

Relation between Economic Cost of Having Child and the Socio-Economic Demographic Determinants: Case Study

Nevein Nagy , Mohamed Mostafa, Abeer Yahea

Abstract:

Statistical and economic studies in the field of population are rare, at the national level in Egypt and also at the global level are not enough. Therefore, this study is concerned with calculating the cost of a child (before and after birth), the aim of the study was to know the relationship between socio-economic and demographic factors and the cost of having a child. It was used multiple regression and the study was found that many factors were significantly affected on the cost of having a child like (Age at first marriage, Husband educational status, Mother age at first child, Total expenditure, Total income, Duration of married life) and it was positive relation. **Recommendations:** For researchers interested in financial and economic issues, they have to do more study about the Economic Cost of Having Child.

Keywords: Economic Cost of Having Child, Significant affected, positive relation, multiple regression.

1. Introduction: Like most developing countries, Egypt suffers from the population problem which is one of the most important impediments to the overall development. Egypt became aware of the existence of a population problem represented in its first dimension in rapid increase in population growth rate as an inevitable result of highness of fertility rate and remarkable sharp decline in mortality rate since the forties of the last century. Since the sixties of the last century, Egypt has adopted many of population policies and programs that work to lower fertility rate, despite the presence of relative rise in utilization rate, remarkable, and with no significant decrease in the total fertility rate kept in pace with such increase.

The most of the world countries suffer from the population problem on one way or another, Egypt suffers in particular and developing countries in general from the existence of steady population increase. This problem is that such increase hinders the development efforts on one hand and the imbalance between the resources of the country and the increase in the other hand. Thus, two problems arise: one of them is the provision of basic needs of the steady increasing population, and the other problem is to reduce the gap between them and developed countries. However, there are countries whose population problem is represented in the low population growth. The problem of population decline in these countries (some developed countries characterized by the phenomenon of seniority) is represented in being made remarkable progress in all areas, and in order to maintain their achievements they must have manpower needs to maintain this progress and continue with it, but there is another side to that problem at the individual and family levels lying in the desire of many people to enjoy the luxury and this would reduce the desire for

childbearing, and therefore fertility decline in these communities . if this the case with developed countries despite of the high development condition in general and economic conditions in particular the matter that may lead to reduce fertility .Therefore, this will be the first priority of developing countries in general and in Egypt in particular to look after fertility from an economic standpoint.

It was many studies like study of Expenditures on Children by Families 2015, (M) Lino, (K) Kuczynski, (N) Rodriguez, (T) Rebecce (2015) Summarized that Since 1960, the U.S. Department of Agriculture (USDA) has provided estimates of annual expenditures on children from birth through age 17. This technical report presents the 2015 estimates for married-couple and single-parent families. Results shown the Expenditures are provided by age of children, household income level, major budgetary component (housing, food, etc.), and region (for married-couple families).

Study of The Career Costs of Children (J) Adda, (Ch) Dustmann, (K) Steven (2015) This paper studies fertility and labor supply of women to quantify the life-cycle career costs associated with children. We estimate a dynamic life-cycle model, extending existing work by incorporating occupational choices, allowing for skill atrophy that is occupation specific and can vary over the career cycle, and by introducing risk aversion and savings. This allows us to better understand the interplay between job characteristics, such as skill atrophy or differential wage growth, and the planning of fertility, as well as the sorting that takes place both into the labor market and across occupations, and to capture the trade-off between occupational choice and desired fertility. We use this model to determine the costs of children, how they decompose into loss of skills during interruptions, lost earnings opportunities, lower accumulation of experience, and selection into more child-friendly occupations, and analyze what are the longer run effects of policies that encourage fertility.

Study On Measuring Child Costs: With Applications to Poor Countries (A) Seaton, (J) Muellbauer (1986) was showed The theoretical basis for measuring child costs is discussed, and detailed consideration is given to two straightforward procedures for calculation, Engel's food share method and Rothbarth's adult good method. Each of these methods embodies different definitions of child costs so that the same empirical evidence can generate quite different estimates depending on the method used. It is shown that true costs are generally overstated by Engel's method and understated by Rothbarth's procedure, although the latter, unlike the former, can provide a sensible starting point for cost measurement. Our estimates from Sri Lankan and Indonesian data suggest that children cost their parents about 30-40 percent of what they spend on themselves.

Study of Estimates of the Cost of a Child in Ireland (E) Garvey, (E) Murphy, (P) Osikoya (2011) showed that The cost of a child is estimated using information from the household budget surveys from 1987 to

2004. We use an Engel method, where the share of household expenditure on food and a broader basket of necessities both act as proxies for the material standard of living. The cost of a child is also disaggregated according to age, gender and the income status of the family. We find that older children are more costly than younger children and that children cost proportionately more in lower income households. The gap between the cost of children for lower and higher income households has increased over time. Our findings on the cost of children according to age are consistent with international findings and previous results for Ireland. Our results on the cost of children according to the income status of their families are consistent with the results of international studies using comparable methods.

Study of The Rising Cost of Child Care in the United States (M)Chris (2015) showed that Anecdotal evidence suggests that the cost of child care in the U.S. has increased substantially over the past few decades. This paper marshals data from a variety of sources to rigorously assess the issue. It begins by using nationally representative survey data to trace the evolution in families' child care expenditures. I find that the typical family currently spends 14 percent more on child care than it did in 1990. This is less than half the increase documented in previous work. Interestingly, low-income families spend the same amount or less on child care, while their high-income counterparts spend considerably more. Despite this divergence, families at all income levels allocate the same share of income to child care as they did several decades ago. The next section of the paper draws on establishment- and individual-level data to examine trends in the market price of child care. The evidence suggests that after persistent, albeit modest, growth throughout the 1990s, market prices have been essentially flat for at least a decade. In the paper's final section, I analyze several features of the child care market that may have implications for prices, including the demand for child care, the skill-level of the child care workforce, and state regulations. A few findings are noteworthy. First, I show that child care demand stagnated around the same time that market prices leveled-off. Second, although the skill-level of the child care workforce increased in absolute terms, highly-educated women increasingly find child care employment less attractive than other occupations. Finally, child care regulations have not systematically increased in stringency, and they appear to have small and inconsistent effects on market prices. Together, these results indicate that the production of child care has not become more costly, which may explain the recent stagnation in market prices.

2. **Problem of the study:** The study problem has characterized in the following point:

- Not knowing what the cost of having a baby?
- Not knowing what is the relation between the cost of having a baby and the Socio-Economic and Demographic Determinants?

3. Study objectives :

This study aims to

- Find out the cost of having a child
- Determine the relation between the Socio-Economic and Demographic Determinants and Economic Cost of Having Child

4. Study Methodology Use of multiple regression analysis method to discover the effect of social, economic and demographic factors at the cost of having a baby.

5. Source of data: Field study Data Sources: The field study was conducted using the following steps: The questionnaire form was designed in light of previous studies and results of focus group (15) and (15) in-depth interviews. The focus group and in-depth interviews were conducted, The questionnaire (660) case Approval of the finalized questionnaire form was obtained from the Central Agency for Public Mobilization and Statistics (CAPMAS), , The mother of children approved verbally to conduct the survey, most of them accepted to complete the survey, Duration of the interview between 20-30 minutes.

6. Determination of the study population: The study population is determined as (Mothers whose ages are 15-45 years, and have one baby at least this study applied on 6th October governorate.

7. Results: the study has calculated the cost of have child which mean (cost of pregnancy and childbirth care, Delayed pregnancy, follow- up pregnancy, birth process, health of the baby , the cost of raising a child(school, clothes and shoes, books and tutorials, transportation, food, medicine, personal expenses, remedial teaching, other expenses).

Efficacy of Classification of the model of social, economic, demographic on the cost of having child (cost before bring a baby and cost after having a baby).the Model is acceptable because the (F test) showed was significant and the result showed the quality of model was 73%

The result of the model was showed That many factors affect in total cost of Child - like Age at first marriage, Husband educational status, Mother age at first child, Total expenditure, Total income, Duration of married life) all the relation is positive relation so its mean when any factor increase its mean the Economic Cost of Having Child and when any factor decrease its mean Economic Cost of Having Child decrease it showed in table (1).

8. Recommendations: For researchers interested in financial and economist have to do more study about the Economic Cost of Having Child

Annexes

Table1: Socio-Economic and Demographic Determinants Affecting on total Economic Cost of Having Child

	B	S.E	T-TEST	Sig
Constant	5158.29	3193.43	1.615	0.107
Residence	604.00-	454.84	1.328	0.185
Age at first marriage	650.50	117.92	5.516	0.000
Mother educational status	269.24	481.04	0.560	0.576
Husband age	26.73-	49.48	0.540	0.589
kinship between the husband and wife	164.02	421.58	0.389	0.697
Husband educational status	1523.75	548.22	2.779	0.006
Husband work out country	265.99-	554.76	0.479	0.632
Mother age at first child	594.56-	93.99	6.326	0.000
Total expenditure	2022	0.47	4.688	0.000
Total income	1.65-	0.48	3.401	0.001
Husband work status	1096.16-	756.56	1.449	0.148
Mother work status	1324.07	1730.30	0.765	0.444
Duration of married life	673.10	6.90	1.874	0.000
$R^2 = 0.731$ F = 55.008 sig = 0.000				

References

(M) Lino, (K) Kuczynski, (N) Rodriguez, (T) Rebecca (2015) Expenditures on Children by Families, 2015 - Center for Nutrition Policy and Promotion Miscellaneous Report No. 1528-2015, January 2017 Revised March 2017 - USAID - United States Department of Agriculture.

(J) Adda, (Ch) Dustmann, (K) Steven (2015) The Career Costs of Children - *Funding through the ESRC grant RES-000-22-0620 is gratefully acknowledged.

(A) Seaton, (J) Muellbauer (1986) On Measuring Child Costs: With Applications to Poor Countries - *Journal of Political Economy*, 1986, vol. 94, no. 4] ? 1986 by The University of Chicago. All rights reserved. 0022-3808/86/9404-0002\$01.50

(E) Garvey, (E) Murphy, (P) Osikoya (2011) Estimates of the Cost of a Child in Ireland - Combat Poverty Agency Working Paper Series 11/0 ISBN: 978-0-9565661-0-2.

(M) Chris (2015) The Rising Cost of Child Care in the United States: A Reassessment of the Evidence - IZA Discussion Paper No. 9072 May 2015.