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by

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This paper was prepared for presentation at the OECD-Capital Market Board Conference in Cesme, Izmir, Turkey, July 1-5, 1985. The purpose of the paper is to review the development of financial markets in some fast-growing countries in East Asia in anticipation that the development record of markets in those countries will be helpful in considering steps to strengthen capital markets in Turkey. The comments of Andrew Chen and Chun Lam on an earlier draft are gratefully acknowledged. The author is responsible for any errors that remain.

Financial Institutions and Markets and the Economic Development of Four Asian Countries

I. Introduction

Four countries in East and Southeast Asia have compiled remarkable records of economic development. The countries -- Hong Kong, Korea (South Korea), Singapore, and Taiwan -- are known collectively as the "Four Little Tigers" or the "Gang of Four." The success of the countries has been such that many have considered emulating their strategies in hopes of emulating their success. Indeed, conferences have been held on the feasibility of replicating their records of success (for example, see the Proceedings of the ARTEP conference on this subject, held in 1980).

Emulation of the four is impossible for the simple reason that none of them have followed the same paths to development. They have differed in pre-development circumstances, political strategies, cultural conditions, external financial support, and --in particular-- in strategies for the development of their financial systems. Certainly there are some similarities, but it is important to keep in mind that the four represent various paths to development rather than a single path. Nevertheless, their records of economic experimentation and economic development are instructive.

Financial strategies employed in the "four tigers" have been highly dissimilar, owing in part to the different circumstances from which the countries began their development efforts. In interest rate policies, for instance, the countries have varied from highly managed policies with selective credit controls through liberal, market-based policies. Two of the four do not have central banks. In some the informal credit markets have been instrumental. In none of the four are the authorities fully satisfied with the development of their capital markets, but for widely varying reasons.

The purpose of this paper is to provide a review of the economic development of the "four tiger" countries, especially with respect to their financial development, to serve as a basis for discussion in other developing countries. The record of success, failure, and "too close to call" with regard to various policies undertaken by the four may prove to be a useful point of departure for others.

Following this introduction, the paper turns to an overview of the development of the four without special reference to financial development. The objective is to provide the backdropping against which financial policies have been undertaken. Following the overview, the subsequent section will survey the historical development of financial markets and institutions in the four. The fourth section will discuss current questions and very recent developments in the four, and conclusions are presented in the final section.

Financial Development: Lead or Lag?

Financial economists and developmental economists have had varying opinions as to the value of expenditures to bring about the financial development of a country (see, for example, Gurley and Shaw (1955; 1967), Goldsmith (1969), Patrick (1966), Stammer (1972), McKinnon (1973), and Coats and Khatkhate (1980)). A recent study by Gupta (1984) provides a summary of the issues and contains empirical evidence from Asian and Latin American countries.

The issues, as described by Gupta, are couched in two different schools of thought, the "financial repressionists" and the "financial structuralists." The repressionists argue that economic growth is retarded by repressed interest rates (interest rates kept artificially low by government policy, and often negative in real terms) and that the liberalizing of interest rates will stimulate financial savings and economic growth. The structuralist argument is that the creation of financial institutions and instruments will induce financial savings and, ultimately, economic growth.

Gupta examines empirical evidence that leads him to conclude that financial development leads to real development, and his evidence --while mixed -- suggests that both the repressionists and the structuralists have something to offer. On applying the Granger-Sims methodology on a countryby-country basis, Gupta concludes that financial development led real development in Taiwan and Korea and followed real development in Singapore. Hong Kong was not included in the tests. For his fourteen countries overall, the conclusion was that financial development (of either the structural type or liberalization type) led to real development.

Thus, examining the thirty-or-so year record of the four countries is not likely to resolve questions of the effects of financial development on real development, or to put to rest policy debates on the financial management of the economies of lesser-developed or developing countries. It will, however, provide a useful reference for the consideration of policy. There are instances where the financial policy decisions of the governments appear to have been helpful, and others in which the decisions appear not to have been helpful. Even if the only value of the experience of the four was in helping to avoid policies which proved not to be helpful, they would be useful to examine.

II. Economic Development in the Four

The growth of the four is illustrated by the tables below. Table I demonstrates that across a 20-year period, gross domestic product per capita expanded by factors of 2.5 to 3.5 across the four (in constant dollars). Growth rates of gross domestic product are shown in Table II. The rates are generally high, but they are also highly variable across time and cross-sectionally.

TABLE I

Gross Domestic Product per Capita
($US 1970)

	Hong Kong	Korea	Singapore	Taiwan
1955	408	138	NA	179
1961	488	145	487	203
1966	736	171	601	279
1971	855	259	907	387
1974	1151	362	1716	542

Source: Chen, Edward K.Y., **Hyper-Growth in Asian Economies.** New York: Holmes and Meier, 1979, p. 10.

Chen (1979) examined the four countries and Japan. He found that the four had several characteristics in common that were associated with their successful growth. Among these, he argues that their common Chinese cultural traditions were significant in that the people were thrifty and hard-working, with high saving being related to the culture as well as to economic conditions. He also argues that they were similar in having economic environments that were largely free enterprise, and that they had all pursued export-oriented strategies.

TABLE II

Growth Rates in Gross Domestic Product

	Hong Kong	Korea	Singapore	Taiwan
1955-60	9.5	3.9	1.9	6.1
1961-65	12.2	6.3	7.2	10.0
1966-70	5.7	11.2	11.0	10.0
1971-74	6.7	10.4	11.0	7.5

Source: Chen, Edward K.Y., **Hyper-Growth in Asian Economies**. New York: Holmes and Meier, 1979, p. 10.

Colonial rule had a bearing on the development of all four of the countries. In Hong Kong and Singapore, the British presence influenced the nature of the economy that grew up, while Korea and Taiwan were heavily influenced by the rule of the Japanese. The British viewed Hong Kong and Singapore as important transshipment points, and their economies developed as major trade centers. Korea and Taiwan were important to the expanding Japanese nation as sources of agricultural products, raw materials (particularly in Korea), and later as small manufacturing points in the pre-war years. Hamilton (1983) provides a survey of the process of industrialization of the four.

Hong Kong and Singapore had particularly attractive natural ports for use by the British as collection points. In Hong Kong, a center for trade with China was available, while Singapore served well as a trade point with the countries surrounding it. British capital, later augmented by Chinese capital, was used to develop the infrastructure needed in both countries to support trade. The British, according to Hamilton, were also friendly towards the development of support industries by the native residents, augmenting the effects of British capital. Thus, imported capital played a major role in setting the stage for development of the capital resources for the post-war growth of Hong Kong and Singapore.

After initially using Korea and Taiwan as sources of food for its growing population, Japan began developing some industrial base in the two countries to augment its own output during the 1920's and 30's. In Korea, the Japanese also changed the ownership structure of the agricultural lands, taking much of the land themselves and creating a system of tenant farming as well. Thus, much of the existing social structure was affected by Japanese rule, and these changes affected the course of post-war development. Also, once the war had ended and Japan had been stripped of its "colonies," the industrial base the Japanese had established in those lands was taken over by the new governments.

Subsequently, the Communist victory in mainland China led to the flight of many Chinese entrepreneurs to Hong Kong, Taiwan, and Korea. Hong Kong came to be viewed as a "safe haven" for capital, and much of the capital leaving China in the years surrounding 1949 ended up in Hong Kong. Similarly, Singapore benefitted from Malaysian capital after the separation of the two nations in 1965, and both Hong Kong and Singapore have benefitted from capital flight from various other Southeast Asian nations over the past thirty years or so (see Wu and Wu (1980)).

After the war, nationalism was a key theme in much of Asia. The rapid reimposition of British rule in Hong Kong stopped the movement there, but it was an effective force in Korea and Taiwan. The US occupation of South Korea helped to establish an anti-left government there, and massive foreign aid began flowing into both Korea and Taiwan, particularly from the US. The Nationalists took control in Taiwan quickly and immediately began policies for the development of the country. In Korea, the Rhee regime came to power and was in charge of the nation throughout the 1950's, but failure to achieve economic development led to the removal of that government in 1960. The military coup of 1961 established the government of Park

Chung-Hee, and Park was elected to office in 1963. The Park government is associated with economic development in Korea.

Both Taiwan and Korea instituted major land reforms and along similar lines. Taiwanese land reform is associated with the period of 1949-1953. Public lands were sold off to farmers, and private lands (over 3 hectares) were "bought" by the government with bonds and equity in public enterprises (largely former Japanese holdings)in a move towards the privatization of industry. Land reform was similar in Korea but occurred later than in Taiwan. The Park government had a background in agriculture and initially had strongly pro-agriculture policies. The government annulled agricultural debts and then began offering agricultural credit on favored terms.

In both Taiwan and Korea, government policies towards agriculture following land reform were oriented towards using the agricultural base to help support the industrial base. As Hamilton expresses the point, agriculture's "surplus" was transferred to the urban industrial centers through the vehicle of government requiring that agricultural products be sold to the government at below-free-market prices, then resold to workers in the cities. This transfer allowed industry to maintain relatively low wages and stimulated the development of export-oriented industry.

In many respects, the development of Taiwan came from policies subsequently employed in Korea. Agricultural reform occurred earlier in Taiwan, and the move to "export-led industrialization" occurred earlier in Taiwan. As we will see later, experimentation by the Taiwan government with interest rate policies to stimulate saving was followed later by the Koreans.

Aid to Korea and Taiwan was very substantial. Literally, AID (the Agency for International Development) played a key role early on in Taiwan, both by providing substantial financial aid and by influencing policy. In total, American aid to Taiwan has been said by Jacoby (1966) to have cut 30 years off of the time required to achieve development. Taiwan accepted AID advice to liberalize the economy and financial structure, and in 1960 accepted the well-known "19 Point Program." This program included, among other points, liberalizing trade, freeing markets and exchange, continued denationalization of industry, and anti-inflationary fiscal and monetary policies (see Hamilton (1983) for more details).

With the loss of access to Chinese markets after 1949, Hong Kong went through a period in which it had to transfer capital from some of its trade-oriented activities into manufacturing for export. The local economy developed very quickly. Aided by the influx of Chinese entrepreneurs and capital from the mainland, a high percentage of the businesses that developed were family-owned, and the businesses found ready access to startup capital from the banks and from informal sources (to be discussed below). Uncertainty about the future of Hong Kong once the British lease runs out (1997) contributed to a slowdown in activity in the late 1970's and early 1980's, but it no longer appears that that will be a problem. Apparently, China intends to maintain Hong Kong as a thriving free port and to support a continuation of the economic development there. Nevertheless, the winds of political change could bring about a change in this situation.

Singapore merged with Malaysia in a short-lived marriage in 1963 that ended with Singapore a fully independent state in 1965. Singapore achieved its growth through massive infusions of foreign capital, largely by direct investment in manufacturing. Singapore, a small city-nation of only two million people, has also had strong government policies restricting wages. As a result, labor has been cheap, and only in recent years has government policy relaxed toward labor. Multinational corporations appear to have been attracted to the country by the country's open policies towards business, its lack of constraints on business, and by the existence of a skilled work force at low cost.

Given the widely-ranging backgrounds of the four countries, it would not be surprising to learn that their financial markets have been developed along rather different paths and at different rates as well. Such is the case. The next section considers financial development in the four.

III. Financial Markets in the Four during Development

Sophisticated capital market activities have generally lagged rather than led the economic development of the four, with some exceptions. In some of the countries, efforts to stimulate the equity markets had met with only very modest success as late as 1980, although economic development had been well under way for over twenty years. In all of the countries except Singapore, there has been a reluctance among private companies to "go public" during a large part of the period of development. That reluctance was apparently due in part to cultural traditions --a tendency of the family or clans to maintain control among themselves-- and to the desire to avoid disclosure. So, capital market development has not been especially fast-paced in some of the countries.

Taiwan

Taiwan proceeded along its financial development path relatively early. Beginning in 1949, the government exercised strong control over interest rates on deposits and loans in an effort to mobilize savings and direct investment. The country had experienced high inflation during much of the 1940's, and there was a reluctance on the part of the working class to place their savings in financial institutions. Rather, the emphasis was on holding savings in other forms, including seed to be used in subsequent crops, land, and other immobile forms. The government began the setting of high real interest rates in

1949, and over the course of the following ten years or so gradually shifted interest policies to favor longer-term instruments and steadily lower rates. The strategy seemed to work in the sense that the "savings habit" was established (see Chandavarkar (1971) for details). Rates have continued to be officially controlled but less tightly so in recent years.

The banking system is directed through the Central Bank of China, which had existed in mainland China as early as 1924. After the Nationalists left the mainland, the Bank of Taiwan served as a central bank before being replaced by the resumption of the Central Bank in 1961. The Central Bank maintains interest rate controls, establishes and oversees reserve requirements, conducts open market operations, and manages selective credit controls. Liang and Skully (1982) discuss the banking system in Taiwan in more detail.

Of the major financial institutions in Taiwan, domestic banks are the most important, accounting for over 50% of the assets of major financial institutions (Liang and Skully, 1982). Foreign banks operate in Taiwan under special controls. Among other controls, foreign banks are constrained to place a large share of their credits at medium to long terms. While banking has the primary credit role in Taiwan, the unorganized money markets are important, as they are in Korea and Hong Kong as well. In fact, Liang and Skully state that the post-dated check has been a major factor in impeding the development of formal credit markets. A recent issue of the **Far Eastern Economic Review** (March 7, 1985) (henceforth, the **Review**) states that the **unorganized markets are responsible for fully 33% of the credit requirements of business.** The resiliency of these markets in the face of financial development is perhaps due to the controls maintained by the government over interest rates in the formal markets.

Bond markets are dominated by government securities. In 1970, the government appointed 10 "government bond dealers" to trade in the bonds. In 1973, the Treasury began issuing Treasury bills. Commercial paper began being issued in 1976 with the establishment by the government of "Bill finance companies" to trade in CD's, T-Bills, bankers' acceptances, and commercial paper. As a further stimulus to the money market, a 1977 law provided tax incentives for investment in money market instruments.

The Taiwan Stock Exchange came into being after the country was well down its development path. It was organized in 1961 and began trading in 1962. The development of the market has been hampered by relatively poor or unreliable financial disclosure among listed firms, but it has developed nevertheless.

The establishment of the Exchange was accompanied by tax policies designed to encourage firms to make public offerings of their securities. For example, a newly listing firm was offered a 10% tax reduction for two years, and the first US$150 of dividends received by individuals were untaxed. Those inducements were increased in 1977 to a 15% tax reduction for three years and an increase in tax free dividends to US$600. The markets seem to have grown primarily, however, in response to a doubling of the average market price of listed shares in 1973. Listing activity increased dramatically after that point.

Korea

Korea's markets have developed more slowly than those in Taiwan. Owing to the difficulties of the war economy of the early 1950's and to substantial political instability until the early 1960's, government policy towards financial development was less consistent than in Taiwan. Korea experimented with policies of reduced interest rates during the 1950's, and after observing Taiwan's relative success sent teams to study the Taiwanese approach. In 1965, the government began a series of programs designed to increase the flow of funds into and through the banking system, much like in Taiwan in the decade before (again, see Chandavarkar (1971) for details).

As in Taiwan, the Korean government also used selective credit controls to foster export growth, offering especially favorable terms to firms that exported goods manufactured from local inputs. By the late 1970's, the government had returned to a relatively repressed interest rate structure, and the development of financial markets was again slowed.

The Bank of Korea (BOK) is the central bank in Korea. It maintains credit controls all the way to the level of controlling the maturity of loans, in addition to rates, on an industry-by-industry basis. According to Nam and Park (1982), only 15% (as of the end of 1980) of the credit issued in Korea is issued by banks that are "truly private" since the government maintains a heavy ownership role in the city banks and exercises control over those. Foreign banks were encouraged to operate in Korea beginning in 1967, and by now most of the world's major institutions have a presence in Korea. The banks are restricted relative to Korean banks; for example, they do not have access to the rediscount window at the BOK, and their holdings of foreign exchange funds are limited.

Foreign loans to Korean firms are given special treatment. On foreign loans, interest is not taxed for a period of five years, and it is only taxed at one-half the normal rate for the subsequent three years. Korean banks are obliged to guarantee such loans as well.

Korea has made a concerted effort to develop its security markets. Like in Taiwan, the Korean Stock Exchange was established in 1962. Also like in Taiwan, the exchange was largely unsuccessful in attracting firms through much of the 1960's. Family owned corporations were concerned over the loss of control and over the disclosure requirements that a public offering entailed. Unlike in Taiwan, the development of the markets occurred in response to strong measures taken by the government. In 1968 the "Law on Fostering the Capital Market" (see Nam and Park (1982)) was passed, and this law was directed at building the number and value of issues listed on the exchange. Equities in firms controlled by the government were listed, and preferential dividends were provided in the law for private shareholders of those firms. Dividends to small shareholders of Korean Stock Exchange (KSE) firms were exempted from tax, and tax concessions were provided to firms that made public offerings. In 1972 the tax exemption was extended to small bondholders as well.

The euphemistically named "Public Corporation Inducement Law of 1972" added strong **disincentives** for not making public offerings. Taxes were raised on private firms, and credit restrictions were added for such firms. Many firms that were unimpressed by the carrot of incentives were more impressed by the stick of disincentives, and public listings grew from about 40 in 1968 to over 350 in 1979.

1974 saw some unusual incentives offered to the new issue market. Credit was made available for up to 50% of the purchase cost of new issues, and the government began a set of pricing policies that often lead to significant **underpricing** of new issues (see Cole and Park (1983)). The underpricing led to abuses by insiders, as might be expected.

A joint underwriting system was established with tax incentives for firms that participated; the system was organized around the Korea Investment Corporation and received participation from securities firms, banks, and other financial institutions.

The Securities and Exchange Commission was established by law in 1977. The Commission set up the Securities Supervisory Board to supervise listed firms. In particular, the Board began administering disclosure requirements and required CPA audits for public corporations. The Board also began managing margin transactions and the process of subscription to new equity to correct past abuses.

An interesting problem that arose early in the life of the Korean markets was related to the practice of monthly settlement. Since speculators could get into and out of a position easily before settlement, it became common to "place bets" on security positions without access to the capital to cover them. The resultant speculation produced volatile price swings, and it was apparently relatively easy to manipulate prices in such a setting. In any event, a collapse of the market in 1962 only months after its opening led to substantial changes in the methods of operation.

Another institutional problem in the Korean market has been the system of limiting price changes. Instituted with the intent of protecting the investor from abrupt changes of price, the effect of the system has frequently been to cause a complete lack of trading in shares for the period of time over which the price would be allowed to adjust to the market level. This system appears to have exacerbated the investor's uncertainty rather than lessening it.

The private bond markets were stimulated by comparatively low controlled interest rates on deposits in the early 1970's and by the introduction of a public bond guarantee system. "Since 1978, public offerings of corporate bonds have surpassed the paid-in capital increase of the listed companies." (Nam and Park (1982, p. 162)). Most of the corporate bonds issued are, however, short maturity bonds (Cole and Park (1983)), and the secondary market for such issues has failed to develop.

Hong Kong

Hong Kong is paradoxical. As mentioned above, Stammer (1972) viewed the country as having "retarded financial development," but the financial institutions of the country serve as banker to much of Asia and provides a channel through which capital flows from outside of Asia. The offshore financial services provided through Hong Kong are, like those in Singapore, very substantial.

Networks of informal credit markets in Hong Kong have, according to Stammer (1972), slowed the development of formal local credit markets in Hong Kong. These networks of clans and agency houses are so efficient that direct finance is highly mobile in Hong Kong. The unorganized market continues to be important in Hong Kong to the present.

Hong Kong has no central bank, but the private Hong Kong and Shanghai Banking Corporation takes on some of the roles of a central bank, such as the issue of currency. In the free-wheeling financial world of Hong Kong, banks are active in areas of finance not common in many countries, and they dominate many areas of finance. Banks own finance companies, securities firms, insurance companies, savings and loans, and other institutions. The government does at various times halt the issuance of licenses, but the institutions in place are not highly constrained.

Foreign banks have had a visible presence in Hong Kong for many years. While foreign banks are constrained from taking local deposits, they are not constrained in many other ways. Offshore banking is greatly facilitated by government posture, so that the provision of financial services offshore is a key industry in Hong Kong (as it is in Singapore). Because Hong Kong has historically imposed no tax on the interest on loans (it now does) and Singapore imposes no tax on deposits, it is common for deposits to be made in Singapore and loans to be made from Hong Kong. Wu and Wu (1980) claim that

> "Hong Kong prides itself on giving the foreign investor no special inducements except the freedom to do virtually anything he cares to do."

Long term credit institutions have failed to develop in Hong Kong. Although there is very active trade in foreign bonds, there is little interest in long term debt securities issued by local firms. Skully (1982) argues that the lack of marketable government securities may have retarded the growth of the market for private debt securities.

Stock trading has been done in Hong Kong as far back as 1866. Nevertheless, there was little trading until the early 1970's. Then, a stock price boom occurred and trading became highly active. By 1972, four exchanges were set up in Hong Kong, although one of them failed to achieve significant volume. The government halted the formation of new exchanges, and there has been interest for several years in consolidating the exchanges.

A measure of the growth of the equity market during the 1970's is given by the increase in turnover. Skully reports that trading volume in 1969 was $2.5B HK, and in 1980 it was $96B HK, nearly a 40-times increase.

The equity market appears to have developed, in part at least, because there are no special tax incentives to the issuance of debt. Also, some security is provided investors through the Stock Exchange Compensation Fund (Skully, 1982). As in Taiwan and Korea, however, disclosure by public firms is low relative to its level in public firms in the major developed countries. This lack of disclosure has been the source of occasional scandal.

As an active financial center for the region, Hong Kong has a number of successful investment funds. However, those funds appear to have done a better job of investing local money abroad than of attracting foreign funds to local equities. Investment funds have not contributed meaningfully to the development of industrial capital into Hong Kong.

Hong Kong has been successful in developing foreign exchange markets and markets for foreign securities. The Hong Kong

Commodity Exchange was established in 1977, emphasizing foreign exchange, and gold futures were added in 1980. The country has not been successful, however, in organizing secondary money markets. Money market securities remain relatively illiquid.

Singapore

Singapore has not had the "freewheeling" financial structure of Hong Kong, but it has had a very favorable tax climate and has developed the infrastructure to serve as a financial center. As mentioned above, Singapore gives highly favorable treatment to deposits, so that deposits flow into the nation and are often reinvested elsewhere.

While there is no central bank in Singapore, the Monetary Authority of Singapore (established in 1971) is like a central bank in many respects. Prior to 1975, interest rates were maintained by a bank cartel, but they have been free since that time. The banking system includes regular commercial banks, wholesale banks, and offshore banks, with the offshore banks being by far the dominant institutions. The granting of foreign bank licenses was stopped in 1973. Wawn (1982) describes the development of financial markets in Singapore.

Chandavarkar (1971) cites Singapore as an example of a country that, in the 1960's, had relatively low real rates of interest and yet had high and growing rates of saving. The low rates were due to the cartel control. The fact that saving rates were high is explained by Chandavarkar as being due to stable prices and investor confidence in the stability of the city-nation's economy.

Singapore is especially characterized by its reliance on direct investment by foreign multinational corporations. The non-protectionist policies of the government, its role as a shipping center, and controls on labor are all cited as partial explanations of the country's attractiveness for foreign investment. During the period 1976-1980, foreign investment comprised 25% of total investment in Singapore, and 80% of manufacturing investment (Wawn, 1982).

Foreign investment was also affected by a series of measures designed specifically to stimulate investment (Chen, 1983). Among others, these measures include preferred treatment of enterprises qualifying for "pioneer" status and for additions to export industries. The pioneer firms are new firms in areas of new technology or areas not already represented by firms in the country. Such firms receive zero tax rates for a period of five to ten years. Additions to export capacity may receive taxation at a 4% rate rather than the normal 40% for a period of five to fifteen years. A number of other tax incentives and loan programs have been set up to encourage investment both domestically and by foreigners.

The Central Provident Fund (CPF) in Singapore is an important institution. It is a pension fund available to non-government employees. One-third of all private savings are invested in this fund. However, over 80% of the funds in the CPF are invested in government securities. Further, insurance companies are required to put 55% of their funds in "authorized assets" (largely government securities), so that the government bond market is dominated by these two institutions.

Because of the dominance of long-term debt markets by the CPF and insurance companies, the markets are highly illiquid and are not important to local investors. Private debt securities are not important in the local market.

The money markets are active. The T-bill market is liquid, and there is an active market in commercial paper as well.

The Stock Exchange of Singapore (SES) was judged by Emery (1970) as "the most active in Southeast Asia." The SES does not restrict equity investment by foreigners, and the government's Fidelity Guarantee Fund insures investors against the failure of the investment houses. The government has imposed strong disclosure requirements, which appear to have increased investors' confidence in investing in equities. In recent years, Singapore and Malaysia have agreed to a system of cross-listing securities on the two exchanges, and this system has increased interest in the markets at the same time as making investments in the exchanges more liquid. The system appears to have been especially beneficial to Singapore.

The Asian Currency Market (ACM) was established in 1968. The market operates much like the Eurocurrency market in that it brings together sources of capital from outside the region (from Europe and the Middle East) and channels it into uses within the region (in Asia). The ACM illustrates well the success of a strategy set up early in Singapore: to create the infrastructure to let Singapore grow into a key financial center in Southeast Asia. The market is of a size something like 10% of the Eurocurrency market.

Continued growth as a financial center, transshipment point, and manufacturing center appears to be what the future holds in Singapore.

IV. Current Issues and Recent Developments in the Four

The material for this section is taken largely from recent issues of the **Far Eastern Economic Review**, to be denoted **FEER**.

The financial markets in the four continue to progress, although not without some problems. Some of the successes and some of the remaining issues are addressed in this section.

All four of the countries have made great progress in their equity markets. Roughly through the end of 1983, market capitalizations on the four countries' exchanges, turnover (when available), and numbers of listings were as shown in Table III.

The Singapore exchange reflects activity in stocks of Singapore firms, other Malaysian firms, and listings of some foreign securities that trade only infrequently. The Stock Exchange of Singapore and the Kuala Lumpur Stock Exchange (Malaysia) have an agreement under which approximately 70% of the shares on the two exchanges are co-listed (**FEER**, 4/12/84). Brokers and dealers on the SES are well-capitalized, and trading is computerized and highly efficient. Also, Singapore permits foreigners to invest freely in its securities. The result is that SES does about 65% more volume than KLSE. Interestingly, almost 60% of the volume on the SES was in securities of Malaysian firms.

While the Hong Kong exchanges have been successful, some problems remain. The Commissioner for Securities continues

TABLE III

Equity Markets in the Four Countries

	Hong Kong	Singapore	Korea	Taiwan
Market Capitalization	$12.9B	$43.9B	$4.4B	$8.3B
# of Securities Listed	254	301	329	119

Data as of end of 1983. Dollar amounts are US$.
Sources: **FEER**, 2/23/84, 3/22/84, 4/12/84.

to move towards unifying the four exchanges, and current expectations are for completion of the process during 1986. As is the case in Taiwan, disclosure remains weak in Hong Kong. The authorities are moving towards much tougher disclosure rules and enforcement of existing rules. It is still relatively easy for insiders to act on inside information. The emphasis in continuing developments is to see that pricesensitive information gets to shareholders much more quickly than it does now.

Taiwan has a problem of apparently inadequate disclosure as well. "Many analysts feel the lack of accurate financial data is a key to why Taiwan's financial system is unable to serve an efficient intermediary function. (**FEER**, 4/25/85) To some extent, the unwillingness to disclose may be related to the important curb market, or informal credit markets, in Taiwan under which individuals (including officers and family members) supply funds to industry and the transactions are often unreported. The curb market is still reported to account for a full 33% of the requirements of industry.

Taiwan and Korea are both taking steps to open up their security markets to foreign investors. Taiwan, for example, recently allowed the establishment of investment funds to provide a vehicle through which foreign investors could invest in Taiwan securities. Korea has been liberalizing its markets at a relatively fast pace. A number of investment funds have been opened up to foreign investors, and this year Korean firms have been permitted to issue convertible securities to foreign investors. By 1986, foreign investors will be allowed to purchase Korean securities directly, and the markets are expected to be "fully open" by the early 1990's.

The curb (or kerb, or informal, or unorganized) money markets are being addressed by authorities in Korea and Taiwan. Academicians and government economists in Taiwan are quoted as saying that the kerb market reflects "distortions in the financial system caused by rigid control of interest rates" (**FEER**, 4/25/85), a reasonable proposition, and the same argument could be made about the Korean markets. The Korean concern over the curb market is exacerbated by reports that 40% of investors in securities on the Korean Stock Exchange use false names to avoid taxation and so that they can move funds freely among the curb market, the equity market, and property investments.

In Taiwan and Korea, foreign banks are restricted relative to domestic banks. In both countries, a relaxation of the restrictions is anticipated to occur quickly, so that during 1986 foreign banks should be on a roughly equal footing with domestic institutions.

A recent scandal in Taiwan has brought to light a problem that has long concerned authorities. Earlier this year, the Tenth Credit Cooperative collapsed. The Cooperative was owned by Cathay Plastic Industrial Company, a large industrial firm. The lending relationships and lack of disclosure involving Tenth loans to various Cathay firms has been brought out. The problem is symptomatic of relationships among major corporations and smaller banking institutions in Taiwan. Concern arose both because of the lack of arm's length relations between the bank and its customers and because of regulators' failure to identify the problems in advance of failure. Lack of adequate disclosure likely contributed to the problem.

Hong Kong banking is also expected to see some regulatory changes in the near term (**FEER**, 4/11/85). New regulations are expected to include regulation of capital ratios, as in most developed countries, and the provision of a scheme for deposit insurance.

Singapore's moves into futures markets received much visibility, including the recent addition of a linkup between the Chicago Mercantile Exchange and Singapore's International Monetary Exchange. While the linkup was heralded as opening up true "round-the-clock" trading opportunities in international currency contracts, volume has been disappointing. Both in Hong Kong and in Singapore, there is interest in providing stock index futures contracts on local stock indexes to heighten investor interest in their respective equity markets. At present, success in futures markets in both countries remains a future event, if it is ever to occur.

V. Conclusions

Reaching general conclusions from the experiences of the four is risky. Nevertheless, some conclusions seem warranted, although they will no doubt be subject to debate.

In broad terms, the experience of the four seems to offer something both for the "repressionists" and for the "structuralists" (see Gupta, 1984) for the reason that liberalized interest rate policies and institutional changes have both had some positive effects on the four economies. The four seem to have emphasized institutional aspects to a somewhat greater degree, but both have had a role.

Interest rate policies have been especially important in Taiwan and Korea, and particularly in the earlier stages of their development. Traditions and past experience had led to a tendency for the people of Taiwan to place their savings in nonfinancial assets. The government began a vigorous policy of interest rate management in the early 1950's that, **ex post**, seems to have been designed to mobilize savings into more productive and efficient financial channels.

The fact that Taiwan's experience with the approach was successful and that the policies were believed directly responsible for the improvement in financial savings is highlighted by Korea's efforts to follow suit. Korea had followed a regime of repressed interest rates until the middle 1960's when it studied Taiwan's record and "took the lid off" of interest rates. Notice the coincident growth rates in Table II.

It is difficult to refer to the policies of Taiwan and Korea as "liberalizing" interest rates, since the governments both continued to "manage" interest rates. But the rates were managed at positive real levels, and the policies appear to have had great benefit in stimulating intermediation. Korea subsequently returned to repressed interest rate regimes at various times and appears to have been generally less consistent than Taiwan in its policies, judging from the limited evidence examined for this paper.

Interest rate repression can have a number of effects, including the retardation of financial saving. Another is that it can stimulate the development of the so-called unorganized money markets. The unorganized markets in Hong Kong, Taiwan, and Korea all have some traditional basis (in the clans and agency houses), but certainly interest rate repression encourages their continuation and expansion.

The experiences of Taiwan and Korea with artificially **high** interest rates may also be instructive. While modern-day financial economics might argue for a fully free market determination of such rates, the managed rates appear to have been instrumental in helping to break traditions and habits and to mobilize savings. Particularly with the political instability that characterized Korea until the middle 1960's, the public was perhaps not confident of the country's institutions and may have viewed even normally "safe" disposition of savings to be somewhat risky. Until the public's perceptions of safety were formed, rates that appeared on the surface to be high might have been entirely appropriate in light of the subjective perceptions of risk. This point is speculation; the evidence has little to say about it.

Recent work by Edwards (1985) and McKinnon and Mathieson (1981) have examined Chile's experiments with the liberalization of interest rates. Chile had a repressed economy until 1973, when the then-new military government opened the economy up. Chile's record since that time may serve as a useful case study of the effects of liberalization. McKinnon and Mathieson are particularly cautious in their recommendations regarding the best means for changing the economy from one of repression.

Related to financial repression in the domestic economy is the degree of openness of the financial markets to foreign competition. Competition is a great stimulant to the development of new financial instruments worldwide, and allowing foreign institutions to compete adds to that competitiveness. Singapore and Hong Kong have been marked by a comparatively high degree of openness in which foreign institutions have been allowed to compete on an equal footing with domestic institutions, and the competition has clearly spurred the develoopment of financial markets and instruments. Korea and Taiwan, on the other hand, have been relatively closed, and they have experienced comparatively slower growth in their financial markets. Both countries are now undergoing a major change in policy to allow foreign institutions entry and to allow them to compete on equal footing with domestic entities.

The points about financial repression also highlight the importance of taking into account the **cultural traditions** of the participants in the economy. Such traditions must be taken seriously. Thus the policies and the effects of those policies must be judged against the background of culture. Policies effective in one culture may be wholly unsatisfactory in another. Repression in the Chinese culture seems to have been a great stimulator for innovation --innovation in ways of getting around the repression through unorganized markets.

Political stability, as mentioned above, is closely related to the effectiveness of government policy as regards finance. The politically stable climate in Singapore was instrumental not only in encouraging domestic savers to have confidence in local outlets for their saving, but it also was helpful in attracting foreign capital. Hong Kong is a good example of an economy that, as the winds of political uncertainty have shifted, has experienced financial results consistent with that uncertainty. Investment was shy in the late 1970's and early 1980's, but it recovered as assurances were offered by the People's Republic of China.

A particularly perplexing problem is the problem of encouraging disclosure and --as is related-- encouraging firms to make public offerings of their shares. It is at this point that the complex interactions of tax policies, informal credit markets, and even culture particularly come into play. Modern financial theory would seem to suggest that disclosure is not a problem --firms will "self-monitor" as long as the benefits of disclosure (with its access to capital markets on relatively favorable terms) offset the costs. That principle may appear on the surface to be violated in the four (and, indeed, in Turkey), but the **costs** of disclosure may be much higher from the firms' perspectives than is obvious. The costs of disclosure are not just the burden of paperwork, the cost of auditors, and the economic cost of "giving away" competitive information. In particular, there appear to be tax incentives for "hiding" certain transactions, especially transactions between firms and the informal credit markets. To the extent that the failure of "key" firms to list on the organized exchanges retards interest in and growth of public capital markets, and to the extent that such failure is caused by the desire to conceal transactions from the authorities, then an active policy of differential taxation for private firms and frequent audit by the government may be sensible, even though such policies are offensive on the surface.

Tax incentives and public funding have been used successfully in all four of the countries to spur development of the financial system or of particular segments of the economy. To the extent that such devices as selective credit controls and other policies have stimulated segments of the economy, they may be judged to have "worked." However, the use of such selective policies also have costs associated with them relative to the use of market-determined allocations. Aside from the general conclusion that all four have had excellent track records overall, it is not possible to judge whether or not the benefits of such policies have outweighed the costs.

Hong Kong, Singapore, Korea, and Taiwan have been remarkably successful in achieving economic growth. While financial markets have played key roles in all of the countries, especially in Singapore and Hong Kong, much remains to be accomplished. Taiwan and Korea, in particular, still have substantial liberalization programs to undertake. Nevertheless, the four have pursued a variety of strategies, and their successes and failures may prove instructive in evaluating policy alternatives for other developing nations. The purposes of this paper will have been achieved if some small amount of light is shed on the issues by the experiences of the four countries. It is in this spirit that this paper is offered.

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