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The Effect of Bank regulation on The Banks' performance: A literature review approach

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Abstract

The efficiency of Bank regulation adopted affects banks operation and performance. In turn,it is the determinant for the existence of financial crisis in the world. The research is conducted by using a prior study content analysis technique. By doing so, the paper found that, structural bank regulation affects the performance of the banks positively or negatively in both advanced and emerging countries. So, Iconcluded that existing literature is insufficient enough to identify the real effect of structural regulation on banks performance; hence, it is empirical question yet. Prudential regulation affects the banks' performance positively, but in case of prudential regulation effect there is different effect in different size and risk level of the banks. Mostly, it affects developed counties banks' performance positively. Hence, it is possible to conclude that, developing countries should tailor out their own prudential regulation based on the size and risk level of banks. Finally, in this study, it is revealed that, monetary regulation affects the bank operation and performance negatively. So generally, any bank regulation has negative effect for one or more countries bank in the world when it is more week and strong. It may result in bank run all over the world. Hence, I argued that the international accord regulations could not boost the banking industry of all member countries or any country comply with the regulation or those set their regulation parallel with the international regulation for political proud purpose without risk and size consideration.

Key words: Bankperformance, Prudentialregulation, structuralregulation, monetaryregulation

1. INTRODUCTION

Thefinancial sector in general, especial banks in bank-based economy like Ethiopia, are engines which synergize the economy. Like that of blood diffusion, their performance circulated in the productive capacity of the economy. Besides, banks are the sector which isvery sensitive to failure than others and they circularly dwarf the economic development when they will not function in a valuable manner. The recent (2007-9) financial crisis is corroborative of how the failure of bank can trigger the economic disaster. This shows that banks should operate in safe and thorough manner to avoid a contagion economic distress. Due to this, banks are the most

regulated sectorirrespective of the development level of the country. However, policy makers are always ballooned on the assessment of what regulatory level can promote a well-functioning banking system and there is no a clear-cut theoretical and empirical evidence about the effect of different regulationlevel on the banks' performance(Beck et all 2006; Calicec et al 2016; Jomini 2011).

According to keuin and Nicol(cited by Eden2014) bank regulations aimed at bringing the benefit of high growth through stable financial system. As with all regulations, they also create a cost in the economy which makes the sector a windbag to participants. Through this nature, the level of bank regulations involves so many complex trade-off since cost and benefits from bank regulationmay haven't so similarity. It is the choice of each country to go above the minimum stringent or below the minimum requirement with the exception of those which are member of international accords. This option based regulatory variety have its own limitation due to the likely high cost of bank regulation. Since banking sector spreads the economy, the increasing cost of the economy from inappropriate regulation of the banking sector have a broad consequence. This implies that, it is important to assess the effect of bank regulation carefully before its execution and regularly appraise to avoid the cost of unfitting bank regulation from the economy.

Currently, following 2007-2009 global subprime financial crises, many reforms of financial regulationschema regarding with banking industry has been agreed internationally including the current banking regulation and supervision agreement (Basel III accord, whichis further complete and stricter than Basel II.) Because according to ClaessensandKodres (2014) the slowing of regulators and supervisors, to catchup development or due to political coverage, were one of the contributor for the occurrence of the crisis. Specifically, this current agreement made a deep reform on the regulation packages in terms of capital, liquidity and credit risk. Through the enforcement of international monetary fund, even developing countries including Ethiopia are in line of using Basel committee's regulation pillars in their own Jurisdiction. As a result, banking industries in our country as well as most of countries in the world required to comply with the regulatory requirements. This issue rises a heated discussion going on as on how bank regulation affects banking industry as well as the overall economy(keuinand Nicol, cited by Eden, 2014;Jomini 2011: Basel Committeeon Banking Supervision, 2010).

According to Barth et al (2013) a well-functioning banking system have a strong positive impact on economic growth and development. However, as past history revealed, practically, banks will not always perform in the expected way. This hostile nature and practice of banks unmasked in the recent financial crisis (2007-2009). To circumvent the problem, policy makers stuffed on the assessment of cases and setting a regulation which can promote a better banking industry. The real effect of the regulation on the banking industry is not clear cut even from theoretical perspective. The public interest theory states that the government regulates the bank to enhance efficiency and avoid failures in favor of the public (Beck et all 2006; Calicec et al 2016). While private interest theory states that bank regulation is in favor of the few not the general public

which impends banks' performance(Barth et al 2013; Quintynand Taylor 2002; and Leaven and Levine 2009).

As stated inCalicec et al (2016) tighter bank regulation leads good banks' performanceand efficiency in developed country than developing country.while, the economy of financial regulation argued that bank regulation would likely boost the efficiency of the banking systemglobally as well as nationallythrough reducing transaction cost for costumers and positive externality without offsetting by higher transaction cost by regulators and firms(Llewellyn 1999).However, regarding to the issue, empirical studies pointed out mixed findings. Many researchers were conducting empirical studies related to the effect of bank regulation on the efficiency and performance of banks and have report a varying twineffect:(Chortareas et ale (2012); Quintynand Taylor(2002); Demirguc-kunt et al (2003); Beck et al (2006); Biggar (2005); Barth et al (013); OmranandNaceur (2010); Gual(2011); Jomini (2011); Eskinder (2015); Klomp andHaan (2015); Calicec et al (2016); PsillakiandMamatzakis (2016); Deli and Hasan (2016); HaqueaandBrownb (2016) and Banerjee and Mio (2017))are some of those researchers.

2. Purpose

During the recent 1 or 2 decades, Ethiopia undergoes a radical financial reform and experience a continues changing of bank regulations under the support of different international organizations (like IMF) with a common prospect of a significant financial and economic development. However,The Ethiopia financial system is unsurprisingly unique as compared with other developing countries given the reliance in only banking based system and high level of government intervention, regulation and dominance (For example, NBE requires bank to purchase bill which is 27% of their total loan with 3% interest rate(Temesgen 2015). This in turn affects banks profitability. It is one of the monetary regulation executed in our country banks). This extreme government involvement leads inefficient credit allocation and in turn poor banks' performance(Chortareas et al 2001). However, the mixed results and arguments on the effect of banking regulation do not provide support for stringent or week regulation of the industry. So that, it is important to analysis the effect of bank regulation on the banks performance. Hence, I tried to answer the following basic regulatory question:

- ✓ How structural regulations, prudentialregulations andmonetary regulations affectbanks performance?
- ✓ Are worldwide regulations(likeBasel accords) sufficient and appropriate to properly regulate banks in any dominion?

3. Approach

This study conducted by literature review approach. means that, it is a conceptual paper. It critically reviews sampled literature on the issue and conceptualized their findings.

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4. Discussion and Finding

In this section of the paper a detailed discussion of theories and previous studies related with bank regulations effect has been presented.

There are two contradicting arguments in the theory of bank regulation. (I) public interest view theory; states that stringent regulation improves the overall performance of the bank through entry barriers on new comersreduce competition in the banking industry and it makes banks to have more prudent lending, reducing the risk of banks; hence in the absence of competition banks may lend only for high credit rating borrowers, while in highly competitive banking industry banks may lend for borrowers with low rating.Moreover, it states that by directly monitoring and regulating banks, official regulators and supervisors can eliminate banking failures. (Agoraki et al 2011; PsillakiandMamatzakis 2016; Beck et al 2006). However, in contrary to this,(II) private interest view theory of bank regulation; states that stringent regulation affects the banks' performancenegatively because of greater fee requirements (rent extraction) and corruptionby the government, entry barriers reduce competition which impedes banks from innovation and efficiency, forces the banking industry to use the most costly financing source (equity than deposit) and leads risky portfolio selection to compensate the high cost and risk take due to high capital requirement which leading poor bank performance.This theory suggest that a powerful and tight bank regulation leads corruption in lending practice and result in improper capital allocation and finally, impedes banks' performanceand may result in bank run (boycotted). (Barth et al 2006 2013; Pasiouras et al 2009; and Leaven and Levine 2009; Quintynand Taylor 2002).

Jomimi (2011) investigates the effect of inappropriate financial regulation and his result illuminated that stringent/tight regulation may result in high cost and poor performance in the form of additional cost to implement, comply and administration of the regulated banks, and since high regulation reduce competition; it restricts economies of scale advantage, innovation, and creates rent. Generally, he argued that after the recent financial crisis there is regulatory overran risk. Hence, it is essential to optimize bank regulation by weighting its cost and benefit for the bank and the whole economy. However, the usual policy problem that we face is that, there is no strict way of weighting the cost and benefit of bank regulation before the implementation.

Naceur and Omran (2010) assess the extent to which financial regulation, development, market structure and institutional factors affect banks' performanceby bank level data from 10 middle east and north African countries and found that bank regulation have strong and positive impact on the banks performance which measured through interest margin, cost efficiency and profitability.However, for instance, capital regulation andprice regulation may havenegative effects. If interest rate restricted by the regulator, it will automatically reduce competition between banks if other things are constant. It will hinder the productivity and efficiency of banks which is part of performances the same is true for stringent capital restriction. This is because

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stringent capital restriction is barrier for new entrants and reduces competition. When strict capital restriction and price restriction imposed together they will directly lead holding than investing by banks. In other circumstance, capital regulation may reduce the banks risk exposure at bankruptcy and may reduce the required rate of return, particularly in bank-based economy, which increases the operation and performance of banks. This implies that this empirical evidence is not sufficient to answer the level of regulation.

Klomp andHaan (2015) studied about bank regulation and financial fragility in developing countries and revealed that stricter bank regulation improves the banks performance which measured by z's score. They detailly discussed that activity restriction reduces the risk of large and foreign owned banks while liquidity restriction has effect on small unlisted banks. Indeed, they strongly argued that bank regulation does not have that much effect on the performance of low risk banks; instead it affects the performance of high risk banks significantly. Their argument is supported by Calicec et al (2016)'s finding.

Effect of structural regulation

According to William in Eden (2014) structural regulation is the restriction imposed on banks activity. Bank activity restriction is the degree of regulation to which a bank restricted from involvement in security market, insurance and other non -financial investments. According to National bank of Ethiopia (2015) and Basel accord III(2010) the objective of structural regulation is to reduce the complex structure and risk of the banks. However, there are different views on the effect of the structural regulation on the banks performance.Haque and brown (2016); and Barth et ale (2013) stated that structural regulation may affect banks' performance negatively. They argued as bank structural restriction impedes economies of scale advantage by the bank since it restricts the activity of banks to what they should do from what they can do. This increases the cost of operating banks which in turn decrease its performance.

According to leaven and Levine (2009)structural restriction limits the economy of scale advantage of the bankswhich in turn restrict the banks from providing different type of service and ordinary service at low cost. Moreover, this regulation impedes the banks' ability to diversify the stream of cash flow or income and franchise value which limits the motivation of productivity and result week performance. Djankove et al in Calice et al (2016) also claimed that structural restriction is only to increase the bargaining power of the regulators and which may hinder the performance and efficiency of banks. Moreover, this argument supported by Chortareas et al. (2001). However, according to Pasiouras et al(2009)and Demirguc-kunt et ale (2003)strict structural bank regulation has a positive effect on the banks performance. They noted that, tighter structural regulation reduces the complexity of business structure and make the management and administration of banks simple and reduce the moral hazard problem and opportunity to increase risk taking. This simple management practice cuts cost of administration, misuse and exploitation, hence the banks may be loyal by the people, they will acquire capital at low cost and results in good performance. Moreover, Leaven and Levine (2009)notified that the

week structural regulation broadens the banks activity and may lead to big to fail structure. Furthermore, Klomp andHaan (2015) showed as it reduces the risk of large and foreign owned banks. So, it may not have effect for the small sized and domestic banks. This evident that there is no consent in empirical findings like that of theoretical arguments. it is still an empirical question.

Effect of prudential and monetary regulation

According to William in Eden (2014) financial regulation classification prudential regulation involves the restriction imposed on the banks capital, concentration (share owners right and nationality) and banking entry and exit. While monetary regulation involves the restriction on the interest rate (lending and deposit), credit (credit balance (credit cap) and portfolio or flow of credit; this restriction includes requirement to hold government security like that of 27% of credit for T-bill in Ethiopia, credit lending to favored institution, manufacturing industry in Ethiopia case and control of the total Credit extended(Bigger 2005) and reserve requirement (liquidity). Eden (2014) found that monetary regulation has a negative significant effect on the banks performance. She noted that in the strict monetary regulation the banks can not lend the capital that it has above the cap or ceil but they paid interest for the investable capital usually from depositor. this reduce the interest income in turn overall performance. Moreover, she argued that high reserve requirementnegatively affects the performance of banks since the reserve deposited at central bank has no interest while the banks paid interest for the fund deposited, it reduces the net interest margin which is one measure of performance. Regarding with reserve requirement Klomp andHaan (2015 argued that strict reserve requirement affects only small and unlisted banks while capital requirement affect every type of banks. Large banks are always liquid by their market share. Even though,Vianney (2013) argued as liquidity regulation does not at all affect the performance of banks, It implies that there should be size based reserve regulation of banks.

GavalasandSyriopoulos (2014) was investigating the impact of Basel III capital requirement on the lending rate and loan growth. Their finding revealed that there is a cross country different effect of capital requirement. The loan and lending rate have different elasticity in different country. According to their data, 1.3 percent increase in capital requirement (equity to total asset) reduce the loan volume by 4.97 percent and 18.67 percent for the banks in those countries experiencing crisis and not experiencing crisis respectively.

Haque and brown (2016); Barth et ale (2013) and Chortareas et al (2012)found thatprudential regulations have a positive effect on the banks performance in the post global crisis period. Specifically, in support of the public interest view theory of bank regulation, they found that bank capital regulation has a positive effect on banks performance. This argument also supported by Dang in Erimyas(2016) who asserts that the objective of prudential regulation is to build internal strength and confidence in the banks and make more profitable. In contrary to this, Beckmann in Erimyas(2016)and Pasiouras et ale (2009) were found negative effect of capital

regulation. He noted that, high capital requirement reduces the risk of the banks and this leads low profit and performance. The banks may not stretch to perform better for high cost of capital. Moreover, shareholders may not monitor banks with stringent capital requirement and may result bank failure to worst.

HaqueaandBrownb (2016) investigates the effect of bank regulation and ownership on the efficiency of banks in the emerging region. Their result support the public interest view of bank regulation. they pointed out that, stringent capital restriction, bank entry, ownership and asset portfolio reduce the banks from strong competition. This in some extent improves the banks performance. It is in support to CheloandManlagnit (2015) who examines the effect of Basel regulation on Banks efficiency and shows that capital stringency affects the cost efficiency of banks positively while activity restriction affects oppositely.

PasillakiandMamatzakis (2016)studies the impact of reform and regulation on banks' performancein a transition economy by taking 10 central and eastern European countries from 2004-09 and arrived on that strong monetary regulations have negative impact on the banks performance. They also find that the effect is more significant for better capitalized banks. Their finding is consistent with private interest view theory of bank regulation and partially with the finding of Klomp andHaan (2015) and Calicec (2016). So according to their finding monetary regulation should not be tighten to boost the performance of banking industry.

Calicec et al (2016) examines how capital stringency, bank entry restriction, banking activities restrictions, transparency requirement, bank exist restriction, liquidity and price control, and the availability of financial safety net affects bank efficiency in Africa. in line with Chortareas et al (2001)'s and Klomp andHaan (2015) arguments, they found that the effect of some bank regulation highly depends on the size and risk level of banks. They discussed that highly entry restriction enhances the performance of large and high-risk banks. But small and low risk banks do not affect by exit restrictions. Indeed, their result showed that stringent capital restriction and price control enhances the efficiency of large and low risk banks. On this ground, they argued that bank regulation should be tailored on the size and risk level of the given banks being regulated. Hence. They supposed that, in Africa a 'risk proportionality approach' in bank regulation should be usedin contrary to "one size fits all" approach which is on a going practice.

Deli andHasan (2016) investigates the real effect of bank capital regulation on loan growth by using bank level data in 125 countries and found that stringent capital regulation affects the growth of loan negatively in short term, mostly for low capitalized banks, however they find positivelong-term effect of Capital regulation on loan growth They also revealed that compliance in international regulatory guidelines such as Basel's pillars has much less effect for growth of loan.

Banerjee and Mio (2017) studies the impact of liquidity regulation on banks and found that tighter liquidity regulation did not reduce the banks loan and asset instead it altered the bank to adjust the balance sheet composition. This argument may have a negative effect through its

impact on long term investment may reduce interest margin as well as the cost efficiency of investment made by bank. indeed, they also found liquidity regulation have no effect on the interest margin of the bank. However, liquidity regulation has a significant and negative effect on the inter-bank market or Fed investment.

Gual(2011) evaluate the capital requirement under the Basel III and its impact on the banking industry. It found that the existing theory and evidence raise doubt on the effect of the regulation. According to his discussion the capital requirement of Basel III accord is unlikely to reduce the risk-taking threat of the banks, instead, it is to reduce the faster capitalization in the banking industry and this recapitalization could result high cost (inefficiency) in the banking industry as well as the economy in the short run in the fact of limited supply of credit and sovereign debt crisis. This have high risk aversion effect than risk reduction. Moreover, he showed that the regulatory methods adopted by Basel III accord do not consider the bank financial risk, it only focused on the capital ratio.

Eskinder (2015) examines the impact of government banking policies on private bank competitiveness in Ethiopia and states that private banks face a sober challenge for compute in the market due to the government policies and directives. Additionally, he showed that there is a clear and formal discrimination of private banks by the governing body in Ethiopia. The national bank bill is functional only on private banks and different public-sector finance mobilized by the government owned banks. This regulation affects the banks' performancenegatively.

5. CONCLUSION

In this paper I have attempted to observe the theoretical and empirical arguments that justify whether a strict or week bank regulation should be designed to have a sound banking system for boosting economic growth and development. The evidences help to arrive on the following conclusions.

In the regulation which reduce competition among banks, there may be high social costs in the form of limiting credit supply, high transaction cost, high lending rate and reduction in motivation. this study conclude that monetary regulation affects the banks' performancenegatively. monetary regulation may, to the worst case, make banks illiquid. Monetary regulation restricts the price and liquidity of banks, in the case the loan will be reduced, this in turn affects the banks' performancenegatively. Moreover, the credit ceiling and favored sector credit affects the performance of banks strongly negatively. The credit ceiling dilutes interest revenue by the interest expense for the amount exceed the ceiling. This supports the private interest view theory of bank regulation.

Prudential regulationhas effect on the banks' performancedepend on the risk level and size of the banks regulated. capital stringency has mixed effect as per the empirical evidences. However, this paper concludes that, in the absence of financial market, it will affect the performance of banks negatively. High capital requirement cannot be complied by small size and risky banks at

low cost which in turn affects their lending volume, decision and price. In the worst case the joint effect of prudential regulation with price regulation may adversely affect the banks performance. The mixed empirical results as per risk level and size of banks implies that regulators should tailor the regulation being executed based on the risk and size of banks being regulated. This made the international accords insignificant or they should not have strict rules being complied.

Stringent Structural bank regulation restricts the activity and investment area of banks on few activities. in this regulation the banks may have many idle resources which need to be invested. Since those resources have implicit and explicit costs, it makes the banking industry cost inefficient and leads poor performance. Activity regulation of banks affects the banking performance negatively by increasing their risk and reducing the portfolio that will reduce risk. Structural bank regulations should not be tightened to boost the performance and productivity of bank from competitive and activity perspective. Activity regulation reduces the banks service to be provided for customs. On the other view, structural regulation reduces the too big to fail structure of banks, and it may also reduce risk taking moral of banks which boosts the banks performance. As per the existed empirical evidence, the effect of structural regulation is different for different size and risk of banks. However, the existing empirical evidence is not sufficient to identify the real impact of structural regulation on the banks performance. Hence, it needs further research. So, I conclude that the effect of structural regulation on the banks performance is still an empirical open question.

Finally, yet importantly, this paper has week support for one particular theory or argument of bank regulation effect, instead, it strongly argued that there is no single straightlyidentified effect of bank regulation. Each identified effect may be different on the individual measures of regulation and performance and on the variables controlled or considered.

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