Challenges and Opportunities of Liberalization in the GCC Banking Industry with Special Focus on Kuwait

Faten Yousef Jabsheh Mohamed Abdelbasset Chemingui

Faten Jabsheh & Mohamed Chemingui

Challenges and Opportunities of Liberalization in the GCC Banking Industry with Special Focus on Kuwait

Faten Yousef Jabsheh* Mohamed Abdelbasset Chemingui**

Abstract

The financial services industry has been subject to dramatic changes over the past decades as a result of the widespread use of advanced information technology, deregulation and financial liberalization. This has reduced margins in traditional banking activities, leading banks to merge with other banks both at home and abroad. This paper reviews the main characteristics of the consolidation process in emerging markets, and evaluates the potential effects of foreign bank entry to the Gulf Cooperation Council (GCC) region in general; and to Kuwait in particular, in light of the GATS agreement. The empirical analysis in this paper is applied to the Kuwaiti banking sector and uses the mark-up estimation to determine the expected impact of competition in the event of trade liberalization. Results show that the financial sector in Kuwait has a significant mark-up on the local market, indicating that the existing conditions in market regulation have almost isolated Kuwaiti banks from external competition through legal and regulatory barriers. Additionally, restrictions on establishing new banks have depressed local competition and hindered the effectiveness of market forces in adjusting the banking industry.

فاتن يوسف الجبشة محمد عبدالباسط الشمنقي

.(GATS)

^{*} Associate Research Scientist; email: fjabsheh@kisr.edu.kw. Kuwait Institute for Scientific Research, Techno-Economics Division.

^{**} Research Scientist; email: mbaseet@kisr.edu.kw. Kuwait Institute for Scientific Research, Techno-Economics Division.

Introduction and Objectives

The financial services industry has been subject to dramatic changes over the past decades as a result of the widespread use of advanced information technology, deregulation and globalization. This has reduced margins in traditional banking activities, leading banks to merge with other banks as well as with non-bank financial institutions, both at home and abroad. The ongoing process of consolidation has raised a number of positive and normative issues for both mature and emerging banking systems. Liberalizing banking services is considered the major reason for bank consolidation in the margin market. Within such a competitive environment, financial institutions are forced to examine their performance because their survival in the dynamic economies of the 21st century will be dependent upon their productive efficiencies.

While numerous studies have examined the effects of bank consolidation on market structure in mature and emerging markets, no systematic research has been conducted about Arab countries in general, and the Gulf Cooperation Council (GCC) region, in particular. This is especially true if looking at the impact of foreign competition on bank consolidations and financial market structure.

In this paper, the main characteristics and benefits of the consolidation process in the major emerging markets, and the affect of liberalization on this phenomenon are reviewed. The GCC region has been chosen to be the focal market for this paper, with the attempt to evaluate the potential effects of foreign bank entry to the GCC region by estimating the mark-up, in light of the GATS agreement that most GCC members are committed to, in varying degrees.

A more micro approach is adopted to show the application of the mark-up estimation to the banking industry in one of the GCC member states; namely, Kuwait. Kuwait is an ideal case study because its banking sector is well-defined and complete data are available on it. Also, more importantly, the Kuwaiti banking sector is an interesting case because it presents a seemingly very profitable financial picture according to the periodic reports and indicators published on the sector. However, upon close examination, it becomes apparent that this profitability does, in fact, mask a mark-up in the sector. Since this mark-up is not a reflection of outstanding performance in the sector, but rather an expression of the well-rooted oligopoly in the banking industry in Kuwait, foreign competition due to financial liberalization is likely to unveil this and hence retract from the sector's earnings.

Mark-up⁽¹⁾, which is the difference between the marginal cost and the marginal price, is a measure of market power. When the mark-up is equal to zero, optimality is achieved, however, when the mark-up is greater than zero, this shows that the market power⁽²⁾ is high and free competition is non-existent.

The aim of this study is three-fold:

- To analyze the merger and consolidation phenomena prevalent in financial markets around the world due to financial liberalization;
- To present the expected impact of major liberalization policy measures that will bring about institutional and regulatory changes, on the development, restructuring and performance of the banking sector in the GCC region; and
- To present a case study by estimating the mark-up in the Kuwaiti banking sector to show the expected impact of financial liberalization and foreign bank entry on that sector.

Recent Global and Regional Trends Toward Consolidation

Mergers and acquisitions (M&A), especially in banking, have received worldwide attention over the past number of years because they have in effect, changed the financial landscape of the world. There has been significant M&A activity in response to the removal of regulatory restrictions, globalization, advances in information processing and communications technologies, financial engineering and other improvements in applied finance and many other changes in market conditions. There have also been many market entries of new banks, some of which are in response to the M&A activity in local banking markets.

(1) Mark-up may be defined as the excess of the selling price of a product over the cost of making or buying it. The mark-up on any product has to cover the overheads of the firm, as well as provide a profit margin.

⁽²⁾ Market power is an indefinite concept concerned with the strength of the position of the dominant firm in a market. Market power may be regarded as high if the dominant firm has the ability to act as a 'price leader' if it can dictate the conditions of the sale for its products, if it is able to deter entry, or if it can persistently make super-normal profits.

Statistics on banking systems in various economies around the world strongly suggest that the future holds even greater potential for bank consolidations. This is obvious in East Asia, Central Europe and the Americas. Reasons for consolidation differ from region to region and among economies. However, recapitalizing financial distress, increased efficiency, cost-cutting and gaining economies of scale as a result of increased size are among the few prevalent motivations of consolidation efforts in the banking sector. Table 1 shows the existing tendency toward a reduced number of banks and other deposit-taking institutions, evidencing the fact that the recent banking crises in Asia and Latin America have energized M&A activity. Also, the banking industries in Central Europe and Latin America have been transformed, as a result of privatization of state-owned banks' which had previously dominated the banking systems of these regions. Moreover, there has been an increase in M&As in the emerging economies in the 1990s, even before the 1997-98 crises, as shown in Table 2.

Table 1. Trends in Banking Systems

Region	East Asia (1)		Latin America (2)		Central Europe ⁽³⁾		Advanced (4)	
Year	1999	1990	1999	1990	1999	1990	1999	1990
Number of Deposit- Taking Institutions (5)	11,761	10,100	1,741	1,344	1,154	2,087	30,361	39,766
Number of Banks	1,059	1,148	302	323	929	1,819		

⁽¹⁾ Sum or simple average of Korea, Malaysia, the Philippines and Thailand.

(4) Sum or simple average of Australia, Euro area, Hong Kong, Japan, Singapore, Switzerland, the United Kingdom and the United States.

Source: Hawkins and Mihaljek (2001)

Table 2. Mergers and Acquisitions in Banking in Selected Countries

Country	Number			
Country	1990-96	1997-99		
India	0	2		
Hong Kong	0	0		
Singapore	1	5		
Indonesia	14	15		
Korea	0	11		
Malaysia	2	21		
Philippines	14	6		
Thailand	1	2		
Brazil	8	38		
Chile	6	6		
Colombia	3	11		
Mexico	5	7		
Peru	5	8		
Czech Republic	1	6		
Hungary	3	4		
Poland	124 (1)	580 (1)		
Saudi Arabia	0	2		
Europe	799	427		
United States	1607	970		

⁽¹⁾ Mainly with cooperative banks.

Source: Hawkins and Mihaljek (2001)

⁽²⁾ Sum or simple average of Brazil, Chile, Colombia, Mexico and Peru. (3) Sum or simple average of the Czech Republic, Hungary and Poland.

⁽⁵⁾ Including commercial, savings and various types of mutual and cooperative banks, and similar intermediaries, such as building societies, thrifts, savings and loan associations, credit unions, post banks and finance companies but *excluding* insurance companies, pension funds, unit trusts and mutual funds.

Internal and External Causes of Mergers and Acquisitions (M&As)

A primary objective of any research on bank M&As is to identify the motives that inevitably reflect the benefits for consolidation. Originally, the merger movement gained impetus on the grounds that mergers achieve greater technical progress, which is imperative in light of deregulation, general globalization and the resulting competitive challenges for financial firms. This is especially when they operate in economic blocs, as is the case of monetary integration in Europe. The next sections provide an overview of some of the main forces and motives that have shaped the banking industry in the emerging market economies in recent years. It proceeds by defining the concept of consolidation, mergers and acquisitions and the differences that exist between the two strategies.

Internal Factors Encouraging Consolidation

There are numerous causes that motivate consolidations, ranging primarily from cost savings to increasing a host of various efficiencies. Mergers and acquisitions in the financial sector are undertaken for a wide variety of reasons. The M&A phenomenon, particularly among banking firms, has accelerated during the last ten years. The Group of Ten (2001) distinguishes between motives for consolidation and the environmental/external factors that influence the form and pace of consolidation, although they are entangled in practice. Both motives and environmental factors vary over time, across countries, across industry segments and even across lines of business within a segment. According to the Group of Ten (*op. cit.*), the most important economic factors that have caused banking institutions to merge over the past several years are to wit: (a) an increase in the expected profit and (b) a reduction in the expected cost as result of an increase in revenues.

Cost Reduction. M&As may lead to reductions in costs for a variety of reasons. The existing research literature, which focuses on cost savings attributable mostly to economies of scale, economies of scope, or more efficient allocation of resources; fails to find conclusive evidence suggesting that cost savings constitute an imperative outcome of M&As. Mergers may lead to cost reductions for several reasons that include: (a) economies of scale; (b) economies of scope due to product differentiation; (c) improvement in management efficiency; (d) increased market power; and (e) easier access to capital markets.

Revenue Enhancement. Consolidation may lead to increased revenues through its effects on firm size, firm scope, or market power. Mergers may lead to increased revenues for a variety of reasons, including: (a) increased size, which allows firms to better serve large customers and to increase the diversity of their portfolios and spread risk more effectively; (b) increased product diversification; and (c) increased monopoly power, allowing firms to raise prices.

External Factors Encouraging Consolidation

There are several external forces that encourage consolidation in the financial services and banking industry. Much of the ongoing restructuring has been a strategic response to changes in the competitive environment. Among the major and often interdependent forces driving change, have been technological innovation, deregulation, globalization, shareholder pressures, monetary integration, changes in corporate behavior and banking crises.

Technological Innovation. Banks and their customers have increasingly adapted to the advantages of new and expensive technologies. However, these technologies are often prohibitively costly, unless costs can be spread over a large number of customers. Mergers are often necessary to allow banks to introduce and maintain the technologies that customers and the market increasingly demand.

The major issue about new technological innovation is its impact on the processing of information, which is the very essence of the banking industry. Banks are increasingly losing their privileged access to information about investment opportunities. Thus, they are under pressure to merge or to build alliances with domestic or foreign-owned banks and technology companies in order to share the costs and the development of new IT applications. The competitiveness of the banking industry relies to a large extent on its ability to adopt, utilize and maintain technological innovations. Technological progress may also have increased economies of scale in producing financial services, creating opportunities to improve efficiency and increase value through consolidation. New delivery methods for customers, such as phone centers, ATMs and on-line banking, have exhibited greater economies of scale than the traditional branching network (Berger, Demsetz and Strahan, 1999). In addition, globalization has entailed many changes on the financial sector, especially for banks that are forced to undergo technological change and invest exorbitant resources in their information technology systems to remain competitive. The electronic revolution has

Faten Jabsheh & Mohamed Chemingui

undermined the traditional role of banks as intermediaries between borrowers and savers, in the process, reducing banks' profits. This, in turn, has forced banks to more urgently cut costs, and a merger with another bank becomes an attractive option to share costs, risks and acquire instant markets, links and portfolios.

Deregulation. Banking in emerging economies was traditionally a highly protected industry, living off spread achieved on regulated deposit and lending rates and enveloping restrictions on domestic and foreign entry. For many years, there was little pressure to disturb this restricted system. However, globalization of markets, developments in technology, macroeconomic pressures and banking crises in the 1990s, have forced governments to deregulate their banking industry and to open up their financial markets to foreign competition. At the international level, the easing of restrictions on foreign entry and the search by global institutions for profit opportunities in emerging economies has led to a growing presence of foreign-owned financial institutions in domestic banking systems (Hawkins and Mihaljek, 2001). Over the past two decades, many governments have removed important legal and regulatory barriers to financial industry consolidation. The removal of these barriers has opened the way for increased M&As, both within and across national boundaries and both within and across financial industry segments ⁽³⁾.

Globalization. Globalization is, in many respects, a by-product of technological change and deregulation. Technological advances have lowered computing costs and telecommunications, while at the same time, greatly expanding capacity, making a global reach economically more feasible. Deregulation, meanwhile, has opened up many new markets, both in developed and in transition economies (Group of Ten, 2001).

In fact, it is believed that many banks might become too small to compete effectively, either in terms of products or geography. In several countries, governments are urging banks to merge not because mergers would make them better, safer or more profitable, but because it would allow them to compete internationally with foreign banks. According to Marcus, (2000) governments and regulators should bear in mind that, very often, the best way to create local banks that can compete internationally, is to allow international banks to compete locally. The conclusion of the General Agreement on Trade of Services (GATS) has forced many governments to allow entry of foreign banks in their national market in order to save their position in the foreign markets, both for products and services.

Monetary Integration. Another development that has had an impact on the competitive environment for banking sector in Europe is the creation of the Euro. The monetary union has implied increased competition among banks and is forcing them to seek ways to cut costs and increase market share. Although the impact of the Euro on financial sector consolidations in Europe is still difficult to assess, there are reasons to believe that the Euro is stimulating consolidations in the European continent. These reasons relate primarily to the Euro-induced changes in financial markets in Europe thereby providing new opportunities for realizing economies of scale and enhance revenues through consolidation (Marcus, 2000; Group of Ten, 2001). The monetary union in the GCC region and the expected common currency for all GCC countries will certainly affect the banking sector in the region through consolidation.

Changes in Corporate Behavior. The spread of information technology has affected the banking industry through its indirect impact on corporate behavior and the development of financial markets, especially in financing new capital investments (Hawkins and Mihaljek, 2001). Many large firms can now raise funds by issuing securities at a lower cost than they borrow from banks. In fact, many large companies can borrow at a cheaper rate in capital markets than the banks themselves, given their superior credit ratings. Therefore, banks are under increasing pressure to keep their customers, and are forced to develop techniques for improved pricing and provisioning of credit risks. Consequently, because of economies of scale in the management and diversification of credit risks, banks have an incentive to merge with other institutions, including foreign banks, which in turn leads to consolidation and a growing presence of foreign banks in the banking industry. Moreover, because of pressure from alternative funding sources and other domestic and foreign banks, there is growing emphasis on shareholder value as the sole commercial objective of the banks.

Banking Crises. There have been many banking crises during the 1990s (South Asia) and the 2000s (Argentina), often occurring shortly after external and banking systems were deregulated. Some of the most common sources of banking crises are microeconomic in nature. To name a few, these are: an excessive optimism about lending to rapidly expanding manufacturing firms and speculative property development; insufficiently diversified loan books; frequently inappropriate management incentives; and unappreciated risks from excessive maturity and currency mismatches. One of the most important consequences of extensive banking crises has been changes in the structure of bank ownership. Fear of bank crises and a vicious circle of credit contraction have led most governments to intervene,

⁽³⁾ Group of Ten (2001) offers a chronological listing of important regulatory changes in several countries.

Journal of Development and Economic Policies	Volume 7 -No. 2 - June 2005			
Faten Jabsheh & Mohamed Chemingui	59			

either by nationalizing the banks in trouble and subsequently returning them to private ownership, or by encouraging bank mergers and foreign takeovers (Hawkins and Mihaljek, 2001).

How Does Consolidation Affect Bank Performance?

Boyd and Graham (1996) present three economic arguments as to why consolidation is expected to affect the performance of the banking industry. The first argument claims that banking is a declining industry, faced with reduced demand for the intermediation service it provides. In other words, there is excess capacity in banking, which would benefit from a mobilization of resources to other economic sectors.

The second argument is that consolidation will increase concentration and rent-earning in banking, thus benefiting banks, if not the society. There is ample reason to believe that increasing concentration in bank markets is associated with increasing bank profitability. A large number of studies have found that when concentration rises in bank markets, loan rates tend to rise and deposit rates tend to fall. However, most studies have shown that the average rise in concentration in bank markets has not been enough to affect profits greatly.

The third argument is that there are economies of scale, which will be realized when banks merge. By decreasing their unit cost, consolidation may allow banks to operate more efficiently. However, some studies suggest that there were no significant scale efficiencies to be gained and possibly some slight scale efficiency losses to be incurred from M&As of large banks (Berger, Demsetz, and Strahan, 1999). Generally, they do not provide support for the view that economies of scale are an important factor driving mergers involving very large firms in the industry. The primary argument by industry practitioners for consolidation is cost reduction, enhanced operational efficiency and increased shareholder wealth (profit maximization and cost minimization). Some studies have found that mergers can potentially lower costs and increase profits in small to medium-sized banks, whereas others have shown that mergers have not resulted in any significant post-merger improvements in efficiency (Berger, Hanweck and Humphrey, 1992; Rhoades, 1993). De Young, Hasan and Kirchhoff (1998) arrived at similar conclusions, but added the observation that the merger of two poor market performers is more likely to produce a more competitive organization than other combinations. Like many other researchers in the field, efficiency was the focal interest of De Young *et al*. As a result, much of the empirical work examining the benefits of mergers has focused on efficiency gains.

Banking literature relies on 'efficiency' measures to propose a position for the various financial institutions in the market. Much of the research conducted on merging is focused on the results of mergers in the United States, Europe and Southeast Asia. Since the merging experience is immature in the Middle East, expectations are ambiguous. Other evidence suggests that only relatively small banks could increase their efficiency due to an increase in size.

A bank's technical efficiency may be categorized into three types: (a) scale efficiency; (b) scope efficiency, and (c) X-efficiency. Scale efficiency measures the bank's operation along a cost curve. Banks operating at the minimum of the long-run average cost curve are said to be efficient; any deviation from this level of production is scale-inefficient. Scope efficiency measures the difference between the total cost of aggregated production in one bank and the sum of producing the various disaggregated outputs in more than one bank. Economies of scale in the banking industry are generally thought to be exhausted at a bank size of \$100 million to \$150 million in total assets (Spindt and Vefa, 1993). Large banks are defined as those that have more than \$10 billion in assets and small banks are those with less than \$100 million in assets. According to Peristiani (1997), the optimal scale efficiency size for a bank is approximately \$800 million in assets.

Efficiency is a broad concept that may be applied to many dimensions of an institution's activity. A narrow definition takes size and technology as given, and focuses on measuring managerial efficiency, or the existing resources available to a bank, by analyzing how production factors are combined. A more holistic approach additionally incorporates economies of scale and scope, both of which vary with technologies, regulations and consumer tastes.

X-efficiency refers to the management's level of competitiveness in operating the organization. Leibenstein (1966) introduced the theory of inefficiency generated by non-competition. Since this type of efficiency is neither allocative nor technical, Leibenstein referred to it as 'X-efficiency'. The concept of X-efficiency leads to the existence of different cost structures associated with different market structures, higher costs being associated with non-competition. Srinivasan (1992) and Peristiani (1997) show evidence that the most acquiring banks failed to improve their X-efficiency after the merger when compared with a control sample that did not merge, and that there was no evidence to suggest that in-market mergers lead to significant efficiency gains. However, regression analysis suggests that improvements in post-merger performance depend on the ability of the bank to strengthen asset quality (Peristiani, 1997). Peristiani also contends that X-efficiency has a positive association with return on assets (ROA) and a negative correlation with the non-interest expense ratio, indicating that X-efficient firms are, on average, more profitable and

have lower operating costs relative to other banks. Additionally, X-efficient banks have less credit risk and are more likely to obtain a better bank examination rating on managerial efficiency.

Consolidation offers banks the opportunity to achieve cost reductions and revenue enhancements. M&As may lead to reductions in costs for a variety of reasons. The existing research literature, which focuses on cost savings attributable to economies of scale, economies of scope, or a more efficient allocation of resources, fails to find much evidence suggesting that cost savings constitute an important outcome of mergers and acquisitions. Consolidation may lead to increased revenues through its effects on firm size, firm scope, or market power. Research suggests that mergers may provide some opportunities for revenue enhancement, either from efficiency gains or from increased market power.

Numerous empirical studies have found a statistically-significant, positive relationship between market concentration and profits, which upon closer examination, appears to be derived from a link between market share and profits. Economists have differed in their interpretations of this finding. While one group argues that high levels of concentration allow firms to exercise market power, resulting in above normal profitability, another group argues that high levels of concentration and high profits are both the consequence of greater efficiency. Studies that have investigated the relationship between concentration and prices tend to support the market power interpretation, but the magnitude of the positive, statistically significant coefficients relating prices to concentration measures tend to be fairly small. Some empirical studies also suggest that high concentration and the presumed lack of competitive pressure may also be associated with the failure of firms to produce efficiently. Other studies have concluded that approximately one third of mergers have reported positive returns, declining costs, increasing profits or greater efficiency (Schenk, 2000), while the remaining two-thirds were largely unsuccessful.

However, in the final analysis, it is important to note that there is mixed evidence regarding whether bank mergers improve bank performance all in all, or not, relative to non-merging banks. Free competition will improve the efficient allocation of resources in the economy, thus enhancing society's wealth and welfare. Increased competition in the banking system may lead to many conditions that include undue risk taking and consequently, reduce stability in the banking system. On the other hand, measures taken to increase stability in the banking system through mergers, may lead to reduced competition. High levels of concentration in any banking system could result in relatively high prices for banking services. However, it is difficult to compare prices before and after a merger in banking because of other factors, such as differential central bank policies and inflationary expectations. When a merger causes large market concentration, or when a market becomes highly concentrated, special attention needs to be given to its impact on competition.

The banking system's contribution to the efficient allocation of resources in the economy is reflected by its managerial ability to control input costs, (labor, physical capital and deposits) through the utilization of the returns to scale, scope and efficiency. Operating costs will eventually determine the optimal structure of the banking system in terms of the number of banks, size of banks, number of branches and possible mergers and acquisitions. Competitive markets are the best assurance that consumers receive the highest quality products at the lowest possible prices.

Overview of the Banking Sector in the GCC Region

Since Kuwait is part of the GCC, it is important to provide a general overview of the banking sector in the region. It is also important to note that Kuwait's banking sector shows a greater degree of market concentration, and hence, oligopolistic behavior, compared to its counterparts in the region.

The GCC is made up of Bahrain, Kuwait, Saudi Arabia, Oman, the United Arab Emirates and Qatar. In general, the region's sectors share much in common in that their regulatory and supervisory bodies perform similar duties and their experience with bank mergers is limited, if not non-existent. GCC banks have challenges and limitations that include economies of scale, competition, modern management mechanisms and diversification in banking products and services. It is very important to bear in mind that banks in the GCC region are relatively very small, compared to their international counterparts.

Since the 1970s, developing countries have been undertaking various reforms in their financial sectors, including the GCC countries which have started to do this recently as part of their overall program of economic stabilization and growth. An empirical study, carried out by Bhattacharya (1995) shows that all GCC countries, except for Bahrain and Kuwait, experienced low financial deepening in the 1980s. As economic activity picked up and banking habits developed, this ratio increased substantially in all of the GCC countries over the last decade. Moreover, there is an increasing move toward privatization in this region where GCC banks have a viable opportunity. In most GCC countries, bank shares are considered to be the most attractive investment opportunity and account for a large portion of the stock markets' capitalization. There is a growing need for a well-developed Gulf financial market to attract domestic

Journal of Development and Economic Policies	Volume 7 -No. 2 - June 2005
Faten Jabsheh & Mohamed Chemingui	61

funds currently invested outside, and to direct them to regional private sector investments. For the banking sector, this presents real challenges.

Overview of the Banking Sector in Kuwait

The banking sector in Kuwait has experienced moderate developments throughout the 1990s. In the earlier periods, sound governmental financial support had been provided to the banking sector to overcome several crises and the difficult debt problems caused by the Iraqi invasion. In addition, protection from foreign competition has also been provided. Foreign banks are not allowed to own financial institutions or operate in the local financial market. Since the primary role of the banking system was to channel funds to the real sector, efficiency and performance were not prioritized in this heavily supported and protected sector. During the past few years, the banking sector in Kuwait has experienced notable regulatory and technological changes.

There are six commercial banks: The National Bank of Kuwait (NBK), Gulf Bank, (GB), The Commercial Bank of Kuwait (CB), Al Ahli Bank of Kuwait (ABK), Burgan Bank (BB), and the Bank of Kuwait and the Middle East, BKME). There are two specialized banks: The Industrial Bank (IBK) and The Real Estate Bank (KREB), in addition to the Kuwait Finance House (KFH), which is an Islamic bank/financial service provider operating according to Islamic principles and *Shariaa*. The banking sector in Kuwait is dominated by the six commercial banks. As shown below in Figure 1, at least two are large enough relative to the total banking industry and that have a relatively overwhelming influence on the money market. The KFH has also been gaining greater market share over the previous years, due to a growing interest in Islamic banking. According to economic theory, the banking sector in Kuwait would be classified as an "oligopolistic" case, which is when a group of banks, each of which keeps a watchful eye on the actions of their competitors. Such actions and reactions include the frequent introduction of new banking services, discounts on some transactions and transfers, and advertising campaigns.

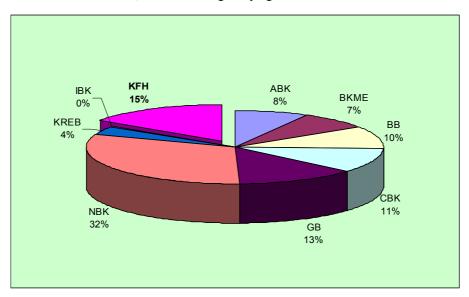


Figure 1. Banks in Kuwait and their percentage in the money market

When considering the size differential between the six Kuwaiti commercial banks, some imperfections are noted. NBK is relatively the dominant bank that captures about one third of the total commercial banking market, in terms of asset size, liability deposits, and assets loans. Hence, it is a very distinct oligopolistic case, where there is one leading bank, with the rest of the banks mostly behaving as followers. These conditions may constrain competition in the local money market. Together with government protection and the restricted ownership of banks, this has hindered competition amongst local commercial banks in Kuwait.

The assets of a bank constitute the uses of bank funds. The income-earning assets, which yield interest payments, enable banks to make profits. Reserves, cash, securities, loans to others, and physical capital are common items in each Kuwaiti commercial bank's assets. The absolute and relative size of each of these items reflects, in some way, the financial position of the bank. The aggregate size of total assets, at one point in time, reflects the wealth of the bank domestically, and within a group of banks.

Between 1998 and 1999, total assets for all Kuwaiti banks experienced a slight decrease from KD 10263 million to KD 10159 million. Many economic factors had to do with this decrease, such as low oil prices, the sharp decline in equity prices, and the general economic slowdown. However, between 1999 and 2001, the value of assets started to increase from KD 10159 million (for all Kuwaiti commercial banks) in 1999 to KD 11792 million in 2001, i.e. an increase of KD 1633 million. Noticeable in this regard is the continuity of the same ranking, according to assets size, for the six commercial banks between 1998 and 2001.

The structure of the aggregate balance sheet of local banks at the end of year 2001 indicates that assets had been dominated by three items, namely: claims on the private sector, and claims on the government and foreign assets. The collective share of these items in total assets reached 81.5% at the end of 2001 (Central Bank of Kuwait, 2001).

In 2001, commercial banks in Kuwait continued to realize improved profit levels, which reached KD 232.5 million, compared to KD 210.3 million, KD 168.4 million and KD 144.7 million for the years 2000, 1999, and 1998 respectively. These numbers indicate a 61% increase in total net profits for the six commercial banks between 1998 and 2001.

The GATS Commitments and Liberalization: A New Challenge for the GCC Banking Sector

The progressive liberalization of trade has become a motive not only for developed economies but also for developing economies alike. Institutionalizing this movement in the form of the World Trade Organization in 1995 following the eight-year Uruguay Round negotiations, systematized the ensuing trade liberalization process, and established a forum for dialogue between and among the various signatory nations.

Services may be characterized with a number of salient characteristics, which make this sector more pliable and responsive to liberalization. Inherently, liberalization invites competition, foreign direct investment, which will subsequently modernize the entire business infrastructure and upgrade the quality of the indigenous service providers. Developing countries cannot afford to maintain inefficient sectors. Liberalization is one of the quickest ways to develop a sector without public expenditure. Introducing a dose of foreign competition frees government and taxpayers from that burden (Jabsheh, 2001). In order for Least Developing Countries to participate and integrate effectively in the world community, their objectives should focus on external liberalization, combined with an active strategic plan to deregulate and privatize core infrastructural sectors.

The General Agreement on Trade in Services (GATS) was one of the major outcomes of the Uruguay Round Agreements (URAs), based on the same principles as the previous GATT. The General Agreement on the Liberalization of Financial Services is part of the GATS. The former has identified "financial services" carefully and thoroughly. The services agreement under the WTO, signed in 1995, did not effectively deal with this sector. Therefore, a new set of rules was put together in December, 1997 and implemented in March, 1999. As a result, three sectors within "financial services" were greatly improved: (a) the stock market; (b) insurance; and (c) banking.

All WTO signatories are also GATS members; albeit they may differ in the levels of quantitative commitments within each service sector covered under the GATS. The GATS covers 160 sectors. There are 11 aggregate sectors identified on the "classification list". Tourism, for example, has drawn the highest number of 'bindings' by member, followed by business and financial services. Financial services include two broad categories of services: insurance and insurance related services, banking and other financial services. "Banking" includes all the traditional services provided by banks such as acceptance of deposits, lending of all types, payment and money transmission services as well as services related to trading in foreign exchange and securities, money broking, asset management, settlement and clearing services.

Under the current format of the GATS, few obligations apply to signatories, unless a sector and the associated modes of delivery are subject to "specific commitments" in the schedule of the signatory or the member. The main general obligations of the agreement are the Most Favored Nation Principle (MFN) in Article II and the Transparency Principle (Article III). The GATS' main provisions are namely: (a) the recognition of qualifications (Article VII); (b) monopolies and exclusive suppliers (Article VIII); and (c) business practices (Article IX). The central "Specific Commitments" are with respect to market access and national treatment. Market access (Article XVI) provides a negative list of obstacles and barriers to trade that signatories should refrain from engaging in. Examples include imposing limitations on the number of suppliers; limitations on the participation of foreign capital; limitations on the total number of service operations or on the total quantity of service output; limitations on the total number of natural persons that may be employed; limitations on the total value of service transactions or assets; and measures which restrict or require specific types of legal entity or joint ventures. The national treatment provision in the GATS

Journal of Development and Economic Policies	Volume 7 -No. 2 - June 2005		
Faten Jabsheh & Mohamed Chemingui	63		

(specified in Article XVII) specifies that members should treat foreign countries' products and services as they would treat their own, without imposing tariff and non-tariff barriers, unless there are special exceptions and arrangements made to suggest the contrary (WTO, 1999).

Many empirical studies indicate that the application of the GATS commitments mainly in developing countries, will increase competition and therefore will reduce the mark-up on the local market. Consolidation appears to be one of the best solutions to reduce the negative effects of such deregulation, and therefore, to maintain an effective banking system in these countries. There many approaches used to quantify the effect of application of the GATS agreement as general equilibrium model and partial equilibrium model. However, for some countries, data are insufficient and hence, such models cannot be applied effectively to capture the main determinants of trade in services.

As previously mentioned, the estimation of the mark-up is one of the most effective indicators derived to show the expected effect of competition as a result of trade liberalization in services. For the banking sector, trade liberalization means the elimination of barriers to entry for foreign banks, which will inevitably affect the profitability of the local banks. Estimations of mark-up on the local market are indicative of the rent received by local firms for their monopoly. Abolition of entry barriers will reduce this mark-up to be equal to zero. In some cases, such effect will affect the viability of the local banks. Consolidation appears to be the ultimate solution for these local banks to continue operating in such markets. In the next section, the model used for mark-up estimation as it is explained by Martins, Scarpetta and Pilat (1996) and applied by Chemingui (2000) for the Tunisian service sector, will be used to estimate the mark-up in the Kuwaiti banking sector to show the expected impact of financial liberalization and foreign bank entry on that sector.

Empirical Analysis

Two main approaches have been used to evaluate the performance of banking sectors. The first is the macroeconomic approach, which concentrates on macro-variables, such as real growth, saving and investment, and interest rates. The main shortcoming of this approach lies in the difficulty in isolating the effects of financial variables from those of other variables (institutional or macroeconomic developments). The second approach concentrates on analyzing the financial sector by determining changes in its structure and performance. Many attempts have been made to estimate changes in variables that include cost, revenue, and profitability of financial institutions operating under the same regulatory conditions, [Grabowski, Rangan and Rezyanian (1994), Berger and Mester (1997) and Humphrey and Pully (1997)]. The data set that was used to define costs, revenues and profits, was obtained from the annual balance sheets of the financial institutions.

However, since objective of this research is to evaluate the impact of trade liberalization in services on the local banking sector, alternative approaches may be used. The main approach is the general equilibrium model specific to service sectors, which takes into account imperfect competition and barriers to the entry of foreign suppliers. This kind of model requires effortless data collection. An intermediate approach may also be used to estimate the mark-up on the local market. Estimations for service sectors may be used in the second stage in simulating models (general and partial equilibrium model) in order to evaluate either exogenous reduction of this markup as result of competition, or to evaluate the effect of trade openness on the level of mark-up. In the latter, the mark-up will be evaluated endogenously on the basis of the initial value used in the model calibration.

For the purpose of this paper, only the estimation of the mark-up will be carried out in order to provide insight to the kind of competition and the determinants of benefits in the local market. Mark-up estimations will allow the division of the profitability of local banking between rent compensating for imperfect competition and efficiency. Moreover, if the mark-up is higher, the profitability of local banks will hence be determined by exogenous conditions rather than by endogenous factors. In turn, the effect of trade liberalization will be very negative on these banks.

This method allows the assessment of the link between mark ups and bank consolidations. In fact, when mark ups are prevalent in the local banking industry, bank consolidation appear to be the best option to affront foreign competition on the local market. Mark up estimates show that local banks may reduce their profit margins over marginal costs, by the equivalent of the mark up rate, without compromising their profitability.

Mark-Up: An Indicator of the Degree of Competition

Over the past decades, a substantial body of literature has been devoted to the empirical identification of market power. This literature has focused particularly on the identification of monopoly pricing. In theory, it is possible to define the degree of monopoly power of a given producer as the mark-up of product price (P) over marginal cost (Cmar). This indicator, the so-called Lerner Index, may be defined as (P-Cmar)/P. With perfect competition, price

equals marginal cost and the index will be equal to zero and unity. Hence, the greater the index, the greater is the degree of monopoly power. This indicator is a static measure of actual conduct and may not reflect the potential for monopolistic behavior on the part of the firm. The latter is more sensitive to the 'type' of market structure, i.e. some market structures will favor, more than others, the development of permanent market power.

The empirical measurement of the Lerner Index and other related measures is complicated. However, at an aggregated level, the economic literature has given little guidance on how to establish appropriate measures. Consequently, there have been few empirical studies identifying market power at the aggregate level (Geroski, Gregg and Van Reenen, 1995). The main problem arises from the fact that while prices can be measured, marginal costs are not directly observable. Therefore, indirect measures have to be developed. In the late eighties, a new methodology attempted to estimate the mark-up of prices over marginal costs by using the short-run fluctuations of output and production inputs by sector. The method proposed by Hall (1990) has become popular and has been extensively applied in the empirical literature (Martins, Scarpetta and Pilat, 1996).

Hall's Approach

This approach for the estimation of mark-up is based on ideas contained in Solow's (1957) paper on productivity measure. For a firm enjoying technical progress in the use of labor and capital, a reasonable approximation of its marginal cost may be given by the following expression:

$$Cmar = (W.\Delta L + R.\Delta K)/(\Delta Q - \theta Q)$$
 (1)

where Q is value added; W and R are the wage rate and the rental price of capital, respectively; and θ is the rate of technical progress. Once the Log differential is applied for this equation, Equation 1 may be re-phrased as follows:

$$\Delta Q = \left[(W.L) / (Cmar.Q) \right] \Delta L + \left[(R..K) / (Cmar.Q) \right] \Delta K + \theta \tag{2}$$

This equation allows the observation that the change in production is determined by the cumulated change in the prices of production factors multiplied by their respective shares in the total cost and adjusted with the technical progress term. Although, under the assumption of constant return to scale, the relative shares of capital and labor in the production value are evaluated at marginal cost and are equal to 1.

$$W.L / Cmar.Q + R.K / Cmar.Q = 1$$
(3)

By substituting the value of R.K in Equation 2 with its value in Equation 3 and with some arrangements, the following expression of ΔQ may be derived:

$$\Delta Q = \mu \alpha . \Delta L + (1 - \mu \alpha) \Delta K + \theta \tag{4}$$

with:

$$\mu = P / Cmar$$
: mark-up, and

 $\alpha = W.L/P.Q$: is the labor share in the value added.

Knowing that the so-called Solow residual (SR) may be obtained by the following equation:

$$SR = \Delta Q - \alpha \Delta L + (1 - \alpha) \Delta K \tag{5}$$

By substituting Δq_f with its expression in Equation 4, the following expression for SR may be obtained:

$$SR = \Delta O - \alpha \Delta L - (1 - \alpha) \Delta K = (\mu - 1)\alpha(\Delta L - \Delta K) + \theta \tag{6}$$

This equation illustrates the key property of the Solow residual. In fact, if the competition in the given market is perfect, the value of the indicator μ is equal to 1, the Solow residual should not be correlated with the growth rate of the capital/labor ratio and is thus identical to the rate of technical progress. Typically, the Solow residual tends to be higher in years of expansion than in years of recession. A possible implication of this observation is that the assumption of perfect competition is rejected by empirical studies.

Journal of Development and Economic Policies	Volume 7 -No. 2 - June 2005
Faten Jabsheh & Mohamed Chemingui	65

Roeger's Approach

By using the formula of Roeger (1995) where $B = 1 - (1/\mu)$, and by replacing μ by its value in Equation 6 and Δl by its value in function Δq in Equation 4, the following expression of SR may be obtained.

$$SR = \Delta Q - \alpha \Delta L - (1 - \alpha) \Delta K = B(\Delta Q - \Delta K) + (1 - B)\theta \tag{7}$$

Roeger proceeds along the same route as Hall with the calculation of the so-called Solow residual on prices. Thus, and on the basis of the marginal cost equation and under the same assumptions used by Hall, Roeger finds the following expression of the Log differential of marginal cost:

$$\Delta Cmar = (\alpha)\Delta w + (1 - \alpha)\Delta r + \theta \tag{8}$$

Knowing that (1-B)P = Cmar, and by substituting the Log differential expression of marginal cost by its expression in the function of prices in the precedent equation, Roeger finds the following expression of the SR based on prices (dual prices):

$$SRP = \alpha \Delta w + (1 - \alpha)\Delta r - \Delta p = -B(\Delta p - \Delta r) + (1 - B)\theta \tag{9}$$

By substituting SRP from SR, Roeger formulates the following expression for the estimation of the B coefficient.

$$SR - SRP = \Delta y = B\Delta x + \varepsilon$$
with: $\Delta x = (\Delta q - \Delta k) + (\Delta p - \Delta r) = (\Delta q + \Delta p) - (\Delta k + \Delta r)$, and
$$\Delta y = SR - SRP = (\Delta q + \Delta p) - \alpha(\Delta l + \Delta w) - (1 - \alpha)(\Delta k + \Delta r)$$

On the basis of Equation 10, the estimation of the B coefficient may be carried out by the usual econometric techniques with two variables. One of the advantages of this method is its ability to overcome some availability problems associated with price data. In fact, prices and quantities are grouped in only one variable, which appears in the equation in nominal values⁽⁴⁾. This feature allows on one side, to avoid problems related to data availability in developing countries, and on the other side, to be applied for the estimation of the mark-up for service activities for which prices and quantities are always grouped in only one variable, i.e. the value of quantity.

In other terms, Equation 10 is used to estimate the average mark-up of price over marginal cost and test whether it is significantly different from unity. If the average mark-up over marginal cost is not significantly different from unity, then this implies that price equals marginal cost, and the joint assumption of perfect competition and constant returns to scale cannot be rejected. But if is significantly greater than unity, then given the assumption of constant returns to scale, this implies that price exceeds marginal cost and μ may be interpreted as an estimate of the average mark-up.

Application to the Kuwaiti Banking Sector

The mark-up estimation takes account of labor and capital as production factors. The series for gross output, employment and wage compensation were taken from the annual statistical abstract published by the Ministry of Planning, Kuwait (Various volumes). Regarding the capital stock and in the absence of any estimation for Kuwait, a proxy is used. This proxy is related to the capital remuneration as share of value-added. The series for capital remuneration is also extracted from the Annual Statistical Abstract. Finally, and regarding the rental price of capital, the approach of Hall and Jorgenson (1967) is used to estimate the real cost of capital for a firm⁽⁵⁾.

⁽⁴⁾ With a simple mathematical calculation, the advantages of Roeger's approach for the estimation of mark-up may be shown. In fact, considering two periods with a simple mathematical calculation, the advantages of Roeger's approach for the estimation of mark-up may be shot and t-1, the following is obtained: $\Delta x = (\Delta Q + \Delta P) - (\Delta K + \Delta R) = \left[(InQ_t - InQ_{t-1}) + (InP_t - InP_{t-1}) \right] - \left[(InK_t - InK_{t-1}) + (InR_t - InR_{t-1}) \right] = In\left[(Q_t P_t / Q_{t-1} P_{t-1}) - In(K_t R_t / K_{t-1} R_{t-1}) \right] = In\left[(Q_t P_t / Q_{t-1} P_{t-1}) \right] / \left[(K_t R_t / K_{t-1} R_{t-1}) \right]$ Also by substitution, the following expression of Δy is derived: $\Delta y = SR - SRP = (\Delta q + \Delta p) - \alpha(\Delta l + \Delta w) - (1 - \alpha)(\Delta k + \Delta r)$

 $⁼ In(Q_t / P_t) / (Q_{t-1} P_{t-1}) - \alpha In(L_t W_t) / (L_{t-1} W_{t-1}) - (1-\alpha) In(K_t R_t) / (K_{t-1} R_{t-1})$ (5) Hall and Jorgenson (1967) approach is defined as follows:

Equation 10 is used to estimate the mark-up in the financial sector in Kuwait. The mark-up is directly obtained from Roeger's coefficient by the following expression: $\mu = 1/(1-B)$. The value estimated for the financial sector in Kuwait is approximately 1.45, which indicates that the financial sector in Kuwait has a significant mark-up on the local market.

Table 3. Estimation Results

Sectors	В	T-test	R2	DW	Num	Mark-up
Financial sector	0,31	14,26	0,75	1,84	15	1,45

Num: number of years of observation

B: The slope coefficient estimated and used for mark-up estimate using this formula: $B = 1 - (1/\mu)$,

In effect, this means and confirms that existing conditions in market regulation have almost isolated Kuwaiti banks from external competition through legal and regulatory barriers against the entry of foreign banks. Furthermore, restrictions on establishing new banks have also depressed local competition and hindered the effectiveness of market forces in adjusting the banking industry. Lately, there has been a sound call for gradual removal of legal and regulatory barriers, as preparation for a new era of a more competitive banking market, which will be driven by the following forces: (a) implementation of WTO agreements, (b) the regional (GCC) pressures on local authorities to open their financial market to other GCC based banks in order to improve competitiveness, and (c) the future challenges from international banks that will have access to local and regional financial markets.

All of the above mentioned forces would make it necessary for local and GCC banks to urgently consider a merger strategy in order to improve their competitive edge and to enhance and build a stronger market position.

Conclusion

This study has shown that the banking industry in the GCC, and in Kuwait in particular, is effectively protected, and hence, will be negatively affected when market liberalization materializes as per the GATS, and foreign banks are allowed to enter and compete in the region. Estimating the mark-up for the case study of the Kuwaiti banking sector has clearly shown that the marginal price is greater than the marginal cost in that sector, which means that Kuwaiti banks have high market power and low competition, which is how these banks are in turn, able to have large mark-ups. More importantly, this shows that the profitability of the banking sector in Kuwait, is not a reflection of its real performance, productivity and the provision of quality services, but rather an expression of the oligopolistic situation that is prevalent in Kuwait. Financial liberalization and foreign bank entry, in turn, are expected to unveil this rentier setting, and thus, negatively impact Kuwaiti banks that will face competition that will force them to reduce their mark-up. However, opening the region's industry will increase its competitiveness and preparedness and will mobilize its willingness to forge strategic alliances.

Restructuring the banking industry represents a challenge for bankers and for regulators alike. Besides strengthening supervisory arrangements, it is incumbent on regulators to support the wave of restructuring by continuing to level the playing field in the banking industry and by eliminating any competitive distortions. This condition needs to be met for restructuring to have its full effect in terms of economic efficiency and proper resource allocation.

Mergers and open market competition are seen as the practical solution to elevated mark-ups. However, mergers are only found to be successful when they are part of a strategy that aims to strike a balance between strengthening existing product lines and diversifying banking activities, as part of a medium-term plan designed to extensively reorganize both distribution channels and means of production.

Some of the challenges that face hopeful mergers in the GCC include the fact that shareholders are not unified, and that management is not motivated, in spite of the presumed rationality of the decision. To allow banks to compete and keep pace with these global financial changes, the central monitoring authorities need to develop and implement a plan for regulatory reform that is flexible and adaptable to future changes in these markets. One of the major obstacles

to achieving consensus on a plan for reform is that the policies adopted across the GCC are not orchestrated nor are they synchronized effectively to achieve the required benefits.

References

Berger A., R. Demsetz and P. Strahan. 1999. <u>The consolidation of financial services industry: Causes, consequences, and implications for the future</u>. *Journal of Banking and Finance* Vol. 23: 135-194.

______, G.A. Hanweck and D.B. Humphrey. 1992. <u>Competitive viability in banking: Scale, scope and product mix economies</u>. *Journal of Monetary Economics* 28(1): 501-520.

and L.J. Mester. 1997, Efficiency and productivity change in the us. commercial banking industry: A comparison of the 1980s and 1990s. Federal Reserve Bank of Philadelphia Working Paper 97-5, Philadelphia.

Bhattacharya, B.N. 1995. <u>Trends of financial deepening in GCC countries and future policy directions.</u> In: Arab Bank and Finance Directory: 373-388.

Boyd J. and S. Graham. 1996. <u>Consolidation in US banking: Implications for efficiency and risk</u>. Bank of Minneapolis, Working Paper No. 572.

Central Bank of Kuwait. 2001. Annual Report. State of Kuwait.

Chemingui, M.A. 2000. <u>The Effects of Trade Liberalization on the Tunisian Economy: A Computable General Equilibrium Assessment</u>. PhD dissertation, University of Montpellier, College of Law and Economics, Montpellier.

De Young, R., I. Hasan and B. Kirchhoff. 1998. <u>The impact of out-of state on the efficiency of local banks</u>. *Journal of Economics and Business* 22: 211-234.

Geroski, P., P. Gregg and J. van Reenen. 1995. <u>Market imperfections and employment</u>. OECD Jobs Study: Working Paper No. 5, OECD, Paris.

Grabowski, R., N. Rangan and R. Rezvanian. 1994. <u>The effects of deregulation on the efficiency of US banking firms</u>. *Journal of Business and Economics* Vol. 46: 39-54.

Group of Ten. 2001. Report on consolidation in the financial sector. BIS/IMF/OCED, January, 2001. Paris

Hall, R.E. 1990. <u>The invariance properties of Solow's Productivity Residual</u>. In *Growth, Productivity, Unemployment*. Edited by P. Diamond. Cambridge, MA: MIT Press: 72-112.

and D.W.Jorgenson. 1967. Tax Policy and Investment Behavior. American Economic Review, Vol. 57.

Hawkins J. and D. Mihaljek. 2001. <u>The banking industry in the emerging market economies: competition, consolidation and systemic stability – an overview.</u> Bank of International Settlements (BIS) Papers, Basel – Switzerland, August, 2001.

Humphrey, D.B. and L.B. Pulley. 1997. <u>Banks' Responses to Deregulation: Profits, Technology, and Efficiency</u>. Journey of Money, Credit and Banking Vol. 29: 71-93.

Jabsheh, F.Y. 2001. <u>Impact of the GATS on the Kuwait banking sector and ways to achieve greater competitiveness</u>. IBK Papers, The Industrial Bank of Kuwait, Series No.65.

Leibenstein, H. 1966. <u>Entrepreneurship, entrepreneurial training, and X-efficiency theory</u>. *Journal of Economic Behavior and Organization* Vol 8: 191-205.

Marcus G. 2000. <u>Issues for Consideration in mergers and takeovers from a regulatory perspective</u>. Speech by Ms Gill Marcus, Deputy Governor of the South African Reserve Bank, at the Institute for International Research 9th Annual Conference held in Johannesburg, July, 2000.

Martins, J.O., S. Scarpetta, and D. Pilat. 1996. <u>Mark-up ratios in manufacturing industries: estimates for 14 OECD Countries</u>. OECD Economic Department Working Paper No. 162, Paris.

Ministry of Planning, Kuwait. Annual Statistical Abstracts. Various issues.

Peristiani, S. 1997. <u>Do mergers improve the x-efficiency and scale efficiency of US banks? Evidence from the 1980s</u>. *Journal of Money, Credit, and Banking* 29: 326-337.

Rhoades, S.A. 1993. <u>A summary of merger performance studies in banking, 1980-1993, and An Assessment of the "Operating Performance" and "Event Study" methodologies.</u> Washington, D.C.

Schenk, H. 2000. On the performance of banking mergers, some propositions and policy implications. Working Paper commissioned by the Finance Committee of Union Network International-Europa (Brussels) for UNI Conference on Mergers and Take-Overs: Implications on Employment, Consumers and Shareholders. London, 23-24 October, 2000.

Solow, R. 1957. <u>Technical changes and the aggregate production function</u>. *Review of Economics and Statistics*, Vol.39: 316-330.

Spindt, P. and Vefa, T. 1993. <u>Performance economies associated with small and medium-sized banks</u>. *Journal of Banking and Finance* April 1993: 891-908.

Srinivasan, A. 1992. Are there cost savings from bank mergers? Economic Review, Federal Reserve Bank of Atlanta.

World Trade Organization (WTO) Secretariat. 1999. An Introduction to the GATS. Trade in Services Division. October, 1999.