The Two-Income Trap:
Are Two-Earner Households More Financially Vulnerable?

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Abstract

We test whether two-earner married couples are more likely to file for consumer bankruptcy in the future than similar married couples. Since two-earner households are unable to adjust their income on the extensive margin, they are more vulnerable to income shocks, and thus at risk of bankruptcy in the future. We find that two-earner married couples in 1999 are more likely to file for bankruptcy from 2002-2004 compared to other married couples. Additionally, we present supporting information that suggests that two-earner households have a higher average propensity to consume.

Keyword*:* added worker; personal bankruptcy

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I. Introduction

Since the 1980s, the labor supply of married women increased significantly (Blau and Kahn, 2007). This trend is part of a revolutionary economic and social shift in female employment (Goldin, 2006). With these changes has come a rise in dual-earner households. The proportion of dual earner married couples more than doubled between 1960 and 2000, increasing from 25 percent to 60 percent (Pew Research Center, 2015). The rise of the second earner has meant many middle-class households now rely, for better or worse, on two incomes. While gaining the ability to invest more in children, through housing, education, and healthcare, these two-earner households have lost an important form of economic insurance: the added worker.

The added worker effect, the propensity of wives to increase their labor supply in response to shocks to their husband's wages, was first observed in Lundberg (1985). Since then, the effect has remained important, though the subset of households for which it is relevant has shrunk (Juhn and Potter, 2007). Nonetheless, the wife's potential labor supply is an important form of insurance against negative wage shocks (Blundell, et al. 2017, Cullen and Gruber, 2000). An important implication of the added worker effect is that the negative welfare effects of a drop in the husband's wages are most pronounced households where female labor supply cannot be adjusted (Attanasio, et al., 2005), and the welfare costs of a shock to husband's wages are largest among households that do not face borrowing constraints. This is largely because households without borrowing constraints have the most to lose (that is, their ability to borrow in the future can be greatly diminished). The results of this research support the story told by Warren and Tyagi (2003). Two-earner households are trapped. When one earner suffers a negative labor market shock, they cannot self-insure, leading them to turn to the credit market and thus increasing their risk of bankruptcy.

We test whether two-earner couples are more likely to file for bankruptcy than similar couples. Since two-earner households are unable to adjust their income on the extensive margin, they are more vulnerable to shocks, and thus at risk of bankruptcy in the future. We use the 2000 Decennial Census linked to administrative personal bankruptcy records. Controlling for income, two-earner married couples in 1999 are more likely to file for bankruptcy from 2002-2004 compared to other married couples. Two-earner households are less likely to file for bankruptcy in 2000 or 2001, meaning the dual incomes protect a household from bankruptcy today but put them at risk for bankruptcy in the future.

Additionally, we present supporting information that suggests that two-earner households are more financially vulnerable to shocks. Using the Consumer Expenditure Survey, we find that two-earner households have a higher average propensity to consume.

II. Data and Model

Information on bankruptcy filings comes from administrative court records available through the Public Access to Court Electronic Records system. Access was not granted in all states; the results exclude Connecticut, Florida, Georgia, New Hampshire, New Jersey, Virginia, and Washington. The bankruptcy data were linked, at the person level, with the 2000 Decennial

Census. We link the bankruptcy record to the 2000 Decennial regardless of when the person filed for bankruptcy. We observe individuals in the 2000 Decennial filing for bankruptcy from 1992-2009. We remove from the sample anyone who filed for bankruptcy between 1992 and 2000 because they were not at risk for filing for bankruptcy again due to legal constraints.

The unit of observation is the household. Our primary dependent variable is whether the household filed for bankruptcy from 2002-2004. We use this range for two reasons. First, a negative shock such as a job loss does not lead to an immediate bankruptcy (Keys, 2018). Therefore, we observe the household two years after the Decennial to detect the impact of being a two-earner household on the future bankruptcy probability. Second, we limit our analysis to bankruptcies prior to 2005 to avoid confounding any potential impact of the 2005 Bankruptcy Abuse and Consumer Protection Act.

To test whether two-earner households just have a higher propensity to file, we also present results from another model where the dependent variable indicates if the household filed for bankruptcy from 2000-2001. We do not expect two-earner households to have a higher likelihood of filing in 2000 or 2001 because both spouses are working.

The Decennial provides two potential definitions of employment status. The first definition is weeks worked in 1999. A person is classified as an earner if the person worked 50-52 weeks. The second definition is based on whether the person was working the week before the survey was answered in April 2000. These two measures of employment allow us to ensure the results are robust.

The primary independent variable indicates if a household has two employed spouses. We control for whether the household is single or whether the household is separated, widowed, or divorced. The omitted category is then married couples with one or no spouses working. We also control for whether there are children under the age of 18 in the home, a quadratic in household income, age, education, race and state fixed effects.

III. Results

Under both employment definitions, married households with two earners are about 10 percent more likely to file for bankruptcy from 2002-2004 than other married households (Table 1). As expected, those who are divorced, widowed, or separated exhibit a higher propensity to file compared to being in a married, two-earner household. Those households with children also exhibit a higher likelihood of filing. The results are consistent when using county fixed effects instead of state fixed effects.

A concern is that two-earner households always have a higher likelihood of bankruptcy. Two earner households may have pre-existing financial risk or an unobservable higher inherent risk of filing. Two-earner married households are 6 percent less likely to file for bankruptcy in 2000 or 2001 than other married households (Table 1). Importantly, there is no change in the likelihood of filing for divorced, widowed, or separated households. This suggests two-earner households do not simply have a permanent higher probability of filing but instead have a lower probability of filing in years when both are working but a higher probability in the future.

We acknowledge that the labor force activity of a household is endogenous with respect to other financial pressures that may expose the household to bankruptcy. However, we show that two-earner households have a lower likelihood of filing for bankruptcy within two years. That is, relative to observably similar married-couple households with one or fewer earners, two-earner households go from being less likely to file for bankruptcy in the current year to more likely to file for bankruptcy 2-4 years later. If it were the case that financial pressures caused a second household member to enter the labor force and put the household at risk of bankruptcy, the measured effect in 2000-2001 would be non-negative. We observe the opposite, suggesting that the risk of bankruptcy increased after 1999/2000 due to presence of a second earner.

One possible mechanism for the link between two-income households and bankruptcy is the commitment to long-term expenses. This matches the narrative in Warren and Tyagi (2003), and consumption commitment is one of the explanations suggested by Chetty and Szeidl (2007) for the relationship between financial instability and two-earner households. We investigate this mechanism using the Consumer Expenditure (CE) Survey from 1995-2004. We regress two measures of expenditures on our set of family-earner structure dummies. Our first measure of expenditures is the ratio of yearly expenditures to yearly disposable income. The second focuses on the largest fixed expense: housing. We take the ratio of housing expenses to income. In the CE, we identify two earner households using weeks worked over the 12 months prior to the interview.

Married two-earner households have a higher average propensity to consume than other married households (Table 2). This indicates that married two-earner households are saving less than other married households. Having less savings may make them more vulnerable to a negative shock. Second, we find that the married two-earner households also have higher housing expenditures, suggesting they have higher long-term fixed expenses (Table 2). These higher fixed expenses may make them more financially vulnerable to job loss as well.

IV. Conclusion

We find that married two-earner households have a higher probability of filing for bankruptcy three to five years later. We show that married two-earner households have a lower probability of bankruptcy when both are still working. Our comparison of contemporaneous bankruptcy probabilities in 2000-2001 with future probabilities 2002-2004 allows us to isolate the effect of some negative shock causing one spouse to lose a job.

In addition, we show the married two-earner households spend a higher proportion of their after-tax income than other married households, including spending more on a large fixed expense, housing. These findings are consistent with two-earner households saving less and/or borrowing more, making them more financially vulnerable to negative shocks such as a health emergency or job loss. If a similar shock occurs to a married, one-earner household, the one-earner household will have a better ability to self-insure by having the non-earner become an earner. If a two-earner household experiences a similar shock, there is less ability for the unaffected earner to make up for the lost earnings because that person is already employed.

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Table 1: Effect of Two-Earner Households on Bankruptcy

	Bankrupt 2002-2004		Bankrupt 2000-2001	
Married & two earners [50-52 weeks in 1999]	0.0014	------	−0.0008	------
	(0.0001)		(0.0001)	
Married & two earners [Last week in 2000]	------	0.0013	------	−0.0007
		(0.0001)		(0.0001)
Divorced-widowed-separated	0.0026	0.0027	0.0027	0.0026
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Single	−0.0059	−0.0057	−0.0036	−0.0037
	(0.0002)	(0.0002)	(0.0001)	(0.0001)
Children	0.0090	0.0089	0.0059	0.0059
	(0.0001)	(0.0001)	(0.0001)	(0.0001)

N=12,950,000
Source: PACER and 2000 Decennial Long Form.
Notes: Models include quadratic in year 1999 income; quadratic in age; education and race dummies; and state fixed effects. The dependent variable indicates whether household filed for bankruptcy during the specified year range. The reference group is married couples with one or fewer earners.

Table 2: Effect of Two-Earner Households on Expenditures

	Expenditure to Income Ratio	Housing Expenditures to Income Ratio
Married & two earners [50-52 weeks]	0.0786	0.0689
	(0.0247)	(0.0136)
Divorced-widowed-separated	-0.1184	0.0242
	(0.2257)	(0.0124)
Single	-0.0831	0.0243
	(0.0286)	(0.0157)
Children	-0.0540	-0.0237
	(0.0206)	(.0113)

N=43,156

Models include quadratic in income; quadratic in age; and education and race dummies.