Underemployment, Fertility Intentions and Fertility in Australia

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This paper explores the interrelationships between 'time-related underemployment' (where a worker is willing and available to work more hours than they currently do) and fertility intentions and births in Australia. Among OECD countries, Australia has one of the highest percentages of its labour force who work on a part-time, and one of the highest rates of timerelated underemployment. Mothers feature disproportionately among the underemployed. As in a range of other More Developed Countries, Australia's Total Fertility Rate has fallen since 2008. During the post-GFC period Australia's underemployment rate increased significantly. Theoretically, the financial hardship associated with underemployment may result in a combination of postponed and reduced fertility. Changes to fertility intentions, especially not intending to have any more children, may also affect willingness and availability for work and, hence, underemployment. Whilst, the literature has examined the effects of rising unemployment and financial uncertainty more broadly on post-GFC fertility decline, it appears studies of the effects of underemployment per se are absent. Using data from the HILDA survey, this paper compares the actual and intended future fertility of underemployed women to those of women who see their work hours as sufficient, controlling for other variables fertility-related variables. Also using multivariate models, it examines the extent to which changes in underemployment follow changes in fertility intentions and parity, and the extent to which changes in fertility intentions and parity follow changes in underemployment. The implications of the findings for understanding recent fertility reduction and changing socioeconomic gradient are discussed.

Introduction

Australia's Total Fertility Rate (henceforth TFR) fell from 2.02 in 2008 to 1.74 in 2017 (ABS 2018). This decrease followed a recovery in the TFR between 2001 and 2008, which occurred mostly in the later reproductive ages (Parr and Guest 2011). Falls in total fertility, following previous periods of recuperation, have also been observed in a range of other more developed countries including; New Zealand, United Kingdom, and United States of America. The suggested explanations of these reductions include; rising unemployment, especially male unemployment, financial uncertainty and perceived financial difficulties (Sobotka et al 2011, Goldstein et al. 2013, Testa and Basten 2014; Cazzola et al. 2016)

The term 'underemployment' is used is used variously in the international literature to refer to the underutilisation of the employed. In this paper we focus on 'time-related underemployment': in other words part-time workers who would be willing and available to work more hours, and full-time workers who did not work full-time hours for economic reasons (Wilkins and Wooden 2011; ABS 2016b). The related issue of 'skills-related underemployment' or inadequate employment (when a person's skills are not fully utilised) is deliberately avoided (De Alwis et al. 2019).

Australia has one of the highest percentages of its national labour force working on a part-time basis in the OECD (World Bank 2019). It also has one of the highest rates of underemployment. In Australia most of the underemployed would prefer to work more hours part-time: only a minority would like to work full-time (Wilkins and Wooden 2011). The two

largest demographic subgroups who work on a part-time basis are people aged 15-24, especially students, and women aged 30-49, especially mothers (ABS 2017). The 15-24 age group has consistently had the highest underemployment rate in Australia. Females also feature disproportionately among the underemployed, forming 57% in 2016 (ABS 2016b). Underemployment is also associated with part-time work, casual work, low skilled work, being recently hired, having a history of unemployment, self employment and with being an immigrant, sole parenthood, low education, low income, low skills enhancement and low life satisfaction, all of which may impact on fertility (Wilkins 2004; Parr 2010; Kier et al. 2017).

The percentage of the employed working part-time has generally increased over time both for males and for females. The rate of underemployment has also generally increased over time (ABS 2016b). Following the Global Financial Crisis (henceforth GFC) of 2008-09 both the unemployment rate and the underemployment rate increased significantly, both these rates also increased between 2012 and early 2015. However whilst post-2015 the unemployment rate fell, Australia's underemployment rate continued to rise.

Theoretical Basis

Theoretically, the financial hardship associated with underemployment may result in a combination of postponed and reduced fertility. Changes to fertility intentions, especially not intending to have any more children, may also affect willingness and availability for work and, hence, underemployment. The dissatisfaction with their current work hours of the underemployed may also correlate with work-oriented values and a broader dissatisfaction with life, both of which have been shown to correlate with lower fertility (Hakim 2003; Parr 2010).

Data and Method

The data analysed are for linked data for the same woman from Waves 14 and 17 of the Household Income and Labour Dynamics in Australia (HILDA) survey. The variation in the percentage who are working part-time and would like to work more hours (the underemployed) for 5,382 women aged 15-49 last birthday at time of interview from Wave 17 and the patterns of fertility in the year prior to interview for Wave 17 will be analysed.

Data on women's intention to have a child in the next 3 years, how much they want to have another child in the future and how likely they think it is they will have another child in the future and the changes in the values of these variables between successive waves are also analysed. The strength of the desire for and the perceived likelihood of having another child are both measured on a 0-10 scale with higher values corresponding the a greater desire/likelihood of having another child. The primary focus of the analyses of fertility, fertility desires and fertility intentions will be on differences by labour force status (employed part-time and underemployed, employed part-time not underemployed, employed full-time, unemployed seeking work and not in labour force) and changes over time for those transitioning to or from being employed part-time and underemployed. Control variables include the woman's age, number of previous children, age-parity interactions, highest education, current study, country of birth, marital status. Multivariate logistic modelling is

used for actual fertility and for whether another child is intended in the next three years (Parr and Guest 2011). The analyses of changes in strength of the desire for and the perceived likelihood of having another child uses linear multivariate models.

Results

Conclusions

References

Australian Bureau of Statistics (2018) Births, Australia 2015. Catalogue Number 3301.0. AGPS: Canberra.

Australian Bureau of Statistics (2016) Labour Force, Australia November 2016. Catalogue Number 6202.0 AGPS: Canberra.

Campbell, I., Parkinson, S. and Wood, G. (2014) Underemployment and housing insecurity: an empirical analysis of HILDA data. *Final Report Series*, no.230, Australian Housing and Urban Research Institute, Melbourne.

Cazzola, A., Pasquini, L., Angeli, A. (2016) The relationship between unemployment and fertility in Italy: A time-series analysis. *Demographic Research*. 34(11): 1-38.

De Alwis, S., Parr, N. and Guo, F. (2019). The occupational (mis)match of Asian immigrants in Australia. *Population Research and Policy Review*.

Goldstein, J., Kreyenfeld, M., Jasilioniene, A. and Örsal, D.K. (2013) Fertility reactions to the Great Recession in Europe: Recent evidence from order-specific data. *Demographic Research* 29(4): 85-104.

Guest, R. and Parr, N. (2013) Family Policy and Couples' Labour Supply: An Empirical Assessment. *Journal of Population Economics*. 26(4):1631-1660

Hakim, C. (2003) A New Approach to Explaining Fertility Patterns: Preference Theory. *Population and Development Review*. 29(3): 349-374.

Kler, P. Potia, AH Shankar S (2018) Underemployment in Australia: a panel investigation. *Applied Economics Letters*, 25(1): 24-28.

Parr, N. (2010) Satisfaction with Life as an Antecedent of Fertility: Partner + Happiness = Children? *Demographic Research*. 22(21):635-661

Parr, N. (2012) Trends in Differentials in the Workforce Participation of Mothers with Young Children in Australia 2002-08. *Journal of Population Research*. 29(3): 203-227.

Parr, N. and Guest, R. (2011) The Contribution of Increases in Family Benefits to Australia's Early 21st Century Fertility Increase: An Empirical Analysis. *Demographic Research*. 25:6: 214-244.

Sobotka, T., Skirbekk, V., and Philipov, D. (2011). Economic recession and fertility in the developed world. *Population and Development Review* 37(2): 267-306.

Testa, M.R and Basten, S. (2014) Certainty of meeting fertility intentions declines in Europe during the 'Great Recession'. *Demographic Research*.31(23): 687-734

Wilkins R. (2004) The Extent and Consequences of Underemployment in Australia.

Melbourne Institute Working Paper No. 16/04 Melbourne University

Wilkins, R. and Wooden, M. (2011) Economic approaches to measuring underemployment. Pp13-33 in Maynard, D.C. and Feldman, D.C. Underemployment. Springer: Netherlands.