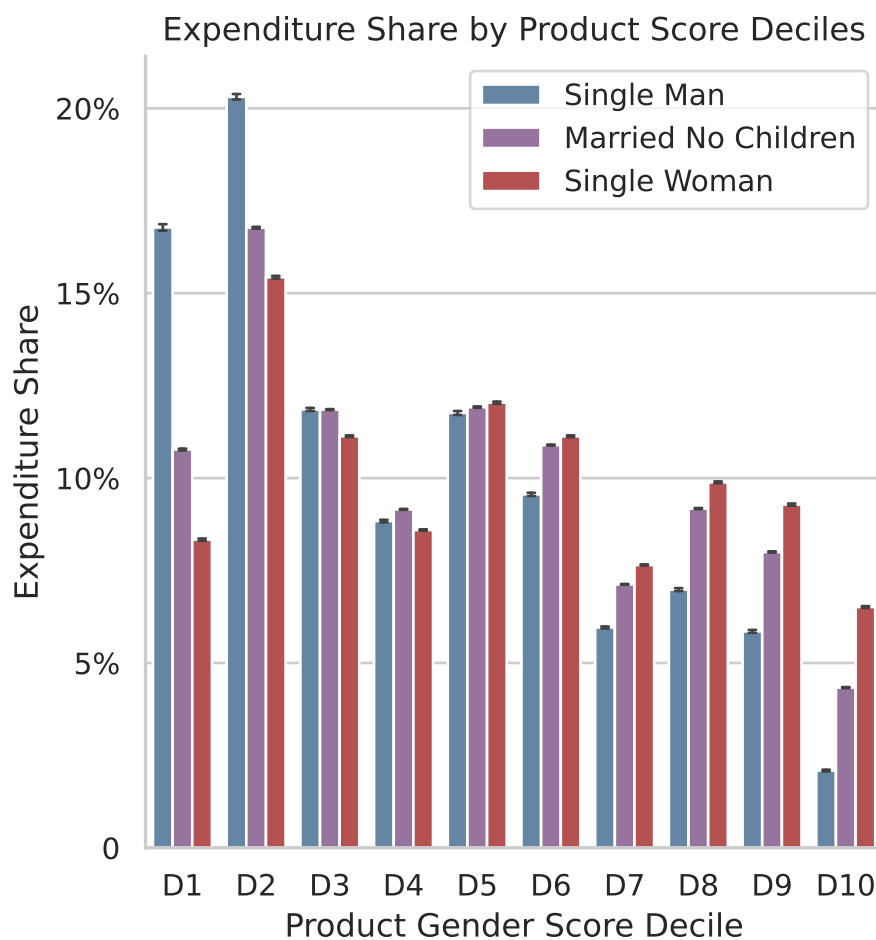


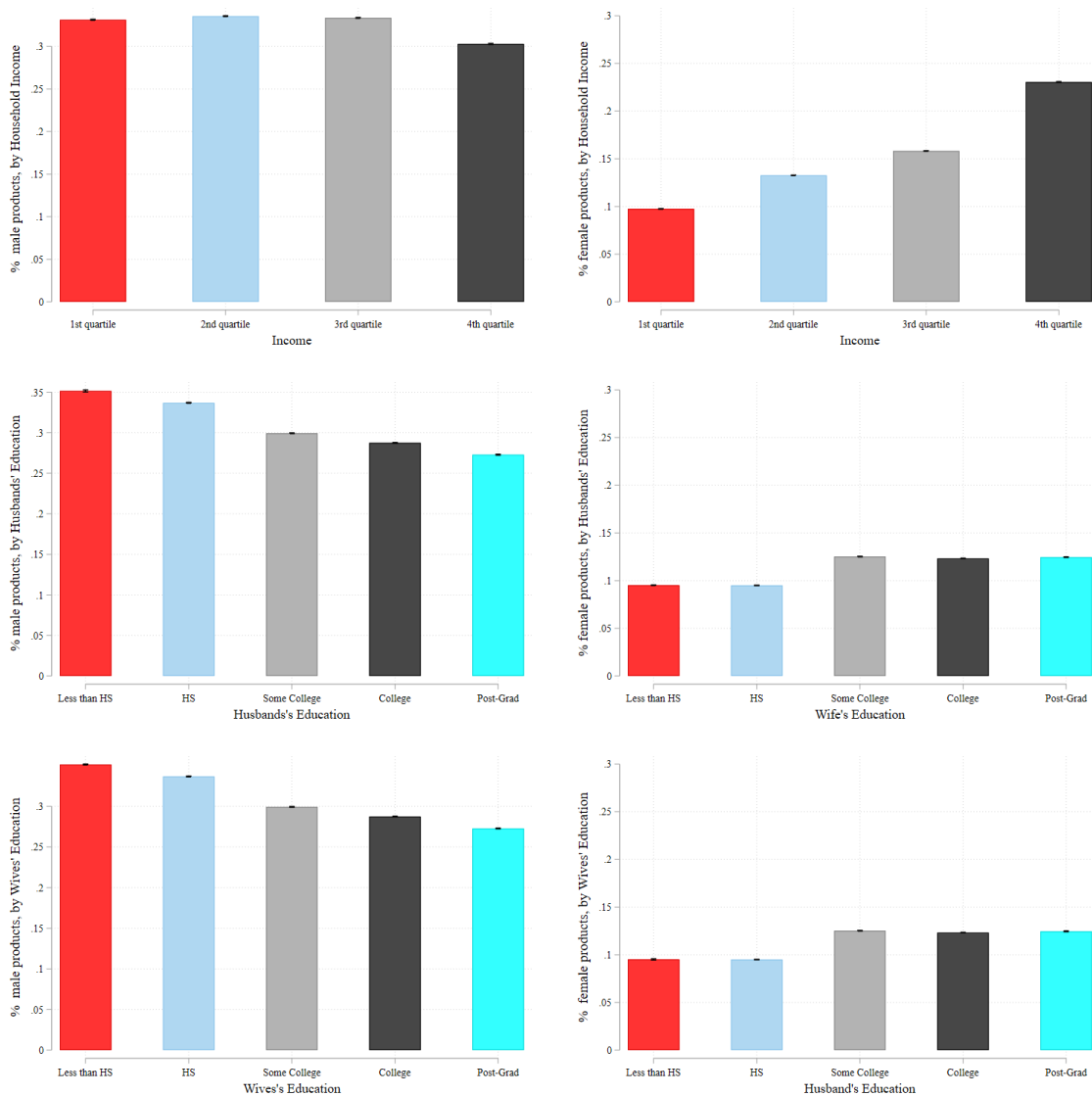
Appendix

Figure A.1: Genderness of Consumption



Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). The Y-axis reports households' expenditure share on products across the different deciles of gender scores on the X-axis.

Figure A.2: Genderness of Consumption by SES, Score Calculated Separately by Income/Education Groups



Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). The figure plots the share of total expenditure spent on prevalently male/female products by SES (income/education) groups.

Table A.1: Robot Exposure and Genderness of Consumption, OLS

	(1)	(2)	(3)	(4)	(5)	(6)
Robot exposure	-23.138*** (6.554)	-21.711*** (6.366)	0.002** (0.001)	0.001** (0.001)	-0.003** (0.001)	-0.002** (0.001)
Observations	397,344	397,344	397,344	397,344	397,344	397,344
R-squared	0.000	0.000	0.000	0.000	0.000	0.000
Mean of Dep. Var.	535.4	535.4	0.135	0.135	0.269	0.269
std. dev.	686	686	0.0733	0.0733	0.100	0.100
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Time-varying controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). Columns 2, 4, and 6 include time-varying controls for household income (quartiles), wife's and husbands' occupation, wife's and husband's education, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.2: Robot Exposure and Genderness of Consumption, 2SLS Estimates, Overall Gender Score

	(1)	(2)	(3)	(4)	(5)	(6)
	Gender gap in expenditure		Share spent on prevalently female products		Share spent on prevalently male products	
Robot exposure	-16.874*	-16.154*	0.001*	0.001*	-0.002	-0.001
	(9.050)	(9.039)	(0.001)	(0.001)	(0.001)	(0.001)
Observations	397,344	397,344	397,344	397,344	397,344	397,344
Mean of Dep. Var.	647.2	647.2	0.123	0.123	0.279	0.279
std. dev.	718.2	718.2	0.0654	0.0654	0.0973	0.0973
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Time-varying controls	No	Yes	No	Yes	No	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). The gender score used to classify products is computed over the overall sample of households, rather than separately by industry (NACE) or demographic subgroup. All estimates include household and year fixed effects, and specific time trends for areas categorized into the first, second, third, and fourth quartiles based on the share of the electronics sector as of 1990. Columns 2, 4, and 6 include time-varying controls for household income (quartiles), wife's and husbands' occupation, wife's and husband's education, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. * p<0.1; ** p<0.05; *** p<0.01

Table A.3: Robot Exposure and Genderness of Consumption, Alternative Index Scores

	(1)	(2)	(3)	(4)	(5)	(6)
	Gender score calculated separately by education		Gender score calculated separately by income quartile		Share spent on	
	in expenditure	Share spent on	Share spent on	Gender gap	Share spent on	Share spent on
		prevalently	prevalently	in expenditure	prevalently	prevalently
		male products	female products		male products	female products
Panel A: Robot exposure						
Robot exposure	-17.654** (8.106)	-0.001 (0.001)	0.002** (0.001)	-19.158** (7.746)	-0.002* (0.001)	0.003*** (0.001)
Observations	397,344	397,344	397,344	397,344	397,344	397,344
Mean of Dep. Var.	767.1	0.293	0.120	665.8	0.314	0.147
std. dev.	726.1	0.104	0.0705	758.3	0.105	0.0834
Panel B: Exposure to Fracking						
Exposure to fracking	146.106* (83.885)	0.048** (0.019)	-0.007 (0.008)	206.479** (81.859)	0.043** (0.020)	-0.019** (0.009)
Observations	8,635	8,635	8,635	8,635	8,635	8,635
Mean of Dep. Var.	864.1	0.324	0.125	677.8	0.340	0.148
std. dev.	671.7	0.111	0.0728	669.5	0.110	0.0808
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). All estimates include household and year fixed effects (Panels A and B), and specific time trends for areas categorized into the first, second, third, and fourth quartiles based on the share of the electronics sector as of 1990 (Panel A). Standard errors adjusted for clustering at the commuting zone level are in parenthesis. In Panel A, scores are calculated separately by educational groups (low-skilled and high-skilled) to account for differences in consumption patterns across educational subgroups. In Panel B, scores are calculated separately by household income quartile to account for differences in consumption patterns across income subgroups. * p<0.1; ** p<0.05; *** p<0.01

Table A.4: Robot exposure - Effects on lagged outcomes

Dependent variable at:	(1) $t-1$	(2) $t-2$	(3) $t-3$	(4) $t-4$	(5) $t-5$
Panel A: Robot exposure					
Robot exposure	-8.832 (5.382)	-4.054 (5.893)	0.691 (7.159)	1.865 (7.455)	5.370 (8.602)
Observations	300,979	246,887	203,336	167,194	136,872
Mean of Dep. Var.	525.6	513.6	503.9	493.1	482.8
std. dev.	684.9	686.4	689.9	692.5	695.2
Panel B: Exposure to fracking among low-skilled under the age of 40					
Exposure to fracking	54.176 (91.385)	50.686 (160.608)	-108.300 (95.266)	-132.921 (175.461)	13.574 (187.162)
Observations	5,013	3,130	1,977	1,240	773
Mean of Dep. Var.	635.9	634.7	628.9	597.1	592.9
std. dev.	652.2	661.7	653	628.9	638.6
Household FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). The dependent variables in columns 1-5 are the lagged values of the gender gap in expenditure. All estimates include household and year fixed effects. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.5: Robot and Fracking Exposure and Genderness of Consumption, Alternative Definitions

	Gender score based on 2004–2005 consumption		Gender score based on low-exposure areas			
	(1)	(2)	(3)	(4)	(5)	(6)
	Gender gap in expenditure	Share spent on prevently female products	Share spent on prevently male products	Gender gap in expenditure	Share spent on prevently female products	Share spent on prevently male products
Panel A: Effect of Robot Exposure						
Robot exposures	-29.639*** (6.826)	0.004*** (0.001)	-0.001 (0.001)	-23.560*** (7.417)	0.002*** (0.001)	-0.002* (0.001)
Observations	397,347	397,347	397,347	371,630	371,630	371,630
Mean of Dep. Var.	401.5	0.171	0.272	701.5	0.133	0.304
std. dev.	623.4	0.0695	0.0820	685	0.0669	0.0890
Panel B: Effect of Fracking Exposure						
Exposure to fracking	151.543* (90.541)	-0.024* (0.013)	0.025* (0.014)	118.209 (81.836)	-0.016* (0.009)	0.028* (0.016)
Observations	8,639	8,639	8,639	8,639	8,639	8,639
Mean of Dep. Var.	440.5	0.167	0.290	576.5	0.130	0.289
std. dev.	533.1	0.0666	0.0834	572.2	0.0637	0.0888
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes - Data are from the NielsenQ Homescan panel (2004–2020). Each panel reports effects on the gender gap in consumption. Columns (1)–(3) define gendered products based on 2004–2005 consumption patterns. Columns (4)–(6) define gendered products using consumption in areas with low exposure (to robots in Panel A, to fracking in Panel B). Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01.

Table A.6: Robot Exposure and Genderness of Consumption, by Education of the Husband (2SLS)

	(1)	(2)	(3)	(4)
	Low-Skilled	High-Skilled	Low-skilled	High-skilled
Robot exposure	-13.569 (9.837)	-21.370* (11.192)	-13.415 (9.784)	-18.954* (10.972)
Observations	238,885	145,120	238,885	145,120
Mean of Dep. Var.	577.5	480	577.5	480
std. dev.	703.2	647	703.2	647
Household FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Time-varying controls	No	No	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). We define low-skilled households as those where the husband has no college education, and high-skilled households as those where the husband has at least some college education. All estimates include household and year fixed effects, and specific time trends for areas categorized into the first, second, third, and fourth quartiles based on the share of the electronics sector as of 1990. Columns 3 and 4 include time-varying controls for household income (quartiles), wife's and husbands' occupation, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.7: Exposure to Fracking and Genderness of Consumption, Overall Gender Score

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Gender gap in expenditure		Share spent on prevalently female products		Share spent on prevalently male products	
Panel A: Overall sample						
Exposure to fracking	8.544 (16.352)	4.644 (16.562)	-0.002 (0.001)	-0.002 (0.001)	0.002 (0.003)	0.001 (0.003)
Observations	413,025	413,025	413,025	413,025	413,025	413,025
Mean of Dep. Var.	643	643	0.122	0.122	0.280	0.280
Std. Dev.	711	711	0.0650	0.0650	0.0972	0.0972
Panel B: Low-Skilled Under 40						
Exposure to fracking	244.442*** (91.714)	226.312*** (74.062)	-0.022** (0.009)	-0.018** (0.008)	0.055*** (0.019)	0.054*** (0.015)
Observations	8,639	8,635	8,639	8,635	8,639	8,635
Mean of Dep. Var.	623.3	623.3	0.130	0.130	0.303	0.303
Std. Dev.	634.7	634.5	0.0661	0.0661	0.0997	0.0996
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Time-Varying controls	No	Yes	No	Yes	No	Yes

Notes - Data are drawn from the NielsenIQ Home-scanner data (2004-2020). Low-skilled households are defined as couples where the husband has no college education; high-skilled households are defined as couples where the husband has at least some college education. Columns 2, 4, and 6 include time-varying controls for household income (quartiles), wife's and husbands' occupation, wife's and husband's education, age of members of the households, and relative prices of prevalently female and male goods (top 20% according to the gender score product index). Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.8: Effects of Robot Exposure and Fracking on Marital and Fertility Behavior

D.V. for	(1) Married	(2) Cohabiting	(3) Divorce	(4) Number of children
Panel A: Robot exposure				
Robot exposure	-0.022*** (0.007)	0.004 (0.004)	0.019*** (0.004)	-0.038** (0.018)
Observations	914,604	914,604	914,604	914,604
Mean of Dep. Var.	0.630	0.0283	0.149	0.590
std. dev.	0.483	0.166	0.356	0.988
Panel B: Exposure to fracking				
Exposure to fracking	0.018 (0.016)	-0.003 (0.007)	-0.004 (0.008)	0.134* (0.070)
Observations	49,776	49,776	49,776	49,776
Mean of Dep. Var.	0.842	0.0450	0.0427	1.424
std. dev.	0.365	0.207	0.202	1.271
Commuting zone FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). All estimates include commuting zone and year fixed effects (Panel A and B), and specific time trends for areas categorized into the first, second, third, and fourth quartiles based on the share of the electronics sector as of 1990 (Panel A). Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.9: Robot Exposure and Genderness of Consumption

Sample:	(1) Cohabiting or Married	(2) Married	(3) Entered as married or cohabiting	(4) Always married or cohabiting	(5) Married or cohabiting within sample
Panel A: Gender Gap in Expenditure					
Robot exposure	-19.456** (7.583)	-19.251** (7.658)	-16.398* (9.540)	-23.848*** (8.582)	-25.310*** (7.967)
Observations	397,344	377,779	330,713	339,278	327,395
Mean of Dep. Var.	535.4	533.5	509.6	538.6	340.2
std. dev.	686	681.5	668.9	679	658.9
Panel B: Share Spent on Prevalently Female Products					
Robot exposure	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002** (0.001)
Observations	397,344	377,779	330,713	339,278	327,395
Mean of Dep. Var.	0.135	0.135	0.136	0.135	0.147
std. dev.	0.0733	0.0725	0.0738	0.0719	0.0942
Panel C: Share Spent on Prevalently Male Products					
Robot exposure	-0.003** (0.001)	-0.003* (0.001)	-0.004*** (0.001)	-0.004** (0.002)	-0.006*** (0.002)
Observations	397,344	377,779	330,713	339,278	327,395
Mean of Dep. Var.	0.269	0.267	0.268	0.268	0.269
std. dev.	0.100	0.0989	0.100	0.0986	0.125
Household FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Time-Varying controls	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). All estimates include household and year fixed effects, and specific time trends for areas categorized into the first, second, third, and fourth quartiles based on the share of the electronics sector as of 1990. All estimates include time-varying controls for household income (quartiles), wife's and husbands' occupation, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.10: Fracking Exposure and Genderness of Consumption

Sample:	(1) Cohabiting or Married	(2) Married	(3) Entered as married or cohabiting	(4) Always married or cohabiting	(5) Married or cohabiting within sample
Panel A: Gender Gap in Expenditure					
Exposure to fracking	175.950* (98.920)	93.307 (80.897)	88.035 (95.759)	47.259 (86.630)	340.204** (161.810)
Observations	8,635	7,216	5,577	6,960	4,322
Mean of Dep. Var.	533.6	516.9	520.5	527.9	603.3
std. dev.	637.9	618.5	626.5	629.3	645.2
Panel B: Share Spent on Prevalently Female Products					
Exposure to fracking	-0.018 (0.013)	-0.009 (0.011)	-0.010 (0.013)	-0.004 (0.011)	-0.029 (0.019)
Observations	8,635	7,216	5,577	6,960	4,322
Mean of Dep. Var.	0.145	0.146	0.147	0.146	0.121
std. dev.	0.0792	0.0780	0.0794	0.0792	0.0823
Panel C: Share Spent on Prevalently Male Products					
Exposure to fracking	0.034** (0.015)	0.015 (0.011)	0.014 (0.013)	0.021 (0.014)	0.066** (0.030)
Observations	8,635	7,216	5,577	6,960	4,322
Mean of Dep. Var.	0.295	0.288	0.291	0.292	0.339
std. dev.	0.105	0.101	0.103	0.103	0.140
Household FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). Standard errors adjusted for clustering at the commuting zone level are in parenthesis. All estimates include time-varying controls for household income (quartiles), wife's and husbands' occupation, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. *p<0.1; **p<0.05; ***p<0.01

Table A.11: Marital behavior and Genderness of Consumption

	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A: Divorce and Consumption					
	Gender gap in expenditure Women	Men	Share of prevalently female goods Women	Men	Share of prevalently male goods Women	Men
	Panel A: Divorce and Consumption					
Divorced	-121.240*** (31.844)	28.088 (27.081)	0.009*** (0.003)	-0.010*** (0.004)	-0.018*** (0.004)	0.018*** (0.005)
Observations	616,655	576,820	616,655	576,820	616,655	576,820
Mean of Dep. Var.	555.1	605.6	0.135	0.130	0.274	0.282
std. dev.	683.1	679	0.0747	0.0713	0.101	0.103
	Panel B: Marital Behavior and Consumption					
Married	156.516*** (22.868)	44.025* (23.819)	-0.016*** (0.003)	0.006** (0.003)	0.019*** (0.003)	-0.014*** (0.005)
Observations	653,620	598,806	653,620	598,806	653,620	598,806
Mean of Dep. Var.	528.2	604.1	0.138	0.129	0.271	0.285
std. dev.	680.5	677.3	0.0769	0.0724	0.102	0.107
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). Panel A focuses on individuals who report being divorced and living alone or being married at any point during the panel. Panel B focuses on individuals who were living alone and not divorced, compared to when they were married. All estimates controls for deciles of household expenditure. All estimates include time-varying controls for household income (quartiles), wife's and husbands' occupation, age of members of the households, and relative prices of prevalently female and male goods. standard errors adjusted for clustering at the commuting zone level are in parenthesis. * p<0.1; ** p<0.05; *** p<0.01

Table A.12: Fertility and Genderness of Consumption Among Cohabiting or Married Couples

	(1)	(2)	(3)	(4)	(5)	(6)
	Gender gap in expenditure	Share of prevalently female goods	Share of prevalently male goods	Gender gap in expenditure	Share of prevalently female goods	Share of prevalently male goods
first child	23.265** (11.758)	-0.002 (0.001)	0.003* (0.001)			
# of children				50.408*** (5.901)	-0.003*** (0.001)	0.005*** (0.001)
Observations	576,188	576,188	576,188	576,188	576,188	576,188
R-squared	0.000	0.000	0.000	0.001	0.000	0.001
Mean of Dep. Var.	602	0.132	0.279	602	0.132	0.279
std. dev.	683.2	0.0714	0.101	683.2	0.0714	0.101
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Time-Varying Controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes - Data are drawn from the NielsenIQ Homes-scanner data (2004-2020). This analysis focuses on cohabiting or married couples. All estimates include time-varying controls for household income (quartiles), wife's and husbands' occupation, age of members of the households, and relative prices of prevalently female and male goods. Standard errors adjusted for clustering at the commuting zone level are in parenthesis. * p<0.1; ** p<0.05; *** p<0.01