

Interactions in the Labor Market Behavior of Couples over the Life Course ¹

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Abstract: Using the matched March Current Population Surveys for 1968-2007 we examine the extent to which husbands and wives coordinate their labor supply over different stages in the life cycle. We examine within couple correlations in year-to-year changes in weeks and annual hours worked. We find that correlations of couples' labor supply changes substantially rise with age, consistent with the notion that couples' time at home are substitutes during child-bearing ages, but are complements at older ages. We also find that labor supply changes have become more positively correlated with each successive birth cohort as participation rates of married men and women converged. The exception appears to be the youngest aged couples of the post Baby Boom cohort for whom husbands' and wives' hours strongly negatively co-vary upon birth of a child.

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I. Introduction

Since 1960 married women's labor force participation rate has doubled from 30 percent to over 60 percent (Blau, Ferber, and Winkler (2005)).¹ In addition, their labor force attachment has increased, as evidenced by the rise in average experience level (Blau and Kahn (1997)). A recent paper by Blau and Kahn (2005) finds that labor supply elasticity of married women fell significantly over the 1980s, resembling more closely the labor supply elasticity of men. Given the pattern of positive assortative mating, labor market shocks of husbands and wives are likely to become more positively correlated as well, as participation rates of married men and women converge. The fundamental question we ask in this paper is whether these shifts—particularly shifts in married women's long-run work behavior—have changed the couples' ability to coordinate labor supply over the life course.

The co-movement of couples' employment may differ across stages of the lifecycle due to substitutability/complementarity of spouses' time in the household. Lundberg (1988) finds substitutability among couples with children. On the other hand, Kniesner (1976) and Blau (1998) among others find complementarity among older couples. Recently, Shore (2006) also documents that the correlation of couples' incomes starts out strongly negative early in the marriage and rises monotonically until it turns positive. Our analysis examines to what extent these correlations at different stages of the life cycle shifted across cohorts. We focus on three different types of events where coordination of spousal labor supply would be important: job loss, birth of a child, and retirement. With regards to wife's response to husband's job loss, a sizeable literature

¹The statistic refers to married women who are 14 and older with a husband present in the household.

examines the “added worker effect,” the increase in labor supply of wives to compensate for husbands’ job loss. Lundberg (1985) uses data from the 1969-73 Seattle and Denver Income Maintenance Experiment and finds a small positive effect of husbands’ unemployment on wives’ labor force participation. Stephens (2004) uses the Panel Study of Income Dynamics and finds that wives increase hours worked following husband’s job loss. Cullen and Gruber (2001) find that unemployment insurance “crowds out” the spouse’s labor supply response. In related papers, Hyslop (2001) and Shore (2006) examine family earnings dynamics and find negative co-movement of husbands’ and wives’ earnings. None of these papers investigate whether these relationships have changed over time. Juhn and Potter (2008) examines labor market transitions of couples and finds that non-working wives are more likely to enter the labor market if husbands leave employment. While this phenomenon is still important for couples where the wife is initially not employed, the effect has become less important in aggregate since the fraction of single-earner couples have declined. In this paper we extend this analysis by examining wife’s response at the *intensive* margin as well, such as weeks and annual hours worked. Recent papers on the labor supply response of the Earned Income Tax Credit (EITC) reviewed in Eissa and Hoynes (2005) point to a large response in labor force participation (extensive margin) but limited and imprecisely estimated response in hours conditional on working (intensive margin). This literature suggests that analyzing the two margins separately may be important.

In addition to job loss, another important life event which requires coordination of couples’ labor supply is the birth of a child. Using the Panel Study of Income Dynamics, Lundberg and Rose (1999) find that the gap between husbands’ and wives’ hours worked

increases after the birth of a child, suggesting that specialization increases. However, they also find that this phenomenon has diminished over time. Recent papers have noted the stabilization and possible reversal of rising labor force participation of married mothers. The popular press has labeled this phenomenon “the opt-out revolution.”² Fortin (2008) finds some evidence that gender attitudes towards motherhood and housewifery have also reversed, with the youngest cohort of women exhibiting more acceptance of traditional gender roles than the previous cohort. One question we examine in this paper is whether there has been a similar reversal towards an *increase* in specialization of spousal labor supply upon the birth of a child.

Another question that is of immediate policy interest is the joint labor market behavior of spouses at retirement age. Have labor market transitions of older couples also become increasingly positively correlated over time? Previous papers (Blau (1998), Gustman and Steinmeier (2000)) show that couples “coordinate” retirement timing beyond what would be predicted by their opportunity sets, leading to strong positive correlation in retirement outcomes. One question we investigate is whether the ability and/or incentives for couples to “coordinate” may have eroded over time as married women become more strongly attached to the labor force and build their own careers. Another possibility is that older couples still “coordinate” the timing of retirement but there has been a shift in response more towards the *wife’s* retirement incentives (Coile, 2003).

Our project utilizes the March Current Population Survey files matched across spouses and across adjacent years. This data has a wealth of information along a number of important dimensions. It has matched data on spouses as well as short two-year panels

² Belkin, Lisa. “The Opt-Out Revolution,” New York Times, Oct 26, 2003.

which allow us to examine *changes* in employment status and other labor market variables for a given couple. The major advantage of the matched CPS is the large sample sizes that span a long period of time, 1968-2007. The sample sizes and the span of years make it possible for us to talk about *shifts* in behavior across cohorts and age groups.

To preview our preliminary results, we confirm previous findings of a robust life cycle pattern in the coordination of spousal labor supply. Couples' weeks and hours are weakly (positively) correlated during the main child-bearing ages, 25-39. As couples age, however, the correlations become more positively related, consistent with the notion that couples' time at home are substitutes during child-bearing ages and complements at older ages. We also find that labor supply changes become more positively related with each successive cohort consistent with the increased labor force attachment and career-orientation of married women. The positive co-movement of labor supply changes appear to be due to both increased correlation of weeks and hours changes among working couples, as well as the more limited hours response to husbands' job loss among women who are already working. The increasing positive co-movement in weeks and hours is most pronounced among older age groups, those 40-54, and 55-69. For the youngest age groups of child-bearing age, 25-39, we find some evidence of reversal in trend. While we find no evidence that women in the post-Baby Boom cohorts are less likely to work than the previous cohort, specialization upon birth of a child appears to have increased for this cohort. Older couples continue to exhibit a strong trend towards positive correlation in retirement transitions.

Our paper is structured as follows. Section 2 describes the data. Section 3 presents our main empirical results. Section 4 provides a summary and describes how we plan to extend the paper in the future.

II. The Data

We use the March CPS files to match husbands and wives for each year from 1968 to 2007. We then match couples' first interviews to their records in the following year, using gender, race, and age to exclude potentially invalid matches, following the algorithm suggested in Madrian and Lefgren (1999). We match husbands and wives using marital status, household identifier, household type and relation of individuals to the household head. Our current sample does not attempt to match across potential cohabitants. Using this method, we match over 97% of individuals who report to be married and living with a spouse. We focus our analysis on households in which the wife is between 25-69 years of age. Although we allow older and younger men in the data in principle, in practice there are relatively few observations for which the age of the husband is outside the 25-69 age range. Our data consists of 320,454 husband-wife pairs that could be matched across spouses and across years. Details of the construction of our matched sample are in Appendix A.

We focus on several labor supply measures-- weeks worked last year, annual hours worked last year, and employment status. Our employment status variables are defined based on data from the survey week in March. We distinguish between employment and non-employment and combine unemployment and out of the labor force

under the broader category of non-employment. Weeks worked last year are based on the retrospective questions regarding the previous year. Prior to the 1976 survey, weeks worked are reported only upon a bracketed basis, making comparison across years difficult. To address this issue, we imputed weeks worked for the pre-1976 years in the following manner. We computed average weeks worked by bracketed weeks worked, weeks unemployed, and weeks in the labor force categories using the 1976-1980 surveys and merged these conditional averages into the pre-1976 data. Another difficulty is that usual hours worked per week are not reported in the pre-1976 surveys. To preserve consistency across years, we use full time/part time status which is reported consistently across all years and assign 20 hours to part-time status and 40 hours to full-time status. In other words, for sake of consistency, we utilize only information on transition across part-time and full-time status and eschew within status variation in hours even though it is available in the post-1976 surveys. Our annual hours measure is the product of our imputed weeks worked and imputed usual hours per week.

We are interested in how joint labor supply behavior of couples varies by age and by birth cohort. We categorize couples into three broad age groups based on the age of the wife—25-39, 40-54, and 55-69. For more detailed analysis that focuses on specialization during child-bearing years as well couples near or at retirement age, we examine finer age categories. For comparing across cohorts, we group couples based on the birth year of the wife-- <1926, 1926-45 (pre-Baby Boom), 1946-65 (Baby Boom), >=1966 (post-Baby Boom). Again for more detailed analysis, we examine finer categories of birth cohorts.

III. Interactions in the Labor Market Behavior of Couples

A. *Correlation of Couples' Weeks and Hours Changes*

We first begin by describing labor supply of husbands, wives, and couples. In table 1 we examine by broad age group and birth cohort the percent of husbands who are employed, the percent wives who are employed, as well the percent of couples who fall into the three mutually exclusive categories—dual-earner households, single-earner households, and dual non-earner households. The basic trends in this table are now familiar. However, these trends are the important backdrop to the correlations in spousal labor supply we examine in the following tables. Panel A examines the young age group, 25-39 year olds. The fraction of husbands who are employed fell slightly between the oldest and the youngest cohorts. The fraction of wives who are employed exhibit a far more dramatic change with 45.2 percent of wives in the pre-Baby Boom cohort (born in 1926-45) employed while 70.9 percent of wives in the post Baby Boom cohort (born in 1966 and after) are employed. Predictably, the fraction of dual earner households increased from 43.3 percent to 66.6 percent and the fraction of single earner households fell from 54.5 percent to 30.7 percent. The shift from single-earner to dual-earner households came largely as the result of rising participation of wives rather than any significant changes in the behavior of husbands.

How has this change in long-run work behavior of wives impacted coordination of couples labor supply over different stages of the life cycle? We begin by examining the raw correlations in weeks and hours changes. For each spouse, we constructed year-to-year changes in weeks worked, ΔWEEKS^W and ΔWEEKS^H , as well as year-to-year

changes in annual hours worked, ΔHours^W and ΔHours^H . Panel A of table 2 reports the raw correlations, $\text{corr}(\Delta\text{WEEKS}^W, \Delta\text{WEEKS}^H)$. There are two points to make regarding panel A. First, the correlations are virtually zero at younger ages, 25-39, but rise at older ages. The correlations have also become increasingly more positive over time as married women have increased labor market participation and become more attached to the labor force. This increase is pronounced at older ages, for groups 40-54 and older, but not very evident among the youngest group, 25-39, who are of child-bearing age.

Panel B and panel C of table 2 examine separately the correlations conditioning on initial employment status of the wife. Panel B reports correlations for couples where the wives are employed in year t , $\text{corr}(\Delta\text{WEEKS}^W, \Delta\text{WEEKS}^H / \text{wife employed in } t)$ and panel C reports correlations for couples where the wives are not employed in year t , $\text{corr}(\Delta\text{WEEKS}^W, \Delta\text{WEEKS}^H / \text{wife not employed in } t)$. Comparing across the two panels, weeks changes are much more positively correlated among couples with working wives. Even among the youngest age group, 25-39 year olds, the correlation is 0.03 for the pre-Baby Boom cohorts, 0.02 for the Baby Boom cohorts, and 0.04 for the post-Baby Boom cohorts. In contrast, among couples with initially non-working wives, the correlation is negative among the youngest age group and positive but smaller among the older age groups. The table suggests that as married women enter the labor market in greater numbers, the correlation of spouses will likely become more positive.

Table 3 shows the correlation in annual hours worked, $(\Delta\text{Hours}^W, \Delta\text{Hours}^H)$. Similar to weeks, hours become more positively related at older ages. There is again a pronounced difference in the spousal correlation of hours between couples by the initial employment status of wives. If the wife is initially working, as illustrated in panel B, her

hours positively co-vary with husband's hours. If she is initially not working, as illustrated in panel C, her hours negatively co-vary. While we will examine this phenomenon in closer detail in the next section, the pattern we observe reflects the fact that non-working wives have a greater margin of response if the husband becomes non-employed. Working wives can respond only at the intensive margin, by increasing hours conditional on being in the labor force. Therefore, the scope of her response will be more limited.

B. *Wife's Response to Change in Husband's Employment Status*

In a previous paper entitled “Is There Still an Added Worker Effect?” we examined the evolution of wife's response to husband's exit from the labor force. We found that the “added worker effect”—the greater propensity of non-participating wives to enter the labor force when their husbands exit employment—is still important among a subset of couples but in aggregate we found greater positive co-movement of couples' employment. In this section, we extend this analysis by examining the intensive margin of work as well. We focus on prime-aged couples, 25-54 years old, in this section since we would like to interpret husbands' exit from employment as involuntary job loss rather than retirement behavior. We first begin by examining the response of wife's weeks (hours) to changes in husbands weeks (hours), controlling for observable characteristics such as age and education of spouses, the presence of children, state of residence and year effects. In particular, we estimate the following regression via OLS:

$$(1) \quad \Delta Weeks_{it}^w = \alpha + \beta \Delta Weeks_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}$$

where X_{it} refer to characteristics of the couple i , and γ_t and π_s refer to year and state fixed effects. We run this regression separately for each cohort and age group. Panel A of table 4 reports the coefficients, β , for each group. For 1926-45 (pre-Baby Boom) cohort at youngest ages, 25-39, the coefficient is 0.03 and statistically significant at the 5 percent level. The coefficient can be interpreted as the following: controlling for observable characteristics, if we see the husband increase his labor supply by one week, we will observe the wife increase her labor supply by .03 weeks. We make no attempt at this point to interpret this as a behavioral parameter. Instead, they are reduced form parameters that incorporate both the labor market shocks faced by each spouse as well as the behavioral response to such shocks. This is closer in spirit to the raw correlations we reported in tables 2 and 3 with the distinction that we have controlled for characteristics of the spouses such as their age and education and state of residence. The regressions in table 4 illustrate that variables such as age and education do not much alter our basic conclusions based on the raw correlations. One obvious concern with both the raw correlations reported in the earlier tables and with table 4 is measurement error which would attenuate the correlations towards zero. We plan to investigate alternative methods to correct for measurement error in future versions. For now, we rely on the assumption that measurement error is stable over time and across age groups so that the *differences* across the correlations and regression coefficients are still meaningful even though the levels are biased.

We next limit our analysis to couples where the husband is initially employed and examine wife's response to husband's exit from employment. While there may be systematic unobserved differences between an employed and a non-employed husband,

the transition from employment to non-employment is more likely to be an exogenous event that reflects displacement, especially among prime-aged men. Therefore, we begin with a pool of employed men and focus on the wives' response to the husbands' transition into non-employment. The comparison group is therefore wives whose husbands were initially employed and remained employed in the second period. Specifically we estimate the following equation:

$$(2) \quad \Delta Weeks_{it}^w = \alpha + \beta Exit_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}.$$

The coefficients are reported in panel B of table 4. None of the coefficients are significant at the 5 percent level for couples in child-bearing age, 25-39. Among older couples, however, husband's exit from employment decreases wives' weeks worked, consistent with the positive raw correlations reported in table 3.

Finally, we examine separately the response of wives who are initially employed and the response of wives who are initially not employed. We estimate the following equation:

$$(3) \quad \Delta Weeks_{it}^w = \alpha + \beta_1 Exit_{it}^H + \beta_2 Exit_{it}^H * Nonwork_t^W + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}.$$

We report the estimates β_1 and β_2 in panel C of table 4. For pre-Baby Boom and Baby Boom cohorts, there is little systematic response of wives to husband's exit at younger ages. Among the post-Baby Boom cohort, however, there is a pattern that is similar to the older groups. For this cohort, the wife reduces labor supply by 1.7 weeks if the husband exits employment and the wife is initially employed. However, the interaction term implies that if the wife is not initially employed, she will increase her labor supply by 5.4 weeks relative to the working wife. The positive co-movement among working wives most likely reflects common labor market shocks experienced by husbands and

wives. While we control for observable characteristics and year and state effects, it is possible that our controls do not account for local labor market shocks and other unobserved shocks that are common across spouses. Wives who are initially not working, however, are more likely to enter if the husbands exit employment. For these women who are not initially working, the adjustment is at the extensive margin, and the entry into the labor force translates into substantial increase in weeks worked. Since the pool of non-working wives have shrunk over time, the contribution of non-working wives to the overall correlation has diminished so that we observe increasingly positive co-movement of weeks in the more recent cohorts.

Table 5 examines wives' response in terms of annual hours. Wives may not only respond in terms of weeks worked but in terms of hours worked per week, namely whether they work part or full time. The corresponding equations we estimate are the following:

$$(4) \quad \Delta Hours_{it}^w = \alpha + \beta \Delta Hours_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}$$

$$(5) \quad \Delta Hours_{it}^w = \alpha + \beta Exit_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it} .$$

$$(6) \quad \Delta Hours_{it}^w = \alpha + \beta_1 Exit_{it}^H + \beta_2 Exit_{it}^H * Nonwork_t^W + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it} .$$

The overall pattern of wives' response in annual hours is similar to the weeks response reported in table 4. Again, the large compensatory increase in wives' hours following husbands' job loss comes from women who are not initially working. This compensatory behavior is also more pronounced among the youngest age group, 25-39 year olds, where there appears to be strong inclination towards negative co-movement of hours.

C. Specialization of Couples' Labor Supply Following Childbirth

Table 6 focuses on couples in the early stages of the life cycle as they are having children. The table summarizes probability of giving birth, wives' weeks and annual hours worked, as well as husbands' weeks and annual hours worked. In this section we focus exclusively on couples where the wife is aged 25-39. The table compares across cohorts. The striking pattern is that with each successive cohort, wives are more likely to work in terms of both weeks worked and annual hours worked. The pattern of increase, however, did slow down between the later Baby Boom cohort, women born during the 1956-65 period, and the post Baby Boom cohort, women born during 1966-75 period. The increase in average weeks worked between these cohorts is 1.2 weeks while the increase in annual hours is 52 hours. While there is a distinct slowdown in the rate of growth, it is worth noting, however, that there is no evidence of an actual "reversal" in labor supply of married women up to this point. This is particularly true given the increase in the fraction of women who experience a birth. Among married women in the 25-39 age group, the probability of having a birth in a given year was 10 percent for the later Baby Boom cohort and 13 percent for the post Baby Boom cohort. This most likely reflects the delay in child bearing among these later birth cohorts of women and reduction of births in the early 20s. The average number of children under the age of 6 in any given year increased as well while the average number of all children 18 and under declined. It is possible that later cohorts of women are delaying children into their forties but this is unlikely to offset the decline in total number of children up to age 40. While women are having slightly fewer children, there is a more pronounced pattern towards delay of children. This translates into later motherhood for the most recent birth cohorts. In the

next set of tables, we explore to what extent these changing patterns of work and childbearing have impacted the correlation of spouses' weeks and hours changes.

Do couples coordinate their labor supply upon the arrival of a child? Lundberg and Rose (1999) use the PSID and document that couples are more likely to specialize (as measured by the gap in hours worked by the husband relative to the wife) after the birth of a child compared to the period before the birth. We investigate these patterns in table 7. We regress the change in wife's weeks worked on husband's weeks worked, a dummy variable for birth, and husband's weeks worked interacted with birth as in the following equation:

$$(7) \Delta Weeks_{it}^w = \alpha + \beta_1 \Delta Weeks_{it}^H + \beta_2 Birth_{it} + \beta_3 * \Delta Weeks_{it}^w * Birth_{it} + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}$$

The main effect of husband's weeks worked point to the positive correlation of weeks worked among spouses. The interaction term relays how this correlation is increased or decreased for couples who experience birth of a child. One robust finding in table 7 is the large decline in wife's weeks worked following birth. The wife on average reduces labor supply by 4.9 to 5.8 weeks. This pattern is stable across all cohorts. There is a generally positive correlation of weeks worked between the husband the wife for couples who do not experience a birth. However, the wives' weeks negatively co-vary with husbands' weeks for couples who experience a birth, suggesting increased specialization. The extent of specialization where the correlation becomes negative upon the birth of a child does not have a consistent pattern across cohorts. For the Baby Boom cohorts, couples born in 1946-65, the extent of specialization is reduced. The trend towards less specialization reverses again, however, for the post Baby Boom cohorts. For couples

born 1966-75, there is positive correlation in weeks for couples not experiencing birth, and significantly negative correlation in weeks for couples experiencing birth, similar to the pre-Baby Boom cohort. While post-Baby Boom mothers are no less likely to be working overall, their labor market behavior and those of their spouses appear to follow the more traditional model of household specialization upon the birth of a child. An interesting question which is beyond the scope of the current paper is to what extent the sorting and selection into marriage may have shifted for the more recent cohorts. One possibility is that couples who marry and choose to have children are “pre-selected” in terms of their desire to have a more traditional household.

D. Labor Supply of Couples at Retirement Age

In table 8 we focus on the older age group and examine labor supply of husbands and wives, as well as fractions of households who are dual-earner, single-earner, and dual non-earner households. We disaggregate by finer birth cohort categories, beginning with cohorts born before 1916 and ending with the early Baby-Boom cohort, those born in 1946-1955. The top, middle and bottom panels summarize labor market variables for 55-59, 60-64, and 65-69 age groups respectively. Interestingly, the fraction of dual earner households first fell before it began to rise. Among the oldest cohorts, while husbands’ employment fell sharply, wives’ employment did not rise, leading to a decline in the overall fraction of dual-earner households. For cohorts born in 1926-35, husbands’ employment continued to fall but employment of wives began to increase. There has been a remarkable rebound in employment rates of older men. Among the 55-59 year old group, husbands’ employment increased from 66.9 to 72.0 percent, suggesting a

considerably higher employment rate among the early Baby Boom cohort. The increase in both husbands' and wives' employment rates have contributed to a strong increase in dual-earner households among these older age groups. Has the shift from employment of husbands towards wives among couples impacted the joint retirement patterns? We examine this issue by estimating the following:

$$(8) \quad \Delta Weeks_{it}^w = \alpha + \beta \Delta Weeks_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}.$$

The coefficient, β , measures wives' response in weeks to change in husbands' weeks worked controlling for observable characteristics. Panel A of table 9 reports the coefficients which are all positive and significant. There is generally a pattern of increasing positive correlation with each successive cohort. We next examine wives' weeks response to husbands' exit from employment among the pool where husbands are initially employed in year t as in the following:

$$(9) \quad \Delta Weeks_{it}^w = \alpha + \beta Exit_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}.$$

Panel B of table 9 reports these estimates. The table shows that among older couples, wives reduced weeks in response to husbands' exit from the labor force. For example, among the early Baby Boom cohorts, wives reduce labor supply by 2.97 weeks if the husband exits employment. Again, there is a pattern of increasing correlation in labor supply changes with each successive birth cohort. Finally, we examine wives' propensity to exit employment in response to husbands' exit from employment, conditional on both spouses working in the initial period t

$$(10) \quad Prob(Exit_{it}^W) = \alpha + \beta Exit_{it}^H + \delta X_{it} + \gamma_t + \pi_s + \varepsilon_{it}.$$

We estimate (10) via probit and report these estimates in panel C of table 9. There is a strong positive impact of husbands' exit on the probability of wives also leaving employment. For example, among the pre-Baby Boom cohorts aged 60-64, wife's probability of exiting is increased 21 percent if the husband exits employment. The propensity for the wife to also exit employment rises to 44 percent when the cohort is 65-69 years old. There is little evidence in table 9 that the coordination of timing of retirement from the labor force has diminished to any extent for the more recent cohorts. Table 10 conducts a similar exercise with husbands' response being the variables of interest and illustrates similar trends towards joint retirement. So far we have only examined the correlation of husbands' and wives' joint exits from employment. In future versions, we plan to utilize the information on weeks worked and weeks out of the labor force, as well as reported reasons for leaving the labor force to more accurately measure the transition into retirement.

IV. Conclusion

Long-run work behavior of married women has changed profoundly since the 1960s. Since that period, labor force participation rates of married women and men have converged as well as their education levels. Given the pattern of positive assortative mating, not only will labor market behavior of women increasingly resemble behavior of men on average, labor market behavior of wives are likely to increasingly resemble that of their husbands. Consistent with our expectations, we find that labor supply changes of couples become increasingly positively correlated over time and across successive birth cohorts.

We also find a robust pattern of increasingly positive correlation in labor supply changes as couples age. Among the youngest aged couples, those 25-39 years old, couples' labor supply is weakly (positively) correlated, confirming findings by Lundberg (1985) and other authors that couples' time in the home are substitutes during child-bearing age. Couples in this age group do not exhibit a pronounced pattern of increased positive co-movement of hours and weeks. In fact, we find some evidence that specialization *increased* with the post-Baby Boom cohorts. While overall labor force participation rates of these women have not decreased, we find that couples' hours and weeks negatively co-vary upon birth of a child, mimicking the pattern observed among the oldest cohorts. In contrast, the pattern towards strong positive co-movement is most pronounced among the oldest age groups, those aged 55-69. Among couples in this age range, we find increasing positive correlation in retirement transitions, with both the husband and the wife increasingly likely to exit employment upon exit of the spouse.

There are a number of issues for future research. One concern is whether measurement in weeks and hours changes seriously bias our correlation coefficients towards zero. While we maintain the assumption that measurement error is constant across time and across groups so that comparisons across these dimensions are still meaningful, this assumption as well as strategies to correct for measurement error need further exploration. Another issue for future research is to what extent changes in selection into marriage as well as patterns of positive assortative mating contributed to the observed changes in couples' labor market behavior.

Appendix A: Construction of the Matched CPS Data

The Current Population Survey is constructed such that a housing unit is interviewed for four months (Months in Sample = 1-4), rotates out of the sample for eight months, then returns for another four (Months in Sample = 5-8). For example, a unit that is first interviewed in March (Month in Sample = 1) will be re-interviewed starting in March of the next year (Month in Sample = 5). This allows potentially half of the units interviewed in a given year—those for whom Month in Sample = 1-4—to be matched to their observations in the following year (Month in Sample 5-8). Using unique record numbers available on the CPS data files constructed by Unicon Research Corporation and the above “Month in Sample” variable, one can construct a naïve match across years. In actuality, this method leads to many false matches because the record number is unique to housing unit, not household; if, for example, a family moves out of their house after interviews 1-4 and another family moves in, this method would naively match the two different families. Madrian and Lefgren (1999) discuss the trade-offs inherent in using different sets of demographics to improve the quality of the matches. Following their recommendation, we use gender, race and age to exclude potentially invalid matches. We then use marital status, household identifier, household type and relation of individuals to the household head to match across couples. Our current sample does not attempt to match across potential cohabitants. We include couples in our sample conditional on the wife being between the ages 25 and 69.

For 1968 to 2007, Appendix Table 1 shows the percentage of these husbands that were matched to a spouse and matched across years. In 1968, for example, the CPS had

34,047 male records in our age range. Of these, 83.7 percent were married with spouse present and matched to valid spouse observations. A well-known fact, which is demonstrated in this table, is that the fraction of men who were married with spouse present fell dramatically over the span of the data, so that only 66.8 percent of male records were matched to spouses in 2006. The third column in the table shows the percentage of couples with Months in Sample = 1-4 who are matched to their observations in the following year. For 1968, 81.0 of the potential couples were matched to observations in 1969. This match rate varies substantially across years and is particularly low during the last four years of our sample, a phenomenon which warrants further investigation.³ The non-matches are due to migration, mortality, and reporting error.

The clear advantages of the matched March sample are its large size and the number of years it encompasses. As noted above, however, a serious drawback is that it follows housing units, rather than households. Consequently, we must drop households that move due to job change or employment/non-employment transition from our matched samples. Appendix Table 2 compares observed characteristics in year t across matched and non-matched households to gauge the bias this may induce. It shows that, on average, non-matched households are younger, slightly less educated and slightly worse-off in terms of labor market variables compared to the matched households. Using the matched samples, then, is likely to bias upwards husbands' and wives' levels of mean employment and participation rates. How this will bias our labor market transitions, however, is less clear (see Peracchi and Welch (1995)).

³ Another complication is that the Bureau of Labor Statistics scrambled the household identifiers in selected years to preserve confidentiality, which precludes matching across those years.

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Table 1. Working Husbands, Working Wives and Dual-Earner Couples

A. Age Group 25-39

<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1926	-	-	-	-	-
1926-1945	95.8	45.2	43.3	54.5	2.2
1946-1965	93.1	66.2	62.2	35.0	2.8
>=1966	93.1	70.9	66.6	30.7	2.7

B. Age Group 40-54

<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1926	90.6	48.2	43.7	51.5	4.8
1926-1945	87.4	60.8	54.2	39.9	6.0
1946-1965	89.1	75.5	68.5	27.5	4.0
>=1966	-	-	-	-	-

C. Age Group 55-69

<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1926	46.1	24.9	16.4	38.3	45.3
1926-1945	49.3	39.9	26.7	35.8	37.5
1946-1965	-	-	-	-	-
>=1966	-	-	-	-	-

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The labor market status is derived from employment status last week.

Table 2. Correlation of Changes in Couples' Weeks Worked

A. All Couples

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		0.01	0.08
1926-1945	0.01	0.03	0.10
1946-1965	0.01	0.04	
>=1966	0.01		

B. Couples with Working Wife in Year t

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		0.04	0.10
1926-1945	0.03	0.04	0.12
1946-1965	0.02	0.04	
>=1966	0.04		

C. Couples with Non-Working Wife in Year t

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		-0.03	0.07
1926-1945	-0.01	0.01	0.08
1946-1965	-0.02	0.04	
>=1966	-0.03		

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports the spousal correlation in change in weeks worked last year. See text for details.

Table 3. Correlation of Changes in Couples' Annual Hours Worked

A. All Couples

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		0.00	0.05
1926-1945	-0.01	0.02	0.06
1946-1965	0.00	0.03	
>=1966	0.01		

B. Couples with Working Wife in Year t

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		0.01	0.05
1926-1945	0.01	0.03	0.06
1946-1965	0.01	0.03	
>=1966	0.04		

C. Couples with Non-Working Wife in Year t

<u>Birth Cohort</u>	<u>Age Group</u>		
	<u>25-39</u>	<u>40-54</u>	<u>55-69</u>
<1926		-0.03	0.05
1926-1945	-0.02	0.02	0.06
1946-1965	-0.02	0.03	
>=1966	-0.04		

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports the spousal correlation in change in annual hours worked last year. See text for details.

Table 4. Wife's Weeks Response to Change in Husbands' Employment Status

A. Δ Wife's Weeks = F(Δ Husband's Weeks, X)

Birth Cohort	25-39		40-54	
	Δ weeks		Δ weeks	
<1926			0.01	(0.01)
1926-1945	0.03 *	(0.01)	0.04 *	(0.01)
1946-1965	0.01	(0.01)	0.05 *	(0.01)
>=1966	0.02 *	(0.01)		

B. Δ Wife's Weeks = F(Husband's Exit, X)

Birth Cohort	25-39		40-54	
	Exit		Exit	
1926-1945	-0.11	(0.63)	-1.03 *	(0.32)
1946-1965	-0.32	(0.33)	-1.59 *	(0.31)
>=1966	0.13	(0.61)		

C. Δ Wife's Weeks = F(Husband's Exit, Husband's Exit*Wife Non-Worker in Year t, X)

Birth Cohort	25-39				40-54			
	Exit		Exit*		Exit		Exit*	
	Exit	Non-work	Exit*	Non-work	Exit	Non-work	Exit*	Non-work
<1926					-1.72	(0.96)	3.60 *	(1.29)
1926-1945	0.15	(0.89)	-0.51	(1.23)	-2.10 *	(0.40)	2.82 *	(0.64)
1946-1965	-0.68	(0.41)	1.00	(0.67)	-2.34 *	(0.36)	2.64 *	(0.67)
>=1966	-1.70 *	(0.75)	5.36 *	(1.27)				

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficient from regressing change in wife's weeks on husband's weeks controlling for education and age of spouses, presence of children ≤ 18 and children < 6 , state and year fixed effects. See text for further details.

Table 5. Wife's Annual Hours Response to Change in Husbands' Employment Status

A. Δ Wife's Annual Hours = F(Δ Husband's Annual Hours, X)

Birth Cohort	25-39		40-54	
	Δ Hours		Δ hours	
<1926			0.00	(0.01)
1926-1945	-0.01	(0.01)	0.02 *	(0.00)
1946-1965	0.00	(0.00)	0.02 *	(0.00)
>=1966	0.01	(0.01)		

B. Δ Wife's Annual Hours = F(Husband's Exit, X)

Birth Cohort	25-39		40-54	
	Exit		Exit	
1926-1945	19.8	(17.3)	24.3	(17.3)
1946-1965	23.9 *	(8.8)	0.0	(8.3)
>=1966	56.2 *	(16.5)	3.2	(8.1)

C. Δ Wife's Annual Hours = F(Husband's Exit, Husband's Exit*Wife Non-Worker in Year t, X)

Birth Cohort	25-39				40-54				
	Exit	Exit*		Exit	Exit*		Exit	Exit*	
		Non-work			Non-work			Non-work	
<1926				-11.5	(25.0)		66.4 *	(33.6)	
1926-1945	22.9	(24.4)	-6.1	(33.9)	-25.0 *	(10.4)	66.4 *	(16.6)	
1946-1965	-1.8	(11.0)	70.3 *	(17.8)	-20.1 *	(9.5)	82.3 *	(17.5)	
>=1966	0.0	(20.1)	164.6 *	(34.0)					

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficient from regressing change in wife's annual hours on husband's annual hours controlling for education and age of spouses, presence of children <=18 and children <6, state and year fixed effects. See text for further details.

Table 6. Summary Statistics for Wives Aged 25-39 by Birth Cohort

<u>Wife's Characteristics</u>						
<u>Birth Cohort</u>	<u>Age</u>	<u>Weeks Worked</u>	<u>Annual Hours</u>	<u>Children<6</u>	<u>Children<=18</u>	<u>Birth</u>
1926-35	36.7	20.2	631	0.5	2.8	0.05
1936-45	33.0	22.0	688	0.7	2.3	0.08
1946-55	33.3	30.4	992	0.6	1.8	0.08
1956-65	32.5	34.2	1137	0.7	1.7	0.10
1966-75	31.0	35.4	1189	0.8	1.5	0.13

<u>Husband's Characteristics</u>			
	<u>Age</u>	<u>Weeks Worked</u>	<u>Annual Hours</u>
1926-35	40.2	49.7	1976
1936-45	36.3	49.2	1956
1946-55	36.0	48.3	1910
1956-65	35.3	48.2	1902
1966-75	34.1	48.4	1910

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficient from regressing change in wife's hours on husband's hours. See text for details.

Table 7. Interaction of Spousal Labor Supply Following Birth

A. Dependent Variable= Wife's Weeks Worked

<u>Birth Cohort</u>	<u>Independent Variable</u>		
	<u>Husband's Weeks</u>	<u>Birth</u>	<u>Birth*Husband's Weeks</u>
1926-35	0.07 * (0.03)	-4.92 * (0.96)	-0.26 * (0.12)
1936-45	0.03 (0.02)	-5.60 * (0.47)	-0.11 * (0.05)
1946-55	0.04 * (0.01)	-5.84 * (0.32)	-0.03 (0.03)
1956-65	0.00 (0.01)	-5.85 * (0.28)	-0.02 (0.03)
1966-75	0.04 * (0.01)	-5.17 * (0.34)	-0.09 * (0.03)

B. Dependent Variable= Wife's Annual Hours Worked

<u>Birth Cohort</u>	<u>Independent Variable</u>		
	<u>Husband's Hours</u>	<u>Birth</u>	<u>Birth*Husband's Hours</u>
1926-35	0.02 (0.02)	-95.5 * (25.9)	-0.09 (0.08)
1936-45	-0.01 (0.01)	-145.7 * (7.6)	-0.04 (0.00)
1946-55	0.02 * (0.01)	-149.1 * (8.5)	-0.05 * (0.02)
1956-65	-0.01 (0.01)	-153.8 * (7.6)	0.00 (0.02)
1966-75	0.01 (0.01)	-113.7 * (9.1)	-0.04 * (0.02)

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficients from regressing change in wife's weeks and hours on specified independent variables. Age and education of both spouses, presence of children, year and state dummies are also included.

Table 8. Labor Supply of Older Couples

<u>A. Age Group 55-59</u>					
<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1916	79.2	40.9	33.1	53.8	13.0
1916-1925	69.4	40.8	30.1	49.9	20.0
1926-1935	65.6	47.3	34.2	44.5	21.3
1936-1945	66.9	59.4	44.0	38.4	17.7
1946-1955	72.0	65.1	50.9	35.3	13.8
<u>B. Age Group 60-64</u>					
<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1916	56.6	27.9	18.6	47.3	34.1
1916-1925	43.3	26.5	15.0	39.8	45.2
1926-1935	40.7	33.5	19.1	35.9	45.0
1936-1945	46.4	41.6	26.0	36.0	38.0
1946-1955	-	-	-	-	-
<u>C. Age Group 65-69</u>					
<u>Birth Cohort</u>	<u>%Husband Employed</u>	<u>%Wife Employed</u>	<u>% Dual Earner Household</u>	<u>%Single Earner Household</u>	<u>%Dual Non-Earner Household</u>
<1916	28.7	10.1	5.2	28.4	66.4
1916-1925	23.0	12.4	6.2	23.1	70.8
1926-1935	24.7	16.0	8.4	23.9	67.7
1936-1945	28.7	21.2	11.7	26.5	61.8
1946-1955	-	-	-	-	-

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The labor market status is derived from employment status last week.

**Table 9. Wife's Weeks Response to Change in Husbands' Employment Status
Older Age Groups**

A. Δ Wife's Weeks = F(Δ Husband's Weeks, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>	<u>Ages 60-64</u>	<u>Ages 65-69</u>
<1916	0.01 (0.02)	0.08 * (0.02)	0.08 * (0.01)
1916-1925	0.04 * (0.01)	0.06 * (0.01)	0.13 * (0.01)
1926-1935	0.06 * (0.01)	0.13 * (0.01)	0.12 * (0.01)
1936-1945	0.09 * (0.01)	0.08 * (0.01)	0.14 * (0.02)
1946-1955	0.07 * (0.02)		

B. Δ Wife's Weeks = F(Husband Exit, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>	<u>Ages 60-64</u>	<u>Ages 65-59</u>
<1916	1.26 (0.94)	-1.22 * (0.93)	-2.76 * (0.80)
1916-1925	-1.14 (0.67)	-1.95 * (0.61)	-2.85 * (0.83)
1926-1935	-1.63 * (0.57)	-2.75 * (0.68)	-3.84 * (1.07)
1936-1945	-2.79 * (0.65)	-3.44 * (0.76)	-4.25 * (1.47)
1946-1955	-2.97 * (0.87)		

C. Prob(Wife Exit) = F(Husband Exit, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>	<u>Ages 60-64</u>	<u>Ages 65-59</u>
<1916	0.03 (0.04)	0.16 * (0.05)	0.42 * (0.08)
1916-1925	0.09 * (0.03)	0.25 * (0.04)	0.56 * (0.06)
1926-1935	0.11 * (0.02)	0.21 * (0.03)	0.44 * (0.06)
1936-1945	0.14 * (0.02)	0.21 * (0.03)	0.47 * (0.07)
1946-1955	0.12 * (0.03)		

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficients from regressions of change in wife's hours on husband's hours. See text for details.

**Table 10. Husband's Weeks Response to Change in Wife's Employment Status
Older Age Groups**

A. Δ Husband's Weeks = F(Δ Wife's Weeks, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>		<u>Ages 60-64</u>		<u>Ages 65-69</u>	
<1916	0.00	(0.02)	0.09 *	(0.02)	0.16 *	(0.02)
1916-1925	0.03 *	(0.01)	0.07 *	(0.01)	0.21 *	(0.02)
1926-1935	0.06 *	(0.01)	0.14 *	(0.01)	0.16 *	(0.02)
1936-1945	0.09 *	(0.01)	0.08 *	(0.01)	0.16 *	(0.02)
1946-1955	0.07 *	(0.01)				

B. Δ Husband's Weeks = F(Wife Exit, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>		<u>Ages 60-64</u>		<u>Ages 65-59</u>	
<1916	1.00	(0.97)	-2.32 *	(1.11)	-2.83 *	(1.40)
1916-1925	0.05	(0.75)	-1.70 *	(0.82)	-8.18 *	(1.22)
1926-1935	-2.75 *	(0.62)	-4.42 *	(0.75)	-5.76 *	(1.23)
1936-1945	-2.37 *	(0.69)	-2.68 *	(0.71)	-1.77	(1.78)
1946-1955	-1.33	(0.85)				

C. Prob(Husband Exit) = F(Wife Exit, X)

<u>Birth Cohort</u>	<u>Ages 55-59</u>		<u>Ages 60-64</u>		<u>Ages 65-59</u>	
<1916	0.02	(0.02)	0.12 *	(0.04)	0.32 *	(0.07)
1916-1925	0.07 *	(0.02)	0.22 *	(0.03)	0.44 *	(0.06)
1926-1935	0.09 *	(0.02)	0.20 *	(0.03)	0.36 *	(0.05)
1936-1945	0.13 *	(0.02)	0.19 *	(0.03)	0.40 *	(0.07)
1946-1955	0.11 *	(0.03)				

Source: March Current Population Surveys. The sample consists of 320,454 couples who are matched across years and where the wife is 25-69 years old. The table reports coefficients from regression of change in wife's hours on husband's hours. See text for details.

Appendix Table 1. Match Rates Across Spouses and Across Years

<u>Year</u>	<u># Male Records</u>	<u>% Matched w/ Spouse</u>	<u>%Matched across Years</u>
1968	34047	83.7	81.0
1969	34453	83.8	76.9
1970	32641	83.9	82.6
1973	31201	82.4	52.9
1974	30718	81.7	81.9
1979	37007	78.3	77.5
1980	43826	77.0	80.8
1981	44347	75.8	72.2
1982	40148	75.0	79.7
1983	40714	74.0	77.7
1984	40488	74.1	75.4
1986	40367	72.0	74.9
1987	40092	71.8	77.1
1988	40665	70.9	72.9
1989	37841	70.7	79.1
1990	41446	70.0	78.1
1991	41619	69.0	77.4
1992	40939	68.6	78.4
1993	40516	68.9	58.1
1994	39127	68.4	57.0
1996	34085	67.6	78.5
1997	34681	66.8	78.5
1998	34829	66.8	77.8
1999	35060	66.4	78.1
2000	35752	65.5	84.2
2001	56061	68.3	56.2
2002	55893	68.1	56.8
2003	55806	67.8	57.9
2004	55066	67.9	50.8
2005	54345	67.5	54.5
2006	54088	66.8	55.0

Source: March Current Population Surveys. Column (1) shows the number of male records aged 25-69. Column (2) shows the fraction matched to spouses. Column (3) shows the match rate across years for couples that could potentially be matched (Month in Sample 1-4 during the first year).

Appendix Table 2. Comparison of Characteristics across Matched and Non-Matched Couples

	Matched Across Years	Not-Matched Across Years
Age of Husband	46.6	
Years of Schooling of Husband	12.9	12.8
Husband Employed (%)	83.4%	84.5%
Husband Unemployed	2.8%	4.1%
Husband OLF	13.8%	11.4%
Husband Weeks Worked	43.4	43.8
Husband Earnings (\$2000)	35474	34942
Age of Wife	44.0	39.8
Years of Schooling of Wife	12.7	12.6
Wife Employed	59.0%	58.9%
Wife Unemployed	2.1%	3.1%
Wife OLF	38.9%	38.0%
Wife Weeks Worked	29.4	29.3
Number of Observations	314978	128944

Source: March Current Population Survey 1968-2006. Column (1) shows average characteristics of the couple in year t matched across year t and $t+1$. Column (2) shows the average characteristics of couples in year t who could potentially be matched to year $t+1$ (Month in Sample 1-4) but did not have matching observations in year $t+1$. The potential reasons for non-match are migration, mortality, and reporting error. See Madrian and Lefgren (1999) for further details about non-matches.

Appendix Table 3a. Determinants of Change in Wife's Weeks Worked

Sample: Wives in Years 1926-1945

Dependent Variable = Δ Wife's Weeks Worked

Indep. Var.	Aged 25-39		Aged 40-54		Aged 55-69	
	Coeff	Std.Err.	Coeff	Std.Err.	Coeff	Std.Err.
wife's age	0.864	0.013	1.153	0.403	-4.095	0.579
wife' age squared	-0.013	0.007	-0.012	0.004	0.033	0.005
wife high school	0.388	0.290	0.309	0.188	-0.374	0.215
wife some college	0.759	0.399	0.603	0.242	-0.332	0.264
wife college	0.863	0.458	-0.293	0.272	-0.214	0.297
husband high school	0.201	0.290	0.269	0.184	0.058	0.207
husband some college	0.142	0.361	0.153	0.225	-0.294	0.247
husband college	0.043	0.388	0.477	0.233	0.176	0.254
number of children<6	-0.066	0.154	0.009	0.279	0.770	1.243
number of children<18	0.628	0.084	0.506	0.071	0.510	0.360
Δ husband's weeks worked	0.025	0.013	0.0411	0.0059	0.0971	0.0048
No. of Observations	23,661		52,704		39,800	

Source: March Current Population Surveys. Calculations are for couples where the husband is employed and the wife is out of the labor force in year t. The number of couples who fall into this category over all years is 69,608. The dependent variable is the probability that the wife will be in the labor force in year t+1 conditional on not being in the labor force in year t and the husband employed in year t. State and year fixed effects were also included. Numbers in bold refer to coefficients significant at the 5% level.

Appendix Table 3b. Determinants of Change in Wife's Weeks Worked

Sample: Wives in Years 1946-1965

Dependent Variable = Δ Wife's Weeks Worked

Indep. Var.	Aged 25-39		Aged 40-54		Aged 55-69	
	Coeff	Std.Err.	Coeff	Std.Err.	Coeff	Std.Err.
wife's age	0.285	0.256	0.576	0.368	-7.756	11.979
wife' age squared	-0.003	0.004	-0.006	0.004	0.064	0.105
wife high school	0.331	0.235	0.323	0.261	-1.381	0.915
wife some college	0.069	0.259	0.083	0.277	-1.291	0.977
wife college	-0.004	0.280	0.135	0.289	-1.950	1.022
husband high school	0.363	0.224	-0.110	0.244	-0.328	0.854
husband some college	0.319	0.242	-0.117	0.258	1.124	0.906
husband college	0.190	0.254	0.150	0.265	-0.204	0.922
number of children<6	0.159	0.093	-0.449	0.200	2.580	3.211
number of children<18	0.719	0.063	0.431	0.067	1.089	0.861
Δ husband's weeks worked	0.012	0.006	0.054	0.006	0.087	0.015
No. of Observations	71,592		56,221		4,930	

Source: March Current Population Surveys. Calculations are for couples where the husband is employed and the wife is out of the labor force in year t. The number of couples who fall into this category over all years is 69,608. The dependent variable is the probability that the wife will be in the labor force in year t+1 conditional on not being in the labor force in year t and the husband employed in year t. State and year fixed effects were also included. Numbers in bold refer to coefficients significant at the 5% level.