Can Openness Hypothesis Improve Political Economy of Pakistan's Financial Market?
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Abstract
This paper is an attempt to test the openness hypothesis for the case of Pakistan. Being a developing country and having different interest groups interfering in the financial market, openness hypothesis provides a theory that provides a win-win situation for the interest groups, consequently improving financial development. We presented a political economy approach of analyzing the state of Pakistan's financial market and proposed an openness hypothesis. Our result indicates that individually, trade and financial opening are beneficial for improving the financial market development however, the simultaneous opening of financial and trade hypothesis does not hold for Pakistan. In other words, the simultaneous opening of financial and trade accounts does not seem to be a necessary condition for improving the financial sector.

Key Words: Financial Development, Openness hypothesis, Political economy, Regression analysis, Financial Liberalization, Trade openness.

Introduction
There is a wide gap in the income between rich and developing countries. Researchers have proposed different theories as to why countries grow disproportionally. More recent literature has pointed out the role of the financial sector in the development process (Ang, 2008; Levine, 1997). Growth theory suggested two ways through which finance impact growth, first, through the “capital accumulation channel” (Gurley & Shaw, 1955) and second is through the “total factor productivity channel” according to which financial institution's credit allocation through reduced informational symmetries improve technology that results in increase in output that will affect growth. In this respect, the financial market has momentous role in the growth process as was also suggested by Levine (1997). A financial system that efficiently performs these roles is said to be more developed or in other words known as financial development. In summary, the above debate shows the effect of the financial market on growth—a topic that has attracted the attention of researchers extensively especially since the research by McKinnon (1973) and Shaw (1973). As of today, there is a mix of evidence for its validity. Some have found a positive effect of financial development on economic growth (Beck, Levine, & Loayza, 2000; Levine, 2004) and some have stressed that the role is overemphasized (Robinson, 1952). However, the large body of literature pointed out that the financial market is important for growth directly or indirectly. The rest of the debate related to the causality between the two.

Finance has always been a tool of play for political governments not only in developing countries but also in developed countries. For example, U.S. farmers were overburdened by mortgages and decreasing

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income during the Great Depression, the government of that time under Roosevelt devalued the dollar against gold (Kroszner, 1999). In Italy, the classic case of the Istituto per la Ricostruzione Industriale (IRI), which was established by the Italian government to bail out banks and industrial firms that were at the edge of bankruptcy. IRI later became the largest holding group that stands over the Italian economy and largely was financing heavy industries and utilities. In addition, this type of political intervention was not just in times of crisis (like Great depression or systematic crisis) but also in the time of normal economic time. Six U.S. railroad companies were nationalized in 1976 under the immense pressure of interest groups. Largely customers, creditors and employees were participating in the above pressure group. It was then privatized after 11 years with a net outflow of $6.5 million from U.S. government funds. The benefits to customers amounted to $2774 million whereas $14 million were also given to members of the House Energy and Commerce Committee. (J. S. Ang & Boyer, 2000). In another instance, Krupp in 1997 made a DM 15 billion bid for Thyssen AG in hostile bid—which was trading at DM 12 million on the Frankfurt stock exchange at the time of the bid. The managers of the Thyssen group pressurized politicians and worker unions along with the help of media to allege that Kruppp's intent was to predate Thyssen and its workers to pay to its shareholders. In the end, the takeover was averted and later on agreed to take Thyssen in a friendly merger. Pakistan was also subject to political interference. In 1972 under the Zulfiqar Bhutto government promulgated an order that took over 32 industries from private sector which was followed by ordinance in 1974 which nationalized 22 financial institutions, which included 13 banks and 9 Insurance companies. Unlike the other two above cases, it was not pushed by pressure groups but nevertheless, it shows how political government interferes in the financial markets. Hence from the above examples, it is clear that the action of pressure groups and the policy of the political parties ended up interference in financial markets to achieve certain political, strategic or sociological objectives such as privatizations, nationalization, bailouts and mergers etc. Economists have developed certain strategies to study such effects of political interference on the economy both at the regional and global levels. This approach was called a "new political economy", which treats the policymakers as self-interested agents who respond to political incentives.

Pakistan's financial sector has gone through many different phases since its independence. Two phases are more important than the rest of the phases, The first phase, that we already mentioned the nationalization in 1974 and the other is the financial reform that started in late 1990. This second phase also saw the start of denationalizing the banks which started with Muslim commercial bank. State bank of Pakistan(SBP) also introduced many reforms that strengthened the overall financial sector. Pakistan's financial sector became more diverse with the introduction of Islamic banking—Shariah compliant banking. Islamic banking provided the customers with a range of products at their disposal. New products also deepened the financial market further on one hand but also provided more opportunities for Interest groups to make more profits. Amna Khalabat (2011) has shown that most of the banking sector in Pakistan was developing since the privatization or denationalization phase but mostly the beneficiaries were politicians and government officials. This phase also saw the removal of the restriction of consumer finance, the establishment of small and medium enterprise and micro-financing institutions and mortgage financing to name a few. Pakistan's banking sector is steadily growing with some years of downfall, but overall steadily increasing. Currently, there are 38 major banks that hold 74% of the total assets of the financial sector at the end of 2014. SBP also encouraged branchless banking which increased not only the deposits but also credit to the private sector. The rise in deposits in branchless banking has surpassed that of conventional banks. Currently, there is pressure on the banking sector especially in the context of a financial action task force to adopt certain regulations. It is believed that after adapting to the regulations Pakistan banking sector will progress more.

By applying the political economy theory, we can analyze why financial markets are not able to develop even in the presence of good regulation? Indirectly the answer to the above question may answer the question of why financial markets across countries are not at par, some are poorly developed and some
better than others but still underdeveloped. The same theory may also help us to answer how pressure group affects the development of financial markets and how the political economy can provide guidelines as to improving financial development. If the financial markets are important than what are the factors that can help to promote it? This is a question that has not been looked at as thoroughly as compared to its effect on growth. In other words, researchers have overlooked a more fundamental question as to why financial market development differs across countries? In this study, we will try to find some factors that can drive financial development with reference to the case of Pakistan. In this context, we would like to test the Rajan & Zingales (2003) hypothesis.

The study consists of five sections. section I presented the introduction, Section II will present the literature review on the topic. Section III will present the methodology which will be followed by estimation results in section IV. The last section V will present the conclusion of the study.

Literature Review

Financial markets are characterized by contracts that give rights to both lenders and borrowers. These rights relate to the right of underlying assets or income associated with these contracts. Therefore, it is necessary that rights associated with financial contracts can/should be implemented. According to the law-finance hypothesis put forward by La Porta, Lopez-De-Silanes, Shleifer and Vishny (1997) and La et al. (1998) investor would be willing to invest only if they have investor protection. The above protection can be guaranteed in the presence of strong "institutions". According to La Porta et al. (1997) and La et al. (1998), legal origins are an important element to shape the institutions in a given country. Daron, Simon, & Robinson. James (2011) is another influential study that showed that the quality of institutions varies across countries depending on the initial endowments. Stulz & Williamson (2003) and Luigi, Paola, & Luigi (2004) have identified cultural or religious aspects that shape the financial development of a country. Beck, Demirgüç-Kunt and Levine (2003), empirically tested both law-finance and endowment hypothesis and suggested both of the hypotheses were helpful in explaining some of the cross-country variations in financial markets. They argued, where colonizers' policy was not to settle, small elite groups mostly benefited instead of private investors. On the other hand, where they settled, private investors were protected through the legal process. While comparing both endowment and law-finance hypotheses they concluded that the former theory is more profoundly able to explain the cross-country variation in financial markets, because the latter is more concerned about the channel through which settler effected financial development. Another hypothesis was put also forward by Rajan & Zingales (2003) where they postulated a political and economic framework that can boost financial development. Their arguments are a way out especially for developing economies where the political intervention in financial markets is quite considerable and we can find many instances where governments push financial institutions to lend credit to a specific industry or to get credit for themselves in exchange for some benefits. These benefits may not be sufficient enough to improve their competitiveness. This will in turn not be helpful for improving the development of financial markets.

According to Rajan & Zingale's (2003) hypothesis (RZH), in any market there exist certain interest groups. Among these interest groups, they identified two important groups—industrial and financial incumbents. Financial incumbents work as financial institutions and industrial incumbents act through the political system. Both of the above groups will stand to lose from financial development. So in a way, their profits are jointly determined. Industrial incumbents are able to finance new projects from retained earnings/profits without consulting the external capital markets, use the collaterals from ongoing projects or their prior reputation to borrow. The industrial incumbents in a way enjoy positional rents. Anyone else who starts a new business has to sell it to the incumbents or get them funded by financial incumbents. Therefore where the incumbents operate, they not only enjoy some rents, but they also end up appropriating most of the returns from new ventures. Financial incumbents take advantage of their informational advantage which arises due to their relation-based financing and overtime they became
monopolists for the new firms in an environment of weak contract enforcements and poor disclosures. Certainly, this type of environment will raise the fixed cost for the new financial entity. So, they suggested that if financial and trade sectors are open simultaneously, only then the incumbents will have the incentive to back financial development. Trade openness in combination with financial freedom forces the incumbents to make use of the foreign capital markets to compete with the incumbents entering the domestic market both from within and from outside. Lower profits resulting from trade openness and greater need for finance now force them to analyze the possibility(ies) of borrowing from international capital markets. The role of the Government will be limited to maintaining financial prudence and its power of instructing the financial incumbents to supply credit to specific industries or to provide subsidized loans will reduce significantly under the liberalized financial markets. So, on sequencing, the RZ hypothesis differs substantially from contemporary theories, where financial account should be the last step and trade openness must precede financial (see McKinnon (1991). RZ favored the opening of both of them simultaneously.

Rajan & Zingale's (2003) paper itself has limited data availability which means that the conclusions are at best tentative. Other researchers have not researched this hypothesis too extensively. There is some evidence that indirectly provides some evidence on the hypothesis. Huang (2006) explained that financial openness is the key variable that explains the cross country difference in the development of financial markets across countries. Levchenko and Quy-Toan (2004) suggested that trade openness explains the financial development process differently for different income countries. According to their findings, trade openness help promote financial development at a higher pace in the case of rich countries and has the opposite effect in the case of lower-income countries. Huang and Temple (2005) postulated that the openness of a good market is associated with increased financial depth.

If we look into the evidence on the RZ hypothesis, we would like to mention three studies—first by Zhang, Zhu, and Lu (2015), second by Baltagi, Demetriades, & Law (2009) and third by Law (2008). The first study by Zhang et al. (2015) was on China and looked across Chinese provinces as to the impact of openness on financial development. The second study by Baltagi, Demetriades, & Law (2009) was on a panel set of countries. Interestingly both of these studies found a lack of evidence on the RZ hypothesis. Both studies also found a positive effect of financial and trade openness individually. The third study found a similar result. A study by Law (2008) for the case of Malaysia which showed that although both trade and financial openness help promote financial development however they were unable to support the RZ hypothesis.

The objective of the present study is to test the RZ hypothesis—openness to both trade and financial openness has a positive effect on financial market development for the case of Pakistan. Being a developing country, Pakistan is heading towards more open policy both in terms of a good market and financial market. The policy of the government is to liberalize it gradually and if it is proven that simultaneous opening help improves financial development can have policy implications. This would also have a consequence of the sequence literature.

**Empirical Model and Methodology**

There can be multiple empirical models that we can employ to test the RZ hypothesis. Here we will take a simple approach to save ourselves from the complications since our aim is to test the above hypothesis directly. We want to employ a model that allows the testing of the RZ openness hypothesis. We have two options, first to take only financial account and trade account and estimate their impact on financial development. Second is a more realistic approach where both the above accounts are taken along with other variables that have the capacity of effecting financial development. It is because financial development is not only effected by trade and financial account openness but also from other variables like gross domestic product and institutions. For the current paper, we will make use of the second approach of taking both financial and trade accounts plus other variables. However, we will test the impact of these variables with and without an openness hypothesis. In this context, we will test two models, a simple one and the other
one that will test the RZ hypothesis. Testing in this way will give us more insight into what happened with and without openness. The simple empirical model can be stated as follows,

\[
\ln FD = \alpha_0 + \alpha_1 \ln RGDP + \alpha_2 \ln law + \alpha_3 \ln COPN + \alpha_4 \ln TOPN + \varepsilon_t
\]  

(1)

The model that will test the openness hypothesis can be written as,

\[
\ln FD = \alpha_0 + \alpha_1 \ln RGDP + \alpha_2 \ln law + \alpha_3 \ln COPN + \alpha_4 \ln TOPN + \alpha_5 (\ln TOPN \times COPN) + \varepsilon_t
\]  

(2)

In the above two equations, FD is the financial development, RGDP is the real GDP per capita, the law is the rule of law, COPN is the financial openness, TOPN is the trade openness. In equation 2, the term \(\ln TOPN \times COPN\) measures the openness hypothesis i.e. financial openness and trade openness. As far as our expected signs related to the above variables are concerned we expect that RGDP having a positive relationship with FD. As real income increases, it is expected that people will have more income that they want to invest somewhere that will increase the demand for financial services. law is also expected to be positively related to FD as suggested by Chinn and Ito (2006) and Demetriades & Andrianova (2004). COPN and TOPN are both expected to be positive as COPN and TOPN are both effecting FD positively. \(\alpha_5\) in equation 2 is expected to shed some light on the openness hypothesis. A positive \(\alpha_5\) provide validation to RZ hypothesis.

The variables in the above equations need a little more elaboration. To measure financial development there are many proxies that are available (Beck, 2000). For this study, we will be using two measures—liquid liabilities and private sector credit. These measures consist of 29 observations spanning from 1990-2018. The source for these variables is mainly World Development Indicators. The reason for using two measures for financial development is that both measures cover a different aspect of the financial market and each one of them has its own strengths and weakness. Liquid liabilities assess the ability of the financial institutions, mainly banks, to mobilize the funds. However, it is not necessary that all of these funds may be given for establishing new businesses. Private sector credit measures the ease through which the business (new and existing) can acquire the finance from financial markets—again mainly banks. In this sense, we will be particularly interested in the outcome related to private sector credit.

The data on other variables like real GDP per capita is taken from World Development Indicators based on 2000 constant prices. The rule of law estimates is taken from World Governance Indicators. Rule of law captures the quality of institutions. Financial openness is calculated from financial globalization indicators calculated by Lane and Milesi-Ferretti (2007). Trade openness is a typical measure of trade openness and measured as a ratio of total trade to GDP. This indicator was taken from World Development Indicators. \(\varepsilon_t\) is the error term in both equations, which encompass the omitted variables that can affect dependent variable. A short definition of the variables and data sources is also given in table 1.

**Estimation Results**

The estimations results for equations 1 and 2 are reported in table 2. Both equations are estimated interchangeably for both measures of financial development. For instance, in the first two columns of Table 2, we estimated equations 1 and 2 for the first measure of financial development-liquid liabilities. The last two columns estimated the same equations for the second measure of financial development-private credit. Our variable of interest is in the second and fourth column which is the interaction term, that will test the RZ openness hypothesis. But we also want to analyze what is the outcome of the other variables? GDP per capita is positive for all cases and mostly it is significant at a 5% level of significance. The positive real GDP per capita means that an increase in income would lead to an increase in financial development. According to theory rise in income will lead to increase demand in financial services. Given this backdrop, the positive GDP per capita validates the view.

Financial account openness is also positive and significant which is quite an interesting result for Pakistan. However, if we see it closely, the significance is on margin and in all cases, it is significant at a 10% level of
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Our results are in line with other studies on Pakistan, for example, Rodrik (1998), who also found a weak but positive impact of financial account liberalization. Similarly, Naveed (2017) found positive but weakly significant effect of capital account liberalization on economic growth for Pakistan. However, their study was on growth rather than on financial development. Kose, Prasad, Rogoff, & Shang (2006) and Ozdemir, Durmus and Erbil (2008) also found mix results for capital account liberalization. Trade openness is showing mix results. In two cases it is significant and positive whereas in the other two cases it is insignificant. An interesting outcome is that trade openness is significant where we had not

Table 1: Summary of the Data Set (1990-2018, Annual Data)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
<th>Unit of Measurement</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>World Development Indicators</td>
<td>at 2000 price</td>
<td>918.23</td>
<td>128.99</td>
<td>741.001</td>
<td>1197.84</td>
</tr>
<tr>
<td>Pvt. Sector</td>
<td>World Development Indicators</td>
<td>percent of GDP</td>
<td>19.09</td>
<td>3.44</td>
<td>14.772</td>
<td>27.098</td>
</tr>
<tr>
<td>Credit</td>
<td>World Development Indicators</td>
<td>percent of GDP</td>
<td>37.16</td>
<td>4.8</td>
<td>28.09</td>
<td>44.07</td>
</tr>
<tr>
<td>Liquid Liabilities</td>
<td>World Development Indicators</td>
<td>percent of GDP</td>
<td>33.03</td>
<td>3.71</td>
<td>25.31</td>
<td>38.91</td>
</tr>
<tr>
<td>TOPN</td>
<td>Development Indicators World</td>
<td>percent of GDP</td>
<td>58.804</td>
<td>13.5</td>
<td>37.1</td>
<td>85.86</td>
</tr>
</tbody>
</table>

Table 2: Estimation Results

<table>
<thead>
<tr>
<th></th>
<th>Liquid Liabilities</th>
<th>Liquid Liabilities</th>
<th>Private Credit</th>
<th>Private Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnFD(-1)</td>
<td>0.8038***</td>
<td>0.7915***</td>
<td>0.6584***</td>
<td>0.6108***</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
</tr>
<tr>
<td>lnRGDP</td>
<td>0.0258**</td>
<td>0.0134*</td>
<td>0.0463**</td>
<td>0.0955***</td>
</tr>
<tr>
<td></td>
<td>(0.0462)</td>
<td>(0.0726)</td>
<td>(0.0449)</td>
<td>(0.0113)</td>
</tr>
<tr>
<td>lnlaw</td>
<td>0.0338</td>
<td>0.0499</td>
<td>0.2075</td>
<td>0.1460</td>
</tr>
<tr>
<td></td>
<td>(0.7756)</td>
<td>(0.6776)</td>
<td>(0.3210)</td>
<td>(0.4412)</td>
</tr>
<tr>
<td>lnCOPN</td>
<td>0.0357*</td>
<td>0.0611*</td>
<td>0.1064**</td>
<td>0.0283*</td>
</tr>
<tr>
<td></td>
<td>(0.0775)</td>
<td>(0.0992)</td>
<td>(0.0516)</td>
<td>(0.0857)</td>
</tr>
<tr>
<td>lnTOPN</td>
<td>0.0477**</td>
<td>0.0262</td>
<td>0.0707***</td>
<td>0.1144</td>
</tr>
<tr>
<td></td>
<td>(0.0578)</td>
<td>(0.2650)</td>
<td>(0.0001)</td>
<td>(0.7534)</td>
</tr>
<tr>
<td>lnTOPN × lnCOPN</td>
<td>0.1336</td>
<td>0.1531</td>
<td>0.1531</td>
<td>0.2250</td>
</tr>
<tr>
<td></td>
<td>(0.3249)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Square</td>
<td>0.8479</td>
<td>0.855</td>
<td>0.7581</td>
<td>0.8124</td>
</tr>
<tr>
<td>Adj R-Square</td>
<td>0.8202</td>
<td>0.8204</td>
<td>0.7141</td>
<td>0.7676</td>
</tr>
<tr>
<td>D.Watson</td>
<td>1.9806</td>
<td>1.9285</td>
<td>1.5955</td>
<td>1.5275</td>
</tr>
<tr>
<td>Normality test</td>
<td>5.771(0.5580)</td>
<td>7.6138(0.2221)</td>
<td>1.9045(0.6362)</td>
<td>1.2425(0.8858)</td>
</tr>
</tbody>
</table>
NOTES: The figures in the parenthesis are the prob. values. ***,**,* indicate significance at the 1%, 5% and 10% level of significance. All estimations are carried out using the ordinary least square technique. Include the interaction term. In the column where we included the interaction term to test the openness hypothesis, trade openness becomes insignificant. This might show that Pakistan’s trade account is currently not competitive enough when it opens.

If we see other literature on Pakistan, we also see mix results like Din, Ghani, and Siddique (2003). Din (2004) also found no causality running from exports and economic growth for Pakistan. found a negative effect on trade and growth for Pakistan. However, when it is combined with human capital, it starts to affect growth positively. In some studies, it is also suggested that trade openness be combined with strong institutions to see its effect like Shahbaz, Muhammad, Azim, Pervez, and Ahmad (2011) showed a positive effect on economic growth when combined with financial reforms. The variable of law that is capturing institutions is not significant for all cases, which shows the weak institutional environment in Pakistan.

On the interaction term-assessing the RZ hypothesis it is positive for all cases however it is insignificant. This is against the spirit that was proposed by Rajan & Zingales (2003). Our result is in line with that of Law (2008) for the case of Malaysia. Their finding also suggested that for banking measures of financial development, the RZ hypothesis was not validated. P. Demetriades & Law (2007) also found mix evidence for the RZ hypothesis for a group of countries. A recent study by Ahmad (2019) also found that for the developing countries the RZ hypothesis was not validated. The reason might be that the level of capital account and trade account was not at the level that can compete in the international environment. It also gives us a clue that interest groups have deliberately suppressed the financial and real sector due to which they are not at a level that will benefit financial development. process.

The diagnostic tests are also stable from model to model and show the overall strength of the estimation. Durbin Watson is close to 2 in the first two models whereas it is fairly close to 2 in the last two models. It shows the absence of autocorrelation in residuals. Normality test is also suggesting that distribution is normally distributed. R-Square is also sufficient to state that a sufficient variation in the dependent variable is able to be defined by independent variables.

Conclusion

This paper tested the hypothesis put forward by Rajan & Zingales (2003) for the case of Pakistan. The above hypothesis is important in the sense that Pakistan is a developing country and finding ways and policies that can develop its financial market and become competitive in the international market. According to the RZ hypothesis, the simultaneous hypothesis will reduce the resistance of the interest groups (financial and industrial incumbents), whose profit stands to lose because of improvement in financial development. The opening of the markets will also be helpful to improve the new profit opportunities for them to be more competitive. hence, it might suggest that extra profits will outweigh the losses of these incumbents and thereby reducing their resistance.

However, according to our results, the RZ hypothesis did not hold valid for the case of Pakistan. Individually trade openness and financial account openness helps improve financial development but the simultaneous opening of not have sufficient evidence to be recommended as a policy tool. The same result applies to both measures that we used for financial development. It shows that for Pakistan sequencing literature-opening of the trading account should precede financial opening, can be further explored. Our result also suggests that in spite of the insufficiency of the RZ simultaneous hypothesis, still individually trade and financial openness might help to promote financial development. In a way, they do not complement rather substitutes according to our results. It is also to be noted that financial account openness may prove to be more effective than trade openness to promote financial development.

On the basis of our study, we suggest that Pakistan should improve on its trade and financial account competitiveness before they can liberate it or open it. Based on our results, Pakistan is in a position to get benefits in terms of improvement in financial development either opening a financial account or trade
account. Although according to RZ hypothesis one type of opening will not be beneficial for improvement in financial development, however in case of Pakistan we recommend that sequencing literature-trade account must be liberalized before the financial account can be beneficial. This can be a blessing of developing countries as they have fewer resources and they can divert their maximum resource on one sector either trade or financial account to get the benefit. On the basis of the recommendation, we also suggest to carry out further research studying the cost-benefit analysis related to such sequencing. For testing the RZ hypothesis further, we recommend further inclusion of control variables to look into the specifics. In addition, the use of advanced estimation techniques and more data (for example quarterly), will help to explore the topic more clear. Lastly, we also recommend using more than one measure to the proxy institutional environment. This will be also helpful to understand the political economy factors that help explain financial and economic development.
References


