Trade and growth in african countries economics essay

Economics

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\n[/toc]\n \nQuite clear evidence that institutional quality have an effect on economic performance and it is also often argued, that there is a positive relationship between them. Institutions can be defined as humanly devised constraints that structure political, economic and social interactions (North 1990). Many of the existing literature focus on the arising issue: how trade openness, institutions and economic growth are linked to each other. While many empirical research papers asked the same challenging question, their findings are sometimes controversial. As Rodrik et al (2002) argue in their study these linkages are rather complicated and there are " deeper determinants" of income level. They regard the institutions as the most important factor accountable for economic growth but they also add that integration, like openness to trade has an impact on growth too, but this impact is not direct, rather goes through the channel of institutions. Dollar and Kraay (2002) are focus on institutional quality and imply that it is highly correlated with the international trade. In their conclusion they stress out that both factors are important for the long-run growth nevertheless on short-run period trade has a larger influence on growth rates. Dollar and

Kraay (2004) choose some " globalizing" countries like China and India to show how the opening-up for trade is related to growth. And they find a positive effect of trade liberalization on the country´s income. Because of the obvious limits of the paper by regarding only Asian countries, there is a more interesting question to be answered. How such liberalization works in other settings of institutions. In this paper we want to have a look at the African region and search for possible answers that could explain the mysterious relationship between trade, institutions and growth under the region specific circumstances.

2. The Case of African Countries

As we have seen before, since the findings are rather controversial, it is quite difficult to draw consequences until we consider all the possibly influential factors. We could more or less certainly say that trade as well as institutions also seem to be matter for economic growth but their effect is depending on the context in which they are analyzed. Therefore it may be worthwhile to look at a specific group of countries in order to tell how these two factors are related to growth. It is often argued, that institutions, notably bad institutions are the main reasons for the African countries´ underdevelopment. Following the theory many states opened up for international trade in the ´80s and ´90s because they want to catch up with the Western economies by increasing the rate of economic growth. On the other hand they did not take into account that institutions could also be a part of the story in the development success. Nevertheless that is why we also look at on both components simultaneously if we want to come up with policy implications. Along with trade policies, also property rights, regulatory institutions,

institutions for macroeconomic stabilization (e. g., managing fiscal deficits), institutions for social insurance, and institutions for conflict management count as critical for development. (Rodrik et al 2004)African countries expected – on the score of standard theory - that liberalization brings along more trade opportunities, since open countries have greater access to new technologies, larger markets. They also tend to have fewer distortions and better resource allocation, and their firms are more likely to be competitive on world markets. Trade reforms may accelerate technological innovations with the help of high-technology imports. Hence it leads to a higher growth rate due to increasing productivity. (Wade 1989)In contrast, the later literature suggest, institutions play a crucial role in trade pattern. As Levchenko (2004) claim that in the North-South trade the Northern countries have an " institutional comparative advantage" and therefore have an opportunity to win from liberalization, but the South might lose. Bormann et al. (2006) stress also out that a country needs certain prerequisites to be able to profit from the presence on the international market. Hence, low institutional quality may encourage increased production of the goods, in which the country may not have comparative advantage. In their cross-country analysis they spit up the countries into different groups according to their institutional quality and they used interaction terms for trade and institutions. In their findings they also get the same results for which we argued before. Those countries, which are in the last quintile regarding the quality of institutions and are opened up for trade, probably suffer from net income loss. The empirical results show that the interactive term is significant, negative and three times larger standing against the positive

effect of trade. All of these papers hold possible explanations for the mixed results on income of trade liberalization in Africa. The combination of open trade, especially for exporters and the government institutions make markets work efficient can positively influence growth. Which problems could emerge if liberalization takes place in absence of strong relevant institutions? First, trade diversification can be affected if the institutions not function adequately. Diverse exports, namely more diverse internal production, is claimed to be an important factor in Africa´s growth potential because it is associated with higher and more sustained growth. (Baliamoune-Lutz & Ndikumana 2007) Since Africa is still highly dependent on its traditional commodities, it is more exposed to external shocks and can lead to a higher volatility of growth. African countries have however potential for more diversified production and exports, including in agroprocessing, manufacturing, and services. (World Bank 2000)Secondly, management efficiency is needed to direct foreign reserves in a direction, which is more beneficial for the country. Trade expansion can bring more gain for the country, if it is able to use the incoming foreign exchange into profitable investments.

3. Empirical Findings on Africa

What is new in the analysis?

In the paper of Baliamoune-Lutz and Ndikumana the authors focus on only African countries to excavate the relationship between institutions, trade and growth. They use panel data of 39 countries for the period of 1975-2001 and implement the method of Arellano-Bond Generalized Method of Moments (GMM). We find in the related literature mostly cross-sectional estimations

and using larger country sets, probably due to data availability constraints. For example in the paper of Rodrik et al (2004) or also in the paper of Dollar and Kraay (2003) in those they were tart by examining the effects of trade and institutions on per capita income in a large cross-section of countries. In contrast in the analysis on African countries the authors apply the following equation: $y_{it} = \alpha y_{it-1} + \beta x_{it-1} + \gamma z_{it} + \nu_i + \varepsilon_{it}$In this estimation y denotes the real income per capita of a given country of a given year. x is a vector of endogenous variables and z is a notation of a vector of exogenous variables. ν signalizes the country-specific part of the equation and ε is a both from country and from time independent residual variable. The endogenous variables contains for example the openness measure taken from the World Bank's World Development Indicators, which is given as a log and defined as the sum of exports and imports as a percentage of GDP. Integration in the world trade system is also measured the same way as in the Rodrik (2004) paper and as it is claimed by Frankel and Romer (1999). However others prefer the so called " real openness" measure, taking into account the nominal imports and exports divided by the PPP GDP. They argue that the simple openness measure (nominal trade divided by nominal GDP) may be biased downwards, since along with the trade expansion we expect higher productivity mostly in the tradable sector and the relative price for non-tradables goes up. This effect lowers the value of the openness measure. Dollar and Kraay (2003) also believe that the " real" measure show a tendency of stronger correlation with log-levels of per capita income following the study of Alcala and Ciccone (2001). Data on investments come from the same database and it show the log of the share of investments in

the ratio of the GDP. To take account for the institutional capacity of the country the authors used two different measures that may matter in the process of successful trade liberalization. As we mentioned in the second chapter, both governmental and financial institutions influence the possible income gains of trade through different channels. Here, in the Baliamoune-Lutz and Ndikumana paper the authors apply domestic bank credit to the private sector as an indicator of financial development. Governmental institutions are indicated by the Polity 2 index of the Polity IV Project. This 21-scale measure, taking up values between -10 and +10 is an adjusted version of the Polity regime index, which includes information on the institutions of the central government and on political groups acting, or reacting, within the scope of that authority. Contrarily, we see the implementation of the so called Rule of Law measure constructed by Kaufmann et al (2002) by Dollar and Kraay and by Rodrik et al, too. Since these indexes are all institutional quality measures are all perception based, we cannot say whether one is more valid than the other. In order to control for the impact of human capital we can find the literacy rate among the endogenous variables. Typical also for African countries, that they have very high ethnic diversity and therefore it is quite important to control for that in the regression. Thus the authors use an " ethnic tension" measure from the International Country Risk Guide (ICRG) database which can capture the negative effect of ethnic diversity on the income level. Exogenous are among others the initial income level, which is expected to have a negative coefficient of present income level because of the convergence hypothesis. Furthermore the dummy for the landlocked countries pick up the important

geographical effects. Lastly they add dummy variables for Northern and Southern African countries, because they want to account for subregional differences, particularly for economic development and institutional quality.

Results:

Interestingly, the coefficient of Openness (their measure of the market size) is only then statistically significant, when the authors apply the basic set of variables. If they expand the estimation with the interaction terms Openness lose their significance, and the interaction term become more relevant. Table 4 contains results for the regressions exploring joint and threshold effects of the interaction between trade and institutions on the one hand, and trade and financial development on the other hand. Our variables of interest are of course the ones showing the effect of institutions and trade on the income. Since these are presented in various combinations (interaction terms and squared interaction terms) we can draw important consequences from the results. The interaction term of trade and institutions on income is positive and statistically significant in the estimations. Nevertheless, we have to mention that using this interaction variable jointly with its quadratic term, both coefficients are significant, and however the joint effect turns into negative, the squared term become positive. This indicates that the joint effect of trade and institutions is not monotonous but rather it picks up a U shape. The authors explain these findings with the engine effect of the good quality institutions if it goes along with an increase of trade openness. If the expansion of export in cooperation with well-functioning governmental institutions can result in better management of trade revenues and can flow toward more profitable sectors and fruitful investments. Furthermore, Dollar

and Kraay (2003) also found a positive coefficient on the interaction term of trade and institutions, but they did not present it in the estimations, because this result was not robust. What can we learn from these results? At first, regarding the trade openness needs to reach a certain level in order to experience income gain, and should be accompanied by adequate institutions. As trade increases, good institutions are crucial in order to channel the accomplishment of the expansion in the right direction, and these are also needed to avoid possible market volatility shocks. The other consequence we can draw, that bad institutional quality prevents countries from earning the benefits from trade exposure. In agreement with the results of the study of Dollar and Kraay (2003), they argue that trade booms may produce short-run growth, but the ability of a country to sustain high growth is depends on the quality of its institutions. In the case of the African countries, we can see this result as a possible explanation to their bad economic performance. This evidence implies that the in the absence of well-functioning institutions, they are not able to get benefits of commodity exports. On the other hand, the coefficient of the square of interaction term of trade and financial development has a negative sign. Baliamoune-Lutz and Ndikumana (2007) explain this with the fact, that those African countries with bigger trade expansion usually had low financial development levels, and therefore the result only shows this simple historical fact. Agriculture in African DevelopmentTaking up the findings of Rodrik et al (2004) as a basis, trade has and indirect effect on institutions and therefore leads to higher growth. In the case of sub-Saharan countries, we face the following issue: since they are primary commodity exporters, of which for most this means

agriculture products. Such a trade pattern can potentially be regarded as a barrier to institutional reform. Drawing upon previous work, the importance of these barriers to trade is shown. The last subsection focus on an analysis of sub-Saharan Africa to show how the effects of possible increases in total factor productivity that is linked to institutional and trade reform can greatly raise per capita income over a forty year period. Final remarks conclude the paper.

What types of institutions?

1 pageOne explanation why Africa left so far behind of other countries in the globalizing world can be the fact of bad institutional environment. Nevertheless, we can ask ourselves, what types of institutions are exactly crucial in the trade liberalization process if a country want to have a better growth performance. Francois and Manchin (2006) for example examine the influence of infrastructure, institutional quality, colonial and geographic context, and trade preferences on the pattern of bilateral trade. And they find that infrastructure a

Further questions