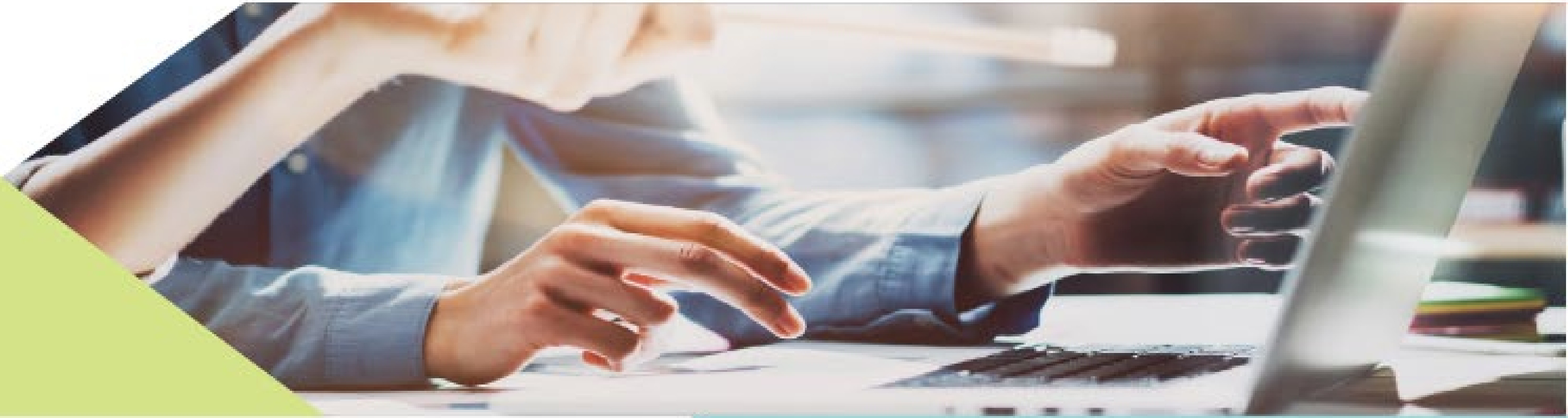
Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem



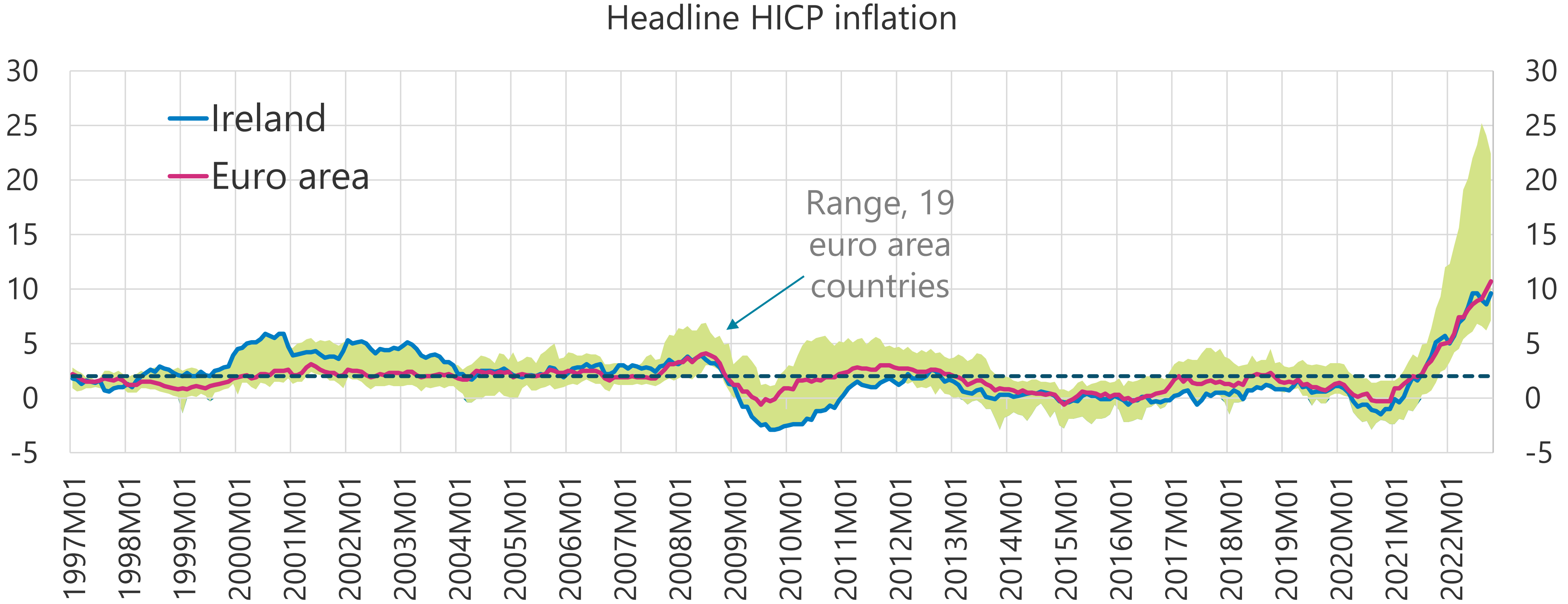
Inflation & the labour market

Sharon Donnery

Donal Nevin Lecture, 10 November 2022

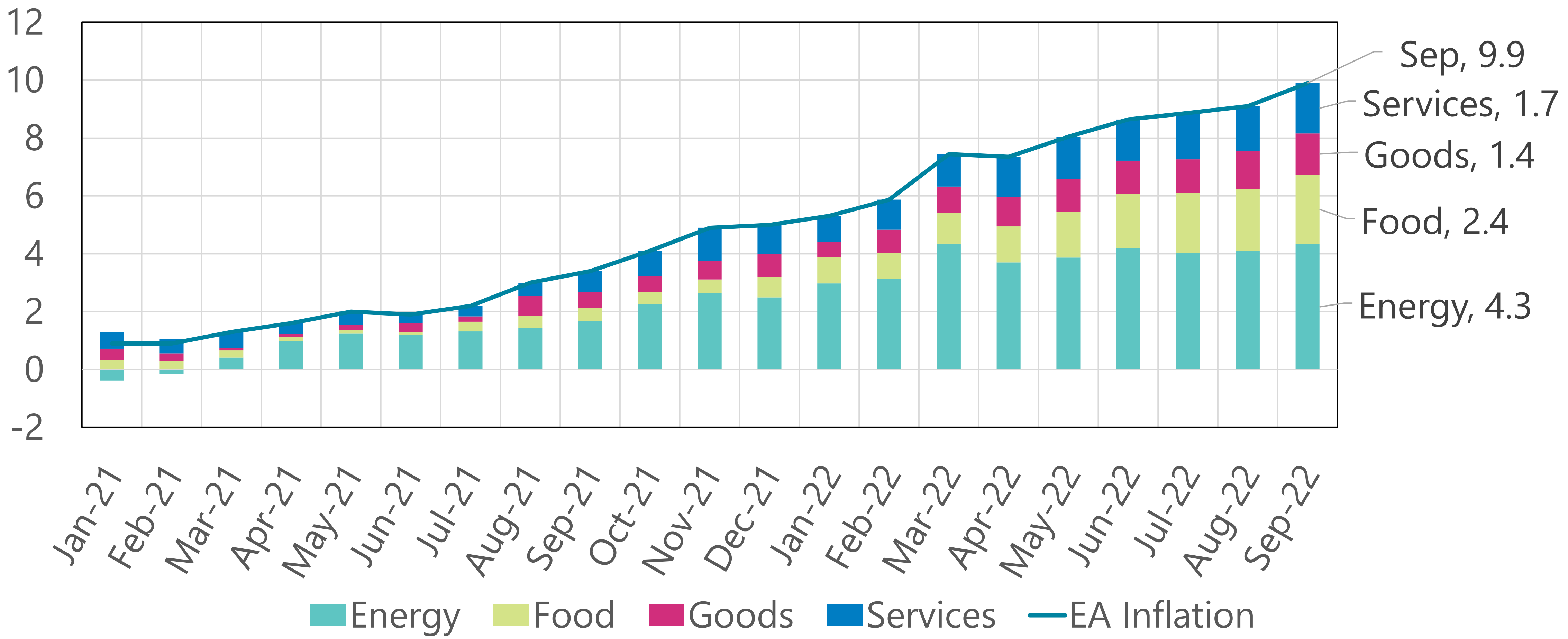
Slides

Headline inflation far above target in 2022…



Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

With energy accounting for around half of euro area inflation…

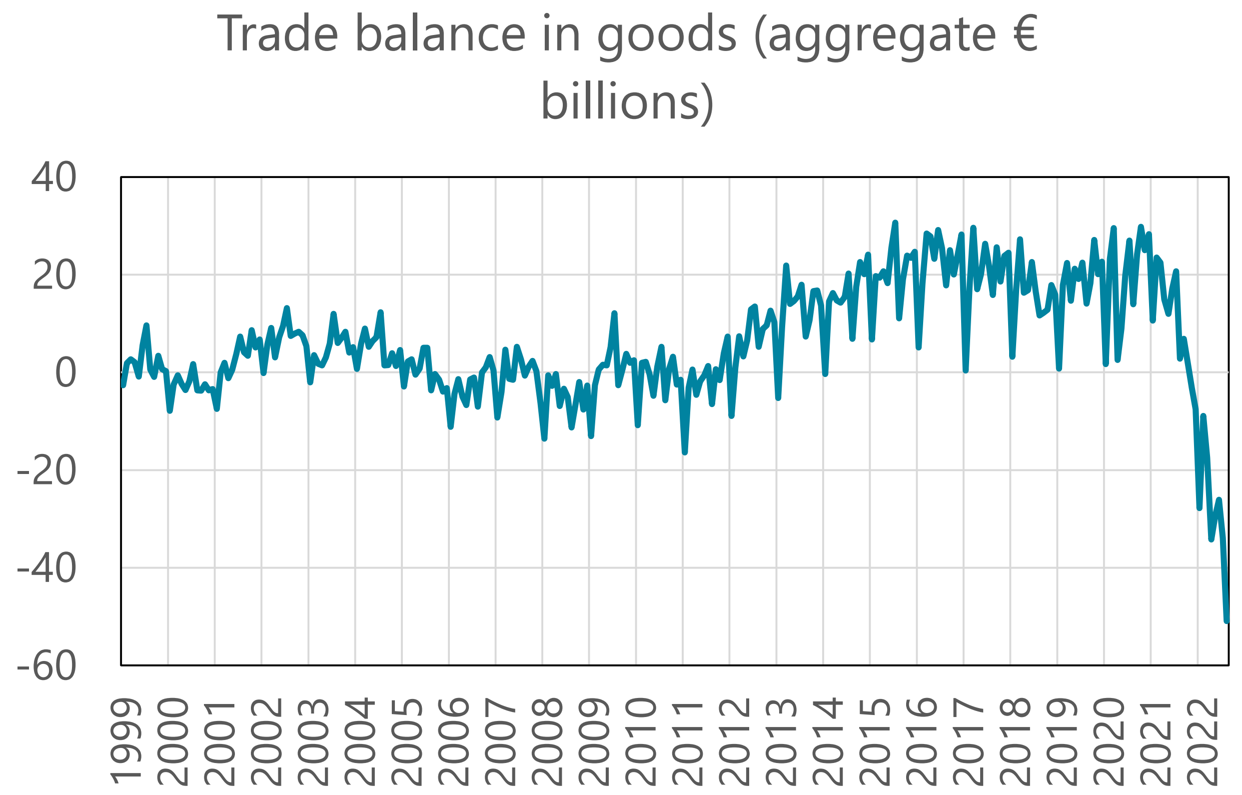


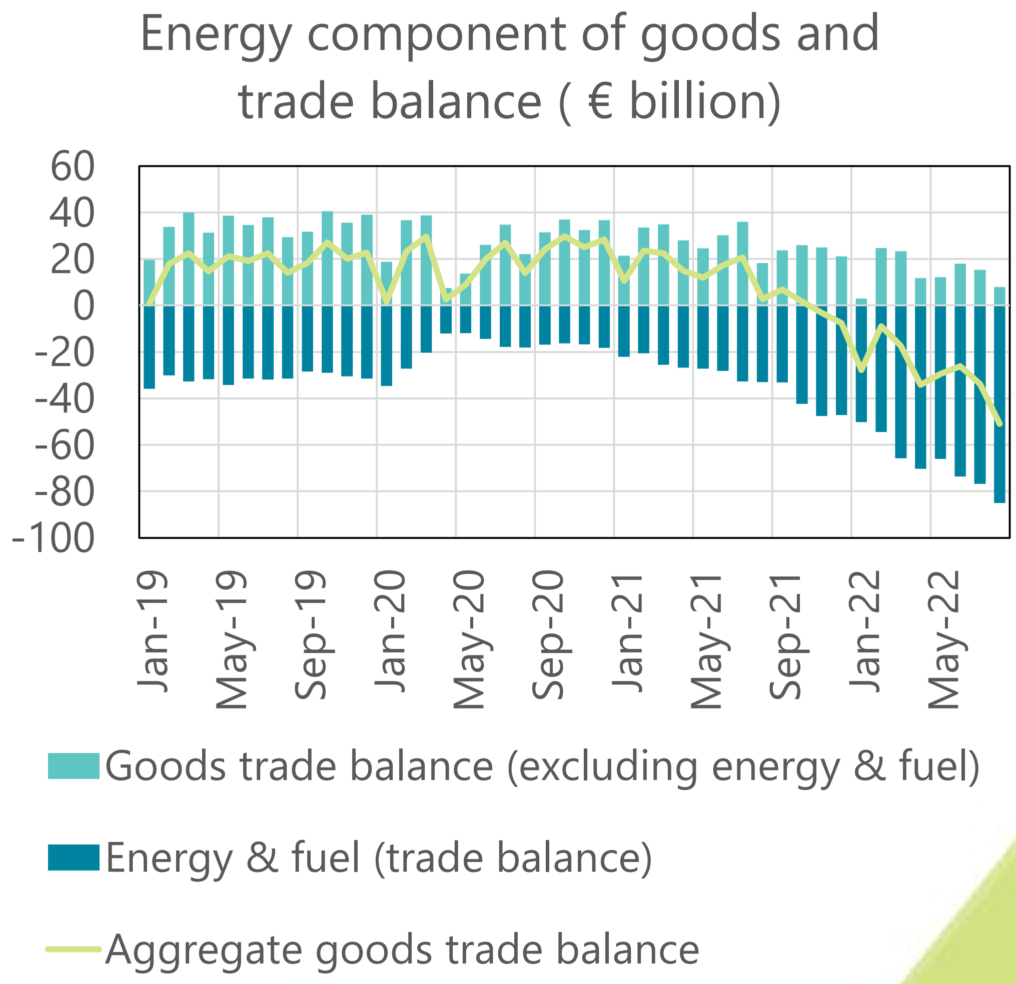
… but other components also far above long-term average

Euro area	Energy	Food	Goods	Services	Total
Share of basket (2022, per cent)	*10.9*	*20.9*	*26.5*	*41.7*	*100.0*
Pre-2022 average	3.2	2.1	0.6	1.8	1.6
2019 Average	1.2	1.8	0.3	1.5	1.2
Sep 2022	**40.7**	**11.8**	**5.5**	**4.3**	**8.9**
Ireland	Energy	Food	Goods	Services	Total
Share of basket (2022, per cent)	*8.9*	*18.1*	*23.0*	*50.0*	*100.0*
Pre-2022 average	3.7	1.6	-2.1	2.9	1.7
2019 Average	1.2	0.5	-2.7	2.4	0.9
Sep 2022	**38.1**	**9.0**	**5.0**	**5.2**	**9.6**

Source: Eurostat

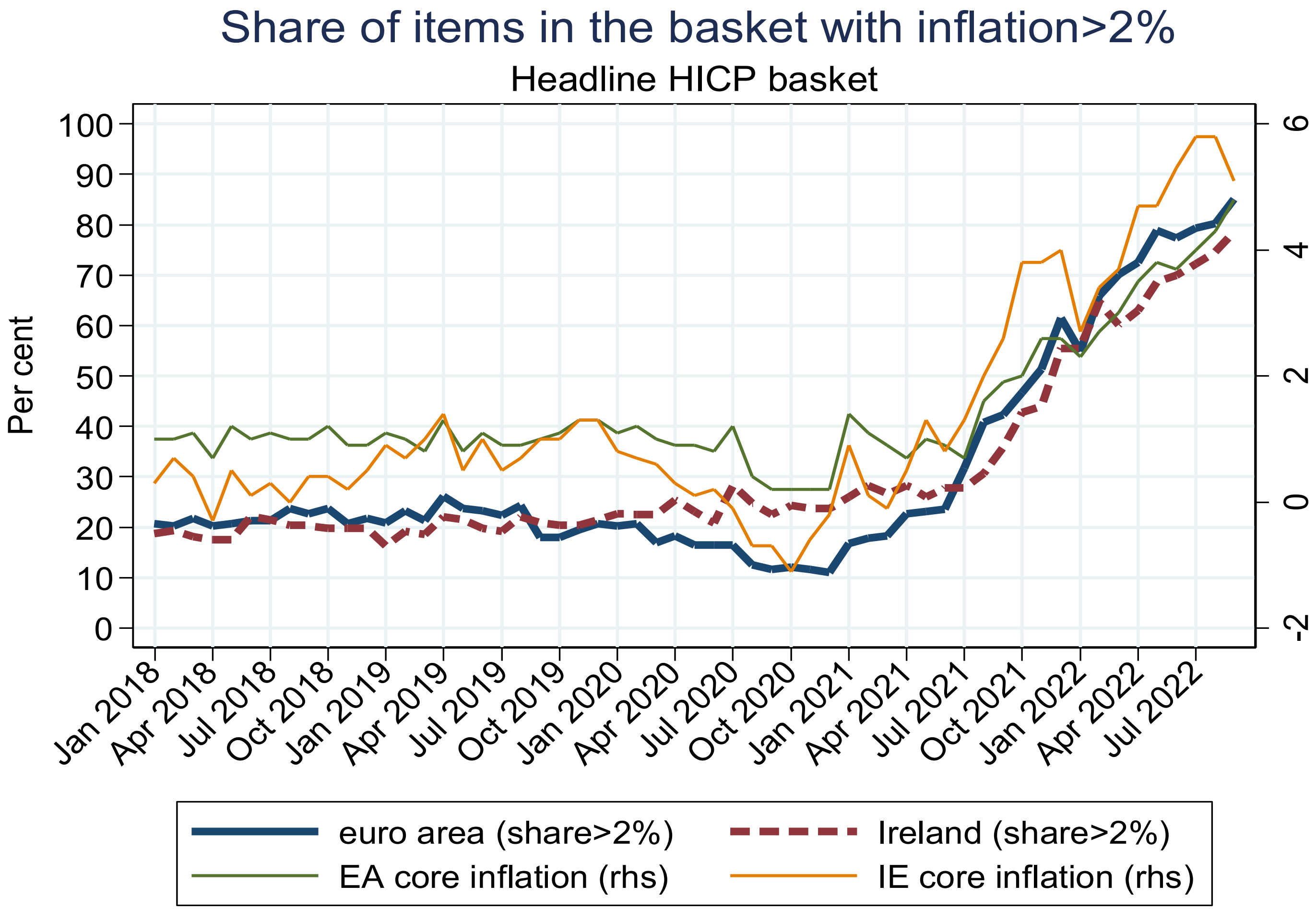
Energy price increases contribute to an unprecedented terms-of-trade shock that is difficult to fully offset in the short-term





Source: Eurostat

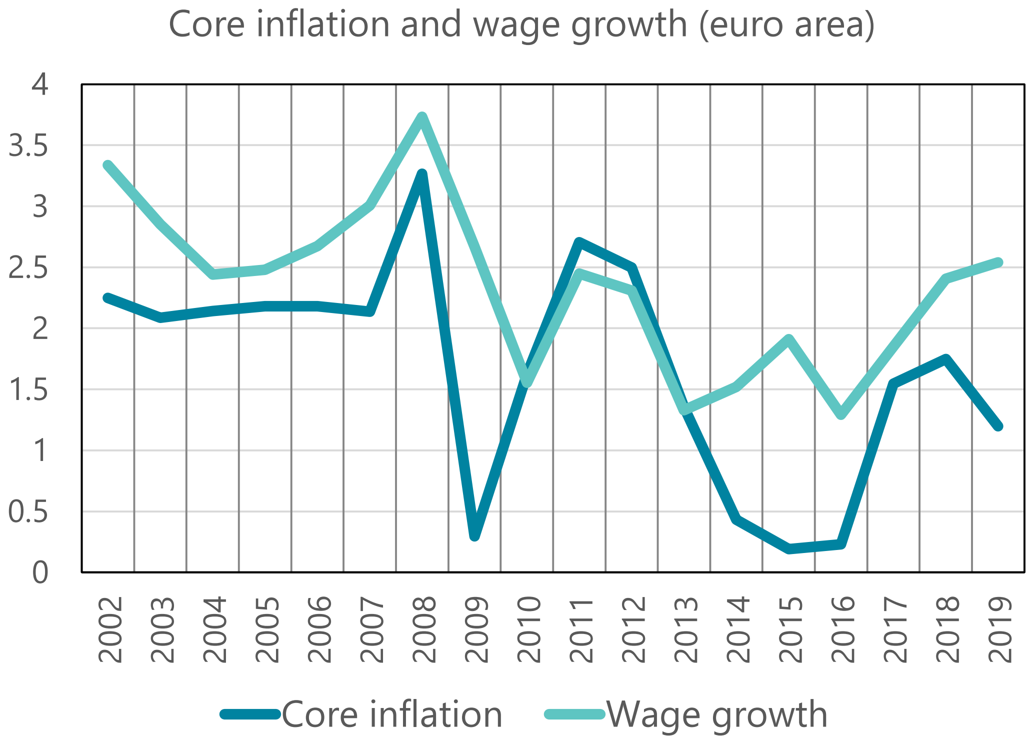
Price rises have broadened… pushing up *underlying* inflation

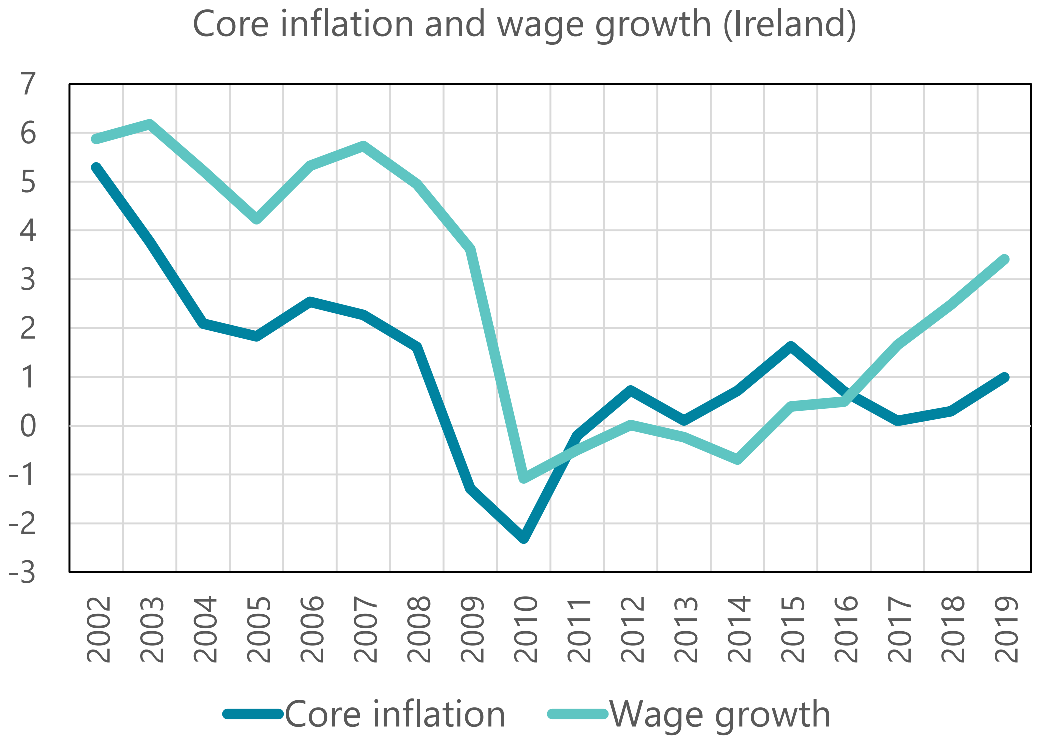


Source: Eurostat

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Co-movement of inflation and wages



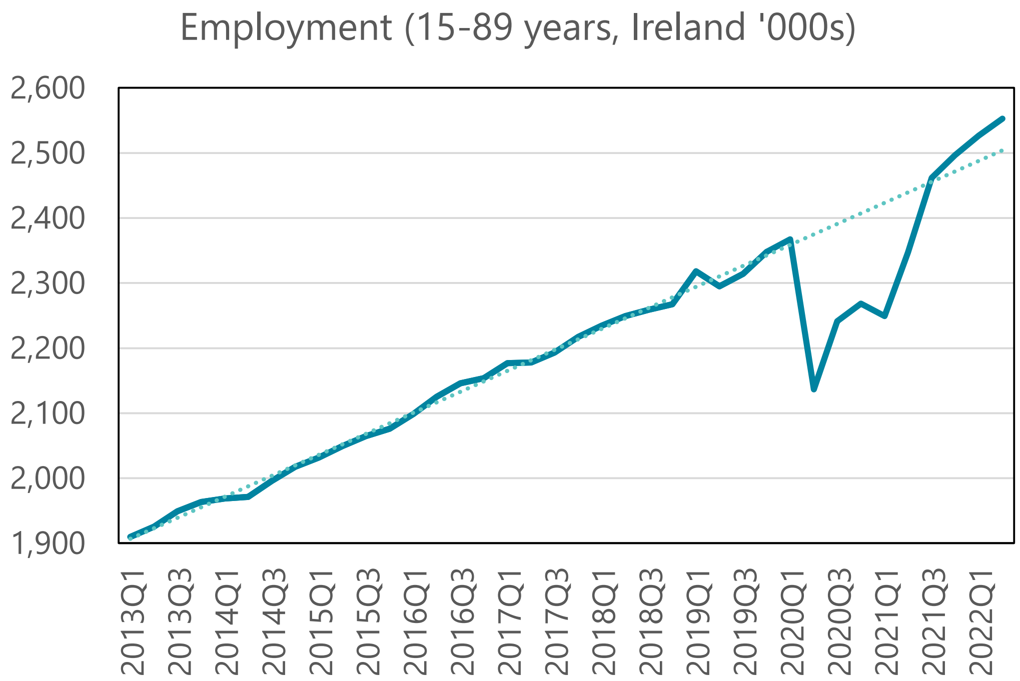


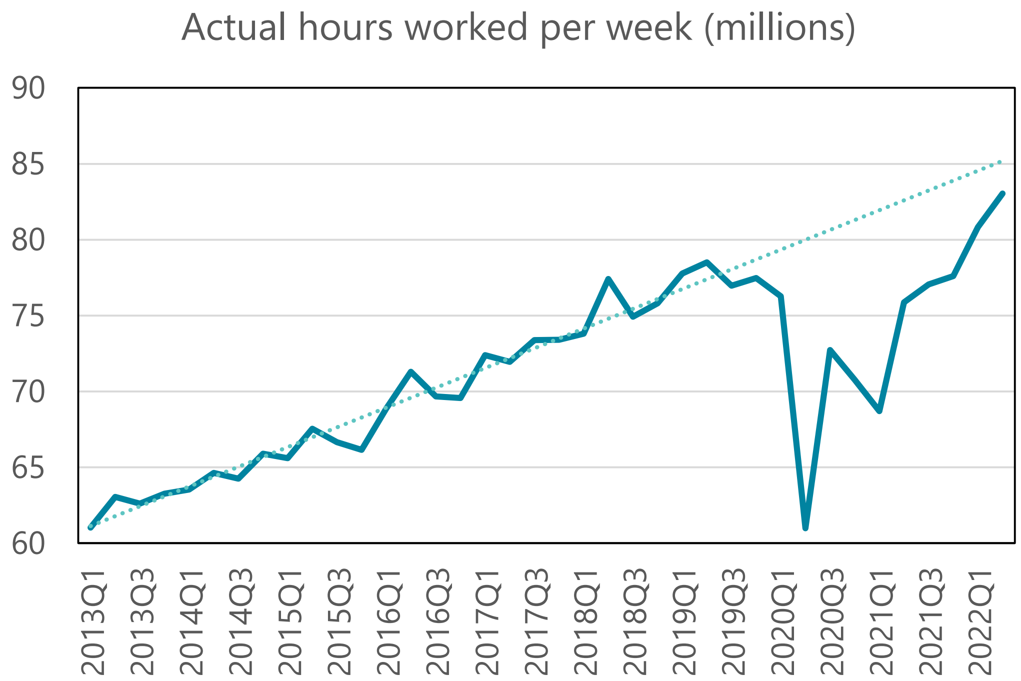
Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: Eurostat & CSO. Note, this is growth in average hourly wages or compensation of employees, unadjusted for changes in composition. In other words, relatively larger increases in the employment of lower or higher-paid workers will skew this mean.

Labour market

A record expansion of employment interrupted by the pandemic

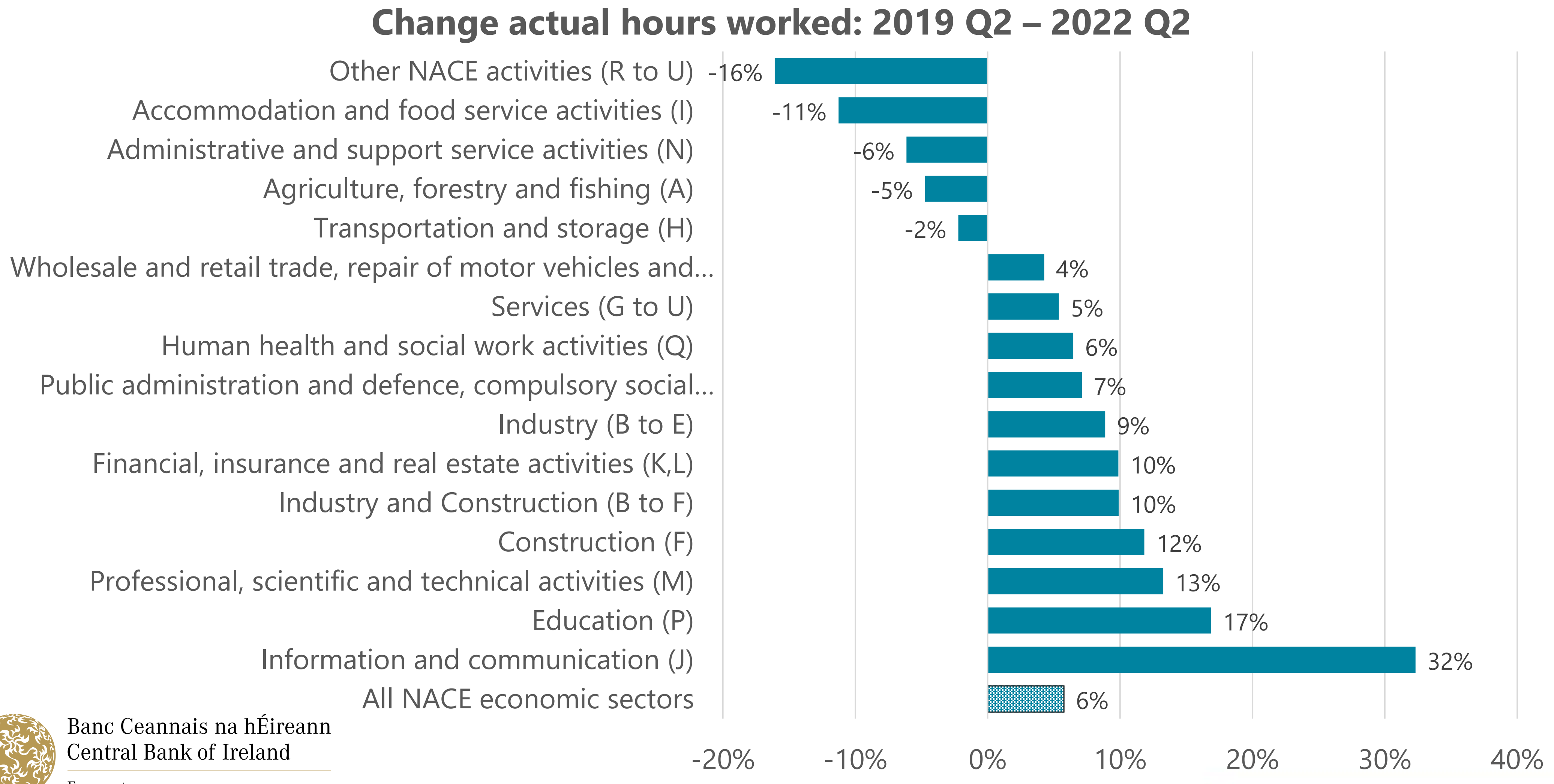




Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: CSO, the employment series is seasonally adjusted (Table QLF03). The aggregate hours series is not seasonally adjusted (Table QLF36). Dotted line is the 2013-2019 trend.

Some contact-intensive sectors lagging in recovery

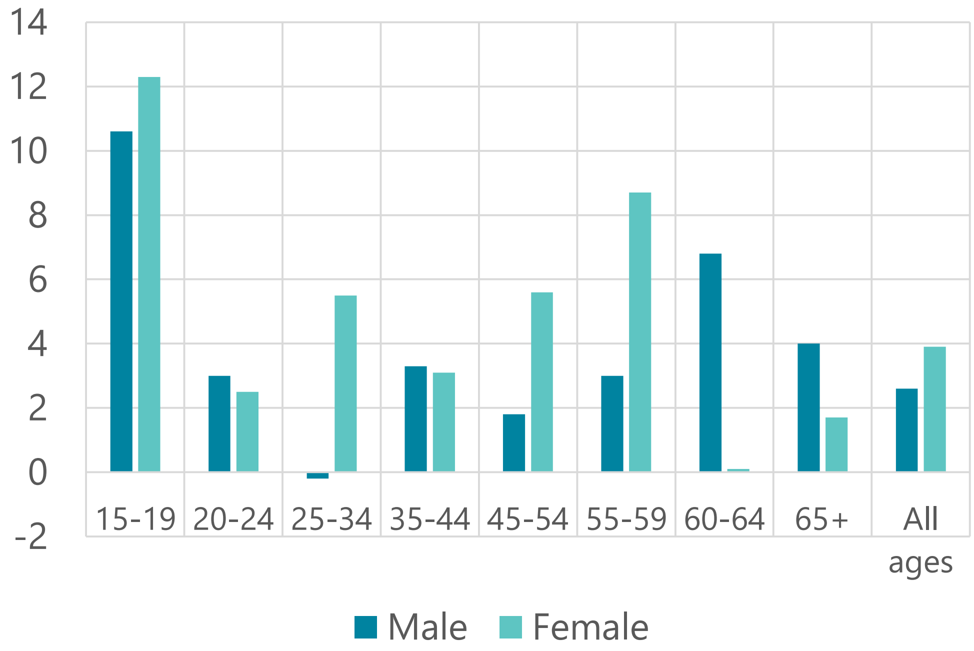


Source: CSO. Table QLF36.

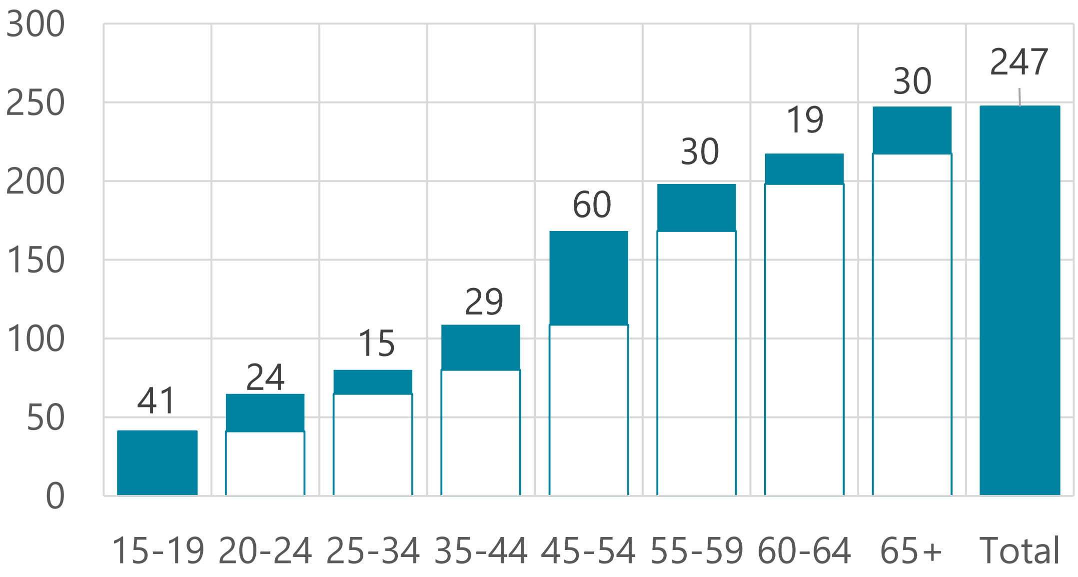
Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

With migration temporarily restricted, post-pandemic growth supported by large expansion of domestic labour force

Change in labour force participation rate, 2019Q2-2022Q2 (%)



Change in employment ('000s) 2019Q2-2022Q2



Source: CSO, the employment series is seasonally adjusted (Table QLF03). The aggregate hours series is not seasonally adjusted (Table QLF36). Dotted line is the 2013-2019 trend.

Similar euro area patterns: employment rates up => unemployment falling and participation increasing

Employment rate (15-64, selected countries)

	2020Q1	2022Q1	*Change*
Euro area	67.4	68.9	*1.5*
Ireland	**69.8**	**72.8**	***3.0***
Germany*	77.0	77.0	*0.0*
Italy	58.4	59.1	*0.7*
Spain	62.6	63.6	*1.0*
France	65.7	67.5	*1.8*
Netherlands	78.4	81.2	*2.8*
UK**	76.3	75.7	*-0.7*
US**	71.79	71.3	*-0.5*

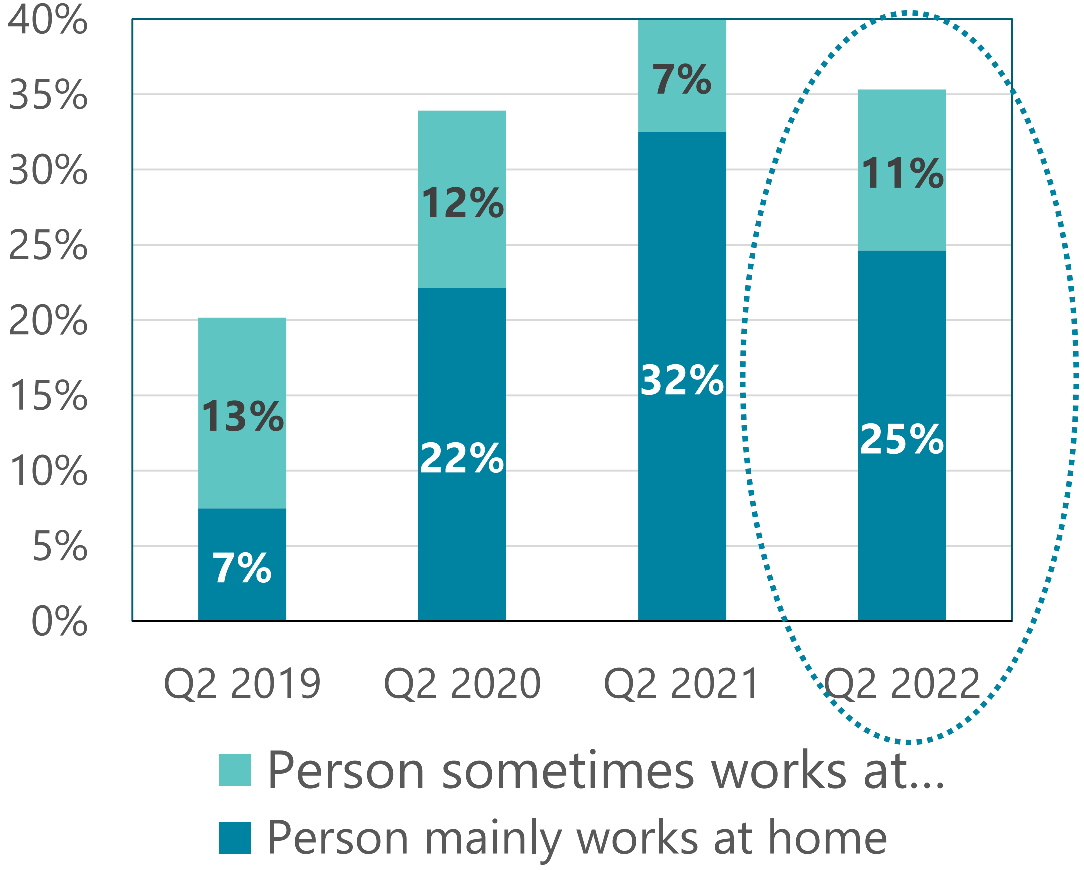
Source: Eurostat; (*) the second period for Germany is 2021Q4. (**) OECD for UK and US employment rates

Employment rate: euro area

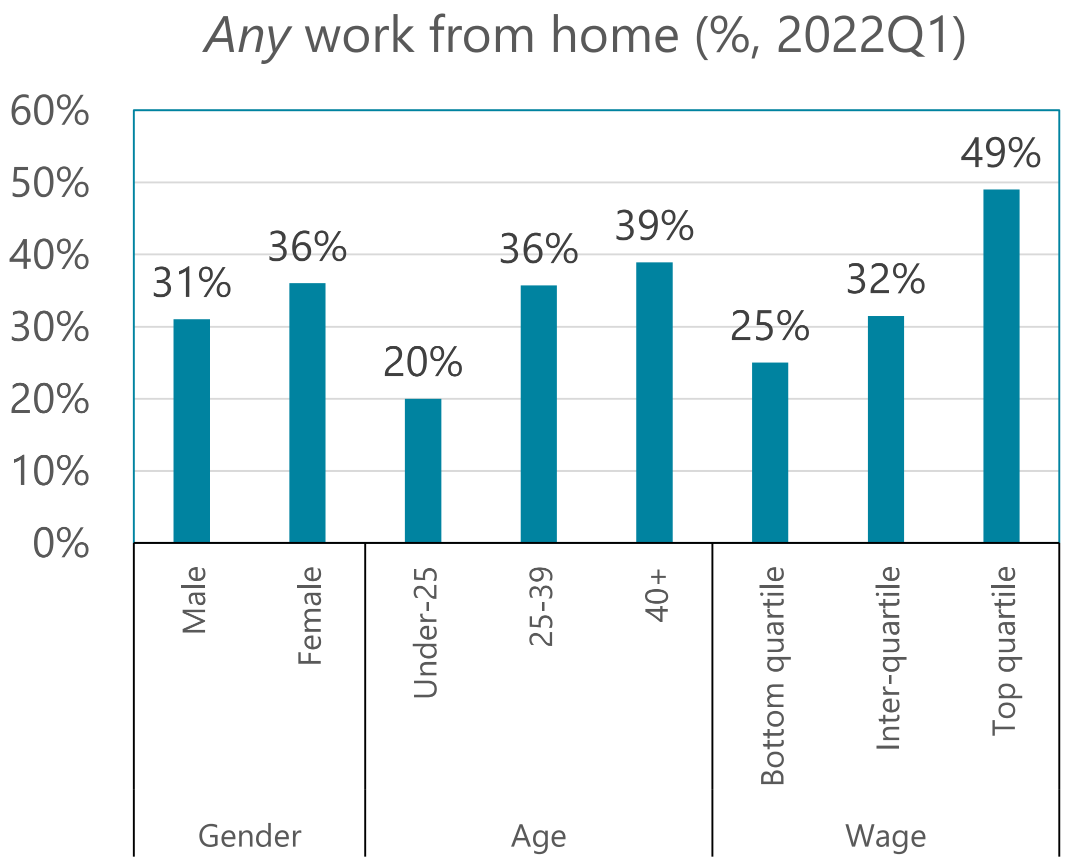
	2019Q1	2021Q4	*Change*
15-19	15.7	16.6	0.9
20-24	50.3	52.9	2.6
25-29	72.6	75.0	2.4
30-34	78.6	80.2	1.6
35-39	80.4	81.8	1.4
40-44	81.4	82.8	1.4
45-49	81.0	82.3	1.3
50-54	79.1	80.5	1.4
55-59	72.7	74.1	1.4
60-64	46.0	48.6	2.6

Source: Eurostat

Working from home here to stay?



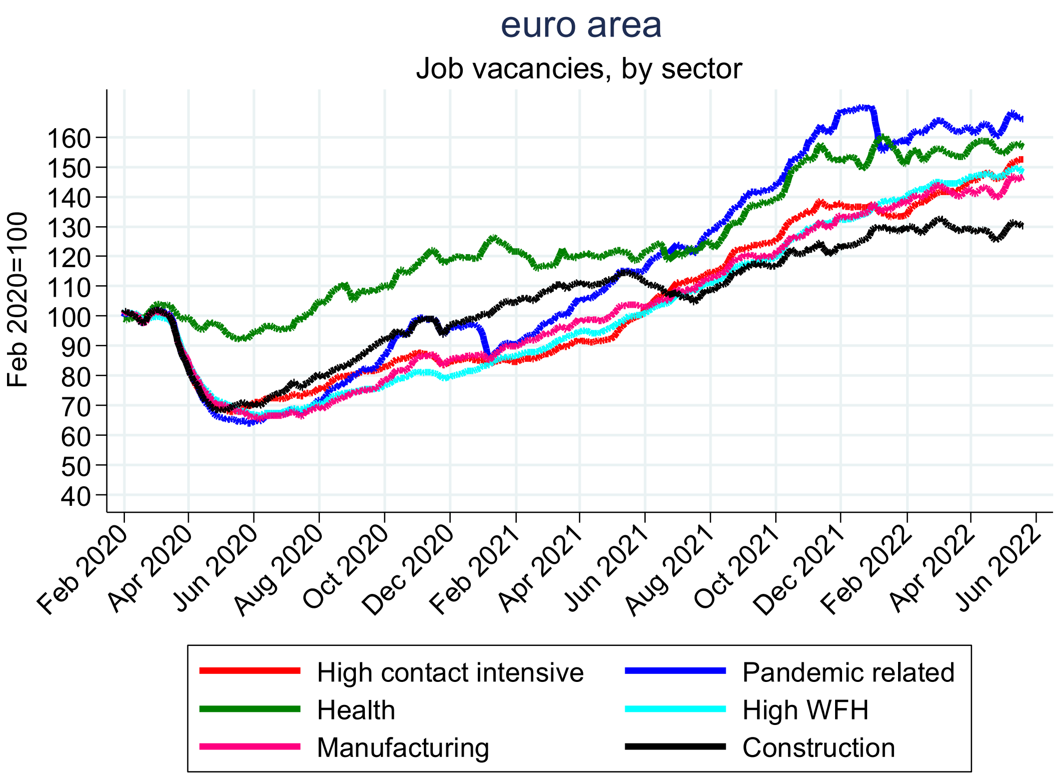
Source: CSO, [LFS Q2 2022 presentation of results]



Source: Analysis of CSO-LFS for Q1 2022. These are *conditional* means and should be taken as *indicative* of differences in the propensity to work from home by characteristic. *Gender* controls for wage, age, sector, occupation and region; *Age* controls for sector and region only; *Wage* controls for age, sector, occupation and region.

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Tightness: despite uncertain outlook, job openings remain high, unemployment is low



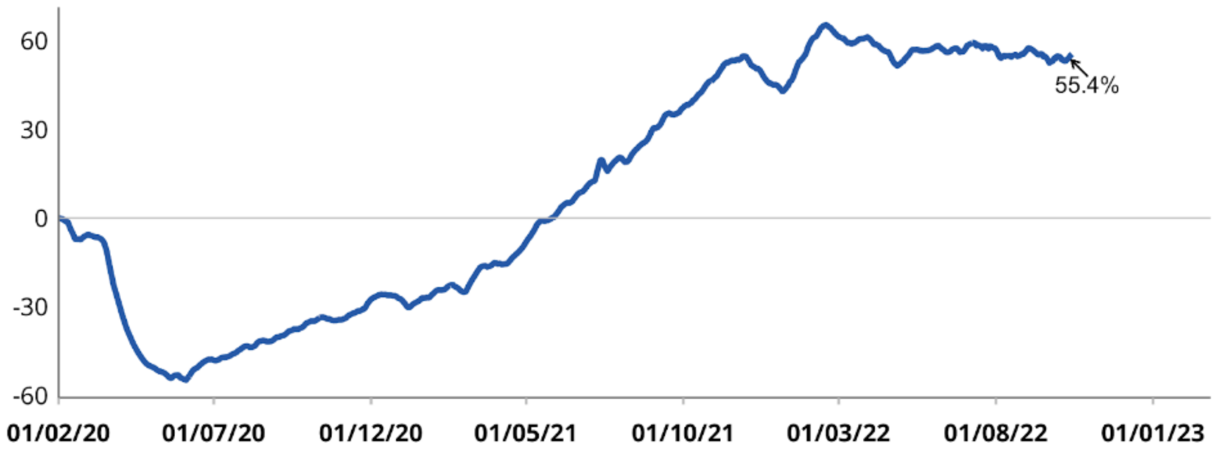
Source: Indeed data to 12 August

Source: National statistics bodies. Ireland and US is July 2022. EA and UK is June 2022.

Demand for new hires remains strong in Ireland – but tech weaker, also reflecting a global shift in demand in that sector

Job postings on Indeed, Ireland

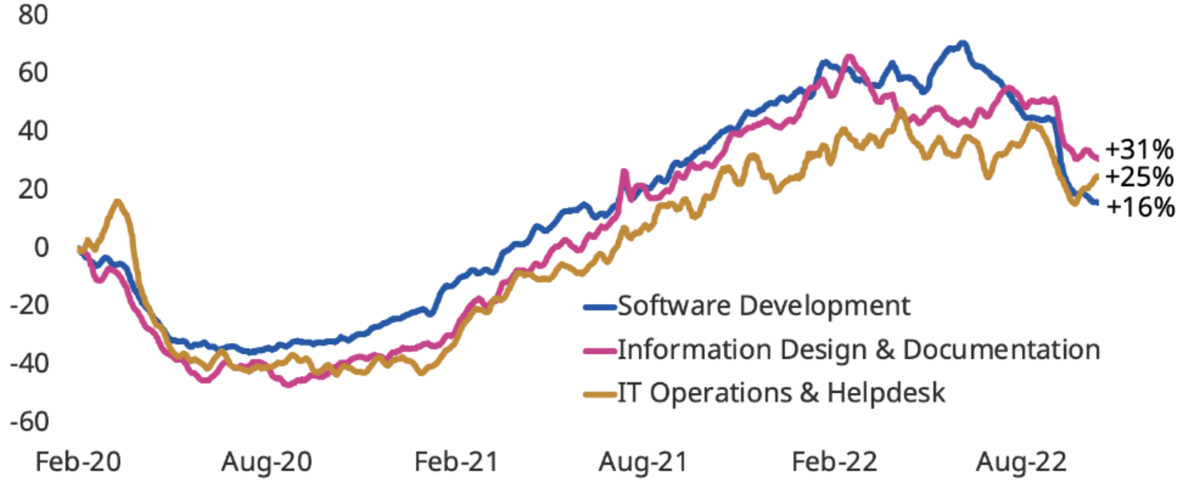
% change in job postings since 01 Feb 2020, seasonally adjusted, to 14 Oct 2022



Source: Indeed

Tech categories have slowed

% change in job postings since 1 Feb 2020, to 14 October 2022

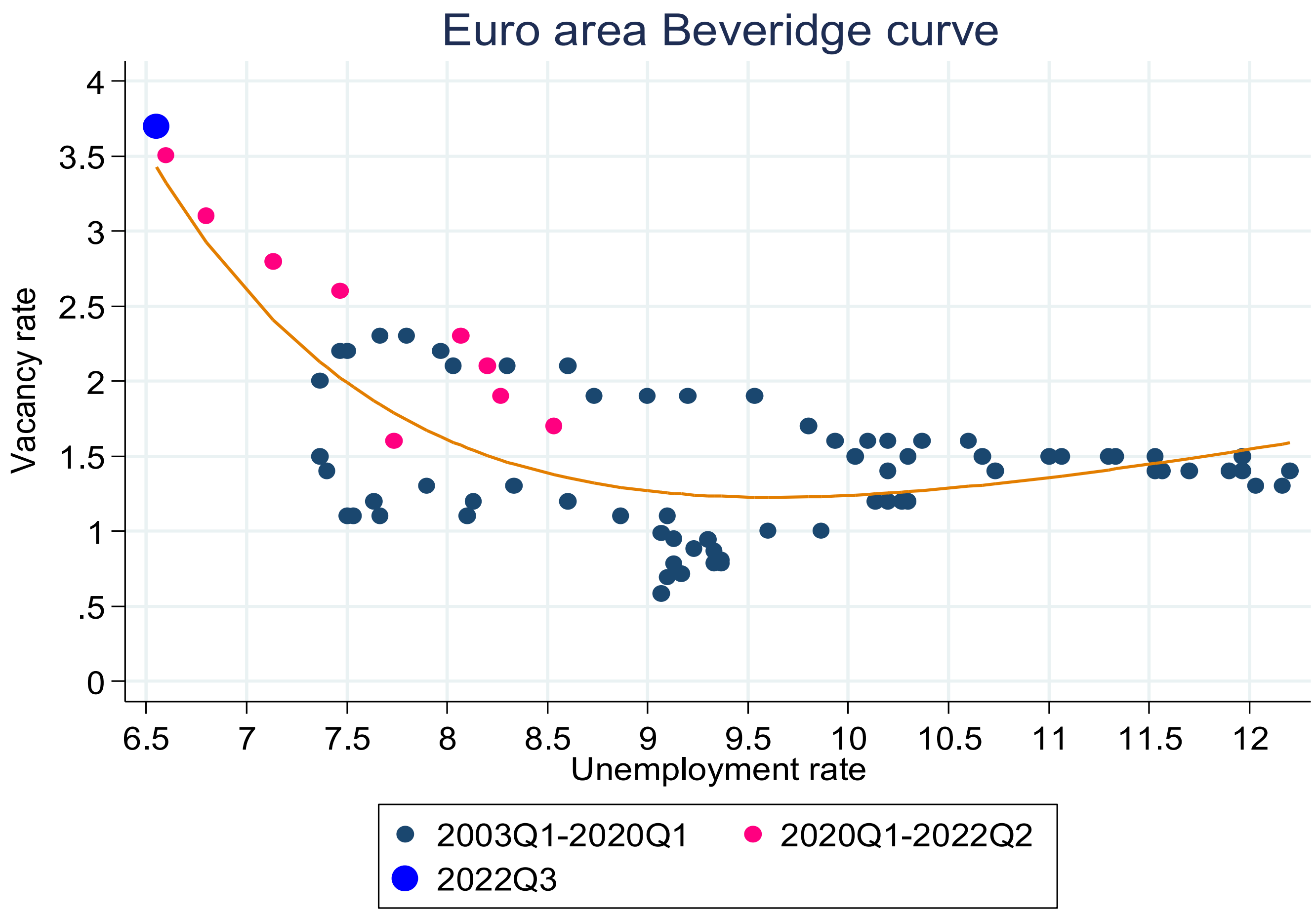


Source: Indeed. Seasonally adjusted data.

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: Indeed data through 14 October. See Kennedy (21 October 2022)

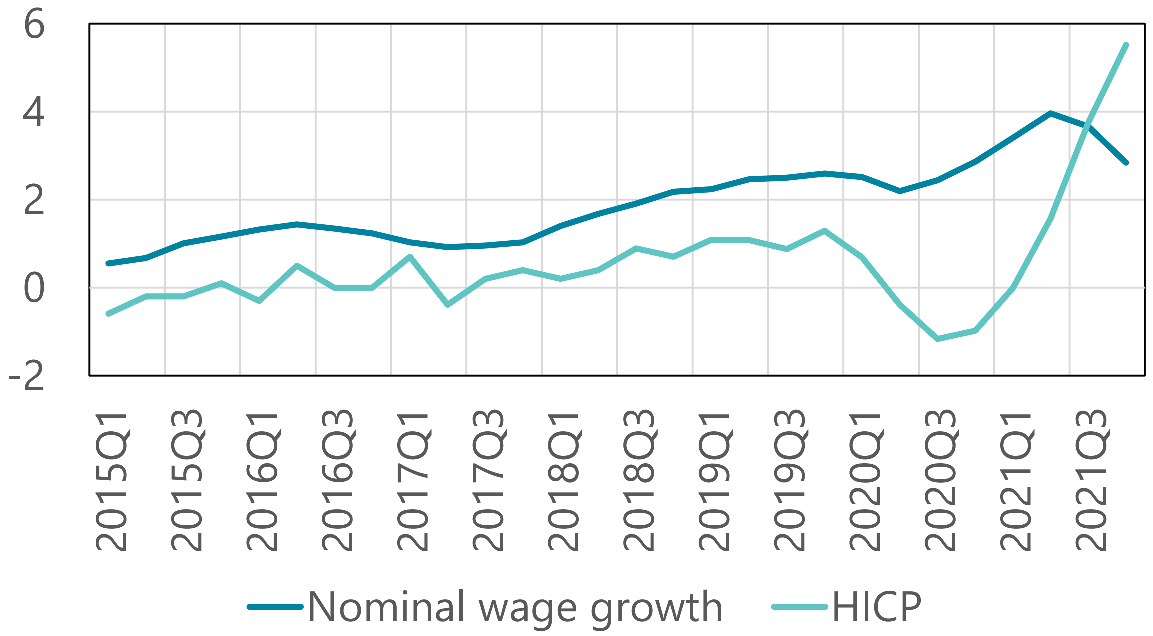
More job vacancies, lower unemployment => moving up the Beveridge curve….



Source: Own calculations using Eurostat data on unemployment and vacancy rates through to Q1 2022, dragged forward to Q3 2022 using Indeed data on job openings growth.

Pre-pandemic:
average *real* wage growth consistent with 1% productivity growth

Nominal wage growth and HICP inflation (Ireland)



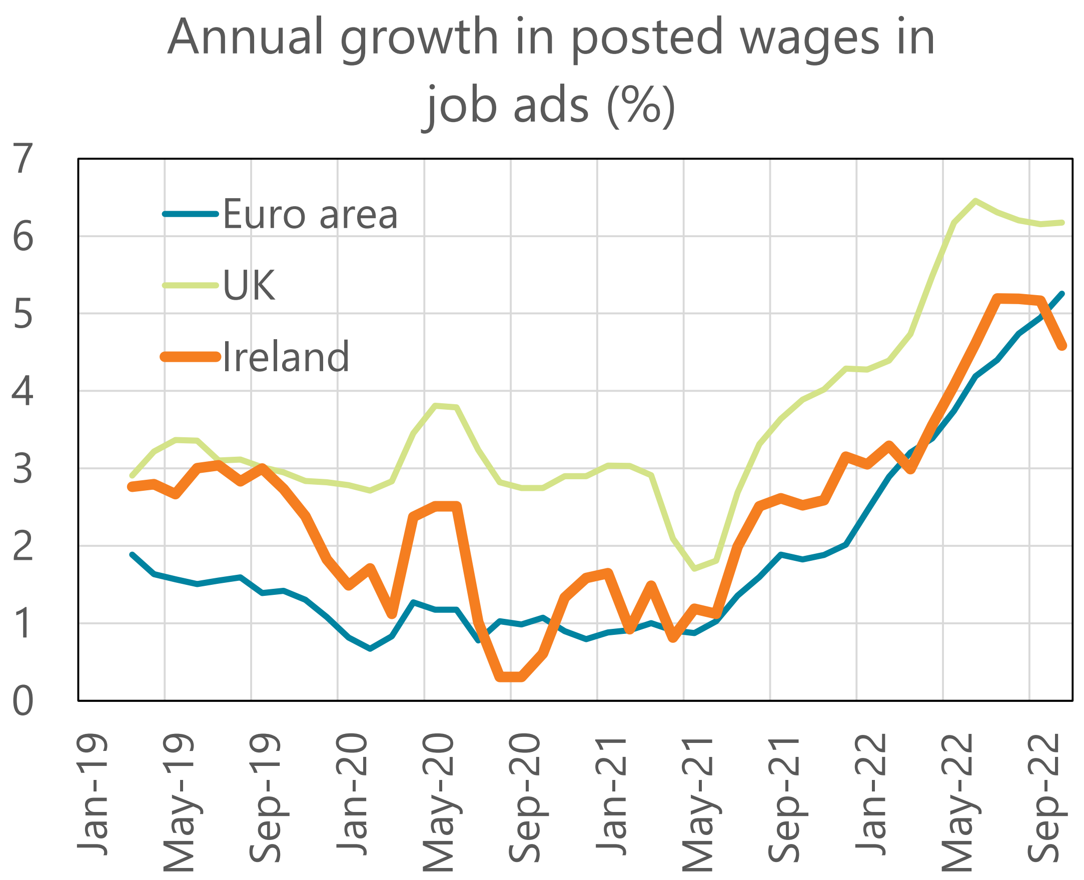
Source: Four quarter moving average of average hourly wage at the firm level (excluding overtime and bonuses). Central Bank analysis of EHECs micro data; controlling for changing composition using firm and sector fixed effects.

Nominal wage growth projections

	2022	2023	2024
Ireland	3.8%	5.8%	4.9%
Euro area	4.0%	4.8%	4.0%

Source: Projected growth in nominal *compensation per employee*. Central Bank of Ireland Quarterly Bulletin 4 2022; ECB September 2022 Macroeconomic Projections

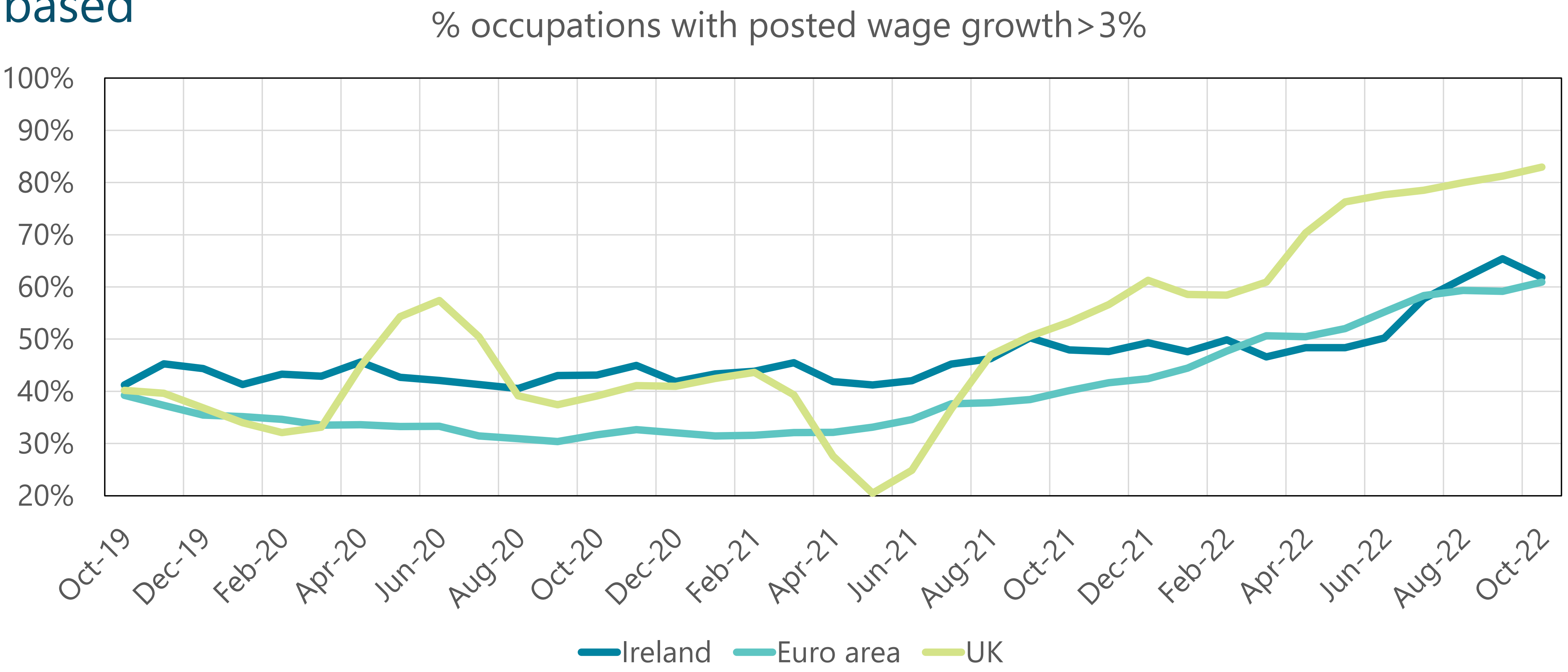
Wage growth tracker – using job ads on *Indeed*



Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: Analysis of wages posted in job ads on *Indeed*. Average wage growth controls for changing composition of job ads. Adrjan & Lydon (2022, fortcoming). 3 month moving average

Upward shift in posted wage growth is increasingly broad-based



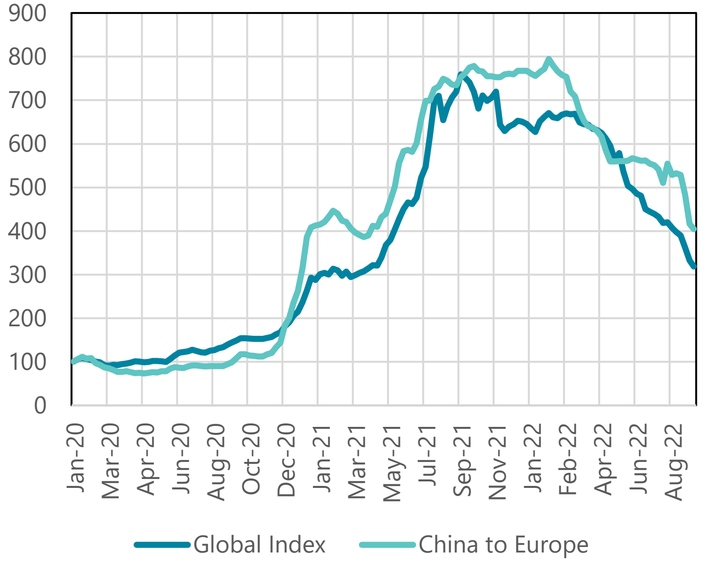
Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: Analysis of wages posted in job ads on *Indeed*. The figure shows the share of 54 narrow occupational categories in the data where annual growth in posted wages exceeds 3%. See Adrjan & Lydon (2022, fortcoming).

Looking ahead…

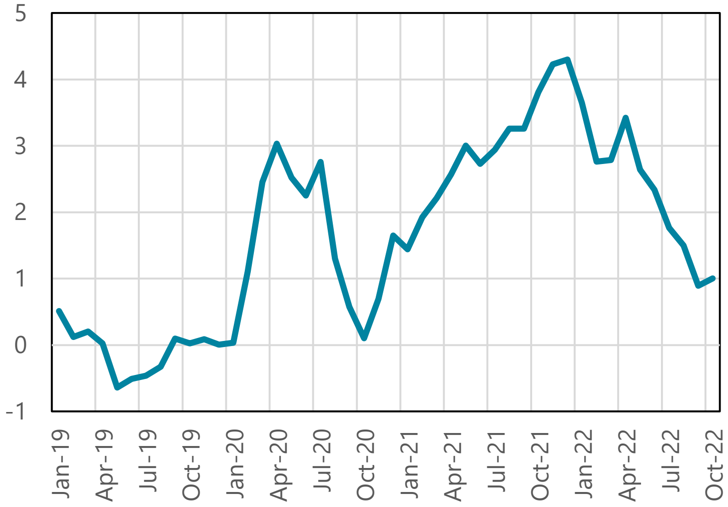
Supply chain pressures are easing…

Shipping price indices
Index, Jan 2020 = 100



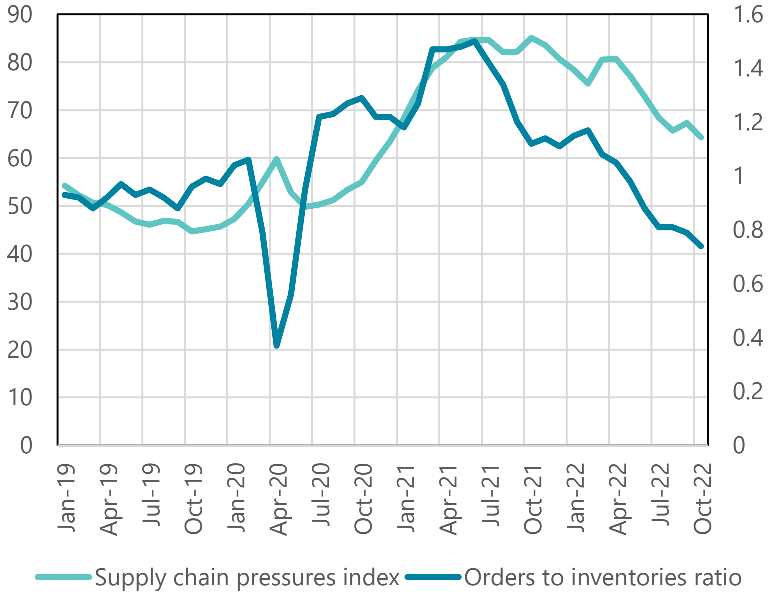
Source: FREIGHTOS via Bloomberg

GSCPI (global supply chain index)
Diffusion index



Source: NYFED

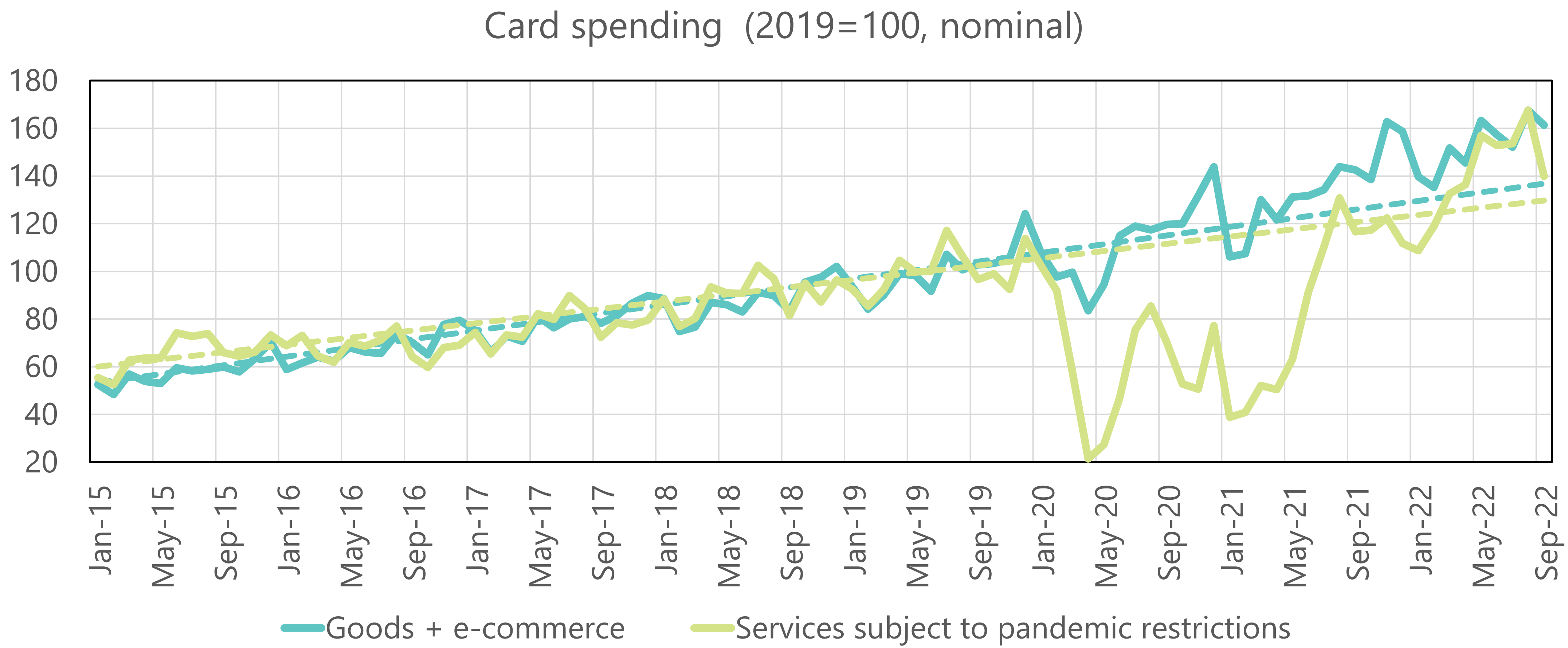
Inventories and supply chain pressures
Diffusion index, ratio



Source: S&P Global
Notes: supply chain pressures captures changes in delivery times and input prices.
Order to inventory ratio is new orders over stock of finished goods

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Card spending on pandemic affected services rebounds in 2022



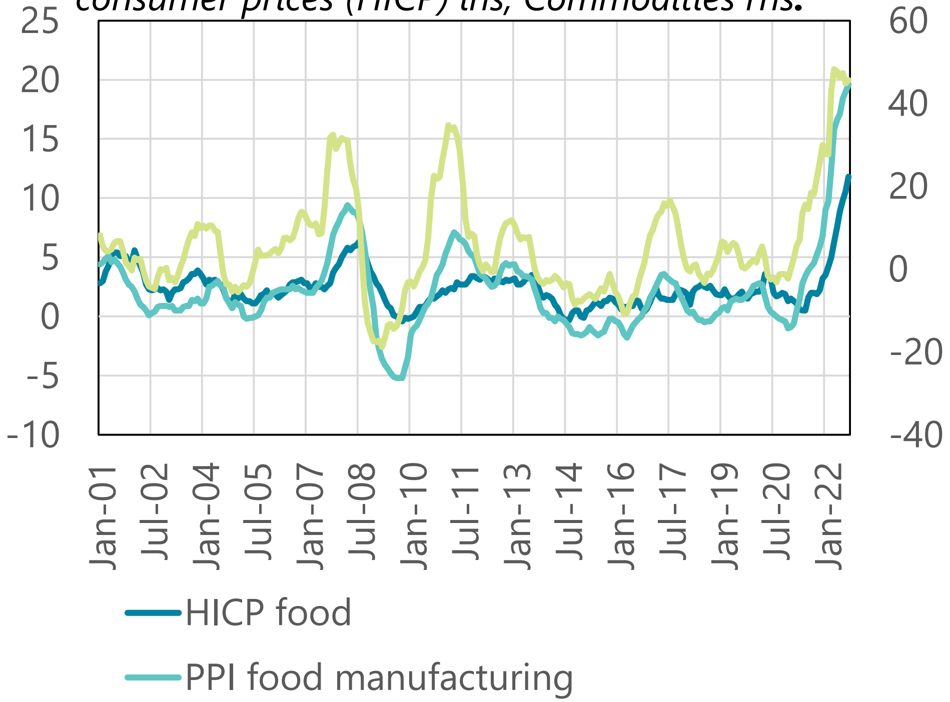
Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Source: Central Bank of Ireland Credit and Debit card statistics, Table A.13. Spending on 'services subject to pandemic restrictions includes: Transport, Accommodation, Food & Entertainment. The dashed lines represent the trend to end-2019. Note: there is an underlying move away from cash for purchases which is reflected In the trends, and arguably accelerated by the pandemic.

Higher food commodity price pressures have eased, but remain at a high level

Commodity, producer and consumer prices (HICP food)

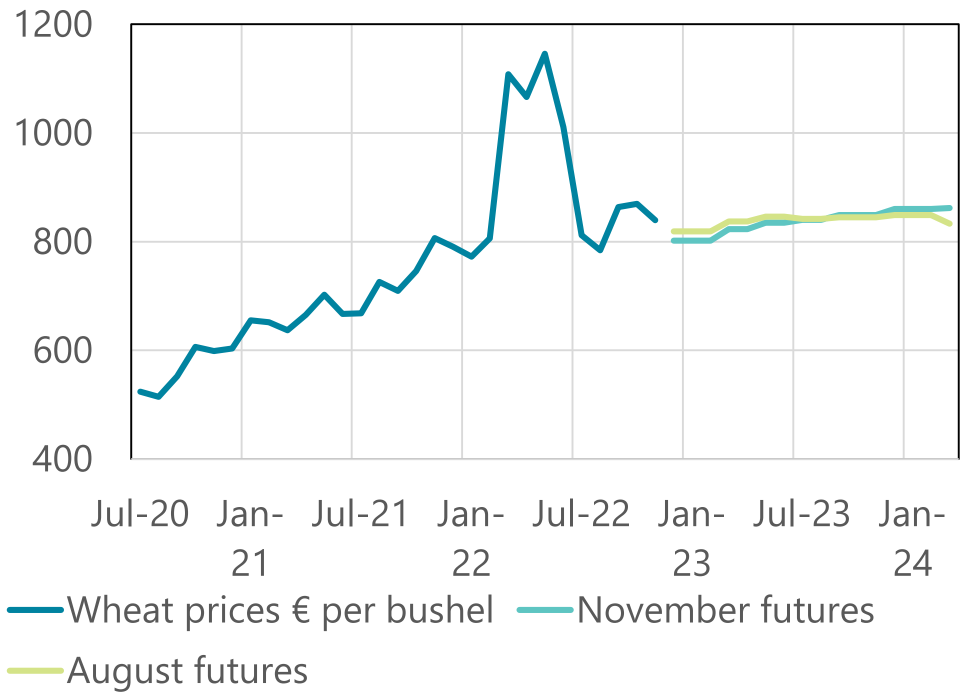
Year on year growth (%). Producer Price Index (PPI) and consumer prices (HICP) lhs, Commodities rhs.



Source: Eurostat, ECB

Wheat futures

€ per bushel



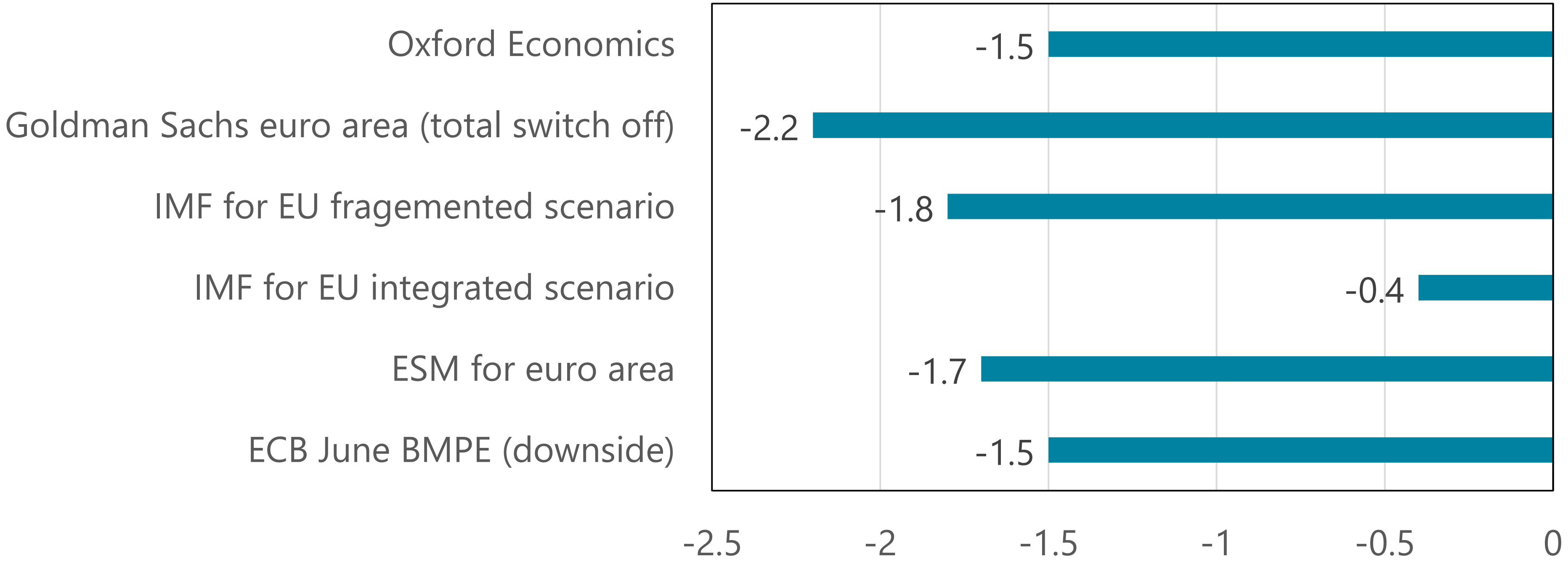
Source: Bloomberg

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Gas shutdown scenarios

Estimates of effect of Russian gas shut off on GDP growth

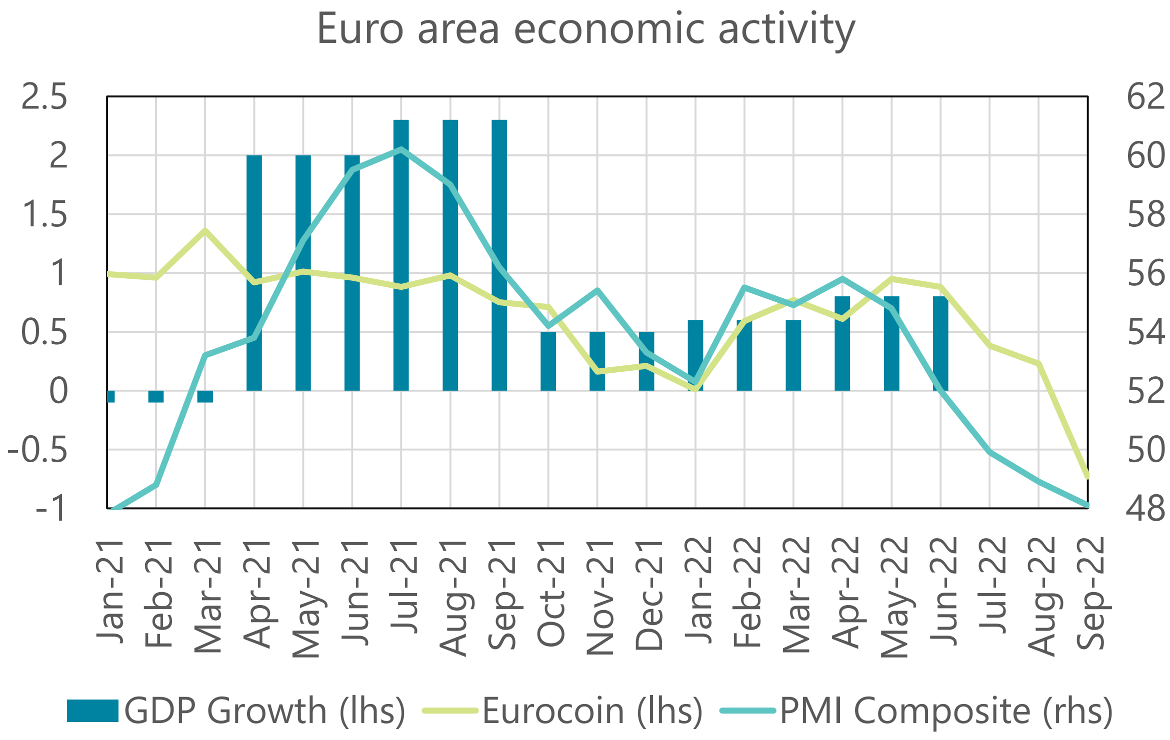
Percentage points

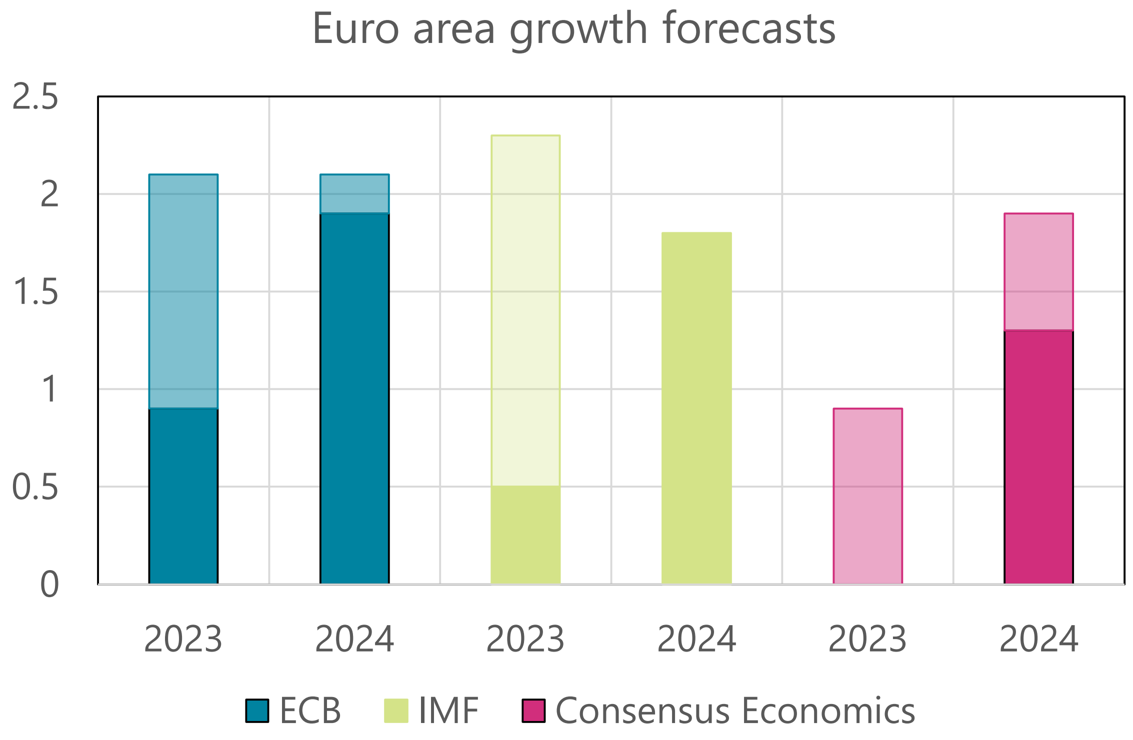


Source: ESM, IMF, Goldman Sachs, Oxford Economics
Notes: All scenarios are relative to baseline, which for the ECB's June 2022 projections for 2023 and 2024 are for annual GDP growth of 2.5% on average.

Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

The economic outlook has deteriorated

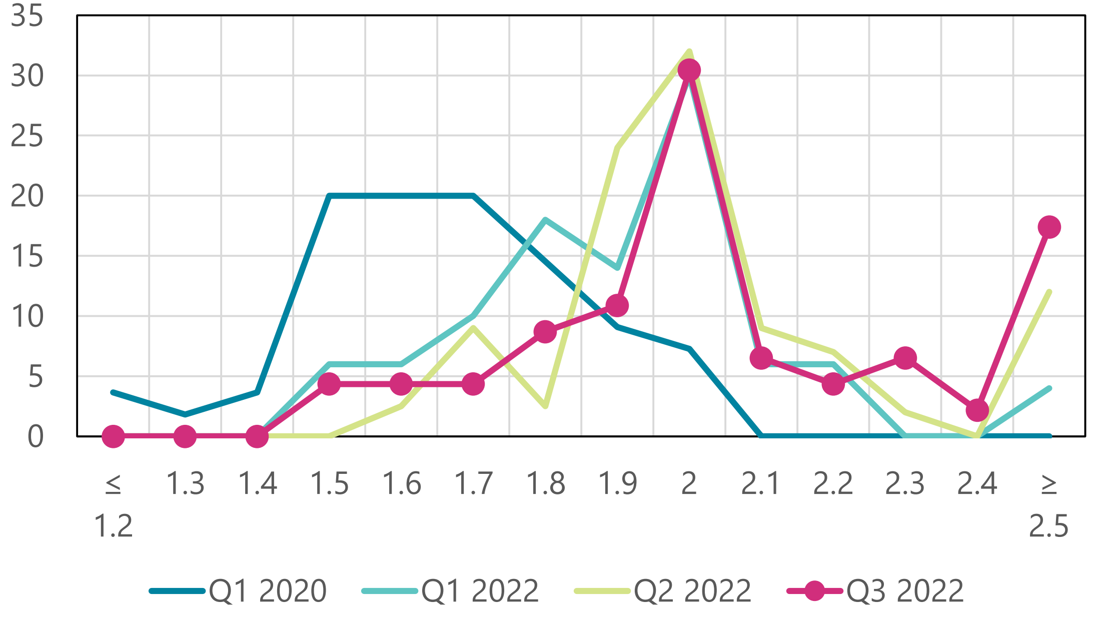




Source: Eurostat, S&P Global and CEPR

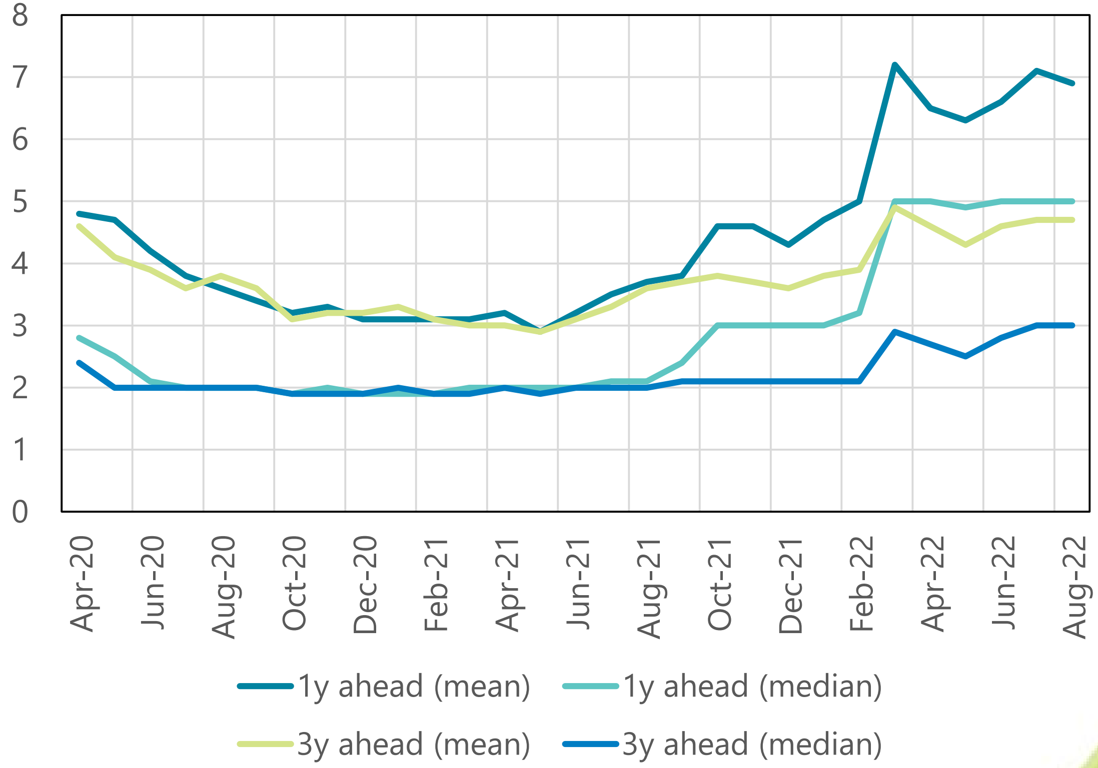
Consumer and market expectations have drifted up with inflation

Survey of professional forecasters (expectations)
5-years ahead *(Share in each bucket %)*



Source: ECB

Consumers' inflation expectations



Source: ECB Consumer Expectations Survey (CES)