Table 1: Relationship between PTER and Spouse Labor Force Participation

1 State Panel Exercise

I propose we follow Valletta et al. (2020) and estimate a state-level panel.

Correlations. First, let's correlate married women's labor force participation with married men's PTER using the state panel (like Figure 2 of Valletta et al. (2020)). The concern I have here is that PTER will rise when labor markets are bad, therefore depressing women's LFP. That will necessitate the regression approach where we control for aggregate economic conditions via a time fixed effect.

Regressions. In particular, let's estimate an equation of the form (like equation 1 from Valletta et al. (2020)):

$$WLFP_{st} = \alpha + f(PTER_{st})\beta + X_{st}\gamma + \phi_s + \delta_t + \epsilon_{st}$$

where $WFLP_{st}$ is married women's labor force participation in state s in year t, $PTER_{st}$ is rate of husbands working part-time for economic reasons, X_{st} is a vector of time-varying state-level controls (e.g., industry shares, labor cost, and demographics), and ϕ_s and δ_t are state and year fixed effects, respectively. ϵ_{st} is an idiosyncratic error term.

2 CPS Microdata Estimation

For individual j working in industry i, living in state s at month-year t, we regress:

$$Spouse\ starts\ working_{jist} = \phi_s + \delta_t + \beta Became\ PTER_{jist} + \gamma_1 X_{st} + \gamma_2 X_{jt} + \epsilon_{jist}$$

where $Spouse\ starts\ working_{jist}$ is a dummy for whether j's spouse entered the labor force between t and $t-1$; $Became\ PTER_{jist}$ is a dummy for whether j became PTER between $t-1$ and t; X_{st} is a vector of time-varying state-specific controls such as the state's unemployment rate; and X_j are individual-level controls such as j's race and education. The sample is restricted to married men who are employed in both t and $t-1$ and whose spouse was not in the labor force in $t-1$.

Consider a Bartik instrumental variable of the form

$$\widehat{PTER}_{st} = \sum_i \frac{E_{is,1977}}{E_{s,1977}} \times PTER_{i,-s,t}$$

$$\widehat{PTER}_{it} = \sum_{s' \neq s} \frac{E_{is',1977}}{E_{i,1977}} \times PTER_{i,-s',t}$$

$$\widehat{IntoPTER}^{males}_{ist} = IntoPTER^{males}_{i,-s,t}$$

where $\frac{E_{is,1977}}{E_{s,1977}}$ is the fraction of employment in industry i for state s measured in the 1977 CPS surveys, and $PTER_{ist}$ is the fraction of workers in industry i, state s, in year-month t who are working part-time for economic reasons.

References

Valletta, R. G., L. Bengali, and C. Van der List (2020). Cyclical and market determinants of involuntary part-time employment. *Journal of Labor Economics 38*(1), 67–93.