



Banc Ceannais na hÉireann  
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Box F:

QB 1 – March 2023

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## Changes in Average Actual Hours Worked since the Pandemic

By Enda Keenan and Tara McIndoe-Calder<sup>1</sup>

The average number of hours worked by those in jobs, combined with the number of people employed, measures the quantity of labour used to produce goods and services in the economy. This a key indicator of domestic economic activity. Since the pandemic, average actual hours worked in the euro area remain below pre-pandemic levels, despite tight labour markets and broadly positive productivity growth.<sup>2</sup> This box explores recent trends in average actual hours worked in Ireland using granular data. The wide spread fall in average actual hours worked across sectors, occupations and euro area countries underscores the need for more detailed analysis of the underlying causes and implications of these trends.

During the pandemic, the introduction of income-support schemes such as the EWSS and PUP meant that changes in employment did not fully reflect the decline in labour market activity.<sup>3</sup> Trends in total actual hours worked aligned more closely with developments in consumption and other indicators of domestic activity. For example, hours worked declined by 21.3 per cent between Q4 2019 and Q2 2020 while employment levels fell by 9.3 per cent (Figure 1). As restrictions eased and the economy re-opened, employment expanded rapidly. Total actual hours worked however, have grown less strongly. As a result, average hours per employment have not returned to pre-pandemic levels, despite low unemployment and continued high demand for labour across the economy.

<sup>1</sup> Irish Economic Analysis Division.

<sup>2</sup> EUROSTAT data shows declines for all euro area countries between Q3 2019 and Q3 2022 in average actual hours worked using comparable data. The euro area average fall is 2.5 per cent ranging from 6.8 per cent in Belgium to 0.2 per cent in Latvia.

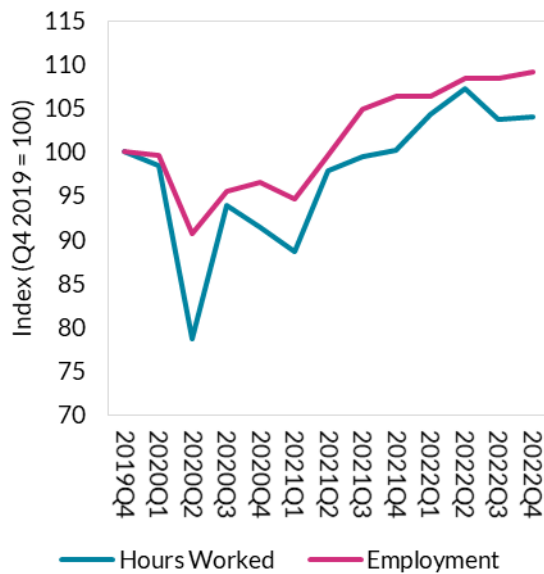
<sup>3</sup> Byrne and Keenan (2020) "[Measuring and Forecasting the Unemployment Rate during COVID-19](#)" Central Bank of Ireland Quarterly Bulletin QB4 2020 Box D



In Ireland, average actual hours worked per employment saw a gradual decline from the 1990s to the aftermath of the financial crisis. This was due to long-term structural changes in the labour market and increases in the part-time share of employment. The position changed in the years before the pandemic. As the labour market approached full employment and the share of full-time work in total employment grew, average hours worked began to increase (Figure 2). The onset of the pandemic led to a sudden reversal of this trend with average actual hours worked declining from 33.5 per week to 30.8 in Q2 2022.<sup>4</sup> Data for Q4 2022 show that average actual hours worked remains 4.9 per cent below pre-pandemic levels. This does not appear to be driven by an increase in the incidence of part-time work as the share of part-time employment has broadly returned to its pre-pandemic value of 21 per cent.

Long term decline of average actual hours worked has continued in post-pandemic period

Figure 1: Growth of Total Actual Hours Worked and Employment



Source: CSO

Figure 2: Average Actual Hours Worked per week by persons in employment



Source: CSO

Note: Data includes both employees and self-employed. Data calculated on four-quarter rolling average basis

Using Labour Force Survey (LFS) microdata, we can assess the decline in average actual hours worked in more detail. We include only workers classified as employees, as self-employed persons typically

<sup>4</sup> This is due to a number of PUP recipients classed as employed but working zero hours in the reference week. The PUP scheme was phased out entirely in Q1 2022 with the conventional ILO employment level no longer affected by these compositional issues from Q2 2022 onwards.



work substantially longer hours. Additionally, we only include workers who were present at work during the survey reference week.<sup>5</sup>

The decline in average actual hours worked has been driven by full-time workers. By Q3 2022, average actual hours worked by full-time employees had declined by 2.7 per cent (1.1 hours) compared to 2019. In contrast, part-time workers have seen average actual hours worked increase by 7 per cent (1.3 hours) over this period. The data allows us to examine whether trends in actual hours worked differ depending on the employees' working arrangements (Remote, Hybrid or Fully On-Site). 'Remote' workers or those who work greater than half the week from home recorded the highest level of pre-pandemic hours (41.5) with levels declining to 38.5 hours (Figure 3) by Q3 2022. A similar decline is seen for 'Hybrid' workers, those who work from home less than half of the week. 'Fully On-Site' workers, or those reporting no remote working, have also seen a decline, albeit from a lower initial starting point. Across all three types of working arrangements, hours worked declined during the pandemic and remain well below their pre-pandemic level.

We decompose these falls in average actual hours worked into the components driven by economy-wide and other factors. Economy-wide factors may include a return to the trend decline in actual hours worked, seen across the euro area over many years. Other factors include changes in the characteristics of those working across the three groups in 2022 compared to the pre-pandemic period. For *Remote* and *Hybrid* workers, economy-wide factors account for approximately half of the fall in average actual hours worked (46 per cent and 51 per cent, respectively). The remainder of the fall, 54 per cent and 49 per cent respectively, is due to factors specific to the types of employees with *Remote* and *Hybrid* working arrangements and the large increases in the number of employees with these arrangements since the start of the pandemic. For *Fully On-Site* workers, the vast majority of the fall in average actual hours over the three years from Q3 2019 can be accounted for by economy-wide factors (94 per cent) i.e. those factors affecting workers independent of their work location.

On a sectoral basis, there is no evidence of the decline in average actual hours worked being concentrated in a particular sector. Average actual hours worked have declined across all sectors (by an average of 1.3 per cent), with the exceptions of Agriculture (up 1.9 per cent), Construction (up 0.4 per cent) and Other Services (up 3.7 per cent). The reduction is also wide spread across medium- and high- skilled occupations (3 per cent and 4.6 per cent, respectively) with relatively smaller falls for those in lower skilled occupations (0.6 per cent).<sup>6</sup> Those in lower-skilled occupations are also less likely to work remotely either before or after the pandemic.

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<sup>5</sup> This is in order to avoid the potential inclusion of PUP recipients that may be classified as employed but have worked zero hours during the reference week as well as persons away for annual leave, illness or other reasons.

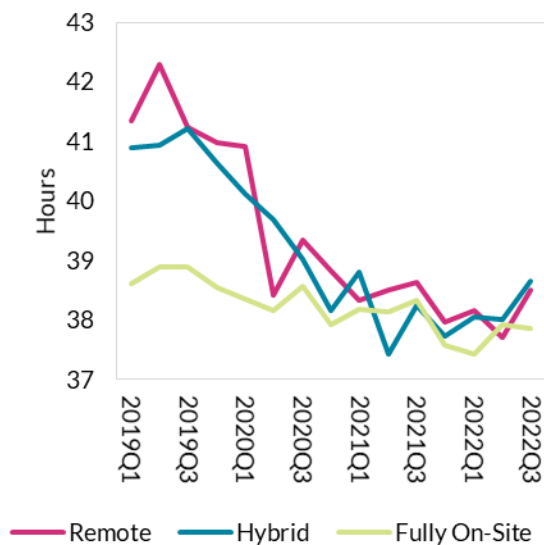
<sup>6</sup> As classified by Standard Occupational Classification System (SOC) 2010 categories



However, the sectoral shares across the three work types have changed substantially between 2019 and Q3 2022. For example by Q3 2022, ICT and Finance together account for 41 per cent of all those working on a Remote basis, up from just over a quarter in 2019. Education and Health account for one in ten Remote workers, down from a quarter in 2019. Industry and Public Administration have also seen increased shares between 2019 and Q3 2022, with Retail’s share in total Remote working falling from almost one in ten workers to less than 5 per cent. This is mirrored in the changes seen for Hybrid and Fully-On-Site. The relative share of either Hybrid or Fully-On-Site workers in Finance and ICT has more than halved. Whilst Health and Industry have seen their shares increase, together these two sector account for almost 36 per cent of Fully-On-Site workers, up from 31 per cent in 2019. These changes have resulted in a convergence of the average actual hours worked between the three work types. The economy wide factors, driving the reduction in average actual hours across all three work types, will require further investigation.

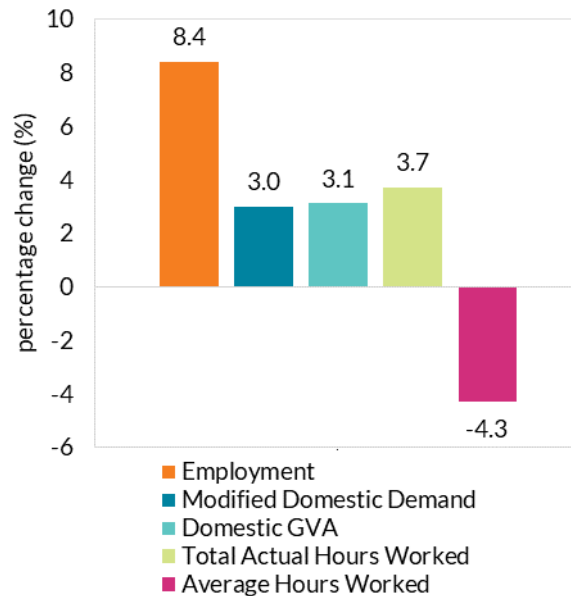
Average actual hours worked down across all work location types as productivity growth remains positive

Figure 3: Average Actual Hours Worked by level of Remote Working



Source: CSO and author’s calculations  
Note: Data are for full-time employees only

Figure 4: Change in Labour Market and Economic Activity (Q4 2019 – Q3 2022)



Source: CSO

Since Q4 2019, measures of domestic economic activity such as Domestic GVA (3.1 per cent) and Modified Domestic Demand (3 per cent) have risen in real terms, reflecting rising total employment. In contrast, average actual hours worked on a per employee basis have declined (Figure 4). At an international level, there is evidence of declines in average actual hours worked across all euro area



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economies. Since the pandemic, average actual hours in the euro area remain below pre-pandemic levels, despite tight labour markets and broadly positive productivity growth. These trends raise a number of questions, including whether the reduction in average hours worked per employee is contributing to the continued strong labour demand in the Irish economy; and whether the decline in average actual hours worked per employee since the pandemic represents a structural change or a trend which may reverse in subsequent quarters. These questions will require further analysis to determine the implications for future productivity growth and potential output in the Irish economy.