

Miguel Mascarúa, University of Virginia

**“The macroeconomic consequences of illegal behavior”**  
(Dissertation)

In Chapter 1 of my dissertation, “Weak laws, informality, and organized crime: An establishment-level approach,” I analyze the consequences of weak laws on informality, drug trafficking, and predation on businesses, and aggregate output. In 2006, Mexico declared war on drug cartels, which preceded an overall increase in crime, including crime against businesses. To counteract the aggression, businesses responded by reducing their scale of operation, spending on additional security, switching to the informal sector, or exiting the market. Using synthetic control methods, I provide causal evidence that the escalation of violence after the Mexican war on drugs reduced output by 4% in the border state of Chihuahua.

Next, I build a model of occupational choice in which weak laws influence crime against businesses, drug trafficking and informality, and calibrate it using micro-level data on business victimization and on drug cartels. I use my model to interpret the Mexican war on drugs as an increase in drug interdiction efforts and a decrease in property rights.

With more interdiction efforts, less drugs reach final consumers and, since the demand for drugs is price inelastic, illegal profits increase. Additional cartels enter the market and hire more workers to contest those profits. Concurrently, fewer property rights increase the cost of crime, which pushes some formal establishments to the informal sector to decrease production costs. The contraction of the more productive formal sector reduces the aggregate use of inputs and wages, in turn, contract. Lower wages reduce the value of being a worker and, hence, some workers switch into informality, expanding further the less productive informal sector. The combined effects of informality, drug trafficking and crime against businesses reduce output by 14% compared with a benchmark economy with full law enforcement.

Finally, I consider the effects on output of policies that target illegal drugs, informality, and crime against businesses. Shutting down the drug market reallocates workers to the legal sector, which increases output by 1%. Shutting down crime against businesses increases output by almost 3% and shutting down informality more than 11%. The last two effects arise through a reallocation of labor and capital to the formal sector.

In Chapter 2, “A whiter shade of wealth: Skin color discrimination and the distribution of wealth,” I use data from the Latin American Public Opinion Project and find that wealth has a skin color gradient in Latin America: people with the lightest skin accumulate 9% more assets than people with the darkest skin. I explore the determinants of those differences and find skin-color gaps in wages, education and health. Those with the darkest skin earn half as much as whites, have one year less of education and report worse health outcomes. I build an overlapping generations model in which individuals with different skills make human capital decisions based on their future wage. A skin-color related wedge between the market wage and the marginal product of labor inhibits human capital accumulation. The combined effects of lower wages and lower human capital create a wealth gradient by skin color.

JEL Classifications: O11, O17, O43, O47, K40, E26, E21

Keywords: Misallocation of resources, illegality, aggregate distortions, formal and informal sectors, distribution of wealth