

# Employment and the distribution of intra-household financial satisfaction

The Economic and  
Labour Relations Review  
2022, Vol. 33(2) 329–350

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DOI: 10.1177/10353046211041394

journals.sagepub.com/home/elrr



**Jaslin K Kalsi and Siobhan Austen**

School of Economics and Finance, Curtin University, WA, Australia

**Astghik Mavisakalyan**

Bankwest Curtin Economics Centre, Curtin University, WA, Australia

## Abstract

This study applies a methodology used by De Henau and Himmelweit (2013) to study resource allocation in Australian mixed-sex couple households. Using 18 waves of data from the Household, Income and Labour Dynamics in Australia survey and by means of fixed effects estimations, the study identifies how men's and women's contributions via paid and unpaid work influences their satisfaction with the financial situation (SWFS) within households. Employment status is used to proxy each partner's contribution to household resources. The results reveal that paid contributions through full-time employment have a strong role in determining SWFS. This is a source of gender difference because Australian men are much more likely to be engaged in full-time employment than women. Most often, for both men and women, unpaid contributions to household resources (proxied by less than full-time employment) has a detrimental effect on their own SWFS, but smaller effects on their partner's SWFS. These results imply that gender asymmetry in paid and unpaid contributions to household resources contributes to the reproduction of gender inequalities within Australian households. The results add external validity to the relevance of De Henau and Himmelweit's (2013) analysis of these issues.

**JEL codes:** B54, I31, E24

## Keywords

Employment, household economics, gender analysis, intra-household, financial satisfaction

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## Corresponding author:

Jaslin Kalsi, Bankwest Curtin Economics Centre, Curtin University, Kent Street, Bentley, WA 6102, Australia.

Email: [jaslin.kalsi@curtin.edu.au](mailto:jaslin.kalsi@curtin.edu.au)

## Introduction

Many policy makers and economists tend to regard what happens inside households as a private matter. However, the internal affairs of households cannot be ignored as intra-household inequalities are a significant aspect of overall gender inequalities, and accounting for such inequalities will allow for more effective policy design. In a paper published in the *Journal of Marriage and Family*, De Henau and Himmelweit (2013) analysed intra-household inequalities by proposing a new approach for investigating how gender influences the distribution of resources within households. Using data from the British Household Panel Survey (BHPS), they identified how men's and women's contributions to the provision of household resources influences each partner's satisfaction with household income. Employment status was used to proxy each person's contribution to household income, and as a corollary, less than full-time employment was used as an indicator of unpaid domestic contributions. Taking this approach, De Henau and Himmelweit (2013: 611) propose that changes in satisfaction with household income, which can differ between the man and the woman, indicate changes in how the benefits from household income are perceived. Their findings suggest that in Britain, gender asymmetry in contributions made to household resources is a source of gender inequalities within the household. These findings, however, might be limited to the single country context which the study is focused on, therefore prompting the question whether similar patterns might be present in other countries.

With the aim of identifying gender patterns in the intra-household distribution of financial satisfaction and how this is affected by paid and unpaid contributions in a new country context and a more recent time period, this study applies the methodology proposed by De Henau and Himmelweit (2013) to Australian data. The analysis enables a broad comparison of Australian and British patterns in the distribution of intra-household financial satisfaction and the effects of work roles. There are some good reasons to expect similar patterns across the two countries. For one, both have liberal welfare regimes and similar gendered labour force patterns. For example, in recent decades both countries have been characterised as having a high incidence of part-time employment compared to other advanced economies, with 25.5% of Australians and 23.1% of British working part-time. Furthermore, 68.3% of Australian and 74.4% of British part-timers were women (OECD, 2020). Both countries also have minimal provisions for child support compared to other advanced economies (such as Denmark and Norway), and this has hindered women's access to the labour market. Such state policies foster the male breadwinner model, with many mothers switching to part-time work or leaving the labour force altogether (Craig et al., 2010; Kalb, 2018). There are strong cultural ties between the two countries but also historical and geographic differences, and these might be consequential for the intra-household distribution of resources and financial satisfaction. The British study by De Henau and Himmelweit is now also quite dated (having used data from 1996 to 2007). Thus, the question of whether the relationship between the pattern of paid and unpaid work within couple households; and the distribution of intra-household financial satisfaction is similar across the countries and study periods, is still open. Strong similarity would point to the continued influence of similar gender norms; whilst variances would

point to different/changing norms – with implications for the relevance of De Henau and Himmelweit’s findings, and the underpinning theoretical model, for Australian policy.

This study uses data from 18 waves of the Household, Income and Labour Dynamics in Australia (HILDA) survey and first considers the question, ‘*For mixed-sex couples, how does each partner’s contribution towards household resources affect their own and their partner’s level of financial satisfaction?*’ (RQ1). Following De Henau and Himmelweit (2013), contributions to household resources are assessed with reference to the partners’ paid employment and unpaid roles. If paid work has a relatively large effect on perceived contribution to household resources, it may have a greater impact on financial satisfaction compared to domestic activities which indirectly support earnings. This will result in gendered differences in financial satisfaction if, as is often the case, the intra-household division of labour is unequal, with men devoting more of their time to paid work and women devoting more time to unpaid work. The study also asks: ‘*For mixed-sex couples, does the influence of a type of contribution on financial satisfaction, in either or both partner’s assessment, depend on the gender of the contributor?*’ (RQ2). Here, gendered outcomes can be expected if men’s employment is considered more important to household financial security than women’s, perhaps as a result of social expectations and the influence of a male breadwinner ideology.

To address these important questions, this study is arranged as follows. The next section briefly outlines the relevant theory on household resource allocation and empirical studies, followed by a summary of the results in De Henau and Himmelweit’s (2013) study. This is followed by a discussion of the *data and measures* used within this study, the *empirical strategy* and *results*. For further specificity, the results section also includes an extension of results for an alternate specification, which analyses a breadwinner typology of households followed by some robustness checks. Finally, there is a summary and discussion of the findings in relation to the proposed research questions followed by a conclusion.

## Background

### *Theoretical perspectives on the allocation of resources within households*

Early economic models of household resource allocation followed the notion of a household with a single decision-maker. That is, traditionally household behaviour was analysed in the same way as the behaviour of an individual with a unique utility function and subject to a single budget constraint (Becker, 1981). This approach implied that household resources are ‘pooled’ such that they would be allocated in a way that was proportional to the needs of different household members, regardless of who contributed towards their provision.

More sophisticated and realistic models have emerged in recent decades to account for differences in the preferences of individuals within the household. Bargaining models, and their later generalisation to collective models, describe households as being comprised of individuals with their own separate utility functions, and most often income pooling is not assumed (see for example, Apps and Rees, 1988; Chiappori, 1988). In

bargaining models, household decision-making outcomes are determined by the man's and the woman's 'threat position' – this is the utility each would receive should the partnership breakdown. In collective models, household decision-making is described as being focused on the maximisation of household utility, with this comprised of the weighted sum of each partner's utility function. The achieved outcomes of each partner depend, in part, on their bargaining power within the household as this would affect his or her threat position in a bargaining model, or the Pareto weights in a collective model. In turn, bargaining power is, described as being linked to 'distribution factors', such as the relative income of each partner (Friedberg and Webb, 2006), their relative wage rates (Pollak, 2005), or their relative labour market status (Lundberg et al., 1997; Thomas, 1990; Tiefenthaler, 1999).

In feminist economics, key works on intra-household resource allocation have been informed by Sen's cooperative conflict model (see for example, Agarwal, 1997; Kabeer, 1997; Himmelweit, 2001; Iversen, 2003; Purkayastha, 2003; Nyman and Dema, 2007; Sung and Bennett, 2007). In this model, households are sites for potential gains from cooperation, but they are also sites of potential conflict between partners who might have different preferences about the use of household resources. As with other models, the cooperative conflict model predicts that the intra-household distribution of wellbeing will be affected by the bargaining power of the partners and, thus, their fallback positions. However, the model is unique in its inclusion of distribution factors that derive from gender norms. Sen (1990) highlights that an individual's *perceptions* of the value of their own and their partner's contributions to household resources can affect their sense of whether they (or their partner), is entitled to a share of household resources. Under the influence of gender norms, perception biases may ignore or understate the value of non-market activities (such as cooking and caring for children) within the household, and only consider paid employment and other market roles as 'deserving' contributions. With women taking up the majority, of domestic tasks, norms that either devalue unpaid work or link entitlements over financial resources to paid work are potentially an important source of unequal resource allocation and a gendered distribution of wellbeing within households. For example, within couples that adhere to male breadwinner ideologies the man's power is naturalised in a way which reduces the value attached to the woman's financial contributions and her claim over household resources (Bennett, 2013). However, perceptions matter not only to the valuation of contributions but also to how households internalise and reproduce gender inequalities.

### *Empirical studies of the distribution of wellbeing in couple households*

One of the main challenges in understanding the processes of distribution of resources within households is its unobservability. In an attempt, to understand factors which capture each partner's relative access to household resources, recent studies have utilised data based on subjective assessments.<sup>1</sup> A number of these studies have observed the links between men's and women's relative income shares and their satisfaction with household finances. They have indirectly tested for income pooling by assessing whether changes in relative income shift the partners' opportunities to benefit from household resources, with

these opportunities proxied by their relative financial satisfaction. If couples pool their income, changes in relative income shares, should have no impact on the distribution of financial satisfaction within the household, *ceteris paribus*.

The findings from these studies often rejected the assumption of income pooling. For instance, Alessie et al. (2006) found that on average in Denmark, France, Greece, Italy, Portugal, Spain and the United Kingdom, an increase in the woman's income share results in an increase in her own financial satisfaction but a lower level of financial satisfaction for her partner. Bonke (2008) found mostly similar patterns in his study using the same data. Using a Danish sample, Bonke and Browning (2009) and Ahn et al. (2014) also found that an increase in the woman's income share results in an increase in her own financial satisfaction but a lower level of financial satisfaction for her partner. Ahn et al. (2014) additionally found that for a Spanish sample, an increase in the woman's income share contribution lowers her own financial satisfaction as well as her partner's financial satisfaction.

Mysíková (2016) found that in the Czech Republic, for couples without children, an increase in the woman's income share increases her own financial satisfaction but lowers the man's financial satisfaction; for couples with children, income share has no significant effects on either the man's or the woman's financial satisfaction. In a study using German data, Elsas (2016) ran regressions which account for various working arrangements between couples. Within the samples where both partners work full-time, on average, an increase in the woman's income share lowers her partner's financial satisfaction but has no effect on her own financial satisfaction. In the sample of male breadwinner couples (where the man works full-time and the woman works part-time or does not work), on average, an increase in the woman's income share has insignificant effects on her partner's financial satisfaction, and only positive effects on her own financial satisfaction if she works part-time.

In sum, each of the reviewed studies have found income share to be an important distribution factor. However, none of these studies have systematically confronted the intra-household effects of employment on financial satisfaction. This is a potentially important gap because related studies have found that work roles are important in defining individuals' bargaining position within their household (see, for example, Agarwal, 1997; Friedemann-Sánchez, 2008; Vogler and Pahl, 1993; Noonan, 2001). Independent of income, employment status might matter for one's bargaining position if notions of effort (and the associated claims over a share of household resources) are tied to paid work hours. If part-time work is not associated with the long-term financial security of the household, it might also fail to generate a claim over household resources, regardless of current income flows. Furthermore, if, for example, a woman is not earning any income, and is economically inactive so that she can provide more domestic and caring contributions, her bargaining position may be different compared to if she was not earning an income because of unemployment. Analysis of the links between employment patterns and the intra-household distribution of financial satisfaction can cast light on these possibilities and is, thus, an important alternate approach to the study of intra-household resource allocation. De Henau and Himmelweit's (2013) was the first – and, to date, most important investigation adopting this approach.

### *Findings from De Henau and Himmelweit (2013)*

De Henau and Himmelweit's (2013) study used BHPS panel data (from 1996 to 2007) to examine how changes in the employment status of men and women living in couple households affected their own and their partner's satisfaction with household income. They found that both men's and women's satisfaction with household income was generally highest when they were engaged in full-time work, indicating that paid work contributions were generally perceived to have more value than unpaid contributions. The authors identified this as a gendered effect since most often women, take on the majority of the domestic roles and are therefore more likely to be the ones in less than full-time employment. Furthermore, on average, men's own contributions from employment were more influential in determining their satisfaction with household income than their partner's contributions from employment. However, for women, on average, their level of satisfaction with household income was influenced more by their partner's employment than by their own. De Henau and Himmelweit (2013) thus concluded that both gender asymmetry in contributions, as well as gender norms affecting the valuation of his versus her contributions, affected the way in which gender inequalities are reproduced within the household.

De Henau and Himmelweit's study and its findings are important to the current project for a number of reasons. It developed an empirical methodology to examine key ideas in Sen's model of cooperative conflict. While other studies had been limited in their focus, tending to focus solely on how income shares affect the intra-household distribution of financial satisfaction, De Henau and Himmelweit address the gendered perceptions of partners' contributions to household resources, proxying this by a different distribution factor – employment status. Their results, as noted, suggest that such factors are important in determining the intra-household distribution of satisfaction with household income. However, their findings have yet to be assessed in other country contexts and time periods. The current study attempts to address this research gap by conducting a similar analysis of the links between employment and the intra-household distribution of financial satisfaction using Australian data from a longer and more recent time period. The results of this study contribute important evidence on the broader (and current) relevance of the findings presented by De Henau and Himmelweit. In doing so, the study will help inform the direction of future theoretical and empirical work on the allocation of resources and the implications of this for the distribution of financial satisfaction within households.

### *Data and measures*

This study utilises data from the HILDA survey. Household, Income and Labour Dynamics in Australia is nationally representative and provides extensive information on the lives of Australians on topics such as employment, health and wellbeing, income, life events, childcare, values and attitudes and relationships (Summerfield et al., 2019). It is the only such survey of its kind available in Australia and is comparable to the BHPS used by De Henau and Himmelweit (2013). This study uses 18 waves of HILDA data, from interviews conducted each year from 2001 to 2018. An important feature is that data is collected at a household level, and therefore contains the information of both partners for

couple households. This feature makes it a survey well-suited for studying intra-household elements.

Using all 18 waves of data, the study sample includes cohabitating men and women in couple relationships. Couples are either married or in a de-facto relationship, with or without children. Similar to De Henau and Himmelweit (2013), the sample is limited to working-age men and women (18–65 years). After imposing these restrictions, an unbalanced panel of 57,092 couple observations from 8478 distinct couples is obtained.

The dependent variable in this study is a measure of each partner's satisfaction with financial situation (SWFS) score. The study utilises responses to a HILDA survey question which, each year, asks respondents: 'How satisfied are you with your financial situation?' The responses to these questions are organised on a scale from 0 to 10, with a score of 0 indicating completely dissatisfied, and a score of 10 indicating complete satisfaction. As seen in Table 1,

**Table 1.** Descriptive statistics: HILDA, mixed-sex couple households, 2001–2018.

	Mean	Standard deviation
Man's SWFS	6.65	1.89
Woman's SWFS	6.66	1.95
Man's employment status		
Full-time	0.84	0.37
Part-time	0.09	0.29
Economically inactive	0.05	0.22
Unemployed	0.02	0.16
Woman's employment status		
Full-time	0.39	0.49
Part-time	0.36	0.48
Economically inactive	0.22	0.42
Unemployed	0.03	0.16
Dependent children in household	0.77	0.42
Number of dependent children 0–4 Years	1.37	0.55
Number of dependent children 5–9 Years	1.34	0.54
Number of dependent children 10–14 years	1.35	0.55
Number of dependent children 15–24 years	1.29	0.52
Equiv. Monthly household income (AUD)	5301.29	3223.53
Man's age	41.91	11.29
Woman's age	39.69	11.00
Man's presence of a health condition	0.18	0.39
Woman's presence of a health condition	0.18	0.38
Man's education (years)	13.41	2.47
Woman's education (years)	13.38	2.63
N (person-year observations)	57,092.00	

Note: This sample consists of men and women in mixed-sex couples, between the ages of 18–65 years old. SWFS: satisfaction with financial situation; HILDA: household, income and labour dynamics in Australia.

men and women, within the sample, reported, on average, similar SWFS scores, at 6.66 and 6.64 points, respectively.

The measure used in this study differs slightly from the one used in De Henau and Himmelweit's (2013) model, 'satisfaction with household income', because an equivalent measure is not available in HILDA. This is a potential limitation of the current study because when respondents answer questions on their satisfaction with household income, they are likely to be reflecting on their household's (rather than just their own) financial resources. With the HILDA question, the respondents might be reflecting only on their own resources. To assess the importance of this measurement issue, in an initial step, the correlation between the partners' responses to questions on financial satisfaction were compared to those on more individual elements (their pay). The results show the correlation in SWFS of partners within household tends to be relatively high, at 0.49. In contrast, when comparing measures of satisfaction with truly individual measures of financial standing – pay – the correlation between partners is only 0.12. This provides some confidence that the key HILDA question on SWFS does, in fact, capture the respondents' evaluation of their benefits from household, and not only individual, financial resources.

The main independent variables are similar to those used by De Henau and Himmelweit (2013), in that they capture each partner's employment status. Employment status is divided into four categories, including employed full-time, employed part-time, unemployed, and economically inactive. The last three categories may suggest a renegotiation of the level of non-financial contribution to the household by each partner. For example, partners who are employed full-time may be seen as largely making monetary contributions while those who are in part-time employment or are not in the labour market are likely to be seen as contributing more towards care and domestic duties.

Referring to Table 1, which contains descriptive statistics for the sample person-year observations, the level of full-time work is more than twice as high for men as it is for women. A total of 84% of the employment observations for men are for full-time work, as compared to only 39% for women. Women in part-time work made up 36% of the observations, while only 9% of the observations for men are in part-time work. The sample distributions in Table 2 show that 34% of the observations capture dual earner couples. However, couples where the man is the primary breadwinner still predominate, with 19% of observations representing couples where only the man works and 31% of observations representing couples where the man is the primary earner and the woman works part-time.

Other variables comprising of equalised household monthly income (in 2018 Australian dollars), number of dependent children, age, health and education are included in this study to account for factors that may have independent effects on SWFS.<sup>2</sup> The presence of dependent children may result in additional demands on household finances and may intensify traditional labour division within households. Age can be related to changing financial pressures as couples negotiate the life course. Education levels may signal career aspirations and different earning expectations too. A person's level of education might also impact the importance attached to equity within the household, and



**Table 2.** Distribution of household types: Household, income and labour dynamics in Australia, mixed-sex couple households, 2001–2018.

	Mean	Standard deviation
Man employed full-time; woman not employed	0.19	0.39
Man employed full-time; woman employed part-time	0.31	0.46
Man employed full-time; woman employed full-time	0.34	0.47
Man employed part-time; woman not employed	0.02	0.15
Man employed part-time; woman employed part-time	0.04	0.19
Man employed part-time; woman employed full-time	0.03	0.17
Man not employed; woman not employed	0.04	0.20
Man not employed; woman employed part-time	0.01	0.12
Man not employed; woman employed full-time	0.02	0.14

Note:  $N$  (person-year observations) = 57,092. This sample consists of men and women in mixed-sex couples, between the ages of 18–65 years old.

this may affect their level of satisfaction with the distribution of financial resources (Bonke, 2008).

### Empirical strategy

The focus of this study is on how changes in either partner’s contributions towards household resources, as measured through changes in employment status, shift both partner’s SWFS. An appropriate method for such an investigation is a fixed effects regression analysis. Following De Henau and Himmelweit (2013), we use a collective approach, with each partner’s SWFS modelled as a linear function of independent variables relating to their own and their partner’s employment status

$$s_{jt}^m = \beta_{1m}E_{jt}^m + \beta_{1w}E_{jt}^w + \gamma_{1m}C_{jt}^O + \gamma_{2m}C_{jt}^P + t_1 + \mu_{jt}^m + \varepsilon_{1jt} \tag{1}$$

$$s_{jt}^w = \beta_{2m}E_{jt}^m + \beta_{2w}E_{jt}^w + \gamma_{1w}C_{jt}^O + \gamma_{2w}C_{jt}^P + t_2 + \mu_{jt}^w + \varepsilon_{2jt} \tag{2}$$

The variables  $s_{jt}^m$  and  $s_{jt}^w$  denote the SWFS of the man and woman in the  $j$ th household at time  $t$ , respectively. The vectors  $E_{jt}^m$  and  $E_{jt}^w$  capture the employment status of the man and woman in the  $j$ th household with full-time employment as the reference category. The vector  $C_{jt}^O$  consists of a set of controls which capture the individual’s own characteristics that may have independent impacts on levels of SWFS, including, age (with a squared term to capture possible non-linear effects), health and years in education. The vector also includes other relevant controls for number and ages of children, and equalised monthly household income. Characteristics of the individual’s partner are captured by  $C_{jt}^P$ , and these include their age (with a squared term to capture possible non-linear effects), health and years in education.  $t_1$  and  $t_2$  consist of year fixed effects, while  $\mu_{jt}^m$  and  $\mu_{jt}^w$  denote individual fixed effects that control for time invariant characteristics of the man and

woman, respectively. Finally,  $\varepsilon_{1jt}$  and  $\varepsilon_{2jt}$  are randomly distributed error terms with a mean of zero.

As an extension, an alternate specification which analyses a breadwinner typology of households is also included (Table 4). This alternate model allows more specificity in accounting for gender role arrangements amongst couples. The models for both men and women are identical to (1) and (2) except that employment status is replaced with different employment combinations with a sole male breadwinner household (where the man works full-time and the woman is not employed) being the reference category.

An important feature of the estimation strategy is the use of fixed effects. By exploiting the panel nature of the data, within-individual comparisons are made such that the same individual is analysed at different points in time, thereby eliminating time invariant unobserved heterogeneity. This identification is therefore more comprehensive in testing the intra-household effects of contributions on each partner's SWFS compared to many previous studies which make generalised between-individual comparisons (such as Bonke, 2008; Bonke and Browning, 2009; Mysiková, 2016).

The choice of a linear fixed effects approach for studies using subjective satisfaction measures has been debated, given the categorical nature of such variables (see Kristoffersen, 2010, for a summary). Nonetheless, a number of studies have compared results from linear and non-linear model estimations (see for example, Blanchflower and Oswald, 2004, 2005; Ferrer-i-Carbonell and Frijters, 2004; Gardner and Oswald, 2001; Headey and Wooden, 2004). These studies have concluded that both approaches produce similar results in terms of effect signs and significance. As such, given the ease of interpreting ordinary least squares (OLS) estimates, equations (1) and (2) are estimated by employing linear fixed effects models. Nonetheless, as a robustness check, estimates on the baseline model using a non-linear estimation strategy are also included in a Supplementary file.

### *Interpreting the research questions*

Estimates for the coefficients in equations (1) and (2) provide insight into the key issues of interest in this study. In relation to RQ1, 'For mixed-sex couples, how does each partner's contribution towards household resources impact their own and their partner's level of financial satisfaction?' if the coefficients  $E_{jt}^m$  and  $E_{jt}^w$  on less than full-time employment statuses are negative, this is interpreted as contributions of the partner in less than full-time employment are perceived as less likely to sustain one's financial position in comparison to contributions through full-time employment. If this is the case, then an immediate gender inequality will be acknowledged as cross-sectional patterns in Tables 1 and 2 indicate that within the sample, women are more often engaged in less than full-time employment compared to men.

Comparing the differences in coefficient magnitudes between  $E_{jt}^m$  and provide insight into RQ2, 'For mixed-sex couples, does the influence of a type of contribution on financial satisfaction, in either or both partner's assessment, depend on the gender of the contributor?' Differences might indicate that the value attached to similar contributions to household financial resources depends on the gender of the partner making the

contributions. Within households it is possible, for example, that the man's employment is perceived to be more valuable than the woman's. The inclusion of controls for household income, strengthens this analysis because they allow us to assess whether, when household income stays constant, each partner's financial satisfaction is still affected by a changing distribution of paid and unpaid contribution. Furthermore, if an individual's SWFS changes in a way that is dependent on the gender of the partner making the contributions, then there is little evidence of income pooling.

## Results

### *Baseline models*

The estimations are run with three different specifications for both men and women, as presented in Table 3. Model A is a baseline model that does not include controls for age, education, number and ages of children and equivalised household income. Model B includes controls for number and ages of children and equivalised household income. Finally, Model C includes controls for number and ages of children and equivalised household income, as well as each partner's age, health and years in education. Model A and Model B are comparable to the British results from De Henau and Himmelweit (2013), as these did not include controls for each partner's age, health and education.

The results from Model A are presented in Columns 1 and 4 in Table 3. These show that, for both men and women, changes in their own and their partner's level of paid work away from full-time employment have a negative impact on SWFS. For example, for men, at mean values, a change from full-time to part-time employment is associated with a 0.473 point reduction in SWFS. For women, at mean values, a change from full-time to part-time employment is associated with a 0.329 point reduction in SWFS. As demonstrated in Table 1, the distribution of employment statuses is gendered with women less often making contributions through full-time employment compared to men within. This indicates that it is women who are more likely to be making domestic contributions, while men are more likely to be making financial contributions, which have greater influence on both partner's SWFS. However, the effect of being economically inactive is less negative than being unemployed. For women, on average, being economically inactive reduces SWFS by 0.538 points compared to being in full-time employment; while being unemployed reduces SWFS by more than double, in the amount of 1.115 points compared to being in full-time work. For both men and women, their own unemployment has the most detrimental effect on their own SWFS. These patterns may suggest that domestic contributions are not entirely discounted within the sample, as women who are economically inactive are likely to be contributing more to domestic work compared to those who are unemployed.

The results on the variables relating to own and partner employment in Model A reveal an important intra-household pattern. The data in Columns 1 and 4 of Table 3 show that, for men, less than full-time employment has much larger negative implications on their own SWFS than less than full-time employment of their partner. For example, when men move from full-time employment to part-time employment their SWFS drops, on average,

**Table 3.** Fixed effects regression results for Men's and Women's SWFS.

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
	Model A	Model B	Model C	Model A	Model B	Model C
Man's employment status (ref: employed full-time)						
Part-time	-0.473*** (0.037)	-0.430*** (0.036)	-0.441*** (0.036)	-0.294*** (0.036)	-0.253*** (0.036)	-0.245*** (0.036)
Economically inactive	-0.982*** (0.061)	-0.911*** (0.061)	-0.908*** (0.061)	-0.447*** (0.055)	-0.379*** (0.055)	-0.368*** (0.055)
Unemployed	-1.337*** (0.065)	-1.289*** (0.064)	-1.292*** (0.064)	-0.696*** (0.065)	-0.650*** (0.064)	-0.646*** (0.064)
Woman's employment status (ref: employed full-time)						
Part-time	-0.157*** (0.021)	-0.078*** (0.022)	-0.075*** (0.022)	-0.329*** (0.025)	-0.256*** (0.025)	-0.252*** (0.025)
Economically inactive	-0.206*** (0.029)	-0.086*** (0.031)	-0.083*** (0.031)	-0.538*** (0.033)	-0.427*** (0.035)	-0.418*** (0.035)
Unemployed	-0.388*** (0.049)	-0.297*** (0.049)	-0.294*** (0.049)	-1.115*** (0.060)	-1.030*** (0.060)	-1.024*** (0.060)
Log equivalised monthly household income		0.430*** (0.027)	0.439*** (0.027)		0.405*** (0.028)	0.401*** (0.028)
No. Children 0-4 years		-0.035* (0.019)	-0.010 (0.020)		-0.027 (0.020)	-0.033 (0.022)
No. Children 5-9 years		-0.015 (0.018)	0.018 (0.020)		-0.005 (0.020)	-0.007 (0.023)
No. Children 10-14 years		-0.024 (0.017)	0.008 (0.019)		-0.032* (0.019)	-0.033 (0.021)
No. Children 15-24 years		-0.037* (0.019)	-0.009 (0.020)		-0.014 (0.021)	-0.014 (0.022)
Man's age			-0.021 (0.023)			0.083*** (0.026)
Man's age squared			0.000* (0.000)			-0.000* (0.000)
Woman's age			0.004 (0.022)			-0.051* (0.026)
Woman's age squared			0.000 (0.000)			0.001* (0.000)
Man's presence of a health condition			-0.110*** (0.024)			-0.047* (0.024)

(continued)

**Table 3.** (continued)

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
	Model A	Model B	Model C	Model A	Model B	Model C
Woman's presence of a health condition			-0.080*** (0.024)			-0.140*** (0.026)
Man's years in education			0.004 (0.019)			0.016 (0.020)
Woman's years in education			0.019 (0.014)			0.017 (0.016)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Individual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N (observations)	57,092	57,092	57,092	57,092	57,092	57,092
Couples	8478	8478	8478	8478	8478	8478

Note: The bracketed terms are robust standard errors (clustered by couples). The sample consists of men and women in mixed-sex couples, between the ages of 18–65 years old, who were interviewed in the HILDA survey, waves 1–18.

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\* $p < 0.10$ . \*\* $p < 0.05$ . \*\*\*  $p < 0.01$ .

by 0.473 points, whereas when their partners move from full-time employment to part-time employment men's SWFS is only reduced by 0.157 points. For women, at mean values, moving from full-time to part-time employment reduces their own SWFS by 0.329 points; and when their partner moves from full-time to part-time work women's SWFS drops by 0.294 points – a much smaller gap.

The addition of controls for household income in Model B reduces the magnitude of the coefficients on the employment variables but it does not alter the statistical significance of the measured effects. Furthermore, the interesting intra-household patterns evident in the Model A results persist. As shown in Column 2 of Table 3, for men, their own less than full-time employment status reduces SWFS by a much larger amount than their partner's less than full-time employment. For example, at mean values, when men move from full-time employment to being economically inactive their SWFS reduces by 0.911 points on average. In contrast, when men's partners move from full-time employment to being economically inactive their SWFS only reduces by 0.086 points. As seen in Column 5 of Table 3, for women, on average, moving from full-time employment to part-time employment reduces SWFS by 0.256 points; similarly, when their partners move from full-time employment to part-time employment, women's SWFS drops by 0.253 points. For other non-employed statuses (economically inactive and unemployed),

own lack of financial contributions through employment reduces one's own SWFS by a larger amount compared to reductions in one's partner's level of paid work.

Generally, these results are similar to those reported by De Henau and Himmelweit (2013). However, the results in the British study suggest that, for women, their partner's unemployment is more detrimental to their SWFS than their own unemployment, whilst this is not apparent in the Australian data. For women, at mean values, moving from full-time employment to unemployment is associated with a 1.030 point reduction in own SWFS, whilst when women's partners move from full-time employment to unemployment their SWFS falls by a smaller amount of 0.650 points on average.

The additional controls – for each partner's age, health and education – in Model C still do not alter the pattern of results on the employment status variables. This helps to confirm the importance of employment status as a key determinant SWFS. The similarity between the results from this analysis of recent Australian data and those reported by De Henau and Himmelweit (2013) from their British sample adds further weight to the proposition that employment matters to individual's claims over household resources.

### *An alternate specification*

The results from models that replaced the employment status variables with measures that identify different household types (as defined by the pattern of male/female employment) are presented in Table 4. The reference category in these models is the traditional breadwinner household where the man is employed full-time and the woman is not employed. The coefficients on the variables that represent the other categories show, for example, what happens, on average, to men's and women's SWFS when the arrangement of paid and unpaid contributions changes. The other details of Model A, Model B and Model C are as they were in the above sub-section.

The results on the household arrangement variables largely follow the same pattern across Models A, B and C. This is consistent with the results presented in the previous section and helps to further confirm the independent significance of household employment patterns in the determination of SWFS. It also allows the description of the results to focus only on Model C, for brevity. The results for Model C show that, for men, moving from a sole breadwinner household to one where his partner is engaged in part-time work has no impact on his SWFS. The opposite is true for women; their SWFS increases, on average by 0.277 points, when such a change occurs. The results for Model C also show that when moving from a sole male breadwinner arrangement to one where both partners are employed full-time, both men and women report the highest SWFS. These results confirm the findings from the previous specification where both partners become more satisfied if they are both making paid contributions from being in full-time employment.

The move from a sole breadwinner household to one where the man works part-time has negative implications for men's SWFS regardless of whether his partner remains unemployed or starts working either part-time or full-time. However, on average, moving from a sole breadwinner household where the man works full-time to a sole breadwinner household where the man works part-time is associated with a 0.393 point drop in the

**Table 4.** Alternate specification: Fixed effects regression results for Men’s and Women’s SWFS.

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
	Model A	Model B	Model C	Model A	Model B	Model C
Employment status combinations (ref: man employed full-time, woman not employed)						
Man employed full-time; woman employed part-time	0.055** (0.026)	0.022 (0.026)	0.022 (0.026)	0.259*** (0.030)	0.231*** (0.030)	0.227*** (0.030)
Man employed full-time; woman employed full-time	0.225*** (0.029)	0.114*** (0.030)	0.112*** (0.030)	0.587*** (0.034)	0.492*** (0.036)	0.485*** (0.036)
Man employed part-time; woman not employed	-0.453*** (0.065)	-0.408*** (0.065)	-0.418*** (0.065)	-0.445*** (0.071)	-0.400*** (0.071)	-0.393*** (0.071)
Man employed part-time; woman employed part-time	-0.364*** (0.055)	-0.360*** (0.055)	-0.372*** (0.055)	-0.006 (0.056)	0.003 (0.056)	0.009 (0.056)
Man employed part-time; woman employed full-time	-0.346*** (0.055)	-0.413*** (0.055)	-0.425*** (0.055)	0.340*** (0.058)	0.286*** (0.059)	0.283*** (0.059)
Man not employed; woman not employed	-1.233*** (0.074)	-1.169*** (0.073)	-1.169*** (0.074)	-0.652*** (0.072)	-0.590*** (0.072)	-0.579*** (0.072)
Man not employed; woman employed part-time	-1.015*** (0.086)	-1.003*** (0.086)	-1.003*** (0.085)	-0.313*** (0.085)	-0.297*** (0.084)	-0.292*** (0.084)

(continued)

Table 4. (continued)

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
	Model A	Model B	Model C	Model A	Model B	Model C
Man not employed; woman employed full-time	-0.844*** (0.080)	-0.886*** (0.079)	-0.889*** (0.080)	0.114 (0.074)	0.083 (0.074)	0.078 (0.074)
Log equivalised monthly household income		0.428*** (0.027)	0.437*** (0.027)		0.402*** (0.028)	0.399*** (0.028)
No. Children 0-4 years		-0.027 (0.019)	-0.002 (0.020)		-0.010 (0.020)	-0.014 (0.022)
No. Children 5-9 years		-0.014 (0.018)	0.020 (0.020)		-0.003 (0.020)	-0.004 (0.023)
No. Children 10-14 years		-0.022 (0.017)	0.010 (0.019)		-0.030 (0.019)	-0.031 (0.021)
No. Children 15-24 years		-0.037* (0.019)	-0.009 (0.020)		-0.014 (0.021)	-0.013 (0.022)
Man's age			-0.022 (0.023)			0.083*** (0.026)
Man's age squared			0.000* (0.000)			-0.000* (0.000)
Woman's age			0.005 (0.022)			-0.051* (0.026)
Woman's age squared			0.000 (0.000)			0.001* (0.000)
Man's presence of a health condition			-0.106*** (0.024)			-0.045* (0.025)
Woman's presence of a health condition			-0.079*** (0.024)			-0.136*** (0.026)
Man's years in education			0.003 (0.019)			0.016 (0.020)

(continued)



**Table 4.** (continued)

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
	Model A	Model B	Model C	Model A	Model B	Model C
Woman's years in education			0.018 (0.014)			0.015 (0.017)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Individual fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
N (observations)	57,092	57,092	57,092	57,092	57,092	57,092
Couples	8478	8478	8478	8478	8478	8478

Note: The bracketed terms are robust standard errors (clustered by couples). The sample consists of men and women in mixed-sex couples, between the ages of 18–65 years old, who were interviewed in the HILDA survey, waves 1–18.

SWFS: satisfaction with financial situation; HILDA: household, income and labour dynamics in Australia.

\* $p < 0.10$ . \*\* $p < 0.05$ . \*\*\*  $p < 0.01$ .

woman's SWFS. On average, for men moving from a sole male breadwinner household to a sole female breadwinner household is associated with a drop in their SWFS by 0.889 points. However, for women, being the sole breadwinner has positive associations with their SWFS although these effects are statistically insignificant.

## Discussion and conclusion

The key findings of this analysis confirm the importance of paid employment and its distribution within the household to SWFS. The results from the various stages of the empirical analysis that have been presented broadly confirm that gender asymmetries in contributions are one way in which intra-household inequalities arise. With RQ1, '*For mixed-sex couples, how does each partner's contribution towards household resources impact their own and their partner's level of financial satisfaction?*' the results suggest that, for both partners, contributions through paid employment are more important to SWFS than unpaid contributions even when total household income remains constant. These results are important given the unequal distribution of paid work within many Australian households, with a large proportion of women in either part-time work or not economically active. The findings imply that part-time work may have effects beyond those noted in previous studies – around precarious employment and long-term reductions in employment opportunities (Bianchi and Milkie, 2010). They show, in particular, that women's participation in paid work is important to their level of SWFS, achieved in part at least through access to claims on household resources.

However, 'For mixed-sex couples, does the influence of a type of contribution on financial satisfaction, in either or both partner's assessment, depend on the gender of the

contributor?’ (RQ2). For men, on average, partner contributions from employment have less influence on SWFS compared to their own contributions from employment. This difference is still prevalent in models that control for equivalised household income (and a range of other factors). As such, it is consistent with a proposition that male breadwinner ideologies will cause men to prioritise their own contributions to household resources. For women, the pattern is similar. Changing from full-time employment to being unemployed or economically inactive reduces women’s own SWFS more than do equivalent changes to their partner’s employment. However, the gap in the effect of own versus partner employment on SFWB are smaller for women than men and, for women, a shift from full-time to part-time work has a similar effect on her own SWFS as an equivalent change by her partner. This might also be showing the influence of male breadwinner ideology, in that the importance attached to men’s full-time employment is relatively high for both men and women.

Additionally, for men, moving from a sole male breadwinner household to one where his partner works part-time, for example, does not, on average, improve his SWFS. The results are in line with Sen’s (1990) proposition that differences in the perceptions of the value of men’s and women’s contributions to household resources can lead to intra-household asymmetries in wellbeing. Perhaps for men already in full-time work there may be some tendency to perceive their partner’s part-time work as relatively less important to the household’s financial position. Her earnings from part-time employment might be dismissed as ‘pin money’; useful for non-essential purchases but not critical to the household’s financial position or his SWFS at least. The fact that SWFS rises only with high levels of paid work, however, implies that unpaid contributions do not translate into claims on financial resources and SWFS in the same way that paid work contributions do. The findings of this study generally suggest that, most often, the SWFS of men and women in Australian couple households depends on the pattern of paid and unpaid contributions – and this evidence, in turn, indicates that income pooling should *not* be assumed for modelling or policy purposes.

Many of the results in this paper show the cross-country relevance of the gender inequalities identified by De Henau and Himmelweit (2013) for the UK. They also point to a persistence of these gender patterns despite the substantial changes in women’s workforce participation that have been underway over recent decades. This makes it important to have policies that shift the value of the paid contributions that women make through part-time work. Protective policies in which employees do not have to sacrifice job quality or entitlements for fewer hours would be beneficial. For example, in Sweden and Germany, employees have the right to adjust their working hours so that they can adapt to household situations and commitments over the life course, without the loss of their workplace entitlements and significant income (Anxo et al., 2006). However, within the Australian context employees currently do not have a legal entitlement to reduce their working hours in their existing jobs, and this results in many women needing to downgrade to lower skill and lower benefit jobs to secure part-time work with poorer access to household resources and lower wellbeing is a likely outcome (Austen, 2017).

Moreover, some scholars (Markusen, 1981; Potuchek 1997) believe that models that focus on male breadwinner ideologies need to be reconsidered given the breakdown in the

patriarchal family pattern (where the man is the primary earner and the woman's earnings are of lesser importance). However, the findings within this study, and those in De Henau and Himmelweit (2013), about the possible persistence in male breadwinner ideologies are thought-provoking given the important transformations in labour trends over the last few decades. Despite the increased number of women joining the labour force and the increase in dual earner couples there appears to be some perseverance in gendered ideologies and perceptions. This raises caution for future studies and policy inferences which assume the breakdown of patriarchal family trends in our *modern* society, given that such trends might continue to exacerbate gender inequalities within the household, with concomitant impacts on wellbeing.

To conclude, the results presented broadly confirm that types of contributions and the gender of the contributor to household resources are important in determining SWFS. These findings reinforce the widespread perception that who makes paid contributions matters for the distribution of intra-household financial satisfaction, therefore rejecting the idea of the unitary family. The results also provided external validity regarding the methodology proposed by De Henau and Himmelweit (2013) and demonstrate that employment is an important distribution factor in determining the distribution of intra-household financial satisfaction.

### **Acknowledgements**

We wish to thank Emeritus Professor Susan Himmelweit and Dr Richard Seymour for their useful suggestions on earlier versions of this paper. We are also grateful to a number of colleagues and scholars who provided useful commentary and feedback at the Bankwest Curtin Economics Centre, Research Development Series Workshop (Curtin University) and the 30<sup>th</sup> PhD Conference in Economics and Business (University of Melbourne).

### **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### **Funding**

The author(s) received no financial support for the research, authorship and/or publication of this article.

### **Supplemental material**

Supplemental material for this article is available online.

### **Notes**

1. See Clark (2018) for a survey on the rising use of subjective measures in the field of economics.
2. The 'modified OECD' equivalence scale is built up by allocating points to each member in the household; the first adult in the household is allocated a weight of 1 point, additional persons

over the age 15 years or above are allocated 0.5 points, and each child under the age of 15 is allocated 0.3 points.

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### Author biographies

Jaslin Kalsi is a research affiliate at the Bankwest Curtin Economics Centre. She has previously worked as a researcher for the Women in Social Economic Research cluster (Curtin University), Insight Energy, and The Red Elephant Foundation. She was also a co-founder of UN Women's EmpowerWomen.org 'I am (Wo)Man' campaign – a digital media campaign which highlights the importance of women's economic empowerment. Her research interests include economic and social wellbeing, gender equity and social exclusion.

Siobhan Austen is a Professor of Economics within the Curtin Business School and Director of the Women in Social and Economic Research (WiSER) research cluster. Her research expertise is in the economic analysis of the gendered aspects of key social and economic policy debates around population ageing, retirement incomes and labour force participation. She is a member of the Australian Bureau of Statistics' Gender Statistics Advisory Group.

Astghik Mavisakalyan is a Principal Research Fellow at the Bankwest Curtin Economics Centre and oversees the Centre's *Focus on the States* report series. Astghik has held appointments at the Research School of Economics at Australian National University and at the Centre for the Economics of Education and Training at Monash University. Astghik works in areas that include cultural economics, political economy, development economics, labour economics and gender and migration.