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Labour market recovery after a pandemic

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Pandemic Context

- Prior to the pandemic, labour market was close to full employment with growth risks pointing to the downside:
  - Brexit, overheating, slowing demand in trading partners

- Pandemic crisis was unprecedented in labour market terms:

Dual nature of recession:

- essential & non-contact intensive sectors *continued* to expand (external demand for exports remained strong in 2020);
- non-essential, contact intensive sectors *contracted* (Coates et al 2020)

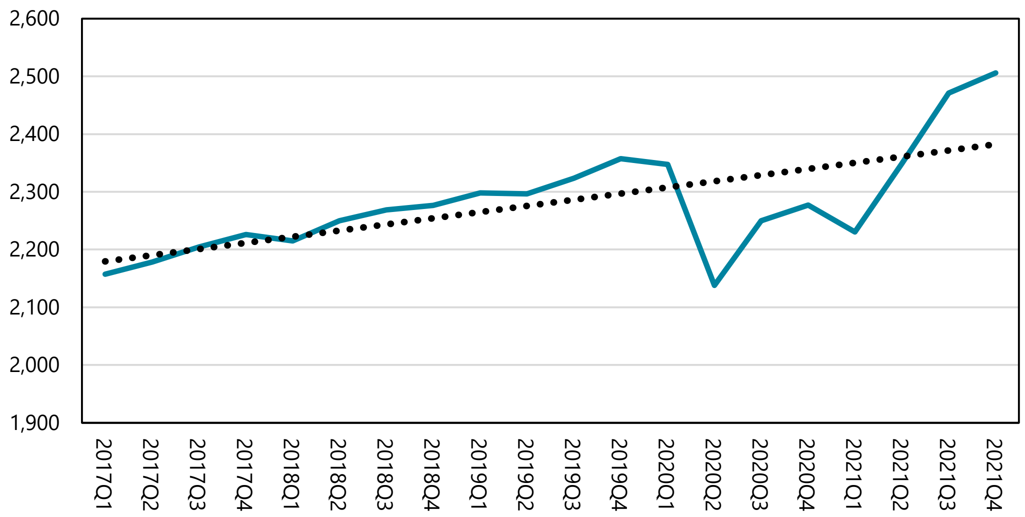
Shared nature of recovery:

- Outward facing sectors *remained* buoyant (exports strong in 2021)
- Removal of health measures resulted in *strong recovery* for pandemic affected sectors (pent up consumer demand, excess savings, positive effects of income supports in maintaining employer-employee links, increased labour demand)

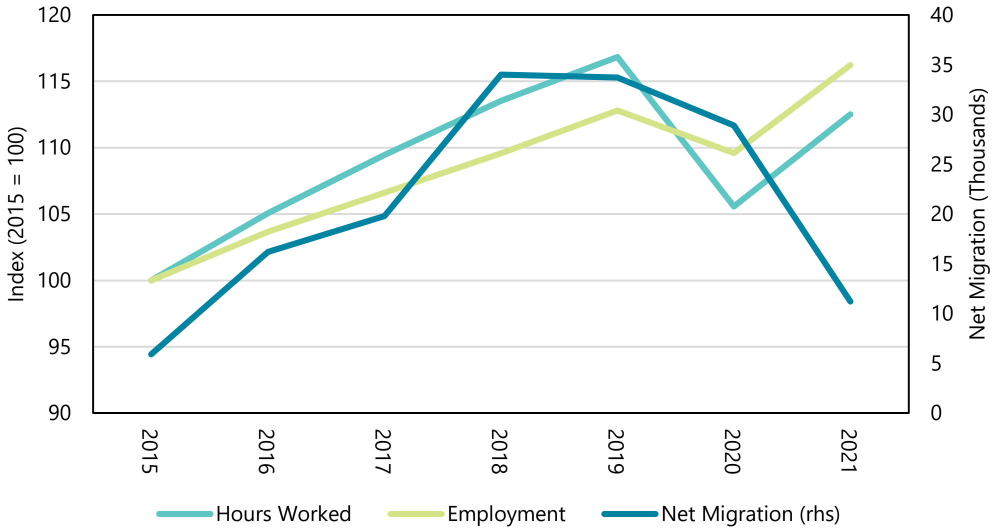
Labour Market Developments

- Q4 2021 employment levels 150k above pre-pandemic peak despite disruption effects of pandemic
- Pace of growth notably quicker than other recovery periods and has outstripped total actual hours worked
- This growth occurred when migration channels were constrained – net inward migration down to 11k in 2021
- This surge appears to be supported by an expansion of the domestic labour force

Employment Growth Above Medium Term Trend



Employment, Hours and Net Migration Developments



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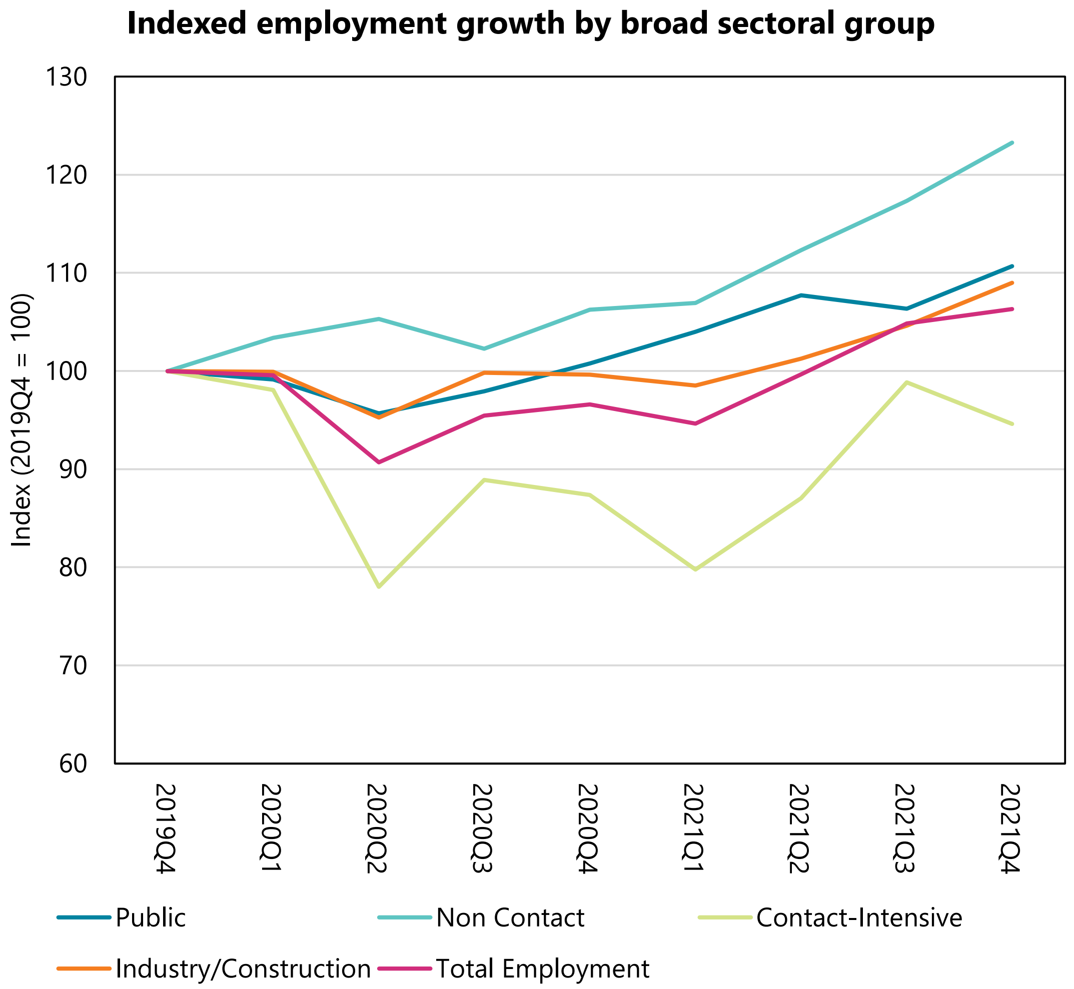
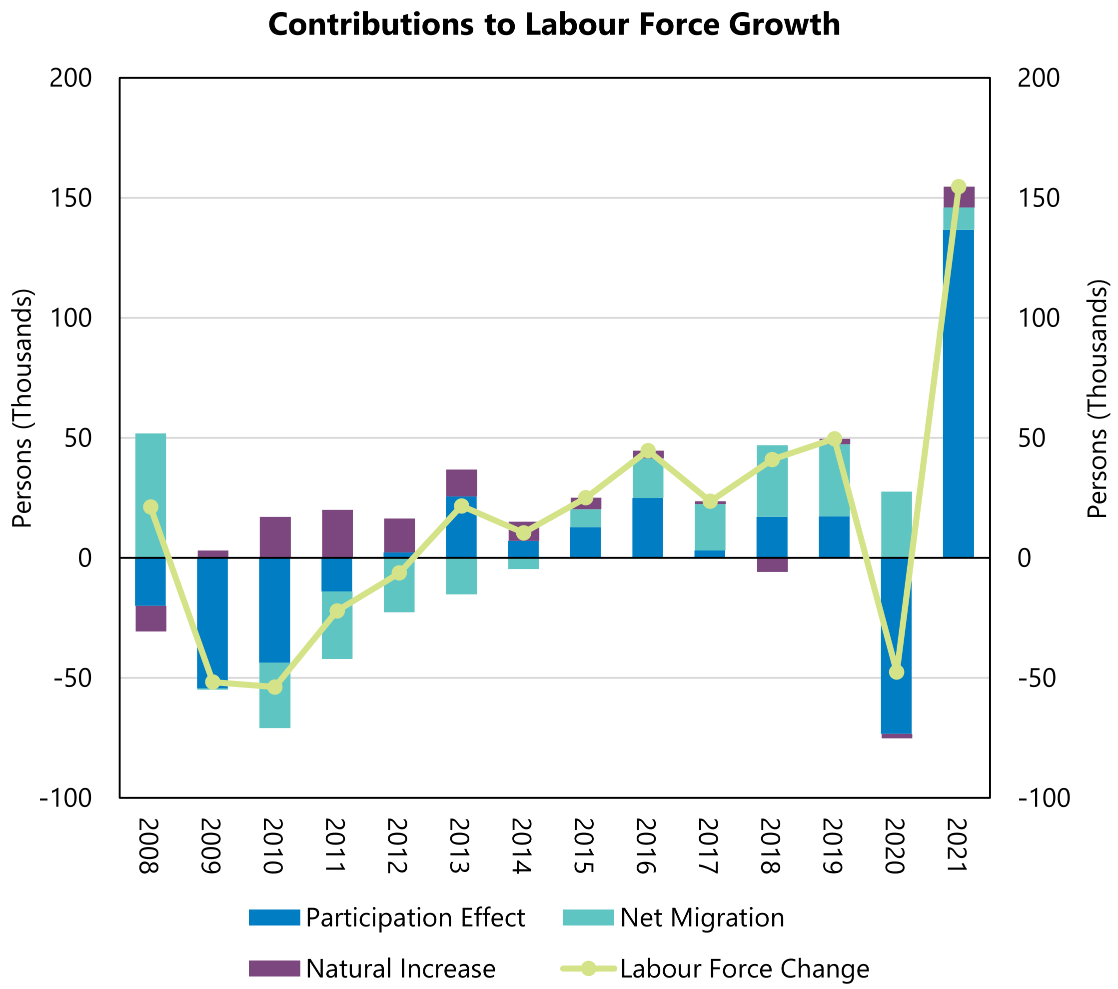
Strong employment gains in 2021, Substantial labour force expansion





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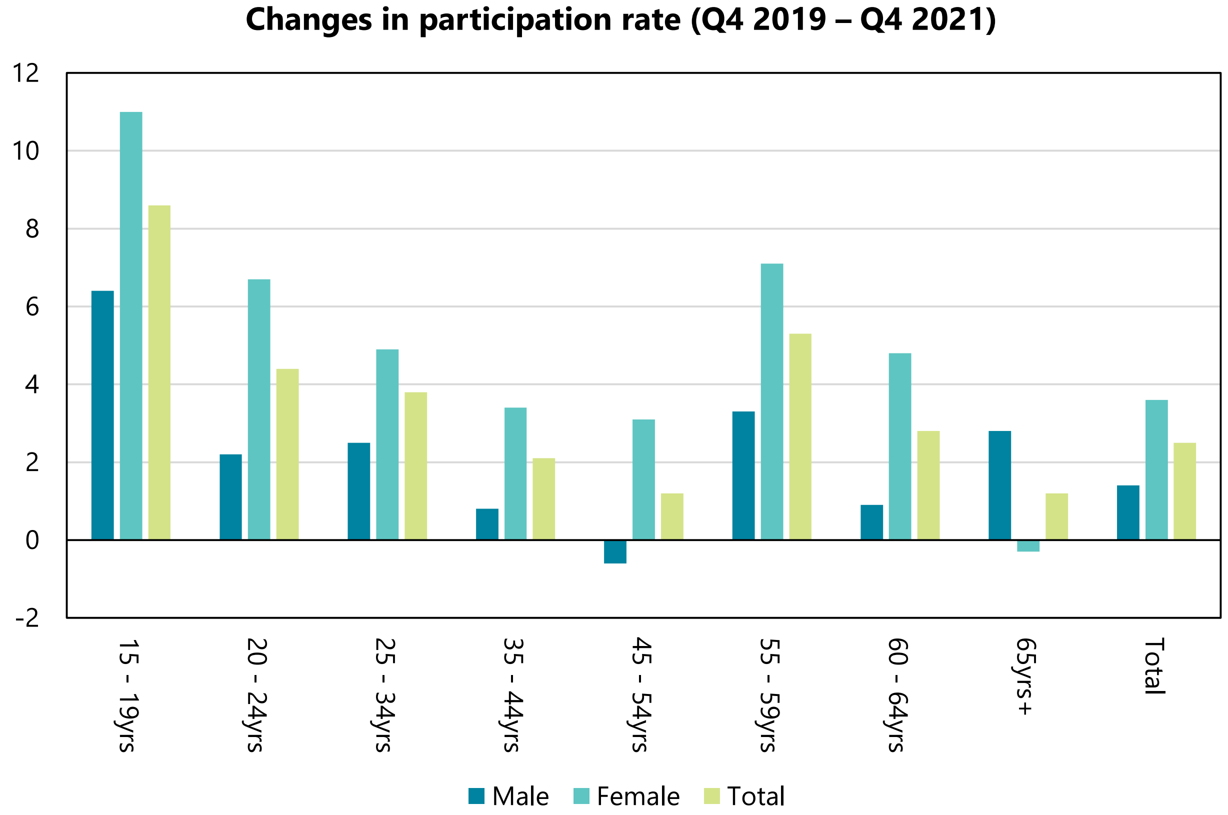
Labour Force Expansion Puzzle

- Stronger than anticipated employment and participation gains in 2021

- Possible explanations
  1. Recovery from the pandemic?
  2. Pandemic-induced structural changes:
     - either speeding up pre-pandemic secular trends, or,
     - pandemic-specific changes?
  3. Something else?

- Important to explore if these participation gains are likely to be permanent



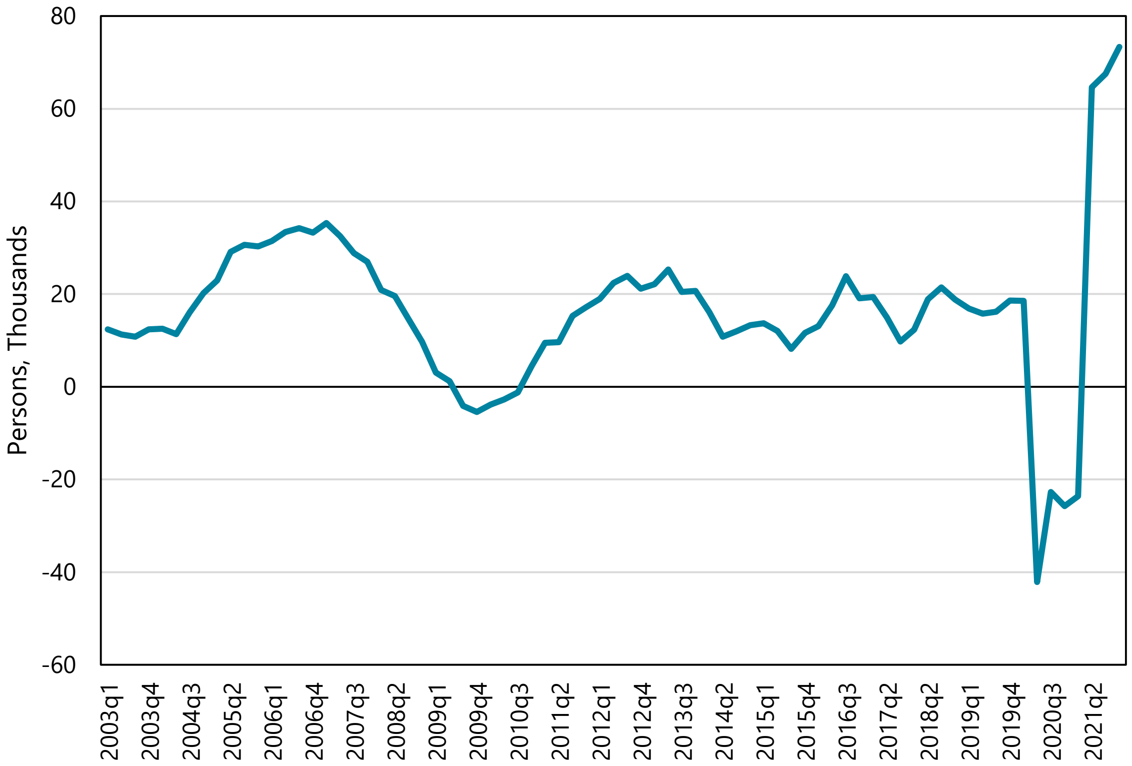
Three possible explanations – what does the data say?

1. Recovery from the pandemic?
   - 2021 does not look like previous recoveries (due to nature of the shock: exogenous demand shock, arrived rapidly, dissipated rapidly, affected contact intensive sectors to greater extent)
     - Although, some characteristics of the labour market recovery *are* familiar (e.g. lower hours worked, higher part-time share)
2. Pandemic-induced structural changes?
   - Long-run secular changes to Irish labour market remain on-going
   - However, characteristics of 2021 employment and participation expansions suggest pandemic disruption *unlikely* to be the primary factor at play in latest data
3. Something else?
   - Using what we know about people moving from inactivity to employment prior to the pandemic, we predict these transitions after the pandemic – with high degree of accuracy.
     - Cyclical effects (<25s *and* women)
     - Cohort effects (women 35-65 years old)

Empirical findings – net flows

- Far stronger labour force growth than previous economic recovery or growth periods
- Scale of the net flows in the pandemic recovery period (Q2 - Q4 2021) appears substantially higher than other previous phases of economic growth
- Net flow of -216k in Q2 2020 followed by136k and 126k in 2021

Net Flows from inactivity to the labour force (4QMA)



Note: the max-min range of quarterly net flows before pandemic was-28.9k to 65.7k

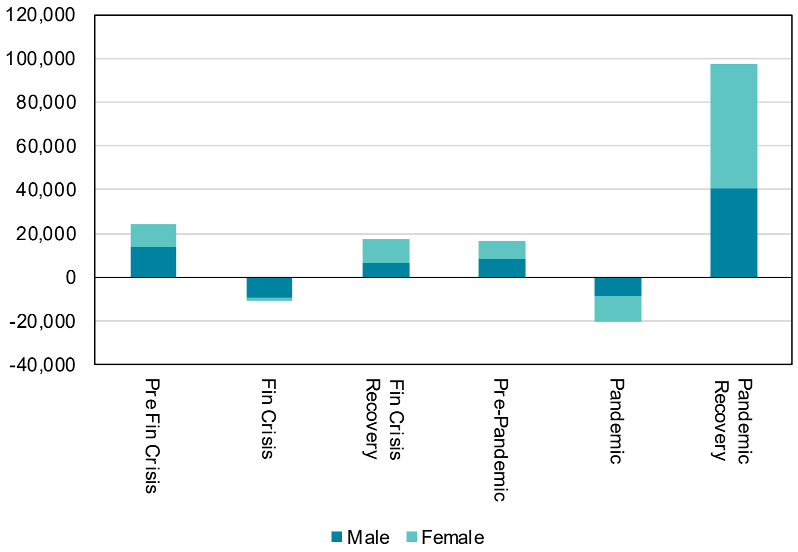
Empirical findings – net flows

- Between 2019Q4 and 2021Q4 participation in the labour force increased by 6.7%

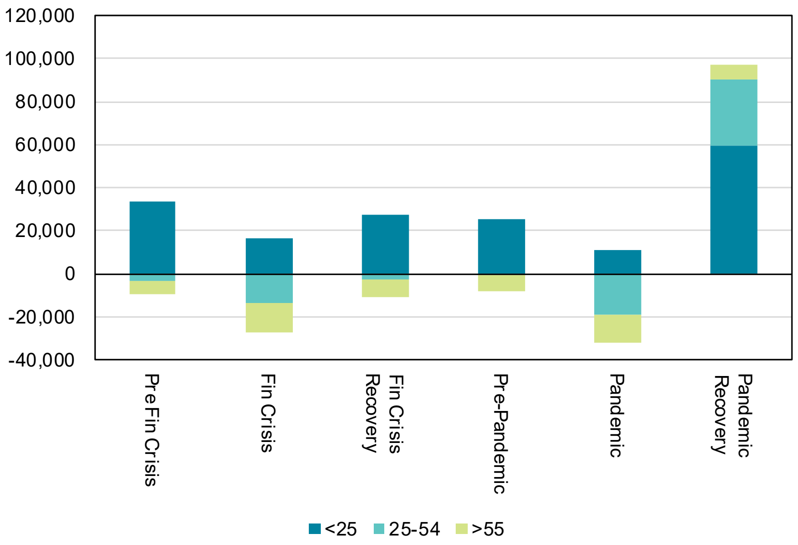
- Of this:
  - Women between 35 and 65 years accounted for one third
  - Those <25 years accounted for 30%

- Similar dynamic when shown by highly skilled occupations

Average net flows by gender



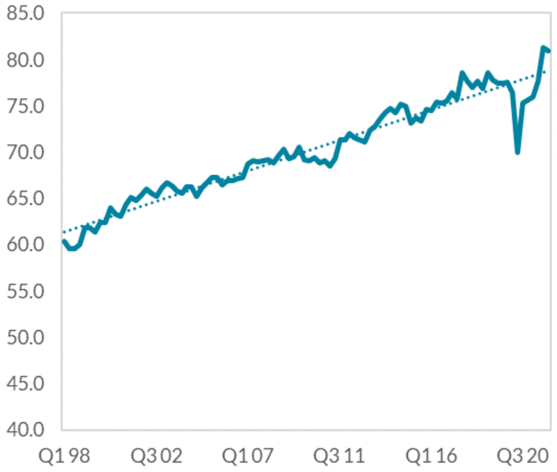
Average net flows by age group



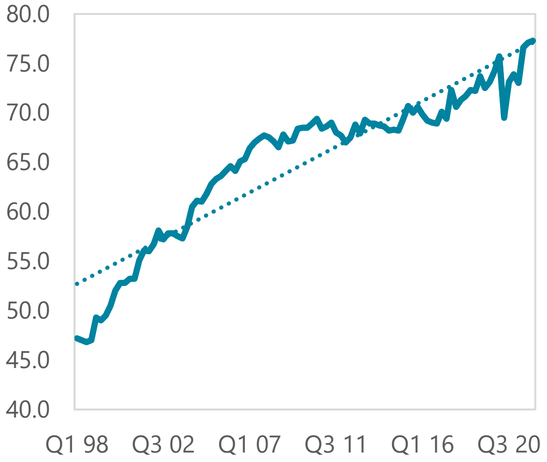
LFPR of women is jointly determined by cohort and cyclical effects

- Females aged 35 years or over in 2021 are more likely to participate in the labour market than similar aged females in 2001
- Increasing skill level and educational attainment over time aligns to higher flow towards non-contact intensive and high growth sectors

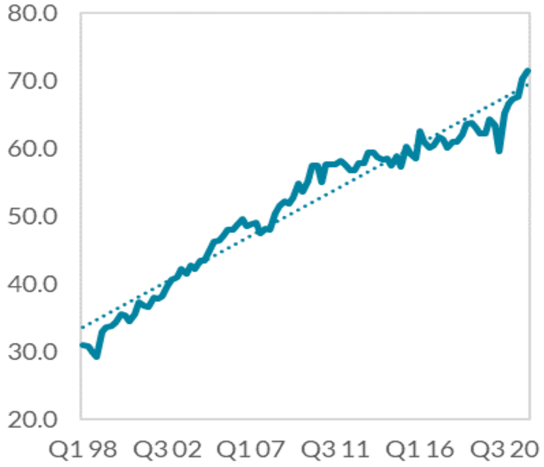
LFPR – Females (35-44yrs)



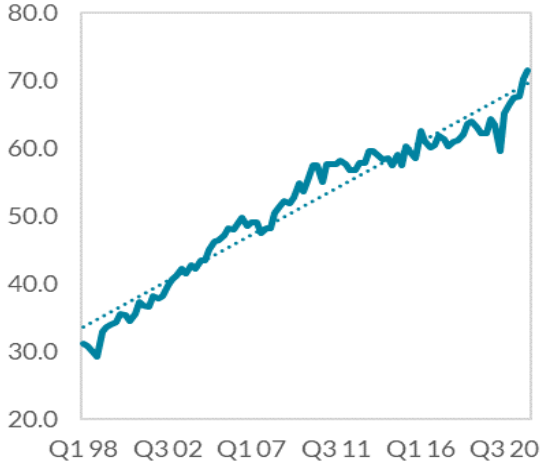
LFPR – Females (45-54yrs)



LFPR – Females (55-59yrs)



LFPR – Females (60-64yrs)



Characteristics of those flowing into employment from outside the labour force

- Skill level: *increasing* for women
- Contact intensive sectors:
  - all (labour demand);
  - young: all sectors, with concentration in contact intensive;
  - older women: contact-intensive
- In education: <25s (characteristic of economic recoveries)
- Part-time share increasing
- Temporary: falling share, esp. for older women

Disentangle contribution of these changes?

1. Regression analysis (relative importance of characteristics. Coefficient stability over time.)
2. Out of sample prediction (statistical power holds)
3. Time-series model (taking a macro view)

	All		<25		Women 35-65	
	2015-2019	2021Q2-Q4	2015-2019	2021Q2-Q4	2015-2019	2021Q2-Q4
Occupational skill level (current/previous employment), share						
Low	5.7	6.7				
Medium	64.0	63.2	78.7	76.7	46.7	47.4
High	30.4	30.2	19.8	20.0	51.0	52.3
Sector of current/previous employment, share						
Primary	9.3	8.7	6.9			
Industry	8.0	6.0	6.7			
Construction	5.8	6.4	4.3			
Private services, contact-intens	29.2	56.7	66.6	64.8	37.1	51.2
Private services, non-contact-in	7.1	9.2	6.4		12.0	9.9
Public services	14.2	13.0	8.5	8.9	33.1	21.4
Demographics						
Age, mean	33.0	34.5	19.3	19.2	48.2	49.5
Female share	53.2	53.0	48.1	52.1	100.0	100.0
Has children under 14, share	15.2	12.8	0.7	0.0	39.8	36.1
Married, share	29.6	30.6	0.5	0.3	74.2	73.7
Migrant, share	11.2	10.6	5.5	4.0	13.4	16.2
Employed in Dublin, share	27.3	21.5	26.9	21.6	26.3	17.7
In education, share	40.3	42.5	71.6	78.1	5.0	4.4
Work intensity, permanence						
Part-time share	64.2	62.3	73.7	72.6	64.3	66.9
Temporary share	41.4	36.9	60.0	58.6	20.9	14.5

Note: Sample limited to respondents appearing at least twice in LFS data.
* Occupational skill level known for approximately 30% of sample
* Sector of (previous) employment known for approximately 30% of sample

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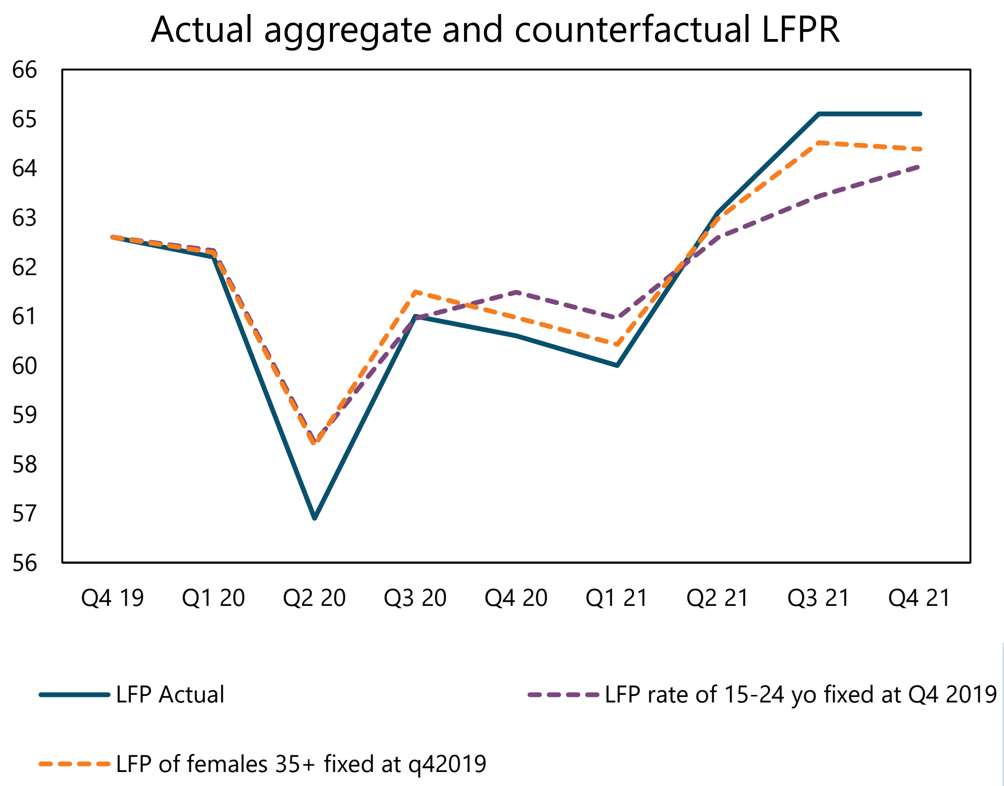
Empirical findings – regression analysis & predicting transitions to employment

- Estimate probability of transitioning from inactivity to employment over specific time periods relating to economic growth and decline
  - Model includes demographic characteristics, work permanence and intensity, skill level (quality of jobs), sector (labour demand)
- Findings concur with our descriptive analysis:
  - For <25s: skill level and sector have little explanatory power in recovery period.
    - Strong cyclical conditions have enticed higher participation among u25s (potentially temporary)
  - For women 35-65: transition probability is <u>increasing</u> in occupational skill level in recovery period
    - The cohort effect increases female participation over time (convergence), but strong availability of high skilled jobs in the post-Covid recovery speeds this up.

Predicting transitions

- Using pre-pandemic period, predict transitions in to employment
  - Within sample: model captures 80% of actual transitions
  - Out of sample: model captures 74% of actual transitions
- Power of explanatory variables in predicting transitions is (fairly) high and (fairly) stable over time.



Summary

- Employment recovery has been remarkably strong, mainly reflecting cyclical strength of the economy.
- Young people (u25) have account for approximately 1/3 of the increase, many in part-time while remaining in education
- Aggregate female participation has been strongly increasing over time (cohort effect), but speed of convergence increases during strong growth periods.
- Historical relationships show that both groups respond to cyclical effects.

Looking ahead

- Gains in female participation are expected to be persistent, boosting overall labour force participation and supporting growth
- U25s participation likely to remain elevated while labour market is tight, but return to in-person education may dampen participation among this cohort
- Overall boost to participation acts as a buffer to wage inflation risks (additional slack)

Questions?