Who is happier: Housewife or working wife?

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5 August 2012

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Abstract

Earlier research found no difference in the happiness between a housewife and a working wife. However, there now is the expectation that a difference in their happiness exists today given the increase in the labor participation of women over the years. This paper revisits the debate using data from the 2000s. For the upper- and low-income economies, there is still no difference in the happiness between a housewife and a working wife. In contrast, results for the middle-income economies clearly show that a part-time working wife is happier than a housewife and that both part-time working wife and housewife are happier than a full-time working wife.

Keywords: Housewife; working wife; happiness; life satisfaction

1. INTRODUCTION

One of the unsettled debates in subjective well-being (SWB) research concerns the happiness of married women vis-à-vis their employment status. Studies in the 1970s and the 1980s presented opposing findings on the matter. Campbell et al. (1976), Wright (1978), Freudiger (1983), Benin

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and Nienstedt (1985), and Plutzer (1988) found no difference in the happiness of married women. Contrary findings were presented by Ferree (1976, 1984), Stokes and Peyton (1986), and Chen and Lin (1992). However, there is now the expectation that a difference in happiness exists today given that there is an increase in the labor participation of women over the years. Changes in the gender roles can also be another factor to argue for the presence of a difference in the happiness between a housewife and a working wife to exist (c.f., Boye 2009).

Interesting, though, recent evidence on the happiness problematic does not seem to suggest that a resolution to the debate is on hand. Treas et al. (2011), for example, found that a housewife is slightly happier compared to a full-time working wife (and a wife with part-time work has no advantage either), albeit Haller and Hadler (2005) found no evidence of a difference in happiness if SWB is measured in terms of life satisfaction. Booth and van Ours (2008, 2009, 2010) and Michon (2007), in contrast, found that a wife who takes part-time work is happier than the one who takes full-time work or one who decides to be a housewife because of family circumstances (Iglehart 1980; Granrose 1984; Granrose and Kaplan 2006). Meanwhile, Blanchflower and Oswald (1998) gave evidence that a self-employed wife is happier than a housewife despite of the hazards concomitant to self-employment like lower salaries and more hours spent at work.

Notwithstanding the unsettled nature of the debate, this paper is another attempt to grapple with this long-standing of the happiness of married women through the examination of a dataset from the 2000s. Instead of presenting a hypothesis, the paper simply raises the happiness problematic in an interrogative statement—"Who is happier between a housewife and a working wife?"—and lets the empirical analysis supply an answer. Part 2 discusses the methodology. Then, the findings are presented in Part 3. The last part concludes the discussion.

2. METHODOLOGY

2.1 Regression Model

SWB is a personal consideration of how one's own state of being is turning out well. The state of being is known by simply asking the person about it. It is a natural activity for people to classify their own experiences as they go about their lives using labels like happy, not happy, etc. in the same way that the ordering things, events, scenarios, etc. is a natural activity that people do everyday. The self-reported *SWB* is deemed truthful because there is no incentive or reason to do otherwise.

All things the same, the "declared" *SWB* is a monotonic transformation of the "underlying" well-being (SWB*). Algebraically, $SWB = h[U(\cdot)]$, where $U(\cdot)$ is *SWB**. The expression implies $SWB_2 > SWB_1$ iff $U_2(\cdot) > U_1(\cdot)$. For various reasons (e.g., cognitive biases, cultural predispositions, etc.), $SWB^* \neq SWB$ and thus, $SWB^* - SWB = e$, where e is an error term. Presumably, e stems from the "translation" from what is internal (i.e., SWB*) to the person to what is declared (i.e., SWB) by the person. Presumably, e is also homoscedastic. Therefore, a sufficiently large dataset can compensate for the discrepancy between *SWB* and *SWB** in order to approximate $SWB \equiv SWB^*$.

Consequently, it is possible to state the SWB function in a general form like $SWB = h(Z_i, Y, \boldsymbol{X})$. In the case of this paper, Z_i is the employment status of the wife, Y is income, and $\boldsymbol{X}$ is a set of other control variables. The total differentiation of SWB obtains $dSWB = h_{Zi}\, dZ_i + h_Y\, dY + h_{Xj}\, dX_j$ and thus $\frac{dSWB/dY}{dSWB/dZ_i} = \frac{dY}{dZ_i} = \frac{h_{Z_i}}{h_Y}$ gives a monetary valuation of Z_i.[1] For ease of calculation, Z_i is

[1] The monetary valuation assumes no indirect income effect on *SWB*. See Beja (2012) and Dolan et al. (2011) for a discussion on indirect income effect. Here, the indirect income effect on *SWB* is assumed zero. The introduction of mediating factors is necessary to capture other indirect effects on *SWB*.

assumed separable (i.e., there are no joint states), which makes $\frac{h_{Z_i}}{h_Y}$ the valuation of a specific employment status.[2]

Given that individual and social circumstances can affect *SWB*, the regression analysis needs to take into account other indirect effects through the so-called "mediating factors."[3] The random intercepts procedure is adopted in this paper. The following structural equations $SWB = \alpha_o + \beta_i \cdot Z_i + \lambda \cdot Y + \varphi \cdot \boldsymbol{X} + \theta \cdot \boldsymbol{M}^{MICRO} + v$ and $\alpha_o = \gamma_o + \gamma_1 \cdot \boldsymbol{M}^{MACRO} + w$ are thus obtained with $\boldsymbol{M}^{MICRO}$ as a vector of micro-level mediating factors between Z_i and *SWB* (i.e., household factors) and $\boldsymbol{M}^{MACRO}$ as a vector of macro-level mediating factors between Z_i and *SWB* (i.e., are social factors). Both v and w are error terms.

The above structural equations can be expressed in reduced-form to make the estimation easier (c.f., Di Tella et al. 2001, 2003); that is, $SWB = \alpha + \beta_i \cdot Z_i + \lambda \cdot Y + \varphi \cdot \boldsymbol{X} + \theta \cdot \boldsymbol{M}^{MICRO} + \gamma_1 \cdot \boldsymbol{M}^{MACRO} + e$. For the purpose of this paper, the reduced-form is estimated using ordinal logistic regression. Estimates for three country-income groups are obtained for comparison. For the empirical analysis, $\boldsymbol{M}^{MICRO}$ is comprised of self-reports on freedom of choice and control and financial satisfaction as well as the perception that a housewife status is as fulfilling as a working wife status (see Section 2.2). Then, $\boldsymbol{M}^{MACRO}$ is comprised of the gross domestic product (GDP) per

[2] Joint states imply the co-existence of status, positions, attributes, etc. Take the case of a married woman. She has multiple roles: wife, mother (if there are children), breadwinner or co-breadwinner, household manager or co-manager, etc. (Sieber 1974; Marks 1977; Reitzes and Mutran 1994). These roles can be complements or substitutes (Waldron et al. 1998) and they can also have spillover effects (Stevens et al. 2007). Studies on the happiness of married women make the implicit assumption of no joint states and no spillover effects. Thus, it is possible to focus on a specific employment status and disregard the issues of complementarity or substitutability of work status, positions, etc. and spillover.

[3] See Wu and Zumbo (2008) for a discussion on the difference between mediators and moderators and their implications for regression analysis.

capita as proxy for standard of living and the female labor participation rate as proxy for women's engagement in "formal" economic activities and production (see Section 2.2).

Because the reduced-form is a partial mediation specification, *e* serves as the "catch all" item for the empirical analysis. Even so, the size of *e* is not expected to distort the correlations between the right- and left-hand side variables or undermine the overall reliability of the findings. Ensuring robust standard errors in the estimation procedure can help address the efficiency issues associated with the single-period cross-section dataset (see Section 2.2). For $i = 1 \ldots n$, $\frac{\beta_1}{\lambda} > \frac{\beta_2}{\lambda} > \ldots > \frac{\beta_n}{\lambda}$ presents a quantitative ordering of Z_i in terms of Y. Given how the dataset is derived (see Section 2.2) and given the assumption of separability in Z_i, the estimated coefficients on Z_i may be interpreted as the "pure" effect on *SWB*. Of course, the determination of the ordering of Z_i is the objective of the empirical analysis.

2.2 Data for Regression

The raw dataset is from the fourth wave of World Values Survey. Data iterations were necessary to remove the life circumstances and domains that do are not pertinent the focus of the study. In particular, information that do not meet the specification of female, married or living as married, ages 18 to 70, *and* employment status of housewife or working wife (i.e., full-time, part-time, or self-employed) was expunged from the dataset.

The resulting dataset has the following useful properties. First, removing all information that is associated with being male makes gender not a useful explanation to any observed difference in SWB. Second, dissolved marriages (due to separation, divorce, or death) or the single status and the other employment status (i.e., student, retired or pensioned, unemployed, etc.) cannot anymore

explain any observed difference in SWB. Issues like empowerment of women because of work, changes in the role of women in society, etc. are therefore captured through the mediating factors. While the iterated dataset internalize controls (albeit in a rudimentary way) for other biases like outlier effect, non-response or missing data, etc., it is not possible to address the possibility of self-selection bias given the one-period cross-section dataset from the World Values Survey. Thus, some caution would be appropriate in the interpretation of the results.

Dependent Variable

SWB is operationalized as "life satisfaction," which is obtained as the responses to the query:

> "*All things considered, how satisfied are you with your life as a whole these days?*"

Life satisfaction uses a 10-point scale with 1 as 'completely dissatisfied' and 10 as 'completely satisfied.' For the regression analysis, two consecutive satisfaction values are collapsed to form SWB quintiles.[4] With the first SWB quintile as the reference category, the second SWB quintile and up to the fifth SWB quintile take the value of 1, respectively, and zero otherwise.

Independent Variables

The employment status of the wife is the focus of the regression analysis. Employment status is defined as paid or unpaid work. Paid work has three categories: full-time employment (FULL), part-time employment (PART), and self-employment (SELF). Unpaid work refers to housework

[4] Judgment-type indicators like life satisfaction are useful measures for SWB because they are relatively stable between periods. For instance, people who are satisfied with their life at time *t* are generally also satisfied with their lives in time *t+1* barring extraordinary or dramatic life events between the two periods.

(HOUSE). These categories assume a dummy variable format with "full-time employment" as the reference category for the regression analysis.

The other individual-level variables are controls for education and income status. Education has seven categories: no formal education, incomplete primary school, complete primary school, incomplete secondary school, complete secondary school, some university-level education, and university level education. These categories assume a dummy variable format with "no formal education" as the reference category for the regression analysis.

Because the World Values Surveys do not collect information on the individual or household income, a proxy measure is used in the form of the self-reported income status of the household. Responses use a 10-point scale with 1 as the 'lowest decile' and 10 as the 'highest decile'. For the regression analysis, two consecutive deciles are again collapsed to form subjective income quintiles. The first subjective income quintile is the reference category. Then, the second and up to the fifth subjective income quintile take the value of 1, respectively, and zero otherwise. Since self-reported income status is not a monetary expression it cannot serve as the numeraire for the valuation procedure. Following the extant literature, gross domestic product (GDP) per capita was chosen as proxy numeraire (see below).

Mediating Factors

As indicated in the multi-level structural equation above, there are two levels of mediating factors between Z_i and SWB. Each represents a so-called "environmental context": one is for individual or household environment and the other is for social environment.

In particular, there are three micro-level mediating factors introduced in the regression analysis.

Other mediating variables like marital satisfaction and family conflict are not collected by the World Values Survey.

The first micro-level mediating factor is financial satisfaction. Neumark and Postlewaile (1998) found that wives tend to seek paid jobs when their husbands are earning less relative to the reference group's husbands. In this regard, the wife's financial satisfaction reflects the income comparison between her own family and that of relevant others and in turn mediates between the Z_i and *SWB*. Yet, financial satisfaction may relate with how well one is able to provide for the household's needs and, in turn, is associated with (daily) happiness.

Information on financial satisfaction is obtained as the responses to the question:

"*How satisfied are you with the financial situation of your household?*"

Responses use a 10-point scale with 1 as 'completely dissatisfied' and 10 as 'completely satisfied.' Similarly, two consecutive values are collapsed to form financial satisfaction quintiles. Using the first financial satisfaction quintile as the reference category, the second financial satisfaction quintile and up to the fifth financial satisfaction quintile take the value of 1, respectively, and zero otherwise.

Another micro-level mediating factor is choice and freedom. Having a choice and the freedom to choose is important to SWB, albeit having too much choices and a lot of freedom may turn out to be counterproductive to SWB (Schwartz et al. 2002; Schwartz 2004). In this regard, having and being able to choose one's own "direction in life" mediates between the Z_i and *SWB*. Having and being able to choose in general also relates to the ability of a person to control the use of one's time, which is associated with happiness (Diener et al. 2010).

Information for the second mediating variable is obtained as responses to the query:

> *"Some people feel they have completely free choice and control over their lives, while other people feel that what they do has no real effect on what happens to them… indicate how much freedom of choice and control you feel you have over the way your life turns out."*

Responses use a 10-point scale with 1 as 'no choice at all' and 10 as 'a great deal of choice.' Again, two consecutive values are collapsed to form choice quintiles. The first choice quintile is the reference category. The second choice quintile and up to the fifth choice quintile thus take the value of 1, respectively, and zero otherwise.

The third micro-level mediating factor is self-fulfillment. In particular, the personal sense of fulfillment with regard to one's role in the family and society mediates between the Z_i and *SWB* (Hamilton 2000; Hundley 2001).

Information on self-fulfillment is elicited through the question:

> *"Being a housewife is just as fulfilling as working for pay."*

Data are reported using a 4-point scale Likert scale with no neutral point—that is, 1 is 'strongly agree,' 2 is 'agree,' 3 is 'disagree,' and 4 means 'strongly disagree.' For the regression analysis, the two agree and two disagree responses are collapsed to thus form one dummy variable with the former as the reference category.

Lastly, there are two macro-level mediating factors used in the empirical analysis. The first

mediating factor is the standard of living measured by GDP per capita. Higher the standard of living is associated with higher SWB (Diener and Diener 1995; Diener and Biswas-Diener 2001; Stevenson and Wolfers 2008; Kahneman and Deaton 2010), albeit past research has also found that the contribution of GDP per capital to SWB is small if any especially at higher levels of income (Easterlin 1974; Easterlin 2005). Higher standards of living are also associated with better functioning domestic institutions, higher provision of social protection and public services, etc., that together contribute to sustain a high level quality of life. Thus, GDP per capita mediates between the Z_i and *SWB*. As mentioned earlier, since individual or household income is not available from the World Values Survey, GDP per capita is used as the numeraire for the valuation of Z_i (for a review see Frey et al. 2010, Welsch and Kühling 2010).

For the regression analysis, the 5-year average of GDP per capita is used in order to control (albeit in a rudimentary way) for the endogeneity of income. Both the level and log-form of GDP per capita are used in the regression analysis in order to obtain the average valuation for each country income group and valuation for each individual economy within each group. As such, $\frac{\beta_i}{\lambda}$ and $\frac{\beta_i}{\lambda}\overline{Y_i}$ (where $\overline{Y_i}$ is the average income of economy i in the country income-group) present the monetary valuations of Z_i for the group and an economy, respectively. The raw data are from the World Development Indicators.

The other macro-level mediating factor is the female labor participation rate. More women with paid work means rising independence, higher sense of self worth, personal advancement, etc., and higher SWB. If paid work is the norm, then what matters more is that the opportunities for work are not restricted against women. Female labor force participation rate is as proxy to the openness of society to women taking up paid work (c.f., Tresch-Römer et al 2008; Treas et al. 2011). At the least, female labor force participation indicates the general state of affairs with regard to female

labor supply to economic production and, thus, it mediates between the Z_i and *SWB*.

As with GDP per capita, the regression analysis uses the 5-year average of the female labor participation rate. Both the level and log-form are also used in the regression analysis as well. Raw data are from the World Development Indicators.

3. FINDINGS

3.1 Descriptive Statistics

Table A in the Appendix contains the descriptive statistics displayed by country-income groups: upper-income (economies, n = 18; obs. = 4,742), middle-income (n = 17; obs. = 6,805), and low-income economies (n = 9; obs. = 2,466). The working wife status (WORK) comprises the majority in the sample from both the upper-income (WORK = 70%) and the low-income economies (WORK 61%) but not from the middle-income economies (WORK = 48%).

The figures in Table A show that a wife in the upper-income economies is on average older and reports higher life and financial satisfaction, educational attainment, choice and control. She is also more likely to find fulfillment in the housewife status if compared to the wife in the middle-income economies. In turn, a wife in the middle-income economies has higher statistics for the same set of indicators if compared to a wife in the low-income economies. These differences in the means across the three income groups are statistically significant ($589.70 \geq F(2, 14{,}010) \geq 91.70$ for the five indicators, all $p < 001$).

There are two other interesting observations from Table A. The first is with regard to the income quintiles. Specifically, a wife in the low-income economies reports on average a higher income

quintile than her counterpart in the middle-income economies ($M_{MIDDLE-LOW}$ = -0.17, $p < 0.001$). Perhaps, the statistic is a reflection of the higher level of inequality concomitant to a depressed standard of living. Still, the difference in the means of the income quintiles across the three income groups is statistically significant ($F(2, 14{,}010) = 358.33$, $p < 001$).

The other interesting observation concerns the female labor participation rate. Specifically, the low-income economies on average have higher female labor participation rate compared to the higher income groups. While the range of the figures in the low-income economies is wide (range = 50.4), it is arguably still comparable to the range of the figures in the middle-income economies (range = 48.6).[5] Perhaps, the relatively higher female labor participation rates in the developing economies suggest a social push on married women to find work in order to augment family income.

The means of the dependent and independent variables by employment status and displayed by income groups are shown in Table B of the Appendix. Notice that within each income group, a working wife (regardless if she works full-time, part-time, or is self-employed) reports on average higher life satisfaction than a housewife. The differences in the means of life satisfaction between the two classifications *within* each income group are statistically significant (respectively, M_{UPPER} = 0.20, $t(4{,}740) = 7.75$, $p < 0.01$; M_{MIDDLE} = 0.06, $t(6{,}803) = 2.47$, $p < 0.05$; and M_{LOW} = 0.09, $t(2{,}464) = 2.09$, $p < 0.05$).

Again, regardless of employment type, a working wife in the upper-income economies reports on average higher life satisfaction than her counterpart in the middle-income countries (Table B). In turn, a working wife in the middle-income economies also reports on average a higher life

[5] Low female labor participation rates are observed in Egypt (20 percent), Turkey (24.6 percent), India (35.6 percent), Mali (36.4 percent), Italy (37.8 percent), and Chile (38 percent).

satisfaction than her counterpart in the low-income economies. These differences in the means of life satisfaction across the three income groups are statistically significant ($F(2, 8{,}064) = 290.74$, $p < 0.001$).

Except for income decile, the observed pattern for life satisfaction is the same for age, education, choice and control, financial satisfaction, and fulfillment in the housewife status—that is, figures are at their highest levels for the upper-income than those for the middle-income and with the lowest figures derived for the low-income economies. Only these differences in the means of the control variables across the three income groups for the working wife status are statistically significant ($290.74 \geq F(2, 8{,}064) \geq 62.47$, all $p < 001$).

Meanwhile, the statistics for the housewife show the same pattern as those of the working wife. The differences in the means of all the variables across the three income groups are statistically significant as well ($303.13 \geq F(2, 5943) \geq 12.04$, all $p < 0.001$).

3.2 Regression Results

The regression results for the three income groups are shown separately as Tables 1, 2, and 3. Consider the results for Model 1 that includes controls only for the socio-economic profile and the employment status. For the upper-income economies (Table 1), results show that a housewife, a part-time working wife, or a self-employed wife is not significantly happier than a full-time working wife at the 0.05 significance level, although a housewife appears to be less happy than a full-time working wife if the 0.10 significant level is acceptable ($p = 0.07$).[6] In the middle-income economies (Table 2), a full-time working wife appears to be less happy compared to a wife who

[6] The results are different from Treas et al. (2011), although no income grouping was done in their study.

has part-time work ($p < 0.01$) or is self-employed ($p = 0.03$) or a housewife ($p = 0.02$). In the case of the low-income countries (Table 3), Part-time work ($p = 0.03$) is associated with greater happiness compared to full-time work. These findings are consistent with the differences in means in SWB (within and across the three income groups) that were presented in the previous section.

[Insert Tables 1, 2, and 3]

Consider next the results that successively control for the macro-mediating (Models 2 and 3) and the micro-mediating (Models 4) factors along with the socio-economic profile. In the case of the upper-income economies (Table 1), the social environment mediates the happiness of a self-employed wife (Model 2, $p = 0.054$; Model 3, $p = 0.06$) but the household environment mediates the happiness of the part-time wife (Model 4, $p = 0.054$). Controlling both social and household environments (shown as Models 5 and 6 in Table 1), obtains no difference in the happiness of married women. Nonetheless, the findings point out the important role of the mediating factors between Z_i and *SWB*.

Results for the middle-income economies (Models 2, 3, and 4) in Table 2 are more persuasive in answering the happiness problematic in this paper. In this case, the mediating factors help draw out the "real" relationship between Z_i and *SWB*. Thus, a wife who works part-time (Model 2, $p = 0.02$; Model 3, $p = 0.02$; Model 4 < 0.01) or a housewife (Model 2, $p < 0.01$; Model 3, $p < 0.01$; Model 4 $= 0.03$) is happier than a full-time working wife. From the final regressions (Model 5 and 6) in Table 2, it can be concluded that there is indeed a real difference between the happiness of a full-time working wife and a part-time working wife (both $p < 0.02$) and also between a full-time working wife and a housewife ($p < 0.03$ and $p < 0.02$, respectively).

The interesting finding is that the difference in happiness is found only for the middle-income

economies. The household and social transformations brought about by fast economic growth could underpin the results. If so, the relatively stable socio-economic environment that is attendant to economic advancement (upper-income economies) or stagnation because of underdevelopment (low-income economies) may obscure a divergence in the happiness between a housewife and a working wife if any.

[Insert Table 4]

Table 4 shows the monetary valuations in the middle-income economies and reveals the following ordering of status, $\frac{\beta_{PART}}{\lambda} > \frac{\beta_{HOUSE}}{\lambda} > \frac{\beta_{FULL}}{\lambda}$ and $\frac{\beta_{FULL}}{\lambda} \sim \frac{\beta_{SELF}}{\lambda}$. It is interesting to see that the valuations of part-time work are about twice the valuations of housework vis-à-vis full-time work. The findings thus reveal two things. First, there are large non-pecuniary values to housework. Second, a work-home balance that is possible with part-time work is another significant element to the well-being of the wife. Moreover, Table 4 shows the potentially large contributions of married women to the economy that is not often acknowledged in the national accounts.

Lastly, results for the low-income countries in Table 3 show no difference in the happiness of married women once the mediating variables are included in the regression analysis, albeit there is a rather weak result in Model 2 ($p = 0.098$) that suggests a part-time wife could be happier than a full-time working wife. What can be inferred from the final regressions (Models 5 and 6) for the low-income economies are similar to that made for the upper-income economies, namely: results essentially show no difference between the happiness of the working wife and housewife.

4. CONCLUSION

Data from the fourth wave of the World Values Survey were used to revisit the question: "Who is

happier between a housewife and a working wife?" Data iterations were done to produce a database that is comprised of women who are married or living as married, between ages 18 and 70, *and* with employment status of housewife or working wife. Paid work was defined as full-time, part-time, or self-employment. Unpaid work was full-time housework. Results for both the upper-income and the low-income economies point to no difference in the happiness between a housewife and a working wife but those for the middle-income economies point to a difference in the happiness of a housewife and a part-time working wife vis-à-vis a full-time working wife.

Given the extant debate on the happiness of married women vis-à-vis their employment status, the findings here are being offered as tentative explanations in favor of a divergence in happiness between a housewife and a working wife at least for the middle-income economies. Still, further investigation and much more extensive data are necessary to resolve the happiness problematic in general and the findings for the middle-income economies in particular.

One direction to pursue is the view that fast economic growth and development in the middle-income economies might be underpinning the household and social transformations and, in turn, is bringing about the divergence in happiness. With further refinement in the empirical analysis, it might be found that full-time paid work (including self-employment) does not really mean greater happiness given that a wife still has to perform her traditional responsibilities in the household. In addition, where socio-economic transformations are occurring fast, the drive to take up paid work might make alternative employment status salient in terms of their non-pecuniary returns to married women. Still, the decision to pursue paid work depends on the internal dynamics of the household (e.g., taking a balance between time allocation for work and home, the consideration of class relations and conflict between wife and husband, etc.) and/or the type of work that is available to a married woman. Finally, the fact that married women still assume multiple roles and have varying life goals with regard to their family, career, etc., perhaps, it might be a more

fruitful step toward the resolution of the happiness problematic that succeeding analyses look into how the multiple and shifting roles of married women (see again Footnote 2) overdetermine their happiness.

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Table 1. Regression results for upper-income economies

	Model 1	Model 2	Model 3	Model 4	Model 5	Mode 6
Age	-0.0706***	-0.0600***	-0.0601***	-0.0577***	-0.0521***	-0.0520***
Age-squared	0.0006***	0.0005***	0.0005***	0.0004**	0.0004*	0.0004*
Educational Attainment, complete elementary	0.3330*	0.2418	0.2430	0.2901	0.2251	0.2240
Educational Attainment, complete high school	0.3749**	0.2505	0.2613	0.3365*	0.2552	0.2618
Educational Attainment, complete college	0.4596**	0.3608*	0.3731*	0.2358	0.1755	0.1830
Income Quintile 2	0.2657**	0.2145*	0.2118*	0.0648	0.0411	0.0398
Income Quintile 3	0.6913***	0.6203***	0.6244***	0.0787	0.0539	0.0580
Income Quintile 4	1.0795***	0.8983***	0.9048***	0.1406	0.0635	0.0683
Income Quintile 5	1.3291***	1.0367***	1.0430***	0.1401	0.0079	0.0095
Micro Mediating Variables						
Individual Choice and Control Quintile 2				0.2677	0.2596	0.2619
Individual Choice and Control Quintile 3				0.8403***	0.8070***	0.8076***
Individual Choice and Control Quintile 4				1.4902***	1.4338***	1.4399***
Individual Choice and Control Quintile 5				2.0436***	1.9920***	2.0001***
Financial Satisfaction Quintile 2				0.7935***	0.8141***	0.8175***
Financial Satisfaction Quintile 3				1.4095***	1.4439***	1.4414***
Financial Satisfaction Quintile 4				2.6027***	2.6095***	2.6072***
Financial Satisfaction Quintile 5				3.7030***	3.6669***	3.6662***
Housewife fulfilling as Work for Pay, Yes				0.0605	0.0458	0.0492
Macro Mediating Variables						
GDP per capita, GDPPC		1.38e-05***			1.20e-05***	
Female Lab. Participation Rate, LABOR		0.0444***			0.0205***	
Log (GDPPC)			0.4188***			0.3469***
Log (LABOR)			2.0165***			0.8677***
Wife Status						
Part-time Employee	0.1129	0.0655	0.0522	0.1510*	0.1197	0.1110
Self-employed	0.1568	0.2041*	0.1976*	0.1397	0.1583	0.1527
Housewife	-0.1327*	-0.0508	-0.0577	-0.0614	-0.0177	-0.0205

Notes:

1. Results are heteroskedasticity-robust standard errors. * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.
2. Reference categories are no educational attainment, income quintile 1, individual choice and control quintile 1, financial satisfaction quintile 1, and wife status of full-time employee
3. Economies = Australia, Canada, Finland, France, Germany, Hong Kong, Italy, Japan, Netherlands, Norway, Slovenia, South Korea, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States

Table 2. Regression results for middle-income economies

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	-0.0497***	-0.0500***	-0.0490***	-0.0251*	-0.0272**	-0.0264*
Age-squared	0.0004***	0.0004***	0.0004***	0.0002	0.0002	0.0002
Educational Attainment, complete elementary	0.3688***	0.0854	0.0826	0.1621**	0.0253	0.0243
Educational Attainment, complete high school	0.0972	-0.0611	-0.0530	-0.0258	-0.0893	-0.0824
Educational Attainment, complete college	0.0613	-0.0076	0.0202	-0.0741	-0.0889	-0.0683
Income Quintile 2	0.1538**	0.1964***	0.2032***	-0.0812	-0.0507	-0.0469
Income Quintile 3	0.5417***	0.5746***	0.5602***	0.0627	0.0980	0.0888
Income Quintile 4	0.9071***	0.8716***	0.8240***	0.0817	0.1063	0.0777
Income Quintile 5	0.8879***	0.7592***	0.6995***	-0.1129	-0.1361	-0.1726
Micro Mediating Variables						
Individual Choice and Control Quintile 2				0.0574	0.0154	0.0129
Individual Choice and Control Quintile 3				0.3925***	0.3160**	0.3148**
Individual Choice and Control Quintile 4				0.8315***	0.7126***	0.7091***
Individual Choice and Control Quintile 5				1.5612***	1.3758***	1.3745***
Financial Satisfaction Quintile 2				0.8571***	0.8324***	0.8316***
Financial Satisfaction Quintile 3				1.5936***	1.5413***	1.5376***
Financial Satisfaction Quintile 4				2.1759***	2.0882***	2.0880***
Financial Satisfaction Quintile 5				3.3224***	3.2241***	3.2303***
Housewife fulfilling as Work for Pay, Yes				0.1519***	0.2025***	0.2131***
Macro Mediating Variables						
GDP per capita		0.0003***			0.0001***	
Female Lab. Participation Rate		0.0121***			0.0049***	
Log (GDPPC)			0.9033***			0.5364***
Log (LABOR)			0.4055***			0.1714***
Wife Status						
Part-time Employee	0.3359***	0.2498**	0.2519**	0.2996***	0.2561**	0.2555**
Self-employed	0.1544**	0.0805	0.0755	0.1434*	0.1192	0.1147
Housewife	0.1274**	0.2008***	0.2138***	0.1171**	0.1242**	0.1348**

Notes:

1. Results are heteroskedasticity-robust standard errors. * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.
2. Reference categories are no educational attainment, income quintile 1, individual choice and control quintile 1, financial satisfaction quintile 1, and wife status of full-time employee
3. Economies = Brazil, Bulgaria, Chile, China, Egypt, Georgia, Guatemala, Malaysia, Mexico, Peru, Poland, South Africa, Romania, Russian Federation, Thailand, Turkey, Uruguay

Table 3. Regression results for low-income economies

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	-0.0635***	-0.0693***	-0.0701***	-0.0570**	-0.0634***	-0.0649***
Age-squared	0.0008***	0.0008***	0.0007***	0.0006**	0.0006***	0.0007***
Educational Attainment, complete elementary	0.3259***	0.2326**	0.1746*	0.1859*	0.0910	0.0603
Educational Attainment, complete high school	0.6316***	0.3264***	0.2419*	0.3168***	0.0715	0.0315
Educational Attainment, complete college	0.8313***	0.3755**	0.2890*	0.4725***	0.1288	0.0954
Income Quintile 2	0.4283***	0.4403***	0.4770***	0.3049**	0.3215**	0.3489**
Income Quintile 3	1.1211***	1.1587***	1.2116***	0.4115***	0.4414***	0.4830***
Income Quintile 4	1.8481***	1.8409***	1.8873***	0.6441***	0.6849***	0.7298***
Income Quintile 5	2.6313***	2.7663***	2.8782***	0.9274**	1.0892***	1.1803***
Micro Mediating Variables						
Individual Choice and Control Quintile 2				-0.5208**	-0.5587**	-0.5620**
Individual Choice and Control Quintile 3				0.0712	0.0553	0.0534
Individual Choice and Control Quintile 4				0.3566*	0.3281	0.3236
Individual Choice and Control Quintile 5				0.5962***	0.5668***	0.5530**
Financial Satisfaction Quintile 2				0.8498***	0.8632***	0.8727***
Financial Satisfaction Quintile 3				1.6920***	1.7310***	1.7359***
Financial Satisfaction Quintile 4				2.8873***	2.8924***	2.8823***
Financial Satisfaction Quintile 5				4.5712***	4.5977***	4.5925***
Housewife fulfilling as Work for Pay, Yes				0.3612***	0.2154***	0.1634**
Macro Mediating Variables						
GDP per capita, GDPPC		0.0009***			0.0008***	
Female Lab. Participation Rate		-0.0038			0.0011	
Log (GDPPC)			0.6396***			0.5267***
Log (LABOR)			-0.0384			0.1802
Wife Status						
Part-time Employee	0.3188**	0.2407*	0.2087	0.2270	0.2022	0.1842
Self-employed	0.0595	0.0394	0.0167	-0.0981	-0.0977	-0.1112
Housewife	0.1505	0.1355	0.1577	0.0872	0.0944	0.1196

Notes:

1. Results are heteroskedasticity-robust standard errors. * = p < 0.10, ** = p < 0.05, *** = p < 0.01.
2. Reference categories are no educational attainment, income quintile 1, individual choice and control quintile 1, financial satisfaction quintile 1, and wife status of full-time employee
3. Economies = Burkina Faso, Ethiopia, India, Indonesia, Mali, Rwanda, Ukraine, Vietnam, Zambia

Table 4. Monetary valuations of employment status, in US$

Middle-income Economies	Part-time	Housewife
Brazil	1,906	1,006
Bulgaria	1,042	550
Chile	2,688	1,419
China	715	377
Egypt	775	409
Georgia	485	256
Guatemala	851	449
Malaysia	2,167	1,144
Mexico	2,869	1,514
Peru	1,148	606
Poland	2,528	1,334
Romania	1,092	576
Russian Federation	1,181	623
South Africa	1,627	859
Thailand	1,127	595
Turkey	2,303	1,215
Uruguay	3,293	1,738
Group Average	1,635	863
Estimated Average	1,380	669

Notes:

1. Estimated average (part-time and housewife) is calculated as $\frac{\beta_i}{\lambda}$.
2. Columns 2 and 3 are calculated as $\frac{\beta_i}{\lambda}\overline{Y}$, respectively. The group average is simply the column mean.

APPENDIX

Table A. Descriptive statistics for the wife, by variable and by country-income group

Upper-income Economies (n = 18, obs. = 4,742)				
Individual	Mean	Max	Min	Std. Dev.
Life Satisfaction Quintile	3.99	5	1	0.84
Age	43.6	70	18	11.0
Education Attainment	2.87	4	1	0.75
Income Quintile	3.05	5	1	1.16
Choice and Control Quintile	3.87	5	1	0.91
Financial Satisfaction Quintile	3.57	5	1	1.02
Housewife fulfilling as Work for Pay	0.67	1	0	0.47
Working Wife, full-time	0.43	1	0	0.49
Working Wife, part-time	0.20	1	0	0.39
Working Wife, self-employed	0.07	1	0	0.25
Housewife	0.30	1	0	0.46
Economy				
5-year Ave. of GDP per capita	26,184.0	40,420.8	12,080.0	8,489.5
5-year Ave. of Labor Participation Rate	53.3	61.2	37.8	6.10
Middle-income Economies (n = 17, obs. 6,805)				
Individual	Mean	Max	Min	Std. Dev.
Life Satisfaction Quintile	3.69	5	1	1.14
Age	39.13	70	18	11.1
Education Attainment	2.39	4	1	0.95
Income Quintile	2.47	5	1	1.15
Choice and Control Quintile	3.69	5	1	1.13
Financial Satisfaction Quintile	3.10	5	1	1.23
Housewife fulfilling as Work for Pay	0.64	1	0	0.48
Working Wife, full-time	0.32	1	0	0.46
Working Wife, part-time	0.06	1	0	0.23
Working Wife, self-employed	0.10	1	0	0.30
Housewife	0.52	1	0	0.50
Economy				
5-year Ave. of GDP per capita	3,431.8	6,911.4	1,017.6	1,806.5
5-year Ave. of Labor Participation Rate	48.1	69.4	20.8	12.7
Low-income Economies (n = 9, obs. 2,466)				
Individual	Mean	Max	Min	Std. Dev.
Life Satisfaction Quintile	3.29	5	1	1.10
Age	36.7	70	18	10.5
Education Attainment	2.19	4	1	1.00
Income Quintile	2.64	5	1	1.03
Choice and Control Quintile	3.52	5	1	1.11
Financial Satisfaction Quintile	2.99	5	1	1.14
Housewife fulfilling as Work for Pay	0.48	1	0	0.50
Working Wife, full-time	0.24	1	0	0.42
Working Wife, part-time	0.08	1	0	0.27
Working Wife, self-employed	0.29	1	0	0.45
Housewife	0.39	1	0	0.48
Economy				
5-year Ave. of GDP per capita	476.1	974.6	150.6	300.7
5-year Ave. of Labor Participation Rate	62.4	86.0	35.6	19.0

Table B. Means for the wife's employment status, by variable and by country-income group

	Full-time	Part-time	Self-emp.	Housewife	Mean
Upper-income Economies					
Life Satisfaction Quintile	4.05	4.02	4.09	3.84	3.99
Age	41.5	43.3	46.4	46.0	43.6
Education Attainment	3.04	2.94	2.94	2.57	2.87
Income Quintile	3.35	2.98	2.23	2.61	3.05
Choice and Control Quintile	3.99	3.82	3.99	3.68	3.87
Financial Satisfaction Quintile	3.66	3.58	3.68	3.42	3.57
Housewife fulfilling as Work for Pay	0.61	0.60	0.66	0.80	0.67
Middle-income Economies					
	Full-time	Part-time	Self-emp.	Housewife	Mean
Life Satisfaction Quintile	3.68	3.82	3.80	3.65	3.69
Age	39.8	39.6	42.4	37.9	39.1
Education Attainment	2.76	2.64	2.29	2.16	2.39
Income Quintile	2.90	2.55	2.55	2.19	2.47
Choice and Control Quintile	3.87	3.84	3.70	3.56	3.69
Financial Satisfaction Quintile	3.16	3.14	3.28	3.03	3.10
Housewife fulfilling as Work for Pay	0.54	0.53	0.40	0.76	0.64
Low-income Economies					
	Full-time	Part-time	Self-emp.	Housewife	Mean
Life Satisfaction Quintile	3.47	3.50	3.16	3.23	3.29
Age	37.1	37.3	37.7	35.6	36.7
Education Attainment	3.03	2.61	1.81	1.87	2.19
Income Quintile	2.97	2.73	2.50	2.53	2.64
Choice and Control Quintile	3.64	3.56	3.49	3.46	3.52
Financial Satisfaction Quintile	3.20	3.16	2.93	2.88	2.99
Housewife fulfilling as Work for Pay	0.50	0.58	0.41	0.51	0.48