its recent performance) and that Ireland continues to close the gap in productivity levels at a rate of 1 percent per annum. In the context of its historical performance, the assumed GNP per hour growth of 3 percent growth is about ½ percent lower than in 1990-2003 and 1½ percent lower than during the boom period, 1995–2000.

### Future growth in labor utilization

18. **Going forward, average hours worked are expected to be broadly stable**. Most of the factors contributing to the reduction in average hours worked in the 1990s appear to have run their course. In particular, the increase in part-time employment seems to have petered out. Given the limited scope for further increases in female participation, we expect part-time employment to remain broadly stable as a proportion of total employment. Average full-time hours are also assumed to stabilize at around 41 hours a week, barring new labor legislation and reflecting weaker income effects. The dynamics of hours worked in recent years seem consistent with the assumption of no trend in average hours worked in the future. However, a further compositional shift in employment towards services, leading to an additional decline in average hours worked, may be a downside risk to our baseline assumption.



Source: Eurostat.

[5] In the same year, Ireland's GDP-based hourly productivity level surpassed that of the US.

19. **The employment rate is assumed to increase modestly**. Future trends in the employment rate are determined by prospective developments in labor supply and employment. On labor supply, our projections are based on the latest estimates made by the Economic and Social Research Institute (ESRI), which show a strong growth of about 2 percent per annum until 2010 and a somewhat slower growth of 0.9 percent per annum afterwards.[6] On employment, we also use the ESRI medium-term projections, which indicate an average growth rate of over 2 percent per annum until 2010 and a more modest growth of 1.1 percent per annum in later years. Therefore, we assume employment growth of 1.5 percent on average up to 2015, consistent with a NAIRU estimate of 4 percent, while labor force average growth is projected at 1.45 percent. Hence, our assumptions imply an annual growth in the employment rate of 0.05 percent per annum—substantially lower than that during the Celtic Tiger era.

20. **The participation rate is expected to rise further but at a slower rate, consistent with falling fertility rates and declining immigration flows**. Prospective growth in the participation rate depends on future growth in labor supply and working-age population. On labor supply, we use the assumptions already described in para. 19. On working-age population, we use the ESRI's assumptions of an average growth of 0.8 percent in the period up to 2015, consistent with slowing fertility rates and stabilizing net migration to 10,000 persons by 2015. Consequently, average growth in the participation rate is projected to be about 0.65 percent per annum until 2015.

21. **The inverse dependency ratio is assumed to decline slightly**. Growth in the inverse dependency ratio reflects the differential growth rates of working-age and total population. As discussed in para. 20, the prospective growth of working-age population is taken to be 0.8 percent per annum. Therefore, we project the inverse dependency ratio to decrease by 0.35 percent per annum, consistent with a population growth of about 1.15 percent.

22. **Population growth is projected to slow down**. While estimates of future population growth differ across institutions, its slowdown is undisputable (see Table 2). Over the medium-term, population growth is expected to slow down, reflecting a decline in fertility rates and a stabilization in net migration. As already mentioned in para. 21, we assume that Ireland's population grows by an average of 1.15 percent per annum until 2015 in line with the ESRI's estimates.

[6] See Bergin, A. and others (2003).

Table 2. Population Estimates
(Average annual growth rate, in percent)

| | Circa 2015 | Circa 2030 | Circa 2050 |
|---|---|---|---|
| CSO 1/ | 0.6 | 0.2 | ... |
| Eurostat 2/ | 0.7 | 0.4 | 0.0 |
| EPC 3/ | 1.0 | 0.4 | 0.0 |
| ESRI 4/ | 1.0 | ... | ... |
| OECD 5/ | 0.5 | 0.2 | -0.6 |
| UN 6/ | 0.8 | 0.4 | 0.1 |

1/ Central Statistics Offi ce (2001), M1F2 scenario.

2/ Baseline scenario, 1999.

3/ Economic Policy Committee (2001).

4/ Bergin, A. and others (2003)

5/ OECD (2003)

6/ Database for United Nations (2003).

## Future growth in potential output

23. **Aggregating its components, we project potential GNP growth of 4½ percent in the medium run**. The baseline projections for labor productivity per hour and the five components of labor utilization are summarized in Table 3. As already suggested in the previous section, labor supply growth was the most important factor explaining the pick up in output growth during the mid-1990s. In the absence of a similar increase in labor supply over the next decade the projected trend growth is 4½ percent.

Table 3. Decomposition of Potential Growth
(In percent)

| | |
|---|---|
| Productivity | 3.00 |
| Average hours | 0.00 |
| Employment | 0.05 |
| Participation | 0.65 |
| Inverse dependency | -0.35 |
| Population | 1.15 |
| Potential output | 4.50 |

Source: Staff calculations

## D. Concluding Remarks

24. **This paper presents a projection for Ireland's potential growth over the next decade and explains its underlying assumptions.** Using a simple growth accounting framework, we make reasonable assumptions about future growth in labor productivity, average hours worked, employment and participation rates, the inverse dependency ratio, and population. Adding up these components, we arrive at an estimate of potential output growth of 4½ percent over the medium run.

25. **Nonetheless, there are significant, mostly downside risks to our baseline projection for potential growth**. First, productivity growth may be lower than 3 percent, particularly if Ireland loses its attractiveness as a destination for FDI. Second, hours worked may continue to fall, reflecting stronger-than-expected income effects and preference for leisure. Third, migration flows may be lower than expected, especially if high property prices act as a constraining force on labor supply. Finally, female participation may reverse its historical trend and decline, particularly if childcare costs continue to rise relative to wages.

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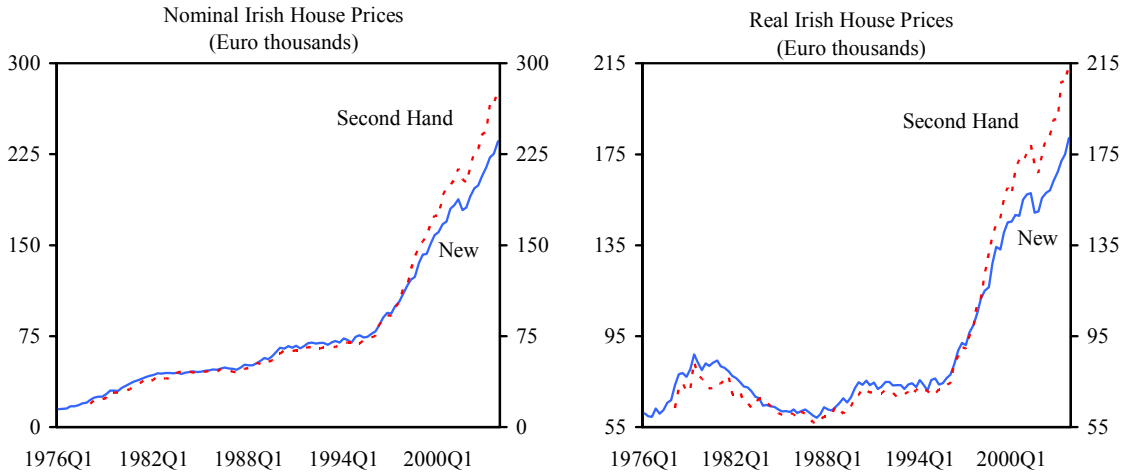
## II. Adjustment in the Housing Market[1]

### A. Introduction

1. **Ireland's house prices have risen dramatically since the mid-1990s, despite an interim deceleration.** From 1993 to 2003, the price of new houses posted a cumulative increase of about 140 percent in real terms (220 percent in nominal terms). During the same period, the corresponding price increase of second hand houses was almost 200 percent in real terms (300 percent in nominal terms). The boom has been particularly pronounced in Dublin, where real house prices have more than tripled over the past decade. Although the strong surge in the housing market did moderate for a short period in the late 1990s—real price increases of both new and second hand houses declined from over 20 percent in 1998 to around 3 percent in 2001—house price inflation reignited in 2002 and reached 11½ percent in 2003.




Sources: The Department of Environment, Heritage and Local Government, OECD, and staff calculations.

2. **The sheer length and magnitude of the Irish house price boom have prompted both the natural question of its sustainability and a wide spectrum of views in response.** A number of external observers, such as the IMF (2003) and the Economist (2003), have argued that Irish house prices are significantly overvalued (by as much as 40–50 percent). In Ireland, some commentators have also cautioned that the longer prices continue rising, the higher the probability of a disruptive adjustment in the housing market (Davy Stockbrokers, 2003; Central Bank of Ireland, 2003). At the other end of the spectrum, Roche (2003) and

[1] Prepared by Petya Koeva and Marialuz Moreno Badia. We thank Kieran McQuinn for providing data on the Irish housing market, as well as for his valuable comments.

McQuinn (2004) have contended that there is no evidence of overvaluation in the housing market.

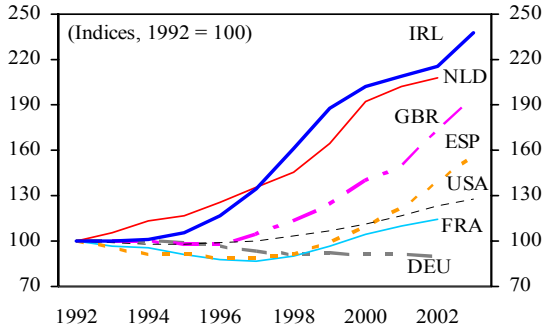
3. **The purpose of this paper is threefold.** First, it describes the spectacular boom of the Irish housing market and its key drivers from an international perspective. Second, the paper presents analytical and descriptive evidence on whether recent house price increases can be fully justified by fundamentals and discusses whether house prices and expectations have adjusted to the new environment of lower income growth. Finally, it raises a number of questions about the Irish housing market, including its linkages with the rest of the economy.

4. **The rest of the paper is organized as follows**. Section B compares the performance of Ireland's housing market with those in other industrial countries and highlights key developments in demand and supply that have the potential to explain it. Section C examines *analytical* evidence (based on alternative valuation methods) on whether the surge in house prices can be justified by fundamentals only. Section D presents *descriptive* evidence (from developments in the buy-to-let and second-home market, the market response to policy changes, and survey responses) on whether other factors could be affecting the recent dynamics of Irish house prices. Section E draws preliminary conclusions and raises questions about the impact that a housing market adjustment would have on the economy.

## B. The Irish Boom in Context

5. **Although many industrial countries have experienced sharp house price increases since the mid-1990s, the magnitude of the Irish boom has been unsurpassed.** Between 1995 and 2003, real house prices in Ireland rose by an average of 10.7 percent per year, exceeding even the annual growth rates in other industrial countries with strong house price inflation, such as the United Kingdom (8.5 percent), the Netherlands (8.6 percent), and Spain (7 percent).

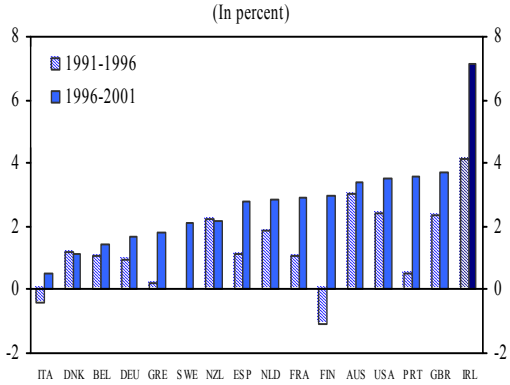
Real Residential Prices




Sources: BIS, staff estimates.

Average Annual Growth in Disposable Income

(In percent)



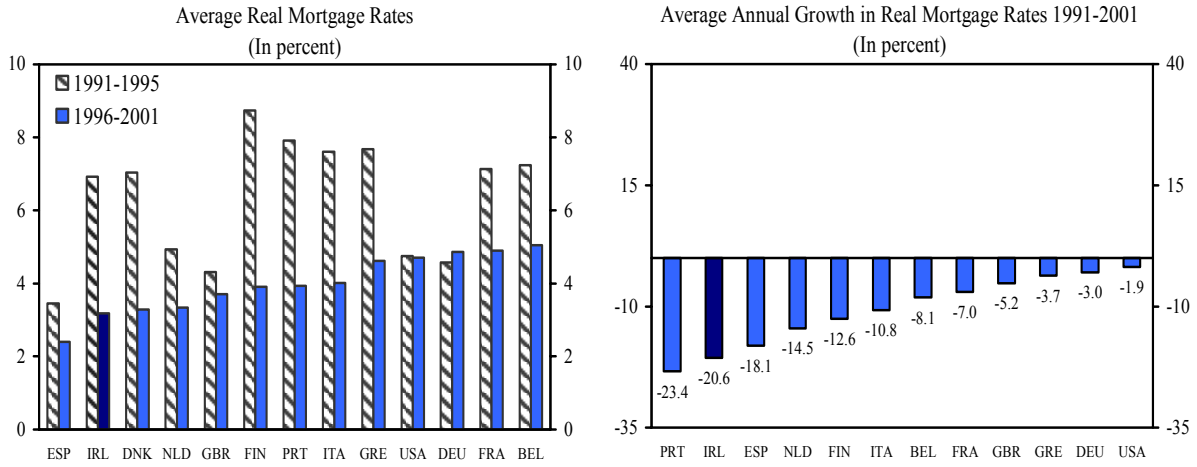

Source: OECD.

6. Perhaps the surge in Irish house prices can be attributed to more favorable demand factors. A number of facts point in this direction:

- *Growth in real disposable income* in Ireland since the mid-1990s has been stronger than in any other industrial country, thereby boosting housing demand. Between 1996 and 2001, the average annual growth rate in Ireland was

7.2 percent, compared with 2.5 percent in the European Union and 3.5 percent in the United States.

- *Real mortgage interest rates* in Ireland in the late 1990s were among the lowest among industrial countries, providing additional support to housing demand. In addition, the decline in Ireland's real mortgage rates since the first half of the 1990s has been more pronounced than in many other countries.




Sources: Ameco, CSO, European Federation of Mortgage Lenders, OECD, and staff calculations.

- *Financial market liberalization* during the 1980s and 1990s has also supported demand by allowing a rapid expansion in credit (Table 1). The strong growth in household credit, averaging 20 percent a year since 1995, has resulted in a doubling of household debt relative to disposable income since the mid-1990s. In fact, mortgage credit alone accounts now for about 80 percent of household credit or 77 percent of household disposable income.[2]

[2] See Kelly, J. (2004).

Table 1. Financial Market Liberalization in Ireland

| Year | Measure |
|---|---|
| 1980 | Daily interbank settlement facilities provided by Central Bank. |
| 1983 | Introduction of sale and repurchase agreements for supplying liquidity to interbank market. |
| 1984 | Formal guidelines for bank lending to private-sector ended. |
| 1985 | New interest-rate arrangements facilitate greater competition among banks at retail level. |
| 1986 | Issue of indicative sectoral credit guidelines ended. |
| 1987 | Announcement of Government intention to establish IFSC. |
| 1988 | Major relaxation of exchange controls. |
| 1991 | Formal trigger mechanism for changes in retail interest rates suspended. Primary liquidity ratio reduced to 8 percent. |
| 1992 | Reduction in primary liquidity ratio to 6 percent. Limitation on foreign exchange borrowing by residents and domestic currency borrowing by non-residents removed. |
| 1993 | Reduction in primary liquidity ratio to 4 percent. Fixed-rate mortgages introduced by some banks for first time. |
| 1994 | Reduction in primary liquidity ratio to 3 percent. Secondary liquidity requirement abolished. |
| 1999 | Reduction in primary liquidity ratio to 2 percent. |

Source: Browne, F., Gavin, D. and A. Reilly (2003).

- *Demographic trends* in Ireland were particularly favorable to housing demand in the 1990s (Figure 1). The growth rate of household formation in Ireland exceeded those in other industrial countries, mostly reflecting rapid growth in the population aged 25 to 34 (the first-time buyer group) and stronger migration inflows.

- *The tax treatment of housing* in Ireland has been more supportive of home ownership than in most other EU countries (Table 2). In particular, the existence of mortgage interest relief, the absence of a tax on imputed rent, and the exemption from capital gains tax on principal dwellings have contributed to a lower user cost of housing, thereby reinforcing housing demand.

Table 2: Housing Taxes in European Countries (2001)

| | Tax on imputed rent | Interest relief 1/ | Tax on capital gain | Real estate tax |
|---|---|---|---|---|
| Denmark | Y | Y | Y (tax exemptions for owner-occupied) | Y |
| Germany | N | N | Y (turnover<10 years, tax exemptions for owner-occupied) | N (land tax, 0.3-1% of rateable values) |
| Greece | Y 2/ | Y 2/ | N | 0.025% to 0.035%; for large estates: 0.3% to 0.8% |
| Spain | N (for primary houses) | Y | Y (tax exemptions for principal dwellings when reinvested) | 0.62 |
| France | N | N | Y (no tax for main residence) | + residence tax; 7.8%-45% of half cadastral rental value |
| Ireland | N | Y | Y (tax exemptions for principal dwellings) | N |
| Italy | Y 3/ | Y 4/ | Y (50% tax reduction for pood) | 0.4%-0.7% of cadastral value |
| Netherlands | Y | Y | N | 0.3% |
| Sweden | Y | Y | Y (25%) | 0% to 1.5% of 75% of the market value price |
| United Kingdom | N | N | Y (tax exemtion for pood) | 0.2% |

Source: European Central Bank (2003).

1/ Mortgage-related.

2/ For principal owner-occupied dwelling.

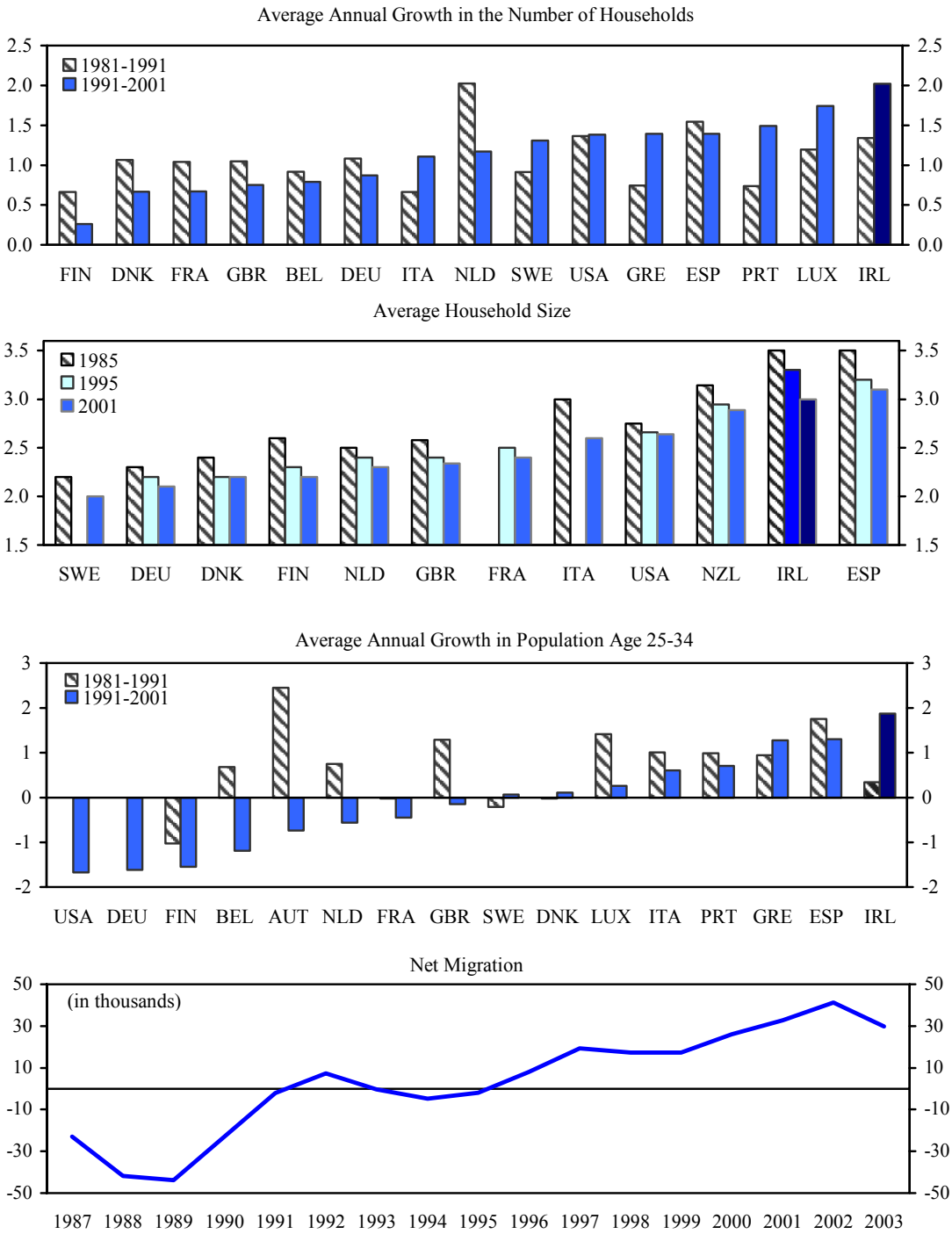
3/ Exemption for principal owner-occupied dwelling.

4/ Only for principal owner-occupied dwelling.

Y: Yes.

N: No.

Figure 1. Ireland: Demographics




Sources: CSO, EuroStat, Housing Statistics in the European Union 2002, National Statistical Offices, and ODPM.

- *Mortgage finance* in Ireland has been less restrictive than in most other EU countries. For example, the maximum loan-to-value ratio is 90 percent, exceeding even those in the United States, Australia, Spain, and the Netherlands (Table 3).

Table 3: Maximum Loan to Value Ratio
(in percentage)

| | |
|---|---|
| Australia | 80 |
| Belgium | 80-85 |
| Canada | 75 |
| Denmark | 80 |
| Finland | 75 |
| France | 80 |
| Germany | 60 |
| Ireland | 90 |
| Italy | 50 |
| Japan | 80 |
| Netherlands | 75 |
| Norway | 80 |
| Spain | 80 |
| Sweden | 80 |
| Switzeland | 66 |
| United Kingdom | 90-100 |
| United States | 75-80 |

Source: Tsatsaronis and Zhu (2004).

7. **The rise in housing demand triggered a response in housing supply unprecedented by international standards (Figure 2).** A number of measures illustrate this trend:

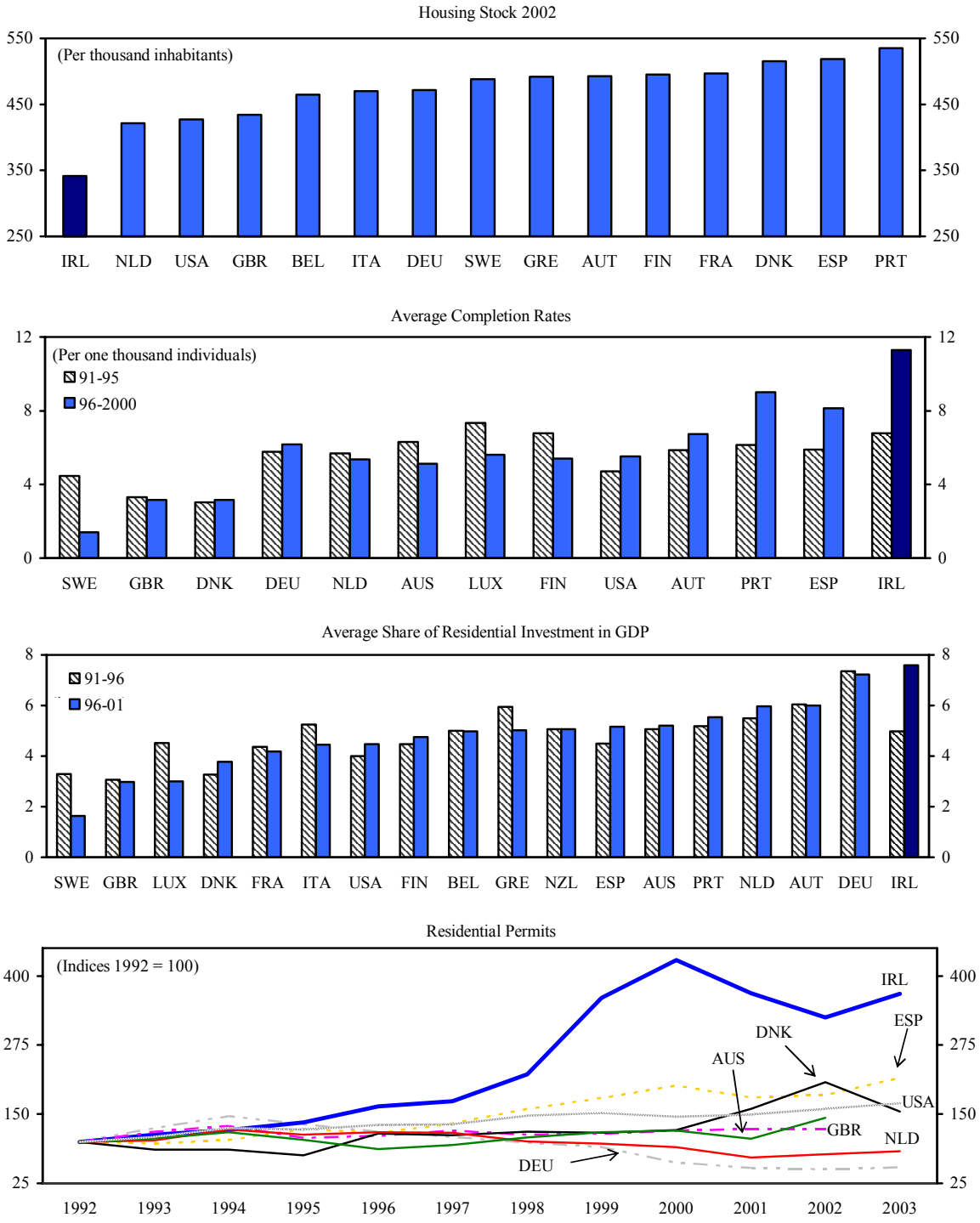
- Over 420,000 new houses were completed in Ireland between 1995 and 2003. The number of house completions reached an all-time high of 69,000 units in 2003, posting a year-on-year growth of close to 20 percent.

- The average implied house completion rate (per thousand people) was higher than in any other industrial country between 1996 and 2000. As a proportion of the existing housing stock, the number of house completions in 2001 was about three times higher than in other housing-boom countries, such as Spain and the United Kingdom.

- On average, residential investment between 1996 and 2001 constituted a higher share of GDP (over 7 percent) in Ireland than in any other industrial country.

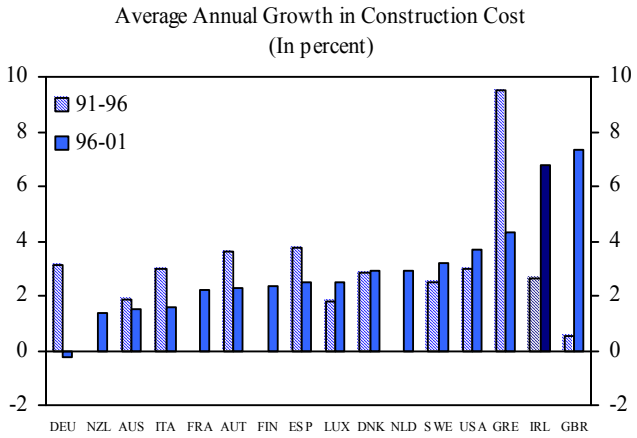
- The number of housing permits issued rose by over 80 percent between 1995 and 2001.

Figure 2. Ireland: Housing Supply




Sources: Ameco, DataStream, Department of Environment, Heritage and Local Government, Eurostat, European Federation of Mortgage Lenders, National Statistical Offices, ODPM, and staff calculations.

8. **Partly stimulated by supportive government policies, the enormous increase in housing supply was accompanied by significant increases in real construction costs and land prices.** The cost of house construction rose by an average of 2½ percent in real terms between 1995 and 2002, but declined by almost 1 percent in 2003. Land prices are estimated to have grown by an average of 25 percent in real terms between 1995 and 2001, but to have remained broadly flat in 2002. The significant cost increases did not deter the supply of new housing, which was also aided by policy measures to increase the availability of land for residential development and to relax zoning regulations, as well as to allow higher densities at desirable locations.




## C. Analytical Evidence

9. **The question of whether the above fundamentals fully explain the Irish housing boom can be addressed by using two alternative valuation methods.** The first approach is to estimate an econometric model of house prices as a function of supply and demand factors and examine whether the actual house prices deviate from their long-term equilibrium values. The second approach is to treat housing as an asset that reflects the discounted present value of its future "dividends," which should be driven by fundamentals, and construct its price-to-earnings ratio.

### Econometric model of house prices

10. **In its generic form, the econometric model is a reduced-form equation of house prices as a function of demand and supply variables.** The starting point is a system of two structural (supply and demand) equations, which is transformed into a reduced-form equation:

- The *structural demand equation* is given by $Q_t^d = f(P_t, X_t^d)$, where $Q_t^d$ is housing demand, $P_t$ is the real house price, and $X_t^d$ is a vector of demand-shifting variables, such as disposable income, the user cost of housing (mortgage rate, taxation), demographics, etc. Some econometric specifications are based on this equation. After reversing the positions of housing demand and prices, one obtains an *inverted-demand equation*, linking house prices to the demand variables $X_t^d$ and the housing stock.

- The *structural supply equation* is given by $Q_t^s = f(P_t, X_t^s)$, where $Q_t^s$ is housing supply, $P_t$ is the real house price, and $X_t^s$ is a vector of supply-shifting variables, such as zoning restrictions, real construction costs, land prices, etc.

- The *reduced-form equation* for the equilibrium house price, $P_t = g(X_t^d, X_t^s)$, is obtained by equating supply and demand. In other words, the equilibrium price depends on all variables that affect housing supply and demand. The house price equation is typically estimated using an error-correction model. Actual house prices are then compared with the estimated equilibrium prices, which are consistent with the (supply and demand) fundamentals included in the model.

11. **Empirical analyses focusing on demand-side factors generally find that house prices in Ireland are significantly overvalued:**

- A background note for the 2003 Article IV consultation with Ireland estimated a reduced-form equation of real annual house prices as a function of disposable income, real mortgage rates, and the share of households aged 25-35. If the equation was estimated for the period 1976-2002, the actual house price was about 16½ percent higher than its long-run equilibrium. However, the deviation of the actual house price from the equilibrium price (implied by fundamentals) was over 50 percent when the model was estimated for the period 1976-97.

- Bacon and MacCabe (2000) estimated an inverted-demand equation for the period 1972-96, including variables such as demographics, disposable income, mortgage rates, and housing stock. Using the estimated parameters to compute the predicted prices for 1997-2000, the authors established that the actual house price in 2000 deviated from its fundamental value by over 85 percent.

- Based on the deviation of the price-to-income ratio from its long-run trend, *the Economist* (2003) concluded that Irish house prices were overvalued by over 40 percent.[3]

12. **If certain supply factors are included in the model, the estimated degree of overvaluation declines dramatically**. Most recently, Roche (2003) and McQuinn (2004) argued that previous studies ignored the importance of supply factors in determining house prices and, therefore, overestimated the degree of house price overvaluation. In particular, Roche (2003) added two supply variables—*real construction cost* and *land cost*—to a

[3] This approach is equivalent to estimating the reduced-form equation of house prices on income only.

reduced-form equation relating house prices to fundamentals.[4] In this case, the degree of overvaluation in 2002 was in the range of 0-4½ percent, leading the author to the conclusion Irish house prices were in line with fundamentals. Using the same supply-side variables, McQuinn (2004) also concluded that the surge in house prices could be fully explained by fundamentals, but noted an important caveat to his results— the potential endogeneity of land prices.

13. **However, the supply variable that is most important in explaining the Irish house price boom is also most likely to suffer from endogeneity problems.** As highlighted in Roche (2003), "*trends in land costs are the most important factor explaining the trend in new house prices.*" But, as the first Bacon report (1998) points out, "*...A key issue is the direction of causation between land cost and house prices. In other words, is it the supply and demand for housing that is pushing development land prices or higher land prices that are pushing housing costs? From an economic point of view the balance of probability would suggest the former channel rather than the latter....*" If land prices are indeed endogenous to the real estate cycle but included as an explanatory variable in the house price equation, the overall importance of fundamentals in explaining the surge in house prices could be substantially overstated.

14. **Projections based on a simple econometric model suggest that house price increases should moderate going forward.** We estimated a simple reduced-form equation of log real house prices as a function of demand-side factors (log disposable income per capita, real mortgage rates and net migration).[5] As expected, the income elasticity of house prices (1.17) was strongly significant and consistent with results from the literature. Similarly the coefficients of real mortgage rates (-0.02) and net migration (0.001) had the expected signs and were significant.[6] The estimation results indicated that if disposable income per capita were to increase by 4.5 percent, real mortgage rates were at 1.7 percent and net migration were the same as in 2003, real house price inflation should be around 5 percent by end 2004.[7]

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[4] The demand-side variables used in his model are the number of new migrants, the user cost of housing, real disposable income, and real household credit.

[5] House prices are a weighted average of new and second-hand house prices. The weights use are the ratio of loans paid on new and other houses total loans.

[6] An alternative specification including supply factors was also estimated but many coefficients were insignificant and had the wrong signs.

[7] Our assumption of real mortgage rates is based on short-term euro rates of 2.3 percent and inflation in line with euro rates.

15. **However, one big drawback to interpreting these results is the inherently backward-looking nature of the econometric approach.** In relying on historical data to estimate the model coefficients, one ignores the possibility that the relationship between house prices and fundamentals may be different in the future. Given the likely structural changes in the economy (associated with Ireland's transition from the boom years of the 1990s to a period of slower income growth), this possibility is distinct and should not be ignored. Therefore, we turn to a more forward-looking approach to housing valuation.

**House prices, rents, and the price-to-earnings (P/E) ratio**

16. **An alternative valuation method considers house prices in an asset-pricing framework.** In this setup, housing can be treated as an asset that provides a flow of housing services. As such, its price should reflect its future income stream. Applying an asset-pricing framework similar to the dividend-discount model for equity valuation, the price of a house should be the present value of its expected benefit of ownership: rental income (market or imputed), discounted at a rate that accounts for the risk associated with holding the asset.[8] In other words, the house price, $P_t$ , is related to the rent $E_t$ and the (constant) discount rate $R$ as follows:

$$P_t = \frac{E_t}{(1+R)} + \frac{E_{t+1}}{(1+R)^2} + \frac{E_{t+2}}{(1+R)^3} + \ldots = \sum_{j=1}^{\infty} \frac{E_{t+j-1}}{(1+R)^j}$$

Assuming that rents grow at a constant rate, $g$, the housing price-to-earnings ratio can be derived from the above expression:

$$\frac{P_t}{E_t} = \frac{1}{R-g} = \frac{1}{r^f + \delta - g}$$

where $r^f$ is the real riskless rate and $\delta$ is the housing risk premium.

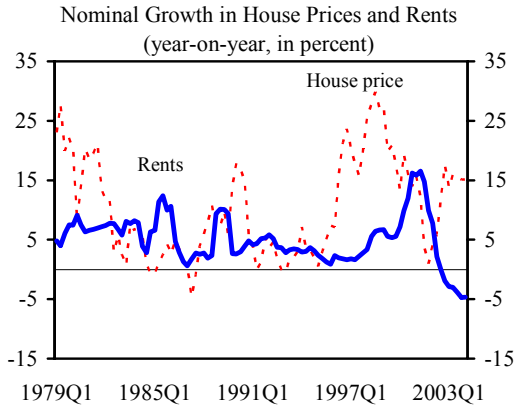
17. **The latter asset-pricing equation demonstrates the link between house prices and rents.** Several observations are of interest:

- The housing P/E ratio provides a useful way to examine whether housing prices are overvalued, since the ratio is invariant to the extent that supply and demand factors influence both the rental and owner-occupier markets.

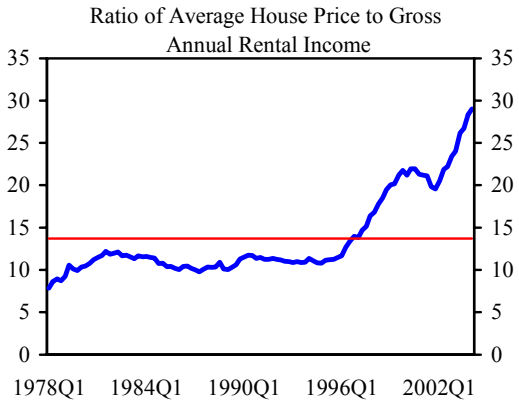
- A decline in the real interest rate, $r^f$ ,(or the housing risk premium, $\delta$ ), or an increase in the growth rate of rents, *g,* could justify a hike in the P/E ratio.

[8] See Weeken (2004), Leamer (2002), Krainer (2003), and Ayuso and Restoy (2003).

- But an increasing P/E ratio could also signal that people are purchasing houses in expectation of capital appreciation rather than due to fundamentals. In this case, house prices would rise faster than rents, prompting a rise in the P/E ratio.



Sources: CSO; Department of Environment.



Sources: CSO; Department of Environment; 2003 Quarterly National Household Survey; and staff calculations.

18. **Currently, the P/E ratio in Ireland is over 100 percent above its historical average** (see chart above). A proxy for the ratio has been constructed by dividing the average house price by the annual rent paid in the private rental market.[9] Interestingly, the sharp rise over the past two years has reflected the significant pickup in house price growth *and* the continued slowdown in rental income growth. In the first quarter of 2004, the P/E ratio is estimated at 29.

19. **What can explain the recent rise in the P/E ratio?** One potential explanation is that a decline in the real riskless interest rate, $r^f$, (and, hence, the discount rate), has driven up the P/E ratio. However, real interest rates have remained broadly stable since 2000, that is, their fall preceded the rise in the ratio by almost two years. Another potential explanation is that the growth rate of rental income, *g*, has gone up. But actual developments point to the opposite finding—growth in rental income has fallen and been negative in every quarter since mid-2002. If one cannot find convincing, fundamentals-driven reasons for the dramatic rise in the housing P/E ratio, then two possible explanations remain: either the new and second-

[9] The house price is the weighted average of new and second hand house prices. The annual gross rent is derived using the Central Statistical Office index of private rents and the monthly rental rate in the third quarter of 2003 available from the housing module of the 2003 Quarterly National Housing Survey. Strictly speaking, one should use net (rather than gross) rental income (which excludes operating costs, such as those on maintenance and property management) and only the part of net rental income that is not spent on new housing investment, i.e., the housing dividend. Because data limitations prevent us from constructing these series, we use gross rental income instead.

hand housing market owes its recent strength to the expectation of capital appreciation, *or* the P/E valuation model suffers from serious problems.

20. **As usual, this analysis is subject to a number of important limitations and caveats.**[10] *First,* the role of leverage is not considered. As residential property is typically financed by mortgage borrowing, the return (or loss) on the initial housing investment is magnified. The impact of this factor on investor demand is not considered in the P/E analysis. *Second*, the tax treatment and regulation of owner-occupied and rental housing are not incorporated in the model. A more favorable tax treatment of housing relative to other asset classes could justify a high P/E ratio. *Third*, the model implicitly assumes that people are indifferent between owning and renting a house. A violation of this assumption would produce a wedge between rents and the flow of housing services. *Fourth*, the lumpiness of housing may imply a limited diversification across other asset classes and properties, possibly leading to a higher risk premium. *Fifth*, existing data limitations (related to the coverage, quality, and availability of house price and rental series) make it difficult to draw definitive conclusions.

21. **Nonetheless, the asset valuation approach still provides a helpful reference point to evaluate future changes in house prices.** The main implication of the asset-pricing approach is that the current level of house prices should incorporate not only the current values of fundamentals, but also expectations about their future values. Therefore, only *changes* in trends of fundamentals matter for *changes* in house price trends. In the absence of such changes, house prices are expected to grow in line with the growth rate of rental income, $g$. Assuming that over the medium run, $g$, does not exceed the growth rate of economywide income, future real house price increases in Ireland should not be higher than 4–5 percent, reflecting the lower medium-term prospects for real income growth.

### D. Descriptive Evidence

22. **Several pieces of additional evidence can also help understand the recent dynamics of Ireland's house prices.** In particular, developments in the buy-to-let and second-home markets and the market response to policy changes provide suggestive information about the role of fundamental and speculative factors in explaining the house price increases over the past few years. Also, evidence from various surveys sheds more light on the motivation and expectations of home-buyers. Together, these sources of information give some indication of whether house price expectations have adjusted to the new environment of lower growth.

[10] See Weeken (2004) for a more detailed discussion.

**Developments in the buy-to-let and second-home markets**

23. **The buy-to-let market has been very active in recent years, although the stock of private rental housing is still comparatively low.** According to the latest Quarterly National Household Survey, private rental dwellings make up about 8 percent of the total number of residential dwellings. However, survey data collected from banks and real estate agencies point to a high level of activity in this market segment:

- On the demand side, new "buy-to-let" mortgages constituted about 20 percent of all mortgage transactions in 2003 (Standard and Poor's). Investors bought about 28 percent of all new properties and 21 percent of all second hand properties in 2003, compared with 25 percent and 17 percent, respectively, in 2002 (Sherry FitzGerald, 2003).[11] In Dublin, investors accounted for approximately 25 percent of all purchases in the new-house market in 2003, compared with 15 percent in the second hand market (EBS/Gunne, 2004).

- On the supply side, an estimated 30 percent of the second-hand dwellings sold during the first half of this year were previously held as investment properties, compared with about 27 percent in 2003 (Sherry FitzGerald, 2003).

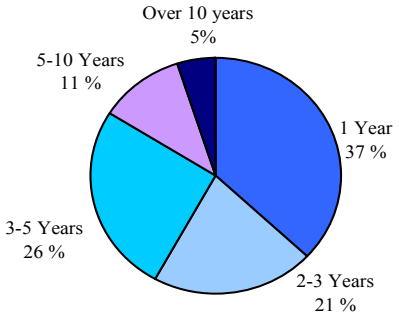
24. **Who has invested in the buy-to-let market and why**? Recent surveys of residential investment property owners suggest that the market is dominated by small, mostly inexperienced investors, whose primary investment objective is to provide for retirement.

- The *Gunne January 2003 Annual Landlord Survey* reports that about 60 percent of investors have been in the buy-to-let market for three years or less (see figure below). The survey also finds that 52 percent of the respondents have invested in the market following the reintroduction of mortgage relief for rental properties (see para 28 below).

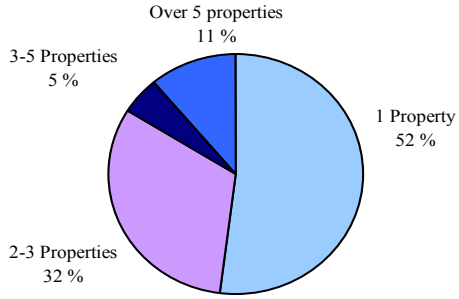
- The same survey shows that over 50 percent of the landlords have only one property.

[11] Preliminary estimates indicate that investors purchased 21 percent of the secondhand houses traded during the first six months of 2004, compared with 19 percent during the same period in 2003.

Classification of investors by date of entry in the market




Classification of landlords by number of properties




Source: Gunne Research Group.

- The *EBS/Gunne March 2004 Report* indicates that over 75 percent of the residential property investors have specified pension saving (for themselves or their partners) as their main investment objective.

25. **Even if small in size, the buy-to-let sector could have a significant impact on the dynamics of house prices**. With property investors taking an active part in the housing market, the question is to what extent they have exerted upward pressure on house prices. Lured by the substantial capital appreciation and supported by the small carrying costs observed in the recent past, many new investors have entered the buy-to-let market, possibly displacing first-time buyers and contributing significantly to housing demand and house prices. By itself, this development is not necessarily worrisome, unless there is evidence that the recent wave of property investment has been driven by unrealistic expectations about future house price increases. Unfortunately, the robust demand for rental property investment in 2003—in spite of a continued decline in private rents—suggests that new, inexperienced investors may have entered the market with such expectations, thereby fuelling the demand for housing.

26. **Demand for second homes appears to be an important factor in the housing market as well.** This market segment consists of households that purchase residential property as a holiday or retirement home or as a (vacant) investment property, which is not used for rental purposes. It is difficult to assess the size of the second-home market, separating it from the buy-to-let market.[12] Nevertheless, Davy Stockbrokers (2003) estimate that about 40 percent of houses in 2003 were *not* bought as a primary residence, but rather as

[12] In Australia, the 2002 Household, Income, and Labour Dynamics Survey provides a breakdown of these categories, as well as comprehensive data on the characteristics of property investors (see the 2004 *Reserve Bank of Australia Bulletin*). To our knowledge, there is no representative household survey in Ireland that contains the same type of information.

a second-home (or buy-to-let) property. Combining this estimate with data from the buy-to-let market (see para. 23), one could approximate second-home purchases to have been up to 15 to 20 percent of the residential property acquisitions in 2003. In other words, although housing supply has risen tremendously in recent years (see para 7), a surprisingly large proportion of it appears to be satisfying demand for second-home properties. As in the case of the buy-to-let market, some of the properties may have been acquired with the expectation that house prices would continue to grow at their current pace in the future.

**Response of the housing market to policy measures**

27. **Identified as a significant cause for concern, the buoyancy of house prices prompted the government to introduce a package of tax measures in 1998 to slow the market.**[13] Following the publication of the first Bacon report, which warned that strong investor demand was causing the housing market to overheat and pricing first-time buyers out of the market, the government announced in April 1998 a set of policy measures to dampen investor demand and increase the potential supply of housing:[14]

- *Tax relief on mortgages for residential investment*. The deductibility of mortgage interest for investment in residential property (against rental income) was removed.

- *Stamp duty*. The zero stamp duty on purchases of new houses was eliminated for nonowner occupiers only. At the same time, the stamp duty for second hand houses was lowered across the board.

- *Section 23 relief*. The tax relief under Section 23 for investment in private rental accommodation was restricted.

- *Capital gains tax*. The capital gains tax rate on disposals of qualified residential land was reduced temporarily from 40 percent to 20 percent.[15]

28. **However, the tax measures affecting property investors were reversed in Budget 2002.** *First,* mortgage interest relief for investors was reintroduced starting in January 1,

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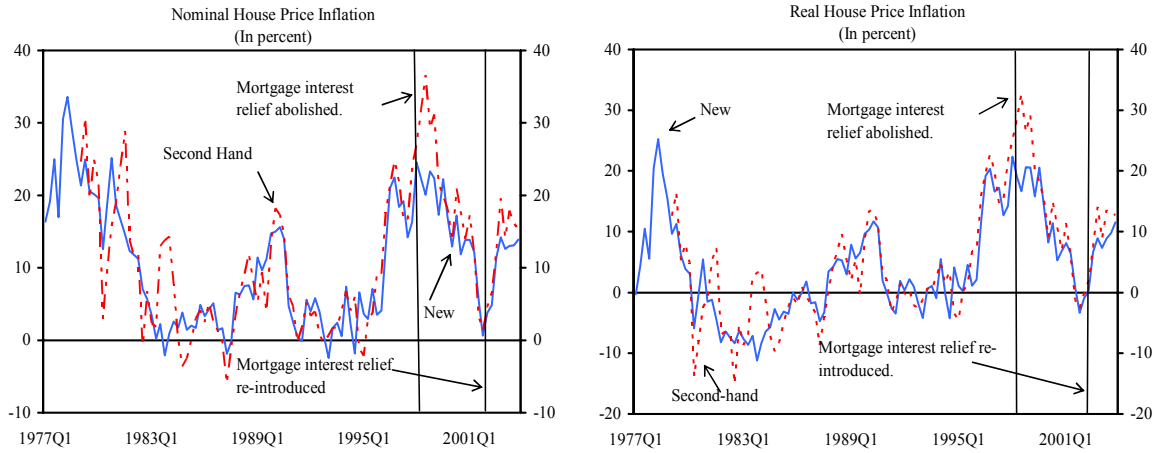
[13] In June 2000, the government also announced the introduction of an anti-speculation tax of 2 percent on the value of all newly-acquired residential investment properties for a period of three years, with exemptions for qualified rented properties. However, the tax was removed in 2001.

[14] The full set of measures is outlined in the document *Action on House Prices*, published by the Department of the Environment, Heritage and Local Government in 1998.

[15] However, the capital gains tax on disposals of *all* development land was reduced to 20 percent on December 1, 1999.

2002. *Second*, stamp duty levels on new property for investors were lowered and brought into alignment with those on second hand property for non-first-time owner-occupiers.

29. **Did the measures of 1998 and 2002 have an impact on house prices?** The observed correlation between the tax changes and the pattern of house price increases is remarkably strong (see chart), raising the question whether the policy changes influenced the dynamics of house prices. Although mortgage rates were in a steady decline during the whole period, growth in house prices decelerated sharply between 1998 and early 2002 but rebounded in mid-2002. Changes in disposable income and demographics appear unlikely to help explain the slowdown and pickup in house prices during the period.




Sources: OECD, The Department of Environment, Heritage and Local Government, and staff calculations.

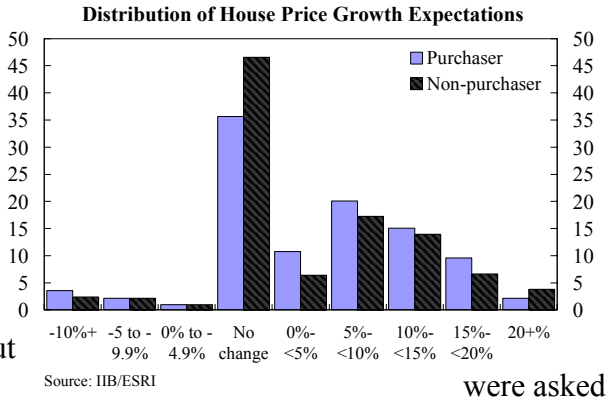
30. **The policy measures could have influenced the recent dynamics of house prices in several ways**. One possibility, supported by anecdotal evidence and market commentary, is that the tax changes had a direct effect on the market by pushing investors out of the market in 1998 and inviting them back in 2002. Unfortunately, the lack of representative time-series data on the residential property investment market makes it difficult to reach firm conclusions on the magnitude of this effect. In addition, the policy measures could have had an impact on house price expectations.[16] While hard to verify empirically, the premise that policy actions can play a significant role in adjusting house price expectations appears to be perfectly plausible.

[16] The importance of this effect was highlighted in Finance Minister McCreevy's speech announcing the 1998 measures, which stated that "*...the package of measures announced last Thursday will help restore balance to the housing market. It will also help to remove another significant factor that has been fuelling price escalation, namely the expectation or—depending on one's perspective—fear of further major price increases. The very publication of the [Bacon] report itself together with the Government's speedy response will help take much of the hype out of the market. It is not without significance that as the publication of the report was approaching there were increasingly frequent comments to the effect that the market 'is about to right itself and that prices are set to stabilise soon."*

**Expectations about the housing market**

31. **The distinguishing characteristics of a booming market have been analyzed carefully in the recent housing literature.** Using survey evidence from U.S. cities, Case and Shiller (2003) have examined the homebuyer behavior in a boom property market, highlighting some of its interesting features. *First*, the vast majority of people in such a market expect significant future price increases—an average of 10 percent per year over the next few years, but about 15 percent per year over the next ten years. *Second*, a large proportion of the respondents view the purchase of a house as an investment. *Third*, people feel a sense of urgency in buying a house (over 70 percent of the respondents noted that it was a good time to purchase a property because house prices would increase in the future).

32. **Although direct evidence on the motivation and expectations of homebuyers in Ireland is scarce, two recent surveys do provide interesting, but somewhat mixed, information.** Conducted in August 2003, the IIB/ESRI survey *Irish Consumer Sentiment towards the Property Market* found that, on average, respondents expected house prices to rise by 4.8 percent over the next 12 months. However, the distribution of price expectations was quite wide, with about 25 percent of the people projecting increases of over 10 percent. (Unfortunately, the survey did not ask the more important question about longer-term price expectations.) The second survey containing useful information is the already-mentioned EBS/Gunne survey of residential investment property owners (see Para. 24). Although there was no explicit question about house price expectations, the respondents were asked their views on investing in property and buying intentions. Interestingly, over 90 percent of the residential investment property owners considered housing a preferred choice of investment vehicle, and about 70 percent of them said that they were planning to increase their residential portfolio over the next five years. Noting the softening of the rental market, the EBS/Gunne survey concluded that investor demand would remain strong in the future, as most investors were being attracted to the market by the expectations of future capital appreciation, as opposed to rental growth prospects.[17]




[17] Approximately 30 percent of the respondents said that rental income was insufficient to cover expenses.

## E. Concluding Remarks

33. **The bulk of the evidence presented in this paper on the recent house price increases suggests that the housing market has not yet adjusted to the post-Celtic tiger era of lower growth.** Although an important factor, developments in fundamentals appear unlikely to justify the full extent of these increases. The qualitative evidence from Section D implies that at least part of the dynamics of house prices is being driven by the unrealistically high expectations about future price increases of some market participants. With the housing P/E ratio significantly above its long-term trend, it is worrisome that the residential investment market continues to be buoyant.

34. **Going forward, house price increases need to moderate.** As suggested by the asset valuation of housing, future growth in real house prices should be in line with the medium-term prospects for real income growth of 4-5 percent per annum. If house price increases—currently still running in double digits—fail to moderate to these more sustainable rates, the likelihood of a disorderly correction will rise further.

35. **What would be the impact on the economy if the housing market did experience an adjustment?** This remains an open (but clearly important) question, whose answer depends on the linkages between the housing market and the rest of the economy, and consequently, the answers to the following questions:

- *What would be the response of the financial sector?* With 50 percent of the banks' loan portfolio concentrated in the property sector, a sharp correction in house prices could lead to cutbacks in lending as the collateral values and banks profitability decline. This, in turn, could result in a protracted period of slow private consumption and investment.

- *What would be the response of the construction sector?* Accounting for over 10 percent of total employment and over 7 percent of GDP, the construction sector in Ireland could suffer sizable output and employment losses as a direct response to an adverse shock from the housing market.

- *What would be the response of private consumption?* An adjustment in the housing market could affect household consumption in a number of (direct and indirect) ways. Potential employment losses could lead to a protracted slowdown in consumption growth. In principle, consumption growth could also decelerate as a result of the negative wealth and liquidity effects associated with the adjustment in the housing market, although the strength of these channels in Ireland is not well established.

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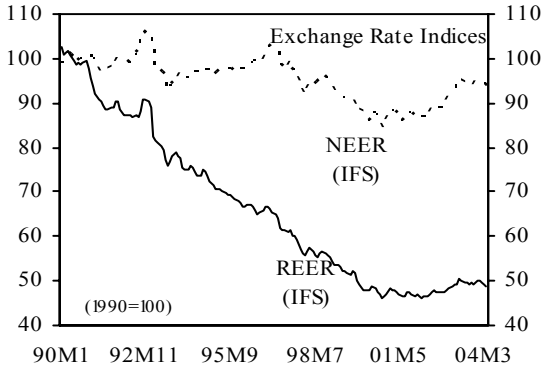
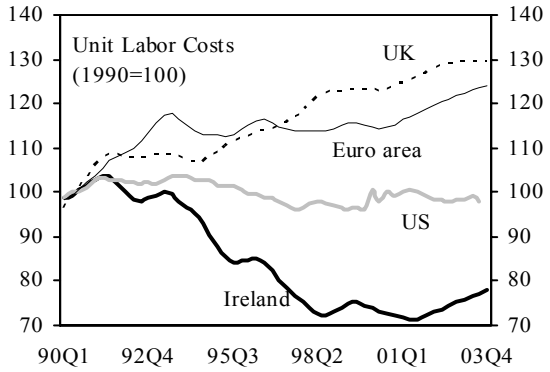
## III. The Competitiveness of Irish Manufacturing: An Update[1]

### A. Introduction

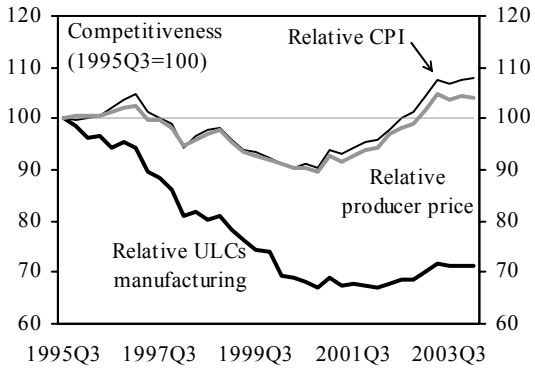
1. **The manufacturing sector in Ireland has experienced significant gains in competitiveness since the 1990s.** The real effective exchange rate (REER) based on normalized unit labor costs (ULCs) of manufacturing, a measure widely used for assessing external competitiveness, indicates a sharp trend depreciation in the 1990s.[2] The remarkable gains in competitiveness reflected primarily a sustained decline in Irish ULCs of




manufacturing relative to trading partners, which in turn was made possible by impressive productivity growth despite higher inflation in Ireland. Since 2001, strong increases in hourly wages in Ireland and production cuts in the midst of the global slowdown have sharply increased Irish ULCs, thereby arresting the strong trend depreciation. Nevertheless, given the past gains, this measure suggests that the Irish manufacturing sector remains strongly competitive overall.

2. **Alternative measures, however, depict a substantial erosion in Irish competitiveness since 2001.** The real exchange rate based on consumer prices, broadly used to compare the cost of living across countries, has increased by nearly 20 percent since end-2000. Persistently higher inflation in Ireland than in partner countries raised Ireland's price level above those



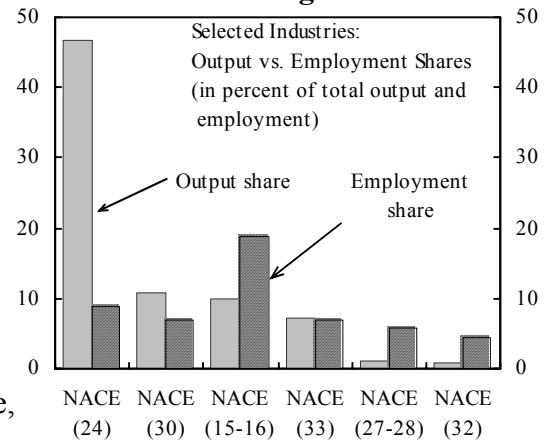

[1] Prepared by Keiko Honjo.

[2] An increase (decline) in the real and nominal effective exchange rates denotes an appreciation (depreciation) or loss (gain) in competitiveness. The ULCs are normalized in the sense that productivity data are smoothed (filtered) to take out cyclical components.

of the partner countries and caused the sharp deterioration. More recently, the substantial strengthening of the euro fueled the appreciation of the nominal effective exchange rate (NEER), which previously had been relatively stable since the mid-1990s, and exacerbated the deterioration. A measure based on relative production costs shows a similar reversal trend, albeit to a lesser extent. Focusing on price and wage competitiveness in Ireland, Lane (2004) finds that the GDP deflator-weighted real exchange rate also points to significant losses in competitiveness since 2001. Cerra and Soikkeli (2002) focus on the dispersion in the competitive position across industries and show that the employment-weighted REER deteriorated significantly in 2001. Following the methodology in Cerra and Soikkeli, this note updates the recent developments in Irish competitiveness in the manufacturing sector. It shows that the erosion in competitiveness experienced in 2001 has continued further, with potentially important employment consequences going forward.

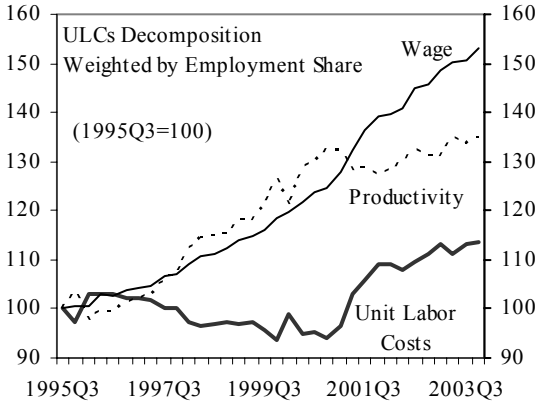
## B. Employment-weighted Real Effective Exchange Rate

3. **The contrasting evolution of Irish competitiveness stems from large differences across the manufacturing industries.** Traditional output-weighted measures of competitiveness in manufacturing in Ireland have been widely criticized because the exceptionally strong performance of a handful of multinational-dominated sectors severely distorts the picture. These sectors' large gains in productivity often resulted from intangible foreign inputs into production, such as returns on past R&D, patents, and advertising campaigns abroad. While accounting for a large share of total manufacturing production, these sectors were highly capital intensive, with strikingly small shares in total manufacturing employment. Among them, the dispersion between the output and the employment shares has been considerable in the chemical and pharmaceutical industries (classified as NACE industry 24) and, to a lesser extent, in office machinery and computers (NACE industry 30).



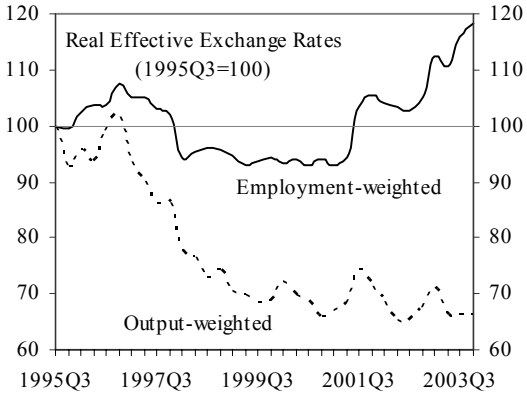

1/ NACE(15-16): food, beverages, and tobacco; NACE(24): chemical and chemical products; NACE(27-28): basic and fabricated metals; NACE(30): office machinery and computers; NACE(32): Radio, TV and communication equipment; and NACE(33): Medical, precision, optical and clock instruments.

4. **The strong wage increases in recent years have had different implications for the ULCs of manufacturing by industries.** More so than capital-intensive industries, which are more immune to the effects of rising wage costs, labor-intensive industries in Ireland have been significantly affected by the recent developments in wages. Weighted by the employment share of manufacturing—rather than the output share—in

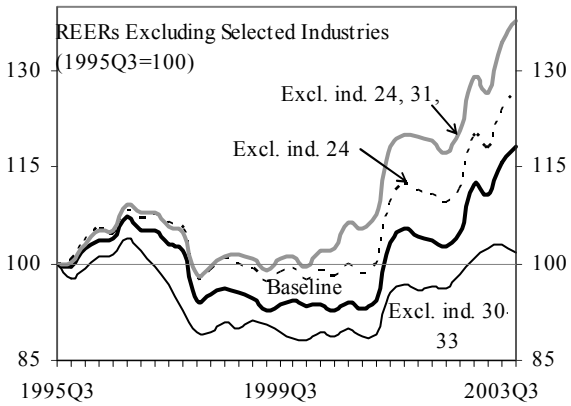


order to capture the sensitivity of the labor-intensive sectors to wages, the ULCs of manufacturing show only a limited decline up to 2001, followed by a sharp increase. Initially, the strong gains in productivity, particularly in chemicals and pharmaceuticals, masked most of the competitiveness losses in the labor-intensive sectors. Since 2001, however, falling production and an acceleration in wage inflation have driven up ULCs.

5. **The movement of the REER weighted by the employment share suggests a significant deterioration in competitiveness since 2001.** Consistent with the developments in employment-weighted ULCs, the employment-weighted REER remained broadly stable during the second half of the 1990s, followed by a notable appreciation since 2001.[3] In contrast, the output-weighted measure shows a steady decline followed by a pause at the depreciated level. The divergence between the two measures has been widening in recent years. The sustained gains in competitiveness shown by the output-based measure were mainly supported by strong production growth in a few industries, which offset the impact of rising ULCs in other industries.

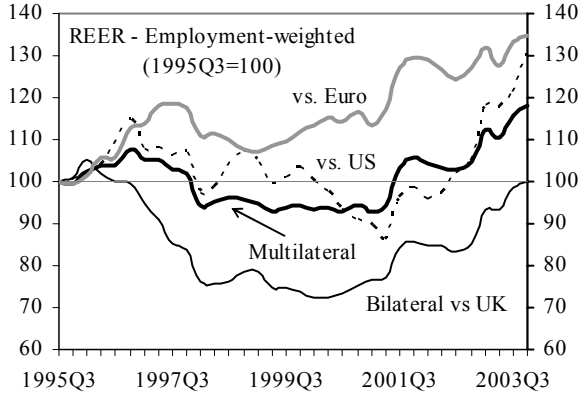


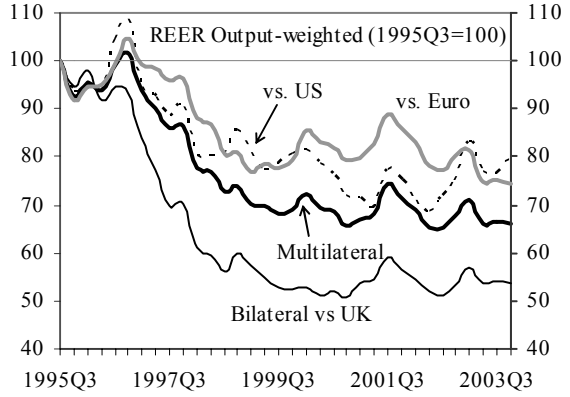

6. **Excluding the capital intensive industries, the deterioration in competitiveness has been more severe.** While the employment-weighted REER is less biased than the output-weighted measures by the strong performance of the handful of capital-intensive multinational industries, the large sectoral dispersion still remains. By excluding these industries, the adjusted REER reflects better the sensitivity of overall Irish manufacturing to wage developments. As expected, without the large cushion provided by the chemicals and pharmaceuticals sectors (NACE 24), competitiveness losses in Ireland would have been even more pronounced since 2001.



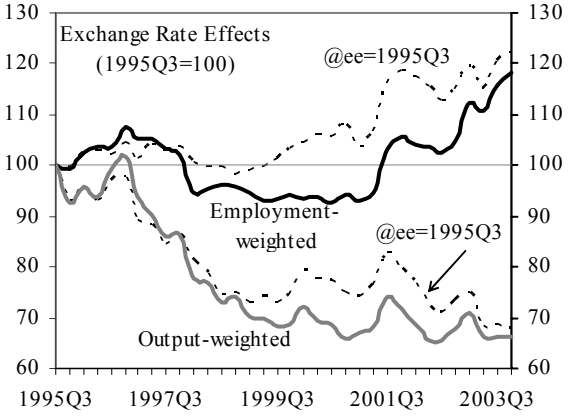

[3] A similar result can be obtained by weighting the REER by total hours worked in manufacturing.

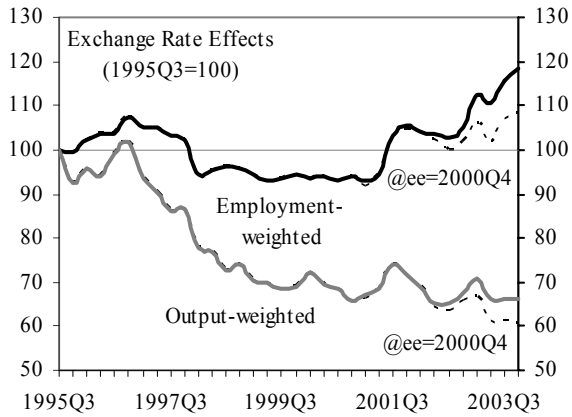
7. **Ireland's competitiveness has varied significantly vis-à-vis partner countries.** On a bilateral basis, and using the employment-weighted measures, Irish manufacturing has maintained large competitiveness gains vis-à-vis the United Kingdom, Ireland's largest trading partner, but the gains have been dwindling rapidly since 2001. In contrast, relative to the euro area, Irish competitiveness has been consistently weak, while Ireland has been becoming less competitive with the United States, a development that is broadly in line with the movement of the multilateral REER. The recent competitiveness losses vis-à-vis the United Kingdom have had significant implications for Ireland's overall external competitiveness, given not only the large share of Irish manufacturing exports to the United Kingdom but also the large volume of consumer goods imported from the United Kingdom. Using the output-weighted measure, however, Ireland has maintained a stable and impressively strong competitiveness position in recent years.




8. **Irish competitiveness is highly sensitive to exchange rate movements.** With Irish membership in the Economic and Monetary Union (EMU), nominal exchange rate fluctuations against the euro area partners have been eliminated. However, currency fluctuations still have a large impact on Irish REER volatility, due to the large proportion of



trade with non-euro countries. The employment-weighted REER evaluated at constant 1995:Q3 exchange rates show that competitiveness was stable until 1998, after which the relative ULCs surged by over 20 percent, partly reflecting a cyclical decline in output. Alternatively, by keeping the exchange rate constant at its end-2000 value, we can explain roughly a half of the competitiveness losses since 2001 through exchange rate developments, which have had a larger impact on employment-weighted measure.

## C. Conclusion

9. **Looking ahead, the recent deterioration in Irish competitiveness in manufacturing poses considerable challenges**. Overall Irish economic conditions remain strong, with low unemployment and resilient employment growth. Notwithstanding the swing in the current account balance from surplus to deficits, the deficit remains small, which suggests that Ireland's external competitiveness remains relatively strong. However, the analysis in this note suggests that the main factor supporting Ireland's strong competitiveness has been the high productivity growth in a handful of capital- intensive industries—a development that has masked competitiveness losses in the rest of the labor-intensive sectors. Going forward, with the accession countries gaining strength, Ireland will be facing increasingly stiff competition in attracting FDI inflows. Against this background, controlling wage developments is key to maintaining Irish competitiveness.

10. **A number of caveats should be mentioned.** While this note follows the same methodology and data sources as in Cerra and Soikkeli, the partner country data on production and employment by NACE industry previously obtained by the OECD have recently been discontinued. At the same time, the current exercise maintains the same export weights, which are based on averages over 1998–2000. Notwithstanding these data limitations, the analysis presents a clear picture about the recent trend in Irish competitiveness.

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# IV. The Role of Social Partnership Agreements in Ireland: Contributing to the Boom and Facilitating Adjustment to Sustainable Growth[1]

## A. Introduction

1. **The social partnership agreements negotiated by the representatives of labor, employers and government since 1987 have often been cited as central to Ireland's economic success.** Although views differ about the precise impact of these agreements, there does appear to be a rather broad consensus that they have contributed importantly to the economic revival that began in the late 1980s. The partnership process was born under conditions of economic crisis that helped coalesce a common view of the macroeconomic conditions required for recovery and instill the willingness in social partners to cooperate to achieve them. The agreements, although principally focused on governing wage growth, have been credited with: generating public support for the policies to foster Ireland's integration within Europe; enhancing Ireland's international competitiveness by moderating wage growth and delivering an era of labor peace; and focusing policy on improving the supply side of the Irish economy. The agreements, however, are not without their critics who have argued that they do not allow for sufficient wage flexibility, may not have delivered the wage restraint that they have been credited with, are becoming too broad and include too many partners, and place inappropriate constraints on public policy.

2. **Understanding the contribution of the social partnership agreements to Ireland's remarkable economic performance over the last decade and a half will be essential to assessing how they may help with the challenges ahead.** In particular, the economic circumstances in Ireland are now much different than in 1987 and the greatest challenge faced by the country will be managing the transition to a lower, more sustainable rate of economic expansion. With a view to stimulating the debate on how social partnership can contribute to this transition, this note outlines the broad nature of the social partnership agreements, their perceived contributions to the Irish miracle, the challenges that the partnership process faces and some suggestions on the directions in which it might be useful to consider modifying the process going forward.

## B. Social Partnership Agreements

3. **The social partnership agreements were born at a time of economic crisis that helped to both galvanize a common view of the major sources of Ireland's malaise and build the will to cooperate to remedy them.** Centrally negotiated wage agreements had first been tried in Ireland in the 1970s in response to the stagflation generated by the oil price shocks. However, they were abandoned in 1981 until their revival as part of the first social partnership agreement in 1987. At that time, Ireland faced a severe economic crisis. Growth

[1] Prepared by Ben Hunt.

was nonexistent and unemployment was 17 percent. The fiscal deficit was 8 percent of GDP and the public debt was well over 100 percent of GDP. In response to the deteriorating fiscal situation, tax rates had been soaring thereby reducing real incomes and encouraging net emigration that was draining away Ireland's best and brightest. Ireland was caught in a self-reinforcing downward spiral. Within this context, the social partners were able to agree on a common analysis of Ireland's fundamental macroeconomic problems (*A Strategy for Recovery* (1986)). This common analysis led to agreement on the appropriate redress and the negotiation of the first social partnership agreement.

4. **Initially the agreements focused primarily on the broad macroeconomic environment and income distribution.** In the initial agreement (*Programme for National Recovery*), a moderate pay increase was combined with a commitment to cut fiscal expenditures and reduce labor income taxes to further increase take-home pay. This was viewed as a means to restore growth and allow for improvement in public finances, the key to stabilizing the macroeconomic environment. The next two agreements, the *Programme for Economic and Social Partnership* and the *Programme for Competitiveness and Work* were similarly focused. They combined moderate wage increases with tax reductions that had become feasible with the growing improvement in the fiscal accounts owing to the restoration of growth and prudent management of fiscal expenditures.

5. **As the broad macroeconomic environment stabilized and economic recovery got underway, the focus on supply-side and equity issues increased.** In 1997, the government invited a much wider range of partners than previously to participate in the formulation of *Partnership 2000*. Not only were volunteer organizations invited to participate, but partners' profiles also became more decentralized with representation from the sectoral, community and enterprise levels. See Box 1 for an account of the evolution of the main elements of social partnership agreements.

### C. The Contribution of Social Partnership Agreements

6. **The social partners' common analysis of Ireland's economic ills in 1986-87 allowed for a policy environment focused on restoring sound macroeconomic fundamentals**. This common view, shared by social partners and all political parties, is argued to have been instrumental in allowing government policy to shift away from a short-term perspective toward a longer-term strategic focus (Honohan (1999)). In particular, the consensus enabled the government to implement policies to improve public finance as the agreements outlined objectives for the evolution of government debt as a share of GNP. Further, the process sharpened the recognition that Ireland would become increasingly dependant on its integration within the wider European economy, thus building consensus for the macro policies necessary to facilitate that integration. Increasing stability in public finance and macroeconomic performance provided support for Ireland's participation in ERM, setting up a virtuous circle facilitating EMU membership and speeding European integration and the arrival of the associated benefits.

**Box 1: The Social Partnership Agreements**

Social partnership agreements In Ireland have covered three broad areas: macroeconomic environment; income distribution; and supply-side issues. The first agreement, negotiated between representatives for labor, employers and government, covered a three-year period,1988-90. Since then, a new agreement has been negotiated every three years. The key aspects of each of the agreements are listed below.

**Programme for National Recovery (PNR) 1988–1990:**

- Basic annual pay increases: 3 percent on the first £120 of weekly pay; 2 percent on any amount above that; and minimum £4 per week increase for the low paid.
- The final pay agreements were to be negotiated at the local level with the expectation that only in exceptional circumstances would the basic increases not be awarded.
- A one hour reduction in the working week to be negotiated locally.
- Commitment by the government to income tax and other tax reforms that would further increase take-home pay and significant cost cutting measure to reduce the budget deficit.

**Programme for Economic and Social Progress (PESP) 1991–1993:**

- Basic pay increases: 4 percent in the first year; 3 percent in the second year; 3¾ percent in the final year; and minimum per-week increase for the low paid.
- An additional 3 percent local-bargaining component was introduced. It was understood that in negotiations for the additional 3 percent, the implications for competitiveness would be taken into account and there would be allowances for flexibility and change.
- Commitments for job creation in specific sectors and the Minister for Labor committed to undertake specific measures to enhance worker protection, employment equality and holidays.

**Programme for Competitiveness and Work (PCW) 1994 – 1996:**

- Basic pay increases for the private sector: 2 percent in the first year; 2½ percent in second year; 2½ percent in the first six months of the third year; and 1 percent in the final six months of the third year.
- Basic pay increases in the public sector: a pause for five months; 2 percent in each of the next two years; 1 percent in the next four months, 1½ percent for the next three months; and 1 percent in the last six months.
- Because the public sector had not received the 3 percent local-bargaining component during the term of the PESP, this agreement allowed for those increases to be paid provided allowances were made for flexibility and change and offsetting improvements in quality were achieved.

**Partnership 2000, 1997 -1999:**

- Basic pay increases: 2½ percent increase for the first year; 2¼ percent for the second year; 1½ percent for the next 9 months; 1 percent in the last 6 months; and minimum pounds-per-week increases for the low paid.
- Local-level negotiations after the first 18 months to augment agreed pay increases by no more than a further 2 percent.
- A reduction in personal income taxes estimated to increase the level of take home pay by 5 percent.
- In addition to pay increases, the agreement covered a range of issues in the following areas: greater social inclusion and equality; promoting enterprise and jobs; modernizing the public sector; and partnership and monitoring.
- The number of social partners invited to participate in the agreement increased with the inclusion of volunteer groups and the extension of partnership to sectoral, community and enterprise levels.

**Programme for Prosperity and Fairness (PPF) 2000-2002:**

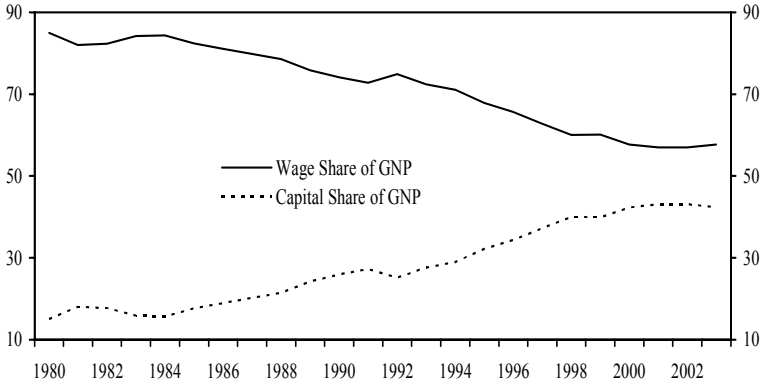
- Basic pay increases: 5½ percent in both the first and second years; 4 percent in the last 9 months; and minimum pounds-per-week increases for the low paid.
- The public sector pay increases were identical with the exception that the final 4 percent increase was to be contingent upon achieving specific performance indicators.
- There was agreement to undertake an exercise to benchmark public sector wages to those in comparable professions in the private sector. This was meant to put a stop to the ever accelerating wage demands resulting from attempt by various public sector unions to restore or maintain historical wage relativities. The recommendations of the benchmarking body were not to be implemented until the next agreement.
- The minimum wage was increased to £4.70 from July 2001 and to £5.00 from October 2002.
- A commitment, through lower labor income taxes, to ensure that net take-home pay including pay increases would increase by at least 25 percent over the period of the agreement.
- In addition to pay increases the agreement covered a range of issues in the following areas: living standards and workplace environment; prosperity and economic inclusion; social inclusion and equality; successful adaptation to continuing change; and renewing partnership.

**Sustaining Progress (SP) 2003 -2005**:

- Basic pay increases for first 18 months: 3 percent in the first 9 months; 2 percent in the next six months; and 2 percent in the final 3 months (first time wage negotiation was split into 2 sub periods).
- Basic pay increases for second 18 months (agreement reached in July 2004): 1.5 percent for last six months of 2004 (2 percent for those with hourly wage of €9.00 or less); 1.5 percent for first six months of 2005; and 2 .5 percent for final six months.
- Increase in minimum wage to €7.00.
- The opt-out provisions for firms unable to pay the agreed increases due to commercial or external competitiveness reasons was strengthened.
- Public sector basic pay increases for first 18 months: pause of six months; 3 percent from January 2004; 2 percent from July 2004; and 2 percent from December 2004.
- Public sector basic pay increases for second 18 months (agreement reached in July 2004): 1.5 percent from June 1 2005; 1.5 percent from December 1, 2005; and 2.5 percent form June 1, 2006.
- It was agreed that 25 percent of the recommendation of the public sector benchmarking body would be effective from January 1, 2001 and would be paid upon ratification of SP. A further 50 percent of the increase would be paid on January 1, 2004 with the final 25 percent paid on June 1, 2005.
- There was agreement that benchmarking would become a regular feature of pay determination in the public sector and the next benchmarking exercise would commence in late 2005 with the report coming in late 2007 (agreed in July 2004).
- In addition to pay increases the agreement covered a range of initiatives in the following areas: special initiatives; building, maintaining and sharing economic development and prosperity; delivering a fair and inclusive society; workplace relations and environment; and delivering quality public services.

7. **The agreements are widely credited with enhancing competitiveness by moderating wage demands, and delivering an era of relatively peaceful labor relations.** Although favorable development in the external environment certainly played an important role in increasing demand for labor in Ireland in the 1990s, the wage moderation contained in the social partnership agreements is argued to have helped maximize the benefits from those developments. It is worth noting that although the agreements only apply explicitly to the unionized sector of the economy (dominated by public sector unions), the agreed wage increases play a critical role in the formulation of wage expectations and thereby provide a benchmark for general wage setting across the whole Irish economy. Lane (1998) illustrates that over the 1987 to 1996 period, the profit share of output, the return on investment and the markup over unit labor costs all increased substantially with a corresponding decline in labor's share of output even in the face of a significant increase in employment. All these point to moderation in wage demands. Figure 1, which presents the labor and capital shares of GNP in the business sector over the 1980 to 2003 period, suggests that the trends identified by Lane continued until the end of the 1990s, after which time shares appear to have stabilized. Additional evidence, presented in Honohan and Walsh (2002), suggests that Irish competitiveness in industry increased steadily over the 1990s, improving by roughly 15 percent relative to its major trading partners by the end of the decade.[2] In terms of labor peace, the evidence suggests that the agreements have had a positive impact. The incidence of strikes and the resulting lost working days presented in Taylor (1996) and extended below in Table 1 suggest that there has been a significant improvement. Relative to the sixteen-year period prior to 1988, the last sixteen-year period has witnessed roughly a fivefold reduction in the average number of days lost per year and a fourfold reduction in the number of disputes. Considering that with employment growth there has been a substantial increase in the potential number of work days since 1987, the improvement is even more significant than the numbers themselves suggest.

Figure 1. Wage and Capital Shares in Business Sector Output




Source: OECD.

Table 1. Number of Disputes and Work Days Lost

| During the Sixteen Year Period of 1972-87. | | | During the Sixteen Year Period of 1988-2003. | | |
|---|---|---|---|---|---|
| | Disputes | Days Lost | | Disputes | Days Lost |
| **1972** | 131 | 206,955 | **1988** | 65 | 143,393 |
| **1973** | 182 | 206,725 | **1989** | 38 | 50,358 |
| **1974** | 219 | 551,833 | **1990** | 49 | 222,916 |
| **1975** | 151 | 295,716 | **1991** | 54 | 85,513 |
| **1976** | 134 | 776,949 | **1992** | 38 | 190,609 |
| **1977** | 175 | 442,145 | **1993** | 47 | 61,312 |
| **1978** | 152 | 613,016 | **1994** | 28 | 25,550 |
| **1979** | 140 | 1,464,952 | **1995** | 34 | 130,300 |
| **1980** | 130 | 412,118 | **1996** | 30 | 114,585 |
| **1981** | 117 | 433,979 | **1997** | 28 | 74,508 |
| **1982** | 131 | 434,253 | **1998** | 33 | 37,374 |
| **1983** | 154 | 319,015 | **1999** | 32 | 215,587 |
| **1984** | 192 | 386,421 | **2000** | 39 | 97,046 |
| **1985** | 116 | 417,726 | **2001** | 24 | 114,613 |
| **1986** | 102 | 309,178 | **2002** | 27 | 21,257 |
| **1987** | 80 | 264,339 | **2003** | 23 | 37,482 |
| Total | 2306 | 7,535,320 | Total | 589 | 1,622,403 |
| **Average number of days lost per annum – 470,958** | | | **Average number of days lost per annum – 101,400** | | |

Source: Central Statistical Office

8. **The agreements have also been credited with improving the supply-side of the economy by facilitating structural change to improve competitiveness.** An important element of the wage negotiation process was the government's commitment to reductions in labor income taxes. In addition to their cited benefit of helping to moderate wage demands, these tax reductions provided a much needed increase in the incentives to work, boosting labor supply. The evidence presented in Taylor (1996) suggests that the local-level component, which was in addition to basic pay increases, successfully increased awareness of the need for flexibility and change and provided the incentives to achieve them, further enhancing productivity and competitiveness.

## D. The Challenges To Come

### Wage flexibility

9. **Greater nominal wage flexibility will be required in the future because currency union implies a more rigid monetary policy regime than ERM participation.** This argument, as outlined in Calmfors (2003), assumes that under common monetary policy asymmetric shocks or different national responses to common monetary policy will require

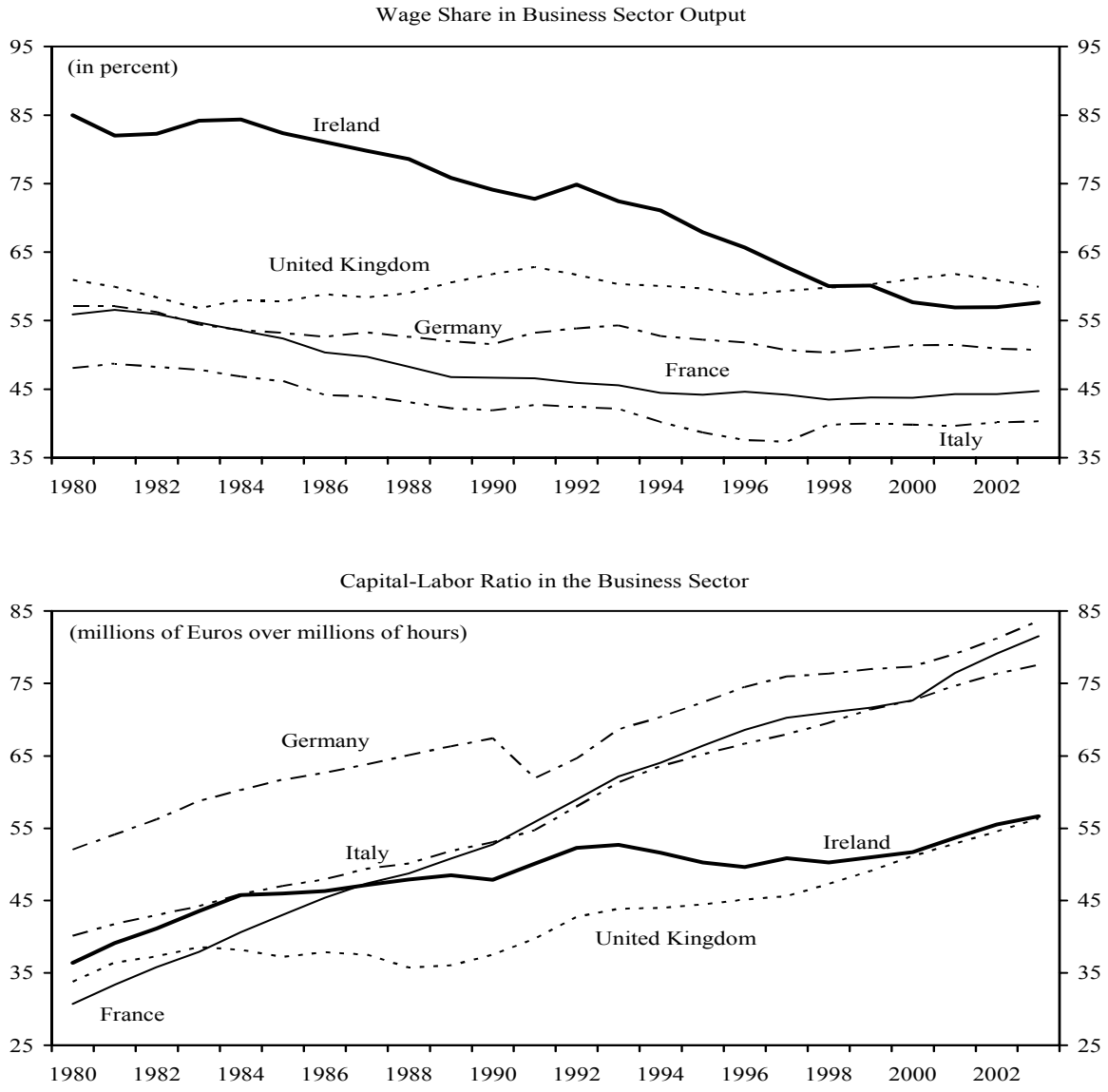
[2] In commenting, Barry Bosworth, however, argues that a large part of the increase in Honohan's and Walsh's measure of competitiveness arises from the de-trending technique employed.

alternative adjustment mechanisms, the most important of which is nominal wage flexibility. Until the most recent agreement (*Sustaining Progress*), the social partners negotiated wage increases to cover three-year periods, which helps to reduce bargaining costs and increases certainty about labor costs for firms. However, nominal wage growth set for three-year intervals may not allow for sufficient flexibility in the face of increased variability in demand and, consequently, employment and output could become more variable.

10. **The success of partnership agreements in improving economic growth in Ireland and bringing living standards up to the European average creates pressure for more flexibility in wage setting.** Figure 2 illustrates that the significant decline in labor's share of output in the business sector in Ireland, which has occurred since the mid 1980s, now brings this ratio close to that in the other major European economies, particularly once payroll taxes, which are not included in the figure, are accounted for. At the same time, Figure 2 illustrates that the decline in labor's share in Ireland did not simply reflect an increase in the capital-to-labor ratio, suggesting that wage moderation via social partnership successfully reduced the relative price of labor. Not surprisingly given Ireland's economic success, the shared sense of crisis and the need for wage moderation no longer appear to have the same prominence in the bargaining process that now appears to be more focused on ensuring real wage gains reflect productivity growth. Accurately forecasting productivity growth over a three-year horizon is difficult and, with the catch-up process largely complete, the tendency to use the past as guide to forecast the future could result in over estimating productivity growth rather than under estimating it as occurred in the past. Wage increases based on a three-year over estimation of productivity growth could seriously erode competitiveness.

11. **Given that dispersion in productivity growth across sectors is likely to continue to be a feature of the Irish economy, avoiding significant price inflation in low productivity sectors will require increased sectoral wage flexibility.** Ireland's openness and favorable business environment have led to a significant inflow of FDI and a boom in the high technology sector that has become an increasingly important determinant of aggregate productivity growth. Centralized wage increases that are based on aggregate productivity growth with only limited scope for local-level bargaining could lead to wage increases in low productivity sectors that result in significant inflation pressures. If this leads to Irish inflation persistently above that of its major trading partners, competitiveness will be eroded. Partnership faces the daunting challenge of ensuring an equitable sharing of the benefits of real economic growth while at the same time preventing price inflation from eroding competitiveness and undermining future growth prospects.

Figure 2. Cross Country Comparison

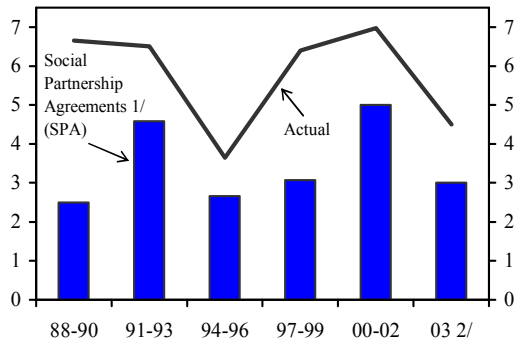



Source OECD

**Controlling wage growth**

12. **Comparing actual wage growth in Ireland with the increases negotiated through social partnership leads to questions about how tightly the agreements govern wage growth.** Over the period covered by the social partnership agreements, actual wage growth has consistently and significantly outstripped the increases set out in the agreements as the figure illustrates. As noted in MacCoille and McCoy (2001) this has not been due to inflation surprises leading to increases in nominal wages above those negotiated, as real wage increases have also consistently outpaced those envisioned by the agreements. In addition to this casual empiricism, Fitz Gerald (1999), looking for evidence of a structural break in the wage determination process after 1987, finds little empirical support for the theory that social partnership agreements altered the wage determination process in Ireland.

Average of Annual Wage Growth: SPA and Actual




1/ SPA including local-bargaining component.
2/ 2003 data through September.
Source: SPA, MacCoille and McCoy (2001), and Casey (2004).

It is argued in Boyle, McElligott and O'Leary (2004) that the labor income tax reductions negotiated as part of social partnership may have allowed the public sector wage premium to be maintained when tightness in the labor market, particularly in the late 1990s, might have otherwise eroded it. With private sector disposable incomes benefiting from tax reductions, there may have been less resistance than otherwise to the public sector wage settlements, which, ex post, were also exceeded. In addition, the public sector benchmarking exercise completed in 2003 recommended additional average wage increases of 9 percent above partnership agreed increases that will be completely phased in by mid-2005. In practice it appears that the central wage agreements have set a floor or starting point for local wage determination, even in the public sector. When Ireland was enjoying economic growth that was much faster than anticipated, this did not present a problem. However, it may have ingrained expectations of the wage setting process that will become increasingly impossible to realize as growth moderates to long-term sustainable rates and partnership negotiated basic pay increases are in line with realized inflation and productivity outcomes.

**Broadening social partnership**

13. **The growth in both the number of partners and the areas that the agreements cover increases the potential for conflict that could slow and possibly undermine agreement.** Box 2 contains a list of the participants in the most recent agreement, *Sustaining Progress*, and an outline of the areas that the agreement covers. It is argued that broadening the participation and scope of social partnership increases the general ownership of partnership initiatives, increases the commitment to achieve those initiatives and overall contributes positively to formulating the public policy agenda. As noted in O'Donnell (2001), however, this growth also presents a number of challenges. First, for many of the non-pay

**Box 2: The Partners Participating and the Coverage of Sustaining Progress 2003-05**

**Partners:** Irish Business and Employers Confederation (IBEC); Irish Congress of Trade Unions (ICTU); Construction Industry Federation (CIF); Irish Farmers' Association (IFA); Irish Creamery Milk Suppliers Association (ICMSA); Irish Co-operative Organization Society Ltd. (ICOS), Marca na Feirme; Irish National Organization of the Unemployed (INOU); Congress Centers for the Unemployed; The Community Platform (consists of 26 organizations); Conference of Religious Ireland (CORI); National Women's' Council of Ireland (MWCI); National Youth Council of Ireland (NYCI); Society of Saint Vincent de Paul; Protestant Aid; Small Firms' Association (SFA); Irish Exporters' Association (IEA); Irish Tourist Industry Confederation (ITIC); and Camber of Commerce of Ireland (CCI).

**Coverage:**

**Part One: A Policy Framework for Sustaining Progress**

- **Special Initiatives**: Housing and Accommodation; Cost and Availability of Insurance; Migration and Interculturalism; Long-term Unemployed and Vulnerable Workers and Those Made Redundant; Educational Disadvantage; Waste Management; Care – Children, Disabled and the Elderly; Alcohol and Drug Abuse; Including Everyone in the Information Society; and Ending Child Poverty.

- **Macroeconomic Policy**: Overall Objectives; Public Expenditure; Taxation; and Competitiveness and Inflation.

- **Building Maintaining and Sharing Economic Development and Prosperity:** Overall Objective; Infrastructure and the Environment; and Adaptation to Continuing Change.

- **Delivering a Fair and Inclusive Society:** Poverty and Social Inclusion; Health and Addressing Health Inequalities; Equality; Access to Quality Public Services; and Challenge of Delivering a Fair and Inclusive Society.

**Part Two: Pay and the Workplace**

- **Private Sector Pay and Related Issues:** Private Sector Pay; Statutory Minimum Pay; Redundancy Payments; Pension and Sick Pay Schemes; Partnership at the Workplace; Affordable Housing Initiative; Anti-Inflation Initiative; and Information, Consultation, Employee Representation and Employer/Employee Dialogue.

- **Workplace Relations and Environment:** Workplace Legislation and Codes; Gender Pay Gap; Work/Life Balance Programmes (Maternity Leave, Adoption Leave, Parental Leave, National framework for Work/Life Balance Polices, Workplace Childcare, Fully Inclusive Social Insurance Model); Equal Opportunities; Workplace Learning; Health and Safety at Work; Hidden Economy Monitoring Group; Pensions; and Migrant Workers.

- **Public Sector Pay and Related Issues:** Public Service Pay; Commitment to Modernization; Modernization and Flexibility; Civil Service; Health Service; Education Sector; Local Government Sector; and Performance Verification.

areas covered in agreements, partners are not bound to take specific actions to ensure their achievement. Consequently, progress has been perceived as slow and each subsequent agreement attempts to strengthen commitments to non-pay initiatives with little evidence of success.[3] Second, as the coverage of issues broadens it includes many more areas that high-level strategies cannot address. As a result, the number of working groups and task forces has areas covered in agreements, partners are not bound to take specific actions to ensure their achievement. Consequently, progress has been perceived as slow and each subsequent agreement attempts to strengthen commitments to non-pay initiatives with little evidence of address. As a result, the number of working groups and task forces has exploded, increasing the bureaucracy surrounding the process. Third, measuring the effectiveness of initiatives in many areas has been difficult and attempts to improve measurement and monitoring of progress are further adding to the bureaucracy. Taken together, these factors suggest that the broadening of the social partnership process, although not without some positive aspects, may slow the process and increase the potential for dissatisfaction and disagreement. This in turn could lead to difficulties in reaching agreement on the central issue of wages. Or, even less desirably, failure to make progress on these only tangentially related issues could lead to pressures and possibly concession on wages that undermine competitiveness.

**Constraints on public policy**

14. **Although linking tax cuts with wage moderation may have been successful in the past, allowing the social partnership process to dictate and potentially constrain public policy may become problematic going forward.** The reductions in labor income taxes that have been implemented since the beginning of the partnership process were both necessary from a labor supply perspective and warranted because prudent fiscal management during a period of healthy growth dramatically improved public finances setting up a positive self-reinforcing dynamic. Now that the catch-up process in Ireland has moved a long way towards completion, the self-reinforcing dynamic is close to being played out and the scope for further labor income tax cuts is becoming more limited, as are the potential benefits given tax reductions to date and improvements in participation rates. As economic growth in Ireland converges to lower, more sustainable rates, there will be less fiscal room for tax cuts. Further, there will be significant pressure for available resources to be directed toward the improvements in public infrastructure that are required to ensure the sustainability of the current level of economic activity and allow for continued healthy growth. At this point in Ireland's development, public infrastructure investment will likely yield the most substantive gains because the impact of tax cuts on participations rates can be expected (as suggested in

[3] This process is succinctly summarized on page 19 in O'Donnell (2001) "Having got them in, they worked to turn platitudes into agreement. Confronting the limits of that they pressed to turn agreements into commitments. Limited progress suggested it was necessary to turn commitments into targets. Now that the dictionary is used up, the question is how can these targets be met?".

Callan and others (2003)) to yield diminishing marginal returns. The absence of any explicit fiscal concession in the most recent agreement was a welcome sign and the introduction of the multi-year spending envelopes for public investment will likely help to maintain infrastructure investment. However, there are still risks that scarce fiscal resources will not be directed where the returns will be greatest if fiscal policy continues to be linked to wage negotiations.[4] In addition, it can also be argued that public policy should ultimately be determined by the elected legislature not the unelected social partners.

### E. The Social Partnership Process Going Forward

15. **Shortening the duration of the wage component of the Social Partnership Agreements would enhance aggregate nominal wage flexibility.** The level of economic uncertainty prevailing when *Sustaining Progress* was being negotiated prompted the social partners to agree to set wage growth initially for only 18 months and then to return to the bargaining table just over a year later to set wage growth for the remaining 18-month period. This clearly served to enhance wage flexibility. Agreed wage growth moderated by 1½ percentage points in the second period. The stricter monetary regime implied by the move from ERM to EMU, the rate of economic expansion slowing to a more sustainable rate, and the fact that wage expectations may not have fully adjusted to actual future growth prospects all ague in favor of continuing to set wage growth for periods shorter than three years. Several commentators have recognized the need for greater flexibility going forward and proposals - such as those in Hardiman (2000), de Buitleir and Thornhill (2001), Macoille and McCoy (2001), and McHale (2001) - have been advanced to increase aggregate flexibility. Essentially the flexibility in these proposal arises from basing part of labor's compensation on ex post outcomes, thereby increasing the responsiveness of wages to realized growth and limiting the potential for forecast errors to erode competitiveness.[5] However, these proposals would be quite difficult to implement in practice and shortening the duration of the wage agreements enhances flexibility while being very straightforward to implement. To reduce, or possibly more than offset, the increased bargaining costs that would arise from more frequent negotiations, social partners could agree on the set of macroeconomic data that would be used regularly to determine the range within which wage settlements should lie prior to the start of negotiations. Although setting wages for shorter intervals would reduce labor cost certainty for firms, this would be offsets by the benefits that would arise from wages being more responsive to unexpected macroeconomic or sector specific developments.

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[4] McHale (2001) notes that in December 2000, key union leaders waited until they saw the contents of the 2001 Budget before giving their final assent to a renegotiation of initial wage increases that had been set out in the PPF.

[5] Part of the drawback of the offered proposals is their complexity, the further entwining of fiscal policy and wage determination (McHale (2001)), and the fact that they do not allow for more sectoral flexibility.

16. **The ability for firms to deviate from agreed wage increases should continue to be strengthened.** Over much of the period covered by social partnership agreements, growth has exceeded expectations and, consequently, partnership agreed wage increases have been affordable to firms. In part this has been at the expense of rapid price inflation in the lower productivity service sector. With Ireland's price level now equal to or above those in its major trading partners, there is no longer any scope for low productivity sectors to accommodate excessive wage increases by raising prices faster than ECB's target rate for inflation. Going forward, a larger number of firms, particularly those in low productivity sectors, may find it difficult to afford partnership agreed wage increase that are based on aggregate inflation and productivity growth. To avoid raising prices, these firms will need to offer wage increases notably below those centrally agreed. It will be important that the mechanism in place to allow firms to do this is not too onerous for firms to resort to and does not lead to labor unrest. Partnership agreements could more explicitly detail exactly what financial or competitive circumstances would allow firms to pay lower than centrally agreed increases. Further, social partners should regularly communicate that it will become increasingly likely that more firms may need to pay less than the centrally agreed increases because the convergence process in Ireland is largely complete.

17. **Fiscal policy concessions should no longer be used to moderate wage demands within the social partnership process.** Although there may have been merit in the past to encouraging wage moderation by having the government commit to labor income tax reductions, circumstances and priorities in Ireland have shifted since the initial days of social partnership. Labor force participation rates suggest that the incentives to work in Ireland are strong, but years of under funding in public infrastructure given the rate of economic expansion has left a public capital stock gap that needs to be filled. If the labor-income-tax option is available, the government could easily be tempted to use it to achieve short-term labor peace if social partnership negotiations are not going well. However, doing so could have very significant medium-term costs if public investment is foregone as a result. This argues for a transparent and binding medium-term fiscal framework that clearly separates fiscal policy from the social partnership wage negotiation process. Government could (and should) continue with its central role in the partnership process both in terms of leadership and as an employer; however, the option for trading wage moderation for tax reductions would be ultimately constrained by the medium-term fiscal framework. Placing constraints on the government's negotiating options in this way would move toward the ideal of having public policy determined by the elected legislature and not the unelected social partners. Further, removing fiscal concessions from the bargaining table could also help speed the negotiation process and offset the increase in costs of holding wage negotiations more frequently than every three years.

18. **Steps should be taken to put more distance between the wage negotiations process and the far reaching social objective that have become an increasingly important part of social partnership agreements.** Broadening the participation in the partnership process has undoubtedly increased the general ownership of partnership initiatives and contributed positively to the formulation of the policy agenda. However, the

large number of participants and issues adds considerably to the time and costs of negotiating each agreement and many of the issues are largely unrelated to the central issue of wages. Having this broader group participate at the time of every other wage negotiation for example would considerably reduce the cost of holding wage negotiations more frequently. This would retain many of the benefits of the current process without a significant loss in its effectiveness as these broader social issues evolve more slowly as policy initiatives require time to have an impact.

## F. Conclusions

19. **The social partnership process has made an important contribution to Ireland's exceptional economic revival. However, with circumstances and priorities now much different, changes to the process should be considered.** Strong arguments can be made that the current wage determination process does not provide the nominal wage flexibility that Ireland will need going forward. To increase nominal wage flexibility, shortening the duration of the central wage agreement, as was done for *Sustaining Progress,* should become a permanent feature. Although more frequent wage negotiations could potentially entail increased negotiations costs, steps can be taken on several fronts to minimize these costs. Continuing to strengthening the mechanism for firms to deviate from the centrally agreed increases would also enhance flexibility. In addition, cogent arguments can be made that fiscal policy should be more distant from the wage negotiation process. Developing a medium-term fiscal framework that clearly constrains the government's ability to make fiscal concessions to facilitate agreement would help ensure that scarce public resources are directed where returns will be greatest. The volunteer and community sectors should continue to play an important and helpful role in the partnership process but the cost of this participation should be reduced by having the most inclusive range of partners participate less frequently.

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