

CONSUMER COSTS AND INFLATION

Executive Summary	2
How are Consumer Prices Assessed?	2
Key Findings	3
Key Policy Issues Arising	6
1 Introduction	18
1.1 Background	18
1.2 Ireland's Overall Cost Competitiveness	18
1.3 Methodology and Report Structure	20
2 An International Context for Irish Inflation and Price Levels	22
2.1 How Irish Inflation Compares Internationally	23
2.2 Drivers of HICP Inflation	26
2.3 Ireland's Relative Price Level	29
2.4 National Accounts Deflators	32
2.5 Cost of Living Studies	34
3 Analysis of Irish Inflation	37
3.1 Consumer Price Index	37
3.2 Irish consumption profile	39
3.3 Inflation in Irish product categories	40
3.4 Contribution to headline CPI inflation	41
4 Irish Sectoral Analysis	45
4.1 Housing, water, electricity, gas and other fuels	45
4.2 Restaurants and Hotels	52
4.3 Alcoholic Beverages and Tobacco	58
4.4 Food and Non-Alcoholic Beverages	62
4.5 Transport	69
4.6 Miscellaneous Goods and Services	75
4.7 Health	85
4.8 Education	93
4.9 Clothing and Footwear	97
4.10 Administered prices	101
Appendix 1: Data Sources	105

Appendix 2: HICP Consumption Profiles and Category Rankings	107
Appendix 3: Why do Some Products Rise Faster in Price than Others?	109
Appendix 4: Additional Tables	110

Executive Summary¹

Ireland's cost competitiveness has improved significantly. However, as the Action Plan for Jobs 2013 points out, approximately half of recent cost competitiveness improvements are accounted for by the depreciation of the euro against the currencies of our major trading partners. As a result, these gains could be quickly eroded. The remainder of the gains have come from lower price inflation in Ireland when compared to our trading partners.

While recognising that inflation is largely determined by the market, any efforts that moderate inflation help to maintain and enhance cost competitiveness whilst protecting real incomes in an era of lower labour cost growth rates. Although Irish inflation is currently low, it is prudent to analyse and understand the factors driving consumer price inflation and contributing to the Irish consumer price level. The key goals of the research are to:

- Examine how consumer price levels in Ireland compare with prices in Ireland's key competitors;
- Examine how inflation in Ireland compares with inflation in Ireland's key competitors;
- Identify the primary products and services driving inflation in Ireland and illustrate how these drivers create price differentials between Ireland and its key competitors; and
- Provide a high-level assessment of the implications of consumer price levels and inflation for Ireland's national competitiveness and identify a range of actions to enhance competitiveness.

How are Consumer Prices Assessed?

Understanding consumer costs is challenging. In order to analyse these costs, researchers are required to make judgements about what costs to measure, over what time periods and against which comparator locations.

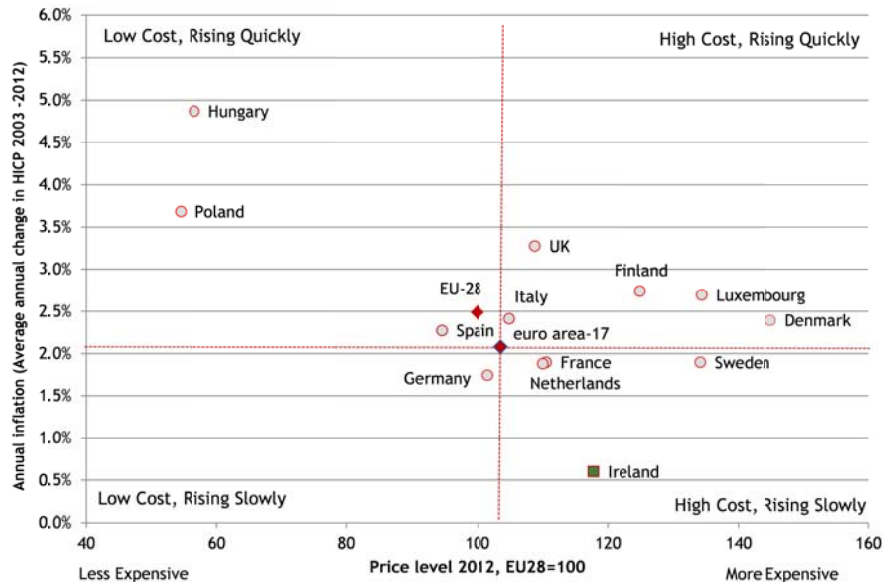
In an effort to develop a rounded view of living costs, this study uses a number of different metrics. It looks at Irish inflation trends both from a European perspective using Eurostat's Harmonised Index of Consumer Prices (HICP) and from a national perspective using the CSO's Consumer Price Index (CPI). In addition, the study looks at comparative price levels over time for Ireland, the euro area-17 and the EU-27. This approach ensures standardised collection methods with significant data available for a large number of locations over a long period of time. Comparisons with the euro area-17 also eliminate the impact of currency fluctuations. Economy wide deflators and 'cost of living' surveys are also reviewed.

The timeframe covered by this analysis spans from 1997 to the end of 2012. Reflecting broad trends in Ireland's economic performance, the data is disaggregated into three time periods; pre-euro (1997-1998), boom (1999-2007) and recession (2008-2012).

¹ Much of the data analysis included in this report is based on work undertaken by Europe Economics, commissioned by Forfás. Forfás would like to thank Europe Economics for their work. Forfás would also like to acknowledge the input of the Competition Authority who participated in the project steering group and to others who reviewed drafts and provided comments and other inputs. Any findings or conclusions contained in the report reflect the views of Forfás.

Key Findings

Figure E1: Consumer Price Levels (2012) and Average Annual Inflation (2008-2012)



It is important to consider both changes in prices (inflation) and price levels. As illustrated in Figure E1, Ireland's current price level and inflation profile can be described as high cost but rising slowly. The analysis below examines inflation and price levels in more detail.

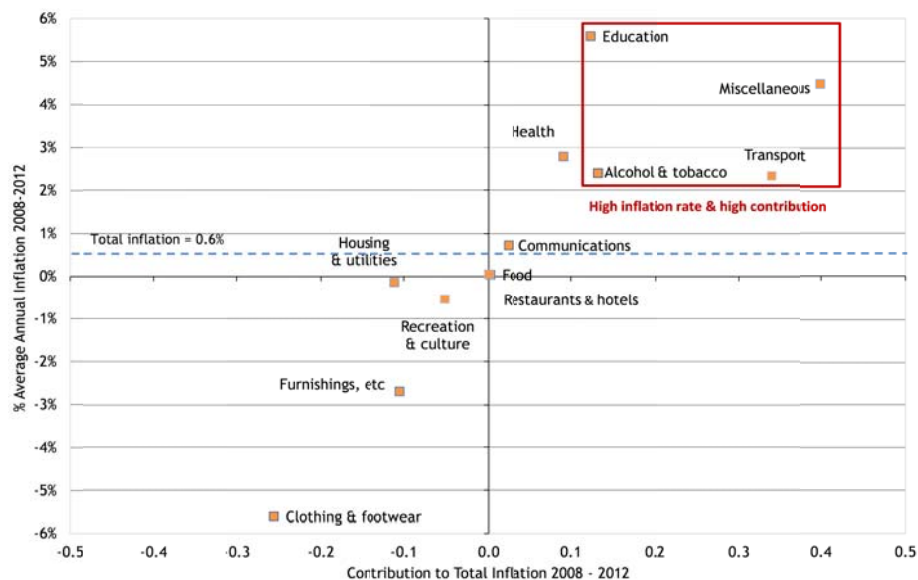
Source: Eurostat, Forfás calculations

Inflation Performance

- Ireland's annual rate of (CPI) inflation peaked in 1999 at 5.5 per cent. Inflation remained high up to the end of 2008 before the commencement of a two year deflationary period. Thereafter, there was a resumption of modest inflation which reached 2.5 per cent in 2011 before falling back to 1.7 per cent in 2012. Inflation in the year to October 2013 is 0.1 per cent.
- Since 1997 Ireland's inflation performance has been more volatile than the euro area average. Ireland experienced higher year-on-year inflation for the period up to 2008. However, since then Ireland's average annual inflation rate has fallen below the euro area average.
- For the period 1997 to 2012, "Education" (6.1%), "Health" (5%), Miscellaneous goods and services (4.3%), "Housing and utilities" (4.2%) and "Alcoholic beverages and tobacco" (3.9%) experienced the highest average annual rates of inflation in Ireland. Most of these sectors have continued to experience the highest inflation rates in recent years (the exception being "Housing and utilities"). Since 2008, the highest rates of inflation have been recorded for "Education" (5.6%), "Miscellaneous goods and services" (4.5%) which is driven by health insurance, "Health" (2.8%) and "Alcoholic beverages and tobacco" (2.4%).
- Irish services inflation has been higher than euro area-17 services inflation and as a result, services have contributed more to overall inflation in Ireland than in the euro area over the 1997 to 2012 period. While services inflation is higher than goods inflation for both the euro area and Ireland, the gap between the two was much greater in Ireland.

- Over the period 1997 to 2012, import inflation (goods and services) in Ireland averaged 1.8 per cent per annum which is on par with a group of comparator countries that Ireland competes against internationally. However, inflation in imported services averaged 4.5 per cent per annum in Ireland compared with an average of 2.3 per cent per annum among the comparator countries.
- For the period 1999 to 2012, “Restaurants and hotels”, “Alcoholic beverages and tobacco”, “Miscellaneous goods and services”, “Health” and “Education” all made a larger contribution (as determined by inflation performance weighted by their importance in the consumer basket) to headline Irish HICP inflation than to euro area HICP inflation. “Housing and utilities” and “Transport” were significant drivers of inflation in both Ireland and the euro area.

Figure E2: Average Annual CPI Inflation and Contribution to Total Inflation, 2008 -2012



Since the recession (i.e. 2008 to 2012), the principle contributors to Irish inflation have been “Miscellaneous goods and services” which is driven by health insurance, “Transport”, “Alcohol and tobacco”, “Education” and “Health”.

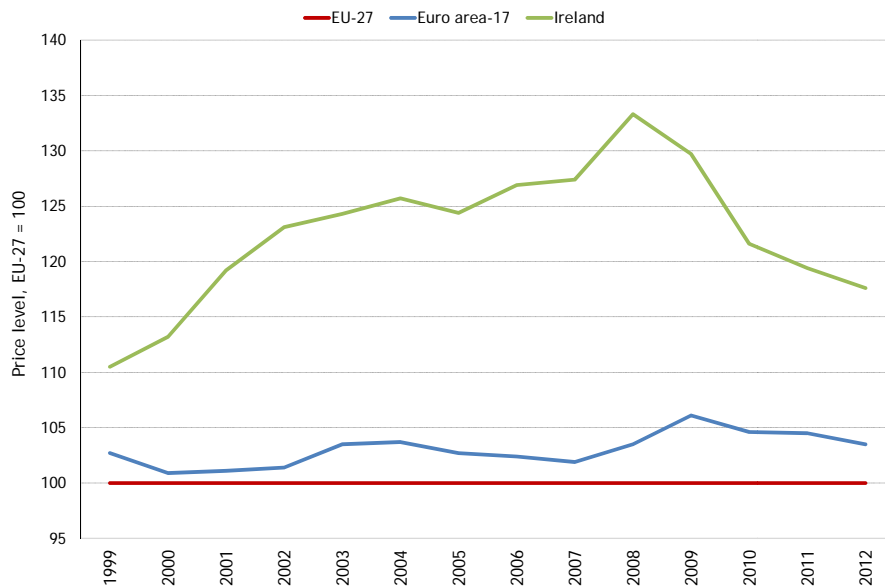
Source: CSO, Europe Economics and Forfás calculations

- Between 2001 and 2012, inflation in Irish administered prices outpaced inflation in administered prices in international peer countries and the euro area. Furthermore, inflation in administered prices has been higher than headline HICP inflation in Ireland. Over recent years, “Combined passenger transport”, “Hospital services”, “Insurance connected with health”, and “Passenger transport by road” stand out as particular drivers of headline Irish inflation.

Comparative Price Levels

- Consumer price levels in Ireland are the third highest within the euro area and are 17.6 per cent above the EU 27 average and 13.6 per cent above the euro area average. This is despite the average annual rate of inflation in Ireland (0.6%) being below the euro area average (2.1%) between 2008 and 2012.

Figure E3: Actual Individual Consumption², Price Level (PPPs), 1999-2012



Irish price levels were above the euro area average in 1999. Movements in price levels between 1999 and 2008 served to widen the existing gap. A combination of Irish deflation and euro area inflation since 2008 has brought the relative Irish price level below the level it was at in 2001.

Source: Eurostat, Europe Economics

Figure E4: Relative Irish Price Levels (PPPs) for key product categories versus the euro area-17, 2012

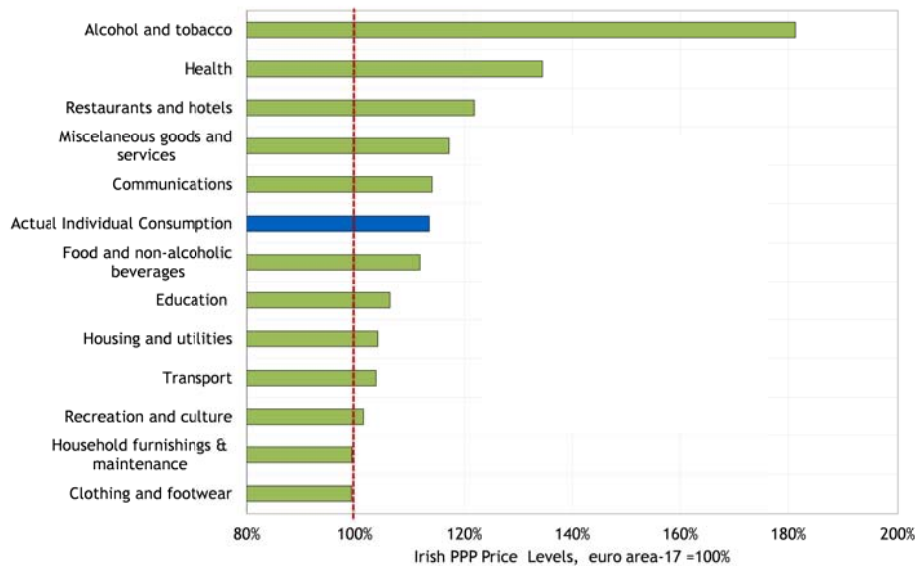


Figure E4 shows Irish price levels relative to the euro area-17 price level. Irish price levels remain above the euro area average (illustrated by the red line) in 10 of the 12 categories of goods and services. Despite reductions in Irish price levels, Ireland remains within the top three most expensive euro area countries in five out of twelve categories of goods and services.

Source: Eurostat, Europe Economics

² Actual individual consumption is used as a proxy for consumer prices. According to Eurostat it refers to “all goods and services actually consumed by households”.

Ireland is the most expensive location in the euro area for “Alcoholic beverages and tobacco” and “Health”. It is the second most expensive location for “Restaurants and hotels” and “Miscellaneous goods and services”. It is the third most expensive for “Food and non-alcoholic beverages”.

Key Policy Issues Arising

Based on the analysis of inflation and price levels above, the product categories in Table E1 were selected for closer examination in Chapter 4. These include the key product categories that were identified as major drivers of inflation in Figure E2 and other important sectors.

In Chapter 4, for each product category, Ireland’s inflation performance is compared to the euro area-17 average and to more detailed national data. Ireland’s price level is also compared to the euro area-17 and EU-27 averages. Where possible, each product category is broken down into its constituent parts. Finally the review of each category concludes by providing some high level policy context and highlighting areas where action may be required. Given the scope of this study, Chapter 4 does not attempt to undertake full market reviews.

Throughout this report, a series of sector-specific recommendations emerge, each of which is intended to enhance the cost competitiveness of a particular good or service category. They are organised below under a number of overarching themes.

In reviewing these, it is worth bearing in mind that the focus of this study is on consumer costs. Policymakers, however have a series of competing policy objectives that they are seeking to achieve. In some instances, these objectives may conflict with each other. For instance, whilst minimising the inflationary impacts of Government decisions (and thus protecting cost competitiveness) is a major goal for policymakers, this may conflict with the objective of enhancing public health (e.g. increases in excise duties on **tobacco products**), repairing the public finances (e.g. reflecting the costs of public hospital beds in **health insurance**) or increasing charges to support investment in service provision (e.g., **third level education costs**).

Consumer Costs and Labour Costs

The Action Plan for Jobs 2013 request required an assessment of the impact of the cost of living on labour costs and other business costs. As noted by NES³, Kenny and McGettigan have identified a stable relationship between Irish wages, adjusted for productivity and

Table E1: Key Product Categories

Housing and Utilities
Restaurants and hotels
Transport
Miscellaneous goods and services
Education
Health
Food and non-alcoholic beverages
Clothing and footwear
Administered prices

³ National Economic and Social Council, Consumer Prices, NES Secretariat Papers, Paper No. 9, November 2013

aggregate consumer prices. However, the direction of causation is not clear - they found evidence of two-way directional feedback between wages and prices over the long term⁴.

Since labour costs are generally the most significant cost component for most firms, the relationship between consumer prices and labour costs is a major determinant of Ireland's overall cost competitiveness⁵. The Central Bank has noted that in the context of weak global demand and the prospect of a muted recovery in important trading partners, regaining price and labour competitiveness needs to be a priority for Ireland in order to achieve an export-led recovery⁶. Persistently high rates of consumer price inflation lead to expectations of further price increases, and can create a vicious circle of increasing prices, increasing wage demands and reduced international cost competitiveness. Inflation also adversely impacts upon our attractiveness as a location for mobile talent.

Wage inflation is, therefore, a crucial element of competitiveness and impacts upon prices and inflation across all of the goods and services considered in this report - it particularly impacts on **non-traded services sectors** (such as **Food and Non-Alcoholic beverages (retail and wholesale)**, **Restaurants and Hotels** and **Health** where the labour content of production is high and productivity potential may be more limited.

Recommendation

In general, is it important that pay increases are linked to productivity improvements rather than inflation as only productivity growth can ensure that wages increases are sustainable.

Competitive labour costs will support more competitive living costs in the long term. Related Forfás research⁷ has benchmarked Irish labour costs and has identified recommendations aimed at ensuring that labour market policy and regulation, and the taxation and social welfare systems support competitive labour costs and job creation.

Role of Competition Policy in Key Sectors

Competition policy has a significant impact upon consumer price levels. Strong levels of competition keep prices down; improves choice and quality for consumers; and supports competitiveness and economic growth. Conversely, weak competition can result in high prices and inflation through a number of channels.

- Barriers to entry have restricted supply in a number of services industries, including **GPs, dentists, pubs, and insurance**. This has reduced competitive pressure to maximise efficiency and has increased the price-setting power of existing suppliers who have some degree of market power.

4 Kenny G and Gettigan D., "Inflation in Ireland: Theory and Evidence" quoted in National Economic and Social Council, Consumer Prices, NESc Secretariat Papers, Paper No. 9, November 2013

5 From the perspective of the individual consumer, the relative affordability of goods and services is also directly impacted by changes in their net pay.

6 O'Brien. D, Measuring Ireland's Price and Labour Cost Competitiveness, Quarterly Bulletin, Q1 2010

7 Forfás, Labour Market Competitiveness, July 2013

- Restrictions can limit the scope for competition on price, quantity, and/or quality. In the absence of competitive pressures, firms may not have the incentive to use more efficient methods, which can increase prices and leave the economy in a less-developed technological and operational state.
- Weak competition can result in higher prices as a result of 'pricing to market' whereby firms "vary their desired mark-up over marginal cost across different markets depending on the elasticity of demand they face" - in essence, firms will sell their products and services at a higher price if they feel that customers can absorb such prices as a result of weak domestic competition⁸.

Not surprisingly, a recurring theme emerging from chapter four of this report which examines key product categories is the need to introduce more competition in the domestic non-traded sector. Notably, **services inflation** has generally outpaced goods inflation since 1997. There is a substantial body of evidence suggesting that the high price level/high inflation across a range of services is a result of weaker competition⁹.

Recommendations:

Encourage competition in sectors where it is lacking: Particular competition issues exist in relation to **Restaurants and Hotels**, **Miscellaneous Goods and Services (health insurance)** and **Health (dental services)**.

A quarter of overall inflation in Ireland during the 1997 to 2012 period was attributable to **Restaurants and Hotels**. Alcohol sold within licenced premises is the largest sub-component of this category. At an industry level, there has been evidence of weak competition in the licensed premises sector – and particularly the urban pubs sector. It is recommended that:

- The State should proceed with a planned review of the alcohol licensing regime to ensure a competitive market exists for the sale of alcohol in both licenced and off-licence premises and to ensure that the market is open to new entrants.
- A ban on below cost selling or an introduction of minimum pricing for alcohol eliminates market competition while limiting the returns to the taxpayer. Efforts to achieve social objectives in relation to a reduction of alcohol and tobacco consumption by increasing the cost to the consumer should result in the additional revenues raised accruing to the Exchequer/taxpayer and not to the retailer or manufacturer as taxes raised can offset taxes elsewhere.

Health insurance is the most significant element within the **Miscellaneous goods and services** category. Over the period 2001 to 2012, Ireland had the highest annual average rate of health insurance inflation (11.3%) within the euro area-17, greatly exceeding the euro area -17 average (3.2%). With respect to competition in the health insurance sector, it is recommended that a number of outstanding Competition Authority recommendations be implemented, specifically;

⁸ Competition Authority, Retail-related Import and Distribution Study, 2009

⁹ Competition Authority, Annual Report, 2012 and Don Thornhill, Competitiveness Policy – Cad a dhéanfaimid feasta gan Troika? , Dublin Economic Workshop, 2012.

- Regulate VHI Healthcare as an insurance undertaking once it has reached the required reserves;
- Remove VHI Healthcare's exemptions from the EU Non-Life Directives; and
- VHI Healthcare should cease cancelling travel insurance policies where a customer switches from VHI Healthcare to another health insurer.

In addition,

- Consideration should be given to making legislative provision for consumers who wish to switch health insurance mid-way through a cover year to be issued with a certificate or letter of closure similar in purpose to that which is issued when someone is changing their credit card.

Ireland has been the most expensive euro area member for **Health** since 2004. A number of pro-competition changes have recently been made in the **GP sector**. With respect to competition in the **dental sector**, it is recommended that the forthcoming legislation to replace the Dentist Act, 1985 should implement a number of the proposals put forward by the Competition Authority, including;

- Introduce regulations to enable direct public access to dental hygienists;
- Remove the restrictions on dentists engaging in advertising their practices and enable the Dental Council to make rules regarding advertising within reasonable and limited circumstance;
- Explicitly permit the creation of corporate dental bodies; and
- Amend the composition of the Dental Council so that each of the professions regulated is represented on the Council and the majority of membership on the Council is from outside the professions being regulated.

Finally, it may be instructive to study sectors that have recently or are set to undergo reform for example **GPs**, **pharmaceuticals**, and **dentists**. Examining the price impacts of these policies by identifying where, how, and by how much policy feeds into consumer prices could provide insight into how policy can influence the price level.

Controlling Services Inflation - Role of Trade Policy

The analysis in this paper indicates that domestic factors account for a significant portion of the inflation experienced in Ireland (section 2.1). Indeed, inflationary pressures are most evident in the services sectors of the economy, particularly **non-traded services sectors** which are not fully exposed to international trade. Imported inflation has generally been moderate in Ireland - though imported inflation in the services sector has been higher - most likely driven by the less developed nature of the European services market and weaker competition in Ireland.

From a costs of living perspective, increased trade and the competition it brings, offers potential to lower the costs of living in Ireland. Building on the Single European Market, further actions are required to create a free market in **services generally**, and particularly to develop the **digital single market** (i.e., **Retail**) and to develop a single European energy

market. The successful negotiation of the planned EU/US Transatlantic Trade and Investment Partnership also offers significant potential to create trade opportunities and to lower business and consumer costs¹⁰.

Recommendations:

- Further actions are required to create a free market in services, to develop the digital single market and to develop a single European energy market.
- The successful negotiation of the planned EU/US Transatlantic Trade and Investment Partnership also offers significant potential to create trade opportunities and to lower business and consumer costs.

Role of Regulation

Regulation impacts on all sectors – it plays a key role in setting standards, protecting consumers and influences prices. In terms of economic regulation of key sectors (**energy, communications, waste, water, public transport services, etc.**), it is vital that Ireland continues to develop clear and consistent regulatory objectives, which then need to be applied and assessed to ensure that the objectives are being met.

At the same time, one must acknowledge that regulators, like Governments, often have competing objectives. While reducing prices as low as possible today may seem an attractive proposition, it could ultimately lead to higher costs for end users. The core function of the sectoral regulators should be ensuring that end users (business and residential) have access to quality services at the least cost, both now and in the future. This theme is of particular relevance for a range of utilities (e.g. the introduction of **domestic water charges** which is dealt with in Section 4.1.3), and **public transport** (Section 4.5.3) etc. The issue of effective regulation is elaborated on in much greater detail in Forfás' Sectoral Regulation study¹¹ and the recent Government Policy Statement on Economic Regulation¹² contains a series of actions and timelines which will have a positive impact upon consumer costs.

Recommendation:

- Implementation of the actions outlined in the Government Policy Statement on Economic Regulation is an essential element in enhancing Irish cost competitiveness.

¹⁰ The EU Single Market gives Irish businesses access to the world's largest trading bloc with 500 million people and 21 million companies generating almost €13 trillion in economic activity. It enables Irish companies to grow scale and export overseas and efficient overseas businesses to provide goods and services in Ireland. While there are considerable pressures to adopt more protectionist policies during difficult economic times, the single market creates jobs and benefits all member states. Trade between EU countries has risen from €800 billion in 1992 to €2,800 billion in 2012.

¹¹ Forfás, Sectoral Regulation - Changes to Sectoral Regulation to Enhance Cost Competitiveness, 2013

¹² Department of the Taoiseach, Regulating for a Better Future - A Government Policy Statement on Economic Regulation, July 2013

Beyond economic regulation policy, a host of other Government regulatory interventions impact upon consumer prices; from the retail planning guidelines which impact upon the **grocery sector**, to the quality standards in **childcare**, and the regulation of **legal services** which impact on **legal costs** and **insurance costs**, State intervention is evident across almost all sectors of the economy. These interventions often have unintended consequences for prices, which must be borne in mind when assessing Irish cost competitiveness.

Recommendation:

- The rate of inflation for **insurance** which is captured in the **Miscellaneous Goods and Services** category in the 2008 to 2012 period (9.7%) is well above the aggregate CPI rate (0.6%). In addition to the enactment of the Legal Services Bill, implementation of the proposals of the Legal Cost Working Group would result in a downward pressure on insurance premium prices.
- Likewise, **childcare costs** have notably high levels of inflation in the **Miscellaneous Goods and Services** category. CPI inflation of 5.9 per cent per annum was recorded for “Childcare” between 1999 and 2012. Considerable efforts are being made to develop and enhance quality standards in the child care sector which are very welcome. Care needs to be taken to ensure that the additional costs arising from higher standards do not increase costs excessively.
- The impact of the recession and recent retail competition reforms may have enhanced competition in the **retail sector**. It is necessary to monitor the impact of the revised floor space cap and other changes to the Retail Planning Guidelines on competition in the grocery sector and schedule a review of the Guidelines. Specifically, the proposed review should consider circumstances under which it would be appropriate to remove the cap in Dublin and the other cities. It is also important that policymakers remain cognisant of the potential impact on grocery prices of efforts to rebalance bargaining power between suppliers and retailers.

Infrastructure and Planning Policy

Insufficient infrastructure and poor planning can result in higher consumer costs through a number of channels including: increased operational costs for enterprise; longer delivery times (e.g. **Retail, Transport**); poor labour mobility due to longer and more costly commute times (**all sectors**), inefficiencies related to population dispersion (e.g. **Utilities, Transport, Retail**), and higher house prices (**all sectors**).

Numerous studies have highlighted the impact that this infrastructure deficit has on Irish inflation and costs¹³. Although considerable investment in infrastructure in the 1990s and early 2000s narrowed Ireland’s infrastructure deficit, there still is scope for improvement. According to the IMD, Ireland is ranked 22nd out of 66 countries in terms of the “perception of distribution infrastructure”.

Forfás and others have highlighted a range of infrastructural priorities relating to transport, energy, water and broadband. Continued investment in these essential economic infrastructures will enhance Ireland’s competitiveness through improved efficiency, enhanced

13 Irish Academy of Engineers, “The Cost Efficient Delivery of Essential Infrastructure”, June 2011

productivity and lower costs. Similarly, a focus on the development of “smart cities” and the rollout of intelligent infrastructure offers a potentially significant cost competitiveness dividend¹⁴.

Recommendations:

Forfás and others have identified a range of infrastructure projects and reforms that would enhance the quality of Ireland’s infrastructure. These can be progressed in the context of the Department of Transport’s review of investment priorities and the range of regulatory reviews which have (e.g. aviation, water) or are expected to commence shortly (e.g. energy).

In addition, it is essential that utility prices are kept under control. While utility prices are often strongly influenced by external raw material costs (e.g. oil and gas), it is essential that controllable costs are managed. Section 4.1 sets out a range of recommendations for the **energy sector** that are focused on managing subsidies and infrastructure build, and encouraging greater efficiency.

Consumers will be paying directly for **water and waste water services** in 2015. The efficient establishment and operation of Irish Water is critical. Proposed actions in relation to ensuring the cost competitiveness of water services are discussed in detail in previous Forfás work¹⁵.

Recommendation:

- Reduce inefficiencies in the delivery of water and waste water services. In particular, we need to bring operating, maintenance and capital costs into line with international best practice.

Finally, spatial policy and planning reform can assist in delivering infrastructure more efficiently. **Housing and utilities** was the largest contributor to CPI measured inflation between 2003 and 2012, accounting for 30 per cent of inflation over the period. Poor planning procedures in the past have led to higher costs and delays in the rollout of this essential infrastructure which can result in higher costs for infrastructure uses (**transport, energy, waste**). Further, poor planning decisions have resulted in unsustainable patterns of development, particularly in relation to residential property development. The availability of zoned and serviced land also influences house prices - a key driver of inflation and wages during the 1999 to 2007 period. Figure 14 plots average house prices and the ratio of average house prices to average annual earnings in order to illustrate changes in the affordability of housing in Ireland.

¹⁴ Forfás, Intelligent Infrastructure - Delivering the Competitiveness Benefits and Enterprise Opportunities, November 2011

¹⁵ See the Joint Enterprise Agency Submission on Water Sector Reform, 2012 and Forfás, Sectoral Regulation - Changes to Sectoral Regulation to Enhance Cost Competitiveness, 2013

Recommendation:

- The Inter-Agency Group on the Property Market should develop policy recommendations to avoid the creation of future sustained property bubbles.
- Falling land and property prices do not reduce the necessity for structural change in respect of land planning. An integrated approach to land use and transport policies is critical to allow the efficient movement of people and goods and to improve the viability of public transport.
- Combining carefully located, well designed high density developments with social, educational and recreational facilities and world class transportation connections offers the possibility of increasing the supply of both commercial and residential property in a more cost effective and environmentally sustainable manner.

Policies on State Influenced Prices

Another way Government can influence prices is by direct or indirect price regulation (i.e. prices that are fully-administered or mainly-administered by central, regional, or local government or national regulators)¹⁶. The goods and services classified as “administered” by the CSO represent a small subset of the overall CPI basket (see Table A5).

Between 2001 and 2012, inflation in Irish administered prices has outpaced inflation in administered prices in international peer countries and the euro area. Furthermore, inflation in administered prices has been higher than headline HICP inflation in Ireland. Inflation in administered prices has been particularly high in 2011 (6.3%) and 2012 (7.3%).

Over recent years, “Combined passenger transport”, “Passenger transport by road”, “Hospital services”, and “Insurance connected with health” stand out as particular drivers of headline Irish inflation.

Care is required in interpreting administered price data. Section 4.10 presents a range of data issues. From a policy perspective, the portion of any increase in administered prices that can be attributed to the government directly is unclear for at least two reasons. Firstly, the categories are “mainly-administered”, meaning the government does not completely determine prices in these categories. Secondly, some categories, such as electricity and gas, may be more influenced by international prices that are outside of the control of governments. In addition, certain pricing aspects of administered prices are determined by independent regulators (in accordance with their prescribed mandates). Nevertheless, it is clear that inflation in administered prices has been higher than headline inflation and is a contributor to the inflation differential between Ireland and other countries.

With respect to competition in the bus transport sector, section 4.5 outlines a range of actions to enhance competition in the bus sector by successfully managing the introduction of competition to the market.

Health policy and the related topic of health insurance policy are beyond the scope of this project. However, according to Eurostat’s PPP data, Irish price levels have consistently been higher than the euro area-17 average. The differential peaked in 2009 when Irish prices were

¹⁶ http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/documents_meth/HICP-AP/HICP-AP_Definitions_Explinations.pdf

45.8 per cent above the euro area-17. Since then this has narrowed to 34.5 per cent. OECD research highlights significant potential to reduce costs. However, managing consumer prices is challenging given the need for the State to reduce its own expenditure. For example, in an effort to ease the pressure on the Health Service Executive's budget, the State has been increasing some charges for publicly-provided services. This affects both the "Miscellaneous goods and services" COICOP category (through health insurance) and the "Health" category (through hospital services).

On the other hand, Government policies can also reduce consumer prices. The Health Act 2013 sets out new procedures for setting pharmaceutical prices and aims to make prescription drugs more affordable.

Recommendation:

- The Irish Medicines Board should progress quickly with the publication of the lists of interchangeable medicines to increase the use of generics in Ireland.
- Monitor the effectiveness of The Health Act 2013 in reducing the cost of prescription medicines, and in particular, to establish if and to what extent originator and generic pharmaceutical prices fall relative to other countries.
- Continue to promote consumer awareness of price variation in prescription drugs.

Finally, **education** was identified in Chapter 4 as having very high inflation rates throughout the periods analysed. Despite its low weighting within the CPI basket it was a driver of inflation during the 2008 - 2012 period. Tertiary education (annual student contribution) accounts for two thirds of the weight of the education component. Continued high inflation is expected.

In order to deliver a quality mass higher education system that meets the needs of the individual, and supports the development of enterprise and the economy, there is a need for adequate resourcing. This in turn requires a continuous process of reform at institutional levels and the allocation of resources in such a way as provides the best value for money.

Graduates, who will benefit significantly from higher education in terms of increased earnings over the course of their life, should contribute a greater portion of the cost of their education. This will impact on inflation. It would also be important to ensure that such a measure does not act as a barrier to participation in third level education. Available evidence highlights that students make strong returns from time spent in third level education. In terms of reducing barriers and managing inflationary impacts, mechanisms that allow education costs to be paid over a period of time when students are benefiting from their education should be considered (e.g. low cost student loans)

Fiscal Policy

At a macro level, in the absence of control over monetary policy, fiscal policy that is counter-cyclical can moderate business cycles and inflationary pressures. Fiscal policy impacts on all sectors of the economy - it can also have specific impacts, typically through changes in the

rate of Value Added Tax (VAT) and excise duties (**Restaurants & Hotels, Alcohol & tobacco**), or indirectly through the impact of taxation on employment or investment.

VAT in Ireland is charged at different rates for various goods and services – a standard rate of 23 per cent for most goods and services, a reduced rate of 13.5 per cent for a range of designated items, a special 9 per cent rate for a range of tourism related activities, and a zero per cent which applies to exports, and a range of items (including tea, coffee, milk and bread)¹⁷. Although Ireland has a high standard rate of VAT, there is evidence that substantial use of special and discounted VAT rates bring Irish consumption tax rates more in line with international peers¹⁸.

There is also evidence that cuts to the VAT rate are passed onto consumer in some instances – specifically, it appears that the VAT reductions introduced as part of the 2011 Jobs Initiative were at least partially passed through to consumers in the **Restaurants and hotels** sector¹⁹. The Department of Finance also noted that “it is likely that the VAT rate reduction on some of the categories acted as a temporary employment stimulus, either through direct pass through or by enabling the retention or expansion of labour demand without offsetting reductions in firm margins”. As highlighted earlier, there is merit in studying industries that have recently or are set to go through reforms.

Excise taxes are another significant driver of price level differentials between Ireland and comparator countries, particularly in relation to **tobacco and alcohol**²⁰. Ireland is one of the most expensive European countries for tobacco and alcohol products largely due to very high excise duties. As noted above, however, taxation policy is often designed to achieve societal objectives – in the case of tobacco and alcohol, for instance, excise duties are used to change consumption and thus achieve a more socially preferable outcome. In attempting to use taxation policy to change consumer behaviour, however, policymakers must be cognisant of the impact increases in price can have on the “informal economy”. For example, a 2011 study undertaken on behalf of the Revenue Commissioners found that a one per cent increase in price results in a 3.6 per cent reduction in cigarette consumption (i.e. price elasticity of -3.6). Such price elasticity is too high to be realistic. According to Revenue, “the most reasonable theory to explain such a large decrease in taxed consumption is that only part of the reduction is caused by lower smoking levels, the remainder must be caused by smokers switching to substitute cigarettes”²¹. In this case, the most likely substitutes are either non-Irish taxed cigarettes (i.e., purchased legally outside Ireland and brought into the country) or untaxed cigarettes (produced in or smuggled into Ireland and purchased illegally).

17 In addition a 4.8 per cent VAT rate applies specifically to agriculture.

18 In 2009, Ireland had the third lowest VAT Revenue Ratio (VRR) amongst a range of OECD comparator countries (behind Spain and Italy). The low VRR compared with other countries reduces the effects of VAT on consumer price differentials between Ireland and other comparators. See OECD, *Consumption Tax Trends 2012, VAT/GST and Excise Rates, Trends and Administration Issues*, Chapter 4, 2012

19 O’Connor, B., *Measuring the Impact of the Jobs Initiative: Was the VAT Reduction Passed On and Were Jobs Created?*, Department of Finance, November 2012

20 Relatively high excise taxes on alcohol and tobacco can in part explain the high price level of these goods in Ireland, but they do not explain inflation differentials.

21 Reidy, P. and Walsh, K., *Economics of Tobacco Modelling the Market for Cigarettes in Ireland*, Revenue Commissioners, February 2011

Role of Consumer Policy

Prices depend on demand as well as supply - as a consequence, consumer behaviour can have a direct and significant impact upon price. One particular tool available to consumers is the power to take their custom elsewhere (in a market where choice exists), thus impacting upon demand for a good or service and ultimately affecting price. The National Consumer Agency (NCA) has undertaken significant research into consumer switching patterns in Ireland for a range of 17 goods and services.

Based on this survey data, consumers display the highest propensity to switch providers in relation to **groceries** (26 per cent of those surveyed had switched retailers), **car insurance** (23%), **electricity supply** (16%), **gas supply** (16%), **broadband** (14%), **gym membership** (14%), **mobile telephone** (11%). By contrast, consumers were less likely to change providers in relation to **health insurance** (9%), **waste providers** (8%), **television services** (7%), **current accounts** (4%), **credit cards** (4%), **savings accounts** (3%) and **life insurance** (3%)²². Across 19 key markets, overall, 45 per cent of consumers have switched at least one product or service provider in the twelve months prior to the survey.

These relatively low switching rates do not necessarily reflect the potential savings which accrue from switching - NCA research has consistently found that consumers who had switched service providers said they had saved money as a result. The same analysis also finds that the vast majority of consumers found the various switching processes relatively straightforward.

All of this analysis serves to highlight the importance of improving consumer awareness: about the choice that is available; the potential savings from switching; and the relative ease of doing so.

Recommendations:

Continued efforts are required to enhance consumer awareness about the benefits of switching between service providers. A particular challenge exists for goods/services where product quality is difficult for consumers to assess (e.g. prescription drugs, health insurance, etc.).

Price Measurement

Measuring changes in prices across the economy is challenging - in particular, where product quality is hard to measure (e.g. ICT equipment/ clothes) or where prices are subject to frequent changes (clothes).

Specifically, there appears to be an issue in the **Clothing and footwear** category of the CPI and HICP price baskets. In this case, Irish prices have declined consistently over the last decade and a half. This, however, may be more a reflection of the practical difficulties of measuring like-for-like prices, rather than actual deflation. Similar concerns exist in other countries and similar issues may exist for other categories.

Price indices in categories with a high degree of time-varying product composition might over or underestimate the true costs paid by consumer simply due to measurement difficulties.

²² National Consumer Agency, Market Research Findings: Consumer Switching Behaviour, September 2013

Measurement error would not directly impact actual competitiveness, but overestimated price levels could have a negative impact upon inflation expectations and wage negotiations.

Recommendation:

Review prices in industries with conspicuous declines or methodological issues in collecting price data. In the apparel industry in particular, it could be useful to monitor price movements and the impact of recent methodological changes to the “Clothing and footwear” index.

Some policies and price changes have differing impacts on different segments of the population. For instance, the cost of **childcare** - which increased significantly during the boom - has a disproportionate impact on certain family types only - namely working families with young children. Understanding the demographic distribution of price increases could help policymakers to better understand the cost drivers that affect key segments of the population and to predict with greater accuracy the likely impact of certain policy decisions (e.g. impact of childcare policies on incentives to work).

Recommendation:

Assess the distribution of the inflationary burden according for family type and income level.

1 Introduction

This study examines price levels and price inflation in Ireland and comparator countries. The key goals of the research are to:

- Examine how consumer price levels in Ireland compare with prices in Ireland's key competitors;
- Examine how inflation in Ireland compares with inflation in Ireland's key competitors;
- Identify the primary products and services driving inflation in Ireland and illustrate how these drivers create price differentials between Ireland and its key competitors; and
- Provide a high-level assessment of the implications of consumer price levels and inflation for Ireland's national competitiveness and identify a range of actions to enhance competitiveness.

1.1 Background

The Action Plan for Jobs 2013 notes that "in the absence of a currency devaluation policy lever to manage cost competitiveness pressures, the policy focus needs to be on achieving enhanced competitiveness through a combination of cost reductions in key business inputs and enhanced productivity growth²³". High business costs make Ireland less attractive in terms of foreign direct investment and reduce our market share in both domestic and international markets for trade.

The Action Plan also notes that consumer prices represent an indirect cost to business inputs, since consumer prices are a key driver of wages. As labour costs are the principal cost driver for most firms, a comparison of consumer price trends in and differentials between Ireland and its key competitors is an essential part of assessing Ireland's overall cost competitiveness²⁴. Reducing consumer costs can facilitate nominal wage adjustment whilst protecting real incomes. Furthermore, unnecessarily high consumer prices can dissuade people with required skills from locating in Ireland and can damage Ireland's attractiveness from an FDI perspective.

Ireland has been successful in boosting its cost competitiveness since the start of the financial crisis (see section 1.2). However, as the most recent Action Plan points out, over half of the recent cost competitiveness improvements are accounted for by the depreciation of the euro against the currencies of our major trading partners. As a result, these gains could be quickly eroded.

As a significant determinant of international competitiveness, there may be scope to improve and sustain Ireland's competitiveness further if the drivers of consumer price inflation can be identified and addressed.

1.2 Ireland's Overall Cost Competitiveness

Changes in international cost and price competitiveness depend on a combination of exchange rate movements and movements in prices. The real effective exchange rate (REER) aims to

²³ Department of Jobs, Enterprise, and Innovation (2013) "Action Plan for Jobs 2013"

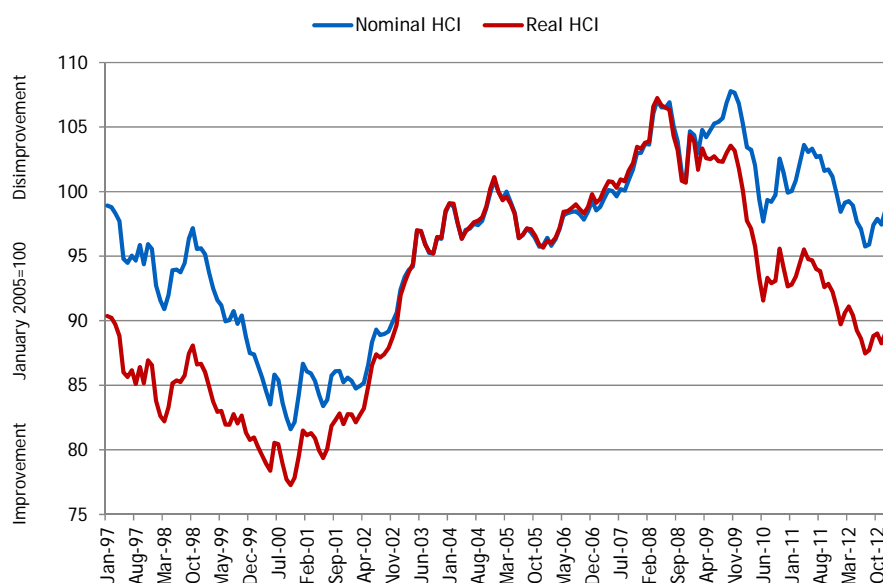
²⁴ Forfás (2012) "Costs of doing business in Ireland 2012"

assess a country's price or cost competitiveness relative to its principal competitors in international markets. The REER combines changes in the price of goods and services (i.e. cost/prices deflators) in different countries, and movements of nominal exchange rates into a single measure.

Much of Ireland's competitiveness story can be illustrated using Harmonised Competitiveness Indices (Figure 1). The purpose of harmonised competitiveness indicators (HCIs) is to provide meaningful and comparable measures of euro area countries' price and cost competitiveness that are also consistent with the real effective exchange rates (EERs) of the euro²⁵.

The Central Bank of Ireland produces both a nominal and real Harmonised Competitiveness Index (HCI). The nominal HCI is a nominal effective exchange rate for the Irish economy that reflects, on a trade weighted basis, movements in the exchange rate vis-à-vis 56 trading partners. The real HCI (deflated by consumer prices²⁶) takes into account relative price changes along with exchange rate movements. In Figure 1 below, an upward sloping line indicates a loss of competitiveness, whilst a downward sloping line indicates improving competitiveness.

Figure 1: Harmonised Competitiveness Indicators for Ireland, 1997-2012 (January 2005 = 100)



Relative Irish competitiveness improved in the period up until late 2000. Between October 2000 and April 2008, however, the real HCI declined by almost 39 per cent (the nominal HCI declined by 31 per cent), reflecting an appreciation of the euro against the currencies of our trading partners (nominal HCI) and higher price inflation

Source; Central Bank Of Ireland

Since the onset of the financial crisis and the recession, Ireland has regained some of its competitiveness because of falls in relative prices and favourable exchange rate movements:

²⁵ HCIs are constructed using the same methodology and data sources as the euro effective exchange rates.

²⁶ The all-items Harmonised Index of Consumer Prices as published by Eurostat is used for European countries, while all-item national consumer price indices are used for all other trading partners.

from April 2008 to Dec 2012, the real HCI improved by 17 per cent. The nominal HCI fell by 7.9 per cent, indicating that approximately half of the improvements in Irish cost competitiveness are a result of exchange rate movements and half are a result of lower Irish inflation rates compared to our trading partners.

Based on ECB data, Ireland has recorded proportionately larger improvements in competitiveness than other individual euro area member states. According to Walsh, “It is understandable that Ireland should show a large competitive gain by euro area standards as the euro declined on world markets after 2008 because non-euro area trade is far more important to Ireland than to any of the other 16 members of the EMU”²⁷. As a consequence, the decline in the value of the euro on world currency markets, and especially relative to sterling and the dollar, has had a much larger effect on Ireland’s competitiveness than on that of any other euro area country.

Researchers have highlighted that pass-through of exchange rate fluctuations relative to trading partners in Ireland is lower than other euro area countries²⁸. In the context of retail prices, for example, the strengthening of the euro versus the UK pound did not manifest as lower prices in the imported sector. Furthermore, price deflation in Ireland occurred at the same time as a fall in the country’s real effective exchange rate. For a country with such a strong trade dependency as Ireland, the opposite would be expected. Of course, prices are also – and it appears largely – impacted by domestic economic activity. The exchange rate channel, then, may have more limited influence on Irish consumer prices as such²⁹.

1.3 Methodology and Report Structure

Forfás commissioned Europe Economics to undertake initial data analysis of price levels and inflation in Ireland and comparator countries. In general, analysis is conducted for a range of time periods where data allows: the pre-euro period (1997/1998), the ‘boom years’ (1999-2007) and the subsequent recessionary period (2008-2012). Summary data for the overall period (1997-2012) is also provided. Appendix 1 provides an overview of data sources used – in particular a description of the differences between Eurostat’s internationally comparable ‘harmonised consumer price index (HICP)’ and the CSO’s national ‘consumer price index (CPI).

Following the completion of this analysis, Forfás engaged in a series of consultations with a number of stakeholders. While the report is primarily analytical in nature, the policy implications of our research are highlighted and a series of recommendations are proposed.

The report is structured as follows:

- Chapter 2 uses international benchmarks of inflation and prices to assess Ireland’s cost competitiveness for consumers.
- Chapter 3 focuses on Irish national data to analyse national inflation trends.

27 Walsh, B., Regaining Competitiveness, Post on www.Irisheconomy.ie on 24th July 2012

28 National Economic and Social Council (2013) “Consumer prices” Unpublished Manuscript

29 It is worth noting that the competitiveness impact of exchange rate movements are not always immediately apparent - there may be a lag between exchange rate depreciation and any beneficial effects or improvements to competitiveness due to contracts being fixed at the higher exchange rate value; in other words, the impacts of the most recent currency depreciation may not yet be fully observable in terms of improved international competitiveness.

- Chapter 4 looks in detail at Irish inflation rates and price levels for individual specific categories of consumer goods and services and examines how they impact upon the headline rate of inflation. The impact of public policy on inflation performance is also assessed.

2 An International Context for Irish Inflation and Price Levels

This chapter commences with a brief comparison of international inflation data across a range of time periods including the pre-euro, boom and recessionary periods that fall between 1997 and 2012. Thereafter, a sample of alternative measures of inflation (i.e. based on National accounts deflators) is considered. Finally, the cost of living in Dublin relative to a range of other international locations is considered using international cost of living survey data.

Key Findings:

- Since 1997 Ireland's inflation performance has been more volatile than the euro area average. Ireland experienced higher year-on-year inflation for most of the period up to 2008. Between 2008 and 2012, average annual inflation in Ireland (0.6%) has been well below the euro area average (2.1%).
- Inflation for both goods and services was higher in Ireland than the euro area between 1997 and 2012. While service inflation was higher than goods inflation for both the euro area and Ireland, the gap between the two was much greater in Ireland, suggesting that services have contributed more to inflation in Ireland than in the euro area.
- From 1997-2012, annual goods and services import price inflation in Ireland was 0.1 per cent below comparator countries. This suggests that domestically-generated inflation has been the principal driver of inflation in Ireland.
- However, inflation in imported services averaged 4.5 per cent in Ireland versus an average of 2.3 per cent among comparator countries indicating that services are driving import inflation.
- Between 1997 and 2012 inflation in "Education" and "Miscellaneous goods and services" was consistently higher in Ireland than for the euro area average. From 1999 onwards Irish "health" inflation also exceeded the euro area rate. Ireland experienced deflation in "Communications" during the 1997 to 2012 period (although communications prices fell more slowly in Ireland than they did in the euro area).
- The largest contributors to inflation in Ireland between 1999 and 2012 were "Restaurants and hotels" (26%), "Transport" (17%) and "Housing and utilities" (15%). The top three contributors to euro area inflation were "Housing and utilities" (23%), Transport (22%) and "Food and non-alcoholic beverages" (16%).
- Price inflation in Ireland has not been a function of price convergence - Irish price levels were above the euro area average in 1999. Movements in price levels between 1999 and 2008 served to widen the existing gap.
- A combination of Irish deflation and euro area inflation since 2008 has brought the relative Irish price level close to the level it was at in 2001. Consumer price levels in Ireland are the third highest within the euro area.
- Ireland's current price and inflation profile can be defined as high cost, rising slowly.
- Despite a range of improvements in price levels, Ireland remains within the top three most expensive euro area countries in five out of twelve categories of goods and

services. They are “Alcoholic beverages and tobacco”, “Health”, “Miscellaneous goods and services”, “Restaurants and hotels” and “Food and non-alcoholic beverages.

- Analysis of USB Cost of Living survey shows that relative to New York, Dublin has become significantly less expensive over recent years as a result of the recession.

2.1 How Irish Inflation Compares Internationally

2.1.1 Ireland’s headline performance

Eurostat’s harmonised consumer price index (HICP) is the most appropriate measure of inflation for inter-country comparison. Table 1 contains inflation rates for Ireland and the euro area-17 from 1997 to 2012.

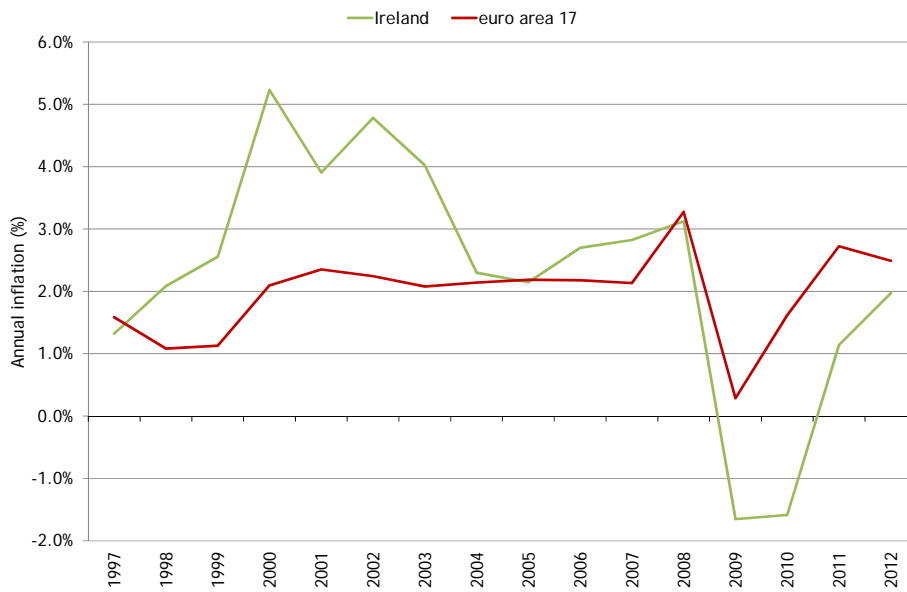
Table 1: HICP average annual inflation in Ireland and comparator countries: 1997-2012

Country	1997-1998	1999-2007	2008-2012	1997-2012
Ireland	1.7%	3.4%	0.6%	2.3%
euro area-17	1.3%	2.1%	2.1%	2.0%

Source: Eurostat; Europe Economics’ calculations

There has been some disparity in inflation trends between Ireland and the euro area during the periods reviewed. In the two years leading up to joining the euro, annual Irish inflation averaged 1.7 per cent, while average annual inflation across the euro area countries was 1.3 per cent. Between 1999 and 2007, Irish inflation exceeded euro area-17 inflation significantly (by 1.3 per cent per annum). Since the recession, inflation in Ireland has fallen to 0.6 per cent per annum compared with euro area-17 annual inflation of 2.1 per cent. From 1997 to 2012, average annual inflation in Ireland was higher than inflation in the euro area by around 0.3 per cent per annum. This data is illustrated in Figure 2 on an annual basis.

Figure 2: Annual HICP inflation in Ireland and the euro area, 1997-2012



Irish inflation has consistently been out of step with the euro area. In the boom period (1999-2007) average annual GDP growth in Ireland was 10.3 per cent compared to 3.1 per cent in the euro area. A portion of Ireland's higher inflation is a result of these higher growth rates (i.e. related to the Balassa-Samuelson effect³⁰).

Source: Eurostat; Europe Economics' calculations

In contrast, during the 2008 to 2012 period, the decline in Ireland's GDP is reflected in deflation; this did not occur in the euro area.

2.1.2 Goods and services inflation

Table 2 presents goods and services inflation rates separately for Ireland and the euro area average between 1997 and 2012.

Table 2: Goods and services HICP inflation in Ireland and euro area-17, 1997-2012

Period	Country	Goods	Services
1997-1998	Ireland	1.2%	2.7%
	euro area-17	0.9%	2.2%
1999-2007	Ireland	2.2%	4.9%
	euro area-17	1.9%	2.3%
2008-2012	Ireland	0.0%	1.3%
	euro area-17	2.2%	1.9%
1997-2012	Ireland	1.4%	3.5%
	euro area-17	1.9%	2.1%

Source: Eurostat; Europe Economics' calculations

³⁰ For an explanation of the Balassa-Samuelson effect see Appendix 3.

Between 1997 and the end of 2012, goods inflation in Ireland was half a per cent below the euro area-17 average. However, services inflation was 1.4 per cent higher in Ireland than in the euro area over the same period. Looking at goods and services inflation rates over shorter time periods, however, reveals a large degree of volatility.

Between 1997 and 2007 both goods and services inflation in Ireland was higher than the euro area-17 average. However, from 2008 to 2012, the price of goods in Ireland did not increase while they rose by 2.2 per cent across the euro area-17. During the same period, the rate of services inflation in Ireland (1.3%) was lower than the euro area-17 average (1.9%).

The Central Bank of Ireland uses data on services inflation as a proxy for non-traded or domestic inflation. Such an approach can offer insights into the breakdown between domestically and non-domestically generated inflation³¹. The disparity between goods and services inflation across the 1997-2012 period suggests that the gap between domestic and non-domestic inflation is wider in Ireland than in the euro area (i.e. domestic factors are a key driver of inflation in Ireland).

2.1.3 Role of import-generated inflation

Small, open economies are price-takers in international markets. If global prices for key imports are increasing, headline inflation can be driven by imported inflation³².

Table 3: Import price inflation in Ireland and comparator countries: 1997-2012

	1997-1998		1997-2007		2008-2012		1997-2012	
	Ireland	Comparators	Ireland	Comparators	Ireland	Comparators	Ireland	Comparators
Imported Goods & services	1.7%	1.8%	1.5%	1.4%	2.3%	2.8%	1.8%	1.9%
Imported Goods	-3.4%	1.2%	0.4%	1.3%	2.9%	2.9%	0.7%	1.8%
Imported Services	14.7%	4.2%	3.6%	1.8%	2.2%	2.4%	4.5%	2.3%

Note: Data for Euro area is unavailable. Comparator countries include Denmark, Finland, France, Germany, Hungary, Italy, Japan, South Korea, the Netherlands, New Zealand, Poland, Spain, Sweden, Switzerland, the UK, and the US.

Source: OECD; Europe Economics' calculations

³¹ The increasing internationalisation of the service trade complicates using service sector inflation as a proxy for domestic inflation. With that in mind, we follow the Central Bank of Ireland in our analysis.

³² Import inflation is defined as the year-over-year per cent change in the relevant import price index from the OECD. The base is set to 2005 = 100. It is important to note that this is whole-economy imports and is not limited to consumer imports.

In general, as shown in Table 3, inflation in imported 'goods and services' has not been higher in Ireland than elsewhere³³. Over the period 1997-2012, inflation in imported goods and services averaged 1.8 per cent per annum in Ireland and 1.9 per cent per annum in comparator countries.

Import prices in Ireland rose more slowly between 1999 and 2007 than in other periods, when Ireland's real effective exchange rate appreciation of 26 per cent greatly outstripped real effective exchange rate appreciation in comparator countries of 3 per cent. The movement of import prices appear to be less dependent on the exchange rate in Ireland. From 2008-2012, a time when the Irish real effective exchange rate fell more than in comparator countries, it is surprising to find import prices rose faster in comparator countries. The scale of real exchange rate depreciation in Ireland relative to comparator countries indicates that imports should have grown more expensive in Ireland relative to comparators, but this was not the case.

Imported inflation has been driven largely by services imports. From 1997 to 2007, inflation in services imports exceeded inflation in goods imports as well as services imports in comparator countries. Goods imports inflation has, by comparison, been more subdued.

For a small, open economy such as Ireland, we would expect to find that import price inflation would exert a considerable influence over domestic inflation. This does not seem to be the case. From 1997-2012, annual goods and services import price inflation in Ireland has been around 0.1 per cent below comparator countries. This hints at domestically-generated inflation as the principal driver of inflation in Ireland. This data does not, however, facilitate an analysis of the degree to which retailers and service providers are absorbing or passing on price increases in goods and services imported from abroad.

2.2 Drivers of HICP Inflation

2.2.1 Inflation in key goods and services categories

Table 4 assess the individual inflation rates for key goods and services (Level I COICOP categories). This is the first step towards understanding how these product categories have impacted on headline HICP inflation rates.

³³ Note Table 4 data refers to import prices generally, not necessarily consumer imports.

Table 4: Average annual HICP inflation by COICOP category, 1997-2012

	1997-1998		1999-2007		2008-2012		1997-2012	
	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area
All-items HICP	1.7%	1.3%	3.4%	2.1%	0.6%	2.1%	2.3%	2.0%
Alcoholic beverages, tobacco & narcotics	3.4%	3.1%	4.9%	4.0%	2.4%	3.8%	4.0%	3.8%
Clothing & footwear	-6.1%	1.0%	-3.7%	0.8%	-5.6%	0.8%	-4.6%	0.8%
Communications	-3.8%	-1.2%	-1.4%	-2.9%	0.7%	-1.7%	-1.0%	-2.3%
Education	4.2%	2.4%	6.8%	3.6%	5.6%	2.0%	6.1%	3.0%
Food & non-alcoholic beverages	2.8%	1.2%	2.3%	2.0%	0.0%	2.2%	1.7%	2.0%
Furnishings, household equipment etc.	2.3%	1.0%	0.4%	1.2%	-2.7%	1.4%	-0.3%	1.2%
Health	4.3%	4.3%	6.1%	2.6%	2.8%	1.6%	4.8%	2.5%
Housing, water, electricity, gas & other fuels	0.7%	1.9%	6.1%	3.0%	1.1%	3.2%	3.7%	2.9%
Miscellaneous goods & services	3.4%	1.2%	4.2%	2.3%	2.6%	2.2%	3.6%	2.1%
Recreation & culture	1.7%	1.1%	2.9%	0.3%	-0.6%	0.3%	1.7%	0.4%
Restaurants & hotels	3.4%	2.1%	4.9%	3.0%	0.0%	2.1%	3.2%	2.6%
Transport	2.0%	0.9%	3.2%	2.8%	2.1%	3.2%	2.7%	2.7%

Source: Eurostat; Europe Economics' calculations

In all time periods Irish inflation in “Education”, and “Miscellaneous goods and services” was higher than in the euro area. In 1997-1998 Irish health inflation was on par with the euro area average but thereafter, Ireland’s health inflation was well above the euro area rate. It may be, then, that there are elements specific to Ireland pushing inflation upward in these categories in Ireland. Chapter 4 will explore these categories in more detail. Irish deflation in “Communications” has not matched deflation across the euro area. Over the period from 1997 to 2012, prices in communications goods and services fell by 1.0 per cent per annum in Ireland and 2.3 per cent in the euro area.

Finally, the table indicates that the “Clothing and footwear” sector has experienced continuous deflation in Ireland since 1997 - while there has been modest inflation in the category across the euro area.

2.2.2 Contribution to headline HICP inflation

Inflation rates can be combined with category weights which reflect their importance in average household consumption, to analyse how individual goods and services sectors (by COICOP categories) have contributed to the headline HICP inflation in Ireland and comparator countries³⁴. Table 5 presents the contribution to inflation of each category as a percentage of total HICP inflation. For actual average annual contribution to headline HICP inflation by COICOP category see Appendix 4, Table A2.

Table 5: COICOP inflation contribution as a per cent of total HICP inflation, 1999-2012³⁵

	1999-2007		2008-2012		1999-2012	
	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area
All-items HICP	100%	100%	100%	100%	100%	100%
Alcoholic beverages, tobacco and narcotics	13%	8%	26%	7%	14%	7%
Clothing and footwear	-3%	5%	-37%	11%	-6%	7%
Communications	-1%	-4%	5%	-3%	0%	-3%
Education	3%	2%	24%	1%	5%	1%
Food and non-alcoholic beverages	12%	15%	-3%	16%	11%	16%
Furnishings, household equipment and routine maintenance of the house	1%	5%	-20%	5%	-1%	5%
Health	4%	4%	18%	3%	6%	4%
Housing, water, electricity, gas and other fuels	15%	22%	19%	24%	15%	23%
Miscellaneous goods and services	7%	9%	32%	9%	9%	9%
Recreation and culture	10%	2%	-10%	2%	8%	2%
Restaurants and hotels	28%	13%	-1%	9%	26%	12%
Transport	13%	21%	57%	23%	17%	22%

Note: Due to rounding subcategories may not sum to "All Items".

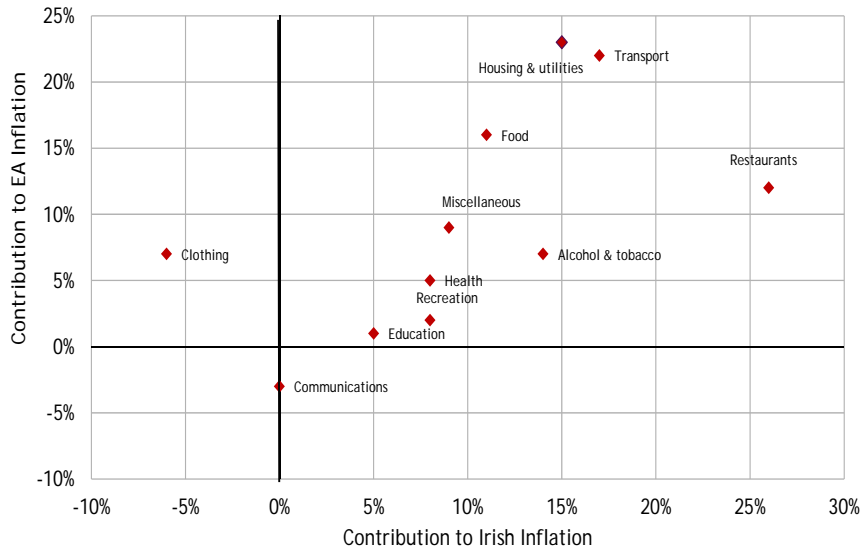
Source: Eurostat; Europe Economics' calculations

³⁴ A comparison of COICOP weightings for Ireland and the euro area is provided in Appendix 2 Table A1.

³⁵ Calculations based on unchained monthly series and may differ from calculations based on annual figures; 2003-2012 averages included for comparability with CSO figures.

There are some similarities between the drivers of inflation in Ireland and the euro area as shown in (Figure 3).

Figure 3: Relative Contribution of Goods and Services to Irish and Euro area inflation, 1999-2012



The largest contributors to inflation in Ireland between 1999 and 2012 were “Restaurants and hotels” (26%), “Transport” (17%) and “Housing, water, electricity, gas and other fuels” (15%). “Housing, water, electricity, gas and other fuels” (23%) and “Transport” (22%), are the two largest contributors to the euro area inflation.

Source: Eurostat; Europe Economics’ calculations

However, in the euro area “Restaurants and hotels” (12%) is responsible for a much smaller proportion of inflation than in Ireland. Not only was the rate of inflation in this category lower in the euro area but it also has a significantly lower weighting assigned to it which softens its impact on the overall inflation rate.

On the other hand, sectors such as “Clothing and footwear”, “Food and non-alcoholic beverages” and “Furnishings, household equipment etc.” have made a greater contribution to euro area inflation than in Ireland over the period 1997 to 2012.

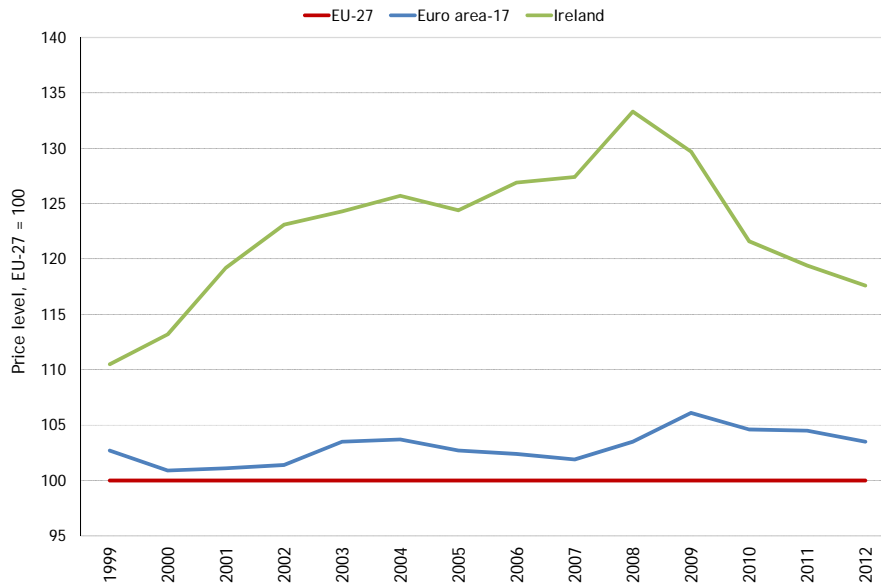
2.3 Ireland’s Relative Price Level

To understand cost competitiveness one must consider not just inflation, but also price levels. In theory, a country that enters the EU Single Market with a low price level compared with the EU average is likely to experience higher rates of inflation as prices begin to converge to the Single Market price. High inflation is likely to be more damaging to competitiveness where price levels are high to begin with.

For this reason, it is important to understand whether Irish prices were initially low compared with the euro area-17 average. If they were, areas in which inflation was noticeably higher might merely represent a “catch-up” in price levels, rather than a deterioration in price

competitiveness per se. Figure 4 plots price levels in Ireland and euro area-17 as a percentage of price levels in the EU-27.

Figure 4: Actual Individual Consumption³⁶, Price Level (PPPs), 1999-2012



In 1999, Irish prices were 7.6 per cent higher than euro area-17 prices. Consumer prices in Ireland increased relative to euro area-17 and EU-27 countries from 1999 to 2008, a time of elevated levels of Irish inflation. Since 2008, consumer prices have steadily decreased in relative terms and were 13.6 per cent above the euro area-17 in 2012.

Source: Eurostat, Europe Economics

Eurostat PPP data reveals that in 2012 consumer goods price levels in Ireland were 10.5 per cent above the euro area average, while consumer services price levels were 12.5 per cent above the euro area average.

At an aggregate level, it is clear that price inflation in Ireland has not been a function of price convergence. Higher levels of inflation experienced between 1999 and 2008 widened an existing gap between Irish prices and prices in the euro area-17. A combination of Irish price deflation and euro area inflation since 2008 has brought the Irish relative price level below the level it was at in 2001 but it remains significantly above the euro area average.

Figure 5 combines the analysis of price levels and inflation rates. Figure 5 illustrates that:

- Average annual inflation in Ireland (0.6%) for the 2008-2012 period was among the lowest in the European Union and was significantly below the EU-28 average (2.5%) and euro area-17 average (2.1%).
- Consumer price levels in Ireland in 2012 were 17.8 per cent above the EU-28 average and 13.6 per cent above the euro area-17.
- Ireland's price level and inflation profile for this period can be defined as "High cost, rising slowly".

³⁶ Actual individual consumption is used as a proxy for consumer prices. According to Eurostat it refers to "all goods and services actually consumed by households".

Figure 5: Consumer Price Levels (2012) and Average Annual Inflation (2008-2012)

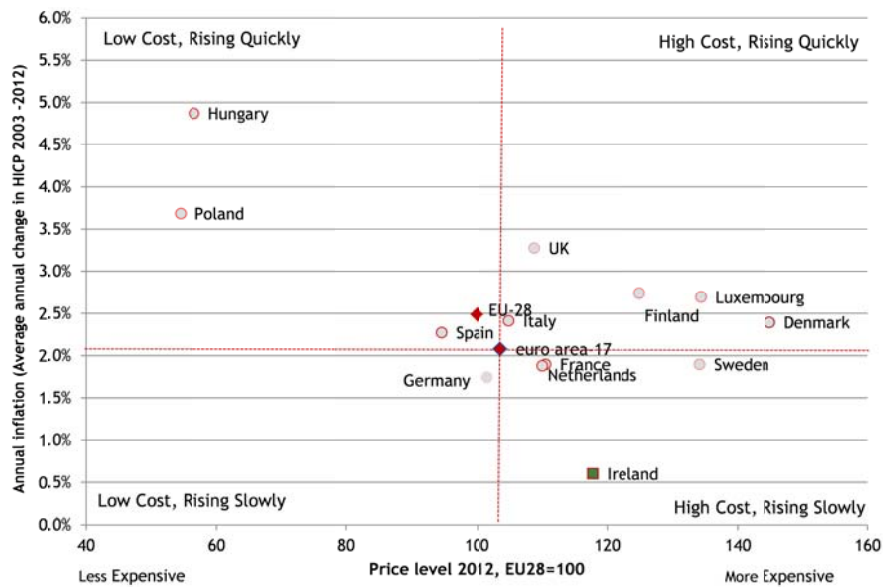


Figure 5 uses Eurostat Purchasing Power Parity (PPP) data for 2012 to plot relative price levels on the x-axis, with the EU-28 price level equal to 100. The y-axis uses HICP data to illustrate annual average inflation rates for the period 2008 to 2012.

Source: Eurostat, Forfás calculations

Table 6 ranks the relative cost levels of the 17 euro area member states using Eurostat’s PPP data for “actual individual consumption”. In 2012, Luxembourg was the most expensive euro area country, while Ireland was the third most expensive. Ireland’s ranking has improved since 2008 when it had the highest price levels within the euro area-17.

Table 6: Price Level Rankings, 2012 (1= most expensive)

Luxembourg	1	Austria	7	Slovenia	13
Finland	2	Italy	8	Portugal	14
Ireland	3	Germany	9	Malta	15
Belgium	4	Spain	10	Estonia	16
France	5	Cyprus	11	Slovakia	17
Netherlands	6	Greece	12		

Source: Eurostat, Forfás calculations

Table 7 outlines Ireland’s ranking in terms of price level for a range of goods and services categories which align with the COICOP categories used in the HICP and CPI indices.

Table 7: Ireland's Price Level Ranking across Categories, 2012

Key Product Category	Rank in the Euro Area 17 (1 = most expensive)
All HICP items	3
Alcoholic beverages, tobacco etc.	1
Health	1
Miscellaneous goods and services	2
Restaurants and hotels	2
Food and non-alcoholic beverages	3
Transport	4
Communications	6
Housing, water, electricity, gas and other fuels	6
Recreation & culture	6
Household furnishings, equipment and maintenance	7
Education	8
Clothing and footwear	9

Source: Eurostat, Forfás calculations

In Chapter 4, this price level data will be looked at in more detail alongside an analysis of HICP inflation rates to develop a better understanding of inflation drivers and price levels across the COICOP categories in Ireland relative to other euro area members.

2.4 National Accounts Deflators

Using national accounts deflators is an alternative way to assess changes in prices. The advantage of using national accounts deflators in an assessment of price levels is that deflators do not rely on assessments of purchasing patterns of a representative household but instead use data on aggregate purchases. This captures changes in expenditure patterns immediately, rather than after a re-composition and reweighting of the consumption basket.

There are a number of national account deflators. The GDP and GNI deflators measure whole-economy inflation - that is price changes for household consumers as well as firms and the government. The household final consumption expenditure (HFCE) deflator measures price changes in those items that households purchase in a given year and is, therefore, a proxy for consumer prices more generally.

Table 8 contains national accounts aggregate deflators for Ireland and comparator countries between 1997 and 2011.

Overall, the data suggests that household final consumption expenditure (HFCE), a proxy for consumer prices, has followed a similar pattern to HICP measured inflation. During the boom period, the Irish HFCE rate outstripped both the euro area and comparator countries. In the recessionary period (2008-2011), Ireland's HFCE has deflated while the euro area and comparator group have continued to inflate. However, broader measures of inflation (GDP deflator) suggest that economy wide inflation has been considerably higher than euro area inflation in the 1997 to 2011 period.

On the basis of national accounts deflators, it is also clear that Irish inflation has been out-of-step with the euro area average inflation: between 1997 and 2007, Irish inflation was higher than in the euro area; from 2008 to 2011, inflation in Ireland was markedly lower than the euro area.

Table 8: National accounts deflators for Ireland and comparator countries: 1997-2011

Period	Country	GDP Deflator	GNI Deflator	HFCE Deflator
1997-1998	Ireland	5.0%	4.7%	3.0%
	Comparators	2.5%	2.7%	2.7%
	Euro area	0.4%		0.4%
1999-2007	Ireland	3.6%	4.7%	3.1%
	Comparators	2.2%	2.2%	2.1%
	Euro area	2.0%		2.1%
2008-2011	Ireland	-2.5%	-1.8%	-2.0%
	Comparators	1.6%	2.0%	2.1%
	Euro area	1.2%		1.6%
1997-2011	Ireland	2.2%	3.0%	1.7%
	Comparators	2.1%	2.2%	2.2%
	Euro area	1.6%		1.7%

Note: GNI data for the euro area not available. Comparator countries include China, Denmark, Finland, France, Germany, Hungary, Italy, Japan, South Korea, the Netherlands, New Zealand, Poland, Spain, Sweden, Switzerland, the UK, and the US;

Source: OECD; Europe Economics' calculations

2.5 Cost of Living Studies

In addition to standardised consumer price indices, cost of living surveys can provide overviews of the comparative cost of achieving the same standard of living (as captured by the basket of goods and services) in different locations.

These surveys use a much smaller basket of goods and services than those used in developing consumer price indices (CPIs). The main audience for cost of living surveys are global companies who use the data to develop appropriate remuneration packages for their overseas employees³⁷. For this reason, the baskets of goods and services used tend to reflect the general consumption habits of households where one member is employed in a multinational firm.

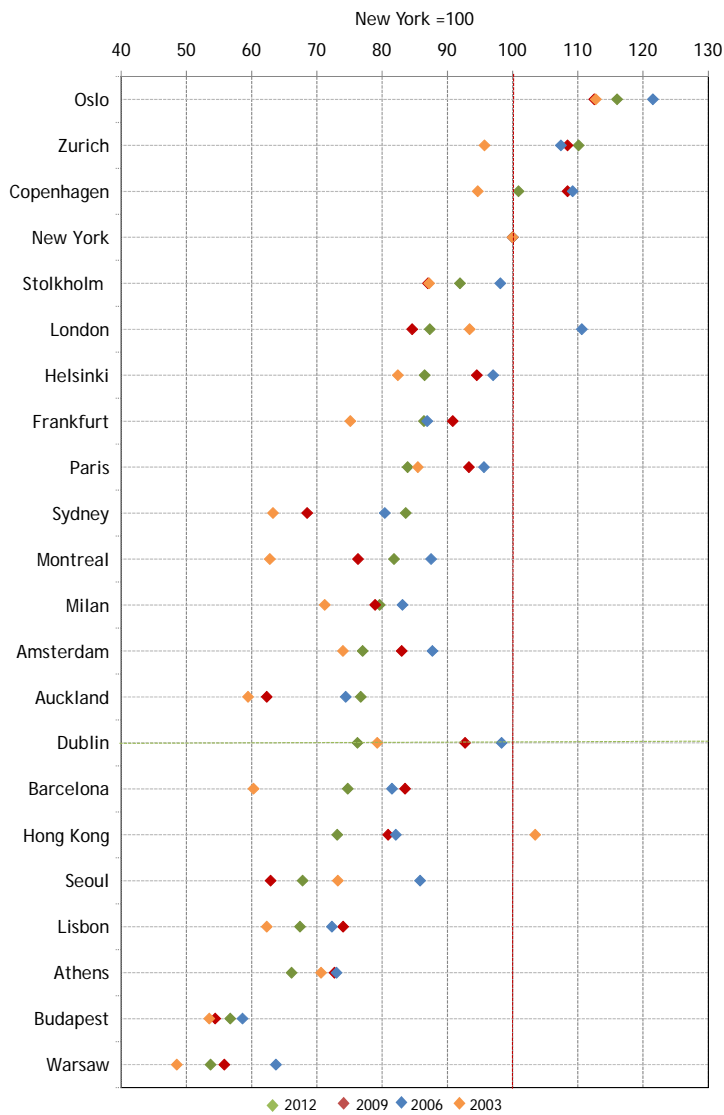
It should be noted that a significant proportion of the annual change in these surveys can be accounted for by exchange rate movements rather than actual price level adjustments. In the three main surveys of this type, conducted by UBS, Mercer and Economist Intelligence Unit (EIU), the cost of living in cities outside the US dollar zone becomes more expensive if the dollar weakens against local currencies even when prices remain unchanged or indeed fall. For example, in the most recent survey, many European cities appear to have become more expensive as a result of the strengthening of local currencies against the US dollar; conversely, many Asian cities appear relatively cheaper due to local currencies' weakening against the US dollar³⁸. Dublin is the only Irish city included in these surveys.

Figures 6 and 7 use UBS survey data to illustrate how price levels in Dublin have evolved vis-à-vis price levels in a selection of twenty one key international comparators. Price levels are plotted including and excluding rent. The data is taken from the four most recent editions of the UBS "Prices and Earnings" survey (i.e. 2003, 2006, 2009 and 2012). The index score for each city in each year is plotted against price levels in New York (which is set equal to 100). Cities that are more expensive than New York will have index values greater than 100 and cheaper cities will have index value less than 100. A move from left to right across the chart indicates a decrease in cost competitiveness.

37 For example, the CSO's CPI includes more than 630 different items while the UBS Prices and Earnings 2012 survey was based on a basket of just 122 items.

38 <http://www.mercer.com/press-releases/cost-of-living-rankings>

Figure 6: Price Levels Excluding Rent, New York =100

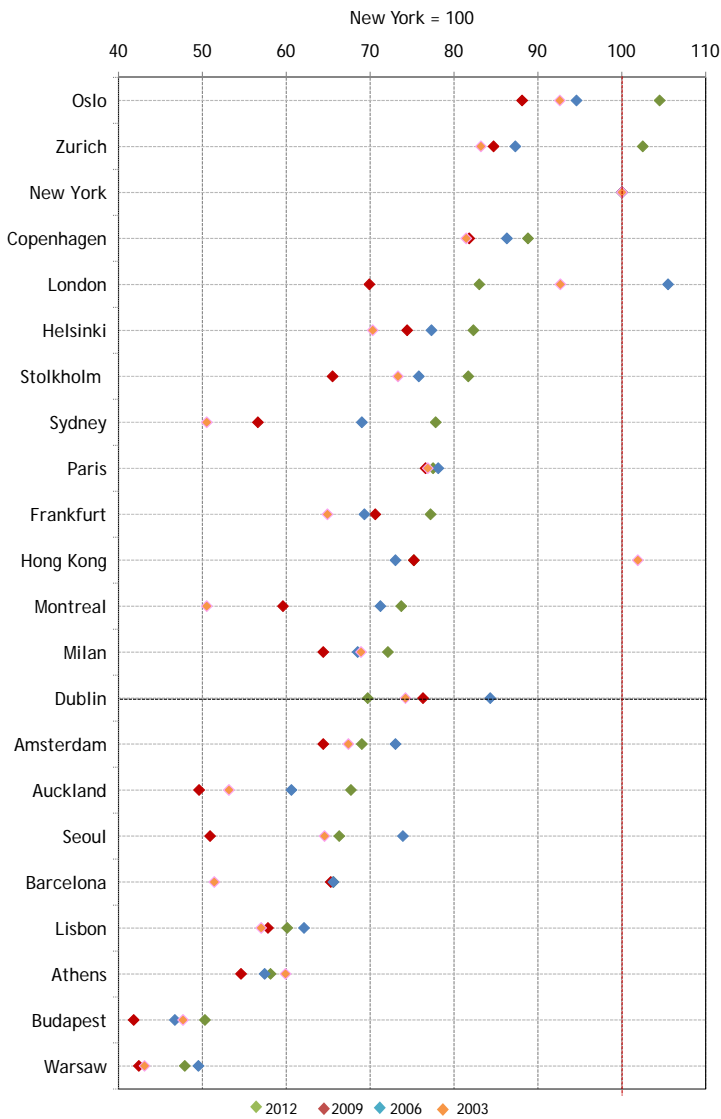


Oslo, Zurich, and Tokyo are the most expensive cities in the world to live in. Dublin has become significantly less expensive over recent years as a result of the recession - in 2009 prices in Dublin were 98.3 per cent of New York prices; in 2012 prices in Dublin were equivalent to 76 per cent of the New York level - representing a significant reduction in the cost of living. Dublin's improved competitiveness has arisen as a result of the combined effects of exchange rate movements and the impact of the financial crisis. Also, in 2012, Dublin's price level fell below the euro area-12 for the first time³⁹.

UBS, Prices and Earnings, September 2012, Forfás calculations

39 Euro area-12 includes Amsterdam, Athens, Barcelona, Brussels, Dublin, Frankfurt, Helsinki, Milan, Lisbon, Luxembourg, Paris and Vienna. Cities from member states that joined the euro after 2003 are not included in Euro area average to avoid skewing the data.

Figure 7: Price Levels Including Rent, New York =100



Oslo, Zurich and New York are the most expensive cities in the world when rental prices are included in the basket. The price level in Dublin peaked in 2006 at 84.3 per cent of New York prices. The 2012 survey found Dublin prices to have fallen to 69.7 per cent. Price levels in a number of euro area cities including Helsinki, Frankfurt, Milan and Athens increased between 2009 and 2012. Of the cities benchmarked here, Dublin is the only one to have achieved its lowest price level in 2012, indicating a cost competitiveness gain relative to other leading international cities. Prices in Dublin including rent remain higher than the euro area-12 average. The relatively high cost of property rental in New York means that in all survey editions both Dublin and the euro area 12 appear relatively cheaper when rental prices are included.

UBS, Prices and Earnings, September 2012, Forfás calculations

3 Analysis of Irish Inflation

Chapter 2 assessed Irish inflation in an international context using Eurostat's HICP data.

Chapter 3 assesses Irish inflation in a national context in more detail using the CSO's CPI data.

Appendix 1 explains the differences between these data sources.

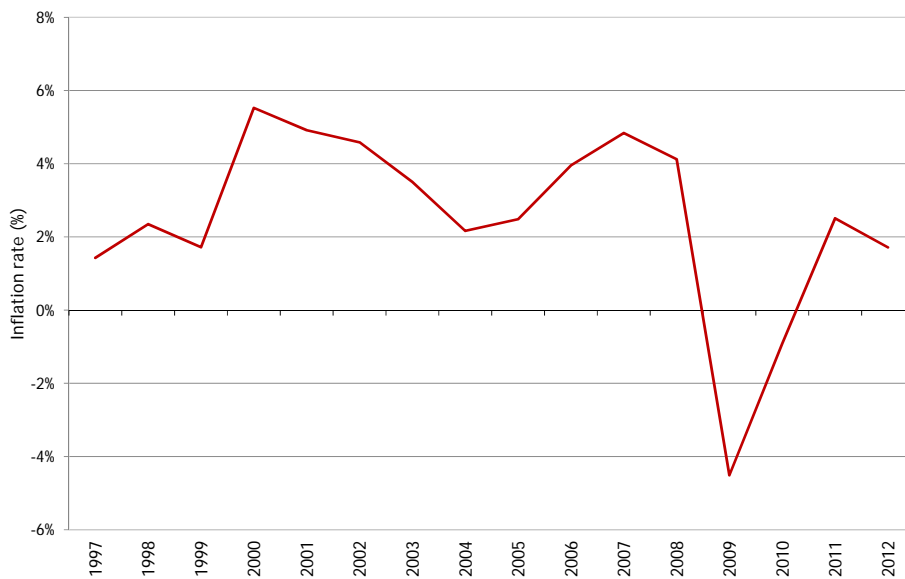
Key Findings:

- Ireland's annual rate of CPI inflation peaked in 1999 at 5.5 per cent when the country joined the European Monetary Union. Inflation remained relatively high throughout the boom period before the onset of a two year deflationary period in 2009. Inflation resumed in 2011 reaching 2.5 per cent before falling back to 1.7 per cent in 2012.
- The consumption profile of Irish households is reflected in the weights assigned to the twelve categories of goods and services measured by CPI. The three largest categories of goods and services in the CPI basket account for 45 per cent of the total basket, i.e. "Restaurants and hotels" (16%), "Housing and utilities" (15 %) and Transport (14%). The three smallest categories in the basket had an average combined weight of eight per cent, i.e. "Health" (3%), "Communications" (3%) and Education (2%).
- Between 1997 and 2012, the highest average annual rates of inflation were recorded for "Education" (6.1%), "Health" (5%), Miscellaneous goods and services (4.3%), "Housing and utilities" (4.2%) and "Alcoholic beverages and tobacco" (3.9%).
- Since 2008, the highest rates of inflation have been recorded for "Education" (5.6%), "Miscellaneous goods and services" (4.5%), "Health" (2.8%) and "Alcoholic beverages and tobacco" (2.4%).
- A high rate of inflation in a category does not necessarily mean that the category is a significant driver of inflation. For example, while Education has a consistently high rate of inflation, it has the smallest weighting within the CPI basket; this minimises its contribution to the total rate of inflation.
- In the period 2003 to 2012 the top five contributors to CPI inflation were "Housing and utilities", "Restaurants and hotels", "Transport" "Miscellaneous goods and services" and "Alcoholic beverages and tobacco".
- Since the recession the drivers of inflation have been "Miscellaneous goods and services", "Transport", "Alcohol and tobacco", "Education" and "Health".

3.1 Consumer Price Index

Figure 8 illustrates the year-on-year rate of inflation as measure by the CSO's consumer price index (CPI).

Figure 8: Annual Rate of CPI Inflation, 1997-2012



Ireland’s annual rate of CPI inflation peaked in 1999 at 5.5% when the country joined the monetary union. Inflation remained relatively high up to the end of 2008 before entering a two year deflationary period. Inflation reached 2.5% in 2011 falling back to 1.7% in 2012.

Source: CSO, Europe Economics calculations

Table 9 illustrates the average annual change in the CSO consumer price index (CPI). The periods under consideration are broken into pre-euro (1997-1998)⁴⁰, post-euro and pre-crisis (1999-2007) and post-crisis (2008-2012). In the two years leading up to the introduction of the euro in 1999, Irish consumer price inflation averaged 1.9 per cent per year. From 1999 to 2007, average annual inflation more than doubled, rising to 3.7 per year⁴¹. In the aftermath of the recession and financial crisis Ireland has experienced only mild inflation, with an average annual rate of 0.6 per cent over the period - this average actually includes two years of deflation. Over the entire period considered, Irish prices increased approximately 2.5 per cent each year.

Table 9: Average Annual CPI Inflation in Ireland: 1997 -2012

Country	1997-1998	1999-2007	2008-2012	1997-2012
Ireland	1.9%	3.7%	0.6%	2.5%

Source: CSO, Europe Economics’ Calculations

40 Although the CSO headline CPI series goes as far back as 1922, we sampled data from the pre-euro period from 1997 onwards. This is to be consistent with other sources, such as the OECD, that provide sufficiently complete data starting around 1997.

41 Forfás has previously commissioned work on the price level dynamics associated with the transition to the euro. This work found some “unusual” price behaviour during the transition to the euro, perhaps due to “euro” pricing, price updating policies due to menu costs, or rounding of prices by firms that deal primarily in notes. For more on this, see: PricewaterhouseCoopers (2002) “Comparative consumer prices in the Euro area & consumer price inflation in the changeover period”.

3.2 Irish consumption profile

Table 10: Average Weights for Irish inflation categories, 2002-2013 (All Items = 100)

COICOP category	Average 2002-2013
Restaurants and hotels	16%
Housing, water, electricity, gas and other fuels	15%
Transport	14%
Food and non-alcoholic beverages	13%
Recreation and culture	10%
Miscellaneous goods and services	9%
Alcoholic beverages and tobacco	7%
Clothing and footwear	5%
Furnishings, household equipment etc.	4%
Health	3%
Communications	3%
Education	2%
Total	100%

Note: The weights have been adjusted four times since 2002. From 2012 onwards, item weights are updated every 12 months.

Source: CSO

The consumption profile of Irish households can be derived from weights used to construct the CPI. In Table 10, key product and service (COICOP items) categories are ranked according to their average weights in the CPI basket from 2002 to 2013⁴².

Based on a weighted average for the 2002-2013 period, the top five expenditure categories are "Restaurants and hotels", "Housing, water, electricity, gas, and other fuels", "Transport", "Food and non-alcoholic beverages", and "Recreation and culture".

At the bottom of the consumption hierarchy are "Clothing and footwear", "Furnishings, household equipment and routine household maintenance", "Health", "Communications", and "Education".

⁴² Item weights based on the current COICOP categorisation are only available from 2002 onwards; thus it is not possible to analyse the CPI weights or contributions of individual COICOP categories prior to this.

3.3 Inflation in Irish product categories

Table 11 presents average annual CPI inflation at COICOP level 1 and highlights those categories in each time period with high rates of inflation (i.e. those categories with a rate of inflation above the “all items” rate of inflation).

Table 11: Average annual CPI inflation by COICOP category, 1997-2012

COICOP category	1997-1998	1999-2007	2008-2012	1997-2012
All items	1.9%	3.7%	0.6%	2.5%
Alcoholic beverages and tobacco	3.3%	4.9%	2.4%	3.9%
Clothing and footwear	-6.0%	-3.8%	-5.6%	-4.6%
Communications	-3.8%	-1.4%	0.7%	-1.0%
Education	-0.2%	7.7%	5.6%	6.1%
Food and non-alcoholic beverages	2.8%	2.3%	0.0%	1.7%
Furnishings, household equipment etc.	2.5%	0.6%	-2.7%	-0.2%
Health	4.3%	6.4%	2.8%	5.0%
Housing, water, electricity, gas and other fuels	1.3%	7.2%	-0.1%	4.2%
Miscellaneous goods and services	4.1%	4.3%	4.5%	4.3%
Recreation and culture	1.8%	2.9%	-0.5%	1.7%
Restaurants and hotels	3.5%	5.0%	0.0%	3.2%
Transport	1.8%	3.1%	2.3%	2.7%

Source: CSO; Europe Economics' calculations

A large degree of variability is evident across the various time periods. For instance:

- “Alcoholic beverages and tobacco”, “Miscellaneous goods and services” and “Health” stand out as having persistently high inflation across all periods while “Education” has experienced high inflation since 1999;
- “Food and non-alcoholic beverages” — often considered as one of the most volatile inflation categories — had relatively high rates of inflation between 1997 and 2007. Since then, however, it has had limited impact on inflation.
- Not surprisingly, “Housing, water, electricity, gas and other fuels” experienced high annual inflation between 1999 and 2007 (averaging 7.2 per cent per annum). Since

2008, however, housing and utility prices have been amongst the most unstable in Ireland.

3.4 Contribution to headline CPI inflation

The following charts illustrate the average annual rate of inflation for each of the twelve COICOP categories and the contribution made by each category towards total inflation over a given time period (i.e. the contribution to total inflation being a function of the inflation rate and the weight attributed to it in the CPI basket)⁴³. Due to data limitations it is only possible to calculate the contribution to CPI inflation from 2003 onwards⁴⁴.

Each of the charts is divided into four quadrants and can be used to identify areas which should be prioritised for policy action. Average annual inflation for each category is measured on the y-axis while its contribution to total inflation is measured on the x-axis.

Categories highlighted within the red square in the top right quadrant have high inflation rates and make a significant contribution to the overall inflation rate. As such, these categories are significant drivers of inflation and should be the primary focus for policy efforts to reduce inflation. Categories in the top right quadrant but outside the red square have relatively high inflation rates but their impact on the overall inflation rate is minimised by the low weightings assigned to them. While measures targeted at addressing these rapid price rises could have some positive impact, any ensuing reduction in inflation in these categories would yield, at best, a moderate decrease in overall inflation.

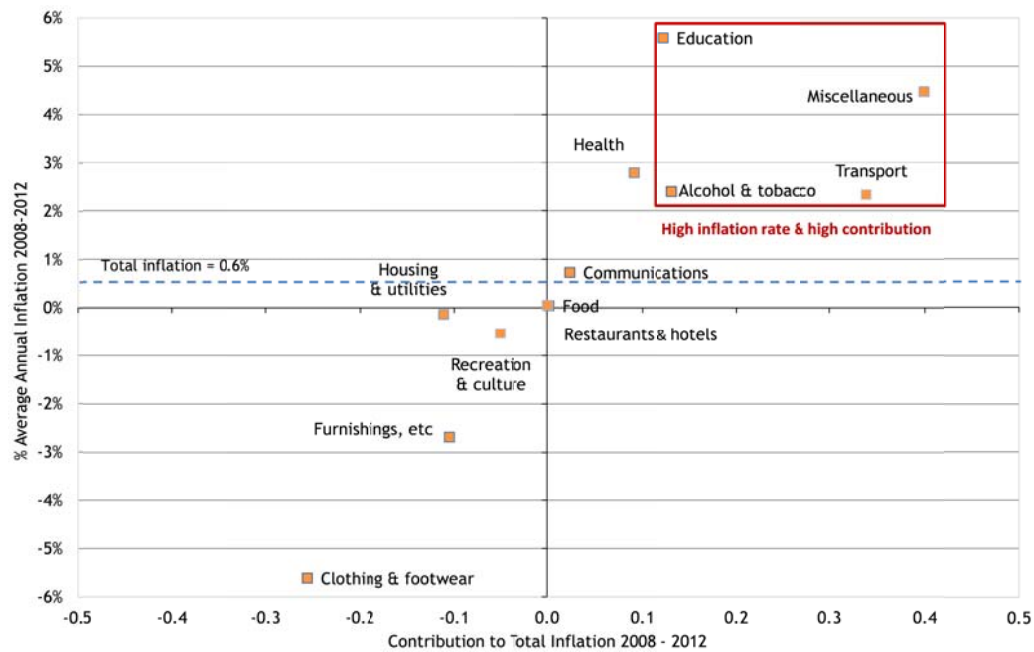
Categories in the lower left quadrant experienced deflation during the period being analysed and acted as a downward pressure on overall inflation. In these categories, it is likely there is limited scope for policy measures to further deflate prices.

Figure 9 focuses on the 2008 to 2012 period when annual inflation averaged 0.6 per cent per annum.

43 As the CPI categories were reweighted several times during the periods being analysed, the average weight for each category has been calculated.

44 See Appendix 4 Table A4 for the contribution of each COICOP category over a range of time periods for which data is available.

Figure 9: Average Annual Inflation and Contribution to Total Inflation, 2008 -2012



Source: CSO, Europe Economics and Forfás calculations

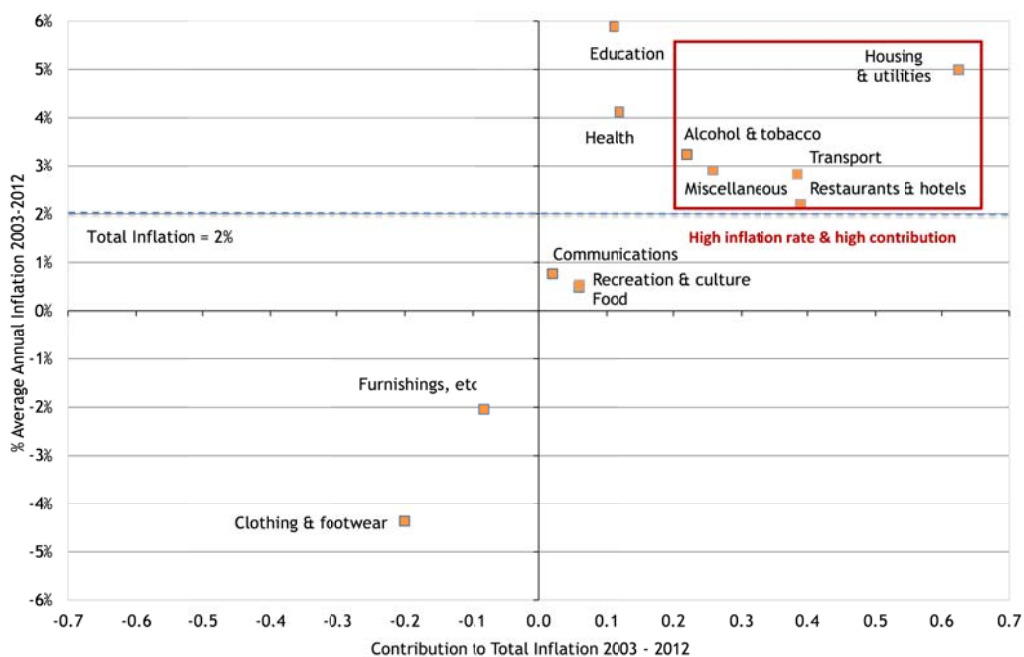
Looking at the individual product categories, we find that:

- The largest contributor to inflation was the “Miscellaneous goods and services” category (shown as Miscellaneous) which saw prices increase by an annual average of 4.5 per cent. Given the disparate nature of this category which includes a wide array of items such as hairdressing, childcare, financial services and various types of insurance, it is necessary to further disaggregate the components of this category and individually assess their impacts on the overall rate of inflation (see Section 4.6).
- “Transport” was the second largest contributor to inflation during this time, with prices increasing at an average of 2.3 per cent per annum. The relatively high weighting accorded to the “Transport” component in the CPI basket resulted in it making a large contribution to the overall rate. By comparison, inflation in Alcoholic beverages and tobacco (2.4%) was similar to that of “Transport” during this period. However, it contributed 0.1 percentage points to overall inflation compared to “Transport” which contributed 0.3 percentage points.
- The category with the highest rate of inflation was “Education” at 5.6 per cent, over nine times the annual average total inflation rate. Even though Education has a low average weighting within the CPI basket (2.1%), its high rate of inflation combined with deflation elsewhere meant it accounted for a fifth of total inflation during the period.
- “Health” with average annual price increases of 2.8 per cent, contributed a 0.1 per cent to total inflation over period.
- Average prices in both the “Food and non-alcoholic beverages” and “Restaurants and hotels” categories remained largely flat between 2008 and the end of 2012, meaning they did not impact on the overall rate.

- The “Housing, water, electricity, gas and other fuels” category experienced slight deflation over the period (resulting in a reduction in overall prices levels of 0.1 per cent over the period).
- “Recreation and culture” also experienced deflation but with minimal impact on the overall figure.
- “Clothing and footwear” (-5.6%) had the highest level of deflation, followed by “Furnishings, household equipment and routine household maintenance” (-2.7%). Combined, they resulted in a reduction of 0.4 per cent in the average annual total inflation rate.

Figure 10 extends this analysis over a longer time period (2003-2012). Over this period, inflation averaged two per cent per annum.

Figure 10: Average Annual Inflation and Contribution to Total Inflation, 2003 -2012



Source: CSO, Europe Economics and Forfás calculations

The largest contributors to inflation over this extended time period were:

- “Housing, water, electricity, gas and other fuels” with average inflation of five per cent per annum and contributed an average of 0.6 per cent to total inflation each year. This category was responsible for a third of all inflation over the period.
- “Restaurants and Hotels” and “Transport” each had higher than average inflation per annum and accounted for approximately a fifth of total inflation between 2003-2012

- Other significant contributors to total inflation include the “Miscellaneous goods and services” and “Alcoholic beverages and tobacco” categories;
- Finally, “Education” and “Health” had particularly high inflation rates but due to weighting effects had a less significant impact on total inflation.

These findings provide the rationale for the subsequent sectoral analysis in the next chapter.

4 Irish Sectoral Analysis

This chapter examines in more detail a number of individual product categories that were identified as major drivers of inflation in earlier chapters. The chapter looks at:

- “Housing, water, electricity, gas and other fuels”;
- “Restaurants and hotels”;
- “Transport”;
- “Miscellaneous goods and services”.

These sectors were identified as significant drivers of general inflation.

- “Education” and “Health” are also examined because of their consistently high rates of inflation over time.
- Given the importance of “Food and non-alcoholic beverages” within both the HICP and CPI baskets this category is also considered.
- “Clothing and footwear” is also considered as it is of particular interest given the persistent deflation recorded in the COICOP over all time periods.

Finally the chapter considers an amalgamation of various goods and services - generally referred to as “Administered prices” - in order to assess the impact of Government influenced prices.

As per previous chapters, analysis is conducted using HICP data to compare Ireland and the euro area-17, followed by an analysis of national CPI data. Eurostat purchasing power parity (PPP) data is then used to assess Ireland’s price level relative to the EU-27 and euro area-17. The review of each category concludes by providing the relevant policy context and highlighting areas where action may be required.

4.1 Housing, water, electricity, gas and other fuels

The “Housing, water, electricity, gas and other fuels” COICOP covers rents, mortgage interest repayments, waste collection and disposal charges, goods and services for maintaining, decorating and repairing dwellings and domestic energy products such as electricity, gas home heating oil and solid fuels.

Key Findings:

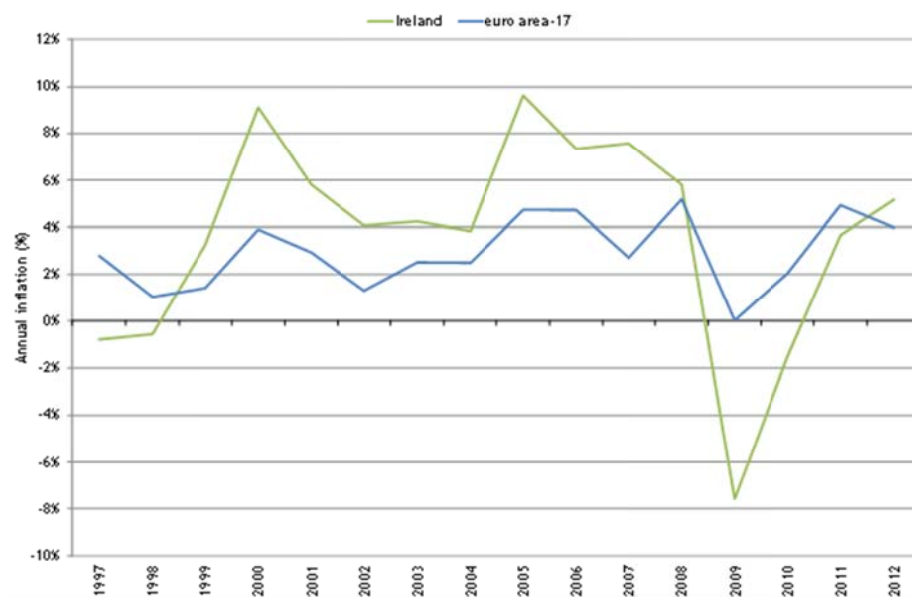
- Over the period 1997 to 2012, average annual HICP inflation in “Housing and utilities” was 0.8 percentage points above the euro area-17 average, negatively impacting upon Irish competitiveness.
- “Housing and utilities” was the largest contributor to CPI measured inflation between 2003 and 2012, accounting for 30 per cent of inflation over the period.

- The gap between Irish and European price levels for “Housing and utilities” was at its largest in 2002 when Irish price levels were 37.9 per cent above the euro area-17. As a result of a sharp decline in prices from 2009 onwards, Irish price levels were 4.2 per cent above the euro area-17 average in 2012.
- The affordability of housing in Ireland declined significantly between 1996 and 2008. Thereafter, house prices fell rapidly resulting in improved affordability. The improvement in the house price-disposable income ratio represents an improvement in Ireland’s competitiveness from a cost of living perspective.
- Policy actions in this area should focus on avoiding future property bubbles, improving planning, increasing urban density.
- In 2012, the Irish price level for “Electricity, gas and other fuels” was 8.2 per cent above the EU-27 and 2.6 per cent above the euro area-17.
- Ireland remains reliant on imported energy commodities to meet demand. This means a significant component of Irish energy prices are determined by fluctuations in the world energy commodities market.
- Ireland’s energy costs are also influenced by a range of domestic policy decisions (e.g. the regulatory framework, provision of domestic subsidies for peat and renewable energy, planning delays and competition issues etc.). Effective action to reduce Irish energy price levels or inflation will require these issues to be addressed.
- The introduction of domestic water charges in 2014 will represent a significant new cost for households. It is important that inefficiencies in the delivery of water and waste water services are minimised and that water prices are cost reflective and passed on to all customers in a fair and transparent manner.

4.1.1 International and National Trends

This category, referred to hereafter as “Housing and utilities” was identified as a significant driver of inflation, most notably within CPI measured inflation. It is important to note that mortgage interest which accounts for 31 per cent of this category within the CPI is excluded from the HICP.

Figure 11: Annual Rate of HICP Inflation for Housing and Utilities, 1997-2012

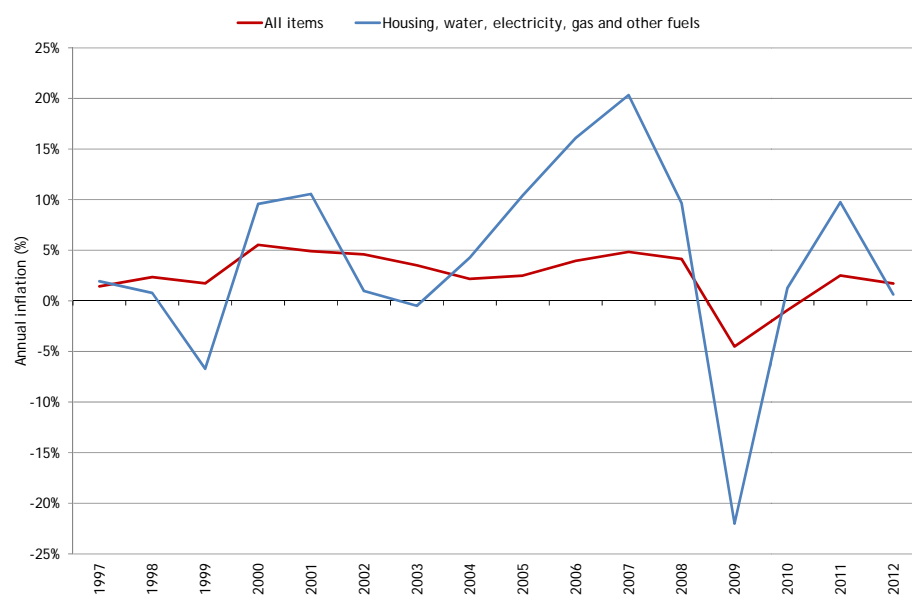


According to the HICP, average annual inflation in this category for 1997-2012 in Ireland was 3.7 per cent compared to 2.9 per cent for the euro area 17 average.

Source: Eurostat, Europe Economics calculations

As discussed in Chapter 3, this category was the largest contributor to CPI measured inflation in the 2003 to 2012 period, accounting for 30 per cent of inflation over the period.

Figure 12: Annual Rate of CPI Inflation for Housing and Utilities, 1997-2012



This is due in part to particularly high rates of inflation during the boom period combined with the significant weighting assigned to this category. Figure 12 shows year-on-year inflation for both overall CPI inflation and for “Housing and utilities”.

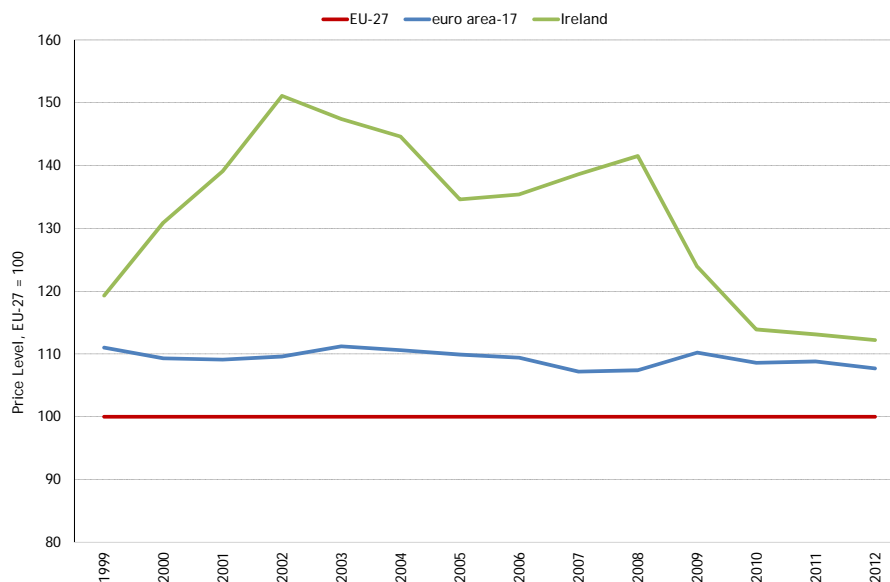
Source: CSO, Europe Economic

4.1.2 Price Levels

Using data from Eurostat on purchasing power parities (PPP), it is possible to establish the relative prices for “Housing and utilities” in Ireland vis-à-vis the EU-27 average and the euro area. It is also possible to use the price relativities to rank Irish price levels relative to other member states.

The “Housing and utilities” price differential was at its largest in 2002 when Irish prices were 51.1 per cent above the EU-27 and 37.9 per cent above the euro area-17. Following a sharp decline in prices levels from 2009 onwards, by 2012 Irish prices for this category were 12.2 per cent more expensive than the EU-27 and 4.2 per cent more expensive than the euro area-17.

Figure 13: Housing and utilities, Price Level Index, (PPPs, EU-27=100), 1999-2012



The Eurostat data shows that between 2007 and 2008, Ireland was the most expensive euro area member for “Housing and utilities”. By 2012, Ireland was ranked seventh most expensive.

Source: Eurostat, Purchasing Power Parities

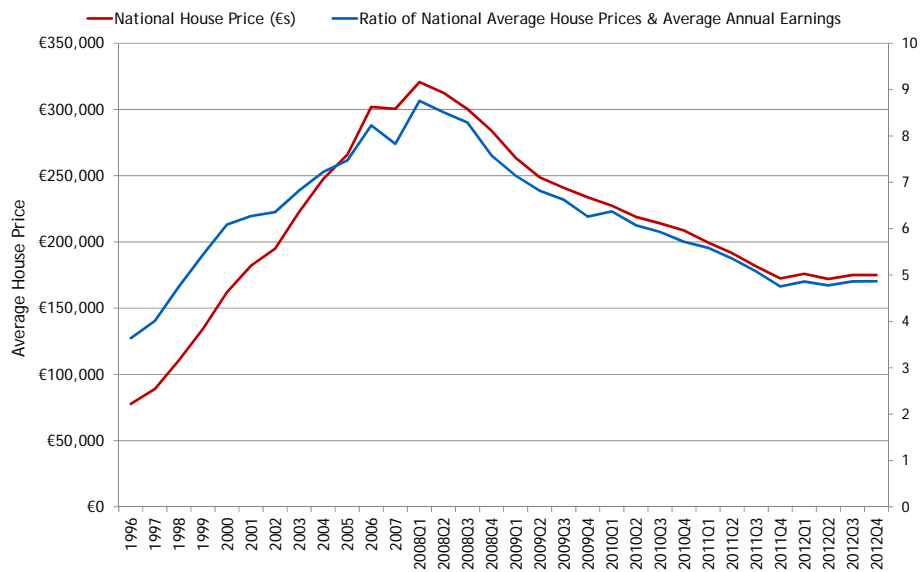
4.1.3 Policy Context

Housing

Housing costs are a significant component of household expenditure. “Actual rental for housing and mortgage interest” accounts for 64.4 per cent of the CPI “Housing and utilities” category.

Elevated house prices can be a drag on competitiveness when house prices or house price growth outstrips growth in disposable income. Figure 14 plots average house prices and the ratio of average house prices to average annual earnings in order to illustrate changes in the affordability of housing in Ireland.

Figure 14: Housing Affordability, 1996-2012



Between 1996 and 2008 the affordability of housing in Ireland declined significantly. The price of housing relative to earnings peaked in Q1 2008 at 8.8. By Q4 2012, following the recession and collapse in property prices, the average house price was €175,000, 4.9 times average annual earnings.

Source: Bank of Ireland Property Review, CSO EHECS Survey, Forfás calculations

After peaking in the first quarter of 2008, Irish house prices fell rapidly resulting in improved affordability - in real terms, Irish house prices are now near 2003 levels, whereas real personal disposable income has declined to 2008 levels (i.e. just prior to the onset of recession). The recent improvement in the house price-disposable income ratio represents a competitiveness gain for Ireland from a cost of living perspective.

The lower house price/disposable income ratio means that Irish residents have more disposable income after paying for housing. This could benefit the economy by increasing the level of funds available for consumption and investment in more productive assets. On the other hand, declining house prices negatively impact upon the stock of wealth of existing home owners.

A recently established Inter-Agency Group on the Property Market is leading cross-Government co-ordination of policy formulation and implementation in the context of the future orientation of the domestic property sector (commercial and residential). A sub-group has been formed to consider supply and demand issues in the property market. Given the serious consequences of the recent property boom and subsequent collapse, it is essential that the subgroup develops policy recommendations to avoid future hyperinflation of housing prices.

The National Competitive Council's report on city competitiveness noted that while property prices have fallen significantly in recent years, a range of land use policy actions could further increase the availability of competitively priced housing and business premises⁴⁵. Increasing density in Irish cities is a key element to improving the effectiveness and efficiency of planning. Carefully located and designed high density developments, with social, educational and recreational facilities, together with world class transportation connections offer the possibility of increasing the supply of both commercial and residential property in a more cost effective and environmentally sustainable manner.

45 National Competitiveness Council, "Our Cities; Drivers of National Competitiveness", Forfás, 2009.

Recommendations:

- The Inter-Agency Group on the Property Market should develop policy recommendations to avoid the creation of future sustained property bubbles.
- Falling land and property prices do not reduce the necessity for structural change in respect of land planning. An integrated approach to land use and transport policies is critical to allow the efficient movement of people and goods and to improve the viability of public transport.
- Combining carefully located, well designed high density developments with social, educational and recreational facilities and world class transportation connections offers the possibility of increasing the supply of both commercial and residential property in a more cost effective and environmentally sustainable manner.

Energy Costs

“Electricity, gas and other fuels” is the second largest sub-component within “Housing and utilities”, accounting for 29 per cent of the category. According to Eurostat PPP data, in 2012 the Irish price level for “Electricity, gas and other fuels” was 8.2 per cent above the EU-27 and 2.6 per cent above the euro area-17 average level. The differential peaked in 2005, when Ireland was 16.7 per cent above the EU-27 and 8.5 per cent above the euro area-17.

Ireland is extremely dependent on imported energy commodities for inputs into domestic power generation. Despite a push for developing domestic energy production capacity via renewables, Ireland remains reliant on imported energy commodities to meet domestic demand. Roughly 89 per cent of Ireland’s energy consumption comes from imported sources and Ireland has the fourth highest energy import dependency rate in the EU 27, with only small island countries (Malta and Cyprus) and one landlocked (Luxembourg) country importing a higher proportion of energy consumption than Ireland⁴⁶. The UK, by comparison, imports 36 per cent of its domestic energy consumption.

Given Ireland’s heavy dependence on imported energy to meet domestic consumption, world energy commodity prices are likely to exert significant influence on domestic Irish energy prices. The impact of energy commodity prices on Irish inflation is examined further in section 4.5 (Transport).

While a large element of energy costs are determined by international fuel prices, Ireland’s energy costs are also influenced by a range of domestic policy decisions, including:

- **Regulatory framework:** In terms of price regulation, from an enterprise perspective only network charges are now regulated. Residential retail gas prices are also regulated by the CER. The regulator also plays a role in ensuring effective competition in the electricity and gas retail markets and the Single Energy Market (SEM) Committee is responsible for the all island electricity wholesale market.
- **Domestic subsidies:** There are subsidies for electricity generated from peat (which increases carbon emissions) and renewable energy (which reduces emissions) which add to costs. In its recent report on the Irish energy market, the IEA recommended

⁴⁶ http://europa.eu/rapid/press-release_STAT-13-23_en.htm

decreasing incentives for specific technologies over time to ensure market competitiveness⁴⁷;

- Planning delays: Delays in completing the North-South interconnector are negatively affecting the efficient functioning of the SEM and are estimated to be costing approximately €20-30 million per annum, which means higher costs for Irish electricity consumers (business and residential);
- Structural issues: While competition has increased both in the electricity generation and supply markets in recent years, the IEA review raised concerns about the level of State involvement in the energy market and the need for further market reform to increase competition⁴⁸.
- Company cost structures: The cost structures of the energy companies in each of the market segments also influence the costs of the services provided.
- Energy use: Reducing energy use is one of the most effective ways to cut energy costs. A 2012 European Commission report found that Ireland's average household energy consumption level was the third highest within the EU-27⁴⁹. While Ireland's performance is negatively impacted by larger average dwelling sizes, the data would suggest room for improving energy conservation behaviours among Irish consumers.

Greater detail on these issues is available in the Forfás report on sectoral regulation⁵⁰.

Recommendations;

- A strong regulatory focus is needed to drive greater efficiencies in the operating, maintenance and capital costs of transmission and distribution network.
- Decrease subsidies for specific technologies over time to ensure market competitiveness, in line with the recommendations from the IEA.
- Prioritise completion of North-South interconnector to ensure the efficiencies of the SEM are fully exploited.
- Continue to review the electricity market both in terms of the depth of State involvement in the sector and also the unbundling of the incumbent's vertically integrated assets, in line with EU legislation.
- Government should encourage energy companies, both regulated and unregulated, to take all necessary steps to improve efficiencies and reduce their costs.
- Government, State agencies and energy stakeholders should support greater energy conservation awareness and behaviour among consumers by highlighting the potential

47 IEA, Energy Policies of IEA Countries - Ireland 2012 Review, July 2012

48 The 2011 OECD Economic Survey of Ireland made similar recommendations, in particular it recommended that some of ESB's price setting generation plant should be divested to reduce ESB's dominance and increase competition.

49 European Commission, Energy Efficiency Status Report, 2012.

50 Forfás, Sectoral Regulation - Study to Identify Changes to Sectoral Regulation to Enhance Costs Competitiveness, April 2013

cost savings available. The completion of the smart electricity metering programme is an important step in promoting more efficient energy usage⁵¹.

Domestic Water Charges

A new system of water charges is being introduced for homes that are connected to a public water supply. The Commission for Energy Regulation will devise the scheme of water charges and the new public water authority, Irish Water, will administer the charges. Water meters are being installed at present and the first bills for domestic water will issue in 2015. The water charges will be captured under this COICOP category. Elsewhere, Forfás has made a number of detailed recommendations in relation to reform of water policy in Ireland which include, but are not limited to, proposed actions in relation to ensuring cost competitiveness⁵².

Recommendations;

- Reduce inefficiencies in the delivery of water and waste water services. In particular, we need to bring operating, maintenance and capital costs into line with international best practice.
- It is essential that water prices are cost reflective and are passed on to all customers in a fair and transparent manner.

4.2 Restaurants and Hotels

The “Restaurants and Hotels” COICOP includes meals in restaurants and hotels, fast food and takeaways; cafes; canteens; alcohol consumed on or within a licensed premises and accommodation services supplied by hotels, guesthouses or hostels.

Key Findings:

- Between 1997 and 2012 Ireland’s average annual inflation rate for this category was 0.6 percentage points above the euro area-17. “Restaurant and hotels” accounted for a quarter of Ireland’s total inflation during the period, compared to 10.8 per cent of the euro area total.
- Irish rates of inflation across all sub-components exceeded euro area-17 rates until 2007. In the recessionary period (2008-2012), prices in Ireland increased at a slower rate than the euro area-17 average. “Accommodation services” in Ireland have seen a notable improvement in relative cost competitiveness with deflation of 4.8 per cent

51 For details of the impact of Smart Metering on consumer behaviours see CER, Electricity Smart Metering Customer Behaviour Trials (CBT) Findings Report, 2011.

52 See the Joint Enterprise Agency Submission on Water Sector Reform, 2012 and Forfás report on Sectoral Regulation 2013.

compared with euro area inflation of 0.9 per cent.

- Alcohol in “Licenced premises” and “Restaurants, cafes, fast food and take-away food” are the two main elements driving inflation in the “Restaurants and hotels” category.
- While the cost competitiveness of Irish “Restaurant and hotels” has improved since the recession, in 2012 Irish price levels remained 21.8 per cent above euro area-17 average.
- The focus for policymakers aiming to improve Ireland’s cost competitiveness in this area should be to ensure that the alcohol licensing regime supports a competitive market with limited barriers to entries.

4.2.1 International and National Trends

The “Restaurants and hotels” category has the highest weighting in the Irish HICP basket and the second highest weighting within the 2013 CPI basket. As shown earlier this category had consistently high rates of inflation and made significant contributions to headline inflation as measured by both the HICP and CPI.

Figure 15: Annual Rate of HICP Inflation for Restaurants and Hotels, 1997-2012



Annual average Irish HICP inflation for this category for the period 1997-2012 was 3.2 per cent compared to a euro area-17 average of 2.6 per cent. A quarter of overall inflation in Ireland during this period was attributable to this category while it accounted for 10.8 per cent of euro area-17 inflation.

Source: Eurostat, Europe Economics calculations

Figure 15 shows that HICP inflation in this category was consistently above the euro area-17 until the economic collapse of 2008. This was followed by a three year period of deflation in Ireland while prices continued to rise within the monetary union; 2012 saw a return to inflation (0.5%) in Ireland albeit at a lower rate than euro area-17 average (1.9%).

Table 12: Average annual inflation in "Restaurants and hotels" HICP, 1997-2012

	1997-1998		1999-2007		2008-2012		1997-2012	
	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area
Restaurants and hotels	3.4%	2.1%	4.9%	3.0%	0%	2.1%	3.2%	2.6%
Catering services	3.4%	2.0%	4.8%	3.0%	0.9%	2.3%	3.4%	2.6%
Restaurants, cafés and the like	3.4%	2.0%	4.8%	3.0%	0.6%	2.3%	3.3%	2.7%
Canteens	3.0%	1.8%	4.6%	2.3%	2.7%	2.4%	3.8%	2.3%
Accommodation services	4.8%	2.8%	5.6%	3.3%	-4.8%	0.9%	2.2%	2.5%

Eurostat, Europe Economic calculations

Table 12 shows that until 2008, the Irish HICP rate of inflation in all sub-components of the category was above that of the euro area. It also shows, unsurprisingly, that inflation was highest during the boom period of 1999-2007. Since then the rate of inflation has fallen below the euro area average and there has been pronounced deflation (-4.8%) in the accommodation services sub-component.

Figure 16: Annual Rate of CPI Inflation for Restaurants and Hotels, 1997-2012

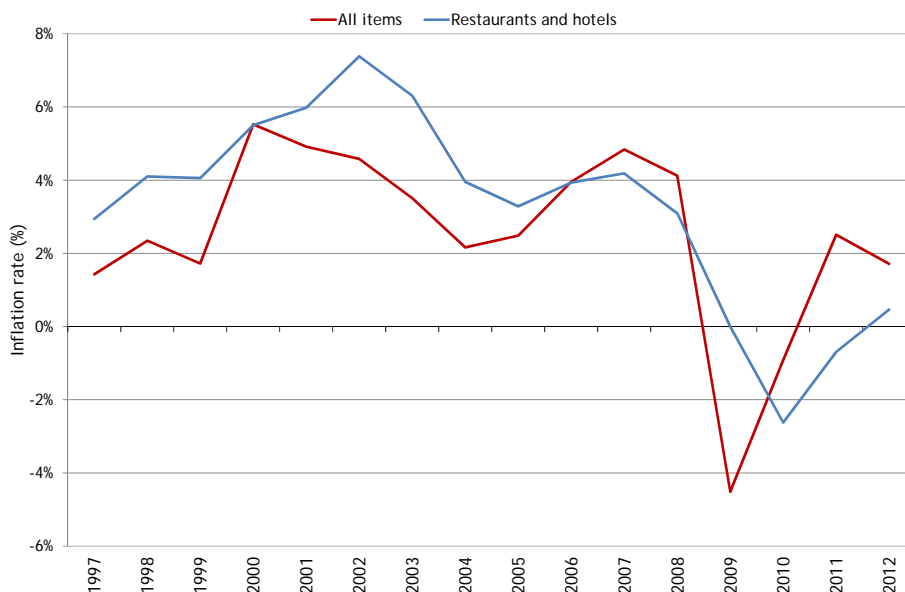


Figure 16 examines CPI data for restaurants and hotels. The annual rate of CPI inflation for this category outstripped general inflation from 1997 until 2006. Thereafter, inflation in this category has generally been below the headline figure.

Source: CSO, Europe Economic

Based on 2013 weightings, expenditure on “Restaurants and Hotels” accounted for 15.2 per cent of the CPI basket. Alcohol sold within “licenced premises” is the largest sub-component of this category, accounting for 6.7 per cent of the CPI basket. This is followed by “Restaurants, cafes, fast food & take away food” (5.2%), Accommodation services (1.9%) and “Canteens” (1.3%). The following table breaks out average annual inflation across these sub-components.

Table 13: Inflation in “Restaurants and hotels” CPI, 1999-2012

	1999-2007	2008-2012	1999-2012
Restaurants & hotels	5.0%	0%	3.2%
Catering services	4.8%	0.9%	3.4%
Restaurants, cafes & the like	4.8%	0.6%	3.3%
Licensed premises	4.6%	1.0%	3.3%
Spirits	5.4%	1.0%	3.8%
Wine	4.4%	0.6%	3.1%
Beer	4.4%	1.0%	3.2%
Soft drinks & mineral water	5.7%	1.3%	4.1%
Restaurants, cafes, fast food and take-away food	5.3%	0.1%	3.4%
Canteens	4.6%	2.7%	3.9%
Accommodation services	5.6%	-4.8%	1.9%

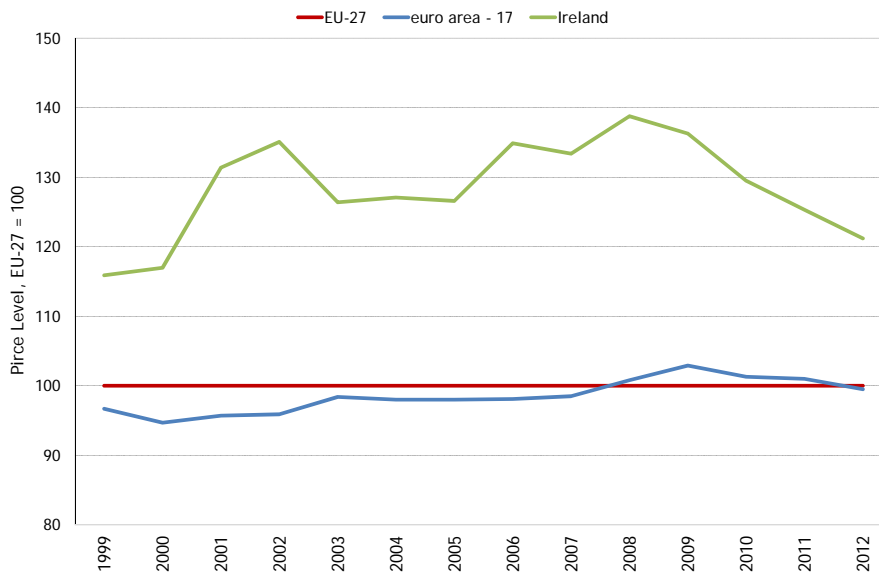
CSO, Europe Economic calculations

The high weightings and high rates of inflation of “Licensed premises” and “Restaurants, cafes, fast food and take-away food” makes these sub-categories key drivers of inflation in “Restaurants and hotels”, one of the major sources of headline Irish inflation.

4.2.2 Price Levels

According to Eurostat’s PPP data, Ireland has the highest price level for “Restaurants and hotels” in the euro area-17 (Figure 17).

Figure 17: Restaurants and Hotels, Price Level Index, (PPPs, EU-27=100), 1999-2012



The price differential between Ireland and the euro area-17 peaked in 2008 when Irish prices were 37.7 per cent higher. Since then the differential has narrowed and by 2012 it stood at 21.8 per cent, its lowest point since 1999. Therefore despite prices improvements, Irish price levels remain far above the euro area average.

Source: Eurostat, Purchasing Power Parities

4.2.3 Policy Context

Competition in the Pub Sector

Insufficient competition in a sector can result in inefficiencies, which in turn yield higher prices. At an industry level, there has been evidence of weak competition in Ireland in the licensed premises sector – and particularly urban pubs sector historically. In 2000, the OECD recommended that a number of competition reforms be implemented in the pubs sector⁵³.

The OECD found that the pub licensing system has been a persistent impediment to effective competition in the sector since at least 1925. The historical response had been to impose price controls via the Prices Act rather than facilitate new entry. This created an environment of under-supply of pubs which drove up the prices of pub licenses and the price of alcohol in pubs in general and in Dublin relative to the rest of the country in particular.

As part of Budget 2011 a review of the alcohol licensing regime was announced. In October 2012, a Tax Strategy Group paper noted that there has been no follow through on this to date, however, “the option to carry out the review remains⁵⁴”. Such a review might best be progressed in the context of the planned Sale of Alcohol Bill, 2014⁵⁵.

In addition to concerns about the lack of competition in the pub sector, it is noted that the wholesale and distribution sector in Ireland is quite concentrated which could be influencing the level of price inflation in the sector.

53 OECD (2000) “Ireland - the role of competition policy in regulatory reform”

54 TSG 12/20, General Excise Duties - Tobacco and Alcohol Products, October 2012

55 This Bill will update the law relating to the sale, supply and consumption of alcohol on licensed premises by repealing the Licensing Acts 1833 to 2011, as well as the Registration of Clubs Acts 1904 to 2008, and replacing them with provisions more suited to modern conditions.

Recommendation:

Proceed with a review of the alcohol licensing regime to ensure a competitive market exists for the sale of alcohol in both licenced and off-licence premises and to ensure that the market is open to new entrants.

Jobs Initiative VAT Rate Reduction

In May 2011 the Government announced a series of measures to boost employment. A key aspect of the Jobs Initiative involved a reduction in the rate of VAT which was targeted mainly at labour intensive goods and services relating to tourism. In this context, a temporary rate of VAT at 9 per cent (as opposed to 13.5 per cent) was introduced with effect from 1st July 2011 until end-December 2013 for a limited number of sectors⁵⁶. The measure was estimated to cost €350 million in a full year.

Analysis by the Department of Finance revealed that prices for the sectors covered by the special VAT rate declined by 1.3 per cent when averaged over the twelve months after its introduction⁵⁷. However, the cyclical nature of hotel and accommodation pricing skewed the data somewhat (resulting in a 2.5 per cent price decrease over the first six months and a 1.9 per cent increase in the second six months). Excluding “Hotels and accommodation” from the analysis, the data reveals a decline of just under two per cent for the year. Given that headline inflation for the period was 1.7 per cent, it is likely that some of the gap between the actual price decrease in the affected sectors and the VAT rate reduction can be accounted for by economy wide inflation.

The study also looked for evidence of pass through of the VAT reduction at a sectoral level. Given a general downward trend in hotel prices since June 2007, it was not possible to make a conclusive judgement on the degree to which the special rate influenced prices here. In the “meals out” category, the reduced VAT rate was found to be partially passed through. The Department found that some of the rate reduction was offset by higher input food prices. The “Hot take away food” category showed little evidence of passing through the reduced rate to consumers and this is attributed to increases in wholesale food prices. The analysis showed clear evidence of a pass through of the VAT reduction for “Hairdressing⁵⁸”, “Admission to cinemas, theatres, musicals, museums and art galleries” and “Newspapers”.

In Budget 2014, the Minister of Finance announced the retention of the special nine per cent VAT rate for the sectors listed above. Given that any potential cost reductions arising from the VAT reduction will have already been realised, further price falls on foot of the announcement to maintain the special VAT rate are unlikely.

56 The supply of food and drink (excluding alcohol and soft drinks), hot take away food and hot drinks, hotel and other tourist accommodation, admission to cinemas, theatres etc. amusement services, provision of facilities for taking part in sporting activities, printed matter and hairdressing.

57 Department of Finance, Mid Term Fiscal Statement, “Measuring the Impact of the Jobs Initiative”, 2012.

58 Despite a significant increase in Hairdressing prices in December as part of the “Christmas” effect, prices returned to November 2011 levels in early 2012.

4.3 Alcoholic Beverages and Tobacco

Alcoholic Beverages and Tobacco

The “Alcoholic Beverages and tobacco” COICOP includes alcoholic beverages purchased in off licenses and supermarkets but excludes alcohol consumed on or within licensed premises (which is captured in the ‘Restaurants and Hotels’ category). It also includes tobacco products.

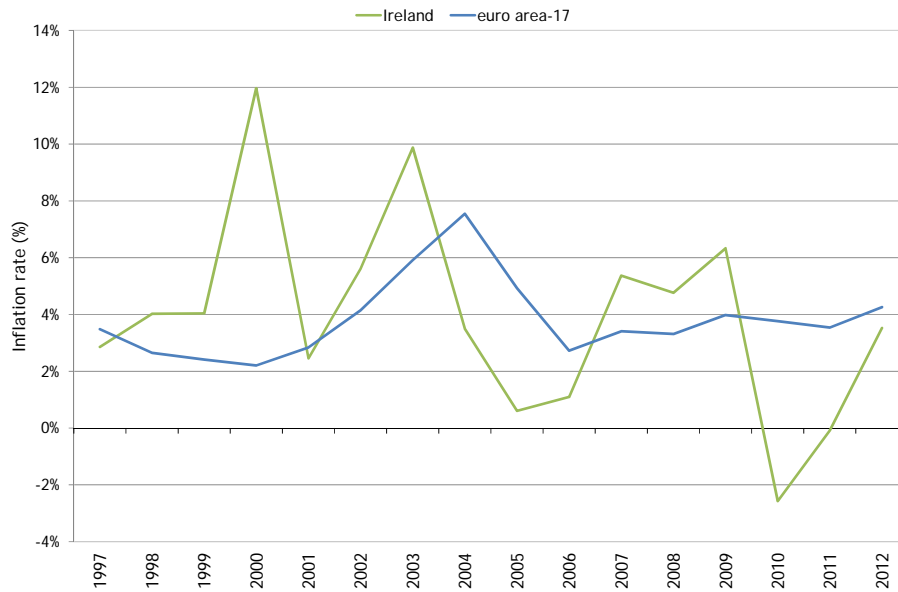
Key Findings:

- Irish inflation rates for “Alcohol and tobacco” are more volatile than the euro area-17 average rate over the period 1997 to 2012.
- CPI measured inflation in this category was higher than overall inflation in eleven out of the sixteen years analysed.
- The rate of inflation for alcohol sold in licensed premises has been consistently higher than the rate for alcohol sold in off-licenses, suggesting that an important portion of the inflation in licensed premises is driven by factors unique to that sector.
- Irish price levels have consistently been between 75 per cent and 82 per cent above the EU-27 and euro area-17 averages between 1997 and 2012. Ireland has been the most expensive euro area member for “Alcohol and tobacco” since 1999.
- A significant proportion of the price differential can be accounted for by the relatively high taxes charges in Ireland for both alcohol and tobacco.
- As with licenced premises, policymakers aiming to improve Ireland’s cost competitiveness in the off licence sector should ensure that the alcohol licensing regime supports a competitive market with limited barriers to entries.
- Policymakers should also ensure that the most appropriate mechanisms are used when seeking to reduce alcohol and tobacco consumption through changes in price.

4.3.1 International and National Trends

“Alcoholic beverages and tobacco” is a significant driver of inflation in Ireland.

Figure 18: Annual Rate of HICP Inflation for Alcoholic Beverages and Tobacco, 1997-2012

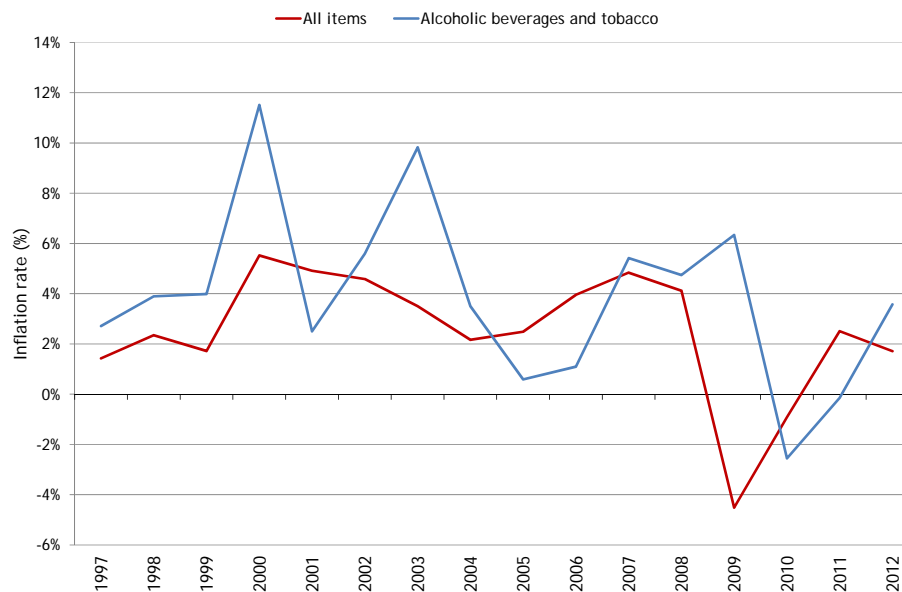


On a year-on-year basis, HICP data shows that inflation rates in Ireland for alcoholic beverages and tobacco are more volatile than rates in the euro area-17. Over the period 1997-2012 average annual HICP inflation in this category was four per cent in Ireland compared with 3.8 per cent in the euro area.

Source: Eurostat, Europe Economics calculations

While the differential in the rates of inflation is small, the larger weight assigned to this category in Ireland means that it made a larger contribution to overall inflation here (14.4%) than it did for the euro area-17 average (7.9%).

Figure 19: Annual Rate of CPI Inflation for Alcoholic Beverages and Tobacco, 1997-2012



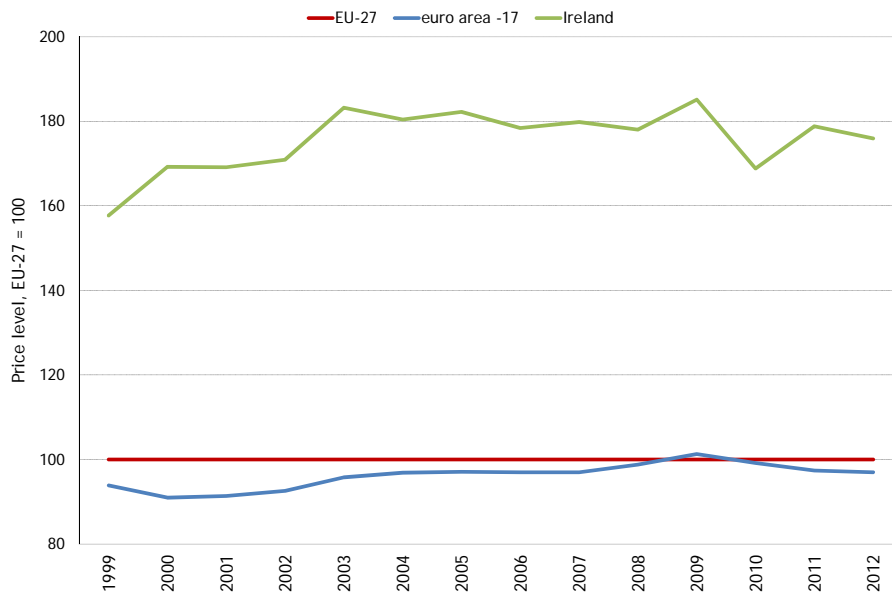
Alcoholic beverages and tobacco has a weighting of 5.4 per cent in the 2013 CPI basket with an almost even split of the weighting between alcohol and tobacco. Analysis of the CPI reveals that inflation in this category was above the overall rate of inflation for 11 out of the 16 years covered by the period 1997 - 2012.

Source: CSO, Europe Economics

4.3.2 Price Levels

Using data from Eurostat on purchasing power parities (PPP), it is possible to establish the relative prices for “Alcoholic beverages and tobacco” in Ireland vis-à-vis the EU-27 average and the euro area.

Figure 20: Alcoholic Beverages and Tobacco Price Level Index, (PPPs, EU-27=100), 1999-2012



Ireland has been the most expensive location, on a PPP basis, for Alcoholic beverages and tobacco within the euro area-17 since 1999. Irish price levels have consistently been between 75 per cent and 82 per cent above the EU-27 and euro area-17 averages over the period.

Source: Eurostat, Purchasing Power Parities

A significant proportion of the price differential can be accounted for by the relatively high taxes charged in Ireland for both alcohol and tobacco. Until recently, Ireland had the highest tobacco tax on cigarettes in the EU. Data from July 2012 shows that Ireland ranks within the top four EU countries for the rates of excise charged on sparkling and still wine, beer and spirits⁵⁹.

The value of excise taxes on tobacco has increased over the period, from €3.00 in 2001 to €5.23 in 2011⁶⁰. While excise taxes in euro terms have fluctuated, total excise and excise tax as a percentage of the retail price has changed very little.

Excise duties on beer and spirits were unchanged from 1994 to 2009. The decrease in Irish prices in 2010 shown in Figure 21 above coincides with a general 20 per cent decrease in the excise rates imposed on alcohol products in Ireland in 2010. As Figure 21 covers the period 1999 to 2012 the effect of the increase in a number of alcohol excise duty rates as part of Budget 2013 are not captured⁶¹.

⁵⁹ Tax Strategy Group 12/20, General Excise Duties (Alcohol and Tobacco Products)

⁶⁰ Revenue Commissioners, Statistical report 2011, 2012

⁶¹ Budget 2013's increase of 10c on beer and spirits was the first increase on beer in nearly 20 years and only brings excise duties back to 1994 levels, while excise on spirits is still below the 2003 level.

Thus, relatively high excise taxes on alcohol and tobacco can in part explain the high price level of these goods in Ireland, but they do not explain inflation differentials.

4.3.3 Policy Context

Alcohol Inflation in licensed and off-license locations

Alcoholic beverages under the “Restaurants and hotels” category are sold in licensed premises for on-site consumption. Prices in the “Alcoholic beverages and tobacco” category are sold for consumption in “off-license” locations. These include traditional off-license retail units that focus solely on the sale of alcohol, but they also extend to all retail premises that sell alcohol for consumption not within their premises. This includes convenience stores and large grocery retailers.

Table 14: Comparison of Alcohol Inflation Rates

	1999-2007		2008-2012		1999-2012	
	Off-license	Licensed	Off-license	Licensed	Off-license	Licensed
Spirits	3.4%	5.4%	-2.6%	1.0%	1.3%	3.8%
Wine	1.5%	4.4%	-0.7%	0.6%	0.7%	3.1%
Beer	1.7%	4.4%	-1.3%	1.0%	0.6%	3.2%

Source: CSO; Europe Economics’ calculations

In each time period considered, alcohol price inflation has been materially higher in licensed premises than in off-license locations, suggesting that an important portion of the inflation in licensed premises is driven by factors specific to that sector. If wholesale alcohol prices (a price both licensed and off-license vendors pay for alcohol) were driving changes, then one would expect to find similar rates of inflation in both industries. The fact that price of alcohol increased at a faster rate in licensed premises may reflect higher operating costs, lack of sufficient competition, or other factors specific to licensed premises.

The Tax Strategy Group has noted there has been a decline in the consumption of alcohol from licensed premises and a shift towards off licence purchases⁶². The reasons for this should not be assumed to be limited to the disparity in prices and the impact of the economic downturn but may also reflect changes in consumer behaviour due to the smoking ban, stricter and better enforcement of drink driving legislation and changing social attitudes in relation to drink driving.

Recommendation:

As recommended in section 4.2.3, proceed with a review of the alcohol licensing regime to ensure a competitive market for the sale of alcohol in both licensed and off-license premises.

⁶² TSG 12/20, General Excise Duties, (Tobacco and Alcohol Products), October 2012

Below Cost Selling / Minimum Unit Pricing

There have been consistent calls for a ban on below cost selling of alcohol by off licences and supermarkets. The Competition Authority and others have argued against such a move with the Competition Authority advocating increased taxation as a more appropriate mechanism to drive down consumption. In October 2013, the Government announced plans to introduce fixed minimum unit pricing (MUP) for alcohol as part of a wider Government strategy to reduce alcohol consumption. The MUP will be set following a cross-border study into the economic and health effects of introducing minimum pricing, possibly in both jurisdictions simultaneously. A number of parties have raised concerns regarding the legality of introducing an MUP. Court proceedings are currently underway in Scotland in relation to a similar policy measure and this issue may ultimately be dealt with by the European Court of Justice. The Government has indicated that if the MUP proposal does not proceed due to legal difficulties, then increases in excise duties will be considered to achieve the same objective.

Recommendation:

A ban on below cost selling or an introduction of minimum unit pricing eliminates market competition while limiting the returns to the taxpayer. Efforts to achieve social objectives in relation to a reduction of alcohol and tobacco consumption by increasing the cost to the consumer should result in the additional revenues raised accruing to the Exchequer/taxpayer and not to the retailer or manufacturer.

4.4 Food and Non-Alcoholic Beverages

Food and non-alcoholic beverages

This category includes food and non-alcoholic beverages purchased in supermarkets, small shops, speciality shops and petrol station forecourt outlets. It excludes meals out which are covered in the "Restaurants and Hotels" category.

Key Findings:

- Average HICP annual inflation in "Food and non-alcoholic beverages" was lower in Ireland (1.7%) than for the euro area (2%) in the 1997 to 2012 period.
- Despite an improvement in recent years, Irish comparative price levels were 11.9 per cent above the euro area average in 2012 and Ireland was ranked the third most expensive country in the euro area.
- Given the limited impact world food commodity prices appear to have on food prices in Ireland, the degree of competition within the grocery sector in Ireland and the competitiveness of the sector relative to other locations is likely to have a significant influence on the price of "Food and non-alcoholic beverages"
- From a policy perspective, it is important that policymakers remain cognisant of the potential impact on grocery prices of efforts to rebalance bargaining power between

suppliers and retailers. In addition, the impact of the revised Retail Planning Guidelines should be monitored and consideration given to the circumstance under which it would be appropriate to remove the floorspace cap within the cities.

4.4.1 International and National Trends

While “Food and non-alcoholic beverages” was not identified in Chapter 3 as a key driver of inflation, on the basis that consumers spend a significant proportion of their income on food and non-alcoholic products; and that Ireland is a relatively expensive location for such products based on Eurostat data, it is worth investigating this category more closely.

Figure 21: Annual Rate of HICP Inflation for Food and Non-Alcoholic Beverages, 1997-2012



Average HICP annual inflation in “Food and non-alcoholic beverages” over the period 1997 to 2012 was lower in Ireland (1.7%) than for the euro area (2%). As illustrated in Figure 21, Irish inflation was consistently above the euro area average from 1997 until 2002. Since then, the Irish rate has generally been lower than the euro area-17 rate.

Source: Eurostat, Europe Economic calculations

Between 1997 and 2012, 3.4 per cent of total Irish HICP inflation was attributable to “Food and non-alcoholic beverages” compared with 14.5 per cent in the euro area.

Figure 22: Annual Rate of CPI Inflation for Food and Non-Alcoholic Beverages, 1997-2012

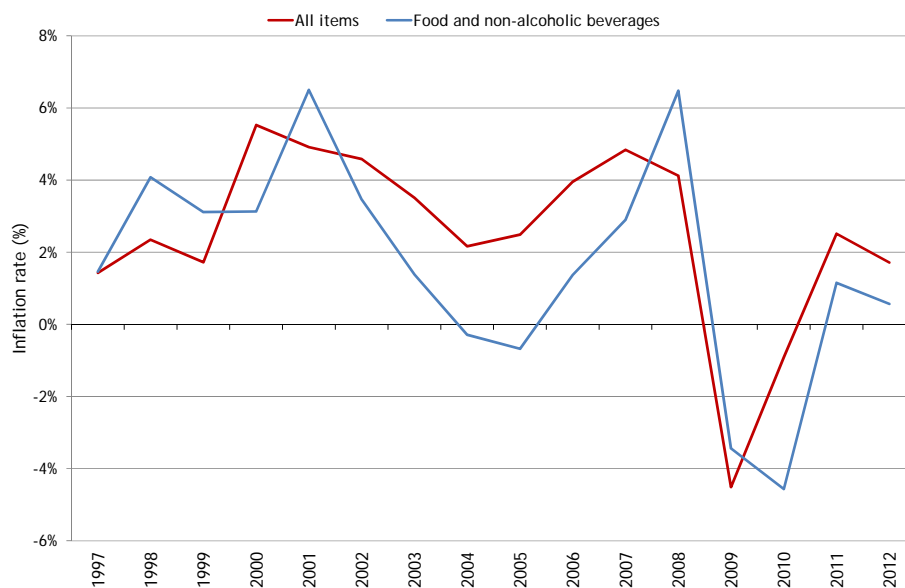


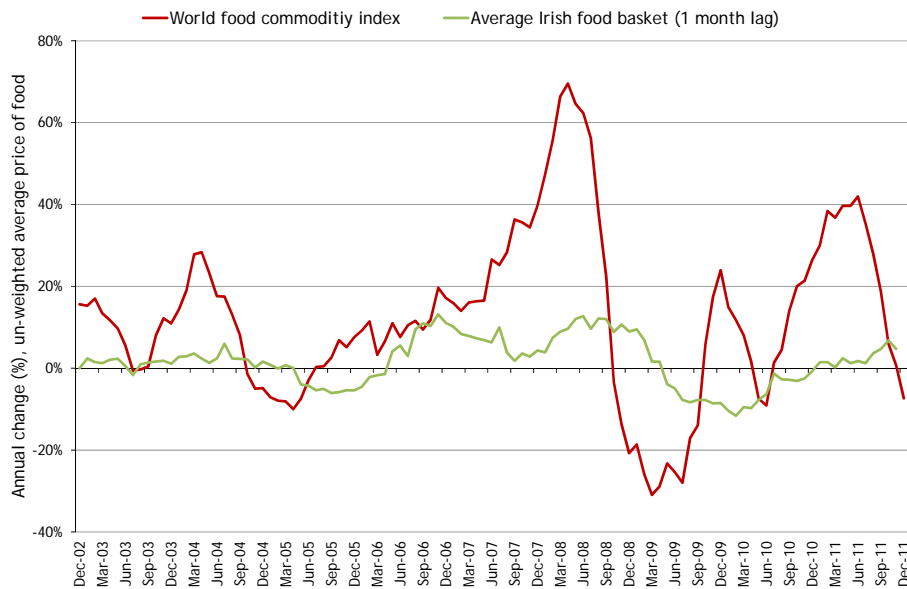
Figure 22 shows the year-on-year rate of CPI inflation for “Food and Non-Alcoholic Beverages”. Based on CPI data, this category contributed three per cent to total inflation between 1999 and 2012. Since 2002, annual inflation in “Food and non-alcoholic” beverages has been below the headline rate with the exception of 2008 and 2009.

Source: CSO, Europe Economics

As a small, open economy, Ireland is dependent on imports for items that it does not produce domestically. Figure 23 compares movements in the food subsection of the World Bank Commodities Price Index with CPI food price movements⁶³. In general, commodity prices tend to be more volatile than many other goods and services.

63 The CSO’s food list approximates the commodities used by the World Bank in the construction of their food Commodity Price Index and includes Round steak per kg., Sirloin steak per kg., Strip loin steak per kg., Roast beef topside/rib per kg., Sliced/diced beef pieces per kg., Pork steak per kg., Uncooked chicken medium sized 1600g, Bananas per kg., Bread white sliced, large (800g), Bread brown sliced, large (800g), White, self-raising flour per 2 kgs., Brown, wholemeal flour per 2 kgs., White granulated sugar per kg., Orange juice per litre.

Figure 23: Annual changes in Irish food prices and world food commodities, 2002-2011



The chart examines the annual change in the un-weighted average price of the food items listed above in Ireland and the food subsection of the World Bank Commodities Price Index. Between 2002 and 2011, the correlation between the two indices (0.4) was weak⁶⁴.

Source: CSO, World Bank, Europe Economic calculations

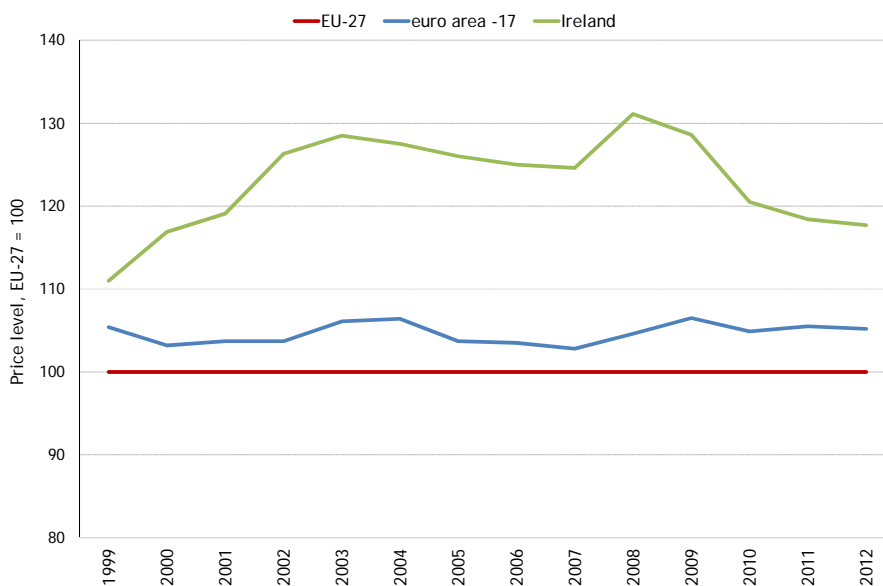
In general, food prices in Ireland seem to be affected more by competitive dynamics than changes in world commodity prices. This is especially true as consumers can shift away from grocery items that are influenced to a greater extent by global market prices to alternative products since supermarkets offer a variety of items to meet the same nutritional need. Furthermore, Ireland only imports around 50 per cent of food consumed, as opposed to 89 per cent of energy consumed. The EU's Common Agricultural Policy also reduces the volatility of food prices within the member states. Thus, while world energy commodity prices are a critical driver of domestic energy prices in Ireland, the influence of world food prices on Irish food prices is not as strong.

4.4.2 Price Levels

The following chart indexes Irish price levels against the EU-27 (i.e. average prices for the EU-27 are set at 100). It also shows euro area-17 average price levels. "Food and non-alcoholic beverages" prices in Ireland have been consistently higher than both the EU-27 and euro area-17 average.

⁶⁴ By comparison, the correlation between inflation in world energy commodities and Irish unleaded petrol is 0.8, while the same correlation using diesel price inflation is 0.9.

Figure 24: Food and Non-Alcoholic Price Level Index, (PPPs, EU-27=100), 1999-2012



The Irish index peaked in 2008 when prices were 31.1 per cent above the EU-27 average and 25.3 per cent above the euro area-17 average. Since then, the difference in prices has narrowed and in 2012 Ireland was 17.7 per cent more expensive than the EU-27 and 11.9 per cent above the euro area-17.

Source: Eurostat, Purchasing Power Parities

Based on Eurostat PPP data, Ireland ranked as the most expensive location for this category from 2002 through to 2010. In 2012, Ireland was ranked the third most expensive of the 17 euro area members.

Irish food prices are often compared to prices in the UK. In 2009, Irish “Food and non-alcoholic beverage” price levels in PPP terms were 32.9 per cent above the UK level, the largest differential in the 1999-2012 period. Since then the difference has narrowed and in 2012 Irish price levels were 13.4 per cent above the UK.

4.4.3 Policy Context

Given the limited impact world commodity prices appear to have on food prices in Ireland, the degree of competition within the grocery sector in Ireland and the competitiveness of the sector relative to other locations is likely to have a significant influence on the price of “Food and non-alcoholic beverages”. These factors are also likely to affect price levels in a range of other COICOP categories, most notably “Alcoholic beverages and tobacco”⁶⁵.

The Irish groceries sector has been a focus for policy research and reform for a number of years. The research has sought to establish the competitiveness of the market vis-à-vis other locations; the degree of competition within the market; and any barriers to entry.

⁶⁵ In recent years many larger grocery chains have begun selling product lines that fall within the “Clothing and footwear” and “Furnishings and household equipment etc.” categories as well as sub-components of the “Recreation and culture” and “Miscellaneous goods and services” categories.

Cost of Retail Operations

In 2008, Forfás undertook a comparative study of the cost of running retail operations in Ireland and elsewhere. The study found that higher operating costs added between five and six per cent to the total cost base of retailers in Dublin versus those operating in Belfast⁶⁶. The higher cost of running retail operations in Ireland was found to account for only part of the differential in costs between Ireland and elsewhere⁶⁷.

Competition in the Market

The Competition Authority published a series of detailed reports as part of its Grocery Monitoring Project in 2008. These reports found the retail grocery sector to be concentrated, with only a handful of retailers having a national reach and that a number of locations within Ireland had relatively low numbers of available grocery outlets.

The number of large retail operators in Ireland has increased since the entry of Lidl and Aldi to the market over a decade ago. The combined market share of the top three retailers (Tesco, Dunnes Stores and SuperValu) was 70.8 per cent in February 2011. By August 2013 this had fallen to 67.9 per cent, driven largely by a growth in market share of Lidl (up 2.2% to 7.7%) and Aldi (up 3.8% to 7.4%)⁶⁸. Research for the National Consumer Association reveals that the average consumer now visits more stores (up from 2.5 in 2007 to 3 in 2013) which suggests more shopping around⁶⁹.

The issue of unequal bargaining power in this sector has been on the agenda in Ireland for a number of years. A number of EU member states have introduced policy initiatives to address these concerns. The Programme for Government outlined the Government's intention to regulate certain practices in the grocery goods sector. It is expected that enabling provisions will be published early in 2014 as part of broader competition and consumer legislation.

Recommendation:

Ireland is currently an expensive location for "Food and non-alcoholic" beverages. It is important, therefore, that policymakers are cognisant of the potential impact on prices of efforts to rebalance bargaining power between suppliers and retailers.

Retail Planning Guidelines

A condition of the EU-IMF Programme for support required the undertaking of a study to explore the economic impact of eliminating the cap on the size of retail premises with a view to enhancing competition and lowering prices for consumers. Forfás was tasked with undertaking this study and concluded full removal of the convenience cap would be likely to produce mixed results for competition. In Dublin and the other main cities, Forfás

66 Given the high rate of cross-border shopping at the time, Belfast was a key location against which Dublin was benchmarked.

67 Forfás, "The Cost of Running Retail Operation in Ireland", 2008

68 <http://uk.kantar.com/consumer/shoppers/030913-irish-grocery-share/>

69 National Consumer Association, "Kantar - Grocery Market Review, June 2013"

recommended the caps should be significantly increased, and in certain circumstances removed, as it was clear that the market could accommodate a diverse range of stores sizes. In other towns, the study found the choice of retailers was more limited and the number of outlets substantially lower. Forfás recommended a small increase in the cap size for these areas, noting that large increases in store size in small population centres could over time, reduce the number of stores in operation, thereby limiting consumer choice further and ultimately lead to higher prices.

The revised Retail Planning Guidelines were published in April 2012. The new Guidelines increase cap sizes in Dublin, Cork, Waterford, Galway and Limerick / Shannon. No change was made to the cap size in other locations.

Table 15: Large Convenience Store Floorspace Cap

	Cap Sizes - Pre April 2012	Cap Sizes - Post 2012
Dublin	3,500 square meters (applied to Greater Dublin Area)	4,000 square meters (applies to Dublin City and County)
Cork, Galway, Limerick/Shannon, Waterford	3,000 square meters	3,500 square meters
Other Locations	3,000 square meters	3,000 square meters

Source: Department of Environment, Community and Local Government

Given the on-going difficulties in the retail sector due to a decline in overall consumer spending, and the lack of any significant retail property development, it may be sometime before demand for large grocery retail space arises again in Ireland. There is also some international evidence that retailers are moving away from developing larger retail spaces in response to consumer preference for smaller stores⁷⁰. However, should demand for larger stores arise in future, it will be important that Irish planning policy is monitored to ensure it supports an efficient and competitive grocery market.

Recommendation:

Monitor the impact of the revised floor space cap and other changes to the Retail Planning Guidelines on competitiveness in the grocery sector and schedule a review of the Guidelines. Specifically, the proposed review should consider circumstances under which it would be appropriate to remove the cap in Dublin and the other cities.

⁷⁰ Forfás, "Review of the Economic Impact of the Retail Cap", 2011.

4.5 Transport

This category includes the purchase of new and second hand vehicles, spare parts, car maintenance, fuels and lubricants, public transport and services such as parking, motor association subscriptions, car wash, toll charges, driving lessons, driving tests, driving licence and car hire.

Key Findings:

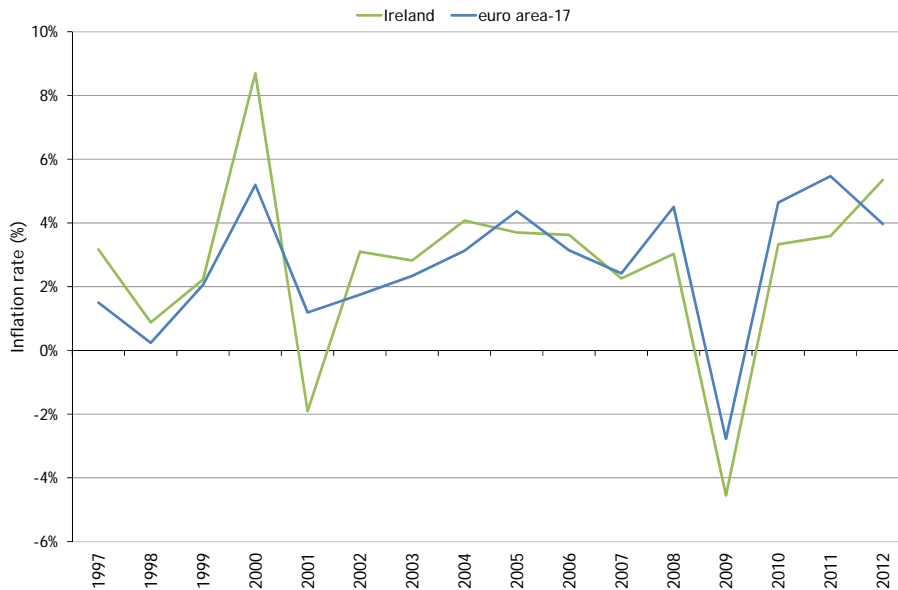
- Ireland's average annual HICP inflation for "Transport" was in line with the euro area-17 average of 2.7 per cent for the period 1997-2012. However, it contributed less to Ireland's total inflation rate (16.5%) than to the euro area average (22.2%).
- The transport contribution to CPI inflation in Ireland is particularly notable in the 2008 to 2012 period when it accounted for 57.2 per cent of total inflation.
- Inflation in this category has been driven largely by services (e.g. transport fares) and commodity based goods (e.g. fuels and lubricants). Given the dependence of Irish fuels prices on international commodity markets, a large element of transport inflation is not determined by Irish market conditions.
- The differential between Irish "Transport" price levels and the euro area average has narrowed recently and stood at 3.9 per cent in 2012. Ireland is the fourth most expensive euro area member in terms of "Transport" prices.
- Reform of the regulatory framework for public transport, particularly in urban bus services, to promote competition and ensure quality services in terms of routes served and frequency of service is required.

The "Transport" category was one of the top contributors to CPI inflation in Ireland from 1997 to 2012.

4.5.1 International and National Trends

Earlier analysis showed that average annual HICP inflation for this category was in line with the euro area-17 average of 2.7 per cent for the period 1997-2012.

Figure 25: Annual Rate of HICP Inflation for Transport, 1997-2012

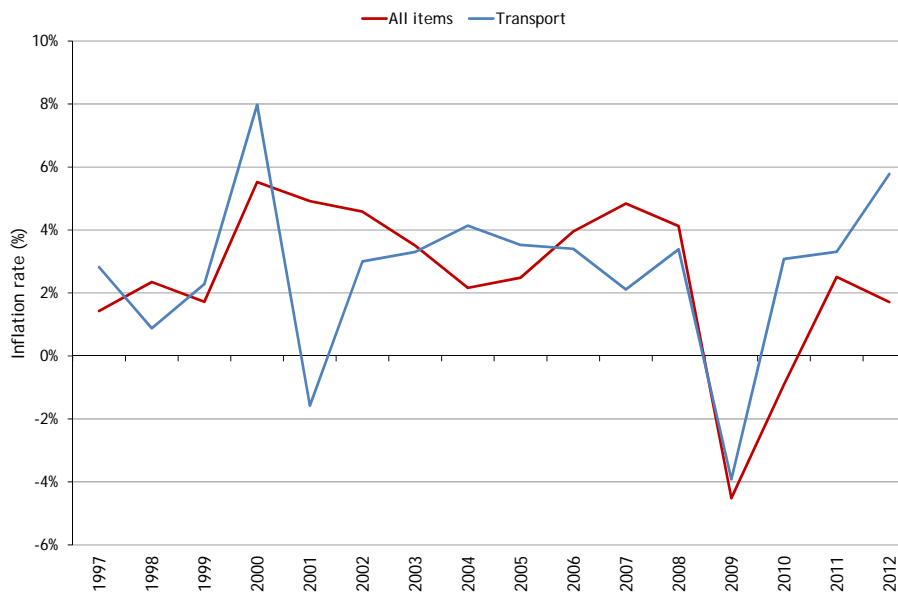


Ireland’s average annual transport inflation was on par with the euro area average at 7.7% for the period covered by Figure 26. However, between 1999 and 2012, “Transport” contributed less to Irish inflation (16.5%) than to the euro area average (22.2%).

Source: Eurostat; Europe Economics’ calculations

Figure 26 tracks year-on-year inflation in “Transport” against the headline rate. According to CPI data, average annual inflation of 2.7 per cent was recorded for “Transport” between 1997 and 2012 - slightly above overall CPI inflation of 2.5 per cent.

Figure 26: Annual Rate of CPI Inflation for Transport, 1997-2012



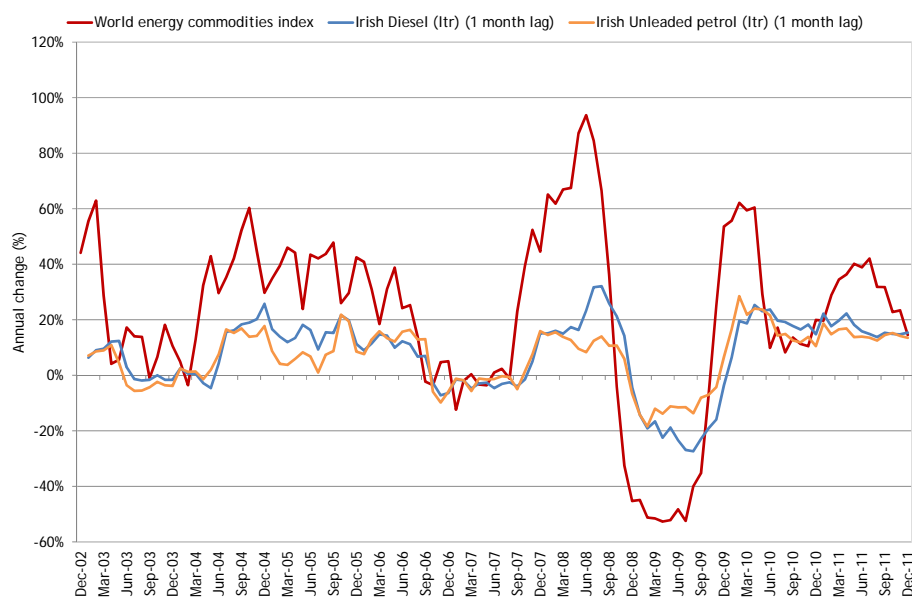
Despite a small differential between “Transport” inflation (2.7%) and the headline rate (2.5%) in the 1997 to 2012 period, the transport category is considered a driver of inflation. Its’ contribution to inflation is particularly notable in the 2008 to 2012 period when it accounted for 57.2 per cent of total CPI inflation.

Source: CSO, Europe Economics

Table 16 presents the CSO's CPI subcategories for "Transport". The sub-component "Fuels and lubricants for personal transport equipment" has the largest weighting within "Transport" accounting for 28.5 per cent of the category's weighting in 2013. Thus, inflation in fuel and lubricant prices exert a strong influence on transport inflation.

Given Ireland's dependence on imported fuel, world energy commodity prices are likely to exert significant influence on Irish transport prices. Figure 27 looks at the relationship between average diesel and unleaded petrol costs in euro per litre in Ireland and a world commodity price index.

Figure 27: Year-over-year changes in Irish fuel prices and world energy commodities, 2002-2011



The data suggests a strong correlation between inflation rates in vehicle fuel prices and world energy commodity prices - the correlation between inflation in world energy commodities and inflation in Irish unleaded petrol (lagged one month) is 0.8, while the correlation using diesel price inflation is 0.9.

Source: CSO; World Bank; Europe Economics' calculations

In road transport, the largest contributor from 1999-2012 was "Bus fares", which rose at an annual average rate of 5.2 per cent over the 13 year period. The "Purchases of vehicles" sub-category (and all its sub-elements) experienced price deflation between 1999 and 2012, most noticeably in the latter part of the period. Furthermore, "Spare parts and other car accessories" saw only modest price rises while "Motor tax" prices rose faster than headline "Transport" prices.

Table 16: Inflation in "Transport" CPI, 1999-2012

COICOP category	1999-2007	2008-2012	1999-2012
Transport	3.1%	2.3%	2.8%
Purchase of vehicles	1.2%	-3.5%	-0.5%
Motor cars	1.2%	-3.5%	-0.5%
Motor cycles	0.3%	-0.9%	-0.1%
Bicycles	0.1%	-2.8%	-0.9%
Operation of personal transport equipment	4.6%	6.0%	5.1%
Spare parts & accessories	1.7%	0.0%	1.1%
Fuels & lubricants	4.9%	8.0%	6.0%
Petrol	4.9%	8.0%	6.0%
Diesel	5.2%	8.6%	6.4%
Motor oil	5.5%	2.7%	4.5%
Maintenance & repair	6.1%	0.6%	4.1%
Other services	4.0%	3.4%	3.8%
Motor Tax	3.0%	4.9%	3.7%
Other vehicle costs	5.5%	1.1%	3.9%
Transport services	4.5%	4.0%	4.3%
Passenger transport by railway	4.4%	3.5%	4.0%
Passenger transport by road	4.3%	4.4%	4.3%
Bus fares	3.8%	7.3%	5.1%
Taxi fares	5.1%	1.6%	3.8%
Passenger transport by air	3.6%	0.9%	2.7%
Passenger transport by sea & inland waterway	6.8%	2.3%	5.2%
Combined passenger transport	4.2%	5.0%	4.5%
Other purchased transport services	5.1%	-6.3%	1.0%

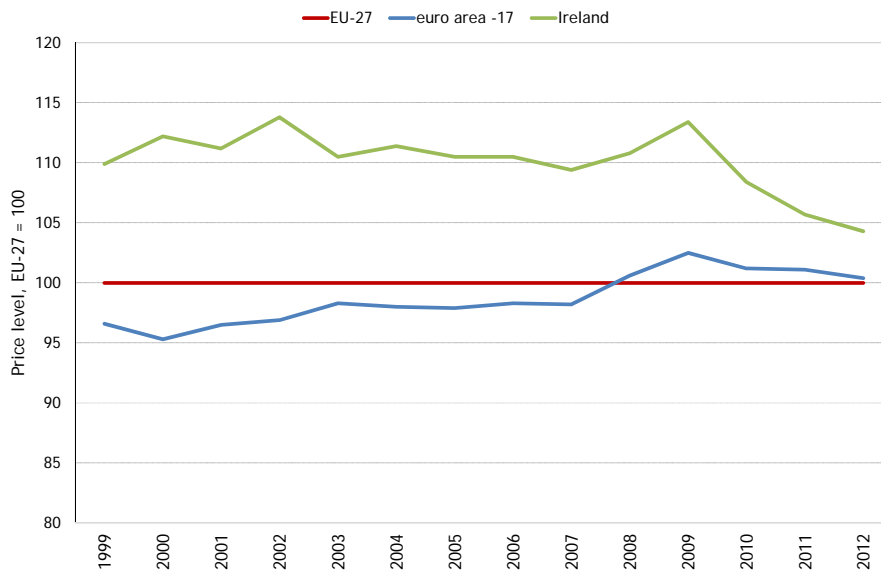
Source: CSO; Europe Economics' calculations

Inflation in the "Transport" COICOP has been driven largely by services (e.g. transport fares) and commodity-based goods (e.g. fuels and lubricants). As noted previously when discussing energy prices, there is a strong correlation between movements in the world price of energy inputs and domestic diesel and unleaded gasoline prices. As a result, a portion of transport inflation is determined by international prices and, therefore, outside of Ireland's control. However, some elements of transport costs such as "Bus fares" (with inflation of 5.1 per cent between 1999 and 2012) are largely driven by domestic factors.

4.5.2 Price Levels

Between 1999 and 2012, Irish “Transport” prices levels have consistently been above the EU-27 and euro area-17 average. However, the disparity in price levels has narrowed significantly in recent years.

Figure 28: Transport Price Level Index, (PPPs, EU-27=100), 1999-2012



In 2009, “Transport” prices in Ireland were 13.4 per cent above the EU-27 and 10.6 per cent above the euro area -17. In 2012, Irish prices were 4.3 per cent above the EU-27 level and 3.9 above the euro area-17 level.

Source Eurostat, Purchasing Power Parities

4.5.3 Policy Context

Public Transport

While, public transport costs may comprise a small element of the CPI, they can have a significant impact on decisions in relation to labour market participation. Greater use of public transport also has broader benefits in terms of congestion reduction.

Transport services in which inflation was less affected by the economic cycle (e.g. the post-recession 7.3 per cent annual average increase in bus prices) may be less competitive and will require further research to explain diverging patterns in inflation. In October 2013, the National Transport Authority announced a range of fare increases for CIÉ public transport services (Dublin Bus, Iarnród Éireann and Bus Éireann) and Luas. The rationale for the fare increases are primarily related to the increase in fuel costs and the reduction in the Public Service Obligation (PSO) subsidy payments which have been reduced by Government since 2009, with a further 7.4 per cent cut (approximately €17 million) set for 2014.

Forfás has previously noted that reform of the regulatory framework for public transport, particularly in urban bus services, to promote competition and ensure quality services in terms of routes served and frequency of service is required⁷¹.

⁷¹ Forfás, “Main Infrastructure Issues for Enterprise”, 2012

The National Transport Authority (NTA) is currently proposing to award new contracts to Dublin Bus and Bus Éireann on the 1st December 2014. It is proposed that up to ten per cent of services (based on the peak hour fleet size) would be open to competitive tendering with a contract for those services being in place from Autumn 2016 onwards. As highlighted by the Competition Authority, competitive tendering of bus services in other markets has led to significant benefits for consumers - including lower fares and/or reduced subvention requirements⁷², more reliable, punctual services, improvements in the bus network to better match consumers' needs and better incentives for public bus services to integrate into the wider public transport system⁷³. The Competition Authority also stresses the importance of a well-designed competitive tendering process to maximise competition and obtain the desired benefits. Inflation in passenger rail transport is also high relative to other sectors.

Recommendations:

- The recent Government Policy Statement on Sectoral Economic Regulation outlines a plan to introduce legislation in the second half of 2014 to undertake a review of the NTA's mandate and to develop a hierarchy of objectives in relation to the regulation of public bus transport. Against this background and in the interests of prioritising consumer interests, greater consultation and transparency is required in relation to the determination of fares.
- The NTA needs to outline its plans for reviewing the impact of the initial market openings and set out the process and the triggers for potentially opening more routes (particularly radial and cross city routes) to competition post 2019.
- Designing a competitive tender that prioritises consumer interests is critical to enable Ireland to capture the full benefits of competition in public bus markets experienced in other countries. It is also important to support other public policy goals such as increasing use of public transport, reducing the requirement for subvention and meeting environmental sustainability goals.
- If the choice of routes for the initial opening of the bus market is suboptimal and unattractive to new entrants, it is likely to have an adverse effect on opening more routes to competition in the future. This in turn will have implications for the quality and cost of bus services offered to Irish public transport users and Ireland's transport competitiveness in the longer term. The NTA should ensure that the selection of routes to be awarded through competitive tendering maximises new entry and enables Ireland to capture the full benefits of competition⁷⁴.
- The Government should maintain pressure on all public transport providers, bus and rail, to increase efficiencies and reduce costs wherever possible.

72 Data from Hensher and Wallis suggests very substantial cost savings from initial round tenders - savings ranging between 20 and 30 per cent were recorded in Scandinavian countries while savings of almost 40 per cent were recorded in some Australian cities. See: Hensher, D.A., and Wallis, I.P., Competitive Tendering as a Contracting Mechanism for Subsidising Transport - The Bus Experience, *Journal of Transport Economics and Policy*, Volume 39, Part 3, September 2005, pp. 295-321

73 The Competition Authority, Submission to the NTA Public Consultation on 2014 Public Bus Service Contracts, July 2012

74 In November 2013, the National Transport Authority announced the list of bus services to be removed from the Dublin Bus and Bus Éireann direct award contracts in 2016 and which will be subject to competitive tendering. Full details are available at www.nationaltransport.ie

Ports

Current research by The Competition Authority into the Ports Sector provides context for the high rate of inflation in the “Passenger transport by sea and inland waterways” category. The Competition Authority has put forward a number of recommendations to promote greater competition in the sector, with a view to driving competitiveness and jobs growth (e.g. recommendations relating to leasing and licensing of Dublin Lo-Lo terminals, stevedore licensing, and investment in port-related road and rail infrastructure)⁷⁵.

Taxi Market

Up to the 2000s, barriers to entry in the Irish taxi market were high. In the early years of the 2000s there was a push to liberalise the taxi market on a number of fronts; these moves reduced the price of a taxi license in Ireland; lowered barriers to entry; and ushered in a large expansion in the supply of taxis. In 2006, a national maximum tariff structure was introduced. According to the Commission for Taxi Regulation “as a result of liberalisation, the cab market in Ireland is highly competitive and has no significant barriers to entry or exit”⁷⁶. Indecon have recently concluded that while taxi prices appear above average in Ireland relative to other countries, they are broadly similar with what would be expected given wages levels, employment and population density in Ireland⁷⁷.

Further reform of the sector is currently underway: following the recommendations of the Taxi Regulation Review Report⁷⁸, the Government is now bringing the Taxi Regulation Bill, 2012 through the Oireachtas. The Bill aims to strike a balance between consumer interests, the interests of the operators in the industry and the need for the regulatory bodies to be able to undertake proportionate and effective oversight.

4.6 Miscellaneous Goods and Services

This category covers a wide range of items including hairdressing and other grooming, goods for hygiene, hair and body care; personal goods such as jewellery, handbags and wallets, childcare and other social protection services; insurance, financial services and other services including funerals, weddings, legal and professional services. The household charge was (temporarily) added to this category in the CPI in April 2012.

⁷⁵ The Competition Authority, Competition in the Irish Ports Sector, November 2013

⁷⁶ Commission for Taxi Regulation and Goodbody Economic Consultants, Economic review of the small public service vehicle industry p. 88, 2009

⁷⁷ Indecon analysis concluded that there is an oversupply of SPSV vehicles in the range of 13-22 per cent of the current fleet. In Indecon’s view the level of oversupply is influenced by the impact of non-compliant operators in the sector and by the low level of exit from the industry. For further details see Indecon International Economic Consultants, Economic Analysis of the Taxi Market, December 2011

⁷⁸ The review made a series of recommendations relating to: Driver Licensing; Vehicle Licensing and Vehicle Standards; Accessible Services; Compliance and Enforcement; Consumer and Industry Assurance; Fleet Management and Rental Controls; and Rural Hackney Services. See Department of Transport, Tourism and Sport, The Taxi Regulation Review - Report of the Review Group, December 2011

Key Findings:

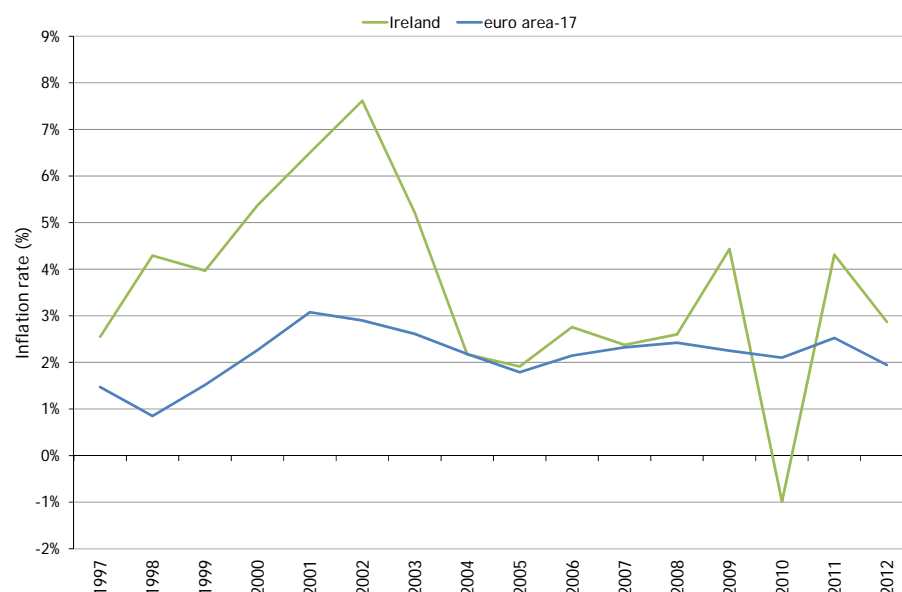
- Given the wide range of goods and services included in the “Miscellaneous” category, price level data should be interpreted with some caution, as it is not possible to disaggregate the data to establish price levels for each of the individual sub-components.
- In 2012 price levels for “Miscellaneous Goods and Services” in Ireland were 17.2 per cent above the euro area average.
- Between 1997 and 2012 average annual HICP inflation for “Miscellaneous goods and services”, was 1.5 percentage points higher in Ireland than for the euro area.
- “Insurance” and “Social Protection” (which is largely related to childcare) have been particular drivers of inflation in Ireland.
- The rate of inflation for “Insurance” in the 2008 to 2012 period (9.7%) was well above the aggregate CPI rate (0.6%). Implementation of the proposals of the Legal Cost Working Group could result in a downward pressure on insurance premium prices.
- “Health insurance” recorded total CPI inflation of 11.2 per cent between 1999 and 2012. Given the high weighting assigned to “Health insurance”, it is the primary driver of inflation in this category and a significant driver within the wider CPI basket.
- A number of idiosyncrasies of the health insurance market create challenges in encouraging competition in this sector and a range of policy decisions in recent years have influenced inflation for this category. A number of Competition Authority recommendations remain to be implemented.
- CPI inflation of 5.9 per cent per annum was recorded for “Childcare” between 1999 and 2012. A 2008 OECD report found Ireland to have the second least affordable childcare among a group of 30 countries.
- While efforts to enhance quality standards in the childcare sector are very much welcome, care needs to be taken to ensure that the additional costs arising from higher standards do not increase cost excessively.

The “Miscellaneous goods and services” category is a multifaceted category containing a collection of goods and services that do not fit naturally in other COICOP categories. This category was identified as a driver of inflation, most notably in the 2008 to 2012 period.

4.6.1 International and National Trends

Between 1997 and 2012 average annual HICP inflation in the “Miscellaneous” category was 3.6 per cent in Ireland, compared to 2.1 per cent for the euro area-17. In the later period (2008-2012) it is noticeable that inflation in this category in Ireland (2.6%) was substantially higher than the overall HICP rate (0.6%). Figure 29 illustrates year-on-year inflation for this category for Ireland and the euro area-17.

Figure 29: Annual Rate of HICP Inflation for Miscellaneous Goods and Services, 1997-2012



In all years covered by the chart, with the exception of 2010, the annual rate of inflation in Ireland for miscellaneous goods and services was above the euro area-17 average. In 2010, deflation of -1.0 per cent was recorded in Ireland.

Source: Eurostat; Europe Economics' calculations

Despite the average annual rate of "Miscellaneous" inflation being consistently higher in Ireland than the euro area-17, the contribution of "Miscellaneous goods and services" to total HICP inflation for 1999-2007 is similar for both (9.1 per cent in Ireland and 8.6 per cent in the euro area-17) due to the lower weight assigned to this category in the Irish basket. However, between 2008 and 2012 "Miscellaneous goods and services" was responsible for 32.1 per cent of HICP inflation in Ireland compared to just 9.1 per cent for the euro area-17.

Coincidentally these categories also have a higher weighting in the Irish "Miscellaneous goods and services" category than they have in the euro area-17 average category⁷⁹. Inflation in insurance and childcare (a sub-component of social protection) is looked at in more detail below using CPI data.

It is important to note that there are a number of differences in the treatment of "Miscellaneous goods and services" between the HICP and CPI⁸⁰. These differences relate to both the items included and the weightings assigned.

- In terms of insurance, only the "service charge" of the premium is included in the HICP, while the gross premium is included in CPI.
- Some insurance-related items in HICP are allocated to other COICOP subcategories.

⁷⁹ Social Protection is 15.6 per cent of the Irish category and 11.1 per cent of the euro area-17.

Insurance makes up 28.1 per cent of the Irish HICP category while it makes up 23.5 per cent of the euro area-category.

⁸⁰ For a detailed description of the differences, see:

<http://www.cso.ie/en/media/csoie/surveysandmethodologies/surveys/prices/documents/comparecpiandhicp1.pdf>

- Furthermore, some items are excluded entirely from the HICP “Miscellaneous goods and services” category, while they are included in the CPI. These differences result in significant differences in the weightings applied.

Looking next at the CPI data, average annual CPI inflation for the “Miscellaneous goods and services” category for the 1997 to 2012 period was 4.3 per cent, well above the headline rate of 2.5 per cent. Between 2008 and 2012, the “Miscellaneous” category accounted for 67 per cent of all inflation.

Figure 30: Annual Rate of CPI Inflation for Miscellaneous Goods and Services, 1997-2012

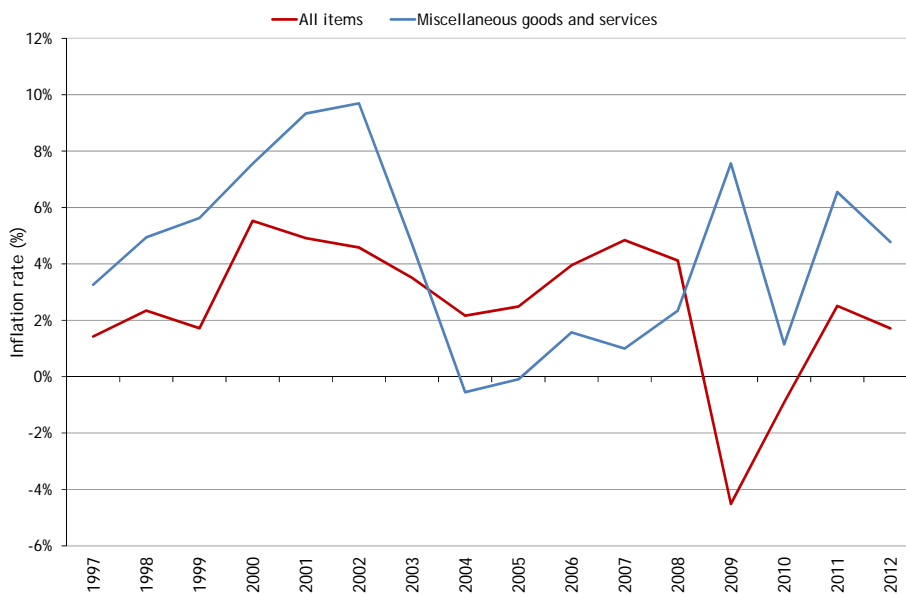


Figure 30 illustrates the annual rate of inflation from 1997 until 2012. In 2004 and 2005 there were low levels of deflation in this category, largely driven by price falls in “Insurance”. Between 2003 and 2005 “Insurance” fell by 5.5 per cent, with “Motor Insurance” down 20.2 per cent in the period.

Source: CSO, Europe Economics

There was a reversal of this trend subsequently - in 2009, for example, while at an aggregate level there was deflation (-4.5%), inflation for “Miscellaneous goods and services” increased rapidly (7.6%).

With total inflation of 11.2 per cent recorded between 1999 and 2012, combined with a high weighting, “Insurance connected with health” is the primary driver of inflation in this category. This mirrors the findings from the HICP analysis, although the higher weighting assigned to this category in the CPI means that the impact of health insurance inflation is more pronounced. Other noticeable trends are:

- The high rate of inflation in “Social Protection” (5.9%) which is dominated by “Childcare” also mirrors the HICP analysis.
- Inflation for “Other social protection” (8%) is higher than in the HICP but it has a tiny weighting within the category⁸¹.

⁸¹ “Other social protection” comprises 1.2 per cent of “Miscellaneous goods and services” and 0.1 per cent of the total CPI basket.

- The highest rates of deflation were recorded for “Other personal effects” (-5.0%) and “Electric appliances for personal care” (-2.5%).
- In general, the higher rates of inflation were found among the services categories rather than the goods categories.

Table 17: Average annual inflation in "Miscellaneous goods and services" CPI, 1999-2012

	1999-2007	2008-2012	1999-2012
Miscellaneous goods and services	4.3%	4.5%	4.4%
Personal care	3.6%	-2.1%	1.6%
Hairdressing salons and personal	7.9%	-0.4%	4.9%
Hairdressing	7.9%	-0.6%	4.9%
Health & beauty treatments	7.5%	-0.2%	4.8%
Other personal grooming	5.1%	3.6%	4.5%
Electric appliances for personal care	-2.2%	-3.0%	-2.5%
Other appliances, articles & products	1.4%	-3.2%	-0.3%
Hygiene products	1.6%	-3.1%	-0.1%
Hair products	0.8%	-3.7%	-0.8%
Cosmetics & skincare	1.7%	-3.1%	0.0%
Toilet accessories	0.9%	-3.5%	-0.6%
Personal effects n.e.c.	-1.1%	-2.6%	-1.6%
Jewellery, clocks and watches	1.5%	3.8%	2.4%
Other personal effects	-3.6%	-7.5%	-5.0%
Social protection	9.0%	0.4%	5.9%
Childcare	9.1%	0.2%	5.9%
Other social protection	9.5%	5.4%	8.0%
Insurance	4.5%	9.7%	6.4%
Insurance connected with the dwelling	2.3%	7.2%	4.0%
Insurance connected with health	9.4%	14.4%	11.2%
Insurance connected with transport	0.5%	3.7%	1.6%
Motor insurance	0.5%	3.7%	1.6%
Motor cycle	11.4%	-1.8%	6.7%
Motor car insurance	0.3%	3.8%	1.6%
Travel insurance	0.5%	3.1%	1.4%
Financial services n.e.c.	3.3%	0.6%	2.3%
Other services n.e.c.	3.5%	4.4%	3.8%

Source: CSO; Europe Economics' calculations

4.6.2 Price Levels

Given the diverse nature of the goods and services included in this category, price level data should be interpreted with some caution, as it is not possible to disaggregate the data to establish price levels for the various sub-components of the category.

Figure 31: Miscellaneous Goods and Services, Price Level Index, (PPPs, EU-27=100), 1999-2012

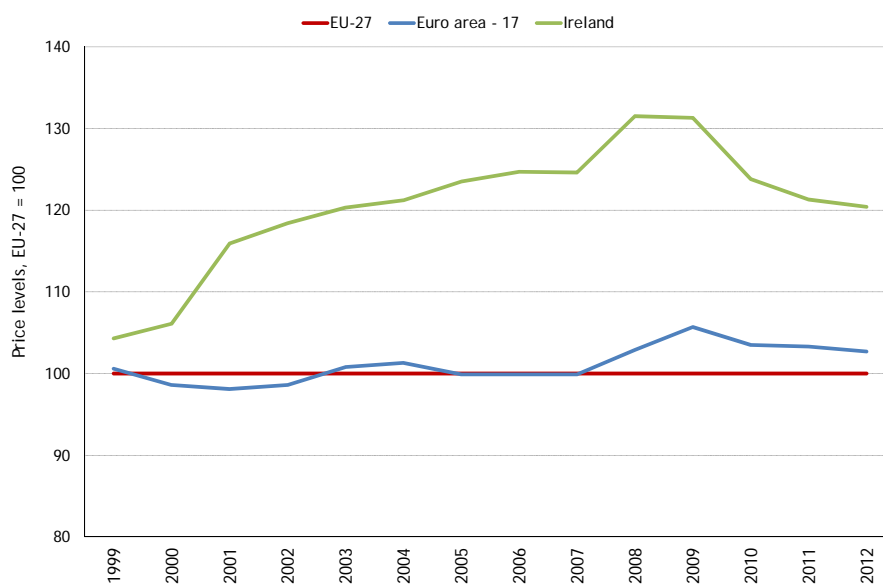


Figure 31 shows that aggregate prices for miscellaneous goods and services have consistently been higher in Ireland than the EU-27 and the euro area-17. In 2008, Ireland was 31.5 per cent more expensive than the EU-27 and 27.8 per cent more expensive than the euro area-17. Since then the gap has narrowed to 20.4 per cent and 17.2 per cent respectively.

Source Eurostat, Purchasing Power Parities

According to Eurostat PPP data, Ireland was the most expensive location within the euro area-17 for this category from 2005 through to 2010. Since 2011, it is the second most expensive location.

4.6.3 Policy Context

Non-Life Insurance

The Competition Authority has undertaken research on both the non-life insurance market and the private health insurance market. The non-life insurance report, published in 2005, concentrated on motor insurance, employer's liability insurance, and public liability insurance⁸². The Competition Authority found that, though in general non-life insurance markets were not greatly concentrated, the markets could be improved by lowering barriers to entry, making switching between insurance providers easier, and increasing price transparency. To address these issues, the Competition Authority made 47 recommendations, the majority of which have been implemented or otherwise since addressed. Many of the

⁸² The Competition Authority (2005) "Competition issues in the non-life insurance market".

implemented recommendations focused on providing information to consumers to improve consumer awareness of pricing policies and switching possibilities.

Recommendations:

In addition to the enactment of the Legal Services Bill, it will be important that the procedural reforms proposed by the Legal Cost Working Group are implemented quickly to realise efficiencies in the legal sector. This could provide a downward pressure on insurance premium prices.

Health Insurance

Health insurance is the most significant element within the “Miscellaneous goods and services” category, and makes up 30.5 per cent of the category and 3.5 per cent of the total CPI basket.

Over the period 2001 to 2012, Ireland had the highest annual average rate of health insurance inflation (11.3%) within the euro area-17, greatly exceeding the euro area -17 average (3.2%). Since 2008 average annual health insurance inflation has accelerated to 16.4 per cent, while elsewhere in the EU, health insurance inflation has been slowing down (2.6 per cent in the euro area-17, and three per cent in the EU-27).

Some idiosyncratic features of the private health insurance market create problems for encouraging competition. For instance, private health insurance is voluntary and founded on the principal of “intergenerational solidarity” whereby young and old customers pay the same premium, despite the fact that young patients are a lower risk than old patients. Risk equalisation is a process that aims to equitably neutralise differences in insurers' costs that arise due to variations in the age profile of the insurers. Risk equalisation involves transfer payments between health insurers to spread some of the claims cost of the high-risk older and less healthy members amongst all the private health insurers in the market in proportion to their market share. In the absence of an effective risk equalisation system, there is a threat to the existence of a community rated market when significant differences in risk profiles exist between competing insurers. Risk equalisation is a common mechanism in countries with community rated health insurance systems⁸³.

The CPI captures the prices actually incurred (i.e. those paid in market transactions, including all indirect taxes and duties⁸⁴). The health insurance levy is, therefore, reflected in changes in the health insurance component of the CPI).

In November 2008, the Government announced an initiative which provided for interim age-related tax credits and a community rating health insurance levy to support the cost of health insurance for older people. This interim system commenced in 2009 and ran until the end of 2012. The health insurance component of the CPI increased by 19.7 per cent between December 2008 and January 2009 (i.e. when the levy was initially introduced).

In January 2013, the Risk Equalisation Fund administered by the Health Insurance Authority came into effect. The Risk Equalisation Fund supports the community rated market by providing age related health credits in respect of those over the age of 60 that help to meet

⁸³ www.hia.ie/regulation/risk-equalisation/

⁸⁴ CSO, The Irish Consumer Price Index, A Brief Introduction, March 2013

their higher claims costs. The health credits vary by age, gender and level of cover. Credits are also provided in respect of each overnight stay in a hospital bed in private or semi-private accommodation. These credits are funded by a community rating health insurance levy paid by health insurers. As the population ages and if the trend towards a decrease in the number of people availing of private health insurance continues, it is likely that the Health Insurance Levy will continue to increase in the longer term.

Table 18: Community Rating Health Insurance Levy, (2009 - 2013)

	2009	2010	2011	2012 - Q1 2013	Q2 2013 ⁸⁵	Average Annual Increase
Adult	€160	€185	€205	€285	€350	22%
Child	€53	€55	€66	€95	€120	23%

Source: Health Insurance Authority, *A Guide to Risk Equalisation, 2013*

In November 2013, further increases to the Health Insurance Levy were announced for 2014 bringing the adult levy to €399 and the child levy to €135.

The current administration of the health levy may act as a barrier to consumer switching. As all private health insurers in the market recover the health insurance levy in full via their premium collections, consumers seeking to switch from one insurer to another insurer part-way through a policy year face the barrier of double payment of at least a proportion of the levy amount. This may deter the consumer from switching given the amounts involved.

For the private health insurance market, issues similar to those in the non-life insurance market were identified in the Competition Authority's report (e.g. issues relating to price transparency and the ease of switching)⁸⁶. The majority of the Competition Authority's 16 recommendations focused on making information available to consumers and ensuring consistent regulatory treatment across insurance providers, with the Health Insurance Authority being empowered to enforce statutory requirements in the industry.

As part of Budget 2014, the Minister for Finance announced plans to change the way patients with private insurance are charged in public hospitals - essentially all private patients are now charged when they receive private in-patient services in a public hospital, irrespective of the designation of the bed they occupy, so that all private patients will be liable to meet both the hospital charge and consultant charge.

⁸⁵ It should be noted that the levies for 2009 to 2012 were administered under the interim scheme. The Risk Equalisation Fund began functioning in January 2013 but the revised rates only applied to policy renewals made after 31st March 2013.

⁸⁶ The Competition Authority (2007) "Competition in the private health insurance market"

Currently, when a private patient attends a public hospital and no private bed is available, the patient is admitted to a public bed and charged a fee of €75 per night. Under the legislation, all private patients will now be liable for the same charges. For example, the cost of a single occupancy room for a private patient will be reduced from €1,121 to €1,000 per day; the cost of a day-case procedure for a private patient will be reduced from €828 to €407. However, the costs for a private in-patient who was accommodated in a public bed will increase from €75 for an overnight hospital stay to over €813. Proponents of the reform argue that, under the status quo, both private patients and private health insurers enjoy a significant subsidy at the expense of the public hospital system.

The Department of Health has stated that the cost of providing hospital services to private in-patients has been at least €200 million more than the amount that public hospitals are currently allowed to charge. The proposed changes will result in recovery of an additional €39 million in 2014. It is expected that if the legislation is enacted, insurers will seek to recoup the extra costs from their customers by increasing the cost of policies. If this occurs it will lead to further acceleration of health insurance inflation in Ireland and, given the substantial weighting attributed to this category, an increase in the overall CPI. Of course, by removing a potential subsidy, it should reduce demands placed on taxpayers.

As part of Budget 2014, the Government has announced its intention to reduce the amount of private health insurance premium that qualifies for tax relief to €1,000 for adults and €500 for children. Consumers with premiums above these thresholds will see an increase in the net cost of their health insurance.

Recent years have seen a decline in the number of people with private health insurance policies in Ireland: the proportion of population covered has fallen from 50.9 per cent in 2008 to 45.8 per cent at the end of 2012⁸⁷. This is likely to be a result of a number of factors including the increase in unemployment and resultant financial strain, compounded by the price increases discussed above. Any further increases are likely to result in a further decrease in the number of policyholders, which may in turn ultimately drive down the weighting of the sub-category within the CPI.

Recommendations:

- Consideration should be given to making legislative provision for consumers who wish to switch health insurance mid-way through a cover year to be issued with a certificate or letter of closure similar in purpose to that which is issued when someone is changing their credit card.

Implement outstanding Competition Authority recommendations in relation to this sector, specifically;

- Regulate VHI Healthcare as an insurance undertaking once it has reached the required reserves;
- Remove VHI Healthcare's exemptions from the EU Non-Life Directives; and
- VHI Healthcare should cease cancelling travel insurance policies where a customer switches from VHI Healthcare to another health insurer.

⁸⁷ Health Insurance Authority, February Newsletter, 2013

Childcare

This sub-category only captures the cost of childcare in formal childcare facilities (i.e. crèches). The low weighting of childcare within the CPI basket (0.6%) reflects the small proportion of households that use such services. Reports have shown that for the families using paid-for childcare services (whether formal or informal), childcare can absorb a significant proportion of their income. While the rate of inflation for childcare was low in the 2008 to 2012 period (0.2 per cent), a 2008 OECD report found Ireland to have the second least affordable childcare among a group of 30 countries.

The OECD found that the proportion of children under the age of three enrolled in formal childcare in Ireland (30.8 %) was on par with the OECD average⁸⁸. However, children from low incomes families were much less likely to participate in formal childcare (9.2%) than the OECD average (25.2%). The OECD indicated that this was likely a result of the high cost of formal childcare in Ireland. Childcare costs in Ireland were found to be 50.2 per cent of the average wage compared to an OECD average of 27 per cent. Ireland had the eleventh lowest level of female employment out of 38 countries for which data was available and the seventh lowest level of maternal employment (i.e., employment of mothers with children under the age of fifteen).

Given the nature of services in this area - in many instances, these services can be provided for free (usually by relatives) or in an informal setting (in the child or carer's home) - it can be difficult to gather reliable data in this area and even more challenging to gather trend data.

The 2013 Budget put in place an Afterschool Childcare Programme which subsidises the cost of 500 afterschool childcare places for children of parents who are long term unemployed and in receipt of a job offer or were former recipients of the One Parent Family Payment and who have got a job offer or have significantly increased their part-time hours.

A recent study by the ESRI found that the most expensive form of childcare in Ireland (expressed as cost per hour) was a non-relative in the family home (€7.35)⁸⁹. The high cost for this category could be due to the carer being an employee of the family - perhaps caring for more than one child and/or doing other household tasks. The mean hourly rate for childcare centres was €5.71 per hour. The cheapest care (where there was any payment) was a relative in his/her own home (€4.21).

A 2012 NERI report noted that for households with children, the additional costs associated with childcare represent the largest additional household cost associated with taking up either part-time or full-time employment. Linking childcare costs to decisions relating to labour market engagement, the report highlighted significant policy implications: "Such costs are real for employees, and must clearly feature in their decision making calculations around taking up, increasing or indeed leaving work. However, from a policy perspective these tend to be latent costs with little consideration of the actual impact they may carry. Their scale and impact, relative to a household's additional income potential, raises questions regarding

88 OECD, *Doing Better for Families*, 2011

89 ESRI, "Growing Up in Ireland - Mothers' return to work and childcare choices for infants in Ireland, July 2013

the integration of affordable childcare provision into the formation of labour market policy⁹⁰.”

The recent Indecon report examining a range of potential policy options to address the childcare obstacles that exist as a barrier to employment and labour market participation is also worth noting⁹¹. The study found that 26 per cent of parents with children at nine months indicated that childcare arrangements had prevented them from looking for a job, or had impacted on training or made them turn down or leave employment.

Recommendations:

Considerable efforts are being made to set and enhance quality standards in the child care sector which are very welcome. Care needs to be taken to ensure that the additional costs arising from higher standards do not increase costs excessively.

4.7 Health

This category includes medical products, appliances and equipment, hospital charges and out-patient services supplied by doctors, dentists, opticians, physiotherapists and practitioners of alternative and complementary medicine.

Key Findings:

- Over the period 1997 to 2012, average annual HICP “Health” inflation was 4.8 per cent in Ireland, compared to 2.1 per cent for the euro area-17. Between 2008 and 2012, the HICP inflation rate in Ireland (2.6%) was well above the overall HICP rate (0.6%).
- Overall, “Health” inflation has been on a downward trend in recent years.
- The “Health” category, however, was responsible for 15.4 per cent of headline inflation in the 2008 to 2012 period, despite its low weighting.
- Ireland has been the most expensive euro area member for “Health” since 2004. While the price level differential between Ireland and the euro area has reduced since 2009, Irish price levels remained 34.5 per cent above the euro area in 2012.
- Reform of the health sector must take account of a wide range of social and economic objectives of which cost reduction is just one element.
- The Health (Pricing and Supply of Medical Goods) Act 2013 represents a significant step towards realising cost efficiencies in relation to prescription medicines. The impacts of these reforms should be monitored to establish if and to what extent originator and generic pharmaceutical prices fall relative to other countries.

90 NERI, Working Paper Series, “The Cost of Work- Insights from Minimum Incomes Standards Research for Ireland, May 2012

91 Indecon, Supporting Working Families – Releasing a Brake on Economic Growth, Indecon Report on Support for Childcare for Working Families and Implications for Employment, A Report for Donegal County Childcare Committee, November 2013

- In relation to health professionals, the recent pro-competition changes in the GP sector should be monitored to assess their impact on consumer prices and the forthcoming legislation to replace the Dentist Act, 1985 should address a number of recommendations put forward by the Competition Authority.

“Health” is not a large driver of headline consumer prices due to its small weighting in the CPI and the HICP baskets. Instead, it is of interest because of the high level of inflation within the category and the extent of the deterioration in Irish cost competitiveness compared with other countries since 1999.

4.7.1 International and National Trends

Over the period 1997 to 2012, average annual HICP “Health” inflation was 4.8 per cent in Ireland, compared to 2.1 per cent for the euro area-17. Between 2008 and 2012, the HICP inflation rate in Ireland (2.6%) was well above the overall HICP rate (0.6%).

Figure 32: Annual Rate of HICP Inflation for Health, 1997-2012

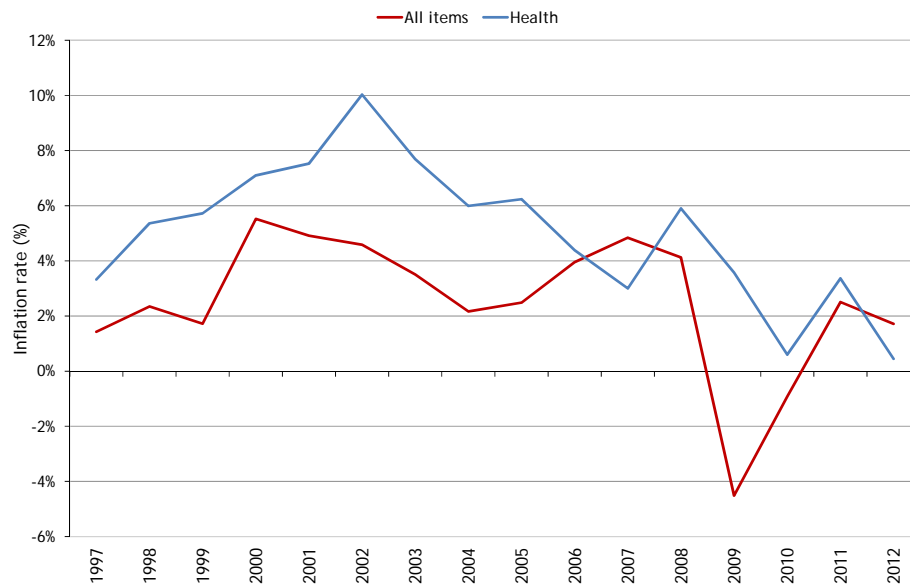


Figure 32 shows year-on-year inflation for this category in Ireland and the euro area-17. Irish HICP “Health” inflation has fallen from a high of 10.1 per cent in 2002 to just 0.5 per cent in 2012. However, in most years since 1997, the Irish rate of inflation exceeded the euro area-17 average.

Source: Eurostat; Europe Economics’ calculations

Figure 33 examines the CPI data for “Health”. Average CPI inflation for 1997 - 2012 was 5 per cent, double the general rate of CPI inflation for the period.

Figure 33: Annual Rate of CPI Inflation for Health, 1997-2012



Overall, “Health” inflation has been on a downward trend in recent years. Given low levels of overall inflation (and some deflation elsewhere in the CPI basket), “Health” was responsible for 15.4 per cent of headline inflation in the 2008-2012 period, despite its low weighting.

Source: CSO, Europe Economics

Looking at the more detailed breakdown of the “Health” COICOP category reveals that:

- Health services inflation has generally been higher than health goods inflation.
- “Hospital services” have the highest sub-category inflation rate at 8.7 per cent.
- Inflation in other health services has been around 5.5 per cent from 1999 to 2012.
- “Other medical and paramedical services” prices increased five per cent on average over the period 1999 to 2012.
- The highest inflation rate in health goods was “Therapeutic appliances & equipment” at three per cent per annum.
- The overall health goods category increased on average by 1.7 per cent per annum from 1999 to 2012.

Table 19: Average annual inflation in "Health" CPI, 1999-2012

	1999-2007	2008-2012	1999-2012
Health	6.4%	2.8%	5.1%
Medical products, appliances and equipment	3.0%	-0.5%	1.7%
Pharmaceutical products	2.5%	-1.2%	1.2%
Prescribed drugs	2.0%	-1.9%	0.6%
Other medicines	2.6%	0.5%	1.9%
Other medical products	3.6%	-0.4%	2.1%

Therapeutic appliances & equipment	3.6%	1.9%	3.0%
Out-patient services	7.3%	2.3%	5.5%
Doctors' fees	7.8%	1.8%	5.6%
Medical & paramedical services	7.7%	1.7%	5.5%
Dental services	6.5%	3.4%	5.4%
Other medical & paramedical services	6.9%	1.5%	5.0%
Hospital services	9.9%	6.6%	8.7%

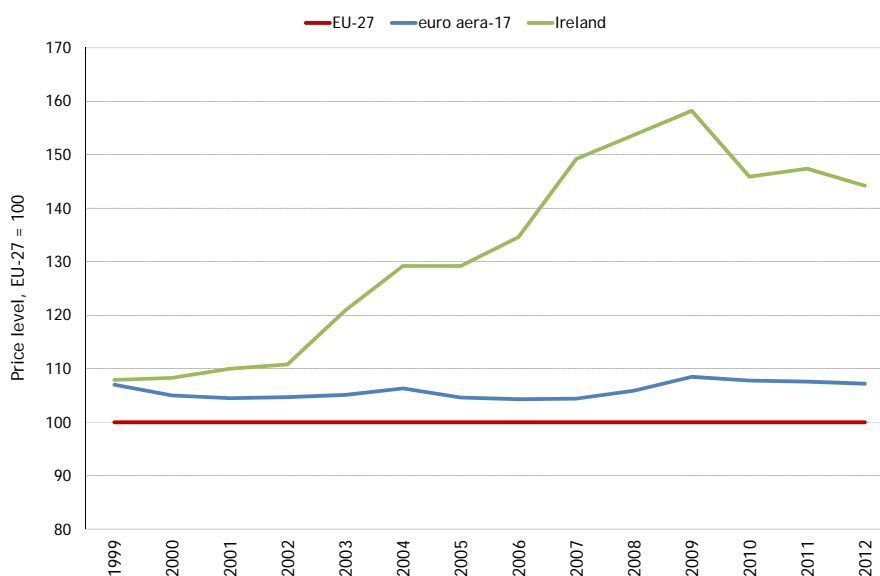
Source: CSO; Europe Economics' calculations

One final point to note it that prices in the "Health" COICOP category are measured as the amount paid by consumers less any public or charitable reimbursements. Insurance reimbursements are not included. Thus, the amount that consumers and consumer prices are impacted by increases in healthcare costs are influenced to some degree by the extent of reimbursements available.

4.7.2 Price Levels

Figure 34 shows Irish PPP prices, relative to the EU-27 and euro area -17. According to Eurostat's PPP data, Ireland has been the most expensive location for "Health" since 2004.

Figure 34: Health, Price Level Index, (PPPs, EU-27=100), 1999-2012



Irish price levels, in PPP terms, have consistently been higher than the EU-27 and euro area-17 average since 1999. The differential peaked in 2009 when Irish prices were 58.2 per cent above the EU-27 and 45.8 per cent above the euro area-17. Since then this has narrowed to 44.2 per cent and 34.5 per cent respectively.

Source Eurostat, Purchasing Power Parities

4.7.3 Policy Context

Health Sector Reform

Reform of the Health Sector must take account of a wide range of social and economic objectives of which cost reduction is just one element. Notwithstanding the complex nature of health sector reform, it is worth noting that the OECD has measured the potential impact of a range of structural reforms that can impact directly upon productivity and can directly improve national fiscal positions while maintaining current outcomes. This analysis suggests that Ireland could save up to 4.8% of GDP through reform of the health care system⁹².

Consideration should be given to making service provision to or on behalf of the State more open to aspects of competitive behaviour. The threat of competitors entering a market can enforce good conduct upon incumbents or the threat of losing market share can also promote more efficient behaviour⁹³. The health sector, for example, may benefit from such an approach. The introduction of systems where funding follows the user, as is currently the case in education, is likely to result in improved health service delivery: if funding follows the user, hospitals and health care providers would be incentivised to manage resources in a more efficient manner, while achieving service standards demanded by users. This process would reward good resource management by assigning budgets based on best practise in public service provision.

A 2013 “State of Readiness” review by an international expert found that the Irish health system was in a strong position to begin a phased implementation of MFTP (money-follows the patient) in public hospitals in line with the target of January 2014. A shadow funding exercise encompassing a selection of hospitals from the hospital groups is underway and plans for the commencement of phased implementation of MFTP from January are in the process of being finalised.

Recommendation:

Introduce funding procedures (and other competitive mechanisms) for the provision of public services that reflect performance and encourage an output focus.

Pharmaceutical Prices

Pharmaceutical prices have been a focus of debate in Ireland in recent years. The National Economic and Social Council highlighted that pharmaceutical prices in Ireland were higher than any other OECD country in 2010 and that generics prices are higher for the HSE than the UK’s National Health Service⁹⁴. The Irish public expenditure on pharmaceuticals was 85 per

92 Potential savings represent the difference between (i) a scenario where public spending and life expectancy gains would increase at the same pace over the next decade as over the decade 1997-2007 and (ii) a scenario where countries would achieve similar health improvements with lower public spending by moving towards the efficiency levels of best-performing countries. See Chapter 6; OECD estimates based on Joumard et al. (2008), “Health Status Determinants: Lifestyle, Environment, Health Care Resources and Efficiency”, OECD Economics Department Working Papers, No 627.

93 See Thornhill, D., Internal Competition is in the National Interest: Stop the rents!, Speech to the Competition Authority, 13th June 2011

94 National Economic and Social Council (2013) “Consumer prices”

cent of total pharmaceutical expenditure in 2007. Pharmaceuticals currently account for 17.5 per cent of public health expenditure, compared with 14 per cent in 2000⁹⁵. Although inflation in pharmaceutical goods has not been generally high, price increases appear to be on top of an already-high price level and the cost of pharmaceuticals is becoming an increasing concern for the public sector and households.

The high cost of prescriptions in Ireland is a combination of prescribing practices by pharmacists, infrequent updates via external reference pricing, and historically low levels of generics usage⁹⁶. The Health (Pricing and Supply of Medical Goods) Act 2013, passed in May 2013, contains a wide range of provisions that will likely impact the Irish pharmaceuticals market. The Act introduced generic substitution where generics are identified as substitutable by the Irish Medicines Board. The Act also requires the benchmarking of generic prices against other Member States and internal Irish prices and enacted a series of measures to encourage competition in the pharmaceuticals market.

The Health Act 2013 presents the potential to radically change the way in which pharmaceutical prices are set in Ireland. Pharmacists will be able to select a lower-priced pharmaceutical product than that prescribed for the patient by a medical practitioner for interchangeable pharmaceutical products. However, the ESRI has noted that the lack of clarity and precision as to how prices will be set under the new legislation means that it is not possible to predict with any certainty that originator and generic pharmaceutical prices in Ireland will fall vis-à-vis other countries⁹⁷.

The Minister for Health speaking in July 2013 announced that his department plans to end the practice of a retail mark-up of 20 per cent paid to pharmacists for dispensing drugs under the drugs payment scheme and the long-term illness scheme⁹⁸. In addition to the pricing structures in place for prescribed drugs, consumer behaviour in regards to the purchasing of prescribed medicines is worth considering. A survey by the National Consumer Association published in March 2013 revealed significant variations in prices of prescription medicines both nationally and in local urban areas⁹⁹. At a national level the average percentage price variation was found to be 56 per cent. This suggests that consumers are inactive in this market and do not compare prescription prices before making purchases. Consumers may assume, wrongly, that the price of all drugs is centrally determined.

The Drugs Payment Scheme incentivises consumers to use a single pharmacy. Under the Drugs payment scheme households pay a maximum of €144 per month for prescribed medicines. Any additional costs above this threshold are paid for by the State. If households use multiple pharmacies and exceed the threshold, they must apply for a refund of the excess themselves. If they use a single pharmacy and exceed the threshold they only pay €144. While the 2013 Act has introduced measures that incentivise consumers using the Drug Payment Scheme to purchase prescriptions at or below the reference price, these incentives and the negative

95 Gorecki, Paul K., Nolan, Anne, Brick, Aoife, and Lyons, Seán (2012) "Delivery of pharmaceuticals in Ireland - getting a bigger bang for the buck". ESRI Research Series Number 24

96 Brick, Aoife, Gorecki, Paul K., and Nolan, Anne (2013) "Ireland: pharmaceutical prices, prescribing practices and usage of generics in a comparative context" ESRI Research Series Number 32

97 Brick, A. et al, "Ireland: Pharmaceutical Prices, Prescribing Practices and Usage of Generics in a Comparative Context", ESRI, June 2013

98 www.dohc.ie/press/releases/2013/20130702b.html

99 National Consumer Association Prescribed Medicines Survey, 2013.

implications should consumers choose to purchase prescriptions medicines above the relevant reference price may not be widely understood or sufficiently transparent for consumers.

Recommendations:

- The Irish Medicines Board should progress quickly with the publication of the lists of interchangeable medicines to increase the use of generics in Ireland.
- Monitor the effectiveness of The Health Act 2013 in reducing the cost of prescription medicines, and in particular, to establish if and to what extent originator and generic pharmaceutical prices fall relative to other countries.
- Continue to promote consumer awareness of price variation in prescription drugs.

General Practitioners

In the CPI, “Doctors’ fees” captures GP fees, specialist fees and optician fees. These fees increased on average by 7.8 per cent per annum between 1999 and 2007. This subsequently fell to 1.8 per cent over the 2008 to 2012 period.

The Competition Authority has examined two sets of healthcare service professional groups; general practitioners (GPs)¹⁰⁰ and dentists¹⁰¹. Dental fees are captured under the heading of “Dental services” and are discussed below.

The study on GPs, released in parts between 2009 and 2010, found that barriers to entry and restriction of competition via advertising were significant impediments to making the profession more competitive. The restrictions on competition had the dual effect of restricting the supply of GPs in the country, which as a result pushed up salaries and reduced incentives to be cost efficient, and of significantly inconveniencing consumers by the attendant “blackspot” areas of the country where GP were difficult to access. All of the recommendations put forward by The Competition Authority have now been acted upon.

The Government responded to the market inefficiencies and competition restrictions identified by The Competition Authority by enacting the Health (Provision of General Practitioner Services) Act of 2012. This Act removed restrictions on GPs treating public patients by allowing any qualified GP to hold a General Medical Services contract. In November 2009, the Medical Council significantly eased the restrictions on advertising and the Irish Medical organisation now recommends that all doctors display price lists. The Irish College of General Practitioners has also introduced a new programme which resolves an access to training issue identified by the Competition Authority for doctors currently working in general practice in Ireland, who have not previously undergone accredited training in general practice.

100 The Competition Authority, Competition in professional services: general medical practitioners, 2010

101 The Competition Authority, Competition in professional services: dentists, 2007

Recommendations:

Given the recent pro-competition changes in the sector, indicators such as prices for GP-supplied services should be monitored to assess their impact on consumer healthcare prices.

Dentists

Average annual inflation for “Dental services” for 1999-2012 was 5.6 per cent, the second highest rate within the “Health” category sub-components. The rate of average annual inflation slowed from 7.8 per cent during the 1999 to 2007 period to 3.4 per cent in the 2008 to 2012 period. It is worth noting that in 2010, the Government reduced the dental benefits associated with medical cards and stopped offering free dental services under the PRSI scheme. This coincided with a significant jump in the index between December 2009 and January 2010 (up 12.9%).

While the rate of dental service inflation, as measured by the HICP, has slowed in recent years, Irish prices for these services continue to rise faster (3.4%) than the euro area-17 (1.7%) for 2008-2012.

The Competition Authority assessed the dental profession to have high barriers to entry. Similar to GPs, this restricted service (especially with regard to dental hygienists substituting for qualified dentists for routine dental maintenance), inflated wages associated with the profession, did not incentivise cost efficiency in operations, and information asymmetry and opacity in the pricing of dental services. Furthermore, the restriction on advertising was also identified as an impediment to competition, as with GPs. The Competition Authority made a series of 12 recommendations and, as of writing, four remain unimplemented¹⁰². The Department of Health has indicated, however, that the remaining recommendations in the Competition Authority report will be reviewed in the context of new legislation. The Department has recently undertaken a consultation on legislation to replace the Dentists Act, 1985. Issues raised in the Authority’s study of competition in the dental services sector were included in the topics for consultation.

Recommendations:

The forthcoming legislation to replace the Dentist Act, 1985 should address a number of the recommendations put forward by the Competition Authority, including;

- Introduce regulations to enable direct public access to dental hygienists;
- Remove the restrictions on dentists engaging in advertising their practices and enable the Dental Council to make rules regarding advertising within reasonable and limited circumstance;
- Explicitly permit the creation of corporate dental bodies; and
- Amend the composition of the Dental Council so that each of the professions regulated is represented on the Council and the majority of membership on the Council is from outside the professions being regulated.

102 www.tca.ie/EN/Promoting-Competition/Market-Studies/Professions/Dentists.aspx

Hospital Services

Average annual HICP inflation in “Hospital services” was 8.4 per cent for the period 2001-2012. As with all other health sub-categories, the annual average rate of HICP inflation for the period 2008-2012 (6.6%) was lower than for the period 1999-2007 (9.7%) , however it remains significantly above the euro area-17 (2.5%) averages. “Hospital services” includes charges from all public hospitals operating in Ireland and a sample of private hospitals.

Currently, patients attending A&E in public hospitals that have not been referred by their GP, do not hold a medical card, are not subsequently admitted to the public hospital, and are not covered by a number of other exemptions, pay a €100 fee. This was last increased in Budget 2009 by 13.6 per cent from the previous charge of €66 per night .The nightly cost for these patients is €75 per night up to a maximum of €750 within twelve consecutive months. Between 2007 and 2009, the cost increased by 25 per cent¹⁰³. A further increase of €5 is envisaged under the Health (Amendment) Act 2013.

Inflation in the “Health” category feeds into the cost of health insurance discussed above.

4.8 Education

This category covers all aspects of education including pre-primary and primary, secondary, third level and other education and training such as night course and examination fees.

Key Findings;

- Average annual HICP inflation for the period 1999-2012 was 6.1 per cent in Ireland compared to three per cent for the euro area-17.
- Education has the highest rate of CPI inflation for the 1997 to 2012 period (6.1%).
- Irish price levels were 42.7 per cent above the euro area-17 in 2008. By 2012, Irish prices were 6.4 per cent above the euro area-17 average indicating an improvement in Ireland’s relative cost competitiveness.
- Recent “Education” inflation can be largely attributed to changes in the third level Student contribution fee, given the substantial weight accorded to “Tertiary education” in the CPI basket.
- Irish third level institutions remain under-funded relative to institutions internationally, which is damaging the reputation and perceived quality of education received. Improvement of quality standards at third level requires adequate resourcing and attention to efficiency and enhanced productivity. This in turn requires a continuous process of reform at institutional levels and the allocation of resources in such a way as provides the best value for money.

Education was identified in Chapter 4 as having very high inflation rates throughout the periods analysed and despite its low weighting with the CPI basket (2.7%) it was a driver of inflation during the 2008 - 2012 period.

¹⁰³ Budget 2008 brought the charge from €60 to €66 while Budget 2009 increased it to €75

The education component of the CPI accounts for 2.7 per cent of the basket of goods and services measured within the index. It is divided into four sub-categories - pre-primary and primary¹⁰⁴, secondary¹⁰⁵, tertiary¹⁰⁶ and education non-definable¹⁰⁷. Tertiary education accounts for two thirds of the weight of the education component.

4.8.1 International and National Trends

Average annual HICP inflation for the period 1999-2012 was 6.1 per cent in Ireland compared to three per cent for the euro area-17.

Figure 35: Annual Rate of HICP Inflation for Education, 1997-2012

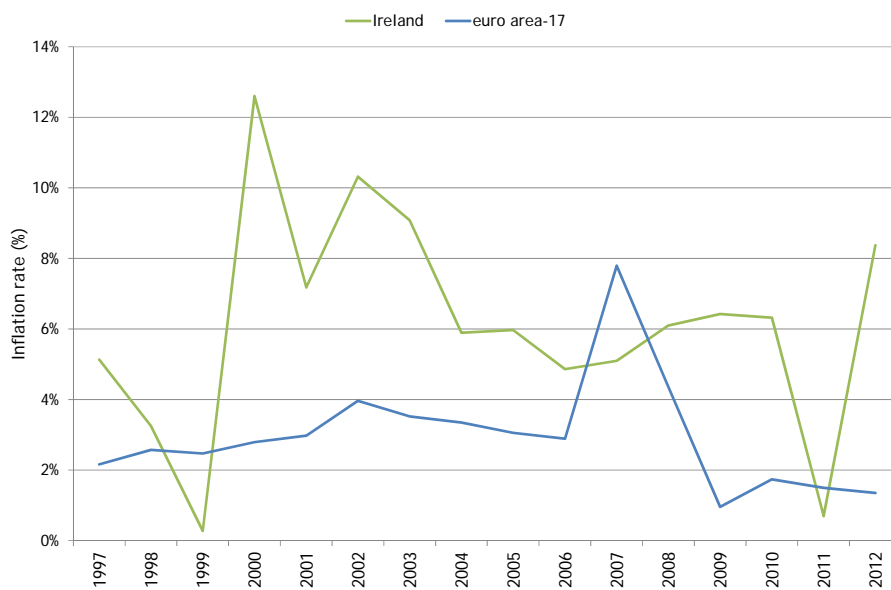


Figure 35 shows year-on-year HICP inflation rates for “Education” in Ireland and the euro area-17. With the exception of 2007, the euro area-17 rate of inflation in “Education” has been more stable than the Irish rate and only outstripped the Irish rate in three years (1999, 2007 and 2011).

Source: Eurostat; Europe Economics’ calculations

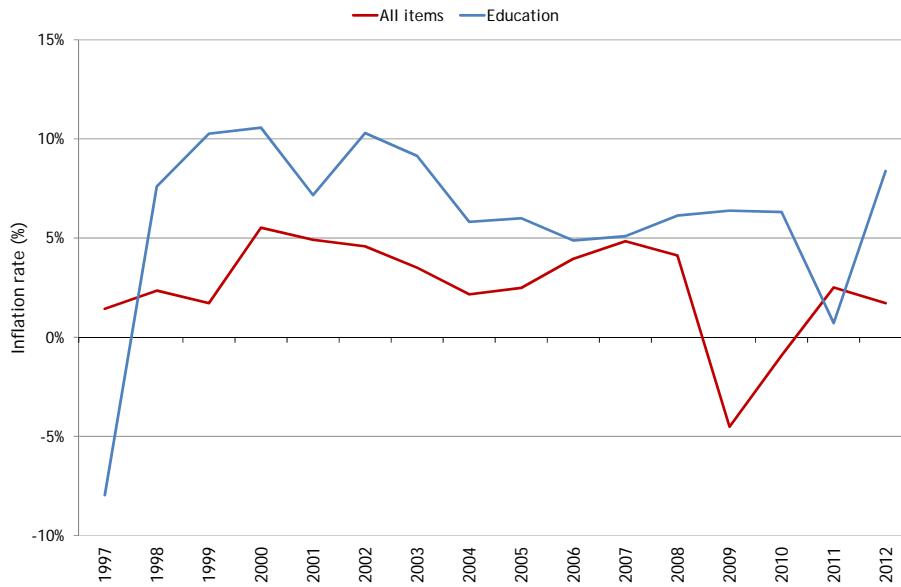
104 Pre-primary and primary education is comprised of playschools and private primary fees.

105 This category captures private second level day fees.

106 This category captures third level tuition fees and third level accommodation.

107 This category is made up of other education and training and examination fees.

Figure 36: Annual Rate of CPI Inflation for Education, 1997-2012



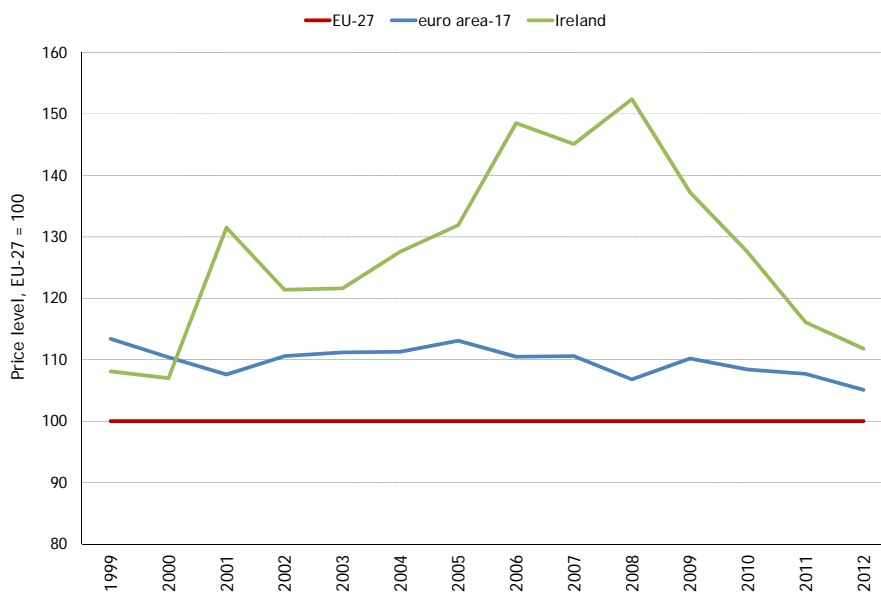
Looking at CPI data in Figure 36, “Education” has the highest rate of CPI measured inflation for the 1997 to 2012 period (6.1%). 1997 was the first full year of free third levels fees and this resulted in annual deflation of -8%. Since then, 2011 was the only year inflation in “Education” fell below the general CPI rate of inflation.

Source: CSO, Europe Economics

4.8.2 Price Levels

According to Eurostat’s PPP data, Ireland was ranked as the second most expensive location for “Education” within the euro area-17 in 2008. By 2012, Ireland’s competitiveness had improved and Ireland was the eighth most expensive location. Given that Ireland’s rate of HICP inflation was 5.6 per cent per annum over this period (compared with a euro area average of two per cent per annum), this data should be viewed with some caution.

Figure 37: Education Price Level Index, (PPPs, EU-27=100), 1999-2012



In 2008, Irish price levels in PPP terms were 52.4 per cent above the EU-27 and 42.7 per cent above the euro area-17. By 2012, Irish prices were 11.8 per cent above the EU-27 level and 6.4 per cent above the euro area-17 average.

Source Eurostat, Purchasing Power Parities

4.8.3 Policy Context

Early Childhood Care and Education

Average educational attainment in Ireland has improved significantly over the last two decades. The proportion of the working age population with tertiary level education has increased from 26 per cent in 2003 to 36 per cent in 2009. While expenditure is not the only determinant of educational quality, it remains a key input metric. In 2008, Ireland spent more than the OECD average per student at primary, secondary and tertiary levels, but less than the average at pre-primary level.

In January 2010, the Government introduced “The Early Childhood Care and Education” (ECCE) Programme. The ECCE provides a free year of early childhood care and education for all children of pre-school age (usually between three and four years of age). There have been calls for the scheme to be expanded to a two-year programme with funding arising from a proposed reduction in Child Benefit payments.

Higher Level Education Funding

The majority of third level students in Ireland are entitled to ‘free fees’. However, students are required to make an annual student contribution, formerly known as a registration fee. In 2008 this charge was €900 but, with the exception of 2010, it has increased significantly in every subsequent year and for the 2013/2014 academic year stands at €2,250 amounting to an average annual rate of inflation of 23 per cent. The Minister of Education has indicated the student contribution fee will continue to rise until it reaches €3,000 in 2015”.

Recent “Education” inflation can be largely attributed to changes in the Student contribution, given the substantial weight accorded to “Tertiary education”. The increase in the Student contribution only applies from September each year and therefore, when analysing annual data, the full impact on the rate of inflation for the category is not realised until the

following year. For example looking at Figure 35, the drop in “Education” inflation to 0.7 per cent in 2011 reflects the freezing of the contribution level in 2010.

In order to deliver a quality mass higher education system that meets the needs of the individual, and supports the development of enterprise and the economy, there is a need for adequate resourcing. The first step is to ensure that current funding is spent in the most efficient manner possible and that maximum value for money is achieved. The OECD has measured the potential impact of a range of structural reforms that can impact directly upon productivity and can directly improve national fiscal positions while maintaining current outcomes. This analysis suggests that Ireland could save up to 0.25 per cent of GDP through educational reform.

Students already contribute some portion through registration fees, which have increased significantly in recent years, as has funding from the State. However, Irish institutions remain under-funded relative to institutions internationally, which is damaging the reputation and perceived quality of education received. Improvement of quality standards at third level requires adequate resourcing and attention to efficiency and enhanced productivity. This in turn requires a continuous process of reform at institutional levels and the allocation of resources in such a way as provides the best value for money.

Graduates, who will benefit significantly from higher education in terms of increased earnings over the course of their life, should contribute a greater portion of the cost of their education. This will impact on inflation. It would also be important to ensure that such a measure does not act as a barrier to participation in third level education. Available evidence highlights that students make strong returns from time spent in third level education. In terms of reducing barriers and managing inflationary impacts, mechanisms that allow education costs to be paid over a period of time when students are benefiting from their education should be considered (e.g. low cost student loans).

4.9 Clothing and Footwear

This category includes men’s, ladies’ and children’s clothing and footwear, sports and leisurewear and services such as laundry and dry cleaning, shoe repair, dress hire and alterations.

Key Findings:

- According to HICP data, Irish “Clothing and footwear” prices deflated annually by 4.6 per cent in the period 1997-2012, compared to a marginal annual increase of 0.8 per cent for the euro area-17 average.
- Deflation is also a constant feature of “Clothing and footwear” according to CPI data.
- In 2012, Ireland was the twelfth most expensive euro area member for “Clothing and Footwear”. Since 1999, Irish price levels for this category exceeded the euro area average in only four years.
- The large and sustained level of deflation in this category, with no immediately apparent justification, points to a potential mismatch between measured prices and prices paid. Recent changes to the methodology used to collect the data should be monitored to assess whether they have successfully addressed the issue.

“Clothing and footwear” stands out as a category that has experienced substantial and sustained deflation since 1997. The category has had the highest level of deflation among the 12 COICOP categories and is only one of three categories in which prices have actually fallen on the HICP measure from 1997 to 2012. Such price declines have not been a function of Irish prices coming down from higher than average levels via a “law of one price” effect in the Single Market. On the contrary, clothing and footwear prices in Ireland have been lower than prices of similar items in the euro area in all but three years since 1999.

4.9.1 International and National Trends

According to the HICP, Irish “Clothing and footwear” prices deflated annually by 4.6 per cent in the period 1997-2012 compared to a marginal annual increase of 0.8 per cent for the euro area-17 average. This provided downward pressure to Ireland’s HICP rate of inflation during this time. During the same period, “Clothing and Footwear” accounted for 8.1 per cent of the euro area-17’s inflation.

Figure 38: Annual Rate of HICP Inflation for Clothing and Footwear, 1997-2012



As illustrated in Figure 38, between 1997 and 2012, the HICP data shows consistent deflation for “Clothing and footwear” in Ireland while the euro area-17 has consistent, albeit low levels of inflation throughout the period.

Source: Eurostat; Europe Economics’ calculations

Figure 39 examines CPI data and reveals a similar picture with regard to this category. Over the period 1997 to 2012, deflation of 4.6 per cent per annum was recorded. While deflation is a constant feature of the “Clothing and footwear”, it is interesting to note there appears to be a relationship between it and the headline rate, despite the category only carrying a weight 4.8 per cent within the total CPI basket.

Figure 39: Annual Rate of CPI Inflation for Clothing and Footwear, 1997-2012

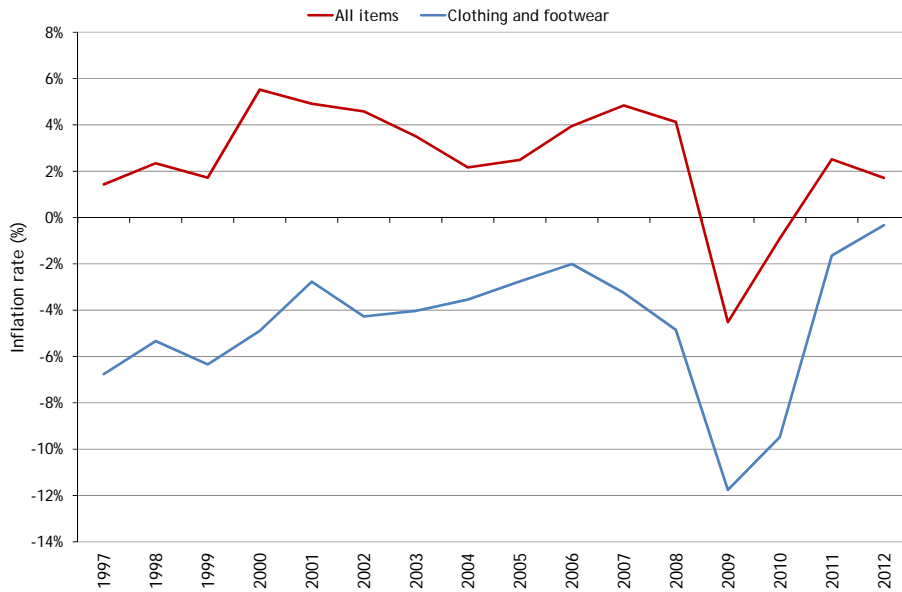


Figure 39 suggests that the inflation rate for “Clothing and Footwear” mirrors or tracks the headline rate - moving in the same direction at roughly the same speed over time. More recently, however, the gap between the two figures has narrowed from nine per cent in 2008 to just two per cent in 2012.

Source: CSO, Europe Economics

4.9.2 Price Levels

According to Eurostat data, Ireland was the ninth most expensive location (on a PPP basis) for “Clothing and footwear” in the euro area-17 in 2012.

Figure 40: Clothing and Footwear Price Level Index, (PPPs, EU-27=100), 1999-2012

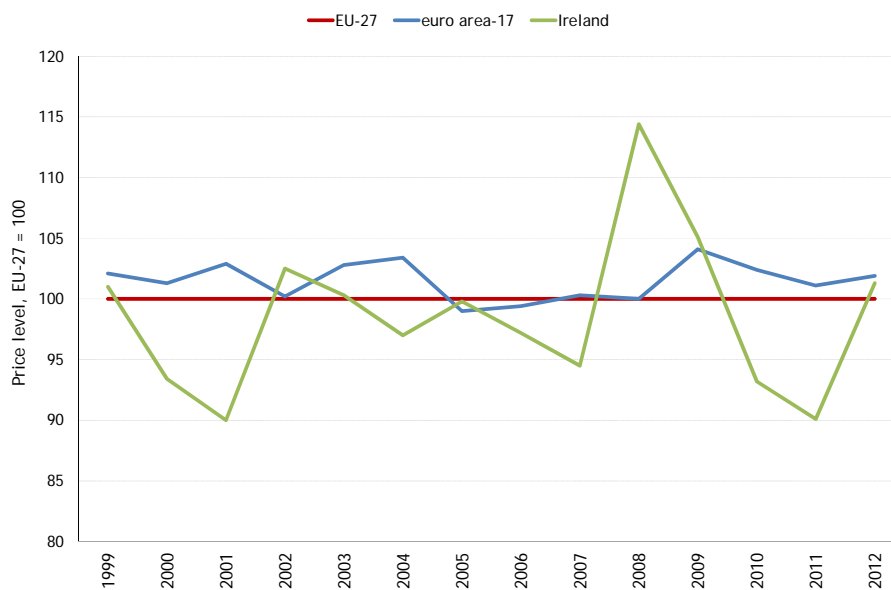


Figure 40 shows Irish price levels relative to the EU-27 and the euro area-17 from 1999 until 2012. In most years, Irish prices have been lower than both the EU-27 and euro area-17 averages¹⁰⁸.

Source Eurostat, Purchasing Power Parities

Sustained Deflation in Clothing and Footwear

There are a number of reasons why clothing may have become cheaper in recent years. For example, the growth in popularity of “fast fashion” outlets that produce high volume, “on trend” garments which are regarded as disposable in nature (i.e. they are designed to only last one season). The success of fast fashion retailers in attracting consumers with low cost garments may be acting as a downward pressure on prices in fashion retail more widely. In addition, clothing manufacture has migrated to less developed economies with low income countries accounting for three quarters of the world’s clothing exports¹⁰⁹. However, these are international developments and do not explain why deflation has been a much stronger feature of “Clothing and footwear” in Ireland than elsewhere within the euro area.

It is surprising to find prices for this category have been both low by international standards and falling. The impact of the recession and certain policy developments by the Irish government, such as the revised Retail Planning Guidelines¹¹⁰ and other recent retail competition reforms, may have enhanced competition in the retail sector and pushed down prices, but these developments obviously do not explain the observed price decreases since 1997.

¹⁰⁸ The spike in the Irish price level for “Clothing and footwear” in 2008 appears to be an anomaly in the data given that in both 2007 and 2009 Irish prices were below euro area prices and in 2008 Ireland experienced HICP deflation of -4.7 per cent in this category while euro area-17 prices increased by 0.6 per cent.

¹⁰⁹ Centre for Globalization, Governance and Competitiveness, The Apparel Global Value Chain, Duke University, 2011

¹¹⁰ Department of the Environment, Community and Local Government, Guidelines for Planning Authorities Retail Planning, April 2012

Another potential explanation for the large decrease in the “Clothing and footwear” index is measurement discrepancies. The OECD has noted that “the pricing of clothing and footwear counts among the trickiest areas of the CPI and the features of the clothing market create problems for price index compilers”¹¹¹. A key point in the price development of clothing and footwear is the unusually large share of non-comparable items. When existing items are no longer available and new items come on to the market, a decision has to be made whether the new item is comparable or not. If it is not considered comparable, it is excluded from the comparison. This may be a source of downward bias because new items tend to be fashionable and their inclusion would raise the price level.

Following analysis by the UK’s Office of National Statistics in 2010 which identified a number of issues in relation to the calculation of “Clothing and footwear” price statistics a number of changes were made to the methodology used both in the UK and Ireland¹¹². Following the introduction of these reforms the “Clothing” sub-component of “Clothing and footwear” recorded annual inflation of 0.8 per cent in 2012. This is the first year prices increased since 1997¹¹³. In light of these issues, it will be important to monitor price movements in this category for some time.

Recommendations:

- Monitor price movements and the impact of recent methodological changes to the “Clothing and footwear” index. It may be useful to examine how well actual prices paid for like-for-like items reflect changes in the price indices over time.

4.10 Administered prices

Key Findings:

- Government can influence consumer price through direct or indirect price regulation. Eurostat measures state-influenced prices or “administered prices” defined as prices that are fully-administered or mainly-administered by central, regional, or local government or national regulators.
- The goods and services classified as “administered” by the CSO represent a small subset of the overall CPI basket. They include hospital services, insurance connected with health, postal services and a range of passenger transport services (see Appendix 4 for a full list).
- Between 2001 and 2012, inflation in Irish administered prices has outpaced inflation in administered prices in international peer countries and the Eurozone. Furthermore, inflation in administered prices has been higher than headline HICP inflation in Ireland.

111 www.oecd.org/std/OECD-CPI-Chile-Clothing-and-Footwear.pdf

112 Office of National Statistics (2010) “CPI and RPI: increased impact of the formula effect in 2010”

113 The distinction between the methods is primarily the use of a geometric or arithmetic averaging technique. For a more in-depth discussion of the features of and differences between these techniques, see: Silver, Mick and Bloem, Adriaan M. (2006) “Why elementary price index number formulas differ: price dispersion and product heterogeneity”. IMF Working Paper WP/06/174

One way Government can influence prices is by direct or indirect price regulation. Eurostat measures state-influenced prices or “administered prices” defined as prices that are fully-administered or mainly-administered by central, regional, or local government or national regulators¹¹⁴. The items used in the construction of the Harmonised Index of Consumer Prices - Administered Prices (HICP-AP) differ from country to country and depend on domestic government arrangements that influence prices. Countries in which the government plays a large role in influencing prices will have more items covered under the HICP-AP while countries with less government price intervention will have fewer items covered. When interpreting HICP-AP inflation rates and levels, it is important to keep in mind that this is not a like-for-like comparison of items weighted by local consumption as the headline HICP inflation measure, but a collection of items that meet the criteria to be considered as administered.

Despite country-specific differences in HICP-AP baskets, there are some criteria applied across countries. First, no excisable products or heavily indirectly taxed products are included. This excludes alcohol and tobacco products as well as petrol from the HICP-AP basket. Second, products that are subject to standards regulation, such as products regulated by health and safety or environmental standards or products under the Common Agricultural Policy are excluded. Third, products that are subject to index-linked price regulation by adjusting for CPI or HICP inflation are typically excluded. Fourth, prices that are influenced by the government for transitory purposes, such as the transition to the euro, are excluded. Finally, there are a set of conditions that dictate whether and how telecommunications and electricity and gas items are included in the HICP-AP basket.

Table A5 in the Appendix contains the COICOP sub-categories that Eurostat has determined qualify as fully- or mainly-administered in Ireland¹¹⁵. Some categories, such as “Refuse collection”, “Electricity”, and “Insurance connected with health” were identified as administered up to a particular point, after which the category has dropped out of the HICP-AP basket. Others, such as “Passenger transport by railway” and “Combined passenger transport” are only included in the HICP-AP basket from a certain date. All other subheadings are included in the HICP-AP index for the entirety of the time series.

Table 20 contains the price levels and inflation rates for the HICP-AP in Ireland, comparator countries, and the euro area-17 from 2001 to 2012. During most of the period, inflation in Irish administered prices has outpaced inflation in administered prices in international peer countries and the Eurozone. Furthermore, inflation in administered prices has been higher than headline HICP inflation in Ireland.

114 http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/documents_meth/HICP-AP/HICP-AP_Definitions_Explanations.pdf

115 For a full list of EU27 countries, see:

http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/documents_meth/HICP-AP/HICP-AP_classification_2013-02.pdf

Table 20: Administered prices annual average inflation, 2001-2012

Year	Ireland	euro area-17
2002	8.6%	1.8%
2003	11.0%	2.5%
2004	6.5%	3.9%
2005	10.1%	2.1%
2006	8.1%	2.4%
2007	8.1%	2.2%
2008	4.3%	2.7%
2009	4.0%	1.7%
2010	-2.6%	1.7%
2011	6.3%	3.6%
2012	7.3%	3.8%

Source: Eurostat; Europe Economics' calculations

As discussed previously, the HICP-AP basket differs from country to country depending on the scope government has to influence prices. Thus, the comparison with other countries is not a comparison between other countries' HICP-AP inflation but a comparison of price trends in categories that make up the Irish HICP-AP basket.

Table 21: Annual average inflation in administered prices sub-indices in Ireland and comparator countries, 2000-2012

	2000-2007		2008-2012		2000-2012	
	Ireland	euro area-17	Ireland	euro area-17	Ireland	euro area -17
Combined passenger transport	4.5%	3.3%	5.0%	3.7%	4.7%	3.5%
Electricity	8.0%	2.9%	3.6%	4.8%	6.2%	3.7%
Gas	9.5%	6.1%	2.9%	4.6%	6.8%	5.5%
Hospital services	9.7%	3.8%	6.6%	2.5%	8.4%	3.3%
Insurance connected with health	9.8%	3.7%	14.4%	2.5%	11.7%	3.2%
Passenger transport by railway	4.5%	2.9%	3.5%	3.6%	4.1%	3.2%
Passenger transport by road	4.6%	2.9%	4.4%	3.0%	4.5%	2.9%
Postal services	5.4%	1.8%	0.7%	1.7%	3.4%	1.8%
Refuse collection	18.5%	3.3%	-1.1%	2.2%	10.4%	2.9%

Source: Eurostat; Europe Economics' calculations

Between 2000 and 2007, inflation in the subcategories that make up the Irish HICP-AP index rose faster than inflation in the same categories in the euro area-17. From 2008 to 2012, only "Combined passenger transport", "Hospital services", "Insurance connected with health", and "Passenger transport by road" stood out as categories in which Irish prices grew faster than prices abroad. Utility and general public services prices, such as postal services and refuse collection, rose slower in Ireland than elsewhere.

The portion of any increase in administered prices that can be attributed to the government directly is unclear for at least two reasons. First the categories are only "mainly-administered", meaning the government may not completely determine prices in these categories. Second some categories, such as electricity and gas, may be more influenced by international prices that are outside of the control of governments. Nevertheless, though the extent of the government's influence in determining administered prices is not known, it is clear that inflation in administered prices has been higher than headline inflation and is a contributor to the inflation differential between Ireland and other countries.

Appendix 1: Data Sources

This report relies primarily on consumer price data produced by the Central Statistics Office and Eurostat.

The CSO's Consumer Price Index (CPI) measures the price of a basket of goods and services that would be purchased by a "representative household"¹¹⁶. The aim is to understand how aggregate prices change from month to month or year to year by constructing a weighted average index of prices. The weights used are, in general, the proportion of average household expenditure allocated to the items making up the basket. In the context of household finances, the CPI is used to understand how the buying power of household income changes as prices rise.

Nationally derived consumer price indices seek to capture average price increases based on consumption patterns within a country's borders. Since consumption patterns differ across countries, direct comparisons between national CPIs are not always appropriate - the goods and services (and the proportion spent on each item) may differ between countries. To overcome this problem, the European Commission's official statistics body Eurostat collects price indices for EU Member States, candidate members, and selected non-EU countries using harmonised product definitions and methodologies. This index, known as the Harmonised Index of Consumer Prices (HICP), facilitates comparison between countries.

Both the CSO and Eurostat measures of inflation divide the range of goods and services measured into a series of 12 categories known as COICOPs (Classification of Individual Consumption according to Purpose). Much of the later analysis in this report analyses price and inflation trends at COICOP level.

It is important to note that differences exist between Eurostat's HICP and the CSO's CPI, reflecting different item definitions and basket weights (i.e. reflecting differences in consumer preferences between countries). Further, while both indices are compiled using the same underlying price data, item classification system, reference population, and methodology¹¹⁷, the CPI includes 8 item categories that the HICP excludes or treats differently:

- Mortgage interest
- Building materials
- Motor tax – motor cycles
- Motor tax – motor car
- House insurance – contents (non-service)
- House insurance – dwelling

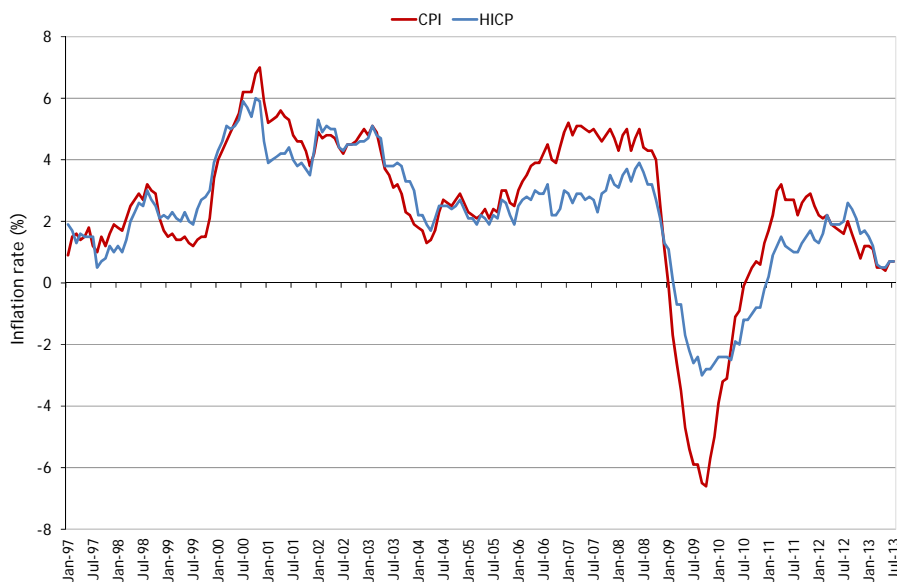
116 In Ireland, the CPI is measured by the Central Statistics Office (CSO) and contains 632 items. Item weights, which measure what proportion of household budgets are spent on particular items, were derived from the Household Budget Survey up until December 2012. From January 2013, item weights are derived from the annual National Accounts "Household Final Consumption Expenditure" data. The item basket is updated every five years to reflect shifting consumption patterns. Weights were updated every 5 years prior to 2012. The weights are now updated every 12 months.

117 CSO, Information Note - Comparison between the CPI and the HICP, March 2013

- Motor car insurance – (non-service)
- Union subscriptions.

Further, the HICP does not include the Household Charge and Local Property Tax introduced in Ireland in 2012 and 2013 respectively. In other words, some key sources of domestic price inflation included in CPI are absent from HICP. As a result of these differences, HICP inflation rates differ from CPI rates. In general the HICP measure of inflation has been lower than the CPI measure. The HICP has also been less volatile than the CPI.

Figure A1: Year-over-year inflation readings from CSO CPI and Eurostat HICP indices, (1997-2013)



CPI inflation peaked at 7 per cent in November 2000 and bottomed out -6.6 per cent in October 2009. HICP inflation reaches highs and lows around the same time, but the peak is 6 per cent and the trough is -3 per cent. Furthermore, the standard deviation of the HICP inflation is 1.9, while CPI inflation's standard deviation is 2.5.

Source: CSO, Europe Economics calculations

Bermingham finds that mortgage interest, motor car tax, and non-service motor car insurance are among the top 20 items Irish households purchased between 2004 and 2005 and 2009 and 2010¹¹⁸. As these items represent a significant proportion of household outlays, they are accorded relatively large weights (based on the Household Budget Survey) in the CSO CPI basket. The fact that these items are absent from HICP explains the HICP's more subdued movements relative to the CPI. It is fair to say, therefore, that HICP tends to understate movements in Irish consumer prices due to the absence or differential treatment of selected item categories.

118 Bermingham, Colin (2012) "Recent trends in Irish expenditure and prices" Central Bank of Ireland Quarterly Bulletin 03 (July)

Appendix 2: HICP Consumption Profiles and Category Rankings

Consumption profiles

The consumption profile of households in the HICP is derived from weights used to construct the index. The proportion of income a representative household spends on various items is calculated out of 100; for example, a weighting of 10 for “Recreation and culture” indicates that an average household spends 10 per cent of their income on recreational and cultural goods and services.

Table 5 compares the consumption profile of Ireland with that of the euro area average. For example, the “Restaurants and hotels” COICOP category had the largest weight in the Irish HICP basket, while “Food and non-alcoholic beverages” was accorded the largest weight within the euro area average profile.

The five categories with the largest weightings in the HICP basket are the same for both Ireland and euro area average, however the ordering is different. In Ireland, the category with the highest average ranking is “Restaurants and hotels”, while this category is on average only the fifth most important category for the euro area. For the euro area, “Food and non-alcoholic beverages” tops the weighting list, whereas this category ranks second in Ireland.

“Housing, water, electricity, gas and other fuels” is the fifth most prominent outlay for Irish households, while it is the second most important category for the average euro area household. It is important to note that the HICP methodology excludes mortgage interest and building materials while these are both included in this category in the CPI¹¹⁹.

The bottom of the consumption hierarchy, by contrast, is nearly identical between Ireland and the euro area. “Health”, “Communications”, and “Education” are the lowest ranked household outlays, in that order. “Clothing and footwear” is the eighth most important category. The only difference in ranking is that in Ireland the ninth most important category is “Furnishings, household equipment and routine maintenance of the house” and in comparators it is “Alcoholic beverages, tobacco and narcotics”.

Table A1: Ranking of COICOP categories by HICP weightings

COICOP category	Ireland	Euro area
Restaurants and hotels	1	5
Food and non-alcoholic beverages	2	1
Transport	3	3
Recreation and culture	4	4

119

www.cso.ie/en/media/csoie/surveysandmethodologies/documents/pdfdocs/CPI_Intro_of_Updated_Series_Base_Dec2011.pdf, p 65.

Housing, water, electricity, gas and other fuels	5	2
Alcoholic beverages, tobacco and narcotics	6	9
Miscellaneous goods and services	7	6
Clothing and footwear	8	8
Furnishings, household equipment etc.	9	7
Health	10	10
Communications	11	11
Education	12	12

Source: Eurostat; Europe Economics' calculations

In summary, Ireland's consumption profile differs most noticeably from the euro area average in the categories of most importance to average households. Given the different consumption profiles between the two, one might expect to find that the same rate of inflation in a category would have different impacts on headline inflation in Ireland and the euro area.

Appendix 3: Why do Some Products Rise Faster in Price than Others?

Changes in price levels are a natural part of a functioning economy. Inflation in a particular product category might be associated with:

- A change in consumer preferences — higher demand for particular goods might raise the price of those goods relative to others.
- If a good or service is non-tradable, a change in consumers (e.g. via immigration or emigration, an increase in consumers with greater demand for that product).
- Changes in the technology of production — Innovations are often industry-specific, and so change relative prices meaning there is more inflation in some than in others.
- Production shocks (e.g. bad harvests, or accidents or wars affecting the supply of raw materials such as oil).
- Changes in supply-side substitutes (e.g. rising demand for other products using the same raw materials, intermediate goods, or labour, bidding up their prices).
 - A special case of this is the so-called “Balassa-Samuelson effect”. In this case the supply-side substitute is labour. This concept is based on the fact that in an economy catching up with its richer neighbours, labour productivity tends to rise faster in sectors producing internationally tradable goods (particularly in capital-intensive manufacturing industry) than in those involved in the more labour-intensive and generally non-traded service sector. Increases in labour productivity growth in traded manufacturing industries are usually followed by wage growth throughout the economy (both manufacturing and services compete for employees in the same labour market). Thus, a combination of wage growth across both traded and non-traded sectors, but lower labour productivity gains in the services sector, leads to more rapid increases in the cost of services. In this way, services inflation is often higher in those regions of a monetary union enjoying the most rapid growth in productivity and incomes.
 - Similar effects apply to other factors of production. For example, if the price of corn for biofuels rises, then the price of corn for feeding farm livestock also rises, raising the price of food.
- The pre-existing situation, before the change in relative prices, may not have represented an “equilibrium” situation. Specifically, the price of the good in one country within a single economic and monetary area may have been higher than in another country in that same area. Differences in inflation may be the consequence of convergence in prices.

Appendix 4: Additional Tables

Table A2: Average annual contribution to headline HICP inflation by COICOP category, 1997-2012

	1999-2007		2008-2012		1999-2012	
	Ireland	Euro area	Ireland	Euro area	Ireland	Euro area
All-items HICP	3.30	2.03	0.57	2.06	2.33	2.04
Alcoholic beverages, tobacco and narcotics	0.41	0.16	0.15	0.14	0.32	0.15
Clothing and footwear	-0.09	0.10	-0.21	0.23	-0.13	0.15
Communications	-0.02	-0.08	0.03	-0.05	-0.01	-0.07
Education	0.11	0.03	0.14	0.02	0.12	0.03
Food and non-alcoholic beverages	0.40	0.30	-0.01	0.34	0.25	0.32
Furnishings, household equipment and routine maintenance of the house	0.03	0.09	-0.12	0.09	-0.02	0.09
Health	0.14	0.09	0.10	0.07	0.13	0.08
Housing, water, electricity, gas and other fuels	0.49	0.45	0.11	0.49	0.35	0.46
Miscellaneous goods and services	0.23	0.17	0.18	0.19	0.21	0.18
Recreation and culture	0.33	0.04	-0.06	0.04	0.19	0.04
Restaurants and hotels	0.93	0.27	0.00	0.19	0.60	0.24
Transport	0.42	0.44	0.32	0.48	0.38	0.45

Source: Eurostat; Europe Economics' calculations

Table A3: Inflation contribution as a percentage of total, 2003-2012 (average annual inflation rate)

	2003-2007	2008-2012	2003-2012
All items	100%	100%	100%
Alcoholic beverages and tobacco	9%	22%	11%
Clothing and footwear	-4%	-43%	-10%
Communications	0%	4%	1%
Education	3%	21%	6%
Food and non-alcoholic beverages	3%	0%	3%
Furnishings, household equipment and routine household maintenance	-2%	-18%	-4%
Health	4%	15%	6%

Housing, water, electricity, gas and other fuels	40%	-19%	32%
Miscellaneous goods and services	3%	67%	13%
Recreation and culture	5%	-9%	3%
Restaurants and hotels	23%	0%	20%
Transport	13%	57%	19%

Note: Subcategories may not sum to all items due to rounding. A contribution of 0 means the calculated contribution is less than 0.5 per cent

Source: CSO; Europe Economics' calculations

Table A4: Inflation drivers in Irish CPI, 2003-2012 (Average annual inflation rate)

	2003-2007	2008-2012	2003-2012
All items	3.37	0.59	1.98
Alcoholic beverages and tobacco	0.31	0.13	0.22
Clothing and footwear	-0.14	-0.26	-0.20
Communications	0.02	0.02	0.02
Education	0.10	0.12	0.11
Food and non-alcoholic beverages	0.12	0	0.06
Furnishings, household equipment and routine household maintenance	-0.06	-0.10	-0.08
Health	0.15	0.09	0.12
Housing, water, electricity, gas and other fuels	1.36	-0.11	0.63
Miscellaneous goods and services	0.12	0.40	0.26
Recreation and culture	0.17	-0.05	0.06
Restaurants and hotels	0.78	0.00	0.39
Transport	0.43	0.34	0.39

Note: Subcategories may not sum to all items due to rounding. A contribution of 0 means the calculated contribution is less than 0.005

Source: CSO; Europe Economics' calculations

Table A5: COICOP sub-headings considered as fully- or mainly-administered prices in Ireland

Fully-administered	Mainly-administered
04.4.2 Refuse collection (up to Dec 2006)	04.5.1 Electricity (up to Dec 2011)
	04.5.2 Gas
	06.3 Hospital services
	07.3.1 Passenger transport by railway (from Jan 2011)
	07.3.2 Passenger transport by road
	07.3.5 Combined passenger transport (from Jan 2011)
	08.1 Postal services
	12.5.3 Insurance connected with health (up to Dec 2008)

Source: Eurostat

Forfás Board Members

Eoin O'Driscoll (Chairman)

Chairman, Southwestern

Martin Shanahan

Chief Executive, Forfás

Mark Ferguson

Director General, Science Foundation Ireland

John Murphy

Secretary General, Department of Jobs, Enterprise and Innovation

Barry O'Leary

Chief Executive, IDA Ireland

Frank Ryan

Chief Executive Officer, Enterprise Ireland

Michael O'Leary

Secretary to the Board, Forfás

Recent Forfás publications

State Investment in Research and Development 2012 - 2013 Forfás	December 2013
Survey of Research and Development in the Higher Education Sector 2010/2011 Forfás	December 2013
NCC Submission to the Action Plan for Jobs 2013 NCC	November 2013
Addressing Future Demand for High-Level ICT Skills Forfás, EGFSN	November 2013
Business Expenditure on Research & Development (BERD) 2011/2012 Forfás, CSO	August 2013
State Investment in Research & Development 2011 - 2012 Forfás	August 2013
Social Enterprise in Ireland: Sectoral Opportunities and Policy Issues Forfás	July 2013
Ireland's Construction Sector: Outlook and Strategic Plan to 2015 Forfás	July 2013
Forfás Annual Report 2012 Forfás	July 2013
Research Prioritisation: Framework for Monitoring Public Investment in Science, Technology and Innovation and 14 Action Plans Forfás	July 2013
Monitoring Ireland's Skills Supply - Trends in Education and Training Outputs 2013 EGFSN	July 2013
National Skills Bulletin 2013 EGFSN	July 2013
Annual Business Survey of Economic Impact 2011 Forfás	July 2013
Global Entrepreneurship Monitor (GEM) 2012 Global Entrepreneurship Monitor	July 2013

Annual Employment Survey 2012 Forfás	July 2013
Ireland's Competitiveness Performance 2013 Forfás	May 2013
Making it in Ireland: Manufacturing 2020 Forfás	April 2013
Future Skills Requirements of the Manufacturing Sector to 2020 EGFSN	April 2013
Sectoral Regulation Forfás	April 2013
EGFSN Statement of Activity EGFSN	March 2013
Costs of Doing Business in Ireland 2012 Forfás	March 2013
Vacancy Overview 2012 EGFSN	February 2013
Action Plan for Jobs 2013 Forfás, DJEI	February 2013
A Review of the Equity Investment Landscape In Ireland Forfás	January 2013
Regional Labour Markets Bulletin 2012 EGFSN	January 2013
A Review and Audit of Licences Across Key Sectors of the Irish Economy Forfás	December 2012
Global Entrepreneurship Monitor (GEM) 2011 Global Entrepreneurship Monitor	September 2012
Annual Employment Survey 2011 Forfás	August 2012
National Skills Bulletin 2012 NCC	July 2012



The publications of Forfás and the advisory groups to which it provides research support are available at www.forfas.ie

To sign up for our email alerts contact us at info@forfas.ie or through the website.

February 2014

Forfás

Wilton Park House
Wilton Place
Dublin 2

Tel: +353 1 607 3000
Fax: +353 1 607 3030

www.forfas.ie