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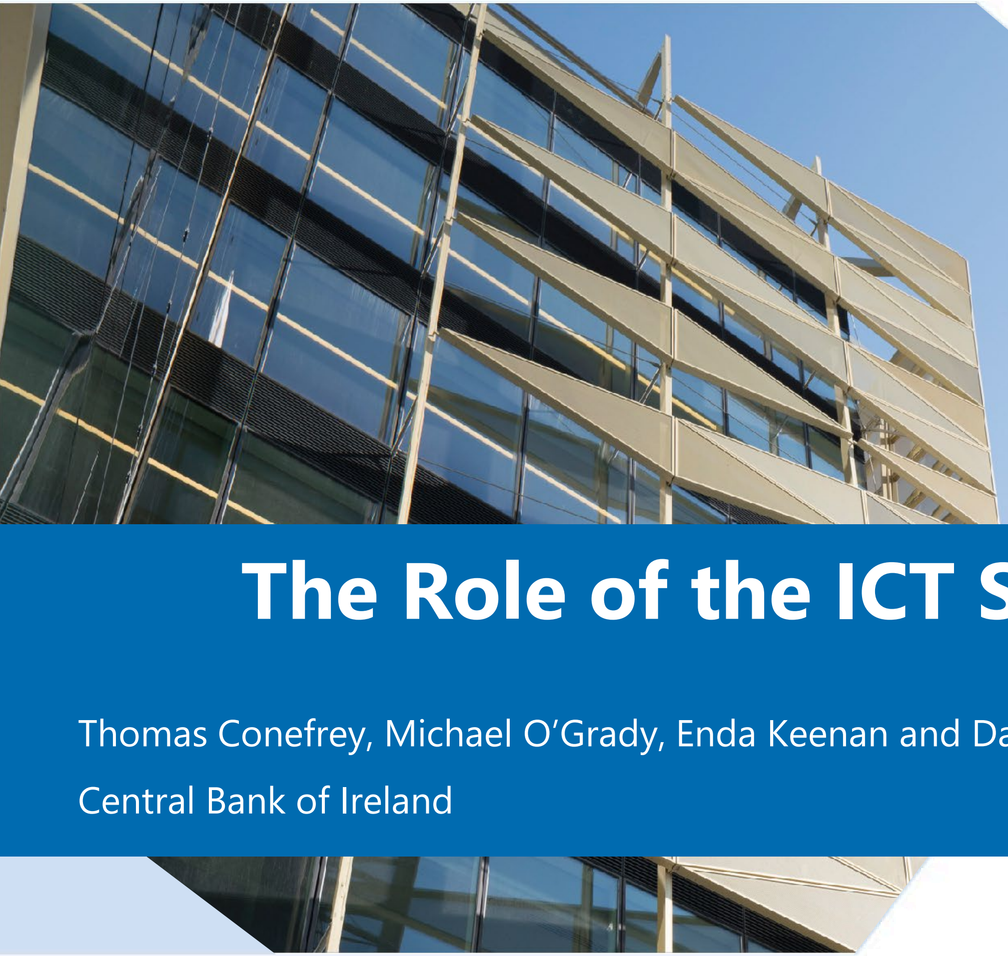

The Role of the ICT Services Sector in the Irish Economy

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Introduction

The ICT services sector has expanded rapidly in Ireland with employment almost doubling since 2010

Following exceptional growth during the pandemic, mid-2022 onwards saw several large multinational firms in the ICT services sector announce cuts to their global workforces

Several of these firms have substantial presence in Ireland and in some cases have located their European HQ here

The announcements of job cuts follows declines in the share prices and valuations of many of these firms over recent months

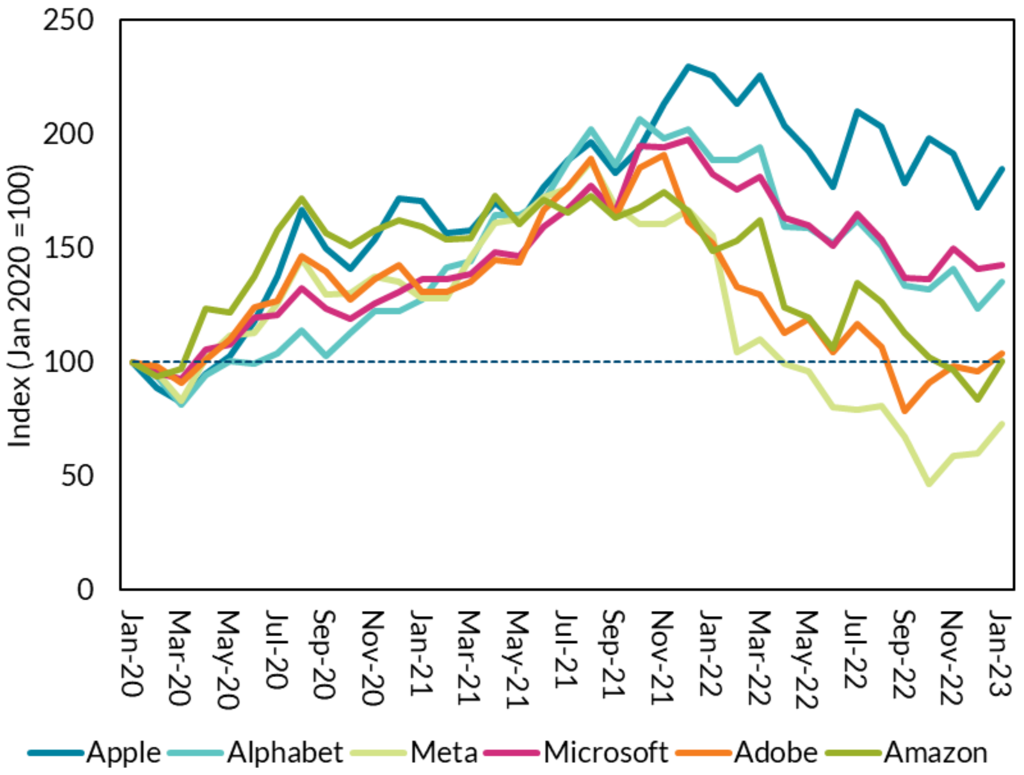
Against this backdrop, we analyse the contribution of the ICT sector to:

1. Economic activity
2. Employment
3. Tax Revenue

Global ICT slowdown

- Weaker demand due to high inflation and impact of US economic downturn on advertising revenue
- Higher interest rates impacting profitability with increased uncertainty
- Investor pressure leading to re-evaluation of growth strategies
- Post-pandemic employment correction with normalisation in demand for digital and online services
- Natural slowdown in customers adopting products
- Correction in the sector following an overestimation of future growth prospects

Stock Prices of key ICT firms



Economic Contribution

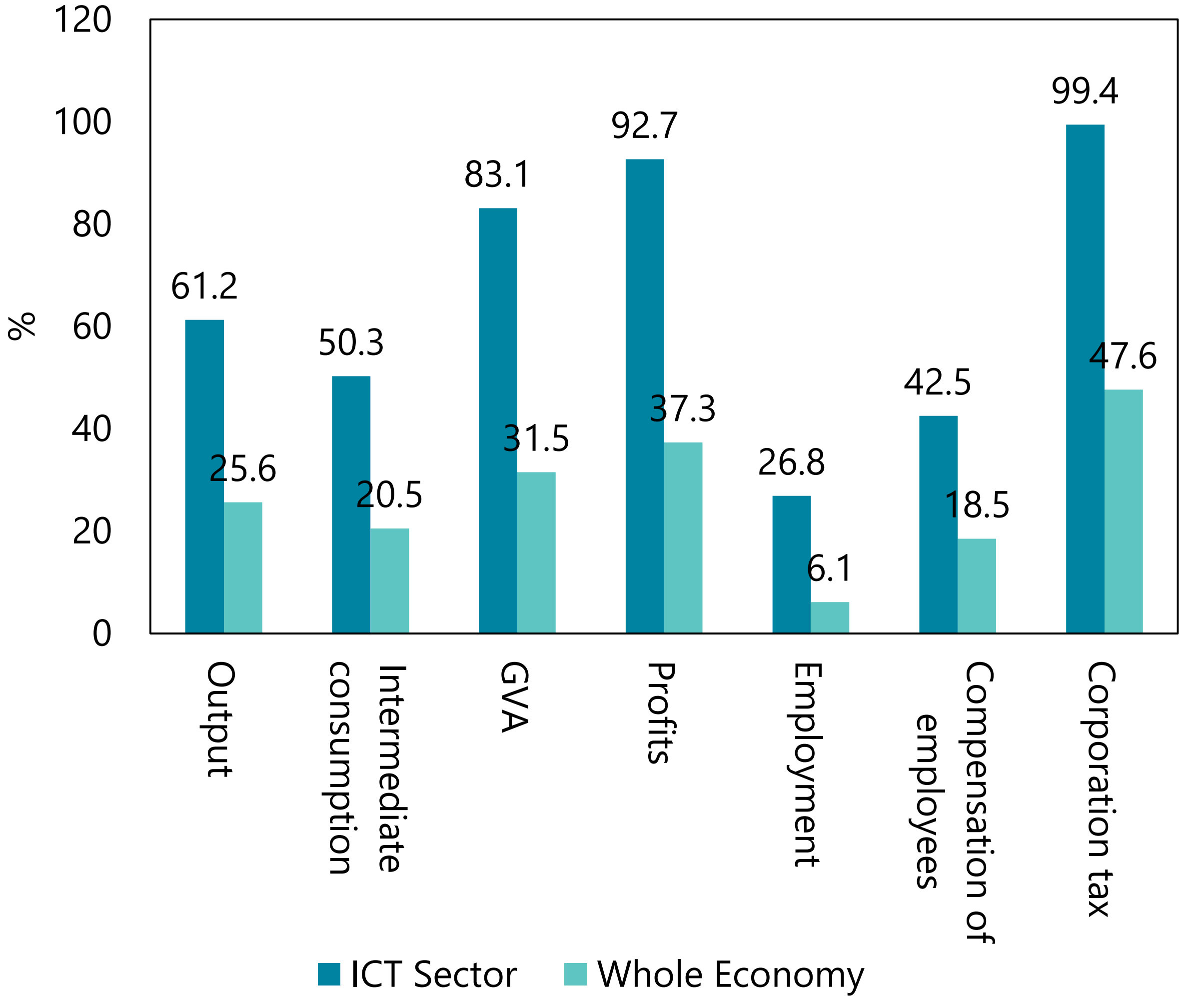
ICT importance to the Irish economy – measured by its contribution to output, exports, employment, wages and tax revenue - has increased steadily over time.

Pace of growth has been between 2-3 times higher than for the economy as a whole over this period.

Sector accounts for:

- 20% of GVA
- 9.6% of the economy-wide wage bill
- 6.4% of employment
- 20% of corporation tax revenue

Measure of Performance of the ICT Sector, % change 2018-2021



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Economic Contribution

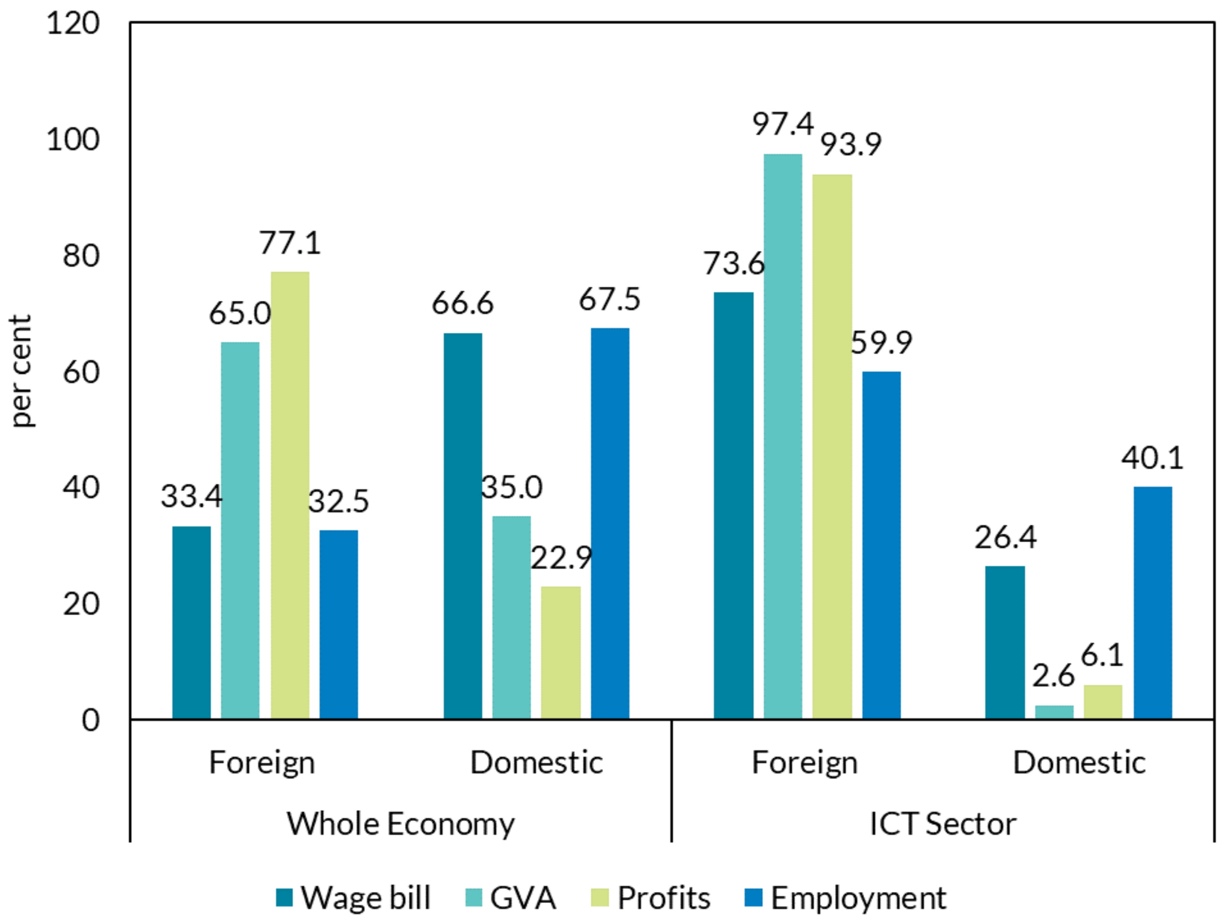
Irish economy is unusually international as below 3% of GVA and 6% of profits are attributed to domestic firms

Large international exposure given majority of profit is generated outside of Ireland

Imports mainly from US (57%) with exports to Europe (52%) with royalties and licensing featuring strongly

Large interlinkage to other sectors meaning a drop in ICT output would lead to negative spillovers in other areas of the economy

Foreign vs Domestic firm economic contributions (2021)



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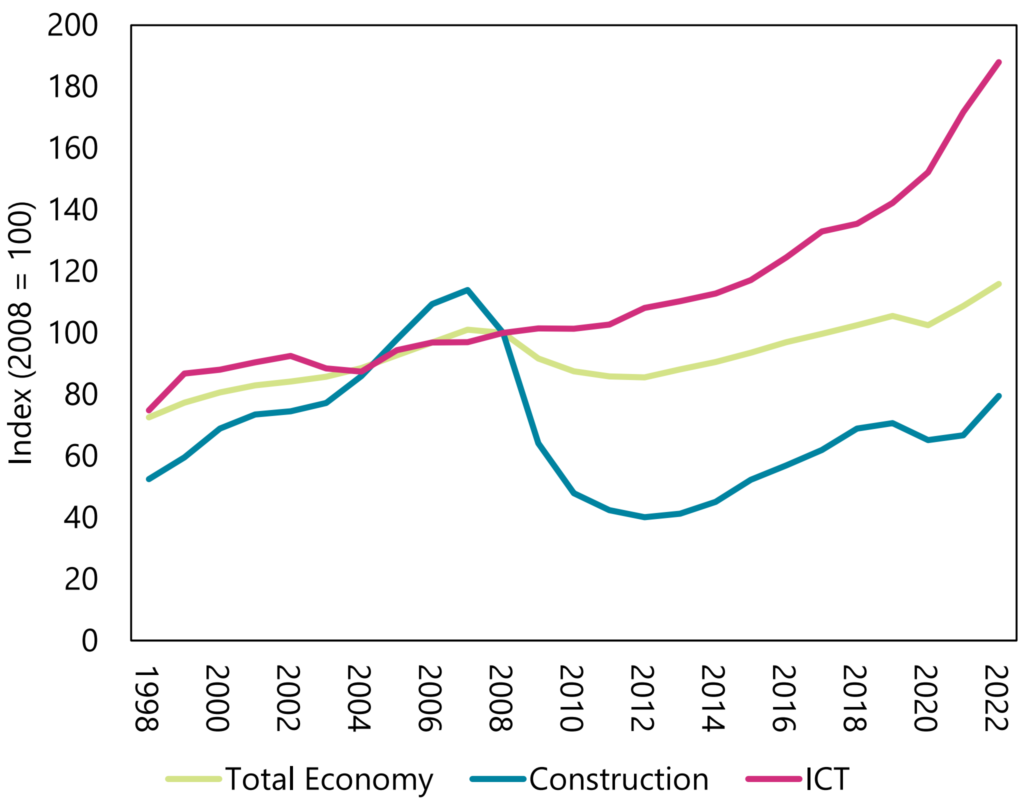
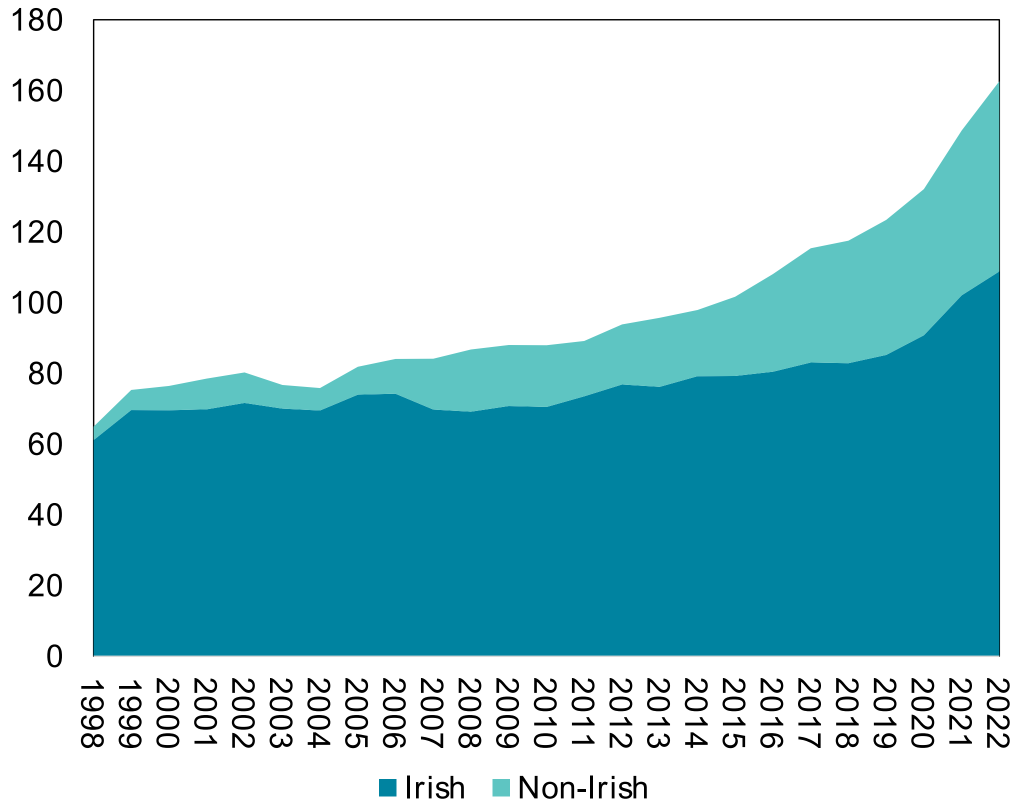
Employment was relative unaffected by the pandemic with expansion in recent years coinciding with increased work permits and higher educational attainment of inward migrants

ICT Employment Growth



ICT Employment by Nationality



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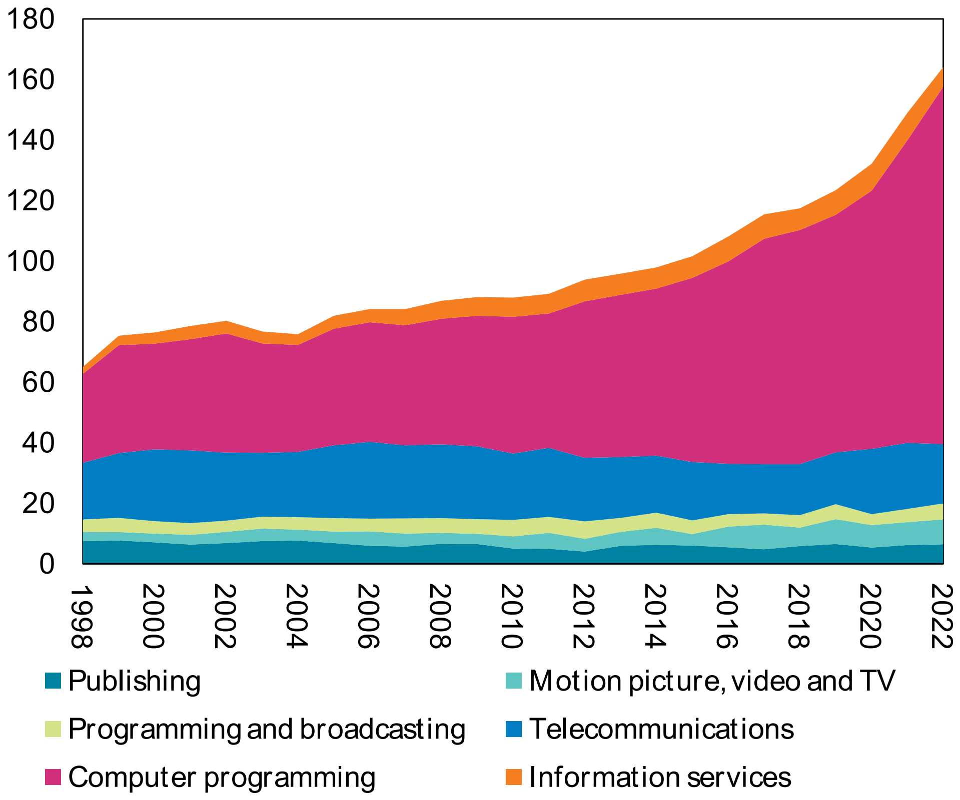
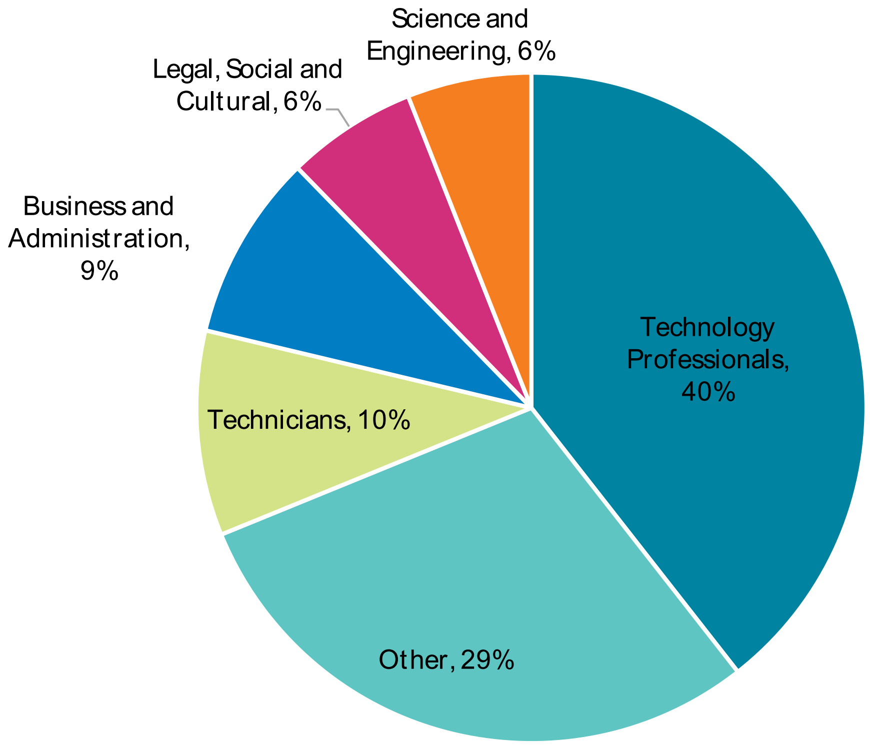
Expansion is primarily in computer programming activities that are higher earning and higher value-added activities which may limit layoffs in Ireland

ICT NACE 2-digit activity



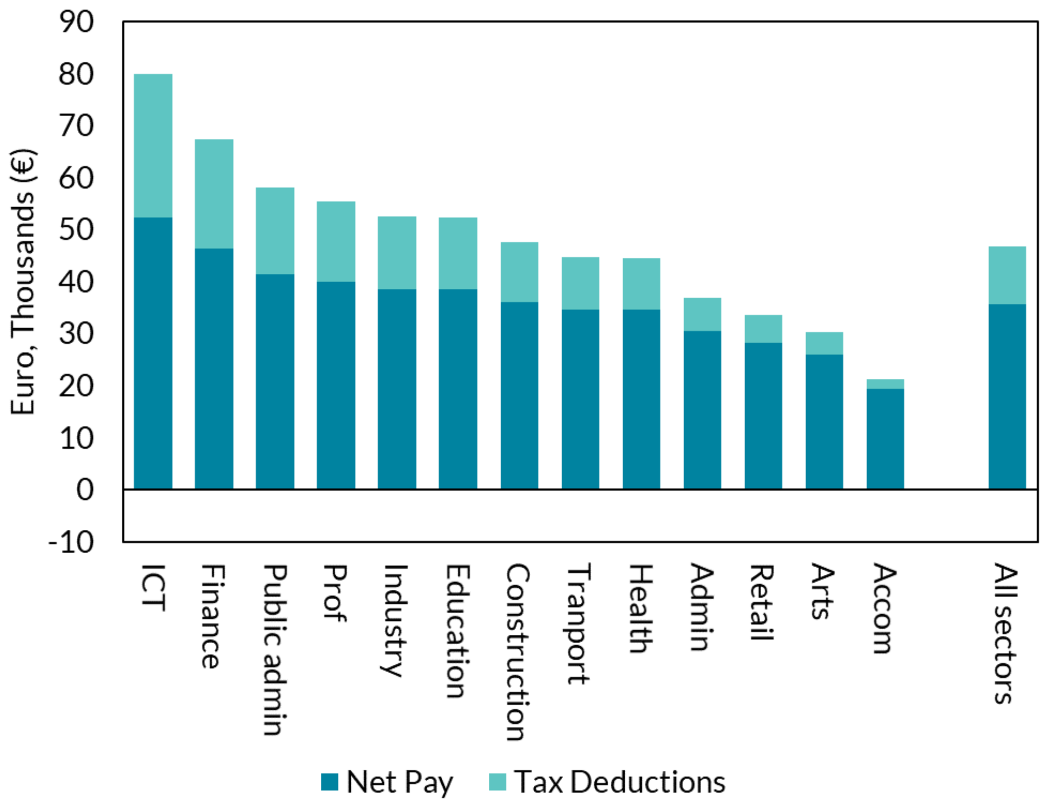
ICT Occupational Breakdown (Q3 2022)



ICT Earnings

- Highest average weekly earnings in CSO EHECS data
- When scaled to annual, ICT workers pay the highest tax amount which is roughly 2.5 times the average employee in the country
- Resilient income tax growth in recent years is likely due to high-income jobs being more aligned to remote working and less affected by restrictions that offset reductions elsewhere
- Low take-up of PUP scheme

Net Earnings and Income Tax Contributions (Q4 2022)



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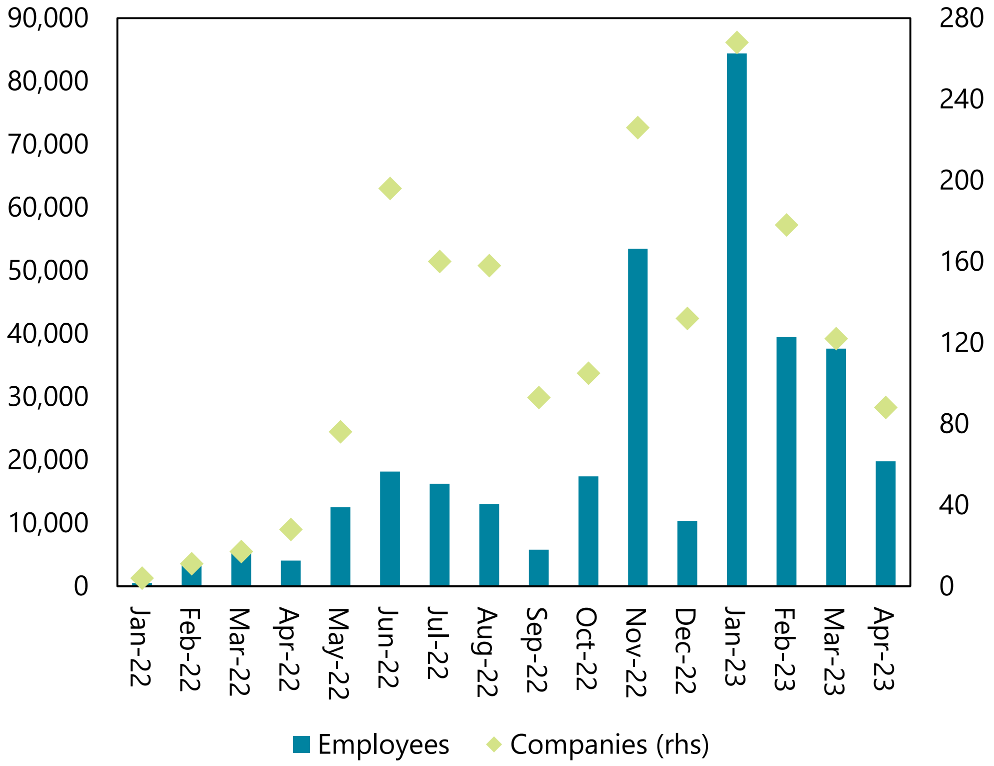
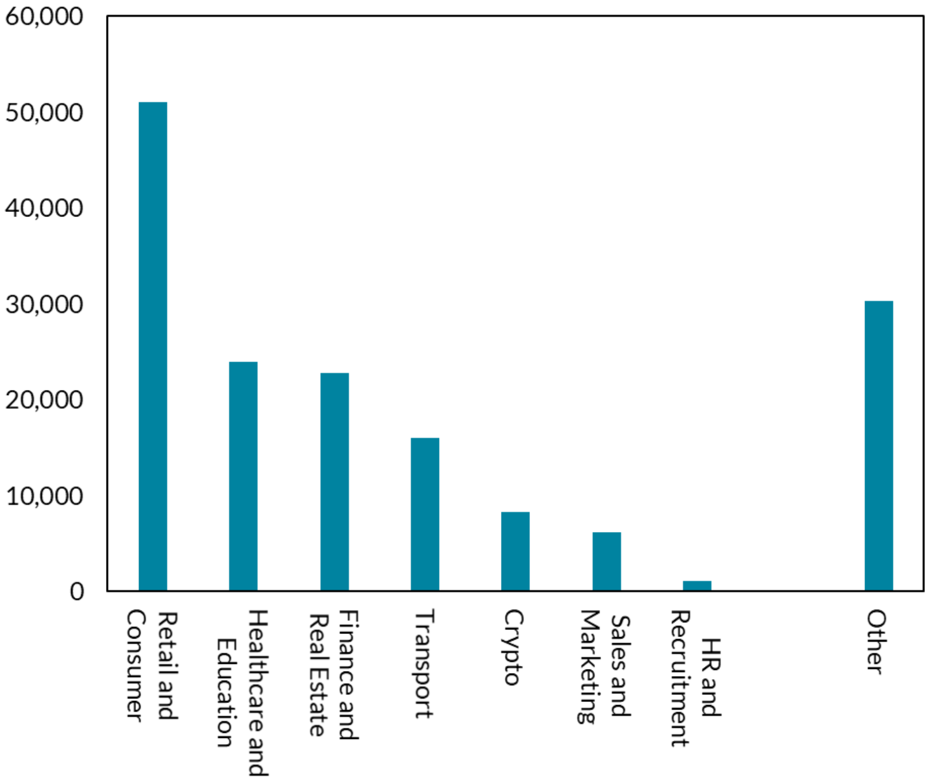
Global layoffs have mainly occurred in the US and in retail and consumer-facing firms such as Amazon, Meta and Twitter

Global ICT Layoffs



Global Layoffs by Broad Firm Activity (2022)



Company Name	Global Redundancies	% Global Staff Layoffs	Irish Redundancies
Amazon	18,000	1.2%	0
Google	12,000	6%	240
Meta	11,000	13%	350
Microsoft	10,000	5%	120
Salesforce	7,900	10%	200
Dell	6,500	5%	**250'**
Hewlett Packard	6,000	12%	**480'**
IBM	4,000	1.5%	**45'**
Twitter	3,500	50%	140
SAP	3,000	2.5%	**58'**
PayPal	2,000	7%	62
Yahoo	1,600	20%	60
Stripe	1,000	14%	90
Hubspot	500	7%	80
Wayflyer	200	40%	70
Intercom	130	13%	62
Total	**87,330**		**2,307*** **

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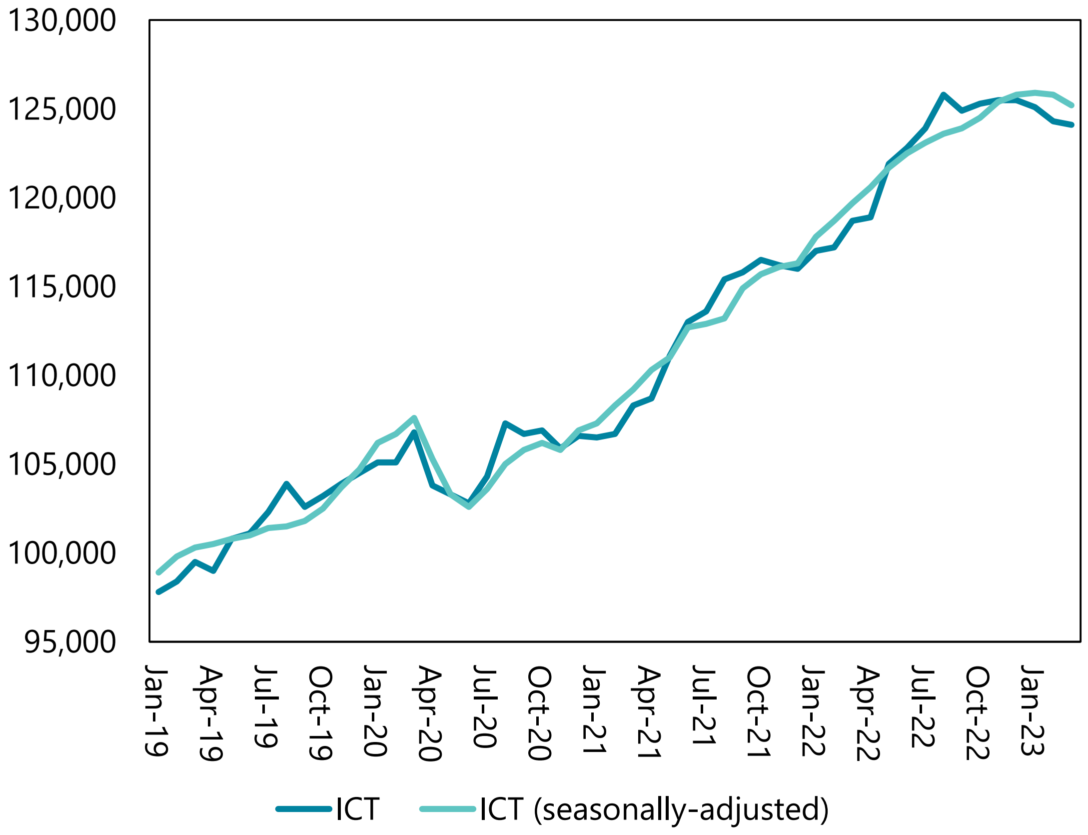
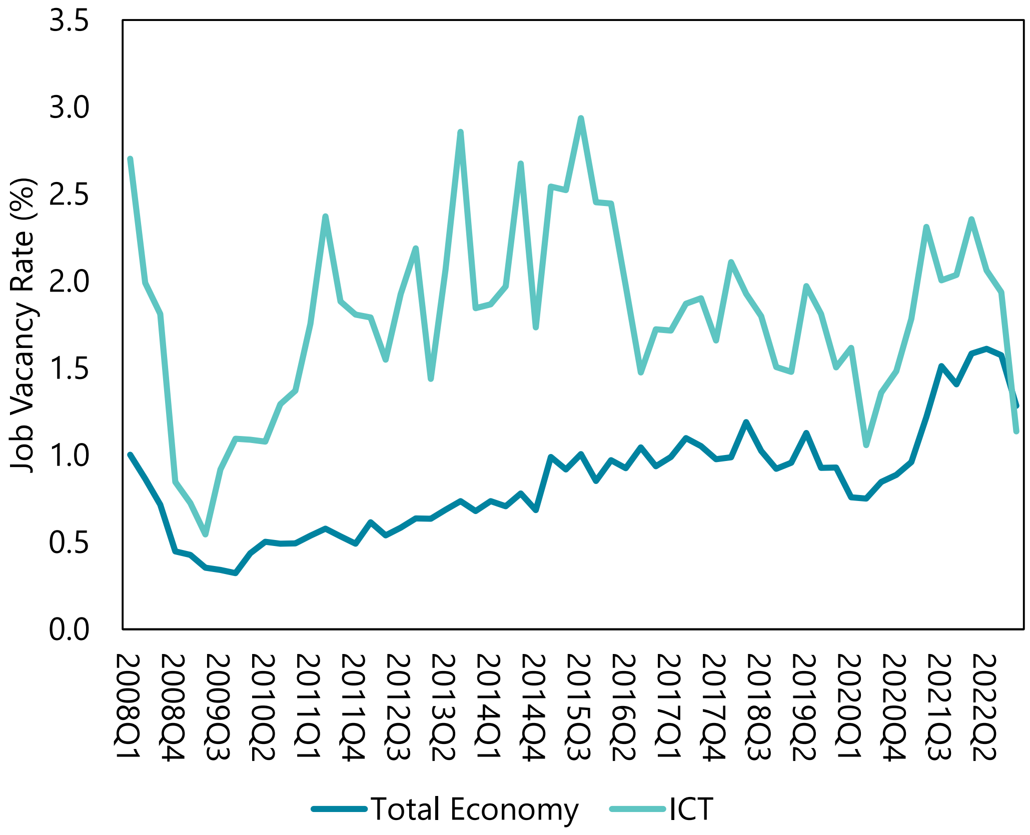
1,474 publicly announced (0.9% of ICT employment)

Tentative signs of real economy impact in employment data on lagged basis

Monthly employee estimate for ICT sector



Job Vacancy Rate



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Conclusion

- Given the size of ICT sector, any prolonged slowdown would have a negative effect on the economy and labour market
- Domestic sector accounts for <10% output indicating limited capacity to counteract any decline in MNE output
- This indicates a structural vulnerability in relation to output and tax revenue (CT and income tax)
- Level of job loss to date is small relative to existing workforce with declines primarily in HR, advertising and marketing
- Further announcements from Amazon, Indeed and other firms since publication but yet to see notable rise in unemployment or redundancy figures. European employment law may delay job loss relative to US
- Irish competitiveness may be reduced if there continue to be limitations to firm expansion such as suitable accommodation for workers