# **Online Appendix**

Taxes, childcare and gender identity norms

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#### A The cost of norms: A simple numerical illustration.

Using the standard CES properties for the expenditure function, the cost of achieving utility H when preferences are summarized by an elasticity of substitution  $\beta$  is given by

$$K(\beta, H) = \left\{ \sum_{j} a_{j} [P_{j}(1 - \tau_{j})]^{1-\beta} \right\}^{\frac{1}{1-\beta}} H,$$
(A1)

with  $a_m = s^{\beta}$  and  $a_f = (1 - s)^{\beta}$ .

Consider a couple with Leontieff preferences  $(\beta \to 0)$ , an initial home production allocation  $H_j$  and associated opportunity cost  $\sum_j (1 - \tau_j) p_j H_j$ , j = m, f. Following a change in the tax structure, the home production allocation remains unchanged and its opportunity cost rises to

$$\sum_{j} (1 - \tau'_{j}) p_{j} H_{j} = K'(0, H) = H \sum_{j} (1 - \tau'_{j}) p_{j},$$
(A2)

where  $\tau'_i$  represents the new tax structure.

If this couple had instead a higher elasticity of substitution  $\beta > 0$ , the opportunity cost would have risen to  $K'(\beta, H) = \{\sum_j a_j [P_j(1 - \tau'_j)]^{1-\beta}\}^{\frac{1}{1-\beta}} H$ . Given (A2),  $H = K'(0, H) / [\sum_j (1 - \tau'_j) p_j]$ . The loss of disposable income associated with Leontief preferences can thus be expressed as a proportion of total home production expenditure K'(0, H):

$$K'(0,H) - K'(\beta,H) = \left\{ 1 - \frac{\{\sum_{j} a_{j} [P_{j}(1-\tau'_{j})]^{1-\beta}\}^{\frac{1}{1-\beta}}}{\sum_{j} (1-\tau'_{j}) p_{j}} \right\} K'(0,H).$$
(A3)

We evaluate (A3) based on total home production time of a representative couple with dependent children in 2006. Based on full-time equivalent (FTE) earnings from the Swedish Wage Structure Statistics and 251 working days in 2006, FTE daily wages in 2006 were equal to  $P_m = 1480$  and  $P_f = 1160$  SEK. Given the 2007 EITC, these baseline earnings imply  $\tau_m = \tau'_m = 0.516$ ,  $\tau_f = 0.347$  and  $\tau'_f = 0.316$ . We calibrate s using the ratio of the first order conditions (4) and (5), together with the above values of  $P_m$ ,  $P_f$ ,  $\tau_m$ ,  $\tau_f$  and our  $\beta$  estimate for the whole sample (1.6, see Table 3). Home production hours are taken from time-use surveys. Specifically, Table B:7a in Statistics Sweden (2012) reports that men and women with children 0-6 do on average 4.6 and 5.7 hours of home production per day, respectively. Corresponding figures for parents of children 7-17 are 3.3 and 4.1, respectively. Using population weights from registry data, we compute that fathers and mothers do on average 4.0 and 4.9 hours of home production per day, corresponding to 1,460 and 1,788.5 annual hours, respectively. These data imply s = 0.83. We feed these figures into equation (A3) to give the loss of disposable income as a function of  $\beta$ . For example, the Leontief couple would spend an extra 0.24K'(0,H) relative to a couple with  $\beta = 1$ , and an extra 0.34K'(0,H) relative to a couple with  $\beta = 2$ . K'(0,H) represents the daily opportunity cost of home production, as given by (A2). Using the information described above gives K'(0,H) = 1,223 (in 2006 SEK). Thus the Leontief couple would forgo about SEK 294 per working day with respect to the  $\beta = 1$  couple, and SEK 416 with respect to the  $\beta = 2$ couple.

# B Alternative methods to address the issue of observations with zero TPL

To cater for observations with 0 TPL, results reported in the paper are based on the  $\ln(1 + h_{ijt})$  transformation, j = m, f. This Appendix shows that our results are robust to alternative methods to measure the percent change in TPL for observations with zero TPL. One alternative method consists in using the Inverse Hyperbolic Sine (IHS) transformation,  $\ln[h_{ijt} + (h_{iit}^2 + 1)^{0.5}]$ .

The second method, illustrated below, is based on a semi-log specification, as proposed by Chen and Roth (2023). The authors consider the problem of estimating the percent effect of a treatment  $D \in \{0, 1\}$  on an outcome Y = DY(1) - (1 - D)Y(0), where the potential outcomes Y(1) and Y(0) can be zero. The solution proposed consists in estimating an average treatment effect in levels, E(Y(1) - Y(0)), and divide it by the estimated average outcome in the absence of treatment: E(Y(1) - Y(0))/E(Y(0)).

To adapt this solution to our context, consider the specification

$$H_{imt} - H_{ift} = a + b \left( \tilde{\sigma}_{ift} - \tilde{\sigma}_{imt} \right) + \left( u_{imt} - u_{ift} \right), \tag{B1}$$

in which the LHS is a difference in levels and b denotes the associated ITT. To identify the elasticity parameter of interest  $\beta$ , b needs to be divided by an appropriate benchmark.

In our empirical context, two transformations of the dependent variable in (B1) are needed to identify  $\beta$  correctly. First, we take first differences in t to remove couple fixed-effects:

$$\Delta(H_{imt} - H_{ift}) = b\Delta\left(\tilde{\sigma}_{ift} - \tilde{\sigma}_{imt}\right) + \Delta\left(u_{imt} - u_{ift}\right).$$
(B2)

Second, we benchmark the differences across control and treated couples before and after the EITC against the corresponding differences in a period without tax changes, which are included in the error term  $\Delta (u_{imt} - u_{ift})$ . As illustrated in Section 4, this is obtained by defining a residualized dependent variable  $\hat{\Delta}(H_{imt} - H_{ift}) \equiv \Delta(H_{imt} - H_{ift}) - \Delta(H_{imt} - H_{ift}) - M_{ift}$  no reform). Hence, we estimate the following transformed version of (B1):

$$\hat{\Delta}(H_{imt} - H_{ift}) = b\Delta \left(\tilde{\sigma}_{ift} - \tilde{\sigma}_{imt}\right) + \varepsilon_{it} \tag{B3}$$

where  $\varepsilon_{it}$  is noise. We then obtain  $\beta$  by dividing the estimated b by an appropriate benchmark, defined as the average first difference of the home production gap in levels during a period with no tax reform,  $\Delta(H_{imt} - H_{ift}|$  no reform).

Figure B1 and Tables B1-B2 replicate Figure 5, Table 3 and Table 5, respectively, in the main text, using the IHS transformation and the semi-log specifications in turn. Reassuringly, the results obtained with each method are remarkably close to those reported in the text.



Figure B1: Elasticities by cohort – alternative methods to include observations with zero TPL

Notes: The figures plot estimates of  $\beta$ ,  $\beta^+$ , and  $\beta^-$  separately for five cohorts of couples using inverse hyperbolic sine transformation (IHS) and the level-log model to deal with zero TPL. See Appendix B for details. The 2004 and 2005 cohorts belong to the placebo sample, which was not exposed to tax reforms. Simulated tax changes for this sample are calculated using criteria that determine exposure to the 2007 EITC. The 2006, 2007, and 2008 cohorts comprise our working sample. The dependent variable in all estimates is the residualized change in the log TPL gap using the Gelber (2014) described in Section 4. All regressions include the same controls described in the notes to Table 3. Vertical bars represent 95% confidence intervals, with standard errors clustered at the couple level.

	Main Sample 2006, 2007 and 2008 cohorts			Placebo sample 2004 and 2005 cohorts		
	Gelber (2014) (1)	(2) IHS	Level-log (3)	Gelber (2014) (4)	$\begin{array}{c} \text{IHS} \\ (5) \end{array}$	Level-log (6)
Panel A						
$\beta$	$1.635^{***}$	1.949***	1.707***	0.001	0.002	-0.050
	(0.087)	(0.109)	(0.075)	(0.063)	(0.080)	(0.057)
Panel B						
$\beta^+ (\tau_f \downarrow)$	$1.549^{***}$	1.846***	$1.655^{***}$	0.001	0.003	-0.050
	(0.110)	(0.138)	(0.092)	(0.081)	(0.102)	(0.068)
$\beta^- (\tau_m \downarrow)$	$1.836^{***}$	$2.191^{***}$	$1.830^{***}$	0.002	0.000	-0.052
	(0.207)	(0.260)	(0.182)	(0.152)	(0.191)	(0.141)
Row difference	-0.288	-0.345	-0.176	-0.001	0.003	0.003
	(0.256)	(0.321)	(0.221)	(0.189)	(0.237)	(0.169)
N	468,533	468,533	468,533	295,567	295,567	295,567

Table B1: Elasticity of substitution in the main and placebo samples – alternative methods to include observations with zero TPL

Notes: The dependent variable in column 1 is the residualized change in the log TPL gap based on the Gelber (2014) method, in column 2 is the residualized change in the inverse sine hyperbolic (IHS) log transformed TPL-gap based on the Gelber (2014) method, and in column 3 the residualized change in the level TPL-gap based on the Gelber (2014) method using the level-log method described in Appendix B. Columns 4-6 report corresponding placebo specifications. Panel B estimates specification (15) with the same dependent variables and samples as in Panel A. All regressions also control for cohort fixed-effects; virtual income, age fixed effects, education fixed-effects (7 categories), dummy for born in Nordic country, and industry fixed effects (10 categories) for each spouse; municipality fixed-effects (289); fixed effects for the number of children aged 4-11; fixed effects for the age of the youngest child; total days of SPL taken by the couple; share of SPL taken by the mother; fixed effects for the number of grandparents living in the same municipality; share of mothers with children aged 0-11 at each spouse's workplace (and their interaction); marital status. Standard errors are clustered at the couple level and reported in brackets. Significance: \* = 0.1; \*\* = 0.05; \*\*\* = 0.01.

		IHS		Lev	el-log	
Birthplace of spouses:	Nordic	Non-Nordic	Difference	Nordic	Non-Nordic	Difference
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
$\beta$	1.929***	2.210***	-0.281	1.720***	$1.550^{***}$	0.170
	(0.112)	(0.428)	(0.441)	(0.078)	(0.290)	(0.300)
Panel B						
$\beta^+ \ (\tau_f \downarrow)$	1.914***	0.732	$1.183^{*}$	1.719***	0.576	1.143***
-	(0.141)	(0.597)	(0.609)	(0.094)	(0.426)	(0.433)
$\beta^- (\tau_m \downarrow)$	1.931***	4.329***	-2.398***	1.699***	2.946***	$-1.247^{***}$
	(0.273)	(0.787)	(0.828)	(0.194)	(0.498)	(0.532)
Row difference	-0.017	-3.597***	3.580***	0.019	-2.370***	2.390***
	(0.335)	(1.079)	(1.119)	(0.233)	(0.718)	(0.749)
Ν	434,547	33,986		434,547	33,986	

Table B2: Elasticity of substitution by country of origin – alternative methods to include observations with zero TPL

Notes: The dependent variable in columns 1–3 is the residualized change in the inverse sine hyperbolic (IHS) log-transformed TPL-gap based on the Gelber (2014) method, and in columns 4–6, the residualized change in the level TPL-gap based on the Gelber (2014) method using the level-log method described in Appendix B. Panel A estimates are based on specification (14), and Panel B estimates are based on specification (15). Coefficients in columns 1 and 2 are estimated in a single regression, including an interaction between the tax variables and a dummy for both spouses being born in a non-Nordic country. Column 3 reports differences between coefficients in columns 1, 2, 4 and 5. Row 4 reports differences between  $\beta^+$  and  $\beta^$ estimates for each type of couple and the double-difference. All regressions also control for variables listed in the notes to Table 3. Standard errors are clustered at the couple level and are reported in brackets. Significance: \* = 0.1; \*\* = 0.05; \*\*\* = 0.01.

### C Marginal tax rates in Sweden

Labor earnings and capital income are taxed at the individual level. For each spouse in our sample, we obtain the marginal tax rate by combining tax schedules and annual labor gross earnings. The labor earnings variable in the LOUISE register is the same concept used by Swedish tax authorities to define individual tax liabilities.

The marginal tax rate on labor earnings is a function of a proportional municipality tax, a progressive central government tax, a basic deduction, and an EITC (from 2007). In 2006, the municipality tax rate ranges from 28.9% to 34.2% (with a mean of 31.6%) and the central government tax is phased in at 20% for earnings above 306,000 SEK, rising to 25% for labor earnings above 460,600 SEK.<sup>C1</sup> Before taxes are levied on gross earnings, a basic deduction is applied, whose value varies with earnings as shown in Table C1.

Gross labor earnings $(Y)$	Basic deduction (BD)
$0 \le Y < 0.99 \times BA$ $0.99 \times BA \le Y < 2.72 \times BA$ $2.72 \times BA \le Y < 3.11 \times BA$ $3.11 \times BA \le Y < 7.88 \times BA$ $7.88 \times BA \le Y$	$\begin{array}{c} 0.423 \times BA \\ 0.423 + 0.20 \times (Y - 0.99 \times BA) \\ 0.77 \times BA \\ 0.77 \times BA - 0.10 \times (Y - 3.11 \times BA) \\ 0.293 \times BA \end{array}$

 Table C1: Basic deduction 2006-2009

Notes: The table shows how to calculate deductions as a function of gross labor earnings. The base amount (BA) is set each year by the Swedish Government to account for inflation and is equal to 39,700 SEK in 2006, 40,300 SEK in 2007, 41,000 SEK in 2008 and 42,800 SEK in 2009.

An EITC on labor earnings was introduced in 2007 and reinforced in 2008 and 2009.<sup>C2</sup> Table C2 shows details of the EITC design and Figure 2 illustrates the associated changes in the overall tax schedule.

 $<sup>^{\</sup>rm C1}{\rm The}$  lower and upper thresholds in 2007/2008/2009 are 316,700/328,800/367,600 SEK and 476,700/495,00/526,200, respectively.

<sup>&</sup>lt;sup>C2</sup>With additional reinforcements in 2010, 2014, and 2019, outside our sample period.

Gross earnings $(Y)$	EITC
$\frac{\text{Panel A 2007}}{0 \le Y < 0.79 \times \text{BA}}$ $0.79 \times \text{BA} \le Y < 2.72 \times \text{BA}$ $2.72 \times \text{BA} \le Y$	$(Y-BD) \times MT$ $(0.79 \times BA+0.2 \times (Y-0.79 \times BA)-BD) \times MT$ $(1.176 \times BA-BD) \times MT$
$\begin{array}{l} \underline{\text{Panel B 2008}}\\ 0 \leq Y < 0.91 \times \text{BA}\\ 0.91 \times \text{BA} \leq Y < 2.72 \times \text{BA}\\ 2.72 \times \text{BA} \leq Y < 7 \times \text{BA}\\ 7 \times \text{BA} \leq Y \end{array}$	$(Y-BD) \times MT$ $(0.91 \times BA+0.2 \times (Y-0.91 \times BA)-BD) \times MT$ $(1.272 \times BA+0.033 \times (Y-0.72 \times BA)-BD) \times MT$ $(1.413 \times BA-BD) \times MT$
$\underline{Panel C 2009}$ $0 \le Y < 0.91 \times BA$ $0.91 \times BA \le Y < 2.72 \times BA$ $2.72 \times BA \le Y < 7 \times BA$ $7 \times BA \le Y$	$(Y-BD) \times MT$ $(0.91 \times BA+0.25 \times (Y-0.91 \times BA)-BD) \times MT$ $(1.363 \times BA+0.065 \times (Y-2.72 \times BA)-BD) \times MT$ $(1.642 \times BA-BD) \times MT$

Table C2: EITC 2007-2009

Notes: The table presents the design of the Swedish EITC introduced in 2007 and further reinforced in 2008 and 2009. BA is the base amount, BD is the basic deduction, MT is the municipal tax rate and Y gross labor earnings.

## D Analysis on the 1990-91 tax reform

#### D.1 Data and sample

We estimate the impacts of the 1990-91 tax reform on the TPL gap using data from LINDA, a longitudinal dataset covering a 3.35% random sample of the Swedish population, a 20% random sample of the foreign-born population, and their household members. The resulting database covers about 11% of the overall resident population. Given the LINDA sampling framework, we use weights throughout. LINDA combines annual information from tax records, censuses, and other administrative sources, and contains rich information on demographics, income, and benefits.

Besides the smaller sample size, the main difference with respect to the registers we use for our main analysis is that, until 1997, LINDA records TPL payments rather than days. We, therefore, rely on information on TPL payments to obtain TPL days as follows. First, we calculate the amount payable for one day of TPL, based on the replacement rate and the cap. Next, TPL days in a year are obtained as the ratio between annual TPL payments and the calculated daily TPL payment. For 1997, when LINDA records information on both TPL payments and days, we estimate a correlation of 0.94 between the TPL days recorded and those obtained based on benefit calculations.

We use LINDA records for 1988-1991. As for the main analysis, in each baseline year t-1, we select couples in which both parents are eligible for TPL and participate to the labor force. This defines cohort t-1. We then observe changes in tax treatment and TPL for each spouse between year t-1 and year t. A couple may be included in repeated cohorts if it satisfies selection criteria in the corresponding baseline years.

We select married couples in which spouses:<sup>D1</sup>

- Are married and have labor earnings above the price base amount in year t-1.
- Have their youngest child turning 4-10 in year t 1.
- Do not hold shares in a closely held corporation (because pre-reform marginal tax rates were a function of both capital and labor income, see also Gelber, 2014).

Our working sample consists of 49,089 observations that fulfill these criteria. Summary statistics, presented in Table D1, are close to those presented in Table 1 for the main sample. Some discernible differences include the fall in the gender gap in TPL from 3.3 days per year in 1989-91 to 2.5 days in 2006-09, and the rise in the foreign-born population from about 6% to 11%.

#### D.2 The reform

The comprehensive tax reform of 1990-91 introduced radical changes to the Swedish tax system, with the aim to reduce the system's complexity and conform with overall taxation principles prevalent in other Western countries. The reform was implemented in two steps, in 1990 and 1991 – the latter being substantially larger than the former. Changes to the tax schedule were supposed to be revenue-neutral, with a broadened tax base and lower marginal

<sup>&</sup>lt;sup>D1</sup>Unlike in LOUISE, we cannot identify de-facto unions in LINDA.

		Mean	Median	SD
Males:	Age	40.2	41	5.3
	Education $(\%)$	19.1	0	39.3
	Immigrant $(\%)$	6.3	0	24.3
	Labor earnings	194	181.3	71.5
	Benefits	7.2	2.9	13.8
	Marginal tax rate $(\%)$	58.2	61.0	10.3
	Days of TPL	1.9	0.7	3.6
Females:	Age	37.7	38	4.8
	Education $(\%)$	15.6	0	36.3
	Immigrant $(\%)$	6.0	0	23.8
	Labor earnings	107.2	102.7	40.6
	Benefit payments	22.9	18.6	14.7
	Marginal tax rate $(\%)$	44.6	42.5	8.4
	Days of TPL	5.2	3.2	6.8
Couples:	No. of children aged 4–10	1.4	1	0.6
	Age of youngest child	6.9	7	2.0
	Male-female gap in taxes $(\%)$	13.5	14.0	12.1
	Combined days of TPL	7.1	4.8	8.3
	Male-female gap in TPL	-3.3	-1.8	7.1
Share couples with:	$\mathrm{TPL}_m + \mathrm{TPL}_f = 0$		0.16	
	$\mathrm{TPL}_m = \mathrm{TPL}_f > 0$		0.03	
	$\mathrm{TPL}_m < \mathrm{TPL}_f$		0.60	
	$\mathrm{TPL}_m > \mathrm{TPL}_f$		0.22	
Observations	1989 cohort		23,966	
	1990 cohort		$25,\!123$	
	Total		49,089	

Table D1: Summary statistics for the LINDA sample

Notes: The table summarizes couples' characteristics as of year t - 1. All monetary values are expressed in thousand SEK. "Education" denotes the percentage of individuals with two years or more of post-secondary education. Benefits include SPL payments, TPL payments, sickness benefits, care allowance, training allowance, unemployment benefits, and rehabilitation compensation.

income tax rates (see also Agell et al., 1998 and Gelber, 2014 for a detailed description of the reform).

Figure D1 describes the pre- and post-reform tax schedules in correspondence of a (flat) municipal tax rate of 31%, also encompassing various deductions. The reform cut marginal tax rates across the whole distribution of earnings, especially so for mid- and high-earners. The top marginal tax rate fell from 76% to 51%.

Figure D2 illustrates the resulting distribution of changes in the tax gap between husbands and wives, according to their respective baseline earnings. Given the nature of the 1990-91 reform, the overall distribution of tax changes is much broader than in the 2007-2009 EITC reforms. In 1991, 50% of couples saw a change in their simulated tax gap of at least 8.2 percentage points (in either direction), against a median value of zero in 2007-09 (see Figure 3). As anticipated in Section 3.3, large tax cuts make it more likely that the zero lower bound for TPL becomes binding, with consequences for the estimated elasticity of substitution across spouses.



Figure D1: Changes in the tax schedule, 1990-91

Notes: Marginal taxes are obtained based on a 31% municipal tax rate. Labor earnings are expressed in thousand SEK.





Notes: The histogram represents the distribution of changes in the simulated male-female tax gap induced by the 1990-91 tax reform. Source: LINDA.

#### D.3 Results

Table D2 shows regression results for the elasticity of substitution in spousal TPL, based on specification (14) of the main text. Column 1 in Panel A yields an estimate of 0.222, which is highly significant, but more than 7 times smaller than the corresponding estimate for the main sample of Table 3. This difference could in principle conflate genuine changes in substitutability over time (possibly related to the evolution of norms) and the role of optimization frictions, as the large tax cuts make the constraint of non-negative TPL more likely to be binding, limiting the possibilities of substitution.

We investigate this possibility by restricting the sample to subsets of couples with progressively smaller changes in the simulated net tax share gap, from up to 50% in column 2, down to 5% in column 5. The elasticity estimate rises monotonically with the tightness of the selection criteria, reaching about 1.1 in column 5, where the distribution of changes in the tax gap is very similar to the distribution generated by the 2007-09 EITC (between +/-5.3%). In so far as the sample in column 2 of Table 3 and the sample in column 5 of Table are comparable, we find that the elasticity of substitution in spousal TPL has risen from about 1.1 in 1989-91 to about 1.6 in 2006-09. The rising importance of economic incentives is also consistent with the descriptive evidence shown in Figure 4, on the relationship between the TPL gender gaps and the wife's share of household income, and how this has evolved over time.

Panel B in Table 6 shows elasticity estimates under asymmetric adjustment. Similarly, as in Panel A, all estimates rise monotonically with the tightness of the selection criteria.

In addition, only  $\beta^-$  estimates, reflecting the reallocation of TPL following a cut in the husband's tax rate, are significantly different from zero, while the  $\beta^+$  estimates never reach standard significance levels. This is possibly due to our limited power to identify the reaction of spousal TPL following a cut in the wife's tax rate, which is a relatively rare event in our sample, affecting only 17.5% of couples (as the 1990-91 reform mostly affected high-earners).

	N	ΓS variatio	on: $\Delta(\tilde{\sigma}_{ift}$	$- \tilde{\sigma}_{imt}$ ) ra	nge
	Overall (1)	+/- 0.5 (2)	+/- 0.3 (3)	+/- 0.1 (4)	+/-0.05 (5)
Panel A					
$\beta$	0.222***	$0.224^{***}$	0.230***	$0.684^{***}$	1.080**
	(0.051)	(0.052)	(0.054)	(0.208)	(0.438)
<u>Panel B</u>					
$\beta^+$	0.084	0.088	0.154	0.368	1.119
	(0.121)	(0.124)	(0.137)	(0.446)	(0.922)
$\beta^{-}$	$0.272^{***}$	$0.273^{***}$	$0.256^{***}$	0.840***	$1.063^{*}$
	(0.066)	(0.067)	(0.070)	(0.273)	(0.547)
Ν	49,088	49,016	47,838	27,356	20,793

Table D2: Varying elasticities with different NTS-variation

Notes: This table displays results for subsets of couples with progressively smaller changes in the simulated tax change. The dependent variable in all regressions is the residualized change in the log TPL gap based on the Gelber (2014) method. Panel A estimates specification (14)) and panel B specification (15). All regressions control for cohort fixed-effects; age fixed effects, education fixed-effects (7 categories), dummy for born in Nordic country, and industry fixed effects for each spouse; municipality fixed-effects; fixed effects for the number of children aged 4-11; fixed effects for the age of the youngest child. Standard errors are clustered at the couple level and reported in brackets. Significance: \* = 0.1; \*\* = 0.05; \*\*\* = 0.01.

# **E** Auxiliary tables and figures

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Panel A: Base year $t-1$	Combined TPL $H \rightarrow H_{c}$	TPL gap $H = H_{c}$	$\log \text{TPL gap}$
By age of youngest child	$m + m_f$	$II_m - II_f$	$n_m - n_f$
Four	10.52	-3.39	-0.59
Five	9.09	-3.10	-0.58
Six	7.48	-2.61	-0.55
Seven	6.26	-2.27	-0.53
Eight	5.48	-2.07	-0.50
Nine	4.77	-1.82	-0.46
Ten	3.71	-1.51	-0.41
Panel B: Change from $t - 1$ to $t$	Cha	nge in log TPI $\Delta(h_m - h_f)$	
By gender		_(********)	
(1) Male		-0.06	
(2) Female		-0.08	
Gap (1)-(2)		0.02	
By share of household income			
(1) Main earner		-0.06	
(2) Secondary earner		-0.08	
Gap (1)-(2)		0.02	
By share of TPL			
(1) Main TPL provider		-0.22	
(2) Secondary TPL provider		0.08	
Gap (1)-(2)		-0.31	
N		295,567	

#### Table E1: TPL use before 2007

Notes: The sample includes the 2004 and 2005 cohorts, selected on the same criteria as cohorts in the main sample (see Section 3.1 for details). t-1 and t refers to 2004 and 2005 for the 2004 cohort and to 2005 and 2006 for the 2005 cohort. Panel A displays the average of couples' combined TPL days and the corresponding male-female gap (in levels and logs) by age of youngest child in year t-1. Panel B displays the average change from year t-1 to t in log TPL by gender, shares of household income and shares of TPL, and the corresponding gaps. Main earners and main TPL providers are defined based on t-1 data (when spouses provide identical TPL days, the wife is chosen as the main provider).

Group	Countries
1	Sweden
2	Finland
3	Denmark
4	Iceland and Norway
5	Bosnia and Herzegovina
6	Croatia, Macedonia, Slovenia and Yugoslavia
7	Poland
8	Ireland and United Kingdom
9	Germany
10	Greece, Italy, Malta, Monaco, Portugal, San Marino and Spain
11	Estonia, Latvia and Lithuania
12	Albania, Armenia, Azerbajdzjan, Belarus, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Moldavia, Romania, Russia, Soviet Union, Tajikistan, Turkmenistan, Ukraine and Uzbekistan Czecheslovskia, Hungary and Slovskia
13	Andorra Austria Bolgium France Lichtenstein Luxembourg Netherlands and Switzerland
14	Canada and the United States
14	Antique Anguille Pehemes Perhades Perhude Pelize Ceste Pice Cube Deminice Deminice
15	Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, St Kitts and Nevis, St Lucia and St Vincent
16	Chile
17	Argentina, Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela
18	Djibouti, Eritrea, Ethiopia, Somalia and Sudan

# Table E2: Country grouping in register data

Continued from previous page.				
Group	Countries			
19	Algeria, Bahrain, Cyprus, Egypt, Gaza, Israel, Jordan, Kuwait, Lebanon, Morocco, Palestine, Qatar, Saudi Arabia, South Yemen, Syria, Tunisia, United Arab Emirates and Yemen			
20	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cap Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zanzibar and Zimbabwe			
21	Iran			
22	Iraq			
23	Turkey			
24	China, Japan, North Korea and South Korea			
25	Burma, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam			
26	Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, India, Maldives, Mongolia, Oman, Pakistan, Sri Lanka			
27	Australia, Fiji, Kiribati, Micronesia, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands and Vanuatu.			

Notes. The table displays the country grouping available in the database LOUISE.



Figure E1: Differences in gender norms indicators between Nordic and non-Nordic couples

Notes: The bars represent alternative indicators of gender norms for Nordic couples (in which both spouses are born in Sweden, Norway, Finland, Denmark, or Iceland) and the rest of the sample (non-Nordic). All indicators are defined such that *higher values correspond to higher gender equality.* WVS1: % of respondents in the WVS (waves 5-7) who do not agree with the statement "When job are scarce, men should have more right to a job than women." WVS2: % of respondents in the WVS (waves 6-7) who do not agree with the statement "When a mother works, the children suffer." GGGI: equal to 100 minus the Global Gender Gap index, capturing gender gaps in economic participation and opportunities, educational attainment, health, survival, and political empowerment; ranging between 0 "most unequal environment" and 100 "most equal environment" (source: 2016 WEF Global Gender Gap Report; 2018 for Iraq). SIGI: equal to 100 minus the Social Institution and Gender Index, capturing discriminatory social institutions, aggregating sub-scores that relate to women's discrimination in the family, restricted physical integrity, restricted access to productive and financial resources, and restricted civil liberties; ranging between 0 "most discriminatory environment" and 100 "least discriminatory environment" (source: OECD, 2014). FLFP: ratio of female to male labor force participation rate (x100) (source: World Bank, 2011). GDP: GDP per head, in thousands USD (source: World Bank, 2011).