UNITED WE STAND, DIVIDED WE FALL: ON REQUIRING THE EMPOWERMENT OF WOMEN

ANDREW PRICE

Junior Sophister

The study of developmental economics faces numerous problems in attempting to identify causal relations. In this essay, Andrew Price examines economic theory and empirical evidence in an attempt to establish whether or not women's empowerment is necessary for economic development. While no firm conclusions can be drawn, he makes a strong argument for women's empowerment being, if not absolutely necessary, of tantamount importance.

Introduction

In recent years, specific emphasis has been placed on women's rights across the planet. See, for example, the UN's sustainable development goals, or the explicit position held by the World Bank on the matter. This essay will discuss this emphasis in relation to developing countries. Through a brief combing of the academic literature on the subject will we used to explain why the expansion of women's rights and opportunities are viewed as essential developing countries. This shall be done by outlining, through economic models, the expected effects of the expansion followed by results from some empirical studies. Then, deeper analysis shall be conducted, focusing particularly on whether or not the expansion of said rights and opportunities is, in fact, 'essential' or merely desired and/or beneficial. This shall be accomplished through empirical analysis of currently developing countries and analysis of the histories of now developed countries. Through these analyses, this essay will show that the expansion of women's rights and opportunities is essentially essential. That is to say not absolutely necessary, in a strict sense of the word, but for all intents and purposes, necessary. However, this must be achieved with great care, with respect to what policies are implemented and in what contexts.

Theoretical Basis

The argument for a particular focus on the expansion of women's rights and opportunities is best illustrated through the augmented Solow growth model (Mankiw, Romer and Weil,

1992). Through the expansion of women's rights (e.g. right to property, work, education, etc.), we directly affect their opportunities in the market. Specifically, we increase the overall levels of human capital (e.g. through increased education) and physical capital (e.g. by removing credit constraints/barriers). These increases in human and physical capital also increase the level of innovation in a country (e.g. technological growth and innovation) and while the standard Solow model actually takes technological growth as a given, it is possible to relax that assumption under the augmented model. These improvements to human and physical capital, combined with technological progress, cause not only a movement along the curve, but a shift of the curve itself, meaning greater output and economic well-being for all in the country. On top of this, we would also expect to see a kind of feedback effect, in that better human capital, physical capital and technology also allows for greater economic opportunities. These new opportunities once again improve human capital and physical capital, which once again improves technology and so on and so forth. Essentially, through the augmented Solow model, the empowerment of women is seen as a kind of perpetual motion machine for economic growth.

Similarly, if we imagine a hypothetical country in which only men are allowed to work, if we were to move that country to a state in which women could work, we would expect to see an effective doubling of the size of the work force. In so doing we would expect to see large increases in economic output. If we also consider the Aggregate Supply Aggregate Demand model (ASAD) this boost in output should be met with a fall in prices for consumers (assuming the boost to aggregate supply is greater than the boost to aggregate demand). If we consider other economic models and theories, specifically, the Investment-Savings Liquidity-Money (ISLM) model, Okun's law and the Fisher effect, we would also expect to see more favourable interest rates, inflation rates and unemployment numbers. From all this, it is easy to see why the empowerment of women is, generally speaking, given such priority by international institutions and organisations.

Practical Basis

Theories are often a useful starting point, but unless they are backed up by the data they are of limited worth. As such, we must compare these theories with empirical findings. Mankiw and colleagues (1992) ran a study using the available global data and found that the augmented Solow model excellently accounted for the current state of affairs with their model accounting for nearly eighty percent of the observed variation across countries. However, empirical studies on this issue are tricky. The feedback and relations between all the variables of the model often make regressions biased. If we accounted for this, the model would likely explain far less variation. This issue noted, for the purposes of this essay we must narrow the focus of the model to the effects of empowerment of women on GDP per capita. According to the augmented Solow model, a decrease in the

population growth rate should (holding other factors constant) shift the depreciation line and improve income per capita. The empowerment of women is, intuitively, likely to reduce the population growth rate. Improving the educational standards of women is empirically correlated with lower birth rates (Reading, 2011), which in turn implies lower population growth rates. Due to the aforementioned correlation issues among variables, it is difficult to find studies in which this correlation is entirely negated. This difficulty noted, there is a striking negative correlation in the data between high fertility rates and GDP per capita (IndexMundi, 2004), just as the augmented Solow model predicts there should be. Similarly, under this augmented model, improved levels of female education implies higher levels of human capital, leading to higher GDP per capita. The data again supports the prediction of the model (Hanushek and Wößmann, 2007).

If we look to the overall output of the economy, theory predict that if more women are employed, as opposed to staying at home, overall output should increase. An article in The Economist (2009) notes that in the developed world, increasing the female participation rate is estimated to significantly increase GDP, in some countries by nearly twenty percent. There is wide variation between developing countries in their respective female participation (Verick, 2014), but there is little initial reason to believe higher participation rates would have different results to those seen in developed countries. Between the early 1970s and mid-1990s, the female participation rate grew by fifteen percent in East Asia and Latin America, this period also saw a significant decline in the wage gap and a large increase in female life expectancy (between twenty and twenty-five years) (Duflo, 2012). In East-Asia these remarkable gains coincided with rapid economic expansion but this was not the case in Latin America, which experienced a period of great turmoil. Given these differences, drawing causal relations between female participation rates and economic development in less developed countries is tricky. Indeed it may have been the case that economic growth caused the increase in participation.

Furthermore, in many cases, poorer regions often see high female participation rates out of sheer necessity (Verick, 2014). To account for this a 'U-shaped' model of female participation rates is often advocated; beginning high out of necessity, then gradually declining with economic growth, only to rise again after a certain threshold (Goldin, 1994). Determining what point an economy is at on this curve is key to policy decisions. These difficulties and complications also present obstacles in determining the effect of increased female participation on the unemployment rate or on interest rates and identifying possible instrumental variables for these situations can be extremely difficult.

Finally, in the ASAD model, the government contributes heavily to overall output, meaning they have a large say in how an economy works and where it allocates its resources, however globally in an average parliament roughly twenty percent of the representatives are women (Duflo, 2012). It is generally assumed that men and women

have different priorities and values, ergo, as things stand, male priorities and values are receiving more focus than women's. The theory goes that if we change the composition of these parliaments and governments to a more gender equal state, we will see increased funding for things women value and prioritise. There is some empirical evidence for the claim that the values differ. It has been found that when in positions of influence in a community women do indeed invest differently to men (Duflo, 2012). However, this is not necessarily a desirable thing for economic development in and of itself, what matters is what these priorities are. If, for example, a male dominated government who focused its budget on health care is replaced by a female dominated government who focuses its budget on education, it is unclear which is better for development or for society as a whole as each has merit. It is therefore difficult to empirically argue that greater female representation in government will be directly beneficial to economic development. It is certainly desirable for other reasons and it may well be better for economic development, but as of yet there has been no satisfactory method to empirically evaluate this claim.

One thing we can say empirically on this matter is that greater female representation and participation in government does have several positive externalities. In systems which have introduced gender quotas, numerous studies have seen a corresponding rise in levels of female educational enrolment, attainment and in their corresponding aspirations for their future (Duflo, 2012). A study in West Bengal found that in regions where there had never been a female leader, 86 per cent of parents wanted their daughters to be 'either a housewife or whatever their in-laws would decide for her. The corresponding fraction was below 1 per cent for the boys (Duflo, 2012:1057). It seems clear that gender quotas in West Bengal would help women immensely, we would expect to see improvements in the levels of education and female labour-force participation, which, as was discussed above, has been shown to be beneficial for GDP per capita and possibly for overall output as well.

Is it Essential?

Ultimately, to determine whether or not the expansion of women's rights and opportunities is essential for policy makers in developing countries, we must look at the data. It must be stressed here that what we are discussing is not whether such an expansion is a good thing, or a desirable thing, but whether it is effective. Can we say or show that in placing particular emphasis on the empowerment of women, we see a greater improvement to economic development than would otherwise occur? Phrased like that it is, of course, impossible to say one way or the other. We cannot construct a test in which we empower the women of a national economy and monitor the results, whilst simultaneously not empowering them and monitoring the results. As such, everything discussed here must be with the caveat that we lack a perfect control group for comparison.

This caveat noted, there are several studies worth discussing here. The first of these is a study conducted by Ashraf (2009) in the Philippines on spousal control and decision making. In the study, cash or vouchers were offered to couples under three distinct sets of conditions. The first of these was a private scenario, in which the spouses were kept apart as much as possible. The second scenario was a public scenario, where both people were informed of all the possible outcomes for them and their spouse, but were only allowed to communicate after their respective decisions were made. The final scenario was one of negotiation, where spouses could communicate throughout the process. In dividing the couples between these three scenarios, the study could (in as much as is feasibly possible) control for the effects of information and communication.

The initial results of the study appear to show differences between genders in terms of decision making in the three scenarios. Men appear far more likely to commit their cash or voucher to consumption than women do. If we were to stop here we might infer that if we were to empower women, through political representation and workplace employment, we would see better outcomes for economic development as women save more. A higher savings rate leads to higher GDP per capita under the augmented Solow model. However when researchers accounted for who in the household has control over how the money taken in is spent the apparent difference between genders is negated. As such, we cannot identify significant differences in propensity to save between genders from this study, but we can infer that the relative position between genders due to pre-existing structural differences affects this propensity. This illustrates the need to consider underlying conditions and social settings before any gender based policies are implemented.

It is generally assumed that women in developing countries are more credit constrained than men. As such, if we were to remove these constraints we would expect to see a large return to investment. This implies improved physical capital which should increase GDP per capita under the augmented Solow model. De Mel and colleagues (2009) carried out a study on credit constraints and microenterprise for women in Sri Lanka. In this study, grants, the size of which was randomly varied, were issued to recipients chosen randomly based upon certain initial criteria. They found that the grants issued to men saw a high and enduring returns, while those issued to women had no effect. Even when adding controls for liquidity constraints, natural ability, risk aversion and industry, the result was the same. The results of this experiment has important implications for policymakers; it is not enough to simply give women more money, if a policy doesn't also address the underlying constraints placed upon women it will be neither effective nor efficient.

This finding that women in developing countries are not merely credit constrained seems self-evident upon reflection. In many nations women lack equal rights to their male counterparts (Duflo, 2012), which will of course limit how they can spend or

invest their money. It may be more beneficial, in the long run, to invest in improving institutional factors in order to empower women in the future, making future grants and loans effective. But finding an empirical study to support this course of action is made impossible by the lack of a control group. Moreover, convincing current business owners that constraining their current credit for future business owners' benefit is, to put it mildly, a hard sell politically.

The final paper to be discussed is an overview paper by Duflo (2012), which gathered information from several other studies together in an attempt to address a similar question to the one proposed here. Namely, should we improve gender equality to reduce poverty, or reduce poverty to improve gender equality? Duflo began by outlining the argument in favour of reducing poverty to improve equality. Essentially, the argument is that reducing poverty disproportionately benefits women. The example that best illustrates this is that in South Africa, the spreading of electricity not only increased overall standard of living also led to a ten per cent increase in the female employment rate, while male employment remained constant. Through the improvement of overall standard of living, a significant gain for female empowerment was also observed. It could be argued that it seems unnecessary to give specific consideration to women's rights and opportunities as they will improve as a side effect.

Conclusion

Why then does this essay claim it to be essentially essential? This is done because there are several simple steps that could be taken, with minimal cost that would greatly benefit not only women, but economic development as a whole. As has been noted above, drawing a direct link between governmental gender quotas and economic development is tricky, but the positive externalities are clear. Such quotas could be implemented with little effort on behalf of and we would expect to see higher levels of female educational enrolment, attainment and future aspirations as a result. By signing a bill, a developing country's government could bring about an improvement to human capital at virtually no extra cost. Similarly, though the study in Sri Lanka found that grants had no effect on women's long run income, this does not refute the claim that women should be given a particular economic focus. If anything, it emphasises the necessity to end the subjugation of women. It is of course economically inefficient to give grants to women instead of men if the men will see greater returns. However it is also economically inefficient to leave women in such a situation. To do so would be to leave a massive well of potential and actual human capital unused.

Ultimately the context is what determines whether or not a policy aimed at the empowerment of women is essential. Taking the Sri Lanka study, it would make no sense for the government of a developing country to loan or give grants to female micro-

enterprise owners if said grants will have no lasting effect. But neither does it make sense to keep women in this position when taking steps to change it could improve female human capital, which would turn improve GDP per capita. This is what was meant by essentially essential. The developing countries of the world could still develop without empowering women. Indeed the empowerment of women came long after the industrial revolution in the West. But to neglect the empowerment of women as an economic tool for growth would be inefficient, not to mention immoral.

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