



*IIMK/WPS/127/FIN/2013/13*

**MERGER OF PUBLIC SECTOR BANKS IN INDIA  
UNDER THE RULE OF REASON**

Rani Ladha\*

\* Visiting Professor, Indian Institute of Management Kozhikode, IIMK Campus PO, Kozhikode– 673570,  
[rani.ladha@iimk.ac.in](mailto:rani.ladha@iimk.ac.in)

## MERGER OF PUBLIC SECTOR BANKS IN INDIA UNDER THE RULE OF REASON

*This paper models the idea of rule-of-reason of the Antitrust literature and applies the model to analyze the possible consolidation of the Indian banking industry through merger and acquisition (M&A) activities. It offers a strategic perspective for public sector banks whereby the banks either meet societal goals or become savvy international players through mergers. India being an emerging economy, the banking industry faces two critical initiatives: (i) proactive servicing of the rural areas and priority sectors, and (ii) a serious presence in the international markets to compete with larger global banks. The model developed in this paper suggests ways to evaluate and examine mergers in the banking sector in India to support both these initiatives. It proposes that the government could use the threat of merger to induce reluctant public sector banks to meet the critical domestic agenda and performance metrics. Those that meet the societal goals may continue to have the benefit of the status quo. Those that do not are required to merge to form an entity that can internationally compete in raising equity and deposits, and providing loans and services.*

**Key Words:** Mergers, Acquisitions, Restructuring, Government Policy and Regulation, Antitrust Law

**JEL Classification:** G34, G38, K21

### INTRODUCTION

The aim of this paper is to model the idea of rule-of-reason of the Antitrust literature and apply the model to analyze the possible consolidation of the Indian banking industry through merger and acquisition (M&A) activities. With consolidation requiring horizontal combinations, a merger will reduce competition measured by number of firms in the industry. Reduction in the number of firms usually may lead to a price increase which is not consumer friendly. Yet, there are situations when a merger may either not lead to price increase or may be necessary from an alternate strategic perspective.

One situation requiring promotion of merger is the need to have large banks on the international stage. Measured by total assets India's largest Bank, the State Bank of India (SBI) is 136<sup>th</sup> in the world. As of 2012, SBI and its Associates have assets of \$328 b, around the size of the 10<sup>th</sup> largest bank in the USA (RBI, FFIEC). This implies that it would take around 7 SBIs to make the world's largest bank by assets:

JP Morgan Chase at \$2359 b. The combined assets of all the nationalized banks in India add up to \$ 709 b which is smaller than the 6<sup>th</sup> largest bank in the USA. Crabtree and Jenkins (2013), note that Indian banks are rather small by international standards and none appears in the top 10 list while China has four banks on the same list. The article further emphasizes that to keep up with the increasing infrastructural and economic development needs banks in India may need to achieve mass scale in their operations. Those in themselves may be grounds for amalgamation of banks so as to create a number of banks that can stand up to international presence.

Another situation requiring promotion of merger is to safeguard depositor interests. Banks obtain deposits from a wide and scattered group of individuals and are responsible for protecting the interests of these depositors. Often, banks may have to safeguard depositor interests even ahead of shareholder value maximization (Fernando, 2006). At times a merger may be necessary to preserve depositor wealth even if it results in the merged entity gaining some market power. For instance, the banks in Cyprus, a member of the European Union, failed to safeguard the interests of the depositors (The Guardian, 2013, Rankin et al, 2013). The key point to bear in mind is that when evaluating bank operation and mergers, significant importance has to be given to ensuring adequate service to depositors and safety of their wealth.

A third situation requiring promotion of merger is when the post-merger price to the consumer actually goes down. A merger-related reduction in market price despite a reduction in the number of firms is usually examined under the rule of reason of the antitrust literature.

In the next section, the paper discusses antitrust and the rule of reason. This is followed by a discussion of the banking industry in India. In the subsequent section, the paper presents the Cournot model with three factors affecting the rule of reason and the banking industry. These factors are the number of firms in the industry, the availability of substitutes as captured by the elasticity of demand, and the marginal cost. The analysis naturally leads to specific policy recommendations for the government as stated in the abstract.

## **A BRIEF HISTORY OF ANTITRUST AND RULE OF REASON**

In order to promote a healthy market environment for trade and protect consumer interests most countries have antitrust rules to deter firms from certain types of behavior that may lead to lower competition. The amended Competition Act 2002 of India replaces the Monopolies and Restrictive Trade Practices (MRTP) Act and seems to follow modern economic antitrust principles and philosophy (Bhattacharjea, 2010). To ensure that Indian markets are competitive, the act broadly covers anti competitive agreements between firms, abuse of dominant position by any single firm, and “combinations” (mergers, amalgamations, and acquisitions). The essential idea is to promote competition and protect consumers but not competitors (Guide to Antitrust Laws – accessed on March 16, 2013, Bork 1978).

One of the early antitrust laws in the USA was the Sherman Act in 1890. Section 1 of this act prohibits “[e]very contract, combination, in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States or with foreign nations” (Guide to Antitrust Laws – accessed on March 16, 2013). In the USA, over the years when scrutinizing the behavior of firms, the Courts have implemented the law in a couple of different ways: (i) by conducting a *per se* analysis, or (ii) by applying the rule of reason. *Per se* transgressions are violations simply by their existence irrespective of the magnitude of the impact. *Per se* violations include price fixing, group boycott and bid rigging among others, and are forbidden as they are anti competitive and affect the consumer negatively. The only defense against the charge of *per se* violation is that the defendant did not commit the violation. Whether the impact of the violation was large or small is irrelevant.

In the case of the rule-of-reason cases, the impact on competition and the consumer is taken into account. In such cases the interpretation and implementation of the law has to be from a broader economic perspective. The evaluation has to appropriately weigh the costs and benefits of the outcome and determine which outweighs the other. If the costs outweigh the benefits, then the action will be considered anti competitive and not permitted. On the contrary if the benefits outweigh the costs, then under specific conditions and suitable caveats the behavior or action may be approved. The principle behind this approach is to examine the situation on a case by case basis.

To appreciate the approach of rule of reason, consider a competitive situation where the price and quantity of a good is determined by market forces. Suppose two of the firms in this market scenario decide to merge. The merger could have the following impact: (i) the merged entity garners greater market power due to size, and (ii) the merged entity produces the goods at a lower cost due to economies of scale or scope. From a firm's perspective, an increase in its size and power may lead the merged firm to raise its price; an anti-consumer outcome. However, the same increase in size may lead the merged firm to lower its price due to a lower cost of production; a pro-consumer outcome. Thus it is not easy to determine the final impact on the consumers due to a merger. The decision based on the rule of reason is expected to balance the opposing effects appropriately and by considering the larger environment.

The analysis under the rule of reason is fact-based. In the context of merger, the analysis helps determine if increasing concentration due to the merger would necessarily be bad for the consumers. There may be sufficient competitive forces already in the market place and initiatives to support growth, and enhance competitive advantage that considering the merger from a broader perspective might be beneficial.

To elaborate, under perfect competition price equals marginal cost leading to efficiency. However, in reality there are several market frictions. Correcting for many of those frictions might lead to a decrease in market competition. If the desired end result benefits the consumer but decreases market competition, that particular action may be justified. The idea is that promoting competition by increasing the number of firms under many circumstances may not lead to the preferred outcomes for the consumers. The rule of reason argument focuses on the impact on the consumers. Increasing firm concentration and size may not always be anti competitive under the rule of reason interpretation.

One of the early cases where the rule of reason argument was applied is in the *Standard Oil of New Jersey vs. United States* in 1911 (Winrow and Johnson, 2008). The court's decision was that Standard Oil had engaged in anti competitive actions and enjoyed monopoly power in the petroleum industry. As such, it had to be separated into several smaller companies to promote competition, possibly leading to lower prices to the consumers. More recently the rule was evoked in the *Continental Television vs. GTE Sylvania* (1977), *Broadcast Music vs. Columbia Broadcasting*

System (1979), State Oil Co. vs. Khan (1997), and Verizon vs. Trinko (2004) to name a few. In all the cases the court considered the background, the industry, the market environment and the final impact to the consumer in reaching its decision. Fisher et. al. (1983), model the cost savings and other factors to determine conditions when a merger that leads to the creation of a monopoly power does not necessarily lead to a price increase for the consumers.

### **BANKING SECTOR IN INDIA**

A bank is an intermediary accepting deposits (cash) from individuals and corporations and lending it to other individuals and corporations needing funds (cash). Banks have to protect and preserve a person's (or corporation's) assets. The rate differential between the two activities above is the profit earned by the bank. Stability and sustainability of banking is critical for the growth and development activities of a nation.

The Reserve Bank of India (RBI) is India's central bank established in 1935, a banker to the government, and empowered to regulate and control other banks through various instruments and policies. Given India's growth, economic development, and increased global presence the role and functions of RBI have evolved to support these initiatives.

The banking sector in India is fragmented and comprises scheduled and non-scheduled banks, commercial banks, cooperative banks, foreign banks, regional rural banks, public sector banks, nationalized banks, private banks (old and new), post office banks, and State Banks and its affiliates. Beginning with the liberalization initiatives in the early 1990s, banking in India has experienced rapid growth especially in terms of the product offerings, service levels, and reach. Yet, it is one of the most under-banked nations when considering the large economies of the world (India Infoline, 2012). Usually, banking penetration is measured as the loan-to-GDP (gross domestic product) ratio. In 2011, India's loan-to-GDP ratio stood at 75%, while China's was 146%, USA's 233%, and UK's 214%. There is a contrary point of view which suggests that banks in India are technologically savvy and with mobile banking on the rise India is no longer an under-banked country (India Knowledge @ Wharton, 2008).

There are 168 scheduled banks in India (RBI database). Scheduled banks, commercial banks in particular, account for most of the banking business in India. Rural regional banks (RRB) were set up in 1975 with the primary goal of providing banking service to the non urban areas. Foreign banks have very little rural branch presence. The new private and old private banks also do not to have many rural branches. The nationalized banks and SBI & its affiliates have about a third of their branches in rural areas and as expected RRBs have 75% of their branches in rural areas.

In an emerging economy like India, one of the challenges in banking is to ensure availability of service to one and all. Providing banking and credit facilities to remote locations is a challenge in itself and in India it is further compounded by the lack of adequate infrastructure. Innovation in the product offerings (micro loans), delivery of banking services (mobile banking) and operations of the banks (increased automation) are few of the developments that have occurred and help achieve the goal of providing much needed banking facilities to all. There are several other issues that banks in India face: increased pace of globalization, need to be competitive locally, nationally and globally, need to be stable yet provide credit which may not have adequate collateral thus increasing the risk, need to constantly innovate to reach more customers and also operate efficiently.

As a part of identifying and understanding the problems of the banking sector and to make the financial system robust two expert committees were set up in 1990s, the Narasimham-I and Narasimham-II committees. While the agenda of each committee was different, the objectives were to study, review and identify all aspects pertaining to the structure, organization, functions and procedures of the Indian financial and banking system and to recommend efficiency and productivity improvements in banking. Both committees identified gaps in the current system and ways to render Indian banks internationally competitive.

The Narasimham II committee report (1998) focused primarily on the banking sector reforms and several of its recommendations have been accepted and some are already being implemented. The recommendations pertained to strengthening the banking system, focusing on asset quality, disclosure practices and norms, process and procedures to ensure smooth operations and structural issues to be examined and modified. Of the several recommendations, one was for the merger of large Indian

banks in order to provide the size and strengthen operations to compete internationally. The committee recommended a three tier banking structure in India with three large banks having an international presence, eight to ten national banks and several regional and local banks to cater to the needs of the large and growing population. The committee also laid out some caveats regarding the merger of banks: large banks should merge only with banks of equivalent size and not with weaker banks. While a few mergers have already taken place in this sector the banking industry in India is not yet competitive at a global scale.

Recently, the finance minister Mr. P. Chidambaram has advocated for the merger of a few public sector banks on the grounds of improving efficiency and making the sector stronger (Ghose, 2013). Banks in India do not have the size and scale to compete effectively in the international markets (Crabtree and Jenkins, 2013). Sudhaman (2013) conjectures that merger of public sector banks may be unavoidable given that RBI has recently encouraged corporate and other financial institutions from entering the banking sector. He also suggests that SBI may merge with a few of its affiliates.

The simple model presented in the next section tries to provide the rationale for more mergers between banks and ways to evaluate the impact of such mergers from a broad multidisciplinary perspective.

### **THE COURNOT MODEL AND ITS IMPLICATIONS FOR RULE-OF-REASON MERGERS**

Without interest in horizontal merger of banks offering similar products, a Cournot model of competing firms offers valuable insights. Following Tirole (1988), consider  $n$  firms competing as per the requirement of the Cournot model. Each firm independently and simultaneously decides to produce its quantity  $q_i$  of a homogenous good. The market price  $P(Q)$  is a function of the aggregate quantity  $Q = q_1 + \dots + q_n$ . Firm  $i$ 's cost function is  $C_i(q_i)$ . Each firm seeks to maximize its profit  $\pi_i = q_i P(Q) - C_i(q_i)$  given the quantities chosen by its competitors. The first-order condition yields:

$$P(Q) + q_i P'(Q) - C_i'(q_i) = 0.$$

Rearranging terms,  $P(Q) - C_i'(q_i) = -q_i P'(Q)$ .  $\frac{Q}{P} \cdot \frac{P}{Q} = \frac{q_i}{Q} \cdot \frac{1}{\varepsilon} P$ , where  $\varepsilon = -\frac{dQ}{dP} \frac{P}{Q}$  is the elasticity of demand. Let  $L_i$  denote the Lerner's index of firm  $i$ , given by  $L_i = \frac{P(Q) - C_i'(q_i)}{P}$ ; it is the firm's margin (= market price – firm's marginal cost) expressed as



a fraction of the market price. Then, at the Cournot-Nash equilibrium, for each firm,  $L_i = \frac{q_i}{Q} \cdot \frac{1}{\varepsilon}$  = firm i's market share divided by the elasticity of demand. Observe that a firm's Lerner's index (= margin/market price) would rise with its market share, and decline with the absolute value of the elasticity.

From the point of view of elasticity of demand, at  $\varepsilon = 2$ , the Lerner index would be  $\frac{1}{2}$  of the market share at the Cournot-Nash equilibrium, and at  $\varepsilon = 3$  (more elastic), it would be  $\frac{1}{3}$  of the market share. Thus, a greater sensitivity to a price change causes the Lerner index to be lower. As is well known, the elasticity of demand (for tea, say) depends on the availability of substitutes (e.g., coffee). Thus, more substitutes would lead to more elastic demand (flatter demand curve) and lower Lerner index. Further, when more firms in the industry are accompanied with lower market share, the Lerner index would be lower. To see this clearly, consider the symmetric case with  $\frac{q_i}{Q} = 1/n$ , so  $L_i = \frac{1}{n\varepsilon}$  implying that more firms result in a lower Lerner index for each firm.

In  $L_i = \frac{1}{n\varepsilon}$ ,  $n$  refers to competition from the firms in the industry, and  $\varepsilon$  captures competition from industries offering substitutes. In the case of public sector banking,  $n$  may be the number of public-sector banks, and  $\varepsilon$  may pertain to the substitutes (e.g., private sector banks, post office, and corporate debt) available to the depositors. It follows that the greater the number of public sector banks, the lower the Lerner index of each bank, and the greater the number of relevant financial instruments outside of the public-sector banks, the lower would be the Lerner index.

Note that the Cournot equilibrium does not require that the marginal costs of the competing firms be equal except in the symmetric case. As a result the industry's cost of production is not minimized at the Cournot equilibrium. Inefficient firms with a higher cost structure can coexist with more efficient firms with a lower cost structure.

### A. Merger Implications

Consistent with the antitrust literature, a merger would be consumer friendly if the price to the consumer after the merger is less than the price before the merger. Let  $P_n$  be the price before merger when there are  $n$  firms, and  $P_{n-1}$  be the price after two firms merge reducing the number of firms to  $n - 1$ . It follows that the merger would be

consumer friendly if  $P_{n-1} < P_n$ . To find the conditions for consumer-friendly mergers, recall that in the symmetric case  $L_i = \frac{1}{n\varepsilon}$ . By definition  $L_i = \frac{P - C'_i}{P}$ , so  $P(1 - \frac{1}{n\varepsilon}) = C'_i$  and hence  $P = \frac{C'_i}{1 - \frac{1}{n\varepsilon}}$ , where  $C'_i$  is firm  $i$ 's marginal cost. The derivative of the price with respect to the marginal cost  $= \frac{n\varepsilon}{n\varepsilon - 1} > 0$  if  $n\varepsilon > 1$ . From  $L_i = \frac{P - C'_i}{P} = \frac{1}{n\varepsilon}$ , we get  $n\varepsilon = \frac{P}{P - C'_i} > 1$  if  $P > P - \text{marginal cost}$ , which is always true when the marginal cost is positive. Further, treating  $n$  as a continuous variable, the derivative of price with respect to  $n$  is always negative. Summarizing, if the marginal cost is positive, then the market price at Cournot equilibrium varies directly with the firm's marginal cost and inversely with the number of firms in the industry.

When the number of firms goes down to  $n-1$  from  $n$  due to a merger, the market price will rise implying  $P_{n-1} > P_n$ . But for a merger to be consumer friendly,  $P_{n-1}$  has to be less than  $P_n$ . For this to happen, the merger needs to result in a sufficiently large decline in the marginal cost. If the drop in the marginal cost is not high enough, then a merger would not be consumer friendly. Thus, the consumer friendliness of a merger would vary from case to case. This is precisely what is recognized by the rule-of-reason standard of the antitrust.

## **B. A Discussion on Rule of Reason**

As per the rule of reason legal standard, a merger is allowable if merger results in cost reduction and some of the benefits of the cost reduction are passed on to the consumers by way of reduced prices. Courts, unwilling to accept a mere promise that economies of merger will result in reduced prices for the consumers, require that there be sufficient competition in the market after the merger and there be sufficient cost reduction. Thus, the courts rely on the profit motive of the firms as a way to guarantee that the consumers benefit from the merger. The preceding analysis, based on a Cournot model, offers a mathematical basis for the rule of reason legal standard: that a merger should be on a case-by-case basis and should be permitted only in those cases in which the cost reduction is sufficiently large and the number of firms remaining after the merger is sufficiently large.

### C. Moral hazard in the case of mergers

Private sector firms are not easily deterred from pursuing market power through mergers simply because of the existence of the rule-of-reason standard. Such firms would *claim* that the cost savings from a merger would be sufficiently large resulting in benefits to the consumers in the relevant market. For instance, Bekier et al (2001) cite Haarmann Hemmelrath Management Consultants' statement that "cost savings are hardly as sure as they appear: up to 40 percent of mergers fail to capture the identified cost synergies." Likewise, Berger and Humphrey (1993), based on an extensive survey of the empirical literature, report that "Scale economies for large [U.S.] banks are often claimed by the banking industry, particularly as a justification for bank mergers. In contrast to these claims, large banks generally do not have lower average costs or higher average profits than most other banks." It is also the case that the State Bank of India, the largest bank in India by assets, does not show cost advantage relative to its smaller public sector peers. Table 1 presents data on assets per employee for select banks in the USA and for SBI and its affiliates. The ratio stands at 1.7 m for SBI and its affiliates and is 12.65 m for Bank of America. Further, the number of employees at SBI is greater than any of the large money center banks in the USA.

**Table 1. Asset per Employee for select Banks\***

Bank	Assets(\$B)	# Employees	Asset in m/emp
JPMC	2,359	203,881	11.57
Bank of America	2,212	174,892	12.65
Citigroup	1,865	192,244	9.70
Wells Fargo Bank	1,423	227,759	6.25
USBank	354	62,444	5.67
PN Bank	305	53,553	5.70
Bank of NY Mellon	359	33,742	10.64
SBI & Associates	328	280,256	1.17

In contrast to the private firms, the position of the public sector banks, such as those in India, could be quite different. The public sector banks or their unions oppose merger on the basis of considerations such as employment, clash of cultures, focus of the bank, etc. Such banks are likely to claim that there are no significant cost savings from a merger.

#### **D. Government role if the public sector banks oppose merger**

As noted before, the marginal costs of Cournot competitors are not the same at equilibrium except in the symmetric case. In the case of banks, it is safe to say that some banks are more efficient than others measured by their marginal costs. Thus, a government, eager for the public sector banks to merge, could merge banks with substantially different marginal costs assuming that the less efficient would adopt the practices of the more efficient. Yet, there is always the risk that the economies of scale are not enough to justify the merger. What can the government do?

The preceding analysis shows that the Lerner index of a firm is inversely related to the elasticity of demand. In other words, if the elasticity is high, a firm's margin expressed as a percent of the market price would be low. The implication being that a more elastic demand reduces a firm's capacity to charge a high price. Since there are more alternative ways to bank in the urban areas, it is safe to assume that demand would be more elastic in the urban areas compared to the rural areas. Hence, the adverse consequences for consumers arising from merger of urban banks would be muted.

In response to the reluctance of public sector banks to merge, the government has at least two distinct options at its disposal. First, the government can simply pressure banks with urban focus to merge on the ground that India needs larger banks to compete with the goliaths of the international business. By choosing urban-focused banks, the government would know that even if it made an error in the choice of the banks, the consequences would not be that bad given that the elasticity of demand is high in the urban areas.

The government's second option is based on the idea that the threat of a merger can be used to require banks to actively seek attainment of social priorities, e.g., extending banking services to the rural areas on an expedited basis. This threat is akin to the role corporate raiders play with respect to private firms. Highly inefficient firms become prime candidates for takeover because of their untapped profit potential. To avoid being acquired, such firms are under pressure to be efficient. Since no threat of corporate takeover presently exists for public sector banks in India, the pressure to be efficient is limited.

Burgess and Pande (2005) analyze the impact of 50,000 new branches set up in unbanked rural locations by a Government of India initiative between 1969 and 1992. They conclude that the presence of a bank led to a decrease in poverty and inequality. Access to credit and options to save contributed to decrease in poverty. They also note that without some specified targets and mandates, banks may not voluntarily undertake rural or priority sector lending at the level needed for economic growth.

In such a situation, the government can step in by *credibly* threatening banks to extend banking services to rural and priority sectors at the required scale. A failure to do so would result in the government forcing them to merge. Credible threat means that if the banks pay no heed, then the government binds itself in advance to carry out the threat. Knowing that the government will carry out its threat, the banks and their unions will be forced to find ways to extend their services to the rural areas. Thus, the second option, while it does not result in a merger, is an effective one for the pursuit of societal goals of financial inclusion.

#### **MERGER AND BANK PERFORMANCE**

Bekier et al (2001) summarizing numerous academic studies of banks in USA conclude that Scale economies occur in the case of smaller (by the US standards) banks to the tune of 5% of costs, but scope economies are minor (in 2001, cross-selling was less of a strategy though). Interestingly, Bekier et al (2001) note that “X-Efficiency: Managerial ability to control costs is much more important than scale and scope economies. The consensus is that on average, banks may have costs about 20% higher than the industry minimum for the same scale and product mix.” Finally, on an average, “mergers have had no significant, predictable effect on costs and efficiency,” and “within-market mergers may reduce competition and create social costs, but cross-market mergers may create social benefits by increasing competition (Bekier et al, 2001).”

Kaur and Kaur (2010), provides details of the bank mergers that have taken place in India after liberalization in the early 1990s. Several of these mergers have been forced, while some others have been voluntary. Broadly, their findings support the recommendations of the Narasimham II committee reports that mergers on the average do lead to cost efficiency. The impact is more when it is a merger of equals.

The efficiency impact in the case of a weak institution merging with a strong one is muted. Forced mergers, usually between a weaker and stronger bank, have played a critical role in protecting the interest of the depositor's of the weaker bank. The other stakeholders in the case of such forced mergers did not garner any gains. They further conclude that given the various infrastructural issues in the Indian banking sector, the government should not resort to merger as a bailout mechanism of weaker banks before exploring other options.

Talwar (2001) notes that implementation of the financial sector reforms has led to considerable improvement in the Indian banking structure especially in terms of risk management practices, and disclosure norms. Although the Indian financial system was affected by the global meltdown in 2008, the impact was muted as compared to several other emerging economies. The merger and consolidation of the banks has been slow and not kept up with western standards. The RBI has been proactive in supporting bank mergers, adopting technology and ensuring stability of the entire system.

## **CONCLUSIONS**

This paper models the idea of rule-of-reason of the Antitrust literature and applies the model to analyze the possible consolidation of the Indian banking industry through merger and acquisition (M&A) activities. Further, it presents a mathematical foundation for the application of the concept on a case by case basis when evaluating bank mergers. The banking sector being the backbone of an economy needs detailed and careful analysis in the case of a merger to ensure that the interests of all stakeholders, especially that of the depositors are protected. To compete internationally, banks in India may need to consolidate to garner economies of scale. There is marginal empirical support that merger of equals does lead to better performance. Also, RBI and the government seem open to such unions.

The model provides a motive for the government to credibly commit to mergers to improve the performance of banks that do not meet the priority lending standards regularly. Such a threat from the government helps mitigate the moral hazard problem present in the case of mergers. Prior research suggests that bank consolidations have

been slow and may need to pick up soon for India to be a significant player in the international markets.

## REFERENCES

- Bhattacharjea, A., 2010, "Of Omissions and Commissions: India's Competition Laws", *Economic and Political Weekly*, 45:31-37.
- Bekier, Matthias M., Anna J. Bogardus, and Tim Oldham. 2001. *Why Mergers Fail*. The McKinsey Quarterly. vol. 4: 6-9.
- Berger, Allen N., and David B. Humphrey. 1993. "Economies d'Echelle, Fusions, Concentration et Efficacité: L'Épérience dans la Banque Américaine," *Revue Economique Financière*, Vol. 27: 123-154. For English translation see: <http://fic.wharton.upenn.edu/fic/papers/94/9425.pdf>.
- Bork, R., 1987, "The Antitrust Paradox," (second edition). Free Press, New York.
- Burgess, R., and Pande, R., 2005, "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment." *American Economic Review*, 95: 780-795.
- Crabtree, J., and Jenkins, P., 2013, "India banks urged to follow China's lead", *Financial Times*, <http://www.ft.com/cms/s/0/6392a434-8743-11e2-9dd7-00144feabdc0.html#axzz2P1jEbOE2> (accessed on Mar 25, 2013).
- Fernando, A. C., 2006, "Corporate Governance: Principles, Policies and Practices," Pearson Education, New Delhi, India.
- Fisher, A. A., Lande, R. H., and Vandaele, W., 1983, "Could a Merger Lead to Both a Monopoly and a Lower Price," *California Law Review*, 71:1696-1706.
- Ghose, J., 2013, "PSU Bank Merger Urgency," *The Telegraph*, [http://www.telegraphindia.com/1130107/jsp/business/story\\_16410477.jsp#.UVXC4aBTtjs](http://www.telegraphindia.com/1130107/jsp/business/story_16410477.jsp#.UVXC4aBTtjs) (Accessed on February 12, 2013).
- Guardian, 2013 "Bank of Cyprus depositors could lose up to 60% of their savings," <http://www.guardian.co.uk/world/2013/mar/30/bank-of-cyprus-depositors-lose-savings> (Accessed on March 30, 2013).
- Guide to Antitrust Law - <http://www.atg.wa.gov/antitrustguide.aspx#.UUbp9jeGPIw> (Accessed on March 16, 2013).
- India Infoline, "India one of the most under-banked nations," <http://www.indiainfoline.com/Markets/News/India-one-of-the-most-under-banked-nations/5569786299> (accessed on Jan 24, 2013).
- India Knowledge @ Wharton, 2008, "Are Bank Mergers in India Entering a New Era?," - <http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4268>
- Kaur, P. and Kaur, G., 2010, "Impact of Mergers on the Cost Efficiency of Indian Commercial Banks" *Eurasian Journal of Business and Economics*, 3 : 27-50.
- Rankin, J., Smith, H., Willsher, K., 2013, "Cyprus has a future in euro, insists president," *The Guardian*, <http://www.guardian.co.uk/world/2013/mar/29/cyprus-stay-euro-president> (Accessed on March 30, 2013).
- RBI, "Statistical Tables Relating to Banks in India: 2011-2012," RBI publications.



Sudhaman, K. R., 2013, “6 banks may merge to create two big players”, Financial Chronicle, <http://www.mydigitalfc.com/plan/6-banks-may-merge-create-two-big-players-868> (Accessed on March 25, 2013).

Talwar, S. P., .2001, “Competition, consolidation and systemic stability in the Indian banking industry,” BIS papers ‘The banking industry in the emerging market economies: competition, consolidation and systemic stability,’ vol. 4.

Tirole, J., (1988), “The Theory of Industrial Organization”, MIT Press, Cambridge, MA.

Winrow, B., and Johnson, K., 2008, “The Rule of Law is the Rule of Reason,” North Dakota Law review, 84:59-83.

---

\*Data for Table 1 obtained from various sources:

USA banks employee count from <http://www.usbanklocations.com/bank-rank/number-of-employees.html> (accessed on Mar 25, 2013).

USA banks Assets from National Information Center, <http://www.usbanklocations.com/bank-rank/number-of-employees.html> (accessed on Mar 25, 2013).

SBI assets and employee count from RBI publications  
<http://www.rbi.org.in/scripts/PublicationsView.aspx?id=14717> (Assets accessed on Mar 25, 2013).  
<http://www.rbi.org.in/scripts/PublicationsView.aspx?id=14672> (Employee accessed on Mar 25, 2013).

## Indian Institute of Management Kozhikode

<i>Type of Document: (Working Paper/Case/Teaching Note, etc.)</i> <p style="text-align: center;"><b>WORKING PAPER</b></p>	<i>Ref. No.:</i> <p style="text-align: center;"><b>IIMK/WPS/127/FIN/2013/13</b></p>				
<i>Title:</i> <p style="text-align: center;"><b>MERGER OF PUBLIC SECTOR BANKS IN INDIA UNDER THE RULE OF REASON</b></p>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center; border: none;"><i>Author(s):</i></td> <td style="width: 50%; text-align: center; border: none;"><i>Institution(s)</i></td> </tr> <tr> <td style="text-align: center; border: none;">Rani Ladha</td> <td style="border: none;">                     Visiting Professor                      Indian Institute of Management Kozhikode                      IIMK Campus PO                      Kozhikode, Kerala 673 570.                      Phone: 91-495- 2809232                      email: rani.ladha@iimk.ac.in                 </td> </tr> </table>		<i>Author(s):</i>	<i>Institution(s)</i>	Rani Ladha	Visiting Professor Indian Institute of Management Kozhikode IIMK Campus PO Kozhikode, Kerala 673 570. Phone: 91-495- 2809232 email: rani.ladha@iimk.ac.in
<i>Author(s):</i>	<i>Institution(s)</i>				
Rani Ladha	Visiting Professor Indian Institute of Management Kozhikode IIMK Campus PO Kozhikode, Kerala 673 570. Phone: 91-495- 2809232 email: rani.ladha@iimk.ac.in				
<i>Subject Areas: <b>Finance Accounting &amp; Control</b></i>	<i>Subject Classification Codes, if any:</i>				
<i>Supporting Agencies, if any:</i>	<i>Research Grant/Project No.(s):</i>				
<i>Supplementary Information, if any:</i>	<table style="width: 100%; border: none;"> <tr> <td style="border: none;"><i>Date of Issue: <b>March 2013</b></i></td> </tr> <tr> <td style="border: none;"><i>Number of Pages: <b>15</b></i></td> </tr> </table>	<i>Date of Issue: <b>March 2013</b></i>	<i>Number of Pages: <b>15</b></i>		
<i>Date of Issue: <b>March 2013</b></i>					
<i>Number of Pages: <b>15</b></i>					
<i>Abstract:</i> <p>This paper models the idea of rule-of-reason of the Antitrust literature and applies the model to analyze the possible consolidation of the Indian banking industry through merger and acquisition (M&amp;A) activities. It offers a strategic perspective for public sector banks whereby the banks either meet societal goals or become savvy international players through mergers. India being an emerging economy, the banking industry faces two critical initiatives: (i) proactive servicing of the rural areas and priority sectors, and (ii) a serious presence in the international markets to compete with larger global banks. The model developed in this paper suggests ways to evaluate and examine mergers in the banking sector in India to support both these initiatives. It proposes that the government could use the threat of merger to induce reluctant public sector banks to meet the critical domestic agenda and performance metrics. Those that meet the societal goals may continue to have the benefit of the status quo. Those that do not are required to merge to form an entity that can internationally compete in raising equity and deposits, and providing loans and services.</p>					
<i>Key Words/Phrases:</i> Mergers, Acquisitions, Restructuring, Government Policy and Regulation, Antitrust Law					