

Banc Ceannais na hÉireann Central Bank of Ireland

Eurosystem

Financial Stability Notes

Rising construction costs and the residential real estate market in Ireland Filippo Arigoni, Gerard Kennedy & Neill Killeen Vol. 2022, No. 12

Rising construction costs and the residential real estate market in Ireland

Filippo Arigoni, Gerard Kennedy & Neill Killeen¹

Central Bank of Ireland

October 2022

Abstract

Construction costs are a key factor to consider when analysing the residential real estate market in Ireland given their impact on housing supply. This *Note* examines longer-term trends in construction costs in Ireland and shows that these costs have increased steadily over the last twenty-five years and faster than general inflation over the same period. The increase in gross construction costs over this time was driven primarily by cost inflation in two periods, namely the early 2000s and the increases observed since March 2020. Some of these patterns have been accentuated by changes to the tax regime over the period 1998-2008. In the last two years, construction costs in Ireland have increased substantially owing to the impact of the COVID-19 shock and the war in Ukraine on the costs of building and construction materials. Although there are challenges with cross-country comparisons, drawing on a number of data sources and a recent bespoke questionnaire issued to stakeholders in the Irish construction industry, the *Note* shows that construction costs in Ireland are at the higher end of the price spectrum in Europe. The outlook for construction costs in Ireland remains challenging with expectations of further increases in costs owing to a number of factors including supply chain issues as well as increases in commodity prices.

1 Introduction

Construction costs are an important factor to examine when analysing developments in the residential real estate market in Ireland given their role in determining the number of housing completions. Costs associated with building a residential dwelling affect both the viability of residential construction for developers and property companies as well as the affordability of the dwelling for the end purchaser.

In this *Note*, we examine construction costs in Ireland, including longer-term trends and developments that are more recent such as the impact of the COVID-19 shock and the war in Ukraine on building and construction materials. When examining the costs associated with the delivery of residential dwellings it is important to differentiate between two distinct categories; namely (i) direct costs covering inputs to construction (such as building materials and labour) and

¹ The views presented in this *Note* are those of the authors alone and do not necessarily represent the official views of the Central Bank of Ireland or the European System of Central Banks. Email: <u>gerard.kennedy@centralbank.ie</u> and <u>neill.killeen@centralbank.ie</u>. We would like to thank Mark Cassidy, Niamh Hallissey, Vasileios Madouros and Fergal McCann for helpful comments and Kieran Sheehan for assistance with some of the data used in the analysis. Any remaining errors are our own.

(ii) indirect costs² (which include land, professional fees, development contributions and levies, VAT, financing and profit margin). As noted by Kennedy and Myers (2019), based on a variety of data sources, direct construction costs can account for approximately 40-60 per cent of the total cost of private sector residential development in Ireland.³

Our analysis focuses primarily on direct residential construction costs and draws on a range of data sources as well as a bespoke questionnaire issued to construction industry participants in Ireland. Moreover, the *Note* describes how construction costs in Ireland compare to costs elsewhere in Europe as well as the outlook for construction costs domestically drawing on aggregate responses to the questionnaire.

Construction costs in Ireland have been on an increasing trend over the last twenty-five years. The increase in construction costs over this time was driven by two periods of elevated cost inflation in particular, the first of which occurred in the early 2000s, while the second has been observed more recently, since March 2020. While housing completions and house prices fell substantially after the 2008 global financial crisis before recovering in the post-crisis period, gross construction costs did not suffer such declines. A key factor to consider when studying construction costs in Ireland over the longer-term is the impact of the expiration of tax breaks in 2008, which had substantially reduced net construction costs in the decade up to 2008 as described in Lyons and Gunnewig-Monert (2021). Therefore, when considering long-run estimates of construction costs, we seek to provide an estimate of these on a gross as well as a net basis, following the approach of Lyons and Gunnewig-Monert (2021).

More recently, and as documented in Central Bank of Ireland (2022) and McGuinness and Erskine (2022), construction costs in Ireland have increased substantially over the 2020-2022 period following a series of shocks including the COVID-19 pandemic and the war in Ukraine, both of which have had an adverse impact on global supply chains. The war in Ukraine has also led to significant increases in commodity and energy prices, which have exacerbated construction cost inflation in Ireland. The price of many key building materials, such as timber, steel and cement had risen substantially even before the outbreak of the war in Ukraine in February 2022 reflecting the disruptions to supply chains arising from the COVID-19 pandemic and associated public health restrictions internationally.

² Indirect fees may be further categorised into two groups. The first consists of the flat fees that apply on land, professional expenses (including design, administration, sales and marketing) and development contributions. The second group includes percentage-based costs such as VAT, financing, and risk-based developer returns, which will vary in line with other costs.

³ Similarly, McGuinness and Erskine (2022) note that direct construction costs such as labour and building materials accounted for almost 50 per cent of the total delivery costs for each unit using data from the SCSI from 2020.

The rest of the *Note* is structured as follows. Section 2 examines both the long-term and more recent developments with respect to construction costs and describes the impact of the COVID-19 shock and war in Ukraine on the price of key building materials. Construction costs in Ireland are placed in an international context in Section 3 while Section 4 discusses the outlook for construction costs drawing on the aggregate results from the aforementioned bespoke questionnaire. Section 5 concludes.

2 Long and short-term developments in construction costs

This section provides an overview of the long-terms trends as well as the more recent evolution of construction costs, including an examination of the underlying causes and extent of price increases for some key building materials.

2.1 Long-term trends - construction costs

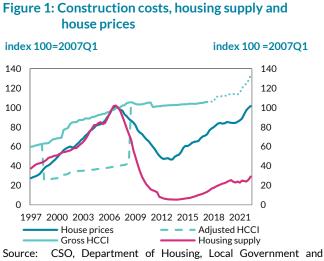
A number of data series are available to examine how construction costs in Ireland have evolved over the long-term. The first, the *"House Construction Cost Index"*, was available from 1975 to August-2017, and tracked construction sector labour and material costs⁴ on a fixed quality basis (Figure 1). From these data, it is evident that the cumulative rise in gross construction costs between 1997 and the peak of the housing market in 2007 (approximately 70 per cent) was greater than the increase in the general price level as measured by the CPI over the same period (approximately 40 per cent). The increase in construction costs was far outstripped, by residential property price growth however, which grew by approximately 250 per cent, as well as by the annual supply of residential property, which rose by approximately 170 per cent, over the same period.

Figure 1 also highlights divergent trends in the Irish residential real estate market post the 2008 global financial crisis. While residential property prices and building activity declined substantially in the period to 2013, gross construction costs did not decline and instead remained broadly flat (Figure 1). As mentioned above, a key factor to consider when studying the evolution of construction costs in Ireland over the longer-term is the impact of the expiration of tax breaks in 2008. As noted by Lyons and Gunnewig-Monert (2021), the abolition of various forms of the "Section 23" tax reliefs with respect to construction costs, which had existed from ca. 1998 to 2008, meant the increase in actual construction costs in the period since the global financial crisis are much higher than portrayed by the official series (Figure 1). Conversely, following the

⁴ Available from the <u>Department of Housing, Local Government and Heritage</u>, the House Construction Cost Index, relates solely to the labour and material costs required to produce a fixed output type (i.e. a representative 2 storey 3 bedroom LA house). It does not include items such as overheads, profit, interest charges, land development etc.

introduction of these schemes at the end of the 1990s, construction costs net of tax reliefs would have fallen dramatically even as gross construction costs series rose.⁵

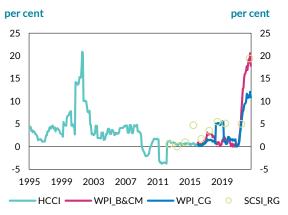
A drawback of the official construction costs series included in Figure 1 is that it is based upon a "fixed-quality" basket, and so fails to account for improvements in housing quality over the period, due for instance to technological improvements or an increase in building standards, which will likely lead to higher construction costs. For example, Lyons (2020) highlights how climate related policies such as the Nearly Zero Energy Building (NZEB) standards, which improve energy efficiency and benefit households over time, naturally also add to the initial costs of construction.



Source: CSO, Department of Housing, Local Government and Heritage, Lyons & Gunnewig-Monert (2021) and authors' calculations.

Note: The (gross) house construction cost index (HCCI) series has been discounted by 60 per cent (as per Lyons Gunnewig-Monert 2021) to demonstrate the impact of the Section 23 tax reliefs on construction costs over the period of their existence from 1998Q3 to 2008Q2 (see dashed line). Post 2017Q2 construction cost series is rolled forward using changes in CSO's wholesale capital goods price index for building and construction (dotted line - see Figure 2). Latest observation 2022Q2.

Figure 2: Annual growth in measures of Irish construction costs



Source: CSO, Department of Housing, Local Government and Heritage, SCSI and authors' calculations.

Note: HHCI = house construction cost inxex, WPI_B&CM = CSO wholesale price index for building and construction materials, WPI_CG = CSO wholesale capital goods price index for building and construction (i.e. materials and wages) and SCSI_RG = SCSI house rebuilding guide. SCSI data reflect the estimated average rebuild costs per square metre of a typical 3-bed/98 sqm. semi-detached house located in Dublin. As 2020 data are not available, 2021 observation refers to growth rate between figures contained in 2019 and 2021 reports. Latest observations August 2022 for the CSO and SCSI series and August 2017 for the DOHLGH series.

2.2 Recent developments - construction costs

Recent quarters have witnessed a marked shift in construction costs inflation (Figure 2). Two additional series produced as part of the CSO's Wholesale Price Index allow for a more detailed examination of recent developments in construction costs, namely (i) the "building and construction (i.e. materials and wages)" component of its "wholesale price index for capital goods"⁶

⁵ Based on media coverage from the time, Lyons and Gunnewig-Monert (2021) put forward a conservative estimate that Section 23 tax reliefs could have provided a discount of up to 60 per cent of construction costs during the period of their existence.

⁶ See CSO <u>Table WPM27</u>. The building and construction capital goods price index is derived by combining a special hourly wage rate index for employees in the building and construction sector with the wholesale price index for building and construction materials.

(WPI_CG) and its (ii) "wholesale price indices for building and construction materials"⁷ (WPI_B&CM). The latter includes detailed sub-indices for 11 separate categories of building materials. According to these series, there has been a substantial increase in annual construction costs in Ireland over the last 18 months or so (Figure 2).⁸ Cumulatively, the WPI_CG suggests that building costs have risen by almost 20 per cent since the beginning of 2021, with an increase of approximately 30 per cent in the WPI_B&CM over the same period. Further evidence of the current inflationary pressures within the construction sector are apparent from SCSI data, which show that national average house rebuilding costs⁹ have increased by about one fifth in the 12 months to August 2022.

The substantial increases in construction costs in Ireland since the start of 2021 have been attributed to a range of factors. These include, for example, Brexit induced trade frictions, supply chain disruption and depleted inventories arising from the COVID-19 shock, as well as soaring commodity prices due to the war in Ukraine. The aforementioned bespoke questionnaire issued to industry groups of the Irish construction sector sought to understand the main drivers of more recent construction cost increases. When asked which factor they believed to be the most important driver of rising building costs, most respondents to the questionnaire (55 per cent) indicated that the fallout from Russia's invasion of Ukraine on the price of transport and energy was the key concern at present. The fallout from the COVID-19 pandemic continues to be felt however, with a number of participants observing the difficulty in separating its impact from that of the war. Spillovers from the war have served to negatively reinforce many of supply-side issues, which originated during the COVID-19 shock including disruptions to key supply chains. Many of these supply-side issues are deemed unlikely to be resolved while the conflict in Ukraine is on-going.

A recent report by property consultants Arcadis (2022)¹⁰ offers an insight into how energy intensive the manufacturing process of many construction materials is and how exposed the construction sector is to fluctuations in the price of coal, electricity and gas. For instance, more than half the energy used in the production of steel and cement is dependent on coal, while natural

⁷ See CSO <u>Table WPM28</u>. The wholesale price index for building and construction materials covers home production and imports of 11 separate categories of building materials. For each commodity heading, the monthly price relatives are derived as the simple arithmetic average of the monthly relatives for the constituent varieties surveyed. Actual transaction prices are collected for materials purchased by construction and civil engineering firms. The price indices reflect an 'average' over a mixture of products from many companies throughout the country.

⁸ On an annual basis, the WPI_CG was 11 per cent higher, while the WPI_B&CM was up by about 18 per cent, as of August 2022 (Figure 2).

⁹ The <u>SCSI Rebuild Guide</u>, which can be used by homeowners to calculate the rebuild costs of their home for insurance purposes, provides estimates of rebuilding costs, per square metre for different house types in different regions. SCSI rebuild figures include the costs of demolition. One should also note that as the specifications and designs of the six house types, on which their calculations are based, have been updated for this year's report, all the reported increases cannot be attributed to construction inflation.

¹⁰ See Arcadis "International Construction Costs 2022", Report.

gas is a key component in the manufacturing of bricks and roof tiles. Even before the spike in energy prices due to the outbreak of the war in Ukraine, Arcadis had compiled data showing that energy costs accounted for up to 38 per cent of the total costs associated with some of the more energy intensive manufacturing processes, such as blast furnace steel and cement. Moreover, the rise in energy costs that had occurred by February 2022 was responsible for 20 to 25 per cent of the increase in a range of building material costs, which had taken place around that time. These estimates therefore do not take account of the significant rise in energy prices since February 2022, which are likely to have added further momentum to the rise in building and construction material costs.

The impact of rising energy costs and other supply-side shocks have contributed to significant increases in the wholesale prices of many key building materials (Figure 3). Notwithstanding the recent moderation, timber products have experienced the largest annual price increases in recent months (70 per cent in Jan 2022), with steel also recording a notable inflationary surge (over 40 per cent in August 2022). Outside of these products, the wholesale prices of cement, concrete, and stone, sand and gravel are also currently growing at a rate greater than 10 per cent per annum.



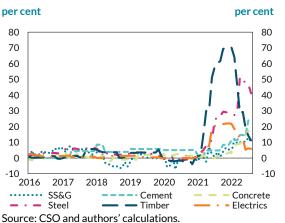
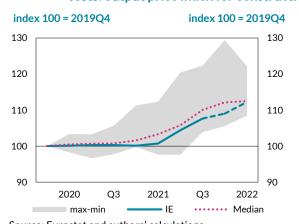


Figure 4: European comparison of construction costs: output price index for construction



Note: Data taken from Wholesale Price Index (Excl VAT) for Building and Construction Materials. SS&G = "sand, stone and gravel", Concrete = "concrete blocks and bricks", Steel = "structural steel and reinforcing metal", Timber = "rough timber (including plain sawn)" and Electrics = "electrical fittings", see CSO Table WPM 28 for more details. Latest observation August 2022. Source: Eurostat and authors' calculations. Note: Chart is based on data from Eurostat's "producer" or "output" price index for new residential buildings series . IE data available to 2021Q3 and rolled forward to 2022Q1 (dashed line) by using growth rates from WPI_CG series (see Figure 2).

Prolonged increases in construction and building material costs will have an adverse impact on the viability of many residential dwelling schemes (for a given level of house prices), where direct construction costs already account for just under 50 per cent of the total cost of delivery.¹¹ Moreover, at a time when the supply of new housing is already constrained, an increase in development costs raises the risk of exacerbating the challenge over the medium-term (2 to 5

¹¹ For more analysis and a breakdown of the direct and indirect costs of house and apartment delivery see "<u>The Real Costs of New Apartment Delivery</u>" (2021) and "<u>The Real Cost of New Housing Delivery</u>" (2020), reports by the SCSI.

years) if developers and investors are hesitant to proceed with planning permission or commencement decisions given increasing costs. Indeed, recent data indicate a decline in the number of annual residential commencement notices from approximately 35,000 in March 2022 to 30,000 as of June 2022. Similarly, in its latest Quarterly Bulletin (October 2022) the Central Bank of Ireland forecast housing completions of 27,000 units in 2023 before rising to 30,000 in 2024. This represents a reduction of approximately 8,000 units over the forecast horizon compared to its opening Quarterly Bulletin of 2022 (January). This in part reflects the limited availability of materials and labour but also higher constructions costs.

3 Irish construction costs in an international context

This section places recent movements in domestic construction costs in an international context. In the analysis that follows we explore how direct constructions costs have evolved across European countries in recent years and examine where Ireland ranks relative to peer countries in terms of the scale of construction costs inflation and the expense of building materials used in the delivery of residential housing.

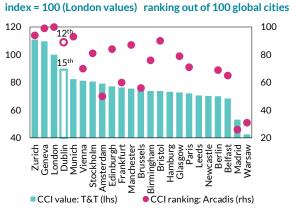
It is important to note that there are challenges when comparing construction costs internationally in a consistent manner due to difficulties posed by exchange rate movements, divergences in building standards and regulations, and differences in the level of efficiency and productivity across countries. While some international data on gross direct construction costs have been collected for a number of years, much less information pertaining to indirect costs exists. This makes it difficult to carry out an in-depth analysis or comparison of developments in non-labour or material building costs, which are likely to vary significantly across jurisdictions. Though data availability is less of an impediment with respect to the comparison of direct construction costs, challenges remain, including how best to assess overall affordability levels within and across markets (for instance in monetary terms). Despite these data issues, the analysis that follows draws on a myriad of data sources to show that construction costs in Ireland are generally at the higher end of the price spectrum in Europe.

Figure 4 presents a comparison of growth rates from Eurostat's output price index for construction of new residential buildings¹² across the EU 27, and shows how developments in Ireland have closely tracked broader European trends over the past couple of years. After a relatively stable 2020, with muted construction activity across the continent due to the impact of COVID related public health restrictions, inflation in the construction sector rose rapidly in many

¹² Also known as the producer price index, this series provides a measure of what building contractors pay for the input factors in residential construction, and includes materials, labour, plant and equipment, transport, energy, productivity, profit margin and other related costs. For more information, see; <u>Construction producer</u> <u>price and construction cost indices overview</u>, Eurostat.

countries throughout 2021, with Romania, Bulgaria, Estonia, Hungary and Slovenia all recording increases of more than 15 per cent. The latest data for 2022Q1 places Ireland close to the European median in terms of the extent of construction inflation since early 2020, before the onset of COVID-19. Meanwhile according to data compiled by construction consultancy firm Linesight (2021)¹³, Ireland ranks close to the top when it comes to the extent of tender price growth rates across seven European countries, over a slightly longer period (2014 to 2021).

Figure 5: Overall construction costs in Dublin compared to other European cities 2022



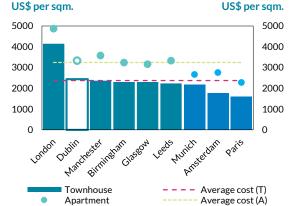


Figure 6: Residential construction costs across European cities 2022

Source: Turner and Townsend (2022) and authors' calculations.

As Lyons (2018) observes however, one shortcoming of this type of analysis is that the data are expressed in index form, i.e. 100 at a certain point, with movements in costs over time and across countries given relative to this. As a result, it is challenging to get a sense of the overall affordability within and across markets (for instance in monetary terms).

Turner and Townsend (2022) produce cross-country construction cost data, as part of an international construction market survey, which also includes a global ranking of the average cost to build across 88 city markets for both residential and commercial buildings. To calculate the most expensive location to build, the authors of the report convert all costs to US\$¹⁴ and compare

Source: Turner and Townsend (2022), Arcadis (2022) and authors' calculations.

¹³ Linesight's tender price index is an average view of changes in tender prices across different locations, project types and sizes. According to their "Europe 2021" report, Ireland's tender price index was over 50 per cent higher in 2021 than in 2014, compared to equivalent figures of 34 per cent for Sweden, 32 per cent for Denmark, 31 per cent for the UK, 25 per cent for Germany, 23 per cent for the Netherlands and 11 per cent in France. For more information see; Linesight "Europe 2021".

¹⁴ According to the Turner and Townsend methodology, building costs per m², include the direct costs associated with the construction of a building; including preliminaries (or general conditions) costs and substructure, columns, upper floors, staircases, roof, external walls, external doors, internal walls, internal doors, wall finishes, floor finishes, ceiling finishes, fitments, plumbing, HVAC, fire protection, electrical and communication systems and transportation systems. It is assumed that building costs are based on the typical building standards and building methods for the region. As all costs are converted into USD, exchange rates will have an impact on each market's ranking based on the strength of currency against the US dollar. For more information see; Turner and Townsend "International Construction Market Survey 2022".

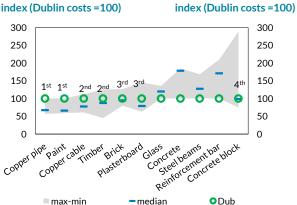
the average direct construction costs per square metre across 11 building types. Based on this analysis, San Francisco is the most expensive place in the world to build in 2022 (\$4,729 per m²). Data from its most recent release for 2022 show Dublin ranks 15th highest in terms of construction costs out of 88 global cities. Narrowing the focus to European cities (including those located in the UK and Switzerland), shows Dublin ranks 4th of 23, behind Geneva, Zurich and London (Figure 5). A similar exercise by Arcadis (2022)¹⁵ which compiled data for 100 locations for its annual "International Construction Cost" report placed Dublin 12th in terms of the costs of construction associated with 20 building types ranging across the residential, commercial, industrial and social sectors.

Restricting the analysis further, and concentrating on the construction costs associated with *residential* property schemes only (as measured by Turner and Townsend), Dublin ranks the 3rd most expensive location to build apartments and the 2nd most expensive place to build townhouses, out of the nine European cities for which these data are available (Figure 6). Indeed, as shown in Figure 6, construction costs for the build of townhouses and apartments in Ireland are slightly above the average of all nine cities included. While construction costs in Dublin are broadly similar to those in UK cities, they rank higher than those in mainland European locations such as Munich, Amsterdam and Paris.

In addition to these data, Turner and Townsend (2022) publish cost details of eleven common building materials as well as wage rates for six categories of construction workers in a number of the locations they monitor. According to the 2022 figures, Dublin ranks as the most expensive of nine European cities for material such as copper pipe and paint, the second most expensive for timber and copper cable, and the third dearest location to source plasterboard and bricks. In contrast, it is the least expensive of the nine cities for concrete, blocks and steel products. (Figure 7). In terms of labour costs, Dublin's highest ranking (2nd of 9) relates to individuals engaged in insulation and heat pump installation. In contrast, wage rates in Dublin appear to rank comparatively lower than many of the other European locations covered, and for carpenters and bricklayers (9th), plumbers and electricians (8th) and carpet layers, tilers and plasterers (8th) in particular.

¹⁵ The Arcadis methodology is based on a survey of construction costs, a review of market conditions and the professional judgement from its global team of experts. Ranges of indicative prices for each building function are collected for each city. Low and high range costs are converted into US Dollars (USD), normalized and indexed against the price range for each building type for Amsterdam, where Amsterdam = 100. For more information see; Arcadis "International Construction Costs 2022" report.





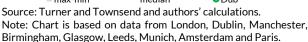
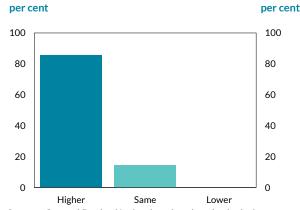


Figure 8: Costs of construction and building materials in Ireland compared to elsewhere in Europe



Source: Central Bank of Ireland and authors' calculations. Note: Aggregate responses to survey question: Broadly speaking, how would you characterise the costs of construction and building materials in Ireland compared to elsewhere in Europe? The questionnaire was distributed amongst eight residential construction sector stakeholders (with seven responses to this question), including industry representative bodies and market experts during September 2022.

Our research on how the level of direct construction costs in Ireland compares to elsewhere was supplemented by the inclusion of a question on this topic in the bespoke questionnaire circulated to construction industry groups. Participants were asked how they would characterise the cost of construction and building materials in Ireland compared to elsewhere in Europe. The results are depicted in Figure 8. In total, 86 per cent (six of the seven respondents to this question) believed building materials were higher in Ireland compared to elsewhere in Europe while none were of the opinion that they were lower. Taken together with some of the cross-country data sources on construction costs such as the Turner and Townsend (2022) and Arcadis (2022) reports described above, this suggests that construction costs in Ireland are, in general, at the higher end of the price spectrum in Europe.

4 Outlook for construction costs

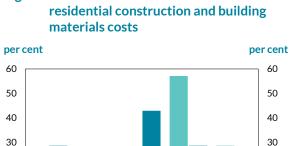
This section details the aggregate results from the bespoke questionnaire issued to construction industry groups as part of this analysis.¹⁶ One of the key issues considered in the questionnaire was the outlook for construction costs.

First, participants were asked how they expect annual construction and building material costs to evolve over both the (i) short (1 year) and (ii) medium (2 to 5 years) term. A summary of the responses received is presented in Figure 9. Over the short-term, some slowdown in the pace of

¹⁶ The questionnaire was distributed amongst eight residential construction sector stakeholders, including industry representative bodies (with combined membership of over 7,600 firms and individuals) and market experts during September 2022. In total eight completed surveys were returned from five organisations, with multiple responses from one organisation. See Annex for details of the questions included in the survey.

increase in the cost of building materials is envisaged by the majority of respondents, from the current rate, to one in the region of 5.1 to 10 per cent (57 per cent of responses). A further 29 per cent of responses expect that direct construction costs will continue to grow at a similar pace to their current level of somewhere between 10.1 and 20 per cent. No respondents expected an acceleration beyond the current level of inflation within the sector (i.e. > 20 per cent).

Over the medium-term of 2 to 5 years, there is a much greater divergence in respondents' views, which are split relatively evenly over a number of outcomes. While 70 per cent of respondents expect construction costs to continue rising over the medium term, 48 per cent expect the increase to be in the range 5.1 to 10 per cent, while 29 per cent are expecting higher growth of 10.1 to 20 per cent. Meanwhile over one quarter of survey participants believe construction costs will experience a modest fall over the medium term, of between 0 and 5 per cent over the coming 2 to 5 years.



20

10

0

Figure 9: Short and medium-term outlook for

-5.1 to -10% 0 to -5% 0 to 5 % 5.1 to 10% 10.1 to 20% Medium term (2 to 5 years) Short term (1 year) Source: Central Bank of Ireland and authors' calculations. Note: Aggregate responses to survey question: How do you expect annual residential construction and building material costs to evolve over both the (i) short (1 year) and (ii) medium (2 to 5 years) term? The questionnaire was distributed amongst eight residential construction sector stakeholders, including industry representative bodies and market experts during September 2022.

Participants were asked to provide the reasons underlying their cost expectations. A continuation of disrupted supply chains, material shortages and the absence of any respite in the rise of energy costs, were the key factors cited to keep the pressure on the cost of building materials over the next year or so. Beyond that, some participants did see reasons why cost pressures may begin to ease to such an extent that construction costs could actually fall over the next couple of years. The prospect of an agreement at European level, which would alleviate some of the pressure arising from the energy crisis, as

well as the likelihood of a slowdown in demand for construction materials due to the increased possibility of recession facing many countries. Others pointed to the potential for a more general slowdown in housing demand, due to the impact of inflation on disposable incomes, or the adverse impact of monetary policy normalisation and higher interest rates on affordability and the ability to secure mortgage finance.

20

10

0

An additional question put to participants sought their views on issues outside of rising construction costs that they feel might have a negative impact on the residential construction sector in the near-term. While a wide variety of answers were given to this question, issues with various aspects of the planning system and uncertainty surrounding regulatory standards and

guidelines were a common theme in the replies received. A related concern was around the lack of zoned and/or adequately serviced land (for instance the provision of utilities; electricity, gas, water supply and drainage), given larger than expected population increases in some areas. Elsewhere, respondents noted the shortage of skilled labour, inefficient construction practices and difficulties achieving economies of scale within the sector as challenges. A number also pointed to the prospect of reduced (First Time) Buyer activity in the period ahead, due to higher mortgage rates, lower savings and reduced disposable income.

5 Conclusion

Construction costs are important to analyse given their importance for housing supply decisions. In this *Note*, we have highlighted that construction costs in Ireland have increased steadily over the last twenty-five years and faster than general inflation over the same period. Construction costs did not decline substantially after the 2008 global financial crisis following the housing crisis in Ireland which impacted house prices and housing completions. A key factor to consider when studying construction costs in Ireland over the longer-term is the impact of the expiration of tax breaks in 2008 which had substantially reduced net construction costs in the decade up to 2008. Drawing on a number of data sources and the results of a bespoke questionnaire, our analysis suggests that construction costs in Ireland are at the higher end of the price spectrum in Europe. Looking ahead, the outlook for construction costs in Ireland remains challenging owing to a number of factors including supply chain issues and commodity prices which have been exacerbated by the COVID-19 shock and the war in Ukraine.

References

Arcadis (2022). International Construction Costs 2022 Report.

Central Bank of Ireland (2022). Financial Stability Review 2022: I.

Kennedy, G., & Myers, S. (2019). An overview of the Irish housing market. Financial Stability Notes 16/FS/19, Central Bank of Ireland.

Linesight (2021). Regional Reports: Europe 2021.

Lyons, R. C. (2018). Credit conditions and the housing price ratio: Evidence from Ireland's boom and bust. Journal of Housing Economics, 42, 84-96.

Lyons, R. C. (2020). Ireland's Housing Need & Policy Options: an Overview. Presentation for Irish Institutional Property, August 2020.

Lyons, R. C., & Gunnewig-Monert, M. (2021). Housing prices, macro-prudential rules and the elasticity of housing supply: Evidence from Ireland. Working Paper.

McGuinness, G., & Erskine, M. (2022). Evaluating the trajectory of rising construction costs in the Irish housing sector. Department of Finance, Economic Insights – Summer 2022, Chapter 2, 10-16.

SCSI (2020). The Real Cost of New Housing Delivery Report 2020.

SCSI (2021). The Real Costs of New Apartment Delivery. Analysis of Apartment Development Costs and Viability, January.

Turner and Townsend (2022). International Construction Market Survey, 2022.

Annex

As detailed in Section 4, a bespoke questionnaire was issued to construction industry groups in Ireland as part of this analysis. The list of questions included in the bespoke questionnaire issued to the construction industry groups in Ireland included:

- 1. How, in your opinion, are higher construction and building material costs impacting (or likely to impact) the Irish residential property market over (i) the short (1 year) and (ii) medium (2 to 5 years) term?
- 2. What do you consider the main driver for the significant increases that have occurred in the cost of many construction and building materials during recent months?
- 3. Broadly speaking, how would you characterise the costs of construction and building materials in Ireland compared to elsewhere in Europe?
- 4. How do you expect residential construction and building material costs to evolve over both the (i) short (1 year) and (ii) medium (2 to 5 years) term?
- 5. Beyond rising construction costs are there any other issues or risks that you feel might have a negative impact on the residential construction sector in the near-term?

T: +353 (0)1 224 6000 www.centralbank.ie publications@centralbank.ie

Bosca PO 559, Baile Átha Cliath 1, Éire PO Box 559, Dublin 1, Ireland



Banc Ceannais na hÉireann Central Bank of Ireland

Eurosystem