Research data management plan (RDMP)

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My dissertation consists in a collection of three essays aimed at investigating the root causes of what I call the "stagnation-financialization paradox", i.e., a situation in which the economy manifests a tendency to stagnation in a context of financial expansion. Given that the second chapter (corresponding to the first paper, the first one being the introduction) is the only empirical work in my thesis that makes use of data, in the present RDMP I will describe in details the data used for the empirical analysis, as well as the data cleaning strategy that I adopted. Afterwards, I will briefly introduce the main insights of the theoretical models in the other chapters.

Chapter 2 investigates the extent to which the tendency to maximize shareholder value, fuelled by stock-based manager compensation, has led U.S. firms to divert resources from real investment to share repurchases to boost stock prices. Using micro-data from U.S. firms' balance sheets and manager compensation between 1992-2017, I estimate two dynamic panel data models in order to (i) analyze the effects of share repurchases on investment decisions and (ii) examine the interaction between stock-based CEO pay and the likelihood of share repurchases. The data are taken from S&P Compustat for annual balance sheet data and ExecuComp for annual manager compensation data, both downloaded from WRDS. The S&P Compustat dataset includes firm-year observations for U.S. publicly listed firms between 1980-2017. I exclude financial (SIC codes 6000-6999) and utility (SIC codes 4000-4999) companies since they are subject to a specific regulatory framework. Moreover, I require the dependent variables (capital expenditure and share repurchase) as well as some main explanatory variables (market-to-book ratio, sales, cash dividend) to have non-missing and non-negative values. Firm-level data are known to be characterized by the presence of large outliers. To tackle this issue, I adopt a twofold strategy: first, all variables included in the regression model are winsorized, that is, observations falling into the upper or lower 1% of each variable's distribution are dropped; second, I exclude firms with permanently negative operating profits, which is a signal of unusual financial troubles. In addition, I require firms to have at least 4 years of life to exclude newly born firms whose economic performance might be impaired with respect to the average firm. After the cleaning process, the resulting data set consists of 31,099 firm-year observations across 1695 firms and 38 years, from 1980 to 2017.

The ExecuComp database provides information about managers' compensation by income type from 3671 firms since 1992. In order to compare the two data sets, manager data are rearranged at firm level: for each variable the yearly average of top five executives by firm is computed. This method permits to compare the two data sets by using the firm's identifier (code 'gvkey') to match common firm-year observations. The focus is restricted to the top five executives in that they are likely the most influential individuals in the corporate governance, those who undertake the relevant decisions concerning the business model and the investment strategy of the company. The top five executives are defined by ranking all the company's managers by income (salary plus bonus) and keeping those with the five highest scores. Given the extremely high variance in stock options across firms, the same data screening process used for Compustat data is applied. Finally, I exclude missing values for the main explanatory variables included in the regression model, that is exercised stock options, unexercised stock options and in-the-money vested options. The final data set consists of 3,671 firms across 26 years, for a total of 43,659 time-year observations. The Compustat and ExecuComp data sets are merged using firm's identifier and year. Of the total 61,627 firm-year observations, only 13,131 are matched after merging the two data sets, consisting in 1006 Compustat firms exhibiting non-missing values of stock-options for the period of 1992-2017. This is the data set used to estimate the regression models.

Based on this evidence, Chapter 3 aims to investigate the conditions under which the tendency to maximize stock market value at micro level gives rise to a disconnect between financial markets and the real economy at the macro level. To do that, the chapter builds a macro-finance agent-based model with a stock market populated by heterogeneous investors, namely patient and speculative. The goal is to analyze how the increasing role of speculative investors in the ownership structure affects managers' planning horizons and R&D investment-buyback decisions and the resulting macroeconomic dynamics. Drawing on Keynes's view of financial markets, the idea is that when the stock market is dominated by a speculative sentiment, managers tend to internalize a short-term view and accommodate investors' demand for high equity returns, by diverting corporate resources from R&D towards share buybacks in order to boost the stock price.

Finally, Chapter 4 aims to build a macro-evolutionary agent-based model with endogenous technical change to investigate how changes in market structure arising from technological progress affect income distribution and economic growth. In particular, the goal is to analyze the underlying causes of the recent increase in market concentration, by focusing on the interplay of technical change and market power, and the resulting macroeconomic consequences in terms of higher inequality and lower growth.