

## Economic Analysis of the Abortion Incidence in the US in 2000

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### Abstract

This paper builds on the Medoff (1988) study in which he uses a fertility control model to estimate the demand for abortion in the U.S. This paper analyzes the impact of socioeconomic factors affecting a state's abortion rate in the U.S. using regression analysis of state-by-state cross-section data for the year 2000. This study investigates the effects of abortion price, women's income, Medicaid abortion subsidies to low-income women, characteristics of women of reproductive age that may reflect their opportunity cost -such as marital status and labor force participation- and religious beliefs. This paper analyzes the effect of the number of abortion providers, number of hospitals per capita, the effect of a state's restrictive abortion policies and number of family planning clinics per capita on a state's abortion incidence.

The empirical analysis performs and compares five OLS regression models. The original Medoff (1988) regression model is replicated in this paper with updated data from year 2000 ( $\text{Abortion Rate}_i = b_0 + b_1 \text{Price}_i + b_2 \text{Income}_i + b_3 \text{Single Women}_i + b_4 \text{Labor Force}_i + b_5 \text{Catholic Rate}_i + b_6 \text{Western States Dummy} + b_7 \text{Medicaid States Dummy}$ ). Then the paper adds other socioeconomic and political variables to the model. The final model is represented by the following regression:  
 $\text{Abortion Rate}_i = b_0 + b_1 \text{Price}_i + b_2 \text{Income}_i + b_3 \text{Single Women}_i + b_4 \text{Labor Force}_i + b_5 \text{Catholic Rate}_i + b_6 \text{Medicaid State Dummy} + b_7 \text{Abortion Providers}_i + b_8 \text{Hospitals}_i + b_9 \text{Restrictive Abortion Policy}_i + b_{10} \text{Family Planning}_i$

The results were consistent with previous studies, abortion follows the fundamental law of demand (the price coefficient is negative) and is a normal good with respect to income (the income coefficient is positive). Also consistent with prior studies, the single women variable is statistically significant and has a positive effect in all the models. Holding everything constant, states with higher percentage of single women will have one more abortion per 1,000 women. Although the magnitude of the coefficient is not great, the results confirmed the greater opportunity cost of single women compared to married women. States with higher percentage of single women will tend to have higher abortion rates. Further analysis may include the direct educational opportunity cost using the proportion of females in college as a proxy.

The Medicaid States variable is statistically significant and has a positive effect. Women in Medicaid States have 5 more abortions per 1,000 women. This variable is statistically significant suggesting that subsidizing low-income women to have abortions improves abortion access to this group and increases the legal abortion rate in the state. This significant positive effect is also consistent in all the models.

Contrary to Medoff (1988), the results of the Labor Force variable are not as expected. Women who are in the labor force presumably had greater opportunity cost than women who are not part of the labor force. This variable is statistically significant but has a negative effect on abortion rate. One possibility is that this variable measures the impact of the women 15 years old and older as opposed to women of reproductive age (15-44) only. Another possibility is that working women in 2000 had more financial and social resources than working women in the 1980s. Greater availability of social capital, child

care, or financial capital could influence a working women's decision not to choose an abortion. More analysis could be done to investigate the negative effect of this variable.

Also, contrary to Medoff's 1988 study, the variable Catholics is statistically significant and has a negative effect on abortion rate. The magnitude of the coefficient variable is big suggesting that Catholic women may view abortion as an unacceptable means of fertility control because of the disapproval of the Catholic Church in recent history. However, further analysis may add other faiths that strongly oppose abortion such as Evangelicals.

The number of abortion providers per capita doesn't have a significant effect on abortion rate. This doesn't confirm the hypothesis that the increased number of abortion providers in a state has a positive effect on the legal abortion rate. One consideration is that this variable is probably endogenous. That is, in long-run equilibrium the same factors that tend to raise the demand for abortions will also raise the number of abortion providers. Further studies can investigate the effect of number of abortions performed by out-of-state providers which may influence the legal abortion rate in a state. Also, the number of counties per state without a provider could be a proxy for this variable. On the other hand, the number of hospitals per capita has a positive significant effect on the abortion rate. However, the results show that the magnitude of the effect is small. Further studies can investigate the distance to abortion clinics in a state which may influence the abortion rate in a state.

A state's restrictive abortion policies may have a significant negative effect on the legal abortion rate among select population groups. The more the state imposes restrictions to abortion the less the legal abortion rate is in that state. This suggests that the extent of a

state's restriction on abortion significantly affect a woman's decision to have an abortion or access to abortion in that state.

Increased number of family planning clinics per capita has a statistically significant negative effect on the abortion rate. This suggests that states with more public family planning clinics increase the availability of contraception and therefore lower their abortion rates. This is consistent with the hypothesis that contraception is a substitute product for abortion and has a negative effect on the abortion rate. Further analysis could include the contraceptive prevalence rate or medicaid funding for family planning as proxies for this variable.

In conclusion, this study analyses the socioeconomic and political determinants of the demand for abortion of a state. The study started with the Medoff (1988) model, then analyzed additional models that added other socioeconomic and political factors affecting the abortion incidence. The results of the final model show that a state's abortion demand is influenced by the proportion of women who are single from 25 to 34 years old, labor force participation of women, catholic faith membership, Medicaid funding for abortion (according to federal standards), presence of restrictive abortion policies, proportion of the population with access to hospitals and family planning clinics in a state. The factors that have a positive effect on the abortion rate are percentage of single women 25-34, Medicaid funding for abortion and health care access in a state. The factors that have an inverse effect on abortion rate are labor force participation of women, catholic faith membership, restrictive abortion policies and number of family planning clinics per capita in a state.