



# Childcare costs and Maternal Employment



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AUTHORS  
Helen Russell  
Fran McGinnity  
Eamonn Fahey  
Seamus McGuinness



# Motivation & Research Questions

- Maternal employment strongly linked to age and number of children. Irl lower than OECD average
- Childcare costs regularly cited as a major barrier to employment among mothers – less often measured
- OECD data suggests that Ireland one of the highest childcare costs as a proportion of income
- How is maternal employment affected by childcare costs in a context of high costs?



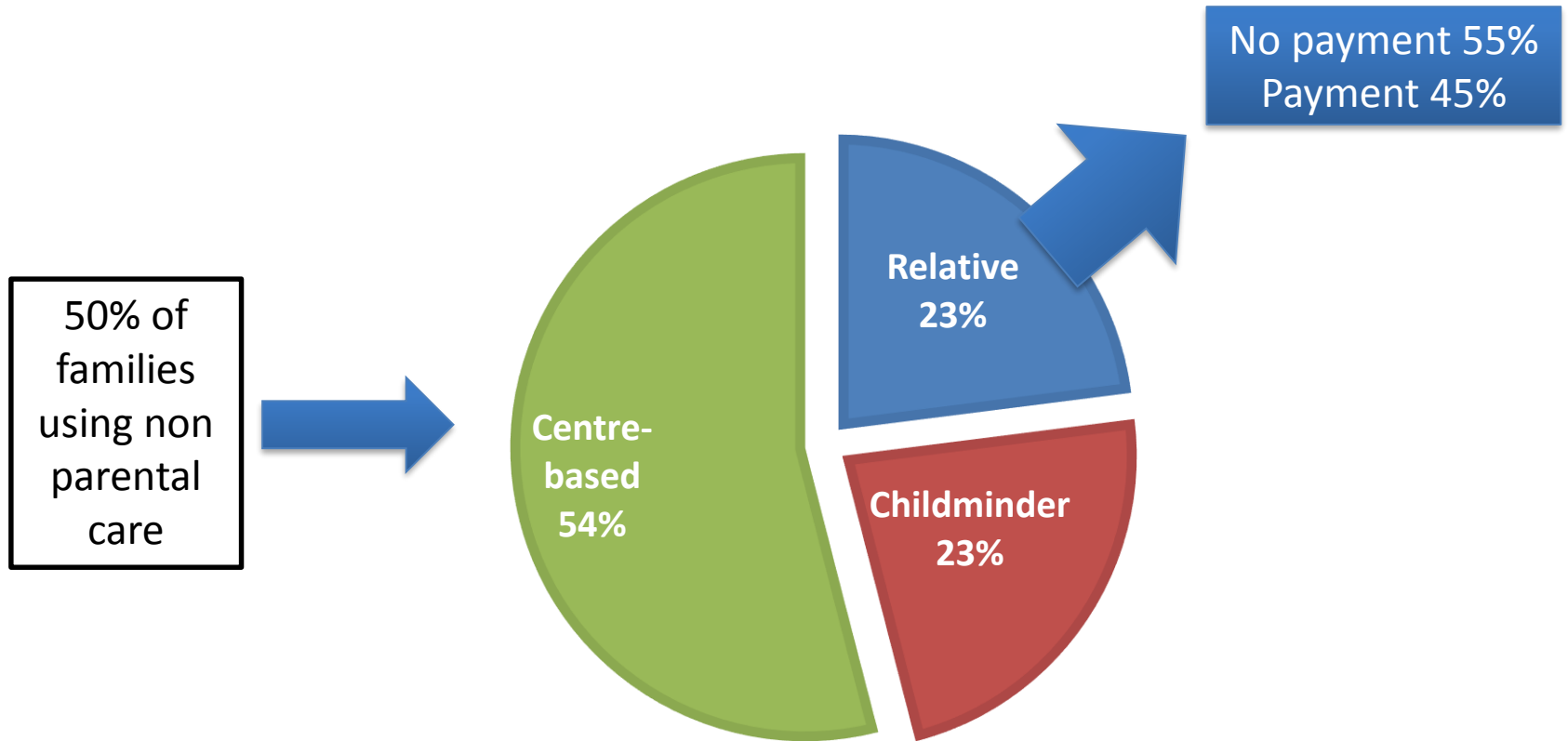
# Previous Research on Childcare Costs and Maternal Employment

- Studies of policy changes/regional variation, to estimate the effects of childcare price (e.g. Brewer et al., 2016; Cascio et al., 2015)
- Typically find reduction in costs/increased availability of childcare has positive impacts on mothers' working hours (Morrissey, 2017) effect smaller in Sweden (Lundin et al 2007) than Spain (Nollenberger Rodriguez-Planas, 2015)
- Brewer et al (2016) UK study found introduction of 15 hours of free pre-school did not increase women's employment but the extension of the scheme to 30 hours per week did have an impact (for the youngest child).
- Econometric studies estimate the elasticity of mothers' employment conditional on wages and the price of formal childcare effect size highly variable ( see review in Akgunduz and Plantenga,2017)



- Collects information on hours & cost of childcare in each wave
- Includes all childcare types, not available elsewhere
- Mother's employment status recorded at each wave

# Non-parental care at age 3 (8 hours or more per week)



# Costs for parents for study child at age 3 years in 2011: paid care only

€ How much does childcare cost for parents?

**€5.70** Childminder in the family home  
PER HOUR **€6.13** in 2017 prices

**€4.43** Childminder outside the family home  
PER HOUR **€4.76** in 2017 prices

**€4.48** Centre-based care  
PER HOUR **€4.82** in 2017 prices

Average share of disposable income spent on childcare (for one child aged three)

Across all families



Lone parents

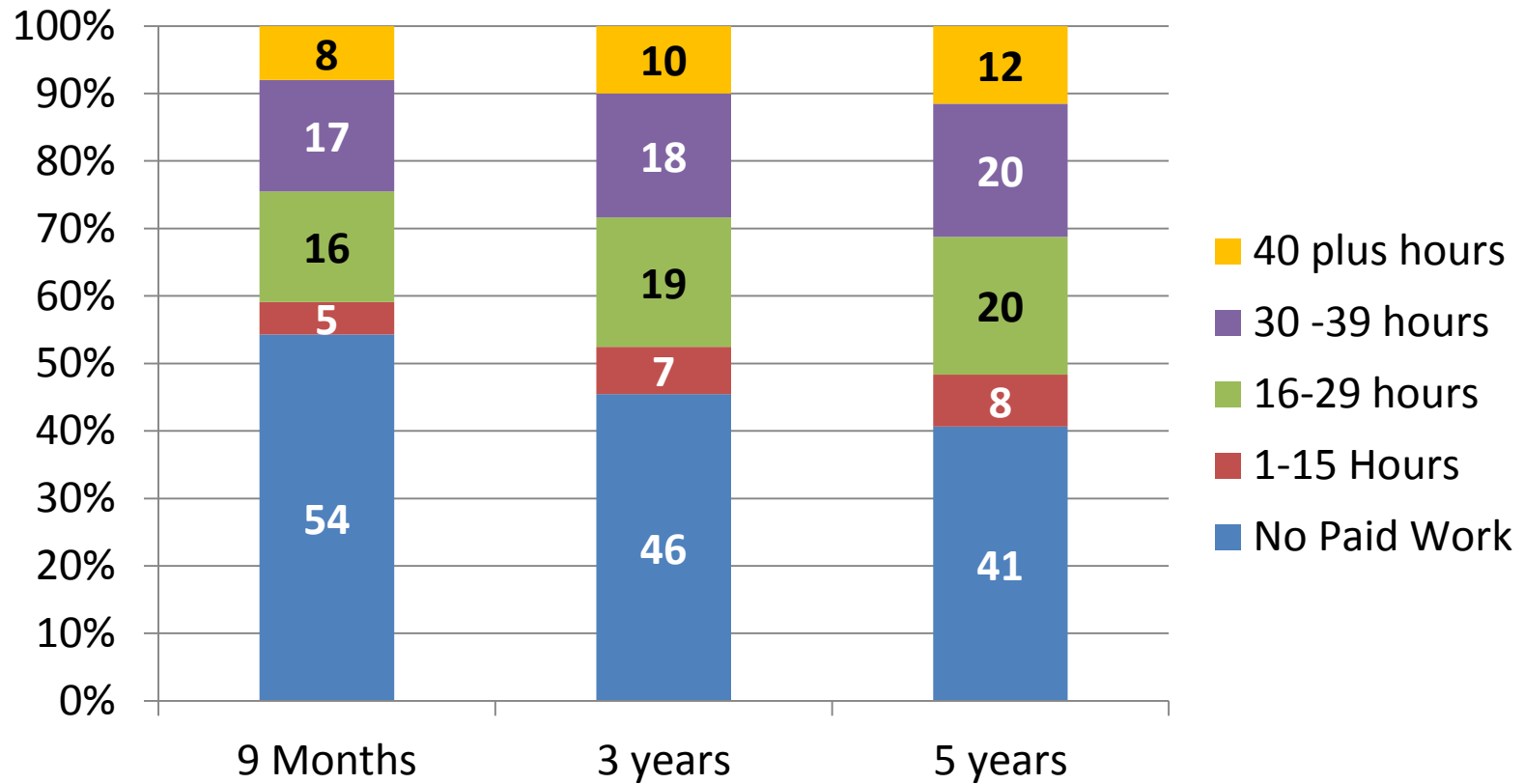


Low-income families

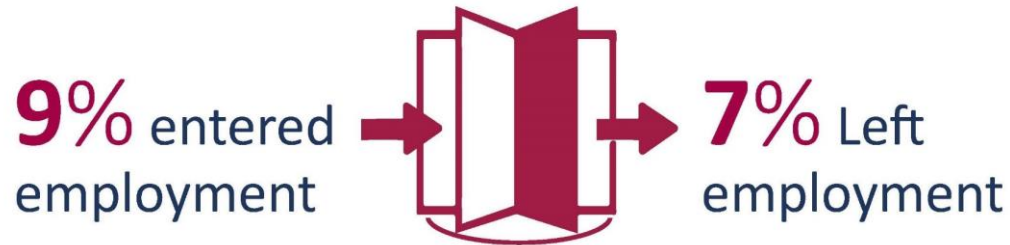


Excludes those not paying for care

# Mothers Employment by Study Child's Age



# Mothers Employment by Study Child's Age



- 9% moved between full & part-time
- Altogether 45% of women experience changes of 1 hour or more between the 2 periods
- Stay-at-home v continuous full-time dichotomy does not capture reality



# Modelling Strategy

- **Challenges**

- care-costs are positively correlated with social advantage – higher education, social class, hh income.
- Need to correct for this or higher costs will be associated with greater likelihood of employment (endogeneity)
- Those not working or using care may face greatest disincentive (but have no costs to model)

- **Solution**

- **Instrumental variable** approach for endogeneity (region)
- **Selection correction model** to adjust for the fact that those in employment and using paid care at age 3 differ from those who are not
- Model hours at age5 to reduce problem of reverse causality
- **Dependent variable** = paid work hours per week (zero if not employed)
- **Care costs** = log of weekly childcare costs
- Controls: age, ed, nationality, health, partner, N children, school.



# Effect of childcare costs on subsequent employment

Sig negative effect of childcare cost at age 3 on mother's hours of paid work at age 5.

- All else being equal we estimate that on average a
  - 10% **increase** in costs leads to **decrease** of 30 mins paid work per week
  - 10% **decrease** in cost leads to **increase** of 30 mins paid work per week
  - 50% **increase** in costs leads to a **decrease** of 2½ hours paid work

*This is the average effect of price across all women. Combines effect of exiting, along with changes in hours and cases where there is no change in response to price.*



# Effect of childcare costs on hours of paid work continued

- Significant interaction with household income: higher cost is more negative for those in low income households
- Conservative estimate
  - Only cost for study child.
  - Other children and birth of new baby has a separate negative effect on working hours, likely partly due to child care costs
- How does this compare to other effects?
  - The birth of a new baby is associated with a reduction of 3.6 hours
  - Chronic illness is associated with a reduction of 1.7 hours per week

# Conclusions & policy implications

- Childcare costs are a substantial burden– 12% of disposable income for one child at age 3, before entry to ECCE scheme.
- Even higher financial burden for low income & lone parent families
- Demonstrates negative impact of care costs on maternal emp.
- Suggests additional childcare supports will increase female labour supply. Effects likely to accumulate over time.
- Finding that disincentive effect greater for low income families supports case for targeting extra support for this group.
- New Affordable Childcare Scheme has universal and income targeted elements, though too early to assess impact.
- Employment of mothers important effect in reducing child-poverty (Watson et al. 2012), also increased tax receipts.

Thanks for listening  
What questions do you have?

Report available to download at  
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