PhD Dissertation Abstract

Georgi Kocharkov

Department of Economics

Universidad Carlos III de Madrid

November 2011

My academic work lies at the intersection of Macroeconomics, Labor Economics, and Family Economics. In my job market paper I study how abortions affect long-term inequality. The basic idea is that in an environment with uncertain fertility outcomes, the availability of contraception and abortions determines the living conditions of children and hence their future labor market outcomes. Using a general equilibrium model of marriage, divorce, and investment in children, I explore how the availability of abortions contribute to the long-term income inequality in the U.S. In another paper (joint with Jeremy Greenwood, Nezih Guner, and Cezar Santos), I study the evolution of marriages and divorces over the last 50 years in the U.S. The goal of the project is to understand how much the declining gender gap and the improvements in home production technologies have contributed to changes in the household structure in the U.S. and exploit the differential changes in household structure by different educational groups to determine the relative importance of these two factors.

Abortions and Inequality *(Job Market Paper)*

In the last three decades over a million abortions were performed annually in the United States. This is around one quarter of all conceived pregnancies. Empirical studies such as Gruber, Levine and Staiger (1999) assess the impact of legalization of abortions in the 1970s on living conditions of children. They argue that legalization of abortions provides better living conditions and human capital endowments to surviving children. This paper takes seriously the hypothesis that legalized abortion can improve the living conditions of children and hence alter their future labor market outcomes. The main question of the paper is what are the implications of abortions for long-term income inequality. An overlapping generations model of fertility, family formation, human capital investment, contraception and abortion decisions is built to answer this question quantitatively. The model economy is populated by heterogeneous agents in terms of age, marital status, education and income. This gives rise to an income distribution as an equilibrium outcome of the model. The model matches the fertility and

abortions behavior in the US economy for the late 1990s and early 2000s. The basic computational experiment is as follows: First, the benchmark income distribution is calculated or an economy where abortions are available. Then, a counterfactual income distribution is derived for the case in which abortions are not allowed. The difference in inequality between the benchmark and the counterfactual economies is interpreted as the contribution of abortions. The results show that in a world without abortions there would be more inequality: inequality (measured by the coefficient of variation) would go up from 0.987 to 1.227.

There are three factors behind the rise in income inequality: (i) higher and more unequal fertility (number of children) across households, especially for the young, the unskilled, and the singles, in the counterfactual world, (ii) changes in parental investments in children, which, with the higher fertility risk, become lower and more unequal across parents in the counterfactual economy, and (iii) changes in family formation patterns. A decomposition exercise is performed in which each of these forces is shut down and the resulting inequality in the absence of abortions is compared to the inequality in the benchmark economy. It turns out that the changing patterns of family formation have a marginal contribution to the increase of inequality. The decreasing and more unequal parental investments explain about a third of the increase of inequality. However, the increasing and more unequal fertility in an economy without abortions alone can account for the greater part of the rise in long-term income dispersion.

Technology and the Changing Family

(joint with Jeremy Greenwood, Nezih Guner and Cezar Santos)

Marriages have declined significantly in the U.S. since 1960. The drop is larger for non-college educated individuals versus college educated ones. At the same time divorce has increased. Again more so for the non-college educated vis à vis the college educated. Additionally, assortative mating has risen. People are more likely to marry someone of the same education level today than in the past. Finally, the last 50 years witnessed a unprecedented increase in married female labor force participation. A model of marriage and divorce is calibrated/estimated to the postwar U.S. data. The contribution of different factors, such as skilled-biased technological progress in the market, labor-saving technological progress in the home, and the narrowing of the gender gap, to explaining these facts is gauged.

The technological progress in the home is introduced through the declining prices of household input

goods used in household production, while the skilled-biased technological change, the rising living standards and the declining gender gap are incorporated in the wages people get. Two experiments are performed in the artificial economy. First, the technological progress in the home is shut down by setting the price of household inputs in 2005 to a 1960 level. The results show that the improvements of the household production technology can account alone for the rise of married female labor force participation and the declining marriages and increasing divorces. Second, the economy is simulated for the case of wages staying at their 1960 level while allowing for technological improvements in the home. The changes in wages explain the rise of assortative mating and the rise in education between 1960 and 2005.

References:

Gruber, J., Levine, P., and Douglas Staiger (1999), "Abortion Legalization and Child Living Circumstances: Who Is the "Marginal Child"?", Quarterly Journal of Economics, 114, 263-291.