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**TO WHOM IT MAY CONCERN**

UNIVERSITY OF CAMBRIDGE

**Faculty of Economics**

**Final Report of the Proposal:**

Dispersion in Financing Costs and Development

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By

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We have finished the first version of the paper. The paper has been presented in several conferences, specialized workshops and seminars at NYU, CEMFI, Bank of Portugal, Pompeu Fabra, among many others. We plan to submit the paper by the coming Summer.

The paper consists of mainly three parts: An empirical section; an economic model; and model calibration and simulation.

Our database comprises annual data of more than 3 million firms from 246 sectors between 2006 and 2016, totaling 11.8 million firm-year observations. Our sample period evolves two years of solid economic growth (2006 and 2007), the burst and aftermath of the global financial crisis in 2008-2009, a strong economic recovery from 2010 to 2013, and the larger recession of the Brazilian economy in recent history (2014-2016), with a huge impact on the labor market. I spent the last summer working in this dataset in Brazil.

We find large dispersion in financing costs among all formal Brazilian firms. In our decomposition exercises, we show that about 50% of the variation in interest loan spreads are explained by loan level characteristics, such as maturity, loan type, and currency denomination; about 25% of this dispersion is explained by firm level characteristics, such as location, sector, age, size, credit risk, and type.

We then develop a general equilibrium model of firm dynamics (endogenous entry, exit and growth) to understand how dispersion in financing costs affects aggregate outcomes such as investment, productivity and misallocation. We compare our theoretical framework with a tradition quantity constraint, which has been the workhorse in the macro development literature.

We then calibrate the model to match key micro level evidence on firm growth and finance using our panel of formal firms in Brazil and their financial contracts. We then show how dispersion in financing costs affect firm growth in the country. We show that our model performs better than a traditional model with quantity constraints only to explain firm dynamics. We also perform financial reforms in our model to understand how they affect aggregate investment and productivity.

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