Public Ownership in Banking: Modeling Divine Energy Efficiency of Selected Chines Banks in China Pak Economic Corridor (CPEC)

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Abstract

Financial institutions play vital role in go ahead of project with financing at each set of activity. On the subject banks participating assessed on performance standards is an integral part of economic activity. For this reason, CPEC get an achievable finale of strategies build on pillar of financing through optimal performing financial institutions turns out play key role in China Pak Economic Corridor. As a token of friendship with China this project will open new corridor for establishment of Chinese universities for research degree in energy economics in Pakistan.

Keywords: Energy Efficiency, Productivity, Public Banking, CPEC

1. Introduction

Prior to memorandum of understanding it wasn't anything on paper. Now it has been on black and white by joining both parties such that China Pak Economic Corridor activity has started. It is talking with media Prof. Ahsan Iqbal emphasized misgivings by the officials by time to time. It is clearly stated a worth of \$46 billion was invested, and there will have no change in the route to make every single activity a success. In this regard numerous meetings have been carried however as according to Prof. Ahsan Iqbal "not even a coma of the initial agreement reached at the firms APC has been changed till date". Misrepresentation, had grown out of certain misunderstandings addressed in quarters \$35 billion would be in infrastructure energy projects worth and reset in infrastructure and rest in development of infrastructure an producing energy, the provinces take its share by Sindh \$7.1 billion, Balochistan and Punjab \$6.9 billion. Every single activity is coming through financial institutions best friend China is extending hand for economic prosperity of Pakistan. It needs to test factor productivity growth for Chinese counterpart. Where do conscious and unconscious decisions on part of government release. Then there is a departure from studies on efficiency. It is utmost important on part of Pakistan to seek performance standards of national banking, Chines Banks taking part in this acidity to rule out any under or over utilization of resources avoid wastage. This has important up front for MPhil/ Ph. D scholars to provide evidence based research on performance for banking in China to take into account its working in optimal parameters in cost analysis in frontier approach, Fourier functional forms with in broader context fixed effect modelling for students to understand and use in research in globally known standards see modeling Zafar (2016) Zafar et al. (2017) assess performance to take further corridor economic activities, beneficial both for China and Pakistan. This is not all CPEC with in banking but to find out possibilities of economic optimality.

2. Review on Public Ownership in Banking

In the meaning of ownership, researchers go through main objectives, own for a high share in market value, and managers in terms of power and utilities. Jesnen and Meckling (1979) took ownership as a part of production function, productive resources, technology in survival of fittest. To distinguish in between ownership structure is central in performance in banking industry. This could be due to industrial complexity, asymmetric information and high regulation Shleifer and Vishny (1986) Tirole (1992) Vernon (1979). As pointed out by Barth

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et al. (2004) and Weill (2003). It is utmost important to walk through governing for a suitable type of ownership such as to Fama and Jensen (1983) deplete agency costs. The role of privatization is also an important factor to consider in this stanza. A common division is foreign, private and public banks Havrylchyk (2006) Kiani (2005) Patti and Daniel (2005). Out of these categories pubic ownership could be decomposed in concentrated and dispersed ownership group on the standard of withholding shares of course up to date. Literature high light in terms of the effect of ownership structure and its penetration in performance of the bank Akmal and Saleem (2008) Alchian and Demsetz (1972) Ataullah et al. (2004) Barth et al. (2004) Benoit and Pierre (1986) Bonin et al. (2005) Boubakri et. (2005) Buch (1997) Burki et al. (1997) Burki et al. (2004) Burki and Shabbir (2007) Zafar et al. (2017) Zafar (2000) Zafar (2008) Zafar (2015) Zafar and Ahmed (2005) Zafar and Iqbal (2015) Zafar and Javaid (2016) focusing towards mainly in grey part of governance. Shareholders domestic and foreign a pretty mile stone source stipulate category of ownership in Pakistan mostly remains in deficiencies of studies to date. For example, studies done are documented by Buch (1997) Baubakri et al. (2005) Barth et al. (2004) Megginson (2005) and Bonin et al. (2005) Muller and Warneryd (2001) Thomsen and Pedersen (1998) Weill (2003) Yildirm and Daneshgadehd (2014) furthermore particularly studies finding direct relationship between own and efficiency.

Mahmood (1992) has examined the effects of change in government pricing policy and external price shocks on factor demand by utilizing the concept of elasticities of factor substitution and price elasticities of factor demand. The study base its analysis on translog cost function for manufacturing sector of Pakistan using time series data for the period of 1954-55 to 1985-86. The estimates of scale economies show that large scale manufacturing sector with industrialization had realized growing economies of scale in Pakistan. Interestingly, non production workers were highly substitutable with energy and capital. Energy and capital were used to be complementary factors, which turn out to be low substitutes for elasticities of factor demands were relatively low.

Amaechi et al. (2014) have used stochastic frontier approach, using a survey data for a maximum of eight oil palm produce processors, randomly selected from each of the four LGAs giving a total of 30 respondents dropping two oil palm millers that is because of inconsistent in all seasons. The result show that the coefficients of quantity of fruits processed (through put) x1 petroleum energy x2 water x3 capital x4 and labor x5 were positive as expected and statistically significant. This imply, increase in the magnitude of these inputs increased oil palm produce mills output. Technical efficiency was computed by finding some more variables that is unknown scalar parameters to be estimated. Age (years), level of education (years spent in acquiring formal education), palm oil processing business experience (years), capital employed n; (measure of capitalization) borrowed in addition to equity and equity, capital, family size (number of persons feeding from the same household pot and residing together), mechanization level (number of machines), petroleum energy use (measure of mechanization) (quantity in litres), mill plant and land ownership. (Binary variable, 1 for owned and 0 for leased), cooperative membership (1 for membership, 0 for non-membership), ownership of oil palm plantation (1 for ownership, 0 for non-ownership), credit (n), interest. The results of this study showed that the small scale oil palm produce millers under their existing level of technology were not fully technically efficient. They had meant technical efficiency estimates of 70.65 percent, and range of efficiency of 37-48 percent -93.46 percent. It implies variation of output below their production frontier and indicates the existence of potentials for improving productivity with proper allocation of their existing resources. This variation was also found to be associated with the millers' practices of controlling their productive resources rather than random variability. Therefore the formulation and judicious enforcement of policies on relevant aspects of education/training, encouragement of formation of cooperatives, injecting capital resources into the industry, encouraging the youths especially those already experienced

in the business and liberal provision of social facilities in the rural areas to attract and retain some young category of labor and entrepreneurs for production activities. These variables have been found to influence the technical efficiency of palm produce millers in the study area and their adequate consideration and/or supply by the relevant stakeholders is recommended. Although study emphasized liberal provision, it do not include potential mating, embarrassments, employment of dating stars or flesh selling in liberal economies and cohabitation hostels etc. in survey do effect efficiency standards in divine perspective.

Akmal and Saleem (2008) use data envelopment analysis for 30 banks 18 local, 8 foreign and 4 public banks. The estimates follow tobit regression incorporating macroeconomic factors. They found evidence of improved banking efficiency since 2000 for foreign then local private or state owned in the year 1995 to 2005. The major reason for inefficiency is over employed inputs. On evidence it finds 5 percent total factor productivity growth which is low, compared to other sectors in the economy. In mutual comparison ownership analysis of efficiency provide evidence for lowest estimates 88 percent for state owned and 93 percent for foreign own banks. It implies foreign banks more efficient than state owned and local private banks.

Burki et al. (1997) have analysed the allocative efficiency in the manufacturing sectors of India and Pakistan. They used annual data on large scale manufacturing industries in India and Pakistan form 1959-87 the translog profit function, which was normalized in output prices, introduced input market imperfection by assuming that imperfections raise the opportunity cost of the inputs above their market prices. To compare allocative efficiencies in the manufacturing industries of India and Pakistan assuming technological parameters were equal for the two countries. Relative price efficiency tests pair wise efficiency in India suggest that the input mix inefficiency takes the form of over utilization of capital, land and raw materials relative to energy and labor. Similarly tests for Pakistan showed that capital is the most underutilized input. So they can say that results provide strong indications of inefficiency in the allocation of resources in both India and Pakistan. In this study although author perceived existence of sin but could not recognize how it appear.

Yildirm and Daneshgadehd (2014) used a survey, distributed to 500 people in various organizations, workplaces, educational and entertaining institutions in Ankara over a period of two and half months Sep-Nov 2012. The respondents do, in do-use, internet banking application. Participation do not earn incentive voluntary to the survey. The overall response rate was 67.2 percent, Out of 336 responses 15 were not valid, do not do, internet banking, it test the following hypothesis. In brief, developed from constructs and internet banking from survey that is usefulness H1, ease of use H2, control H3, social influence H4, and awareness of service H5, website features H6, risk H7, compatibility H8, personalization H9, alliance service H10. In this step, the statistical significance of each hypothesis was tested by running bootstrapping procedure. The control and social influence constructs were extracted from the research model as result of the reliability test in pilot study. Therefore H3 and H4 could not be measured. U (β =0.155, p<0.01), EOU (β =0.106, p<0.05), COM (β =0.435, p<0.001), PER $(\beta=0.150, p<0.01)$ and AS $(\beta=0.184, p<0.01)$ jointly predicted the internet banking usage in this study. These variables explained 65 percent of variance in internet banking usage. Therefore, H1, H2, H8, H9, H10 were supported. On the other hand, H5 (β = -.0.018, p>0.05), H6 (β =0.048, p>0.05) and H7 (β =0.047, p>0.05) were rejected. The results show preference for internet banking easy to use. Furthermore, compatibility of internet banking with customers life and work styles found to be the crucial driver of internet banking. Personalized and alliance services determined as the additional factors which encourage customers to use internet banking. This study agrees neither adopt specific technology for acceptance of theory nor employ an econometric research model.

Recently we investigate distortion i.e., inflation interest rate and debt to gdp ratio in national banking. Our results strongly Zafar et al. (2017) support appearance of inefficiency in National

Bank of Pakistan. On governance it establishment of more branches, credit expansion accumulation of assets and deposits such as employment in market strategies Gurley (1967) Hart (1988) to add people in work market for the country as a whole and on the other hand input market for better allocation of resources in divine economy out of inefficiency. It matter little how much information we possess about efficiency if we do not grasp its inner meaning. It remains in grey area to answer efficiency Qayyum and Ghani (2006) Saaid et al. (2003) Kwan (2006) and factor productivity and there it still remains. However public banks prove to be source of efficiency in developing countries mostly providing services Qayyum and Ghani (2006) Saaid et al. (2003) Kwan (2006) Zafar et al. (2017) Zafar (2015) Zafar and Iqbal (2015) Zafar and Javaid (2016) to small and medium size enterprises. It also encounters foreign banks in developing country not to take way all parts of financial sector including bliss Patti and Daniel (2005) Havrylchyk (2006) Kiani (2005). This serves as a major source of existence for government own. In terms of allocation of credit Vernon (1979) Muller and Warneryd (2001) Thomsen and Pedersen (1998) Weill (2003) Yildirm and Daneshgadehd (2014) in developing nations ownership further be classified as public, foreign, personal family or majority own, dispersed own, subsidy of multinational, co-operatives Thomsen and Perdersen (1998). Here personal or family majority own, refer to rights especially voting rights in holding share to date. Hart (1988) view is worth mention not in favor of majority own right govern, but to managers for it does they might foreigner, live in other countries operate bank. Managers do have better understanding and availability, access to resources and understanding. This let him draw conclusion its crucial curb information asymmetries between company and outside owners. See table follows own in China.

Table: List of Public Banks

Bank.	Establishment
Dank.	25440115111110111
Export Import Bank of China The China Development Bank Industrial and Commercial Bank of China	1994 1994 1994

Source: Pak-China Corridor Projects.

Standards of managers begin with power, status and security such as act of harm Sheifer and Vishny (1986) for utility maximization based on self-interests. This clearly shows to take interests of managers in account and their future goals, more facilities and strong incentive oriented environment. According to Allchin and Demsetz (1972) partnership some time cause free ride problem even a share of firm or company consuming additional marketable sources. Therefore it is vital for outsiders Muller and Warneryd (2001) to take part to increase performance and cash flows well-adjusted and ruled out residuals which need to distribute surplus to provide evidence for existence of right disbursement of surplus. In equilibrium outland investors extract least part of surplus having rights in residual claims. This improves efficiency standards through allocative efficiency Hassan (2007) Jafry and Ahmed (1991) Khan and Mirakhor (1990) Naqvi and Haider (1982) Akmal and Saleem (2008) Alchian and Demsetz (1972) Ataullah et al. (2004) Barth et al. (2004) Benoit and Pierre (1986) Bonin et al. (2005) Boubakri et al. (2005) Buch (1997) Burki et al. (1997) Burki et al. (2004) Burki and Shabbir (2007) Naqvi (1982) Nisar (1999) Shabbir and Burki (2014) Isik and Hassan (2002) Mohan et al. (2004)Zafar et al. (2017) Zafar (2000) Zafar (2008) Zafar (2015) Zafar and Iqbal (2015) Zafar and Javaid (2016). Never the less with full information system reduced shared holdings. It is crucial analysis need restructuring foreign, private and public own banks. None the less foreign banking an out source and enabling financial services toward domestic markets having high absorb ability to grow Patti and Daniel (2005).1 It is believed that managers having inland shareholders keep up hope either for targeted achievements and pass through humps of strategies governed by government to find out sectors adding inefficiency be replaced or got in order to pack up for new technologies in favor of standardized output input utilization of resources a way forward for growth and development in managerial strategies.

Shadow Economies on Energy Efficiency

More toward public ownership, it examines the arguments usually extended to build a case for privatization of the public ownership Muller and Warneryd (2001) Thomsen and Pedersen (1998) Weill (2003) Yildirm and Daneshgadehd (2014) Fama and Jensen (1983) and subsidiaries. In the process a few facts are placed in proper perspective to facilitate an informed debate on privatizations that in one time or another has been taken place for several banks in China in past. It birth to related issues in the banking sector. It is not correct, for example, to say, as is being alleged in the current literature on the subject that reforms over a decade now have not made any significant improvement in the performance of the public and they are facing a crisis or near crisis situation Barth et al. (2004) Benoit and Pierre (1986) Bonin et al. (2005) Boubakri et al. (2005) Buch (1997) Burki et al. (1997) Akmal and Saleem (2008) Alchian and Demsetz (1972) Ataullah et al. (2004) Burki et al. (2004) Burki and Shabbir (2007) Jafry and Ahmed (1991) Khan and Mirakhor (1990) Naqvi and Haider (1982). The often repeated criticism of frequent recapitalization of the nationalized banks Mohan et al. (2004) is based more on perceptions and less on factual analysis. The aspect of fiscal burden would appear has been exaggerated. The competition and deficiency issues are generalized not withstanding a few distinctive features of the banking sector Qayyum and Ghani (2006) Saaid et al. (2003) Kwan (2006) often inconclusive derived by comparing non comparable units. Islam is not unique in prohibiting or condemning the use of interest, Riba Hassan (2007) Jafry and Ahmed (1991) Khan and Mirakhor (1990) Naqvi and Haider (1982). Plato and Aristotle maintained that money is barren and therefore, it cannot breed money. They denounced birth of money from money. Even Judaism which permitted charging interest on loans from Nochri (foreigners) maintained that it was unlawful to charge interest Mohsin (1986) Mustafa and Sayera (2009) from brothers in religion. Their teachings suggest that when loans were advanced to other Jews they may be forgiven at the end of every sabbatical year. X-religious distortion means when Hassan (2007) Jafry and Ahmed (1991) Khan and Mirakhor (1990) Nagvi and Haider (1982) one get away from religion. There will be many diseases enter the social system and cause turn around for all efficient allocation of resources. God fearing people remain out of these evil for some it stands a magic Qur'an (99:30). There is a huge list of blur but we have some of them. Eroticism, woman flesh money, a bank note having woman flesh in mirror image and its velocity (measured by issued coupons and electronic tickets through developed banking) measurement in this area of banking cause sickness which is yet an area of research to be explored even in developed economies, remains beyond the scope of this study.

Grasp in Shadows on Energy

The Church as well as the state prohibited usury, interest rate. According to the Church, charging interest Benoit and Pierrie (1986) amounted to disobeying the seventh commandment. Thus, it may be stated that the three principal monotheistic religions with roots in the Middle East, as well as philosophers, condemned charging interest in varying degrees. However, since the rise of capitalism, interest rates have played a central role in the development of the modern banking system. Yet, Gurley has observed that banking system as intermediaries are not highly

essential to the growth process Gurley (1967). Cameron (1972) pointed out that the contributions of the modern banking system have been positive, negative, and neutral in the early stages of economic development in various European countries Shepherd (1989). The degree of success depended on the support to the banking industry received from the government. Thus, historically the role of the modern banking system in economic development or economic stability has produced mixed results. In recent years some muslim countries Naqvi (1982) Mustafa and Younus (2009) have initiated non-interest based banking. Foremost among the countries that subscribe to this philosophy are Pakistan and Iran. Since Islam forbids the payment of interest, what alternative mechanism will be needed to mobilize resources? Muslim economists have suggested that the operations of the banking industry Naqvi (1982) Mustafa and Younus (2009) should not be viewed differently than the operation of any other business activities, by sharing profit or loss, then the return accruing to the lender of money is acceptable. The lender's sharing in profit or loss is similar to venture capital. In theory interest free banking Mohsin Khan (1986) contrast consistent with Keynesian or Classical macroeconomic models. This argues that fixed interest rates prevent adjustments to shocks resulting from profit or loss. It is this rigidity in sum that could lead to financial instability. For an evidence in national banking of Pakistan had a substantial increase in interest rate as in 2008 for having Islamic evidence it's a magnitude of financial meltdown and grasp from heavens to stop activities. That is in national bank net interest income grasp increase by 10.2% to Rs. 37.1 billion compared to last year. Several issues get birth regarding law and order, liquidity, power of shortage, rise in interest Mustafa and Sayera (2009) rate, arise. This cause fiscal deficit coming through globalization effecting internal financial markets for on evidence a slowdown (grasp) Qur'an (2: 276). It pose in domestic economy many challenges to volume growth Naqvi (1982) has argued that on ethical grounds it is easy to reject the interest rate, however, "in the realm of economics, the issue is not so clear-cut". He analyses interest rates within the framework of a dynamic economic system (in real terms). This concludes that Islamisation can be completed only over a period of time. Hence during this period, the institution of interest can be gradually replaced by what is known as the profit and loss sharing (or Musharika) since the institution of interest "cannot be abolished arbitrarily through an administrative fiat". In describing the development of Islamic banking in Iran and Pakistan have Khan and Mirakhor (1990) observed that in both countries private sector deposits increased. Hence, the Islamic banking system can effectively Hassan (2007) Jafry and Ahmed (1991) Khan and Mirakhor (1990) Naqvi and Haider (1982) mobilize resources. The authors also point in terms of mobilizing of resources. State in two countries played an important role. They are uncertain. In performance of Islamic banks in the absence Said et al. (2003) of government intervention. Much of the literature on interest free banking is of a theoretical nature. Primarily because such banks have appeared on the scene only in recent years during modern times. Darrat (1988) Darrat et al. (2002) empirically examined the effect of interest free banking on the stability of financial system in Kuwait. The findings include a demand of stable financial system and a monetary stability in circulation of economy. On evidence noninterest bearing do not cause more to velocity of money. In 1973, Pakistan adopted a new constitution. According to Article 37 of the constitution the country was obligated to abolish riba as soon as possible, what a country? In subsequent years the Council of Islamic Ideology recommended that gradually western style Naqvi (1982) and Mustafa and Younus (2009) banking system should be replaced by an interest free Islamic Banking System. Well will roots remain for sustainable development? In an Islamic society both hoarding of goods (ihtikar) and hoarding of cash (jktinaz) are thoroughly discouraged El-Bdour (1984) and condemned while the circulation of wealth is strongly emphasized. Since the hoarding of cash is virtually prohibited members of the household are expected to make their savings available for investment. Interest free banking however, does not imply access to capital without cost of risk.

What mechanism will facilitate the process of making? Household savings available to borrowers will depend upon the type of financial institutions. A society already has or it develops. About the forms of these institutions such that there are no specific requirements. Existing financial institutions with appropriate modifications can serve an Islamic society. In existing banking system interest payments have three components: administrative expenses, basic interest and risk premiums. Under Islamic banking system only El-Bdour (1984) administrative expenses will be permitted. Profit and loss relationship between the borrowers and lenders are in two specific terms that define, Musharikah and Mudarabah. Musharikah, equity participation or limited partnership. It refers to a financial system in which losses and profits are shared by the lenders and borrowers. It is "a partnership based on the joint contribution Mohsin (1986) Mustafa and Sayera (2009) of a bank and an entrepreneur, a customer, who mutually agrees to form capital for business exploration with a prior agreement of the ratio of profit and loss" Jafry (1991). Mudarabah, silent partnership or short term commercial credit arrangement. Do Islamic interpretation an alien interpretation? Other religions are also prohibiting interest rate returning to get efficiency standard; Public Banks of Pakistan is experiencing substantial competitive pressure Cameron (1972) Claessens and Laeven (2005) Darrat (1988) Darrat et al (2002) El-Bdour and Radi (1984) domestically and internationally. As a result of specialization in input utilization, a way towards Islamisation and liberalizing financial services, increasing use of advanced technologies it cope with both standards together and in response to these competitive pressures, the bank has attempted to adopt alternative strategies to reduce their production costs by exploiting economies of scale eos. In theory, the presence of eos means bank have a cost advantage. A large amount of research has estimated the production economies of the banking sector in past. However, most of these studies are in banking sector of developed economies, little or no attention has been paid individually to banks in emerging markets such as Pakistan and China, In banking scale inefficiency emerges due to distortion in effective competition in banking. Such inefficiencies are common due to distortion in banking sector, in factor markets leading to the use of inappropriate factor proportions Burki et al. (1997) Nisar (1999) Zafar (2000) Isik and Hassan (2002) Burki and Mehmood (2004) Ataullah et al. (2004) Claessens and Laeven (2005) Zafar and Ahmed (2005) Patti and Hardy (2005) Kwan (2006) Havrylchyk (2006) Burki and Shabbir (2007) Shabbir and Burki (2014) and Zafar and Iqbal (2015) for NBP also compete in marketing finance. However distortions in the factor markets in the banking produce inefficiencies leading to biased economies to privatize services of public banks, vice versa.

3. Modeling Misspecification

The role of these potential sources of misspecifications behavior can be incorporated by introducing the concept of shadow prices instead of actual prices, using either production or cost function approach assuming imperfection results in Nisar (1999) Burki et al. (1997) Zafar (2000) Zafar and Ahmed (2005) and Hassan (2007) in terms of opportunity cost of input that differ from its market price. i.e., assuming distortion function Burki et al. (1997) $R(x_i, w_i) = c_i x_i$, w_i . i.e., opportunity cost of the input that differs from its market price i.e., similarly assuming distortion function as non zero Zafar (2008) rows $p_i, p_{i-1}, p_{i-2}, \dots, p_1$ of a system are linearly dependent it means one of the rows say p_j is linear combination of the preceding ones i.e. $p_j = \tau_{j+1} p_{j+1} + \tau_{j+2} p_{j+2} + \dots + \tau_i p_i$ for p_j where p_j is the distortion in factor prices the kth component of p_j is its first nonzero element hence kth components of the system p_{j+1}, p_{j+2}, p_{j

represented by the following equation Burki et al. (1997) Zafar (2008) $p_i^* = f(\tau_i p_i)$ the firms dual total shadow cost function is defined as $c^s = c^s(\psi, y)$. Where ψ is the vector of input specific shadow price. We can derive actual input demand function with the help of shadow cost function by applying Shepherd's Lemma $\frac{\partial c^s}{\partial \tau_i p_i} = x_i$. We derive total actual cost $c^a = \sum_{i=1}^n p_i x_i$ to incorporate the shadow prices in the function we substitute the values of input

demand obtained by shadow cost function, it turns out $c^a = \sum\limits_{i=1}^n p_i \, \partial c^s / \partial \tau_i p_i$. Symmetry condition requires that $\beta_{ij} = \beta_{ji}$. Monotonicity of the shadow cost function entail that when all shadow prices increase shadow cost also increase. Homogeneity of the shadow cost function require

 $\sum_{i=1}^{n} \alpha_i = 1, \sum_{i=1}^{n} \beta_{ij} = \sum_{i=1}^{n} \beta_{ji} = 0, \sum_{i=1}^{n} \beta_{iy} = 0$. In grey area rate of change at a point yield parametric expression for the shadow cost shares i.e. $\frac{\partial \ln c^s}{\partial \ln(\tau_i p_i)} = \tau_i p_i x_i / c^s = \varsigma_i^s$ Curvature condition require Hassian matrix H should be semi negative definite. From share equations of shadow cost it turns out for all $\tau_i = \tau_j$ bank's total actual cost function $\ln c^a$ reduces to total shadow cast function. We find actual cost share equations ς_i^a In efficiency measurement researchers are referred Zafar (2005, 2008) Zafar et al. (2017).

$$\begin{split} \boldsymbol{\varsigma}_{i}^{a} &= ((\boldsymbol{\alpha}_{i} + \sum\limits_{j=1}^{n} \boldsymbol{\beta}_{ij} \ln(\boldsymbol{\tau}_{i} \boldsymbol{p}_{i}) + \boldsymbol{\beta}_{iy} \ln \boldsymbol{y}) \boldsymbol{\tau}_{i}^{-1}) / \\ &\sum\limits_{i=1}^{n} ((\boldsymbol{\alpha}_{i} + \sum\limits_{j=1}^{n} \boldsymbol{\beta}_{ij} \ln(\boldsymbol{\tau}_{i} \boldsymbol{p}_{i}) + \boldsymbol{\beta}_{iy} \ln \boldsymbol{y}) \boldsymbol{\tau}_{i}^{-1}) \end{split}$$

Further for presence of religious activities for having god Qur'an (24:26, 30:31), we can further add in globally known translog cost function aspects of inefficiency that arise due to activities taking one out of religion such as is there porn starts in banking, women flesh sellers and registered meetings in hotels offer x category drinks and women. In United Sates of America what is that? In land of the free and home of the brave. Then conquer we must, When our case it is just, And this is our moto, In god is our trust (remember national anthem). This is a departure from ordinary estimation of efficiency and literature on banking sector efficiency to look in the inner meaning Zafar et al. (2017).

4. Parametric Efficiency and Test of Hypothesis

To shed more light relative price efficiency exists if marginal rate of technical substation are equated to corresponding ratio of market price of inputs, and absolute price efficiency exists in value term such as value of marginal product for each input is equated to input market price. Relative efficiency in all pair of input implies production of output at minimum cost. However, absolute cost minimization and efficient production. In above formulation efficiency in relative price, need efficient in inputs i and j if and only if $\tau_i = \tau_j$ and absolute price efficiency exists if and only if $\tau_i = 1$ for all i. The total actual cost equation and actual cost share equations are homogeneous of degree zero in τ_i . Therefore the absolute values of τ_i cannot be estimated, consistent with economic theory. The generalized cost function cannot be used to test for absolute price efficiency. However, the relative values of the τ_i can be estimated that is after an appropriate normalization, and therefore the generalized cost function can be used to find evidence on relative price efficiency. Firm minimize cost subject to market price (i.e., attain relative price efficiency) provided $\tau_i = \tau_j$ for all i and j. The null hypothesis of relative

efficiency is tested statistically by estimating the system of equations Naqvi (1982) Nisar (1999) Shabbir and Burki (2014) Isik and Hassan (2002) Mohan et al. (2004) Zafar et al. (2017) Zafar et al. (2017) Zafar (2008) Zafar (2015) Zafar and Ahmed (2005) Zafar and Iqbal (2015) Zafar and Javaid (2016) with and without imposing equality restriction. The results are compared by computing -2log (λ) where lemda is difference of maximum likelihood function for restricted and unrestricted equation. We use chi square test for number of restriction.

5. Grasp Free Banking

In Islamic society both hoarding of goods and hoarding of cash are thoroughly discouraged and condemned whereas every circulation of wealth is strongly emphasized. As the hoarding of cash is strictly prohibited, every member of the household motivated without gender to take part in savings and investment. Interest free banking, however, does not imply Mustafa et al. (2009) access to capital without cost of risk. The process emerge through defined lines of action without an alteration amendment making through lenders and borrowers on the basis in the light of religiosity a mechanism will facilitate the process of making household savings available to borrowers Cameron (1972) Darrat (1988) Darrat et al. (2002) El-Bdour and Radi (1984) Claessens and Laeven (2005). It will depend upon the type of financial institutions that a society already has or develops Qur'an (9:65, 49:11). There are specific requirements about the form it deal with and definition of institutions. Existing financial institutions with appropriate modifications can serve an Islamic banking system. The relationship between borrowers and lenders, Musharikah and Mudarabah. Islamic interpretation is widely accepted parliament on several occasion have taken steps to bring in Islamic Banking System. However interest income increase in NBP by 10.2 percent a 37.1 billion; it is aggregate degree of grasp banks taking part along with Islamic banks outlets on pure Islamic principles. Do public banks are effective competing in financial market purr to interest rate distortions, remains a solid question besides religiosity.

6. Conclusion

Competition enhances efficiency is a terminology globally tested and its significance have been proved for its essence. Firms adjust their operations, maintain profitability and raise efficiency this opens a way out to less efficient firms to leave the industry. It need understand inner meaning of efficiency. Intensity of argument lies in hot core for availability of wrong used resources release efficiency World Bank (2002). Although to achieve standards from strategy of World Bank (2002) it remain in grey area how to cope efficiency in an economy that could lose features to again standards in banking. It's a departure to understand efficiency and to incorporate in measuring efficiency in banking sector.

References

- Akmal, M., and Saleem, M (2008) Technical efficiency of the banking sector in Pakistan, SBP Research Bulletin, 4(1), 61-80.
- Alchian, A. A., and Demsetz, H (1972) Production, information costs, and economic organization, American Economic Review, 62, 777-795.
- Amaechi, E. C. C.1., Ewuziem, J. E., and Agunanna, M. U. Pelagia (2014) Estimation of technical efficiency in the translog stochastic frontier production function model: An application to the oil palm produce mills industry in Nigeria, Research Library, Advances in Applied Science Research, 5(3): 230-236.
- Ataullah, A., Cockrell, T., and Le, H (2004) Financial liberalization and bank efficiency: A comparative analysis of India and Pakistan, Applied Economics, Volume 36, 1915-1924.

- Barth, J. R., Caprio, G., and Levine, R (2004) Bank supervision and regulation: What works best?, Journal of Financial Intermediation, 13(2), 205-248.
- Benoit, J., and Pierre, V (1986) United States interest rates and the interest rate dilemma for developing countries. Westport, Connecticut, Quorum Books.
- Bonin, J. P., Hasan, I., and Wachtel, P (2005) Bank performance, efficiency and ownership in transition countries, Journal of Banking and Finance, 29, 31-35.
- Boubakri, N., Cosset, J. C., and Fischer, K (2005) Privatization and bank performance in developing countries, Journal of Banking and Finance, 29, 2015-2041.
- Buch, C. M (1997) Opening up for foreign banks why central and eastern Europe can benefit, Economics of Transition, 5 (2), 339-366.
- Burki, A., Mushtaq, A. Khan., and Bratsberg, B (1997) Parametric test of allocative efficiency in the manufacturing sector of India and Pakistan, Journal of Applied Economics, 29(1), 11-22.
- Burki. A., and Khan, Mehmood-ul-Hassan (2004) Effect of allocative inefficiency on resource allocation and energy substitution in Pakistan's manufacturing, Journal of Energy Economics, 26, 371-388.
- Burki. A., and Shabbir, Kasuri (2007) Corporate governance chances in Pakistan's banking sector: Is there a performance effect, Lahore University of Management Sciences, CMER, Working paper, 07-58.
- Cameron, R (1972) Banking and economic development, New York: Oxford University Press.
- Claessens. S., and Laeven, L (2005) Financial dependence, banking sector competition, and economic growth, Journal of the European Economic Association, 3(1), 179-207.
- Darrat, Ali (1988) The Islamic interest free banking system: Some empirical evidence, Applied Economics, 20, 417-425.
- Darrat, Ali., F, Topuz, C., and Yousef, T (2002) Assessing cost and technical efficiency of banks in Kuwait, In proceedings of the ERF's, Annual Conference, Cario. 1-22..
- El-Bdour., and Radi, I (1984) Islamic economic system: A theoretical and empirical analysis of money and banking in the Islamic economic framework. Un- published, Ph.D. Dissertation, Economics Department, Utah State University.
- Fama, E. F., and Jensen, M. C (1983) Separation of ownership and control, Journal of Law and Economics, 26, 301-325.
- Gurley, John. G. H (1967) Money, credit, and banking, monetary policy, consumer finance, mortgage credit, American Economic Review, 57:4 950-953.
- Hart, O (1988) Incomplete contracts and the theory of the firm, Journal of Law Economics and Organization, 4, 119-139.
- Hassan (2007) Evaluation of Islamic banking performance: On the current use of econometric models, Munich Personal RePEc Archive, MPRA Paper No. 6461.
- Havrylchyk, O (2006) Efficiency of Polish banking industry: Foreign and domestic banking, Journal of Banking and Finance, 30, 1975-1996.
- Isik, I., and Hassan, M. K (2002) Technical scale and allocative efficiency of Turkish banking industry, Journal of Banking and Finance, 26, 719-766.
- Jafry, Mahfooz. Ahmed (1991) Islamic banking in Pakistan, Unpublished MA. Thesis, Economics Department, Central Michigan University.
- Jensen, M. C., and Meckling, W. H (1979) Rights and production function: An application to labor-managed firms and co-determination, Journal of Business, 52, 469-506.
- Khan, M. S., and Mirakhor, A (1990) Islamic banking: Experiences in the Islamic Republic of Iran and in Pakistan, Economic Development and Cultural Change, 38(2), 353-375.

- Kiani, Adiqa (2005) A comparison of domestic vs foreign bank using stochastic frontier approach, The Lahore Journal of Economic, 10:2, 55-74.
- Kwan, Simon. H (2006) The x-efficiency of commercial banks in Hong Kong, Journal of Banking and Finance, 30, 11217-1147.
- Mahmood, Z (1992) Factor price shocks factors in the large scale manufacturing sector of Pakistan, International Economic Journal, 6 (4), 63-73.
- Megginson, W. L (2005) The economics of bank privatization, Journal of Banking and Finance, 29, 1931-1980.
- Mohan, Ram, T. T., and Subhash, C. Ray (2004) Comparing performance of public and private sector banks: A revenue maximisation efficiency approach, Economic and Political Weekly, Money, Banking and Finance, 39(12), 1271-1272+1274-1276.
- Mohsin, K (1986) Islamic interest free banking: A theoretical analysis In ternational Monetary Fund, IMF Staff Papers, 33, 1-27.
- Muller, H.M., and Warneryd, K (2001) Inside versus outside ownership: A political theory of the firm, RAND Journal of Economics, 32(3), 527-541.
- Mustafa, K. Mujeri., and Sayera, Y (2009) An analysis of interest rate spread in the banking sector in Bangladesh, The Bangladesh Development Studies, 32(4), 1-33.
- Mustafa, K. Mujeri., and Sayera, Y (2009) An analysis of interest rate spread in the banking sector in Bangladesh, The Bangladesh Development Studies, 32(4), 1-33.
- Naqvi, S. Nawab, Haider (1982) Interest rate and intertemporal allocative efficiency in an Islamic society. In Mohammad Arif (ed.) Monetary and Fiscal Economics of Islam. Saudi Arabia, International Centre for Research in Islamic Economies, 75-95.
- Nisar, A (1999) Evidence on allocative efficiency in banking sector of Pakistan, Un Published MPhil Thesis, Department of Economics, Quaid-i-Azam University Islamabad Pakistan.
- Patti, Emilia. B., and Daniel, C. Hardy (2005) Financial sector liberalization bank privatization and efficiency evidence from Pakistan, Journal of Banking and Finance, 29, 2381-2406.
- Qayyum, A., Khan, S., and Ghani, E (2006) X-efficiency, scale economies, technological progress, and competition: The banking sector in Pakistan, The Pakistan Development Review, Vol. 45, No. 4, Papers and Proceedings PARTS I and II, Twenty-second Annual General Meeting and Conference of the Pakistan Society of Development Economists Lahore, pp. 733-748.
- Qur'an (2017) Web Page: http://www.whyquran.com/877/content/view/81/updated 2013, Last Visited, Feb 2021, world wide web
- Saaid, E., Rosly, S. A., Ibrahim, M. H., and Abdullah, N (2003) The x-efficiency of the Sudanese Islamic banks, IIUM, Journal of Economics and Management, 11(2), 1-20.
- Shabbir, Kasori., and Abid, A. Burki (2014) Banking deregulation and allocative efficiency in Pakistasn, CMER Working Paper No. 14-11 Lahore: Lahore University of Management Sciences, 1-18.
- Shepherd, W. G (1989) Public enterprise: criteria and cases, In the structure of European industry, ed. H.W. de Jong. Norwell, MA: Kluwer Academic Publishers.
- Shleifer, A., and Vishny, R. W (1986) Large shareholders and corporate control, Journal of Political Economy, 94, 461-488.
- Thomsen, S., and Pedersen, T (1998) Industry and ownership structure, International Review of Law and Economics, 18, 385-402.
- Tirole, J (1992) The theory of industrial organization, Cambridge, MA: The MIT Press.
- Vernon, R (1979) The international aspects of state-owned enterprises, Journal of International Business Studies, 10(3), 7-15.

- Weill, L (2003) Banking efficiency in transition economies: The role of foreign ownership, Economics of Transition, 11, 569-592.
- World Bank (2002) World Development Report, 2002 and various issues, reports.
- Yildirm, S. O., and Daneshgadehd, S (2014) Empirical investigation of internet banking usage: The case of Turkey, Conference on Enterprise Information Systems / ProjMAN 2014 International Conference on Project Management / HCIST 2014 International Conference on Health and Social Care Information Systems and Technologies, Procedia Technology, 16, 322-331.
- Zafar et al. (2017) appearance of inefficiency in national banking, out for publication, Pakistan Development Review, Pakistan.
- Zafar, S (2000) Evidence on economic efficiency in the manufacturing sector of Pakistan: A comparison across alternative ownership status of firms, unpublished thesis, Department of Economics, Quaid-i-Azam University Islamabad Pakistan.
- Zafar, S (2008) Modeling distortion effect in scale economies, Proceeding of Applied International Business Conference, 692-697.
- Zafar, S (2015) evidence on allocative efficiency and scale economies of National Bank of Pakistan, Quality Assurance 17 Sep 2015, unpublished thesis submitted for Ph. D in Economics, Department of Economics, University of Azad Jammu and Kashmir Muzaffarabad AK, pp 1-179, Pakistan.
- Zafar, S., and Ahmed, E (2005) Evidence on allocative efficiency and elasticity of substitution in the manufacturing sector of Pakistan, Pakistan Development Review, 44(4), 795-803.
- Zafar, S., and Iqbal, J (2015) Evidence on scale economies in National Bank of Pakistan, out for publication, Athens, Working Paper No. 1, Kashmir Institute of Economics, University of Azad Jammu and Kashmir Muzaffarabad, 1-21.
- Zafar, S., Javaid, I (2016) evidence on scale economies of National Bank of Pakistan, out for publication, first draft presented in seminar 2015, Kashmir Institute of Economics, conference paper, World Academy of Science Engineering and Technology, pp 1-23, Denmark.