

### **1A.1. Gender Inequality and the Demographic Dividend**

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**Background/Significance:** Much attention in the development field has focused in recent years on research on the “demographic dividend” and the implications this has for youth-focused development. Considerable research has also evolved at the same time on gender inequities and the effects of efforts to overcome them for economic development. However, the implications of gender inequality for realizing the benefits of the demographic dividend have not been explored. Given decades of theorizing about the links between fertility decline and women’s status, this appears to be an important oversight. This research will provide a theoretical framework for modeling the relationships between gender and the demographic dividend and test these relationships using comparative macro-level data. Preliminary analyses suggest that a failure to invest in the human capital of young women (specifically in their education) and restricting their ability to participate in the formal economy both reduce the economic effect of the favorable age structure that generates the ‘dividend’. While not specifically focusing on youth, the policy implications of this research are likely to be greatest for this age group, as they are the basis for the demographic dividend.

**Main Question/Hypothesis:** The main hypothesis we examine in this research is whether gender inequality (measured in terms of education and labor force participation) has an effect on the degree to which the economic benefits of the ‘demographic dividend’ are realized. More specifically, we hypothesize that:

1. Economic growth will be higher in countries with higher levels of female educational attainment and labor force participation
2. Economic growth will be higher in countries with less difference between male/female educational attainment and labor force participation
3. The positive effect of a high ratio of working age to total population will depend on the difference between male and female educational attainment, with the effect being smaller in countries where this difference is greater.

**Methodology:** We use cross-national longitudinal data to explore this research question. Specifically, we use information from all countries where it is available between 1960 and 1990, using this information to estimate a random-effects model of economic growth in the 1965-1990 period. The dependent variable in the analyses is the GDP growth rate within each five-year period between 1965 and 1990, and the key independent variables are: the ratio of working-age to the total population (an indicator of the favorability of the age structure); the ratio of female to male average years of secondary school education; and the ratio of female to male participation in the non-agricultural labor force. In addition to these variables, we also control for GDP per capita and per worker at the beginning of each five-year period, whether the country is located in the tropics, whether it is landlocked, a measure of the quality of its social and economic institutions, a measure of the degree to which the country was ‘open’ in terms of economic trade over the five-year period, growth of the total population and working-age population over the five-year period, and life expectancy and population density at the beginning of the period.

**Findings:** Our preliminary analyses suggest that the degree to which women receive a secondary education, in particular, has an effect on both GDP growth directly and the degree to which the potential bonus to economic growth that a favorable age structure may generate. In other words, not only does a greater difference between male and female educational levels lower GDP growth rates, but it also lessens the effect of the ‘dividend’. The results of the differences in labor force participation are less clear, partly as the result of the peculiarities of the relationship between women’s labor force participation and development level, which is ‘U’ shaped and therefore difficult to model empirically). Further research is being conducted using a variety of more precise measures of labor force participation to resolve these questions.

**Knowledge Contribution:** This research contributes to the growing knowledge base on both the demographic dividend and how gender inequality influences economic growth. To our knowledge, no research has been done that examines the intersection of these two themes. In addition, few research topics have policy implications that are as clear-cut as this type of research, which is able to put the cost of gender discrimination in economic terms. Our research has particular implications for youth, as the policy implications of our findings are likely to be focused on them, particularly with regard to increasing their relative human capital.