Childcare Payments and the Savings Paradox: Do They Promote Higher Savings?

Tairsa Mathews, MFPA, CFP®, Texas Tech University[1]

Household decision-making plays a crucial role in shaping the economic well-being of individual families and society as a whole. Households often make decisions without full information on the long-term consequences of the decisions (Lusardi & Mitchell, 2017). With an increase in focus on equality in parental roles as well as a desire for a more diverse workforce, we have seen an increase in both women entering the workforce and dual-income households (Darcy & McCarthy, 2007). Reasons for a household's choice are founded in concepts that can be explained through the Household Production Theory introduced by Gary Becker (Becker, 1965). Household Production Theory states that because time is scarce, households will allocate the use of their time by analyzing the trade-offs between workforce labor, leisure, and household production.

The household decision to have children has implications for almost every other household decision thereafter. One of the most impactful household decisions involves the allocation of time toward either household production or workforce labor. Households with young children have the option of a spouse exiting the workforce to provide childcare or outsourcing childcare to a provider. This decision has the potential to impact present consumption as well as future savings. Households experience constraints around the use of total resources and must consider the cost of time when allocating their resources to maximize utility. When earnings increase, the relative cost of time also increases, which leads households to allocate more time to the workforce and outsource household tasks, such as childcare.

The investment in childcare allows both parents in a married household to work. It is expected that households that invest in childcare do so with the expectation that, even after childcare expenses, the total household utility will be higher than if one parent stayed home to provide childcare. With the increase of dual-income households and women in the workforce (Gorry & Thomas, 2017) it is important for households to understand the costs and benefits involved in the decision of how to allocate their resources. For some households, utility is maximized by one parent exiting the workforce to provide childcare. In this situation, the parent has chosen to invest their time in household production and forgo the income they would make in workforce labor. For other households, having both parents in the workforce maximizes utility, increasing earnings, and creating the potential for higher savings and lifetime consumption. After considering the potential trade-offs, a household will make the decision in the best interest of the household. This decision may have the greatest impact on women, as women have historically spent more time in household production (Buffardi & Erdwins, 1997; Culkin et al., 1991; Poms et al., 2009).

A measure of utility maximization and productivity in the home is total savings. Individuals with a higher savings rate are able to achieve higher levels of utility by increasing their consumption capacity over their lifetimes. Families with higher levels of financial literacy will often prioritize savings, allowing the household to build assets and providing current and future financial security (Ballinger et al., 2011). Savings rate has been used as a measure of utility maximization in studies of behavioral economics, where individuals use factors such as hyperbolic discounting to overcome short-term biases to reach their long-term savings goals (Laibson, 1997), Another area where savings rate has been used as a measure of utility is the Life-Cycle Hypothesis, where individuals make savings and consumption decisions that smooth consumption over their lifetime, maximizing the utility of future income (Ando & Modigliani, 1963).

This study tests the impact of childcare costs on household savings. Theoretically, households who invest in childcare to enable both parents to work likely do so with the expectation that, even after childcare expenses, total household utility – as measured by savings rate – will be higher than if one parent provides childcare and forgoes workforce labor. The question this research seeks to answer is: whether dual-income households that pay for childcare have higher savings rates.

The data for this study came from the 2021 Panel Study of Income Dynamics (PSID) (Panel Study of Income Dynamics (PSID), 2021). The PSID is a longitudinal study that includes information on income, employment, family structure, housing, health, and wealth accumulation. This dependent variable for this study was created using two constructed total consumption variables, Total Consumption, and Total Consumption with Rental Value. The variables were assigned to households based one their

[1] Tairsa Mathew, (taimathe@ttu.edu), PhD Student, Personal Financial Planning

responses to their household ownership status. Once the appropriate consumption variable was assigned to each household, a savings ratio was created by subtracting total household consumption from total household income and then dividing by total household income.

The original sample size had 9,569 observations. The sample was restricted to only married households (dropping 5,541 observations), households with at least one child under age 6 (dropping 3,020 observations), and eliminating DK/NA responses for childcare costs and age of respondents (dropping 96 observations) for a final observation count of 911. Our sample had 70% dual-income households and 30% single-income households. The age of the youngest child was broken down by year, with 38% of households having a child under the age of 2, 16% have a child age 2, 12% having a child age 3, 14% having a child age 4, 10% having a child age 5 and 10% having a child age 6.

The Saving's Variable ranged from -3 to 1, with dual-income households saving 30.9% of their income compared to -5.01% for single-income households. Breaking out the dual-income and single-income households into categories of whether they pay for childcare or not, dual-income households who pay for childcare had an average saving's ratio of 33.9%, dual-income households who did not pay for child care had an average saving's ratio of 27.2%, single-income households who pay for childcare had an average saving's ratio of -2.7%, and single-income households had an average saving's ratio of -5.6%.

Two ordinary least squares regression analysis were ran, the first one the four household categories (dual-income pay for childcare, dual-income do not pay for childcare, single-income pay for childcare, single-income do not pay for childcare), and the second one observing dual-income households who pay for childcare and single-income households who do not pay for childcare. Both regressions found similar, statistically significant results. Single-income households savings rate is lower in both regressions, -0.284 for the first regression, and -0.271 for the second regression.

Fig.1: Regression Results (abbreviated)

Variable	**Regression 1**		**Regression 2**	
Single Income	-0.284	***	-0.271	***
College Degree Ref (No Degree as Reference)				
Associate's Degree	0.143	**	0.166	**
Bachelor's Degree	0.205	***	0.176	***
Graduate Degree	0.228	***	0.183	**
College Degree Sp (No Degree as Reference)				
Associate's Degree	0.037		-0.46	
Bachelor's Degree	0.112	**	0.126	**
Graduate Degree	0.171	***	0.201	***
Age of Youngest Child (Under 2 as Reference)				
2	0.018		0.066	
3	0.066		0.021	
4	0.091	*	0.093	
5	0.069		0.111	
6	0.183	***	0.139	*

*Notes: *p<0.05, **p<0.01, ***p<0.001*

This study examined the relationship between childcare decisions and savings behavior, looking specifically at the decision to have both spouses participate in the workforce in comparison to one spouse remaining at home to provide childcare. Through the theoretical lens of the Allocation of Time Theory (Becker, 1965), it was hypothesized that households choosing to outsource childcare and maintain dual-incomes would have higher saving's rates than single-income households, even after accounting for childcare costs. The hypothesis was supported that dual-income households who pay for childcare on average have a higher saving's rate. As the number of dual-income households increase, it is important to help families understand the trade-offs they make in their allocation of time between workforce and household labor.

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