

Who benefits from household resources? A cross-national exploration using gendered data on satisfaction with household income

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### **Policy motivation**

- Investigating the impact of gender roles on financial inequalities within households
- Many policies impact on gender roles: how men and women spend their time
- Few are designed to reduce gender inequalities, nevertheless their effects are often assessed on:
  - gender inequalities in access to financial resources within economy e.g. gender wage and earnings gap
  - inequalities in gender roles within households e.g. on housework hours
- but rarely on:

□ inequalities in the benefits from household resources

Need ways of analysing how policies, particularly those that impact on gender roles, influence such financial inequalities within households

### Why does this matter?

- Qualitative evidence that there are significant gender inequalities how household income benefits members
   and these are bound up with gender inequalities more generally
- Knowing about the effect of policies on these inequalities matters for the same reasons as other inequalities:
  - if we want to ensure policies reduce such inequalities/do not make them worse
  - such inequalities may affect behavioural responses to policies, reducing their effectiveness in meeting their own goals
    - e.g. of education and health care policies in reaching those who benefit unequally from household resources, relevant to girls' educational chances and survival

### Background to this project

- "Gender and Intra-household entitlements: A crossnational longitudinal analysis" (GeNix) funded by ESRC
- Follows on from mixed methods joint project "Within household inequality and public policy" part of ESRC's Gender Priority network (GeNet)
- New project refines and applies cross-nationally the quantitative methods of analysis developed during the earlier UK based project

# Economic analysis of intrahousehold inequalities

- Most economics used in policy analysis (and econ text books) uses unitary model of household;
  - No room for differing impacts on household members
- Development of household bargaining and collective models
  - Allow for differing interests of members impacting on household decisions
  - Allows for outcomes having differing impact on well-being of household members
  - Recent models also include household public goods, household production and do not see all non-employed time as "leisure"
  - Difficult to estimate empirically without questionable identifying assumptions

# Limitation of existing model

- Empirical applications tend to recognise only consumption and in some cases free time as contributing to the utility of household members
- Miss out the process benefits of access to income, such as increased autonomy
  - qualitative studies show these may matter more than, and are not determined by levels of consumption and leisure time
  - capabilities framework would also stress consumption and free time of values in what they enable people to do and be, rather than in themselves
- Want a method of examining intra-household inequalities in all the benefits that household income brings to its members
- Build on Sen's insight that it may be cultural perceptions that matter most
  - e.g. perceived contributions to household rather than actual ones that determine bargaining power
  - Expectations, aspirations and adaptation all relevant to this

## Our alternative method

- Measure *full benefits* that household income brings to its members directly by members' subjective assessment of that household income
- Many household data sets include couples' matched answers to the question "How satisfied are you with your household's income?" (SWHI)
- If we assume respondents take into account the full range of benefits that they perceive themselves to gain from that household income
  - Specific controls needed to allow for other influences, but having done so
  - Can examine whether factors influence the relative benefits that household income brings to it members by whether those factors affect the difference in their assessment of their common household income

## Key assumptions:

- In answering SWHI questions, respondents take into account the full range of benefits that they perceive themselves to gain from that household income
- Ceteris paribus, that if a factor affects the SWHI of a man and a woman sharing the same household income differently, it does so because it alters the couple's relative benefits from that household income

### Aspirations, expectations and adaptation

- All subjective assessment is relative to reference points:
  - Own past history
  - □ The situation of social comparators
- Can be captured by some personal or local variables e.g. own human capital, local unemployment rates
- Such variables can function in many ways e.g.
  - □ own human capital may have
    - +ve effect on SWHI if an indication of longer-term prospects
    - -ve effects on SWHI if an indication of income that one should be earning
  - □ local unemployment rates may have
    - -ve effect on SWHI if an indication of probability of dining employment (informational effect on expectations)
    - +ve effect on SWHI if normalises unemployment level incomes (social comparison effect)

## Method and Controls needed

#### Use fixed effects with panel data to:

- control for time invariant factors, including fixed personality traits, known to be significant influences on all subjective measures
- focus on changes for the same couple over time, so not comparing subjective assessments across individuals
- Spill over from other domains of satisfaction
   Control for own "Satisfaction with life in general"
- Mutual concern by partners for other's well-being
   Control for partner's "Satisfaction with life in general"
- Will treat ordinal measure of SWHI as cardinal
  - □ Shown to make little difference in practice when fixed effects regression is applied to subjective scales (Ferrer-I-Carbonell & Frijters, 2004)
  - Means that while not comparing *levels* across individuals are treating *differences in levels* as having comparable meaning across individuals

## Two equations

We estimate two equations;

- 1) of SWHI for *all individuals* in couples: including as regressors variables relating to the man and the women in a couple
  - to give a gender blind picture of what influences individual SWHI
  - and any gender differences in how men's and women's characteristics do so
- 2) of the difference in their SWHI for *all couples*: using the same regressors as equation (1)
  - □ to give a picture of what influences relative SWHI
  - and again we might find asymmetrical gender differences in how men's and women's characteristics do this

# *Types* of independent variables to use

- Household income
- Factors affecting expectations and aspirations for household income and adaptation to it
- Factors affecting partners' relative benefits
  - Bargaining power; how well each partner would fare outside relationship or in the absence of cooperation
  - Partners' perceived contributions to household income (Sen)

Equation 1 for individuals  

$$S_{it} = \boldsymbol{\alpha}_{1} \mathbf{H}_{it} + \boldsymbol{\beta}_{1m} \mathbf{M}_{it} + \boldsymbol{\beta}_{1f} \mathbf{F}_{it} + \boldsymbol{\gamma}_{1} \mathbf{E}_{t} + \boldsymbol{\mu}_{i} + \boldsymbol{\varepsilon}_{it}$$

where in period *t*:

 $S_{it}$  is the recorded satisfaction with household income of individual *i*;

 $\mathbf{H}_{it}$  is a vector of time-varying characteristics of *i*'s household;

 $\mathbf{M}_{it}$  is a vector of time-varying individual characteristics of the man in *i*'s household;

 $\mathbf{F}_{it}$  is a vector of time-varying individual characteristics of the woman in *i*'s household;

 $\mathbf{E}_t$  is a vector of time-varying extra-household environmental characteristics;

 $\mu_i$  is a vector of time-invariant characteristics of individual i and their household;

and  $\varepsilon_{it}$  is a randomly distributed error term (with mean zero).

## Equation 2 for couples

$$S_{jt}^{m} - S_{jt}^{f} = \boldsymbol{\alpha}_{2} \mathbf{H}_{jt} + \boldsymbol{\beta}_{2m} \mathbf{M}_{jt} + \boldsymbol{\beta}_{2f} \mathbf{F}_{jt} + \boldsymbol{\gamma}_{2} \mathbf{E}_{t} + \boldsymbol{\lambda}_{j} + \boldsymbol{\nu}_{jt}$$

where in period t:

 $S_{jt}^{m} - S_{jt}^{f}$  is the difference between the man's and the woman's recorded satisfaction with household income in couple *j*;

 $\mathbf{H}_{jt}$ ,  $\mathbf{M}_{jt}$ ,  $\mathbf{F}_{jt}$  and  $\mathbf{E}_{t}$  are all defined as in equation (1) except now for couple *j*;

 $\lambda_{i}$  is a vector of time-invariant characteristics of couple *j*;

and  $v_{it}$  is a randomly distributed error term (with mean zero).

$$S_{jt}^{m} - S_{jt}^{f} = \boldsymbol{\alpha}_{2} \mathbf{H}_{jt} + \boldsymbol{\beta}_{2m} \mathbf{M}_{jt} + \boldsymbol{\beta}_{2f} \mathbf{F}_{jt} + \boldsymbol{\gamma}_{2} \mathbf{E}_{t} + \boldsymbol{\lambda}_{j} + \boldsymbol{\nu}_{jt}$$

- In equation (2) rises (falls) in the dependent variable indicate a relative increase in the man's (woman's) benefits from household income
- Coefficients are positive for factors that increase men's relative benefits and negative for those that increase women's.
- NB there are only half as many observations for equation (2) as for equation (1)

$$S_{it} = \boldsymbol{\alpha}_1 \mathbf{H}_{it} + \boldsymbol{\beta}_{1m} \mathbf{M}_{it} + \boldsymbol{\beta}_{1f} \mathbf{F}_{it} + \boldsymbol{\gamma}_1 \mathbf{E}_t + \boldsymbol{\mu}_i + \boldsymbol{\varepsilon}_{it}$$
(1)

- In equation (1) coefficients show what factors influence SWHI
- There are two different ways in which reference points can influence satisfaction variables giving alternative hypotheses
  - (H1a): for a given level of household income, variables that indicate higher *expectations* of household income have a positive influence on individual satisfaction with household income; their coefficients in equation (1) should therefore be positive.
  - (H1b): for a given level of household income, variables that indicate higher *aspirations* for household income have a negative influence on individual satisfaction with household income; their coefficients in equation (1) should therefore be negative.
- We investigate these by looking at the signs of coefficients in

$$oldsymbol{lpha}_1,\,oldsymbol{eta}_{1m},\,oldsymbol{eta}_{1f}$$
 and  $oldsymbol{\gamma}_{-1}$ 

$$S_{it} = \boldsymbol{\alpha}_1 \mathbf{H}_{it} + \boldsymbol{\beta}_{1m} \mathbf{M}_{it} + \boldsymbol{\beta}_{1f} \mathbf{F}_{it} + \boldsymbol{\gamma}_1 \mathbf{E}_t + \boldsymbol{\mu}_i + \boldsymbol{\varepsilon}_{it}$$
(1)

- Effects of individual characteristics in equation (1) may be gendered
   Expectations and aspirations may be formed more on the basis of the man's labor market characteristics than the woman's
- Our second hypothesis therefore is:
  - (H2): in traditionally male domains, men's individual characteristics are more influential than the equivalent women's characteristics in forming expectations or aspirations for household income, so that men's characteristics will have more influence on satisfaction with household income than women's.
- To test this hypothesis requires comparing the magnitudes of corresponding characteristics in traditionally male domains to see if, for characteristic *k*,  $|\beta_{lmk}| > |\beta_{lfk}|$ , assuming they both have the same sign.
- This hypothesis will not necessarily apply in reverse to characteristics in traditionally female domains, such as time spent on housework, which are unlikely to influence expectations of, or aspirations for, household income.

### $S_{jt}^{m} - S_{jt}^{f} = \boldsymbol{\alpha}_{2} \mathbf{H}_{jt} + \boldsymbol{\beta}_{2m} \mathbf{M}_{jt} + \boldsymbol{\beta}_{2f} \mathbf{F}_{jt} + \boldsymbol{\gamma}_{2} \mathbf{E}_{t} + \boldsymbol{\lambda}_{j} + \boldsymbol{\nu}_{jt}$

- Individual characteristics that improve the couple's expectations, such as being in a good job, are also likely to improve that individual's perceived contribution to household and their fall-back position and thus their relative benefits from household income.
- Our third hypothesis therefore is:
  - (H3): an individual's characteristic that by changing expectations improves (reduces) satisfaction with household income in equation (1), will increase (decrease) the satisfaction of the person with that characteristic relative to that of his or her partner.
- This requires seeing if in equation (2), for any characteristic k, (sign  $\beta_{2mk}$ ) = (sign  $\beta_{1mk}$ ) and (sign  $\beta_{2fk}$ ) = (sign  $\beta_{1fk}$ )
  - □ this way round because  $S^{m}_{jt}$   $S^{f}_{jt}$  measures couple's relative satisfaction with household income

$$S_{jt}^{m} - S_{jt}^{f} = \boldsymbol{\alpha}_{2} \mathbf{H}_{jt} + \boldsymbol{\beta}_{2m} \mathbf{M}_{jt} + \boldsymbol{\beta}_{2f} \mathbf{F}_{jt} + \boldsymbol{\gamma}_{2} \mathbf{E}_{t} + \boldsymbol{\lambda}_{j} + \boldsymbol{\nu}_{jt}$$

- If the relative benefits from household income depend on traditional gender norms, as well as on individual characteristics in particular households:
  - □ Effects need not be symmetrical between gendered characteristics. The coefficients  $\beta_{2m}$  and  $\beta_{2f}$  in equation (2) may differ in magnitude as well as sign.
  - □ Might go in either direction, for example
    - women might benefit relatively more by employment than men do, since for men it is an expected role and traditional access to the benefits of household income are based on a male breadwinner model;
    - alternatively men may lose more than women from not fulfilling a traditionally male gender role.
- Therefore a fourth hypothesis to test is:
  - □ (H4): there is a gender difference in the impact on relative satisfaction of individual characteristics that relate to traditional gender roles.
- In equation (2), if  $\beta_{2mk}$  and  $\beta_{2fk}$  are of equal magnitude but opposite sign there is no gender difference in the impact of characteristic *k* on relative satisfaction.
  - □ Testing H4 therefore requires testing whether, for any characteristic *k*,  $\beta_{2mk} + \beta_{2fk} \neq 0$

## Gender regimes in three countries: Germany, UK and Australia

#### All strong male breadwinner regimes:

- Germany conservative-corporatist; active support of male breadwinner model, reliance on family to provide welfare services
- □ UK and Australia: male breadwinner more by default, liberal "safety-net" welfare regimes focused on minimal decommodification of labour
  - UK: most benefits means-tested plus market provision of services
  - Australia: benefits tend to be more "affluence tested"; greater involvement of voluntary sector
- Since mid 1990s all had labour market activation policies with some focus on gender roles:
  - Different methods and rates in different countries
  - Included policies on childcare, parental leave and changes in tax-benefit systems to "make work pay"
- By 2002-7, the years for which we have data, such policies:
  - had largely already been implemented in UK, but were only just beginning to be introduced in Germany
  - while Australia policies focused more on supporting traditional gender roles after change of government in 1996 (changed again in 2007)

## Outcome of policies 2002-2007

	AU		GE			UK			
	1997	2002	2007	1997	2002	2007	1997	2002	2007
Male employment rate	77%	78%	81%	73%	71%	75%	75%	76%	77%
Female employment rate	60%	63%	67%	56%	59%	64%	63%	65%	66%
Share of women in total employment	43%	45%	45%	43%	45%	46%	46%	46%	46%
% of all women employed full- time	35%	38%	42%	39%	38%	39%	37%	39%	41%
%of all women employed part- time	25%	25%	25%	17%	21%	25%	26%	26%	25%
Usual weekly hours men		41.4	40.7		40.6	40		42.8	41.8
Usual weekly hours women		30.7	30.9		31.4	30.2		31.1	31.4
Employment rate of mothers of child<6 years old	44%	45%	48%	50%	57%	60%	56%	57%	56%
Gender pay gap (FT)	15%	15%	15%	24%	26%	25%	25%	23%	21%

- Employment rates increased in all countries over the period, though women's increased faster, especially in Germany and Australia.
- In Australia and the UK the increase was in women working full-time, while in Germany it came from more women working part-time.
- In all countries women worked on average only 75% of the hours of men.
- The employment rate of mothers of children less than six years old rose by 10 percentage points on Germany to overtake that of the UK by 2007. It was much lower in Australia.
- Only the UK saw a slight fall in the gender pay gap (for those working full-time), which was highest in Germany at around 25% but considerably lower in Australia at 15% 21

## Data sets and variables

- To control for invariant individual characteristics need panel data
- Household panel data sets in which the question "How satisfied are you with your household's income" was asked annually of all adults in a household are available for:
  - □ Germany (GSEOP), UK (BHPS) and Australia (HILDA)
  - $\Box$  Answers on a scale 1-10 (or were rescaled to be so)
  - □ Matched answers for sample of couples of working age 2002-2007
- We are interested primarily in gender roles; so main independent variables of interest
  - □ Real household income
  - □ Gender roles: how the man and woman in a couple spend their time:
    - labour market status (FT employed, PT employed, inactive, unemployed, disabled)
    - hours of housework (and hours of housework squared)
- But must also allow for other well-known influences on such subjective assessments

# Controls

- Control for some household level variables relevant to gender roles and potentially to relative benefits from household income:
  - □ the proportion of household income coming from earnings:
    - women/men may be more likely to receive income from other sources (in practice, mostly benefits and child support)
    - also a dummy variable to indicate if there are no earnings at all:
  - $\Box$  the number and ages of children, to allow for:
    - any child-related costs, such as childcare, that are not fully covered by equivalence scales
    - time spent on childcare, which is not included in housework hours.
  - □ the proportion of earnings coming from each partner:
    - to see if they have any effects additional to gender roles (the variables of interest in this study)
    - the focus of most studies of intra-household inequalities in access to household income
- Also:
  - □ year dummies
    - to control for macro-economic effects, such as inflation or unemployment rates, that may differ between countries.
  - □ Both partners' satisfaction with life in general, to control for:
    - Spill-over effects from other domains of satisfaction
    - Concern for other's well-being

#### Table 1

#### Descriptive statistics of sample variables (excluding controls)

	(N = 1	JK 14,563)	Ger (N=5	Germany (N=53,897)		tralia 2,903)
Variables:	M	SD.	M	SD.	M	SD.
Man's satisfaction with household income	5.2	1.1	4.9	1.3	5.6	1.0
Woman's satisfaction with household income	5.3	1.1	5.0	1.3	5.7	1.0
Real equivalised household income (EUR)	33558	19542	33003	19534	29087	17606
Man's weekly hours of housework	5.3	5.0	4.4	5.0	5.9	6.2
Woman's weekly hours of housework	15.3	10.0	16.1	9.6	18.8	13.7
Sample proportions:	Men	Women	Men	Women	Men	Women
employed full-time	90.0%	47.7%	83.3%	31.8%	84.3%	37.0%
employed part-time	3.4%	30.7%	3.2%	38.3%	4.2%	34.7%
inactive	1.6%	17.7%	3.1%	19.7%	2.8%	20.7%
unemployed	2.5%	1.5%	8.3%	8.1%	5.7%	2.2%
long-term disabled	2.6%	2.5%	2.1%	2.1%	3.1%	5.4%

## Differences between our countries

- Average real equivalised household income is somewhat lower in the Australian sample than in the UK's and Germany's.
- Satisfaction with household incomes is lower in Germany and higher in Australia and marginally higher for women in all countries.
- Couples' characteristics are fairly similar across our countries' samples
   differences largely consistent with what we know about their gender regimes
- Most men are employed full-time in all countries while most women are also in employment (full-time or part-time).
  - The UK's employment rate for both sexes, and full-time employment rate for women is higher than Australia's and especially Germany's, though in all countries a significant proportion of women are inactive.
  - Very few individuals are unemployed or long-term disabled, with higher proportions of unemployment in Germany and disability in Australia.
- Women report spending almost three times as long doing housework as men in the UK, with the ratio being higher in Australia and higher still in Germany.
- Difference in gender roles greatest in Germany followed by Australia, UK slightly less most pronounced

#### Part of Table 2

Summary of Fixed Effects Linear Regression Analysis for effects of variables on satisfaction with household income: UK, Germany and Australia

	UK		Germany		Australia	
Variable	C	<b>L</b> <sub>1</sub>	(	$\boldsymbol{\alpha}_1$		<b>L</b> <sub>1</sub>
Equivalised real household income	0.275***		0.419***		0.341***	
	$\mathbf{eta}_{1m}$	$\mathbf{\beta}_{1f}$	$\boldsymbol{\beta}_{1m}$	$\mathbf{\beta}_{1f}$	$\boldsymbol{\beta}_{1m}$	$\mathbf{\beta}_{1f}$
Employed part-time	-0.390***	-0.149***	-0.316***	-0.238***	-0.415***	-0.044
Inactive	-0.402***	-0.239***	-0.356***	-0.401***	-0.455***	-0.085*
Unemployed	-1.389***	-0.402***	-0.687 ***	-0.554***	-0.546***	-0.408***
Disabled	-1.074***	-0.431**	-0.154 ***	-0.247***	-0.064	-0.094*
Hours of housework	-0.019**	-0.005	-0.008 ***	-0.004*	-0.003	0.002
Hours of housework squared	0.001*	0.000	0.000**	0.000	-0.000	-0.000

# **Discussion of Hypothesis 1**

- The coefficients of most of the variables of interest in Table 2 are significant for all countries.
- An increase in equivalised household income has a positive effect on individual satisfaction with it.
- In general, negative effects are found for
  - □ either partner being employed less than full-time
  - □ hours of housework
  - implying a (mostly significant) positive effect for full-time employment or doing less housework.
- The sign of the effects of these variables seem to support their being used to inform future financial expectations, than to set aspirations from social comparisons, confirming Hypothesis 1a rather than 1b.

Table 3

Gender differences in the effects of gender roles variables on satisfaction with household income: UK, Germany and Australia

	UK	Germany	Australia
	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $
Employed part-time	0.241**	0.078	0.371***
Inactive	0.163	-0.046	0.370***
Unemployed	0.987***	0.134***	0.138
Disabled	0.643**	-0.093	-0.030
Hours of housework	0.014	0.004	0.005

Notes: 1) \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

2) Standard errors not shown (available from the authors upon request).

3) For all k,  $\beta_{1mk}$  and  $\beta_{1fk}$  have the same sign (see Table 2)

# **Discussion of Hypothesis 2**

- Hypothesis 2: men's characteristics in traditionally male domains have effects of a greater magnitude than women's on SWHI
  - This hypothesis is confirmed wherever such gendered differences in effects are significant i.e. all significant coefficients in Table 3 are positive.
- Men's less than full-time employment status in general has a negative effect of larger magnitude on satisfaction with household income than women's, though there are variations in the effects of different employment statuses across countries
- In other words, men fulfilling their traditional breadwinner role still seems to provide greater satisfaction with household income, presumably through enhancing expectations for the future

#### Table 4

Summary of Fixed Effects Linear Regression Analyses for effects of variables on relative satisfaction with household income: UK, Germany and Australia

	UK		Germany		Australia		
Variable	$\boldsymbol{\beta}_{2m}$	$\mathbf{\beta}_{2f}$	$\boldsymbol{\beta}_{2m}$	$\boldsymbol{\beta}_{2f}$	$\boldsymbol{\beta}_{2m}$	$\mathbf{\beta}_{2f}$	
Employed part-time	-0.360*	0.202**	-0.155*	0.104**	-0.022	0.164***	
Inactive	0.034	0.308**	-0.084	0.086	-0.125	0.350***	
Unemployed	-0.050	0.371	-0.226***	0.283***	-0.401***	0.599***	
Disabled	0.447	1.046***	-0.013	0.065	-0.014	0.144*	
Hours of housework	0.001	0.007	-0.000	0.007*	-0.002	0.001	
Inactive Unemployed Disabled Hours of housework	0.034 -0.050 0.447 0.001	0.308** 0.371 1.046*** 0.007	-0.084 -0.226*** -0.013 -0.000	0.086 0.283*** 0.065 0.007*	-0.125 -0.401*** -0.014 -0.002	0.350*** 0.599*** 0.144* 0.001	

# **Discussion of Hypothesis 3**

- That any characteristic that works by changing expectations to improve (reduce) SWHI in equation (1) will increase (decrease) the SWHI of the person with that characteristic relative to that of his or her partner
- Table 2 showed that all gender roles affected SWHI by changing expectations, and therefore Hypothesis 3 predicts that their effects on relative satisfaction should be in the same direction as those on SWHI
- All significant variables in Table 4 have the sign that Hypothesis 3 would predict, but which these are varies across countries
- Combining the findings of Tables 3 and 4 we can see that the same male breadwinner role whose fulfillment raises couples' expectations for their household also improves both men's relative benefits from that income.

#### Table 5

Gender differences in the effects of gender roles variables on relative satisfaction with household income: UK, Germany and Australia

	UK	Germany	Australia	
	$\boldsymbol{\beta}_{2m} + \boldsymbol{\beta}_{2f}$	$\boldsymbol{\beta}_{2m} + \boldsymbol{\beta}_{2f}$	$\boldsymbol{\beta}_{2m} + \boldsymbol{\beta}_{2f}$	
Employed part-time	-0.158	-0.051	0.142	
Inactive	0.342	0.002	0.225	
Unemployed	0.321	0.058	0.198	
Disabled	1.493***	0.053	0.130	
Hours of housework	0.008	0.007	-0.002	

Notes: 1) \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

2) Standard errors not shown (available from the authors upon request).

# **Discussion of Hypothesis 4**

- Hypothesis 4 predicted that there would be a gender difference in the impact on relative satisfaction of individual characteristics that relate to traditional gender roles.
- Table 5 shows only one significant gender difference and this is not for any obvious gender role:
  - in the UK a woman's relative access to the benefits of her household income is more affected by being long-term disabled than a man's.
- Hypothesis 4 is not confirmed by our results

### Interpretation

- In all three countries, policies had been or were being implemented that were having some (uneven) effect on gender roles and should therefore that have led to some improvements in women's access to household resources.
- Of these indicators of gender roles, we know the proportion of women working FT has an effect on access to household income:
   this suggests that UK and Australia may have been more successful over this period in raising women's access to household resources
- Our method does not allow us to make direct cross-national comparisons of intrahousehold inequalities
  - e.g. we cannot say that because the employment rate of mothers was lower in Australia than in UK or Germany, Australian mothers had less access to their household resources
- But we can investigate whether different cultures and policy regimes could make gender roles affect access to household resources differently in our three countries

#### Part of Table 2

Summary of Fixed Effects Linear Regression Analysis for effects of variables on satisfaction with household income: UK, Germany and Australia

	UK		Germany		Australia	
Variable	C	<b>L</b> <sub>1</sub>	(	$\boldsymbol{\alpha}_1$		<b>L</b> <sub>1</sub>
Equivalised real household income	0.275***		0.419***		0.341***	
	$\mathbf{eta}_{1m}$	$\mathbf{\beta}_{1f}$	$\boldsymbol{\beta}_{1m}$	$\mathbf{\beta}_{1f}$	$\boldsymbol{\beta}_{1m}$	$\mathbf{\beta}_{1f}$
Employed part-time	-0.390***	-0.149***	-0.316***	-0.238***	-0.415***	-0.044
Inactive	-0.402***	-0.239***	-0.356***	-0.401***	-0.455***	-0.085*
Unemployed	-1.389***	-0.402***	-0.687 ***	-0.554***	-0.546***	-0.408***
Disabled	-1.074***	-0.431**	-0.154 ***	-0.247***	-0.064	-0.094*
Hours of housework	-0.019**	-0.005	-0.008 ***	-0.004*	-0.003	0.002
Hours of housework squared	0.001*	0.000	0.000**	0.000	-0.000	-0.000

# Differences between countries in effects on SWHI (Table 2)

- Coefficients on unemployment for men and disability for both sexes more negative in UK than Germany or Australia
  - Lower benefits, greater scarring in UK?
- Coefficients for women working part-time or being inactive are more negative in Germany than in the UK and, particularly, Australia
  - Despite policy being more supportive of stay at home mothers in Germany
  - Active government support of domestic and caring roles for women in Australia
- Coefficients for men's hours of housework largest in the UK, still significantly negative in Germany, but much smaller in Australia
  - Less of an indication of labour market failure perhaps in Australia (why?)

Table 3

Gender differences in the effects of gender roles variables on satisfaction with household income: UK, Germany and Australia

	UK	Germany	Australia
	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $	$\left \mathbf{\beta}_{1m}\right  - \left \mathbf{\beta}_{1f}\right $
Employed part-time	0.241**	0.078	0.371***
Inactive	0.163	-0.046	0.370***
Unemployed	0.987***	0.134***	0.138
Disabled	0.643**	-0.093	-0.030
Hours of housework	0.014	0.004	0.005

Notes: 1) \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

2) Standard errors not shown (available from the authors upon request).

3) For all k,  $\beta_{1mk}$  and  $\beta_{1fk}$  have the same sign (see Table 2)

# Differences between countries in gendered effects on SWHI (Table 3)

- Much bigger differences between effects of men's and women's working part-time in UK and Australia than in Germany
- Much bigger differences between effects of men's and women's being inactive in Australia than in UK or Germany
- Difference between effects of man's and women's unemployment much bigger in UK than in Australia and Germany
- Difference between effects of man's and women's disability large in UK but insignificant in Australia and in opposite direction in Germany
  - Germany seems less gendered in effects on SWHI than other countries despite more active support of male breadwinner model
- Differences in effects of hours of housework vary in magnitude but none are significant

#### Table 4

Summary of Fixed Effects Linear Regression Analyses for effects of variables on relative satisfaction with household income: UK, Germany and Australia

	UK		Germany		Australia		
Variable	$\boldsymbol{\beta}_{2m}$	$\boldsymbol{\beta}_{2f}$	$\boldsymbol{\beta}_{2m}$	$\boldsymbol{\beta}_{2f}$	$\boldsymbol{\beta}_{2m}$	$\mathbf{\beta}_{2f}$	
Employed part-time	-0.360*	0.202**	-0.155*	0.104**	-0.022	0.164***	
Inactive	0.034	0.308**	-0.084	0.086	-0.125	0.350***	
Unemployed	-0.050	0.371	-0.226***	0.283***	-0.401***	0.599***	
Disabled	0.447	1.046***	-0.013	0.065	-0.014	0.144*	
Hours of housework	0.001	0.007	-0.000	0.007*	-0.002	0.001	

# Differences between countries in effects on relative SWHI (Table 4)

- Relative benefits are affected by
  - □ working part-time
    - More so for both men and women in the UK
    - Reflects poor quality of part-time work in the UK?
  - □ Being inactive
    - For women in Australia and UK
    - Reflects higher benefits in Germany to mothers?
  - □ Being unemployed
    - For both men and women in Germany and Australia
    - Not clear why not in UK: community effect?
  - □ Being disabled
    - Strongly for women in UK, much less strongly for women in Australia
    - Magnitude of effects for men much higher in UK too, but not significant
    - Poorer level of benefits in UK?
  - □ Hours of housework
    - For women in the UK and Germany, though not significant for the UK
    - More acceptance of housework as contribution to household in Australia?

# Conclusions

- Gender roles matter in all countries to access to the benefits of household income
- Changes in gender roles therefore also affect intrahousehold inequalities
  - E.g. UK and Australia's growth of women's FT employment
- Policies interact with culture and attitudes more generally to produce
  - Extent to which men and women fulfil traditional gender roles
  - Effects of these roles on intrahousehold inequalities 41

# Specifically

- In Germany a welfare system designed to let women stay out of labour market, was lagging behind attitudes
  - □ Lee et al (2007) showed gender role attitudes changing faster in Germany than in our other two countries at this time
    - both men and women increasingly believed women should contribute financially
    - even if they still had more traditional ideas about the care of small children
  - But actual practices, at least in terms of FT employment, were not changing so fast
- Thus in Germany 2002-2007:
  - women's were fulfilling more traditional gender roles than in UK or Australia
    - Specifically fewer were in full-time employment
  - in all countries women employed less than full-time gives everyone less SWHI
    - But particularly so in Germany
    - In Germany people lose almost as much SWHI through woman not being in full-time employment as men
  - in all countries women employed less than full-time lose relative benefits from SWHI
    - Somewhat less so in Germany

# More generally

- Policy can affect intra-household inequalities in two ways, by affecting:
  - □ the particular roles that men and women play
  - by affecting how gender roles impact on relative benefits from household income
- Effects on intra-household inequalities are largely indirect:
  - □ Few policies directed at inequality in gender roles
  - □ Even fewer, if any, at intrahousehold inequalities
- Unlikely to be able to pin down differences between countries to particular policies, rather than to:
  - □ policy regime more generally and its direction of change
  - historical underlying differences in cultures and practices w.r.t gender roles

# Consequences may be different from policy intentions

- Germany, the country that most consistently promoted the male breadwinner model, rather than creating it by default (UK), is not clearly better or worse for women's in terms of intra-household inequalities
  - □ Worse in terms of gender roles
  - □ Better in terms of the effects of those roles
- German policies in 2002-7 still resulted in gender roles less favourable to women's access to household income:
  - But may have created frustrations that made these roles less salient in determining relative benefits from that income
- Interesting to investigate what happened subsequently