Capital Account Liberalization Institutions and Economic Growth in the Emerging World

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**ABSTRACT**

**Purpose:** The relationship between capital account liberalization and economic growth has been a fervently discussed subject among economists and policy-makers. The role of institutions is imperious to comprehensively investigate the impact of financial openness on growth. The objective of the study is to inspect the nexus between financial liberalization and economic growth after incorporating the contribution of institutional quality.

**Methodology:** A panel of data on 17 emerging market economies (EMEs) is used for the period 1995-2019. We employ the GMM technique by using different de facto and de jure measures of financial liberalization along with institutional variables.

**Findings:** The empirical results illustrate that better quality institutions strengthen the connection between capital account liberalization and output growth in the emerging World.

**Implications:** The policymakers should focus on the more beneficial nature of financial liberalization such as FDI. Also, the policy should be aiming at availing the services of efficient human resources with proper institutional infrastructure.

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**Introduction**

Liberalizing the movements of capital across countries is considered to be an important economic event of the past. The liberalization of capital account provides opportunities for the investors to avail foreign capital in case of capital deficiency. Capital account liberalization is very important
for developing countries to remove the deficiency of domestic savings to boost up economic growth and productivity. However, liberalization can bring economic volatility, especially in emerging market economies.

The finance growth nexus has been a hotly debated topic among economists and policymakers. The traditional views about finance and growth relation tend to underestimate the role of institutional quality. This study tries to contribute to the literature by incorporating the role of institutions with a special reference to emerging market economies. The contribution of institutions in the finance-growth relation is imperative to understanding the dynamics of economic development. According to economic theory, a robust institutional infrastructure may significantly contribute to GDP growth in the long run. Goldsmith (1969) found a positive link between institutional arrangements and output growth in the long run. The positive impact of institutions in finance growth relation is attributed to the enhancement of allocative efficiency of financial resources. The influx of foreign finances from the capital-abundant nations creates positive spillovers when utilized for availing profitable investment opportunities.

McKinnon (1973) as well as Shaw (1973), both suggest the abolition of government restrictions and regulatory controls on the financial system. The liberalization reforms concerning the financial flows triggered massive foreign capital inflows to the emerging market economies in the late 1980s. In the presence of proper financial intermediation, these foreign resources can stimulate economic growth in many countries of the world. A developed institutional setup may contribute to the proper functioning of an economy. In the nations where legal Institutions are not properly developed and the law enforcement is weaker, the market functioning is badly influenced. Better institutional quality can increase the growth-promoting role of financial liberalization. The minimum level of corruption in the institutions makes the foreign flows more productive and leads to the optimal utilization of foreign financial resources. So, institutional quality is a decisive factor in analyzing the long-run growth of an economy. Acemoglu, Johnson and Robinson (2002) claim that the institutional system promoting investments is a vibrant feature in explaining the development of an economy.

North (1990) regards the institutions as the rules of the game in a social setup. The functioning of an economy is greatly influenced by the institutional infrastructure (Aghion, 2005 and Law et al., 2018). Better institutions contribute to the better functioning of an economy (Aghion, 2005 and Law et al., 2018). The frizzle institutional system minimizes the supportive role of financial flows in economic performance. Financial corruption, fragile law enforcement, and political interventions main divert towards productive activities. That's the successful growth impact of financial liberalization is mainly dependent on the institutional infrastructure which encourages productive Ventures.

Acemoglu et al. (2001) discover a major effect of institutional quality on per capita income in the European states. Acemoglu & Robinson (2010) declare that the main factor behind income differentials among countries is the difference in economic institutions. The secret of economic development is to reform economic institutions. The reforms in economic institutions depend on the state of the political institutions of a country. The sound political system leads to forming better political institutions and thus helps in the formation of growth-promoting economic institutions. The process of institutional reforms depends upon the political system of an economy. The nations face many obstacles in the way of institutional reforms due to their political bottlenecks. The countries with a better political system can form better institutions and successfully achieve higher growth rates. So, properly functioning institutions lead to economic development. Institutions can support economic development through property rights protection, financial market efficacy and effective law enforcement. A rising level of expropriation and oppression discourage investment
and hinder economic growth. Institutions affect economic growth through financial development (Fernández and Tamayo, 2015).

Literature Review
Klein (2005) explores the effect of financial liberalization on output growth in 71 economies. After controlling for the institutional quality, different estimation approaches are employed including linear and nonlinear least square and instrumental variable techniques. The empirical results suggest that the connection between financial market liberalization and GDP growth is inverted u shaped. The findings also propose that a well-developed institutional system helps to enhance the growth-promoting role of financial liberalization. Kose et al. (2006) examine the relationship between financial openness and output in 145 economies. The empirical results suggest different impacts of financial liberalization on growth. The difference in empirical results may be observed due to the use of diverse measures of financial liberalization. The use of more advanced de facto and de jure measures provide more favorable results. It is found that financial openness in turn may also provide Collateral benefits in the form of better institutional quality and a developed financial system. The study also finds that the different forms of financial flows have different impacts on total factor productivity and growth.

Blackburn (2008) study the small open economy by using a dynamic general equilibrium model. It is found that the government-appointed bureaucracy may tend to avail the opportunity of corruption in public funds. This opportunity can become more attractive after financial liberalization. The better institutional quality and minimum level of corruption can help to avail the proper benefits of financial liberalization.

Honig (2008) explores the influence of financial liberalization on GDP after incorporating the institutional quality for 122 economies for the period 1970-2005. The empirical results suggest a positive effect of financial globalization on economic growth. However, these findings are not very much improved in the economies with better institutional setups.

Edison et al. (2002) empirically analyzes panel data set for 57 countries during 1980-2000 to discover the effect of financial openness on output. Using the GMM approach, the authors are unable to find any impact of capital account openness on GDP growth. No evidence of any positive influence was found even after controlling for the institutional quality.

Eichengreen et al. (2011) explore the association between capital account openness and industrial sector growth in the 49 economies. The empirical estimates are controlled for the banking crisis, financial development and institutional quality. A significantly positive effect of financial openness is observed in financially dependent industries. A well-developed financial and institutional infrastructure is important to avail the benefits from the financial liberalization policy. The authors suggest that a threshold level of institutional improvement must be achieved to avail the proper benefits of liberalized foreign financial flows.

Saidi (2014) uses a simultaneous equation model for the developed and developing states for the period 1983-2012. The author explains that the EME's should prepare proper institutional infrastructure before implementing the capital account liberalization strategy. Concerning macroeconomic framework liberalizing financial markets can be favorable and growth-promoting when combined with a minimum level of corruption and better law enforcement. So, the better-quality institutions make a valuable contribution to the success of the financial openness policy. This is likely to raise output growth in emerging economies.

Empirical Methodology and Data
The dynamic panel data generalized method of moments technique is employed for the estimation
in this paper. This methodology provides solutions to the simultaneity and reverses the causality problem. We are justified in using GMM because of the presence of lagged dependent variable on the right-hand side. Two variants of GMM estimator of dynamic panel data are available namely first difference GMM and system GMM. The first one is originated from the methodology of Arellano and Bond (1991), whereas the second one is consequential upon Blundell and Bond's (1998) methodology. The system GMM is considered to be more efficient than the first differenced GMM. We adopt the system GMM for the estimation in this study.

A general estimation equation can be written as

$$Y_{i,t} - Y_{i,t-1} = \beta_0 + \beta_1 (Y_{i,t-1}) + \beta_2 X_{it} + \beta_3 (CAL_{it}) + \beta_4 (INST_{it}) + u_i + v_t + \epsilon_{it}$$

Then, $Y_t$ is per capita real GDP and $X$ is the vector of control variables. The notation CAL indicates the capital account liberalization measured by any de facto or de jure measure. The variable INST is representing the institutional quality.

Where, $i$ and $t$ represent a country and time, respectively. Moreover, $U_i$ represents country-specific effect, $V_t$ is a time-specific effect, and $\epsilon_{it}$ is the error term.

According to theory, institutional development significantly influences the per capita real income. In this perspective, we constructed an institutional quality measure by using three subcomponents of the World Governance Indicators (WGI). The sum of three subcomponents of WGI, Rule of Law, Regulatory Quality and Control of corruption is used to represent the quality of institutions. Furthermore, Klein (2005) points out that the effect of capital account openness on GDP is not monotonic, and this effect depends upon the level of institutional development. In this study, we try to empirically discover this hypothesis by presenting an interaction term between institutional quality and capital account liberalization.

We compiled data on 17 major emerging market economies including Argentina, Brazil, Chile, China, Hungary, India, Indonesia, Malaysia, Mexico, Pakistan, Philippines, Poland, Russia, Thailand, Turkey, Ukraine, and Venezuela for the period 1991-2015. The source of data for income per capita, schooling, life expectancy and trade openness is the World Bank's World Development Indicators (WDI) database. We use some de facto and de jure measures of capital account liberalization in our study. De facto measures represent actual capital flows while de jure measures represent the legal restrictions on the flow of capital. We use three de facto measures in this study including foreign assets, foreign liabilities plus assets and FDI inflows as a share of GDP. Two de jure measures including the Chin-Ito KAOPEN index and Schindler index are utilized in our study.

**Empirical Results**

The empirical results are presented in the following tables.

<table>
<thead>
<tr>
<th>Dependent Variable; Growth Rate of Real GDP Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression (1) (2) (3)</td>
</tr>
<tr>
<td>Initial Income</td>
</tr>
<tr>
<td>-1.5662**</td>
</tr>
<tr>
<td>(0.5747)</td>
</tr>
<tr>
<td>Schooling</td>
</tr>
<tr>
<td>0.9561</td>
</tr>
<tr>
<td>(0.6146)</td>
</tr>
<tr>
<td>Life Expectancy</td>
</tr>
<tr>
<td>3.2455**</td>
</tr>
<tr>
<td>(1.2983)</td>
</tr>
<tr>
<td>Trade Openness</td>
</tr>
<tr>
<td>-0.4941</td>
</tr>
<tr>
<td>(0.4162)</td>
</tr>
<tr>
<td>Institutions</td>
</tr>
<tr>
<td>1.2163</td>
</tr>
<tr>
<td>(1.0800)</td>
</tr>
<tr>
<td>Total Liabilities</td>
</tr>
<tr>
<td>0.9462***</td>
</tr>
</tbody>
</table>

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752
Table 4.2
GMM Estimates using De jure Measures of Capital Account Liberalization

<table>
<thead>
<tr>
<th>Dependent Variable;</th>
<th>Growth Rate of Real GDP Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression (1)</td>
</tr>
<tr>
<td>Initial Income</td>
<td>-1.435** (0.5862)</td>
</tr>
<tr>
<td>Schooling</td>
<td>1.25*** (0.6675)</td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>2.6908** (1.2346)</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>-0.3039 (0.3935)</td>
</tr>
<tr>
<td>Institutions</td>
<td>1.3291 (1.2019)</td>
</tr>
<tr>
<td>KAOPEN</td>
<td>-0.0239 (0.2256)</td>
</tr>
<tr>
<td>KAOPEN* Institutions</td>
<td>0.0509*** (0.0271)</td>
</tr>
<tr>
<td>Schindler</td>
<td>-0.4341 (0.6011)</td>
</tr>
<tr>
<td>Schindler *Institutions</td>
<td>0.04111*** (0.0223)</td>
</tr>
<tr>
<td>Groups</td>
<td>17</td>
</tr>
<tr>
<td>Observations</td>
<td>68</td>
</tr>
<tr>
<td>Hansen test (p-value)</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: Robust standard errors are given in parentheses; *, ** and *** indicate significance at 1%, 5% and 10% level respectively.
Interpretations of Empirical Results
The empirical estimates using de facto measures of capital account liberalization are presented in table 4.1. The negative and significant initial income coefficient depicts the income convergence. The life expectancy variable is found to be positive and statistically significant showing that better health facilities or improved social sector stimulate economic growth. In general, the measures of financial liberalization and institutions are significant. Capital account liberalization measures include total liabilities, total liabilities plus assets and FDI inflows, all as ratios to GDP have interacted with institutional quality. The core variable FDI is positive and statistically significant at a 5 percent level of significance. The interaction terms using all the de facto measures are statistically significant. FDI makes a developing country able to import modern technologies and encourages innovations. So, the FDI is significant even without any support from quality institutions. The positive signs of interaction terms indicate that the growth effect of financial liberalization is supported by better institutional quality. The weakly significant interaction terms in some cases perhaps depict that the institutional infrastructure in the emerging market economies is in the process of transition. As the institutions properly develop, they start playing a more important role in generating growth effects from outward-oriented policies.

The empirical results with de jure capital account liberalization are presented in table 4.2. The negative and statistically significant initial income coefficient describes the convergence. Among control variables, the life expectancy variable is consistently significant with the positive sign which shows that better health facilities or improved social sector stimulate growth. The remaining control variables are insignificant except schooling in the KAOPEN equation. The signs of interaction terms between liberalization and institutions are positive and significant in the case of the Schindler index. The p-values of the Hansen test asserts that the instruments are valid for all the estimations presented in both tables.

The countries with the better institutional quality and higher legal standards are expected to experience vital growth responses from financial market liberalization policy. Acemoglu et al. (2003) I was good that better quality Political and institutional system can efficiently contribute to the economic growth by taking advantage of outward-oriented policies. On the other hand, economies with relatively bad institutional quality and inefficient legal systems can experience stagnant growth rates. The inconsistent statistical significance may depict that the institutional infrastructure in the EMEs is in the process of transition.

Conclusion
This study tries to unveil the relation between capital account liberalization and GDP growth after incorporating the contribution of institutions in this nexus. The liberalization of financial flows may buoy up growth by optimal utilization of finances in the emerging market economies. The liberalization of the financial sector can provide access to foreign financial resources and proves to be helpful for the accumulation of savings leading to profitable investments and growth. The role of institutional quality is imperative to comprehensively analyze the impact of financial openness on economic growth. Using a panel data set from 17 EMEs, the GMM technique is adopted for the estimation. The empirical analysis is made by utilizing the popular de facto and de jure measures of capital account openness. The empirical estimates propose that better institutional quality strengthens the association between financial openness and growth in emerging markets. The capital account liberalization measures are statistically significant when interacted with the institutional quality. FDI can import modern production techniques and propagate a competitive environment among producers. It is the most expedient and the least volatile capital flow playing a pivotal role in economic growth. The policymakers should focus on the more beneficial nature of financial liberalization such as FDI. Also, the policy should be aiming at availing the services of efficient human resources with proper institutional infrastructure. The better quality institutions with efficient
bureaucracy and minimum corruption along with a well-functioning legal system can avail the proper growth benefits of financial liberalization in the emerging market economies.

References


