

The Impact of Growth in Non- bank Financial Intermediaries on the Financial Sector and the Economy of Kuwait

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ملخص

أثار التوسع في أعمال قطاع المؤسسات المالية غير المصرفية

على القطاع المالي والاقتصادي في الكويت

تستعرض الورقة الدور الهام الذي يلعبه القطاع المالي في التنمية الاقتصادية في دولة الكويت والتطورات الهامة التي مرت بالقطاع المالي من حيث تزايد الأهمية النسبية للمؤسسات المالية غير المصرفية فيه. ولقد خلصت الورقة إلى أن نشاطات تلك المؤسسات قد تركز بشكل رئيسي حول الأعمال المصرفية والاستثمارية والخدمات المالية، وأن معظم هذه المؤسسات المالية تحاول بصورة أو أخرى أن تحاكي مفهوم المصرف الشامل. بالإضافة إلى ذلك فإن هناك حوالى ٦٥% من تلك المؤسسات تنتهج أسلوب المصرف الإسلامي. كما أظهرت النتائج أن هذه المؤسسات المالية غير المصرفية لا تعتمد على الودائع كمصدر مهم لاستخدامها بل تعتمد على رؤوس أموالها الذاتية مما يشكل قيداً على أعمالها ومقدورها على التوسع. وعلى الرغم من ذلك فإن شروط الاقتراض من تلك المؤسسات أبسط وأسهل على المقترض المحلي من الاقتراض من الجهاز المصرفي وهذا هو العامل الحاسم في نجاح أعمال تلك المؤسسات المالية. من جهة أخرى حاولت الورقة استكشاف طبيعة العلاقات السببية بين التوسع في نشاطات المؤسسات المالية غير المصرفية وأثر ذلك على الاقتصاد الكلي من ناحية درجة النمو الحقيقي للاقتصاد الكويتي، ولقد استعانت الورقة بطرق الاقتصاد القياسي في بناء نموذج لدراسة تلك العلاقة في ثلاث دول هي دولة الكويت والمملكة العربية السعودية ودولة الإمارات العربية المتحدة.

ولقد أظهرت الدراسة القياسية أن التوسع المالي من خلال المؤسسات المالية غير المصرفية كان له آثار واضحة في خلق النمو الاقتصادي الحقيقي في الدول الثلاث دول المعنية بالدراسة. ولقد أظهرت النتائج أنه بالنسبة للكويت فإن علاقة السببية على المدى الطويل واضحة وقوية وأن هناك تبادلاً في اتجاه العلاقة حيث إن التوسع المالي يؤدي إلى زيادة في النمو الاقتصادي من ناحية ثم أن النمو الاقتصادي يؤدي إلى المزيد في التوسع المالي لأعمال المؤسسات المالية غير المصرفية من ناحية أخرى، أما على الأجل القصير فإن العلاقة السببية غير واضحة في دولة الكويت.

في حين أظهرت النتائج أن علاقة السببية واضحة وقوية على الأجل القصير في كل من المملكة العربية السعودية ودولة الإمارات العربية المتحدة ولكنها على الأجل الطويل أقل وضوحاً مما يدل على اختلاف جوهرى عن حالة دولة الكويت، الأمر الذي يمكن تعليقه على أنه يعكس بشكل أساسى النمو المتسارع في أعمال القطاع المالي في حالة كل من المملكة العربية السعودية ودولة الإمارات المتحدة بدرجة فاقت معدلات النمو في أعمال القطاع المالي في دولة الكويت خلال فترة الدراسة.

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1. Introduction

During the 1970s and the early 1980s, Kuwait made significant progress in financial deepening and in building a modern financial infrastructure. Abundant oil revenue led to the accumulation of sizeable official foreign assets and private wealth, part of which were intermediated by Kuwait financial institutions. Moreover, Kuwait, which was net provider of savings to the rest of the world until the early 1990s had little constraint in mobilizing resources for the financing of domestic investment projects, most of which were undertaken by the government. However, activity of Kuwait financial intermediaries continued to be centered around its traditional niche consisting mainly of short-term lending to trade, building and construction, and small manufacturing. It was not until the early 1990s that the process of rapid development of financial intermediation and integration with international financial markets started to take hold under the effects of profound changes in the economies of the region, stemming, in particular, from the impact of the Gulf war and the economic reforms that have been initiated thereafter.

With the end of the Gulf war and the return of confidence, banks strengthened their deposit base, and improved productivity by acquiring new technology and developing lucrative consumer-based services (e.g., credit cards, automatic teller machines, consumer lending). Increased capitalization, higher profits, and government assistance, in Kuwait, for example, allowed the banks to compensate for the bad loan problems that had plagued a number of them. Other segments of the financial sector, however, have not made similar progress. Domestic money markets have remained underdeveloped lacking depth and diversification. Stock exchanges have faced various constraints, despite the existence of a potentially large demand for

equity investment; and corporate bonds and secondary markets for government paper have not emerged in a significant manner.

Looking ahead, Kuwait financial systems face a number of challenges stemming from the need to adapt to the rapid globalization and support the policy changes that are currently shaping the region's economies, namely (1) the increased role of the private sector;(2) the strong demand for new financial services and, more generally, the need to better manage domestic savings; and(3) the gradual opening up of activity to foreign participation. Increased competition at the domestic and international levels in the period ahead will put a premium on the efficiency and productivity and require enhanced prudential regulation and bank supervision to reduce risks and preserve the soundness of the banking system. Equity markets would need to be developed further to help promote private sector saving and investment. The recent emergence of non-bank financial intermediates is an important step for further developing of the financial sector in Kuwait.

Non-bank financial intermediaries (NBFIs) comprise a mixed bag of institutions. Traditionally, they included all financial institutions that were not classified as commercial banks. But with the assimilation of building societies and other thrift deposit institutions with commercial banks as institutions that accept deposits and make loans, NBFIs have come to mainly include leasing, factoring and venture capital companies as well as various types of contractual savings and institutional investors (pension funds, insurance companies, and mutual funds). The common characteristic of these institutions is that they mobilize savings and facilitate the financing of different activities but do not accept deposits from the public at large.

NBFIs play an important dual role in the financial system. They complement the role of commercial banks, filling gaps in their range of services, but they also compete with commercial banks and force them to be more efficient and responsive to the needs of their customers. Most NBFIs are also actively involved in the securities markets and in the mobilization and allocation of long-term financial resources. The state of development of NBFIs is usually a good indicator of the state of development of the financial system as a whole. The exception is when the development of commercial banks is held back by restrictive regulation. Korea is often given as an example of country where NBFIs have been encouraged to grow at the expense of commercial banks and whereby the implication of the state of development of NBFIs may exaggerate the overall development of the financial system (World Bank 1989).

This paper is mainly focused on the role of NBFIs in the financial sector and the economy of Kuwait. However, before discussing their role and the determinants of their growth, the paper offers a brief review of the role and growth of the various NBFIs companies. There is also a brief discussion of the insurance sector and venture capital companies and mutual funds. Although the paper offers an overview of development in selected countries in different regions of the world, a section is devoted to examinations of the recent growth of NBFIs, and especially of venture financial institutions (including investment companies) in Kuwait. The paper concludes with a brief summary of policy implications.

11 - Non-Bank Financial Intermediaries: A Review

1- Leasing and Factoring

Leasing and factoring companies have experienced significant growth in most countries around the world (Table 1).

They enjoy a number of important advantages over traditional bank lending (IFC 1996). Leasing companies retain ownership of the leased asset and are able to repossess it more easily in cases of customer default. They can thus overcome the effects of weak collateral and enforcement regulations that hinder commercial bank lending to small and medium size enterprises. Leasing companies also benefit from the preferential tax treatment conferred on investments in fixed assets and capital equipment. They can apply the accelerated depreciation allowances to profits originating from other business ventures, while sharing some of the tax benefits with lessees. Leasing companies employ specialist staff and follow more focused procedures in their dealings with their customers. They are often established as joint ventures between equipment manufacturers and financial institutions and thus benefit from the technical support of their founders. They thus enjoy important informational advantages over commercial banks as well as better marketing strategies.

The use of specialized staff and procedures is perhaps the main strength of factoring companies which usually have a much better collection record than commercial banks. Thus, leasing and factoring companies are ideally suited for supporting the financing and growth of small and medium size firms and can play a very important role in those countries where economic and social development is dependent on a thriving SME sector. Leasing companies may also facilitate foreign direct investment as they are often established as joint ventures with foreign institutions. In this respect, they play an important role in the transfer of financial technology and know-how

Leasing and factoring companies may also have a beneficial effect on the development of the financial sector. They obtain term finance from commercial banks, allowing them to engage in maturity transformation and earn a higher spread without undue risk. But they can also raise finance from other

financial institutions such as pension funds and insurance companies, providing profitable outlets for their accumulated financial resources. Leasing companies have stimulated the development of the corporate bond market in many countries by being among the first issuers of medium to long term bonds. And more recently, by securitizing their receivables, they have given a boost to asset-backed securitization.

The development of leasing and factoring required the adoption of an appropriate enabling regulatory framework, including a clear and supportive tax treatment, and an openness to entry of specialized foreign firms and that can transfer financial technology and provide links with foreign manufacturers. Many developing countries, starting with Korea in the late 1970s, have supported the establishment and growth of leasing and factoring companies. The sector is today far more developed in Asia, especially East Asia, although significant progress has also been made in Latin America and Eastern Europe. The Arab world appears to be behind in the development of leasing and factoring companies, as in most other areas of the financial sector, although the basic regulatory framework has been established in a number of Arab countries, including Kuwait, Tunisia, Morocco, and more recently Egypt and Lebanon.

2- Contractual Saving Institutions

As already noted, contractual savings institutions are by far the most important NBFIs. They have the potential to accumulate vast amounts of long-term financial resources and to literally transform the structure and functioning of capital markets.

Countries vary considerably in the relative importance of their contractual savings institutions. We can usefully distinguish three levels of development:

- Countries where the assets of pension funds and insurance companies correspond to less than 10% of GDP;
- Countries where they are over 10% but less than 50%;
- Countries where they exceed 50%, in some cases by a wide margin.

The first group covers most Latin American countries (with the exception of Brazil, Colombia and most notably Chile), all Francophone African countries, and all Eastern European and Asian countries (except the Asian countries listed below).

The second group covers Brazil and Colombia among Latin American countries, such Asian countries as India, Indonesia, Korea, the Philippines and Sri Lanka, all MENA and Anglo-phone African countries, and all the continental European countries (except Scandinavian countries as well as the Netherlands and Switzerland).

The third group covers mainly Anglo-American and Scandinavian countries (i.e. US, Canada, UK, Ireland, Australia, New Zealand, Denmark, Finland, Norway and Sweden) as well as Switzerland and the Netherlands among European countries, Hong Kong, Japan, Malaysia and Singapore among East Asian countries, South Africa and Chile.

Jordan, Morocco and Tunisia among Arab countries bordering on the Mediterranean Sea have total contractual savings in the region of 20% of GDP, while in Egypt the total assets of the social insurance system, private pension funds and insurance companies are nearly 40% of GDP. Despite basing

their pension systems on the so-called scaled premium approach, there are important differences among the contractual savings sectors of these four Arab countries.

In Jordan, the assets mostly represent the accumulation of financial resources by the Social Security Corporation. This is financed with a 15% contribution rate and has benefited both from a low dependency ratio (a small number of beneficiaries compares to the number of contributors) and from a positive, though moderate, real rate of return.

Egypt applies a much higher contribution rate of 26% in its social insurance system. Annual flows into the system are very large as both the system and the covered populations are very young. However, the benefits of the large annual net inflows have been offset by highly negative real returns earned in the late 1980s and early 1990s (World Bank 1993).

Kuwait has a contribution rate of about 15% in its Social Insurance System.

Morocco and Tunisia have social pension systems with much lower contribution rates and more mature structures. These already face financial pressures with limited accumulated resources. However, both countries operate other social funds with surplus resources, in particular the funds for family allowances.

All five countries have very young populations. Their social security systems may benefit in the medium term from the expansion of coverage. However, a sounder basis for their future evolution and greater contribution to financial sector development would be achieved if the systems were based on individual

accounts with a more direct link between contributions, investment income, and benefits.

Contractual savings institutions experienced rapid growth in the 1980s in most countries of the third group (Table 2). In four of these countries (the Netherlands, Switzerland, South Africa, and the United Kingdom), the total assets of pension funds and insurance companies exceeded 100% of GDP in the early 1990s, growing from less than 50% in 1970. Among East Asian countries, Singapore and Malaysia have long had sizeable contractual savings sectors, with resources corresponding to between 50% and 70% of GDP, while in the 1980s, following the radical reform of its social security system, the total assets of contractual savings institutions in Chile expanded from less than 1% in 1980 to 30% in 1990 and 52% in 1993. The main factors explaining the high rate of growth in these countries were expansion of coverage and/or high investment returns, especially in the 1980s.

What accounts for the underdevelopment of contractual savings in the different Countries? In the very poor countries in Africa, Asia and Latin America, the low level of income and wealth is the most important factor. Poor households cannot afford to put aside large sums of money for their future long-term needs. Although high-growth poor countries experience a high rate of saving (e.g. China and India in recent years), such saving is usually first placed in bank deposits and other liquid instruments. Reliance on the extended family and other informal support systems, which is more prevalent in poor countries with large rural populations, is another factor.

In middle income countries, the main reasons for the underdevelopment of contractual savings are high inflation and macroeconomic instability, a repressive regulatory framework, and the extensive of an unfounded and often badly designed

social security system. Each of these factors can have important adverse effects on the development of contractual savings.

High inflation undermines the predictability of operations of pension funds and insurance companies. Although use of indexed instruments may mitigate the problem, indexation mechanisms often break down in highly inflationary countries. Repressive regulation has a negative impact because it impedes competition, innovation and efficiency and leads to a widespread and mutual mistrust between contractual savings institutions and their customers. Finally, the existence of a badly designed and often unfounded social security system may crowd out the development of contractual saving institutions, both by weakening the need for them and by limiting the scope for their expansion through the imposition of high payroll taxes.

Among developed countries, the main factor explaining differences in the state of development of contractual savings has been the existence or not of a social security system promising more or less generous pensions and operating on an unfounded, pay-as-you-go basis. The countries of Southern Europe, from Portugal to Turkey, fall under this pattern as well as Germany, Belgium and Austria. In addition, the operation of unfounded or partially funded occupational pension plans has been another contributory factor.

3- The Insurance Sector

The insurance sector comprises life and nonlife (also known as casualty and property) insurance companies. Their development varies considerably across countries (Table 3). It has been influenced by the same factors that determine the growth of contractual savings institutions. In fact, life insurance companies are a main component of contractual savings because

they offer whole life and endowment insurance policies as well as a growing variety of annuity products. Nonlife insurance companies generate relatively smaller amount of financial assets deriving from the reserves they set aside to cover future claims.

Income and wealth, macrofinancial stability, and the regulatory framework are the main determinants of insurance business as they are of contractual savings more generally. In many developing countries, including most Arab countries, the main line of insurance business is compulsory motor insurance, which is often subject to regulated and low premiums. Motor insurance produces large technical losses, which force insurance companies to scrutinize claims and delay their settlement. In many cases, large court awards complicate matters, as claimants prefer to go to court rather than accept reasonable settlements by insurance companies. A climate of mistrust has evolved over time between companies and their clients. This has had adverse effects not only on motor insurance but also on the development of other personal lines including household and life insurance.

In many developing countries, large industrial and commercial risks are reinsured with international reinsurance companies. This protects the domestic market from excessive retention of risks, but it also implies that the domestic market does not develop the capacity to price and retain risks locally. However, in countries where local retention has been enforced and where the reinsurance business has been declared a state monopoly, the financial and insurance results have been disastrous.

In most countries around the world, including East Asia, Latin America and Eastern Europe, insurance business has experienced considerable growth. In the Arab world insurance business has stagnated and has suffered declines in relation to

GDP. In large part, this may be attributed to the underdevelopment of life insurance. Whereas in many countries around the world the share of life premiums in total premiums has been growing fast, reaching or exceeding 60%, it has hovered around 20% or less in Arab countries (Table 4).

The development of life insurance is often affected by the existence of a credible social security system and/or the offer of well-funded company pensions based on defined benefit plans. But in countries where the security of social pensions is in doubt, life insurance business may benefit as workers seek alternative means for securing their old age financial needs. For instance, life insurance has been growing very fast in France where both social security and company pensions are unfounded.

But life insurance business also receives a great boost in countries that rely on defined contribution pension plans since workers purchase annuity products when they retire. The rapid growth of life insurance business in Chile is attributed to the pension reform program that was implemented in the early 1980s. The life insurance sector also benefited from the compulsory purchase of term life and disability insurance. This is needed to protect workers and their families from financial consequences of serious accidents and death before reaching retirement.

In Arab countries, cultural and religious factors may also explain the underdevelopment of life insurance. However the repressive regulatory environment, lack of competition and product innovation, and the prevailing mistrust of insurance companies have probably been of greater significance. After all, life insurance represents nearly 50% of total premiums in

Malaysia, where life business corresponds to 2.30% of GDP against 0.16% in Egypt and 0.12% in Tunisia.

4- Venture Capital Companies and Mutual Funds

These two types of institutions are the latest additions to NBFIs, although they have existed in one form or another for a long time. Their role has become more important in recent years as a result of the growth of pension funds and other contractual savings institutions.

Venture capital companies (VCCs) specialize in financing small firms and new ventures. Increasingly, they become involved in financing infrastructure and other major projects that governments delegate to the private sector for more efficient construction and management. The main characteristics of VCCs are that they offer both equity and debt finance and take a more active and specialist interest in the management of the ventures they support. Their approach is described not as "hands-off" as with traditional commercial banking, but rather as "hands-on" but with "gloves-off". VCCs expect sizable losses on some projects but operate on the principle that a few successful ventures will cover most losses and will leave a substantial profit to compensate their founders for the risks assumed.

VCCs play an instrumental role in the provision of high tech finance in the United States and in supporting the emergence of large numbers of new ventures in such areas as computing and electronics, biotechnology, etc. Their successful operation requires an enabling regulatory framework and an environment that is conducive to private sector initiatives. Access to long-term financial resources and an active market allowing the disposal of stakes and exit from individual companies once the latter are well established are also essential.

Mutual funds investing in equities or bonds have been developed over time as means for conferring to small individual investors the benefits of professional fund management and efficient risk diversification. Their number has proliferated in recent years, especially in the financial systems of high-income countries. There are now mutual funds specializing by sector or by country or region as well as mutual funds following active investment management policies or passive ones using published indices of various types of securities.

The proliferation of specialized mutual funds has allowed their use by pension funds and other institutional investors for their asset allocation, provided a reduced management fee can be negotiated. Pension funds and other institutional investor clearly lack the specialist skills needed to invest in particular economic sectors or in particular regions or countries. Using well established and successful mutual funds is an economically viable and efficient alternative.

Mutual funds, in the form of venture capital funds, are also established by successful venture capitalists. Such funds have also become an important outlet for the financial resources controlled by pension funds and other institutional investors. Institutional investors often lack the skills for dealing with small firms and new ventures, both in selecting promising projects and in monitoring their performance. Participating in venture capital funds, that may also be listed on the stock exchange and may thus be easy to dispose, is an effective alternative that is gaining popularity around the world. Such funds or investment trusts may also be used for financing infrastructure projects, real estate development, and other forms of private equity. The latter usually offers higher returns than publicly listed traded equity

and is also gaining in popularity among institutional investors in America, Europe and Asia.

Venture capital companies and mutual funds are not very advanced in the Arab world although the legal foundations for their creation and growth have been established in all four Arab countries covered in this paper. The prospects for these types of NBFIs look very promising, especially if sound macro financial policies continue to be pursued and the countries concerned are able to reform successfully their contractual savings sectors and especially their social security and pension systems.

III- Examination of the Recent Growth of NBFIs in Kuwait

The NBFIs sector in Kuwait is poised to make a significant contribution to economic development following recent monetary policy changes. For a review of the financial sector of Kuwait before the recent policy reforms, see World Bank (1993). First, enabling legislation for the creation of leasing companies and mutual funds by commercial banks has been enacted. Second, the privatization program has been pursued with renewed vigour. Third, the modernization of the securities markets has reached a critical stage. Fourth, the reform of the financial sector has continued to progress with a revised regulatory framework and greater emphasis on competition and innovation. And, fifth, the financial performance of the non-bank financial intermediaries have been improved with the liberalization of interest rates paid on new and reinvested balances.

Various studies and policy-makers have examined alternative strategies for promoting economic growth. Notable among these is the "supply-leading" hypothesis that financial deepening is a catalyst for economic growth. Accordingly, the creation and expansion of modern financial institutions both banks and NSFIs becomes an important inducement for capital

accumulation and sustained real economic growth. Most empirical studies have generally been very supportive of the important role of the financial institutions in the economic development process. Examples of such studies include Morley (1971), Mckinnon (1973), Shaw (1973), Fry (1978), Diaz-Alejandro (1985), and Moore (1986). These studies regress the contemporaneous values of a variable representing real economic growth on the contemporaneous values of some measure(s) of financial deepening. Typically, the estimated coefficient on the financial deepening proxy tends to be positive and statistically significant which is usually interpreted in favour of the supply-leading hypothesis. In light of the overwhelming empirical support for this hypothesis, many, perhaps most, studies and policy-makers in developing economies seem to adhere to the view that financial deepening is a necessary precursor of economic development. Indeed, most participants in the Economic Research Forum's First Workshop on Financial Market Development held in 1994 have implicitly adopted a similar view. Commenting on the Workshop, El-Erian (1995, p.1) writes: "The papers discussed at this workshop ..all started from a common premise that an efficiently operating domestic financial system is a critical component of efforts to achieve sustained improvement."

While plausible, another equally plausible hypothesis is the "demand-following" thesis. This alternative hypothesis holds that it is the real sector (not the financial sector) which leads in the dynamic process of economic development. Such a hypothesis, originally due to Patrick (1966) and recently revived by Ireland (1994), argues that progress in domestic financial sector is simply responding passively to a growing economy. As the real economy expands and advances, it generates increased and new demands for financial services with the consequent progress in the financial market.

The preceding discussion then suggests that there are two possible patterns in the casual relationship between financial deepening and real economic growth. The supply leading hypothesis contends that expansion and progress in the domestic financial sector (banks and NBFIs) precedes (induces) expansion in the real side of the economy. In contrast, the demand following thesis argues for a reverse causal pattern in which growth in the real sector promotes (causes) expansion in the domestic financial market (banks and NBFIs).

Clearly, uncovering the nature of the causal relationship between financial deepening and real economic growth in any particular country is paramount to designing proper economic development policies. If causality is consistent with the supply-leading hypothesis, then policies should be directed at establishing and promoting financial institutions and improving their operation regardless they are banks or non-banks financial institutions. If, on the other hand, causality accords instead with the demand-following view, then any initial policy emphasis on financial development should be deemed premature and entail unnecessary wasteful use of scarce resources. Moreover, another costly risk of overemphasizing financial deepening, according to the demand-following thesis, is that attention will then be diverted from other, more relevant and urgently needed policy options to propel economic growth, such as export promotion or tax reforms.

Therefore, research should focus on testing the direction of causality between financial deepening, in particular NBFIs, and economic growth in Kuwait. The high correlation (significant regression coefficient) between financial deepening and real economic growth reported by most previous studies cannot discriminate between four different causal hypotheses. These are that: (1) financial deepening causes changes in real

economic growth (the supply-leading view); (2) real economic growth causes financial deepening (the demand following view); (3) both hypotheses are valid, implying bi-directional causality; and (4) neither hypothesis is valid, implying causal independence. If causality in a given country obeys hypothesis (2), (3) or (4), then serious doubts will be cast on most previous studies in this area. In particular, hypothesis (2) implies that previous models are meaningless because the effects reported should have been assigned to the dependent (not independent) variable. Under hypothesis (3), previous results are plagued with simultaneous-equation bias, rendering these results both biased and inefficient. Finally, if hypothesis (4) is instead correct, then previous regression results linking financial deepening to real economic growth can be considered spurious, whereby the reported correlation is in fact attributable to some omitted (but relevant) variables. Granger (1986) provides a lucid theoretical discussion of these and other related issues.

The remainder of the study is organised as follows. Section IV provides a brief discussion of the methodology and data used. Section V reports and analyses the empirical results. Section VI concludes the study and discusses some policy implications.

IV - The Methodology and Data Used

The focus of this study is on the causal relationship between financial deepening as manifested by the expansion of NBFIs in Kuwait and real economic growth. The results are then compared with two GCC member countries; namely, Saudi Arabia and the United Arab Emirates. Availability of consistent and sufficiently long annual time series data dictated the choice of these countries. These countries, moreover, represent a variety of economic experiences, making them an interesting case to

study the causal role of financial deepening in the economic growth process. Prior to the major oil price drop of the early 1980s, both Saudi Arabia and the UAE achieved remarkable real economic growth of 11 per cent and 13 percent per year respectively. However, in the period 1981-88 when oil prices dropped drastically, both countries suffered an economic decline of -0.6 and -3.8 percent annually. In the 1990s the two countries seemed to have recovered where their real GDP grew by 5 and 6.5 percent respectively.

In examining the direction of causality between any two variables, the Granger procedure has gained a lot of popularity, partly because of its simplicity. This procedure further saves degrees of freedom, which, in relatively small samples, is an important advantage. Geweke et al. (1983) have also reported Monte-Carlo evidence in favour of the Granger Procedure over several alternatives. Briefly, a time series $\{X_t\}$ is said to Granger cause another time series $\{Y_t\}$ if the prediction error from regressing Y on X declines by using past values of X in addition to past value of Y .

Tests of Granger-causality require stationary time series. A variable is said to be stationary if its stochastic properties are time invariant (i.e., its mean, variance, and covariance with other variables in the model do not depend on time). The use of nonstationary variable(s) in a given model leads to the "spurious regression phenomenon" discussed by Granger and Newbold (1974) and Phillips (1976). Moreover, Stock and Watson (1989) have also shown that the usual test statistics (t and F) will not possess standard distributions if some of the variables in the model have unit roots and are thus nonstationary. There are a number of ways to test for nonstationarity. Granger (1986) shows that a nonstationary time series $\{Y\}$ can achieve stationarity if differenced appropriately. The appropriate number of differencing is called the order of integration. Hence, Y is said

to be integrated of order d (contains d unit roots) if Y becomes stationary after being differenced d times, denoted by $Y_t I(d)$. To find out the proper order of integration for any variable, researchers usually use the Dickey-Fuller (DF) and/or the Augmented Dickey-Fuller (ADF) tests. These “unit roots” tests have become quite popular in the recent econometric literature and thus their full details are not reproduced here (Maddala 1992). However, a brief account may be warranted. The DF test is based on estimating the following equation:

$$\Delta Y_t = \alpha + \beta Y_{t-1} + \gamma \text{Time} + u_t \quad (1)$$

where A is the difference operator, Y is the variable being tested (in levels or log-levels), Time is deterministic time trend, and U is an error term. The null (maintained hypothesis) is that Y is nonstationary (contains a unit root), with stationarity being the alternative hypothesis. The test statistic is calculated as the ratio of β to its standard error, but the corresponding critical values are modified t -ratios provided by Fuller (1976). If β proved statistically significant, we reject the null, which means that Y is stationary in the level form. Otherwise, we conduct a similar test to see whether first- (second- etc.) differences achieve stationarity for Y . The ADF test is akin to the DF test except that it includes lagged values of the dependent variable in the testing equation to guard against possible autocorrelation.

Once the two variables of interest (Y and X) are converted to stationary time series (denoted by y and x), we can test for Granger-causality running from x to y by applying the following standard Granger-causality test:

$$Y_t = \alpha_0 + \sum_{i=1}^h \alpha_{1i} Y_{t-i} - \sum_{i=1}^k \alpha_{2i} X_{t-i} + Y_t \quad (2)$$

where $\sum \alpha_{1i}$ and $\sum \alpha_{2i}$ and polynomials of some orders (h and k respectively), and μ is a white-noise error term. I use a maximum lag of 3 years for h and k . A longer lag profile could seriously deplete scarce degrees of freedom particularly in small annual samples. Within that lag structure, the proper lag length on each variable have been examined by means of the Hendry General-to-Specific modelling strategy (Gilbert 1986).

The null hypothesis that X does not Granger-cause Y will be rejected if $\sum \alpha_{2i} \neq 0$, which can be tested using an F-test. To test the reverse hypothesis that Y does not Granger-cause X , we estimate a similar equation to (2) except for using X_t as the dependent variable and examining whether the lagged coefficients on y are jointly statistically significant.

The above standard Granger-causality test between X and Y is valid only if the underlying variables are not cointegrated. Cointegrated variables, if they are disturbed, will not drift away from each other and thus possess a long-run equilibrium relationship. For more on this, see Davidson and Mackinnon (1993), and Harris (1995). Otherwise, Hendry (1986) and Engle and Granger (1981) have recently demonstrated that inferences from equations like (2) above will be biased since they overlook valuable long-run (low-frequency) information. If Y and X are found cointegrated, then the proper approach is to use Granger's (1986) Representation Theorem to construct an Error Correction Model (ECM) to analyze the causal relationship between the two variables.

Therefore, it is important to examine the cointegrating properties of Y and X before using the standard Granger procedure. There are two possible outcomes. One possibility is that the two variables are stationary in different orders, in which case they cannot be cointegrated. Another possibility is that the

two variables possess the same order of integration. In this latter case, further testing is required to check whether the nonstationary form of the variables (having unit roots) share the same common unit root (cointegrated) or possess different unit roots (noncointegrated). To that end, we need to estimate the associated cointegrating equation using the variables in their nonstationary form. These are:

$$Y_t = \lambda_0 + \lambda_1 X_t + e_t \quad (3)$$

We examine the stationarity property of the residuals (e) in equation (3) by means of the DF test (see equation I) and by Cointegrating-Regression-Durbin-Watson (CRDW) estimates recommended by Engle and Granger (1987). The two variables are said to be cointegrated if the maintained hypothesis of nonstationary residuals is rejected.

If the two variables are deemed cointegrated, then the final stage of the empirical methodology is to construct Error Correction Models that take into account the cointegration properties of the two variables. The ECM differs from the standard Granger-causality model (2) in that it adds another regressor; namely the estimated residuals (lagged once) obtained from the cointegrating equation (3) which is called the error-correction (EC) term. Thus, the ECM is:

$$Y_t = \alpha_0 + \psi e_{t-1} + \sum_{i=1}^h \alpha_{1i} + \sum_{i=1}^k \alpha_{2i} X_{t-1} + \varepsilon_t \quad (4)$$

Interestingly, as Granger (1986) shows, the EC term provides another channel by which X can Granger-cause Y even when the lagged co-efficients of x ($\sum \alpha_{2i}$) are statistically insignificant. Thus, X is said to Granger-cause Y if $\sum \alpha_{2i}$ is jointly significant and/or ψ is significant. Some researchers [e.g., Jones and Joulfaian (1991)] have argued that the lagged coefficients on x represent *short-run* Granger-causality, while

the coefficient on the EC term reflects *long-run* Granger-causality relationships. A similar ECM is constructed to test for Granger-causality from Y to X.

The above empirical procedures are used to detect the direction of causality between financial deepening and real economic growth in the three ERF members. The annual time series cover 1974-1997 for Kuwait; 1975-1997 for Saudi Arabia and 1974-1997 for the United Arab Emirates.

One last task in designing the empirical methodology is to define proper measures of the financial deepening and real economic growth. For the latter variable, we used the growth rate (percentage changes) of real GDP in 1989 prices denoted by G. Since financial deepening is more difficult to quantify, we used two alternative proxies. One is the currency ratio, denoted by K, and calculated as the ratio of currency to the narrow money stock (M1). Vogel and Buser (1976) argue that this measure assesses the complexity (sophistication) of domestic financial markets. A decrease in this ratio signifies a higher diversification of financial institutions and greater availability and use of non-currency (bank deposits) forms of transaction media. The second proxy of financial deepening is the inverse of broad-money velocity, that is, the ratio of broad money stock (M2) to nominal GDP. This measure, suggested by McKinnon (1973) and Shaw (1973), is often called the monetization variable (Z). An increase in this variable, which measures the size of the financial market, indicates further expansion in the financial market relative to nonfinancial markets since it implies faster accumulation of a wide range of financial assets (primarily saving accounts). Annual data on the components of the three measures (G, K, and Z) for the three countries (Kuwait, Saudi Arabia, and the United Arab Emirates) are compiled from various issues of the International Financial Statistics published by the International Monetary Fund.

V- The Empirical Results

Based on the foregoing discussion, support for the supply-leading hypothesis would be inferred if financial deepening (K and/or Z) unidirectionally Granger-causes real economic growth (G). If, however, it is real economic growth that unidirectionally Granger-causes financial deepening then support is instead obtained for the demand following hypothesis.

Table 5 reports the results from the unit roots (nonstationarity) tests for the three sample countries.

The test results from *both* DF and ADF procedures indicate that, except for the monetization variable in the case of Saudi Arabia, the null hypothesis of nonstationarity is soundly and consistently rejected for all variables across all countries if these variables are expressed in first-differences. Thus, these variables can be considered integrated of order one [$\sim I(1)$] and may thus be cointegrated. The monetization variable (Z) for Saudi Arabia, however, seems to be stationary in levels [$\sim I(0)$]. Therefore, in the case of Saudi Arabia, Z cannot be cointegrated with G and, as such, the two variables possess no long-run equilibrium relationship between them.

The stationarity results of Table 1 are utilized to estimate appropriate bivariate cointegrating equations for the three countries. The estimated residuals from these equations are recovered and tested for nonstationarity. The test results from the DF and the CRDW procedures are displayed in Table 6. As can be seen in the table, these results clearly suggest the presence of strong cointegration among each pair considered and across all these countries. Thus, there appears to be important long-run

relationships between real economic growth and either currency ratio or the monetization variable in the three GCC countries.

Next specifying an error-correction models to test for (short-run and long-run) Granger noncausality between financial deepening and real economic growth. The results are reported in Table 7.

For both Saudi Arabia and the United Arab Emirates, the results indicate some support for the supply-leading hypothesis that financial deepening (as measured by the monetization variable Z) is a catalyst for economic growth, at least in the short-run. In the long-run, the results suggest no reliable relationship between the two variables. When financial deepening is measured not by the size of the financial sector (Z), but rather by its complexity (the currency ratio, K), then financial deepening and real economic growth are mutually causal in the long-run, with no short-run causal linkage. Therefore, using K, the evidence in the long-run supports the coexistence of a supply-leading and a demand-following processes in Saudi Arabia and in the United Arab Emirates.

In the case of Kuwait, the results reveal no causal relationship in the short-run between financial deepening (defined by NBFIs) and real economic growth. However, in the long-run, the evidence clearly shows unidirectional Granger-causality running from financial deepening (particularly if measured by K) to real economic growth in accordance with the supply-leading hypothesis. If Z is instead used, the results still indicate Granger-causality flowing from financial deepening to real economic growth, but with some (albeit weaker) feedback's from the latter to the former.

Before concluding, observe that blind applications of the standard Granger causality tests would have yielded incorrect causality inferences. For example, using K as the measure of financial deepening, standard Granger's tests suggest no causal relationship between financial deepening and real economic growth in all three countries. Yet, incorporating the cointegration properties of the variables, results from the ECM clearly indicate the presence of strong causal relationships between these same variables in every country examined.

VI- Conclusions and Policy Implications

Kuwait faces important challenges of improving economic efficiency, diversifying its economic base, given its excessive reliance on depletable natural resources; and more important, providing increased employment opportunities to a growing indigenous labour force. To help achieve its objective Kuwait has reduced financial imbalances and is gearing its medium-term economic policies toward achieving high economic growth through liberalisation, deregulation, and promotion of private sector activity. These challenges and the required policy reforms to deal with them have important implications for Kuwait's financial systems, which will need to adapt to the changing demands of the private sector, support the structural changes in the period ahead, and position themselves to compete in the global economy.

Kuwait's bank intermediaries are at an advanced stage of development, having already undergone important changes in their size, structure, managerial capabilities, and adoption of modern technology. Nonetheless, domestic money markets remain underdeveloped, stock exchanges face various constraints, and corporate bonds and secondary markets for government paper have not emerged in any significant manner.

Moreover, competition remains limited, government equity participation in and control of financial institutions is relatively significant, and there are moratoria on new domestic and foreign banks.

This study has identified a number of steps toward completing the reform of Kuwait's financial systems, with a particular focus on the need to strengthen market forces; promote competition and efficiency; open up the financial sector to increased foreign participation; deepen and develop capital and equity markets; enhance prudential regulations and supervision; and upgrade the standards of transparency and the provision of financial information. These reforms will need to go hand in hand with structural reforms including privatization and deregulation, as well as sustained efforts to maintain financial stability through prudent fiscal and monetary policies. Policy makers in Kuwait are aware of these challenges and of the required structural changes, some of which are at various degrees of preparation or implementation. The reform measures outlined in this study are signposts rather than a detailed road map; the latter will have to integrate other elements of the reform agenda and take into account the political and social dimensions of economic change.

The main conclusion from the preceding analysis is that NBFIs complement the services provided by banking institutions and also represent a countervailing force to their dominant role, forcing them to be more competitive and efficient. NBFIs provide a strong stimulus to the development of the capital markets, generating large amounts of long-term financial resources and creating new sources of supply and demand for marketable securities.

For leasing, factoring and venture capital companies, which mostly deal with financial professionals or, at worst, businessmen and entrepreneurs, the main precondition for their creation and growth is enactment of an enabling regulatory framework, including a clear and supportive tax treatment. Openness to foreign participation to ensure availability of the specialist skills and transfer of financial technology and know-how would also be very helpful. If such companies provide loans to consumers, or obtain funds from non-professional investors, they should be subject to the same consumer and investor protection regulations as other financial institutions.

The empirical results of this study do suggest some support for financial deepening as an engine for real economic growth in the three countries examined. Perhaps equally important, the empirical results also indicate different inferences depending on the precise measure of financial deepening used and the results are also sensitive to the short versus long-run causality processes.

An unambiguous support for the supply-leading hypothesis is obtained for Kuwait, but only in the long-run. That is, financial deepening, defined either in terms of the breadth (Z) or complexity (K) of its financial system, unidirectionally causes (induces) real economic growth. Such economic benediction of financial deepening can be reaped in Kuwait only gradually in the long-run. Over the shorter time horizon, the results evince no causal link between financial deepening, defined in term of NBFIs and real economic growth.

A somewhat different picture emerges for Saudi Arabia and the united Arab Emirates. In both countries, there is clear evidence that expansion in the size of their respective domestic

financial markets can trigger *quick (short-run)* causal effect upon real economic growth. In the long run, however, such beneficial outcomes from enlarged financial markets would slowly disappear as both economies mature. An opposite conclusion is revealed for the alternative measure of financial deepening. This measure defined by the complexity and sophistication of the financial markets in both Saudi Arabia and the United Arab Emirates is relatively leaden to produce much impact on their respective economic development processes. This is because no systematic Granger-causality relationship between this measure of financial deepening and real economic growth has been found in the *short-run*. In contrast, there exists a strong causal relationship between the complexity of financial markets and real economic growth in both countries in the long-run. Interestingly, this causal relationship is bi-directional, given credence to both the supply-leading as well as demand-following propositions. Thus, while sophisticated in financial markets ultimately insights higher economic growth, economic development itself would feedback and induce further sophistication in financial institutions.

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Table (1)
Leasing in Selected Countries
 (% of private investment)

	1988	1993	1996
United States	32	32	32
United Kingdom	20	20	19
Australia	33	25	20
Spain	26	28	18
Sweden	27	15	20
Ireland	19	28	43
Portugal	10	10	24
Korea	13	16	23
Indonesia	6	9	14
Colombia	1	6	21
Hungary	--	8	18
Venezuela	12	8	15

Source: International Financial Corporation (1997).

Table (2)
Pension Fund and Life Insurance Assets in Selected
Countries
 (% of GDP)

	1970	1980	1993	1996
Netherlands	45	63	110	124
Sweden	42	51	60	76
Switzerland	51	70	105	130
UK	43	46	97	145
US	40	46	74	90
Chile	--	1	31	52
Malaysia*	18	21	51	58
Singapore*	17	41	68	68
South Africa	40	47	81	121
Egypt	--	39	34	36
Jordan	--	10	17	19
Morocco	--	--	12	18
Tunisia	--	--	10	12
Kuwait	--	9	11	12

* The data do not include the funds invested directly by individual workers in housing and other approved assets. Although Singapore is a high-income country, it is classified in this paper with developing countries because of the historical interest of its performance.

Source: Davis (1997) and national central banks.

Table (3)
Life and Non- life Insurance Premiums in Selected Countries
 (% of GDP)

	1985	1990	1994
Netherlands	5.60	8.08	8.80
Sweden	4.72	4.83	6.40
Switzerland	7.07	8.03	9.74
UK	7.11	9.67	11.43
US	7.52	8.89	8.57
Chile	2.16	2.97	3.30
Malaysia	2.79	3.09	4.65
Singapore	2.40	3.20	4.22
South Africa	7.22	10.60	12.77
Egypt	1.00	0.89	0.79
Jordan	--	--	--
Morocco	1.84	1.92	2.65
Tunisia	1.63	1.51	1.71
Kuwait	0.90	0.85	0.90

Source: Sigma, Swiss Reinsurance.

Table (4)
Share of Life Insurance in Total Insurance Premiums in
Selected Countries
 (% of total premiums)

	1985	1990	1994
Netherlands	46.6	51.7	51.3
Sweden	57.1	52.0	54.8
Switzerland	53.3	55.9	61.5
UK	59.8	64.5	63.9
US	37.9	42.6	42.4
Chile	52.4	59.6	59.1
Malaysia	41.9	44.3	49.5
Singapore	39.5	56.3	64.7
South Africa	76.8	80.0	80.8
Egypt	18.0	18.0	20.3
Jordan	--	--	--
Morocco	18.1	19.3	21.1
Tunisia	5.20	8.60	7.00
Kuwait	--	--	--

Source: Sigma, Swiss Reinsurance.

Table (5)**Unit Roots Test Results**

Null Hypothesis: The Variable is Non stationary in the Tested Form Kuwait

(A)	Variables in Levels	DF	ADF(L)
	G	-6.27**	-3.71
	K	-1.37	-1.26
	Z	-3.41*	-2.85
(B)	Variables in First- Differences		
	ΔG	-8.36**	-6.20
	ΔK	-5.32**	-3.53
	ΔZ	-6.73**	-4.83

Saudi Arabia

(A)	Variables in Levels	DF	ADF(L)
	Real Economic Growth, G	-3.50*	-2.40
	Currency Ratio, K	-1.83	-1.99
	Magnetization, Z	-1.64	-2.33
(B)	Variables in First- Differences		
	ΔG	-6.41**	-6.06
	ΔK	-5.67**	-3.28
	ΔZ	-2.86	-2.34

The United Arab Emirates

(A)	Variables in Levels	DF	ADF(L)
	G	-3.13	-1.74
	K	-3.80	-2.91
	Z	-1.52	-1.44
(B)	Variables in First-Differences		
	ΔG	-5.07	-4.37
	ΔK	-4.95	-4.85
	ΔZ	-4.04	-2.00

Notes: L is the lag length in years.

* indicates rejection of the null hypothesis of nonstationarity the 10 percent level of significance while.

** indicates a stronger rejection at the 5 percent level. The critical values from Fuller (1976) for a sample size of 25 observations are -3.24 and -3.60 at the 10 and 5 percent levels, respectively. All equations for DF and ADF tests include deterministic time trends. One or two lags of the dependent variable in the ADF test are included to purge autocorrection.

Table (6)
Cointegration Test Results

Null Hypothesis: The Two Variables are Noncointegrated

Cointegrating Equation	Kuwait DF	CRDW
G = f (K)	-6.36**	2.42**
G = f (Z)	-6.48**	2.45**
Cointegrating Equation	Saudi Arabia DF	CRDW
G = f (K)	-3.64**	1.51**
Cointegrating Equation	The United Arab Emirates DF	CRDW
G = f (K)	-3.15*	1.58**
G = f (Z)	-3.16*	1.57**

Notes: See notes to Table 5. For Saudi Arabia no cointegrating equation between G and Z is estimated since the two variables possess different orders of integration as suggested by the results in Table 5. The approximate critical values from Engle and Yoo (1987) for the bivariate case are approximately 2.90 (10 percent level) and 3.29 (5 percent level) for the DF test; and 0.69 (10 percent level) and 0.78. (5 percent level) for the CRDW test.

Table (7)
Granger- Causality Test Results From Error Correction
Models

Null Hypothesis	F- Statistics for Short- Run Noncausality	F- Statistics for Long- Run Noncausality
Kuwait		
K → G	0.85	7.51**
G → K	0.25	0.004
Z → G	2.39	13.40**
G → Z	0.43	3.31*
Saudi Arabia		
Currency Ratio (K → Real Economic Growth (G))	0.18	10.11**
Monetization Measure (Z) → G	3.11**	-
	0.61	--
The United Arab Emirates		
K → G	0.36	7.15**
G → K	1.64	38.32**
Z → G	5.27**	0.59
G → Z	0.78	1.16

Notes: See notes to Table 5. The → means "does not Granger causes".

Every equation in this table was tested for autocorrelation in the residuals and none was found according to the Durbin -m and the Geary- tau (nonparametric) test procedures. To guard against heteroscedasticity, all equations were estimated using the White (1980) method which yields heteroscedastic- consistent estimates of the coefficient standard errors.