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**By**

**Kevin Reynolds**

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Student Name (print or type)

Kevin Reynolds

Faculty Supervisor (print or type)

Dr. Wilcox

Faculty Approval Signature

Department of (print or type)

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## **Abstract:**

How do increasing levels of education affect parents' decisions to stay home with their children? When children are born parents make the decision to stay home and raise them or to continue at their jobs in the labor force. Parents need to be informed to make the best choice for their family. The choice to stay home with the children or work in the labor market is based on the perceived value a family puts on a parent staying home.

Some of the duties of a typical stay-home parent include cooking, cleaning, laundering, childcare, and driving. Using three levels of education including high school, college, and professional school graduates an income will be established that parents may use to determine whether or not they should stay home. Opportunity cost, market equivalents of services, and reservation wage will all be used to determine at what level parents will stay home.

Financially, if a parent makes more than the average salary of someone performing the average household tasks, they should choose to enter the labor force once again. Otherwise it is beneficial to stay home and raise the child and forgo the potential market wage.

## The Value of a Stay-home Parent

### Research Methods in Economics

Kevin Reynolds

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#### **Introduction**

How do increasing levels of education affect parents' decisions to stay home with their children? The value of a stay-home parent is often considered immeasurable, but more recently economists have begun attaching monetary values to this line of work. The monetary wage that is desired, in this case, is the typical contemporary salary of someone performing an identical task in the labor market.

When children are born parents make the decision to stay home and raise them or to continue at their jobs in the labor force. Parents need to be informed to make the best choice for their family. The choice to stay home with the children or work in the labor market is based on the perceived value a family puts on a parent staying home.

Some of the duties of a typical stay-home parent include cooking, cleaning, laundering, childcare, and driving. The preceding tasks can all be considered household tasks. Most of these household tasks can be accomplished through certain occupations. For example, a maid can do the cleaning and a fulltime nanny can care for the children.

Using three levels of education including high school, college, and professional school graduates an income will be established that parents may use to determine whether or not they should stay home. Opportunity cost, market equivalents of services, and reservation wage will all be used to determine at what level parents will stay home. Opportunity cost is the next best opportunity of a choice one has already made; in this case

it will be the choice to work or stay home. Market equivalents are a good way to use the salaries of workers that do the same tasks as a stay-home parent to give a market value to their household tasks. Reservation wage is the level of income at which an individual will choose to work instead of stay home. This will serve as a measure of a person's willingness to pay for these household tasks

These tasks are all things that someone can be paid to do or individuals may perform themselves. However, having someone else perform household tasks saves valuable time for individuals. To find out the value of one of these activities, individuals must consider what they give up in order to do household tasks. The opportunity cost of stay-at-home parents is a consideration when attaching a market value to household tasks. For working parents the value of the time they lose doing a task is the wage they could have made working in the labor market for that time. Different levels of education may prove to have a large role in the decision to stay home.

Finding the value of a market version of the task individuals wish to complete is another way one may determine a value. This stay-home "salary" is the approximate median of what it would cost for the household tasks that are performed by a stay-home parent. This can be modeled with the use of parents' reservation wages. An attempt will be made to determine, under controlled circumstances, what conditions make it fiscally justifiable for a parent to stay at home.

Other attempts to identify the value of this situation may be used, such as maternity or paternity leave (Bergmann 2000). Home production is slowly becoming a forgotten industry, but it can be worth over 70% of a working spouse's salary (Gronau 1980). Home production values may be an accurate way of determining the market value of a stay-home

parent. Nonmarket time, or time at home, can have differing values, so using the reservation wage of a person may prove to be a way to establish value (Blau, Ferber, Winkler 2010). The reservation wage is the limit a person is willing to pay for the household tasks.

A parent staying home is valuable. Unfortunately, in this case, a monetary value in the market is not what determines worth. However under the correct circumstances, a market value can be attached to the services provided by a stay-home parent. A look at the market value for household tasks and the forgone market salary will help ascertain the value of a stay-home parent. The analysis will focus on three sets of individuals who choose to stay home: a high school graduate, a college graduate, and a professional school graduate. Each of these examples will have different opportunity costs and will help determine what value a stay-home parent may be worth.

### **Literature Review**

Parents face the question of whether or not to return to work after their child is born. When maternity or paternity leave ends, parents make a vital decision about whether raising their child or their wage in the labor market is more important. Research has yet to reach a conclusion about how to quantify the value of a parent staying home; however, there have been several attempts made using different methods.

**Bergmann (2000)** offers insight into child rearing, stating it can have an applied monetary value. In this study, she argues that maternity or paternity leave is a way to attach a value. Using the wage that the employee is paid during their temporary child-induced leave can establish a value. In theory, this paid leave is allotted because firms see the need for parents to be at home with newborn children. This is an indirect attempt to

place a value on childrearing. The most appropriate way to consider this type of leave is to view it as a subsidy. In a way, paid maternity or paternity leave is a way for a family to subsidize childcare temporarily. This is one of the ways Bergmann portrays childrearing as having a value; it is a means of putting a value on nonmarket time for new parents (Bergmann 2000).

**Blau, Ferber, and Winkler (2010)** helped to establish a value for market time and nonmarket time, but in a different fashion. A decision to stay home can be difficult, and having a value on time both in and out of the labor market can help. Market and nonmarket time may be evaluated in a number of ways. The two most applicable routes are opportunity cost and reservation wage. Opportunity cost is the forgone second best choice to the one that was made. In this case, the opportunity cost would be the market wage given up to stay home. The reservation wage is the point at which one determines whether or not to enter the labor market based on a specific wage. Both of these routes are viable when determining value. This value is a way to preserve the dying industry, referenced by other researchers (Blau et al. 2010).

**Gronau (1980)** states home production is becoming a forgotten industry. With the advancement of gender equality in the workplace, home production has decreased. More people are valuing working rather than staying home with their children. According to Gronau, home production can be worth over 70% of a working spouse's income without children at home. Having a single child at home can increase the value of staying home so much so that if the spouse works, then the loss in home production value will equal almost their entire wage earned in the labor market. The greater number of children that are in a

household, the higher the home production value is. This means that home production is inherently valuable, a value that increases with each additional child (Gronau, 1980).

**National Compensation Survey (2011)** from the Bureau of Labor Statistics shows the national salary averages for various occupations. These occupations include the some of the same tasks a stay-home parent completes on a daily basis. These averages can be used to determine the value of a parent staying home. With a national average in place, the standard wage of a stay-home parent can be found by adding up the various mean wages. These salary averages can be combined with the methods discussed by Blau, Ferber, and Winkler. Combining these two ideas can establish an average salary for a stay-home parent that completes a set list of household tasks simply by staying home.

**Education Pays (2012)**, the article from the Bureau of Labor Statistics, also offers the average earning of graduates at differing education levels. This helps parents see what their potential earning power would be in the labor market. This can be related back to opportunity cost and reservation wage.

Each study is different, but they all seem to agree that home production has value. An issue arises with how that value is measured. For example, each article has a different method of quantifying home production. Bergmann says maternity and paternity leave wages are the closest estimate. Blau, Ferber and Winkler say opportunity cost and reservation wage are the best ways to measure the value of staying home. Gronau discusses the increasing value of staying at home based on the number of children in the house, but gives researchers a base without children. The National Compensation Survey shows us the actually market wages of some of the jobs stay-home parents do without pay. Education Pays shows the average salaries of a graduate at various education levels;

helping parents see what their potential wage could be if they did not stay home. While each article disagrees about how to find value, they all agree that home production has value.

Taking all of these things into consideration a promising course of action is to observe the value of someone staying home with varying levels of education. The average salaries of a high school graduate, a college graduate, and a professional school graduate for example are all very different. This should yield different maternity/paternity leave, opportunity costs and reservation wages. Analyzing three couples at three different education levels may prove to be a valid tool to measure home production. Of the above literature review Balu, Ferber, and Winkler (2010), the National Compensation Survey (2011), and Education Pays (2012) will be the focus.

### **Theory**

Using a three-tiered system of education levels including high school, college, and professional school graduates a level of income will be established that parents may use to determine whether or not they should stay home. Opportunity cost, market equivalents of services, and reservation wage will all be used to create this values chart. Opportunity cost is the forgone next best opportunity of a choice; in this case it will be the choice to work or stay home. Market equivalents are a good way to use the salaries of workers that do the same tasks as a stay-home parent, but in the labor market. These salaries combined will give a market value to their household tasks. Reservation wage is the level of income at which an individual will choose to enter the labor force. This will serve as another measure because the wage at which a parent decides to enter the labor market will be at the point where they see home production value ends.

Using three different education levels and the average national salaries of those graduates at each tier we can attempt to determine how increased education affects the decision of a parent to stay home. With information about the value of staying home to raise children and the value of working in the labor market, at each specific education level, parents can make informed decisions about whether or not to stay home.

### **Economic Analysis**

There is a multitude of ways to determine a market value for household tasks. The ultimate determination will help parents make an informed and economically sound decision of returning to work or staying home to raise children. Excluding personal reasons and utilities, parents should choose to stay home if the parents' wage in the labor market does not equal the value of their household tasks.

Before the three tiers can be analyzed, there needs to be an established value of household tasks. These tasks include childcare, cooking, transportation, maid services, and laundry. Each of these household tasks has a market equivalent occupation. The average childcare worker earns \$19,730 a year. The average short order cook earns \$20,638 a year. The average personal transportation worker earns 35,633 a year. The average maid earns \$20,691 a year. And the average laundry worker earns \$21,731 a year. Since the stay-at-home parent in this scenario will be expected to do all of the listed household tasks, the average salary you would need to pay for all of these services in the market would be \$118,423 a year. However, since it is one parent staying home they cannot perform five full time jobs; the average of these five should be our stay-home salary \$23,685. This is effectively the salary stay-home parents would earn if they were paid for their household

tasks. The \$23,685 is the reference point at which couples should evaluate the value of staying home (National Compensation Survey 2011).

The decision to stay home can be affected by many different factors; the assumptions in the decision to stay home are the following: there are no personal considerations or preferences that affect the decision to stay home, there are two parents making this decision and at least one will work in the labor market regardless, and they are guaranteed their education level's average wage only. Holding these three conditions constant will help provide a decision based strictly on the salaries and the perceived values of household tasks. There are far too many factors to account for, such as the utility one gets from interacting with coworkers, or children, and so on. Basing this decision strictly on monetary values keeps the decision process more applicable. Each decision will be made based on education level average salaries.

A high school graduate (tier 1) can expect to earn an average of \$638 a week, or \$33,176 a year (Education 2012). This is the national average salary of a high school graduate. The decision to stay home or not will rest mainly on the idea of opportunity cost. In this case if the parent decided to stay home and forgo their market wage of \$33,176 they would still be losing their gains from working, \$9,491 by staying home for one year. This decision seems fairly obvious, by staying home a parent will cost the family over nine thousand dollars.

A college graduate (tier 2) can expect to earn an average of \$1053 a week, or \$54,756 a year (Education 2012). At this salary the decision to work in the labor force would produce a gain of \$31,071 over home production. The decision to stay work will add over thirty one thousand dollars compared to staying home.

A professional school graduate (tier 3) can expect to earn a weekly average of \$1,665, or \$86,580 a year (Education 2012). If the parent decided to remain in the market in this case, they would gain \$62,895 each year they work. The table below represents the three tiers of education and the salaries available in both the labor market and in the household. Gains from entering the labor market are the biggest factors in the decision to stay home or not. The salary one gives up in order to stay home may not be the best financial decision for the family.

	Average Market Salary (annually) (BENEFIT)	Household Tasks (average annually) (COST)	Gains from Entering the Labor Market	Stay Home?
High School Graduate [Tier 1]	\$33,176	\$23,685	\$9,491	No
College Graduate [Tier 2]	\$54,756	\$23,685	\$31,071	No
Professional School Graduate [Tier 3]	\$86,580	\$23,685	\$62,895	No

(Education 2012)

If the reservation wage goes up it will increase the Household Tasks and after a certain point it will not be beneficial to enter the labor market. As long as the Gains from Entering the Labor Market column is positive a parent should choose to work. It would

become negative if their salary was below the household wage salary, in that case they should stay home.

## **Conclusion**

At any tier in the above table, the decision to stay home is always, "No." The reason each tier has the graduate choosing not to stay home is because the value of performing household tasks is less than the average salary they would earn in the labor market. At each tier graduates are gaining more if they continue working. The only point at which it would be financially responsible to not enter the labor force with children would be if your market wage would be at or below \$23,685. If one's wage were higher than the performance of household tasks then one would be giving up more to stay home.

Other research has shown that staying home can be valuable; this research has taken into account something others have lacked—education. Education level does play a large role in the decision to stay home and it should be considered in the decision to work in the market or stay home with the children.

So if the answer to the decision to stay home is always no, then why are people still continuing to stay home? The answer is something that could not be accounted for in this study—utility. The research accomplished here shows the average salaries of three education levels and the average salary of someone staying home. This is meant to aid in the decision to stay home to raise children or not. However, if one could take into account the utility received from personally rearing children then there might be more incentive to stay home. In this case a theoretical value of \$10,000 will be attached to staying home. This changes the table above because the high school graduate would now see that staying home is the better option. If that parent stayed home then the gains from entering the

labor market would be -\$509. At this point, if the parent decided to work they would lose over five hundred dollars. The theoretical value in this example is the utility one would get from staying home; this value is different for every couple. This increase in nonmarket utility would be reflected in a parent's reservation wage. Meaning that if the reservation wage were higher than their market salary, they would choose to stay home.

This research can account for the financial aspects of the decision to stay home; it could be improved however, if there could be an average utility value of staying home with children. This would make for a more accurate decision because it would account for some of the reasons people stay home other than money.

The decision to stay home and raise children or return to the labor force is a decision every parent will face. With a monetary value attached to this decision every couple can be better informed about the decision to stay home or not. Financially, if a parent makes more than the average salary of someone performing the average household tasks, they should choose to enter the labor force once again. Otherwise it is beneficial to stay home and raise the child and forgo the potential market wage. The unanswered question is all that is left; what level of utility does one get from staying home?

Overall, home production may be a valuable thing, but without receiving an actual paycheck it can be difficult to measure its worth. The three different ways to measure the value of home production are: the opportunity cost of the salary earned in the labor market, the equivalent of a market good for household tasks, and the reservation wage. Parents will face this decision to stay home every time a child is born and it is important to be informed so they can make the proper choice for their family. Increasing levels of education and utility will affect parents' decisions to stay home.

## References

Bergmann, B. R. (2000). Subsidizing Child Care by Mothers at Home. *Feminist Economics*, 6(1), 77-88.

Blau, F. D. , Ferber, M.A. , and Winkler, A.E. (2010). *The Economics of Women, Men, and Work*. 6<sup>th</sup> ed. New Jersey: Prentice Hall, Print.

Bureau of Labor Statistics. (2012). *Education Pays*. Retrieved from [http://www.bls.gov/emp/ep\\_chart\\_001.htm](http://www.bls.gov/emp/ep_chart_001.htm)

Gronau, R. (1980) "Home Production-- A Forgotten Industry." *The Review of Economics and Statistics*. Vol62(3), 408-416. Aug. 1980. Web. 29 Apr. 2012. <<http://www.jstor.org/stable/1927108>>.

Bureau of Labor Statistics. (2011). *National Compensation Survey*. Retrieved from database (Accession No. 2753).