Extended Abstract

The correlation between economic growth and equity capital markets has been brought to evidence in different empirical studies in the past. Fuchs-Schündeln and Funke (2001), focusing on existing, but liberalized stock markets concluded that there is a temporary positive effect of such liberalization on real GDP growth. They based their study on a sample of 26 countries from all over the world. The empirical evidence was confirmed for the countries from the Middle East and North Africa (henceforth MENA region, Naceur, et. al., 2008) where the focus of the investigation was centered on the pre-and post-development of those economies, which introduced equity capital markets. So far, the effect of introducing stock exchange markets as a determinant of economic growth has not been researched for the case of Sub-Saharan Africa. This paper addresses this issue, focusing on stock markets as the predominant type of new equity markets.

The motivation behind the research question "How does the development of private equity capital markets affect economic growth in developing countries?" lies within the fact that most of the Sub-Saharan countries implemented their stock exchange markets very recently. The countries mostly belong to third world developing countries where it is of interest to analyze whether the introduction of such financial markets has significant positive effects on economic growth. The introduction of international stock exchanges affect GDP throughout different channels. They~~,~~ improve accounting standards and disclosure transparency, enforce property rights, strengthen legal and judicial systems for investor protection, attract foreign and local equity capital and increase the domestic institutional investor base.

A useful empirical identification strategy to assess these effects is by use of a Diff-in-Diff approach. The source of variation in this setting arises from the comparison of economic growth prior to and past the introduction of stock exchange markets, and in comparison of a group of treated countries (that implemented stock markets) versus control countries (that did not implement stock markets). When estimating the coefficient for "treated" countries we control for variables such as the value added over time for different sectors, foreign direct investment net inflows, and domestic credit to private sector and net official development assistance. This is to ensure that the common trend assumption is fulfilled. These control variables directly correlate with both, GDP per capita and the introduction of international stock exchange markets and thus are necessary to estimate unbiased coefficients.

Our results are robust and presume that the introduction of international stock exchange markets have a significant impact on the level of GDP per capita. For treated countries, the

GDP per capita increases around 532 US$ post market implementation. In economic terms, this is considerable given that it constitutes a more than 40% increase compared to the average GDP per capita of all Sub-Saharan countries over the period of 1970-2018. We repeat the regression to measure the impact of an introduction on GDP per capita growth. In this approach, we find the introduction of international capital markets on GDP per capita growth to be significant on a 5% level when including control variables. Post implementation, treated countries display a growth rate that is 0.9 percentage points. The positive relationship is coherent with the results of Fuchs-Schündeln and Funke (2001) who did a similar regression on market liberalization but controlling for policy reforms.

Based on our results, we deepen our analysis by assessing how variable this effect is overtime. We apply the empirical strategy of Fuchs-Schündeln and Funke (2001). This way we can capture if the effect of introducing stock markets on economic growth is limited overtime or sustainable in the end. Our regression suggests that in the very year of market introduction, the effect on the GDP per capita level is statistically non-significant with a coefficient around 407 US$. Afterwards, it follows a hump-shape, by starting to be statistically and economically significant from year 1 after the introduction onwards and peaking in year 5. This result is coherent with the work of Fuchs-Schündeln and Funke (2001) who found that the effect of liberalization on GDP per capita growth reaches its peak in year 4. However, the effect seems to be limited to the first 5 years after introduction. From year 6 onwards, the effect is no longer statistically significant and the coefficient decreases which implies that the long term effect of the introduction of international stock exchange markets on GDP per capita limits itself to the results achieved within the first five years.

The remainder of the thesis is divided into 5 sections. Section 2 summarizes the relevant literature. Section 3 gives a brief overview of stock exchange markets and economic status of Sub-Saharan countries in general. Section 4 describes the empirical methodology and is followed by the results in section 5. Finally, section 6 concludes.