

THE SOUTH KOREAN SUCCESS STORY :
COMPARISON AND CONTRASTS WITH EGYPT*

By

Dr. HEBA A. HANDOUSSA

Associate Professor of Economics
The American University in Cairo

1 — INTRODUCTION :

There are several countries in the Far East, Latin America or Europe which qualify as success stories because of their rapid and sustained development based on industrialisation. South Korea stands as the single most appropriate example for the purpose of contrasting with Egypt and for drawing some major lessons. Citing a few alternative countries, Japan developed too early in the century to make a cross country comparison viable, Taiwan is too small, Singapore and Hong Kong do not have an agricultural sector, Yugoslavia does not carry a heavy military burden, Brazil has an altogether different resource balance.

At mid-century, Korea can be said to have shared with Egypt all of the burdens of poverty and underdevelopment combined : a heritage of colonisation which retarded education and diversification of the economy, dependence on one cash crop (Korea's rice corresponding to Egypt's cotton), an inherent resource imbalance with very limited agricultural land coupled with overpopulation, and a subsistence level of income for the majority of the population. In addition, Korea has early suffered from its partition in 1945 followed by the devastating war between North and South in 1950-53.

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Today, South Korea has surmounted the most difficult stage of its development process by radically transforming the structure of its economy, by redirecting employment into the most productive sectors of economic activity and by generating those mechanisms that will ensure a sustained process of growth and development. It has brought population growth to manageable levels and has retained a remarkably equitable distribution of income for its 40 million citizens, while raising the average per capita income to \$2000 (as estimated for 1984) up from \$87 in 1962. This compares with Egypt's per capita income of \$750 in 1983, up from \$150 in 1960. It is indeed difficult to avoid asking why Egypt's record of achievement appears to meagre in contrast to Korea's and where Egypt's government should look for useful formulas from Korea's outstanding performance.

The purpose of this paper is to show the many parallels between Egypt and Korea's development attempts and experiences, to identify the major differences in approach, in strategy and implementation, and to draw practical lessons for consideration by Egypt's policy makers.

Even today, some of the basic conditions underlying the internal and external resource equation for these two economies are remarkably similar. One is the continued domestic scarcity of natural resources relative to an abundance of manpower, another is the serious 'urbanisation problem which follows from continued migration to the cities in what are already two of the most densely populated countries in the World. A third is the vulnerability of these two economies to world trade conditions because of high import and export dependence. A fourth characteristic of concern to both countries is the difficult legacy of heavy borrowing in the 1970's with outstanding foreign debt for Korea at \$40 billion and Egypt at \$17 billion. On the political front both countries face an unusually large burden in maintaining their military preparedness which is reflected in significant allocations of physical and human resources towards defense. Internationally, both have been the focus of exceptionally high levels of interest and interference from the Super Powers.

2 — BACKGROUND ON SOUTH KOREA :

Prior to World War II, Korea had been colonized by Japan for thirty five years. Agriculture accounted for more than 80% of em ployment; there were a limited number of industries producing textiles, iron and steel products, fertilizer, cement, sugar, tobacco, pulp and paper, more than half of which were located in the North. Japan was Korea's major trading partner, accounting for 85% of Korea's imports and an even larger percentage of its exports. Korea's trade balance was in substantial deficit throughout the colonial period, the compensating capital inflows orginating from Japan¹.

Approximately one third of agricultural land was held by the Japanese, as well as virtually all of the modern manufacturing enterprises. Technical manpower operating in industry, construction and public utilities was dominated by the Japanese with ratios as low as 1 Korean for every 9 Japanese technicians in metals and chemicals. The government administration was again served by Japanese nationals which meant that no Koreans gained any experience in administration. Only 10% of all local judges were Korean, while no Korean served on the Supreme Court.

In the realm of education, the overwhelming majority of the population was illiterate. Korean culture was suppressed and the Korean language only taught in the first three years of primary schooling. The Japanese had also restricted the admission of Koreans to high schools and colleges. The result was a very small proportion of Korean as opposed to Japanese teachers and an equally small proportion of Koreans as opposed to Japanese students at the universities in Korea. As late as 1941, there were only 304 Korean students at university and only one Korean university professor².

Although there was significant growth and structural change of the Korean economy during the period 1910-45, these changes reflected the needs of the colonial power. Economic development "bore little relation to the traditional sector of the Korean economy and was incompatible with the achievement of self-sustaining economic development"³.

While per capita output increased significantly over the period, the per capita annual consumption of rice, the staple food for Koreans, had in fact declined from 111.5 to 80.2 kg. between 1912 and 1944, because of forced increases in rice exports to Japan. Meanwhile, per capita consumption of rice in Japan was maintained at 157 kg.⁴.

In 1945, the Japanese departed and Korea was partitioned along the 38th parallel, the U.S. occupying the South and Russia the North. There were major disruptions and dislocation resulting from partition including large movements of population with an estimated 2.3 million immigrants either fleeing from the North or repatriated from Japan. Power supply was cut off by the North, and all production of fertiliser, cement, iron and steel was lost by the South to the North as well as all mineral resources. Inflation was out of control, prices increasing 40-fold in 1945 and quadrupling again in 1946⁵. The outbreak of the Korean War in 1950 wiped out what little gains were made by the south towards restoring some balance and coordination in the supply of power, the transport system and other basic facilities. The level of destruction was extremely high, with close to 320,000 killed and with some 661,000 buildings and facilities destroyed in the South⁶.

Destruction of manufacturing facilities was estimated to equal 42.4% of the pre-war capacity, and the heaviest damage was incurred by textiles, shipbuilding, printing and publishing, mostly located in the Seoul-Inchon and Samchok areas. By 1951, the average production Index for South Korea had fallen to half its 1949 level⁷. Inflation reached new peaks and the morale and confidence of the people was badly damaged. Gross domestic savings were barely 2% of GNP in the early 1950's and rose to only 2.4% by 1960.

American aid has dominated all foreign assistance (at an average of 10% of GNP) throughout the 1945 to 1965 period. Between 1945 and 1951, U.S. aid totalled \$611 million but more than 90% of this consisted of imports of relief commodities in finished form which could be easily distributed without further processing. Up till 1962 there was no source of foreign exchange other than aid: private capital inflows were nil and exports

from Korea were stagnant at less than 2% of GNP. From 1945 to 1962, Korea received close to \$2 billion in aid from the U.S.A. Although the bulk of aid was spent on commodities, it went a long way in helping the country in reconstruction. There were also a limited number of projects for the development of coal resources, thermal power generation and fertiliser production to help compensate for resources lost to the North and for the rebuilding of infrastructure.

While the period from 1953 to 1957 was a period of reconstruction, that from 1958 to 1961 was one of very slow growth. Exports which stood at \$40 million in 1953 did not retain that level until 1961⁸. High rates of population growth during the 1950's prevented any improvements in per capita income which stood at \$87 in 1962. It is against this utterly bleak history that one should assess South Korea's modernisation and development efforts.

3 — EARLY ACHIEVEMENTS : BASIC NEEDS.

In spite of South Korea's limited resources and overwhelming difficulties in the late 1940's and 1950's, this period laid the ground work for Korea's subsequent pattern of development. Viewed in retrospect, the most immediate priority of the policy makers during the First Republic (with President Syngman Rhee in office from 1948 to 1960) would seem to have been to improve the living conditions of the least privileged in society, the landless farmers and the illiterate.

The Agricultural Sector⁹

South Korea's total arable land stood at around 2.3 million hectares (5.5 million feddans) in the 1940's with very limited possibility for expansion since 66% of total surface area consists of forests. Compared with Egypt's 6.5 million feddans for agricultural land, both countries share the same basic problem of an extremely high man to land ratio.

In 1949, a land reform was enacted in South Korea whereby 23% of the total arable land (farms previously owned by the Japanese) plus all Korean owned land of more than 7.5 acres (7.2 feddans) was redistributed to landless farmers. Approximately 62% of farm households benefitted from the reform. It is interesting to note that maximum size holdings allowed in Korea was significantly smaller than the corresponding size allowed in Egypt under the series of land redistribution schemes of 1952 (200 feddans per family), 1958 (100 feddans per family) 1969 (50 feddans per person), in spite of the fact that climatic conditions in Korea make it exceedingly difficult to introduce multiple cropping patterns.

In common with Egypt, land fragmentation became a serious obstacle to productivity. Korea's land reform had reduced the average size of individual farms to less than 2.2 acres (2 feddans). By 1959, only 0.3% of all farms exceeded 7 acres (6.7 feddans), while 42% were 1.2 acres or less. In Egypt, average size of holdings rose to 1.2 feddans after the first land reform but has since been reduced on account of continued fragmentation.

In spite of the difficulty of achieving economies of scale, Korean agriculture was able to raise its productivity and rank high among rice producers in terms of yields at 2.06 ton per acre (Egypt 2.37 ton per acre) in 1978.

Overall growth of agricultural production during the 1960-65 period was at an average annual rate of 5.19%, and total food production rose by 26% in the second half of the 1960's. Between 1960 and 1970, 14% more arable land was brought under cultivation, irrigated land expanded to reach 85% of total agricultural land, and double cropping was extended to reach a ratio of cropped land to arable land equal to 1.4 in 1976. Selfsufficiency in rice production was regained in 1977. By 1982, Korea was producing and consuming more than 5 million metric tons of rice but (again in common with Egypt) was heavily dependent on the import of wheat (1976-82 imports of wheat a little less than 2 million tons per year for Korea but grew from 3 to 5.5 million tons in the same period for Egypt),

corn (1982 imports equal to 4 million tons for Korea, 1.2 million tons for Egypt).

The expansion of the fishing industry and its increased competitiveness in Korea has been dramatic and now helps bridging its food gap. The level of fish catches has risen from 377 thousand tons in 1960 to 816 thousand tons in 1970 to 2,410 thousand tons fetching Korea close to \$1 billion on the international market. In view of Egypt's highly unexploited potential for utilising its surrounding territorial waters and inland fisheries there would seem to be much scope for introducing schemes comparable to Korea's effort in that area.

It is also important to consider Korea and Egypt's vulnerability to International food prices. It has been estimated that the **additional** cost of grain imports due to price increases in 1973 and 1974 was equivalent to 1% of Korea's GNP, 3% of Egypt's GNP. The difference is of course partly due to Korea's GNP being close to two multiples of Egypt's in that year. But whereas total food imports accounted for 19% of Korea's import bill in 1970-72, it reached 40% in Egypt's case. By 1974 the percentage importance of grain in total imports had soared to 25% for Korea and 73% for Egypt¹⁰. Korea unlike the more fortunate Egypt also carried the enormous burden of increased petroleum prices in 1973-74 which added another \$724 million to its import bill in 1974 alone. Korea's heavy dependence on oil imports which cost \$6 billion in 1982 should be a reminder to Egypt of the essential responsibility which it carries when making decisions on output levels and domestic prices concerning this invaluable but exhaustible natural resource.

One last but important comparative aspect of policy making in the agricultural sector pertains to agricultural price management. Where Egypt and Korea stand in sharp contrast since the mid-1970's. Whereas Egypt's decision makers chose to contain domestic agricultural prices in an attempt to avoid inflation and protect the poorer class of consumers, and thereby allowed farmgate prices to lag considerably behind world prices, Korea had decided not only to raise farmgate prices to their border equivalent but it has in fact raised these prices gradually to levels well above world prices so as to achieve three essential

goals. The first is the strategic objective of encouraging increased production of all essential crops (rice is purchased from farmers at more than twice its international price), by giving the incentive to raise productivity in response to higher profitability. The second objective is to raise the income standards of the farmer class which has traditionally been at a relative disadvantage when compared to urban and rural nonfarm workers. The third goal has been to contain the urban pull factor which has exacerbated Korea's problem of density in the cities (Seoul alone accounting for 20% of Korea's population).

Education¹¹

Comparing Korea's educational achievements with international levels places Korea in a class of its own in terms of its remarkable commitment to the eradication of illiteracy and its emphasis on training students in the skills required for development.

Virtually universal elementary education had been achieved by 1964, with more than 95% of eligible children (in the relevant age group) actually attending schools. In line with the significant decline in population growth, peak enrollment in primary education was reached as early as 1971 with 5.81 million school children and subsequently declined to 5.27 million in 1983. These numbers are in sharp contrast to Egypt's enrollment at the primary level of only 4.86 million in 1981/82 - less than 80% of eligible children - and go to show how far Egypt's policies and their implementation have deviated from the proclaimed goal of achieving universal elementary education by 1970.

Between 1960 and 1976 (the two most recent census years for Egypt), the percentage of illiteracy among adults (over 10 years old) declined from 70% to 57%, but the absolute number of illiterates had increased by 2.4 million persons, with a considerable differential between males (43.2% illiterate) and females (71.0% illiterate) in 1976. The obvious cause for this sad state of affairs is the maldistribution of schools regionally, the inadequate funds provided for building more classrooms and

training more teachers, and the absence of a national campaign which would mobilize voluntary action in an effort to eradicate illiteracy among the post-school age population. Korea's example in this last area is also exemplary as displayed by the contribution of Saemaul Undong movement in the countryside and Women's clubs which have proved to be an invaluable tool in supplementing the formal system of elementary education.

Egypt's poor record in providing primary education to its population is to be deplored on many counts : first in view of its negative impact on income distribution and basic needs, literacy being one of the fundamental human rights that any society strives to provide as early as feasible and indiscriminately, second because this long delay in the process of primary investment in human capital has had deleterious effects on the skills and productivity of Egypt's most abundant asset - its people, third because this slow growth (2.4% per year) in primary school enrollment (below the rate of population growth) is matched with a lopsided increase (17.2% growth per year) in university education over the same period, while it has long been patently clear that there are no real productive jobs to cater for the growing annual size of graduate entrants in the labour force, and again from a moral and morale standpoint which makes it difficult to accept the situation whereby Egypt has throughout the 1960's and 1970's provided thousands of Egyptian teachers to educate hundreds of thousands of Arabs in all neighbouring countries while neglecting to fulfil their duty towards their compatriots.

Egypt must also exploit the now well documented thesis which has confirmed the strong negative link between female primary schooling and the number of children born during her child bearing age. For all developing countries including Egypt, six years of primary education will ensure a drop of at least one and up to two children per educated woman. In South Korea, the statistics for 1974 showed an average of 5.5 children per woman with no education as compared to 5.4 children for a woman with 1 to 3 years of education, 4.5 children per woman with 4 to 6 years of schooling and 3.5 children per women with 7 or more years of education. This observed tendency in all countries was used as a forceful argument to encourage Egyptian

policy makers to give priority to the extension of rural education for girls since it was also shown that its budgetary cost would even be lower than those of land reclamation in the overall attempt to bridge the growing food gap. By checking population growth - together with achieving all of the previously discussed objectives - primary education would directly contribute in alleviating the problem of food self sufficiency.

The gains to South Korea from population control, itself closely linked to the attainment of primary schooling and literacy among females) has had a very favourable impact on resource allocation for education. The substantial saving from having half a million less pupils at the primary level over the decade 1972-82 has meant expenditure on improved services with an increase of 20% in the absolute number of primary school teachers in the last ten years and the resulting reduction in the student/teacher ratio to 42 in 1983, down from 53 in 1973 and 63 in 1964. The ten year growth in number of classrooms is also significant at 14%.

The decline in the number of primary school children over the past 12 years has also enabled Korea to focus more attention on kindergarten and day care center enrollment which has increased ten fold over the last ten years to reach 206 thousand students in 4,276 kindergarten schools by 1983. Korea's entrance rate to middle school has also increased from 50% in 1964 to 74% in 1974 to 98% in 1982. Whereas Korea enjoyed a student body of 2.6 million students enrolled in middle school in 1981, Egypt had only 1.7 million middle school students in 1981/82.

At the high school level, Korea had 1.13 million students in the general curriculum, and another 1.07 million in the vocational (including junior vocational stream in 1982. The comparable figure for Egypt was 1.21 million high school level students in 1981/82 and only 56 thousand students in technical colleges attached to the Ministry of Education.

Even if an allowance is made for the additional Egyptian students enrolled in vocational training centers attached to the

Ministry of Manpower and those belonging to Public Sector enterprises, the picture shows a glaring deficiency in the training facilities available in Egypt.

At the university level, Egypt's enrollment level at 595 thousand in 1981/82 surpasses the corresponding figure of 534 thousand (1981) for Korea and serves to highlight what is accepted in Egypt as being one of the serious anomalies caused by the maldistribution in the composition of education facilities. Korea's priorities have clearly been more socially equitable and more economically rational. The expansion of University education was consciously kept slow in Korea.

Comparing Korea's educational achievement with several developed countries as early as 1970 had confirmed its success story : the median years of education in Korea were 6.76 for young adults (ages 25-34), comparing very favourably with France (5.01) or Italy (4.05). It is those young adults who have served so well the cause of high productivity in all sectors of the Korean economy but particularly in manufacturing industry. This is how Korea has more recently been able to enforce the mandatory requirements that all vocational training students must first complete nine years of school education (primary plus middle school) before qualifying for entry into the vocational centres. This has also translated itself into the most exacting standards from industrial enterprises in recruiting new workers, with 82% of 1981's new entrants to the labour force having completed middle school or higher educational levels.

Education has also been responsible for providing the necessary qualification for women to work. In industry, more than 50% of employment growth (1975-81) was female. More jobs for women in turn mean higher income and living standards per household and also become a valuable factor in stabilising wage levels in the labour market.

4 — INDUSTRIAL STRATEGY, EXPORT PROMOTION AND PLANNING :

Given the limited arable land and the meagreness of other natural resources in both Egypt and Korea, rapid industrialisation was correctly perceived as the only option for growth and development of the two economies. But whereas Egypt was to embark on an import-substituting strategy which has continued over the past three decades, Korea soon realised that such an industrialisation path would meet with many structural constraints and early shifted its direction radically towards an export oriented strategy.

At the onset of Egypt's 1952 revolution, the government devoted considerable attention to development, with the introduction of a special development budget and the setting up of the production council in 1954 with the purpose of evaluating large projects which would modernise and diversify the structure of Egyptian industry. Public investment expanded, but policies were on the whole quite traditional, relying on the indirect promotion of privately owned and controlled investments together with direct regulation of foreign trade in order to increase protection for domestic import substituting activities. In 1957, development planning was introduced on a large scale, with more emphasis on government investment. A five year plan for industry and another for agriculture were adopted and these were integrated into a comprehensive five year plan for 1960-65.

For the entire decade of the 1950's - and in contrast with Korea - Egypt was in the comfortable position of using up its large reserves of sterling balances (approximating \$1 billion) accumulated during World War II and had no recourse to foreign aid or the international capital market. There was therefore no shortage of foreign exchange to import capital goods and these rose from 15% to 26% of total imports to Egypt throughout the period of the 1950's. It was only with the start of Russian deliveries of equipment for the construction of the High Dam (1958) and with the import of U.S. surplus commodities (1959) that Egypt's dependence on foreign assistance began.

The development of Egypt's manufacturing industry¹¹ uninterrupted since early 1930's - was in many ways ahead of South Korea's until the start of the 1960's. Whereas Egypt's manufacturing sector was already contributing 15% of GNP in 1952, Korea's manufacturing accounted for only 6% of GNP in 1953¹². During the 8 year period that followed the Korean War (1953-60), Korea was only able to raise industry's share of GNP to 7.2%, while Egypt's manufacturing output had further doubled in real terms, raising its value added share in GNP to 18%, with the share of manufactured goods in total exports rising from 6% in 1953 to 20% in 1960. Egypt's per capita manufacturing output was \$29 as compared to only \$15 for Korea in 1960, and the total value of manufactured export stood at \$105 million for Egypt as compared to \$11 million for Korea¹³. Egypt's total employment in manufacturing had reached 770 thousand persons in 1960 compared to only 480 thousand in Korea.

Throughout the 1950's both Egypt and Korea had followed similar import substituting industrialisation policies, with emphasis on the production of some basic consumer goods (food and textiles) and intermediates (cement, fertiliser, iron and steel). Both countries also shared a very similar foreign trade regime, with the use of a complex system of multiple exchange rates, high tariffs on imports of domestically produced equivalents, low tariffs on capital goods and intermediates and the imposition of quantitative restrictions on the import of an increasing number of imported products. The principal incentive to export came from the multiple exchange rate system whereby export earnings were converted at a premium. In addition, modest direct cash subsidies were also used to encourage selective exports.

Until 1961, Korea's manufactured exports were very limited, with the highest values attained for metal ores and derivatives (\$8.9 million), raw silk (\$2.9 million), plywood (\$1.2 million) and cotton fabrics (\$0.8 million)¹⁴, whereas Egypt's exports of manufactures were far more diversified with cotton yarn (\$22.2 million), cotton fabrics (\$17.4 million), clothing (\$2.0 million), petroleum products (\$4.6 million), processed food (\$14.5 million), metal and non metal products (\$12.0 million), chemicals (\$1.9 million), books and printed matter (\$3.0 million) in that same year¹⁵.

Egypt's economic development was fairly rapid during the 1950's with real annual growth rates of 7.8% for industry, 3.0% for agriculture and more than 9% for construction and transport in the decade 1953 to 1962/63. Overall GNP growth was 6% for Egypt as compared with 4% for Korea in this ten year period. In contrast to Egypt, all key indicators for the Korean economy were far from promising at the start of the 1960's. Dependence on foreign aid for the import of basic commodities was not subsiding. By 1962, the domestic savings ratio was showing no sign of rising from its low level of 3% of GNP (Egypt's savings ratio in the 1950's period was 12% of GNP). Foreign exchange resources were still a major constraint on Korea's investment efforts and made it impossible to raise the ratio of imported capital goods above the low level of 11% of total imports, a situation which lasted throughout the 1953-60 period¹⁸.

In parallel with the seemingly unsurmountable economic difficulties confronting South Korea, domestic political instability and social unrest were becoming critical. The military revolution of May 1961 was a major turning point in Korea's economic history. Its leader (soon elected as President Park Chung Hee) was to inaugurate an era of unprecedented growth and continuity in a hitherto unstable domestic environment. Whereas ministers had served an average of eleven months in office during Rhee's twelve years as president, the new governing elite brought with it stability, discipline, considerable administrative talent and a goal oriented energy and drive. Above all, the new regime proved capable of recognising, accepting and implementing expert advice on developmental issues. The systematic formulation of a series of five-year economic development plans starting in 1962 and their efficient execution was to shift the rate of growth of the economy to the consistent rate of 9% for the decade 1967-71, and to bring about a radical change in the structure of the economy. It is in the policies and institutional framework established in the 1960's that one can find the key to South Korea's tremendous leap forward, a leap which set in motion all of the growth and development mechanisms, the change in each variable reinforcing progress of the other such as to rid the economy of all of its early imbalances. From 1962 onwards, Korea moved way ahead of Egypt and of most other developing countries.

Beginning with the military government, economic policy clearly shifted from the previous emphasis on import substitution to a program of growth maximisation through export led industrialisation based on exploiting Korea's only national resource, an abundant and relatively skilled labour force. Unlike Egypt, Korean policy makers realised that continued import - substitution of consumer goods and backward integration in the production of their intermediates would not be as effective as the alternative strategy of export oriented industrialisation. In common with Egypt, Korea's domestic market was not large enough to support implementing projects of acceptable size to achieve scale economies. Import substitution would also involve increased rather than diminished reliance on the import of the necessary intermediates to operate these industries, and most important of all, such industries would require considerable investment in capital relative to the number of jobs they could create. Considering Korea's acute balance of payments difficulties, the expansion of exportable output would avoid having to face foreign exchange shortages (which began to impinge on Egypt's growth effort since 1965). Employment creation was the second most valuable objective which labour intensive export promotion policies would enhance. Another important objective which could be fulfilled by an outward looking orientation for industry was to ensure the optimal allocation of Korea's resources by subjecting all export industries to the competition of the international market. Success in exporting was the best insurance against inefficiency.

Starting in 1962, the Korean government undertook a package of basic reforms in the economy, all geared to the important task of reorienting the country's development path. These reforms included the devaluation of the Korean currency by 50%, the unification of the exchange rate and the adoption of floating rate, all in order to counteract the existing bias against production for the export market. A large and flexible set of direct and indirect export incentives were also introduced as elaborated below. A doubling of interest rates on bank deposits to reach a real rate of between 9% and 14% was designed so as to encourage voluntary savings and discourage unproductive use of credit facilities. The response of private savings was immediate, and household contributions to national savings rose

from less than 10% to between 20 and 30% over the decade 1962-72. The government also undertook a tax reform which raised the ratio of tax revenue to GNP (the tax burden) from 10% in 1960 to more than 15% of a much larger GNP in the early 1970's. This measure, together with the price reforms introduced on public enterprise output, enabled the government to control the level of inflation and to become a significant contributor to national savings, accounting for between 20% and 40% of domestic savings in the 1965 to 1973 period¹⁷.

These measures were highly successful in achieving a rate of growth of exports of 30% per year during the entire decade 1962-72, domestic savings were raised from 3% to 17% of GDP, thus making possible a significantly higher ratio of investment to national income. Both exports and domestic savings became substantial enough to support large increases in output while simultaneously replacing foreign saving as the dominant factor in development. The output of manufactured goods rose at the annual rate of 18.4%, led by the ever-increasing exports of labor-intensive manufactured goods. Up until the early seventies, all of the light manufacturing products achieved high rates of growth in the export market. But the most notable contribution to exports was made by textiles and clothing, rubber shoes, wigs, plywood and processed foods.

The Export Promotion Drive¹⁸ :

The package of export incentives introduced in the 1960's by the Korean government is one of the broadest ever conducted in a developing country within such a short period, and surely one of the most successful. Apart from the successive and substantial devaluations of the won currency, the various export promoting schemes have included the following :

- 1 — Starting in 1959, exporters were given unrestricted access to imported capital and intermediate goods, together with tariff exemptions on these commodities. This measure subjects exporters to a free trade regime, purchasing their inputs and selling their output at world market prices. The Korean system goes further than the usual schemes employed by most countries (including Egypt) whereby

tariffs are rebated after goods are shipped (at a greater cost to the exporter who bears the burden of the tariff until the drawback procedures can be set in motion and completed). In Korea, when exports were less than expected, the importer would be made to pay the difference in the tariffs due. In 1965, tariff exemption was also extended in Korea to all domestic suppliers of exporting firms, another policy measure which is not widely used elsewhere and requires a great deal of export administrative scrutiny to ensure that exemptions were in fact deserved by the beneficiaries in question. In July 1974 tariff exemption was shifted to a rebate system, probably in response to the reduced need for incentives after 15 years of uninterrupted export growth.

2 — In 1961, a 50% reduction on direct taxes was allowed on all income earned in exporting and this incentive measure lasted until 1973 when it was discontinued. Exporters were also exempted from the payment of any indirect taxes both on major intermediate inputs, whether imported or purchased locally, and on exported products. Although the indirect tax exemptions are simply tax neutral (giving no subsidy to the export activity), they do help reduce the bias against export sales which would otherwise exist. The income tax relief is also a measure which favours export sales over domestic sales by the producer, without necessarily distorting the allocation of investment resources since it does not discriminate among different export products and is also a useful tool, along with tariff exemptions in that it does not reduce government tax revenue. On the basis of a with and without export situation, it is clear that the absolute value of tax receipts from export activity is much greater than tax receipts under full tax liability and limited exports.

3 — In the late 1950's and much of the 1960's, selective use of an "export-import" link system entitled specific exporters to import certain popular goods that were not otherwise approved for import, thereby giving these exporters additional profit from the trading activity. This import privilege was used intermittently on a more or less ad hoc basis to

subsidise exporters who suffered from temporary losses due to their entry into new markets or because of world price fluctuations. In 1957, registration as an importer became conditional on export performance, and the value of exports required to obtain an importer's registration was gradually increased. In 1958, it was \$10,000, in 1959 it had become \$100,000, by 1970 the minimum required export value was \$300,000. Once an import registration certificate was granted, it did not automatically remain valid. Export licensing has also been in force in Korea, with minimum exports of \$20,000 in 1959. The export import link has been criticized by many authors because of its ad hoc nature which could easily become a source of corruption. Its incentive implications are however strong enough for a country like Egypt to seriously contemplate its rational use as part of its own recently initiated export drive. Since private import activity has been liberalised in the early 1970's, it has evidently been the source of 'above average' profits in Egypt. Instead of the government allowing the import business to continue to be the preserve of the few, it may be advisable to grant import licenses exclusively to those producers which raise their export sales above some officially announced targets.

- 4 — Korea has long used subsidised medium and short term credit as an incentive to exporters who could borrow foreign exchange to finance their fixed assets or working capital needs at substantially preferential rates. In 1965, when the interest rate reforms had increased the rate to 26% for domestic borrowing, preferential loans were offered to exporters at 18%. Dollar denominated loans were however at 12% and the government was in full control of the allocation of these credits among priority borrowers. These credit incentives fall in the category of direct export subsidies, and are all the more discriminating among users at a time when the overall credit market is very tight as was the case in Korea throughout the 1960's and 1970's. To give an order of magnitude to the importance of preferential credit to exporters, it has been estimated that interest-rate subsidies accounted for more than one fifth of total export subsidies

in 1964, apart from the advantage accruing to export credit recipients in a situation of credit rationing.

- 5— Korea has also used the often criticized wastage allowance as an additional bribe to coax exporters. These generous duty free allowances for loss or spoilage of imported intermediates permitted the earning of premiums on the domestic sale of unused imports. If not traded, the recipient of the wastage allowance would get the unfair advantage of utilizing cheaper inputs for his domestic sales. The magnitude of this subsidy has been calculated at approximately 2.5% of the total export value in 1968 - not a significant distortion of incentives - even though it may have encouraged excessive use of imported as opposed to domestic intermediates by exporters. This distorting effect is also true of the preferential credit terms which should have encouraged the use of more capital intensive modes of production by exporters. The level of the wastage allowance has fluctuated from year to year, as dictated by the degree of overvaluation of the domestic currency and yet one more compensating device used by the Korean government in its determined effort to accelerate the growth of exports.
- 6— A number of other export incentives - of lesser significance - have also been utilised by Korea. Accelerated depreciation was allowed since 1966 for exporting enterprises, small price reductions on railroad and electricity rates (estimated at 0.4% of export value in 1968) were introduced in 1967, and a relaxation of tax surveillance on selected export achievers has also been reported.

The wide range of export incentives and the selectivity of their use show the extent to which the entire government machinery became oriented to the attainment of export goals.

In addition to the export incentive devices, the Korean government introduced an annual export target system in 1962 and it proved to be a great deal more effective than the setting of annual export goals in the successive five year plans. Responsibility for the fulfilment of annual export target was placed with the Ministry of Commerce and Industry, a department of

the government which was clearly assigned the task of emphasizing the link between export achievement and industrial growth. The Ministry established an "export situation office" to monitor the daily performance of major exporters. Targets were set at ambitious level by the Ministry in consultation with industrial associations and with the management of the enterprises concerned. These targets were detailed by industrial sector, commodity and by region on a quarterly basis, and every time they began lagging for a particular sector, efforts were initiated to adjust incentive policies, simplify bureaucratic procedures, improve the marketing services provided by the government.

Korea's Trade Promotion Corporation (KOTRA) was founded by the government in 1964 to promote Korea's exports and do market research. By 1984 it had a budget of \$10 million provided by the state and operated some 200 offices in various trading centers abroad. With 580 employees at its headquarters in Seoul, KOTRA is now serving medium and small scale enterprises with information on export prospects in the various foreign markets and organises trade fairs every other year. Whereas Korea's exports totalled \$175 million in 1965, KOTRA can now boast of the country's \$24 billion of export revenue (1983), 94% of which is of manufactured products. The government also authorised the Korean Traders' association (a private organisation) to collect 1% of the total c.i.f. value of imports as an export promotion fund. It has also required its embassies abroad to actively promote Korea's exports, which they faithfully pursue with the full backing of special training in the necessary commercial skills.

The President of Korea's republic himself took great interest in export expansion ever since he advocated the export drive in 1962. He would personally attend the monthly export meetings to review the progress of exports and to ensure that any administrative obstacles would be removed. By 1969, exporters were graded into four categories on the basis of their export performance, with the highest achievers being awarded the national medal of honor and public presidential commendation.

Export incentives have been shown to have been instrumental in Korea's phenomenal export performance. Export targetting

was an important complement to the incentive system. To quote Westphal : "One important function filled by the export targeting system was to keep the government well informed regarding export performance so that timely changes could be made in incentives, often including ad hoc assistance to individual exporters. The other function of the export targeting system and its trappings was to publicize the importance attached by the government to exports : export incentives were well advertised and access to them was immediate. An atmosphere was thus created in which businessmen could be certain that the incentive system would reward efforts to export. Businessmen responded by taking the substantial risks of expanding production and capacity of export". According to Krueger : "The most difficult challenge that most governments face in attempting to reverse earlier inward looking policies is that of convincing would-be exporters that the commitment to the export strategy and incentives for exporting will continue"²⁰. In Korea, incentives for export were sufficiently strong and sustained.

In dollar value, the compound rate of growth of exports over the 1966-75 period was 40% per year. The most dramatic increase was achieved in the exports of the textile sector (spinning, weaving and clothing which grew from \$80 million in 1966 to \$1,431 million in 1974. But diversification was well under way, with electrical machinery, iron and steel sheets, transport equipment and metal products each rising above the \$100 million mark by 1975. In that year a sizeable increase was also made in exporting construction services. Contracts worth \$1.8 billion were signed for building housing, highways and hospitals, predominantly in the Middle East. These contracts included Korean management, the supply of Korean labour and Korean building materials²⁷.

One way of assessing the contribution of export growth to growth in Korea's national income is by comparing the incremental changes in GNP components of expenditure with the changes in GNP itself. During the thirteen year period 1960-62 to 1973-75, GNP had more than tripled. The marginal contribution of export to this increment was 39%, that of investment was 35%. Consumption was reduced from a marginal ratio of 97% during the previous seven year period to only 65% during

the later period. Domestic savings made the dominant contribution to the increase in investment in the decade of the 1960's, with at least 70% of investment growth after 1962 financed by Korean efforts. The average ratio of savings to GNP was 2-4% in the 1950's and rose to 14-17% in the 1960's. The marginal savings rate became 25-35% of GNP in the second period²².

Exports were also responsible for a significant increase in total factor productivity. In manufacturing, the incremental capital output ratio fell by 43% from 2.58 to 1.46 in the 1960-1975 period (contrary to an increase in the ICOR for agriculture of 71%) while labour productivity grew at an average of 10% annually over the period 1963/64 to 1974/75, compared to an overall average growth in labour productivity of 6.7% per year over the same period²³.

Korea's employment growth in the 1960 to 1970 period was again led by the remarkable growth of employment in manufacturing which averaged 11.7% per year, with an additional 1 million jobs created in that sector over the decade. This compares with Egypt's modest increase of 275 thousand jobs in manufacturing over the same period²⁴, a good proportion of which were created by the employment drive of the 1960's which resulted in an overall stagnation of labour productivity, rising costs in public sector manufacturing firms and the loss of potential savings which would have financed the continued growth of investments during the difficult 1967 to 1973 period.

Egypt's overly protective and inward looking industrialisation policies of the 1960's had ironically placed it in an exceedingly vulnerable position with regards dependence on the world market for the provision of capital goods and the necessary intermediates to operate its industrial sector. When foreign exchange resources became scarce as a result of reduced foreign aid and an increased military burden, this was automatically translated into idle capacity and the serious recession of its domestic economy. In contrast, when Korea's economy was shaken with the massive increase in the prices of grain and petroleum in 1973-74, followed by the world recession, it was the strength and dynamism of its export sector which was responsible for avoiding any significant slowdown in output or employment growth.

Korea's exports rose from \$1,632 million in 1972 to \$5,081 in 1975, with the quantum index for its exports more than doubling over this 3 year period, a remarkable response when compared with the traumatic impact of the oil crisis on other developing countries. Although the value of imports had risen from \$2,522 million in 1972 to \$7,274 million in 1975 (with import prices rising 107% compared to a 60% increase in export prices), necessitating a massive increase in foreign borrowing on the international market, it was Korea's previous export performance and credit worthiness that enabled it to obtain loans from the international capital market on commercial terms. Korea's foreign debt rose, with foreign commercial loans in 1972 to 1975 period amount to \$8,026 million, and yet Korea's debt service ratio declined from 25.5% in 1972 to 12.7% in 1975 and 13.5% in 1979. The acceleration of exports brought about a doubling of exports between 1975 and 1977 to reach \$10 billion and a further doubling by 1981 to reach \$20.7 billion. Real GNP grew at rates of 9% to 15% per year throughout the 1970's²⁵.

Planning and the Market :

In spite of Korea's commitment to a capitalist ideological orientation, the government of Park Chung Hee embraced comprehensive economic planning as part of its overriding objective of rapid economic development. The first five year plan was adopted in 1962-66 and four more have been designed and implemented since (Korea is now in the 3rd year of its fifth Five Year Plan).

Korea's planning system is one which seeks to set overall national economic goals and sectoral targets and to achieve them through a combination of conventional (Western Style) macro-economic and budgetary techniques together with various forms of direct government interventions and more indirect consultation with the private sector.

By world standards for mixed economies, and in spite of being very far from advocating a socialist ideology, Korea has in practice introduced significant public ownership and control of the means of production comparable to that in India but

substantially smaller than Egypt's. There were 36 public sector enterprises in 1960, mostly acquired from the Japanese colonial government or private Japanese entrepreneurs including the tobacco and Ginseng monopolies. Contrary to Egypt, Korea did not undertake to nationalise any of its domestic enterprises (and could hardly have considered it in view of their young age and of the tremendous importance which the government attached to nurturing their energy and encouraging their dynamism. However, the Korean government did set up many new state enterprises in such fields as iron and steel, fertiliser, oil refining, petrochemicals, agroindustries and deep sea fishing. By 1973, the number of public enterprises had grown to 104 companies. Their contribution to GDP grew from 6.6% in 1963-64 to 10% in 1971-72 at a real average annual rate of 14.5% over that period. By 1972, public sector activity accounted for 87% of value added in finance, 2/3 of electricity and water, one third of both mining and transport and communication, 15% of manufacturing and 5% of construction²⁰.

Jones quotes some of the early writings of President Park Chung Hee in which he cites Japan's Meji Reform, Turkey's Ataturk and Egypt's Nasser Revolutions as having inspired and guided his own thinking. The motive for his support of public enterprise and state intervention would seem to stem from fear of the excessive concentration of monopoly power in private hands. "... the key problems facing a free economic policy are coordination and supervisory guidance by the state of mammoth economic strength. Neither state nor society can be the victim of the greed of powerful interest groups"²⁷.

According to Korea's economic philosophy, state intervention must be sufficiently selective so as not to inhibit private initiative: "The economic planning or long-range development program must not be allowed to stifle creativity or spontaneity of private enterprise. The overall national development program may necessitate, for the rational operation of the economy, reluctantly imposed administrative controls over the regional allocation of various industries and planning for investment. Yet we should utilize to the maximum extent the merits usually introduced by the price machinery of free competition, thus avoiding the possible damages accompanying a monopoly system"²⁸.

Except for the outstanding rate of growth of the 1962-66 period at an average annual rate of 9.6%, the first five year plan failed to meet most of its detailed objectives and targets, an experience very similar to Egypt's results for its first five year plan 1960-65 in which the overall growth rate for the five year period (6.0%) was not far from the target of 7.17% but sectoral rates again deviated considerably from target.

Korean planners had a difficult time fulfilling all of the prerequisites for efficient planning. National income accounting (which was only introduced in the 1950's) had to be improved considerably so that data and concepts could form the variables which could be manipulated by central authorities; a nucleus of technical capability had to be formed with trained individuals who could assume positions of responsibility in the economic planning and related government organisms, and above all political support had to be gained so as to organise the bureaucratic hierarchy and give effective authority and power to the planning Board on all key issues of economic policy.

One of the first policy issues tackled by Korea's policy makers has been the adoption of the price mechanism as a powerful planning tool. Unlike so many developing countries (including Egypt) where concepts of opportunity cost pricing and the profit criterion are met with great resistance, Korea early decided to gradually eliminate subsidies and to introduce shadow pricing in allocating investments in all of its state-owned enterprises including railways, communications and electricity. This measure resulted in substantial reductions in the government's budgetary burden, a pronounced increase in the efficiency with which investment and production decisions were made, and allowed the government to channel its previously indiscriminate implicit subsidies into more desirable and focused areas of welfare expenditure (such as rural development and explicit subsidies for housing).

The Second Five Year Plan was a much more sophisticated blue print for development, designed by a small group of young government officials with the assistance of some Korean academicians and a few American planning experts. The achievements were very much superior than the already ambitious

targets that were set. Bottlenecks anticipated by use of econometric input-output models had been partly obviated by appropriate measures, areas of comparative sectoral advantage were identified and pointed in the direction of promoting light manufacturing industries together with skill-intensive low capital projects in metals and engineering, a mixed integer programming model tested the desirability of implementing two large import-substituting projects (a petrochemical plant and an integrated iron and steel mill) and appropriate policy measures were also formulated on the basis of calculations and consistency checks to contain inflationary pressures and provide effective incentives for savings, investment and exports²⁹.

Continuous reassessment based on very close monitoring and follow up mean a flexible approach which characterises Korean planning. The Economic Planning Board monitors the daily changes in every indicator of relevance to policy including money supply, wages, prices, interest rates, and can thus swiftly respond with appropriate decisions to which all subordinate agencies must comply. Another characteristic of planning in Korea is the extent to which the private sector participates in the setting of targets and is then subject to a host of incentives or penalties for its achievements. There is a great sense of mutual trust and dependence between the government and the entrepreneur, born out of the confidence gained by private businesses that the state will deliver its pledges, will support private efforts with every single unit of its bureaucratic machinery.

Apart from the monthly, weekly and daily surveillance of the planning organism of domestic and world trends and its continuous adjustments to policy, long range planning has clearly delineated priorities in each phase of Korea's recent economic history. Whereas the first and second five year plans emphasized industrialisation and the necessary infrastructure with industrial parks, laws to encourage foreign investment, the package of export incentives and selective import substituting projects, the third Five Year Plan turned its attention to raising the incomes and productivity of the rural community.

5 — FOREIGN AID AND FOREIGN DIRECT INVESTMENT :

. In 1962, Korea was still heavily dependent of foreign aid for its survival, with the domestic savings ratio at only 3.3% of GNP and foreign aid inflows (almost exclusively American) accounting for as much as 10.7% of GNP. Korea's industrial sector contributed only 14.2% of GNP and exports were still negligible at \$55 million (Egypt \$399 million) or 5% of GNP (Egypt 26%) while imports amounted to \$400 million. It was becoming very clear to the Korean leaders that U.S. aid which had contributed heavily to reconstruction of the country's infrastructure and to maintaining consumption levels of basic commodities at adequate levels (GNP per capita in 1962 was still \$87) could not be called upon to support any major investments necessary to implement Korea's first five year plan. A breakdown of total aid into project aid as opposed to non project and PL 480 commodity aid in the 1955 to 1965 period shows that project finance including infrastructure was in fact declining with Korea receiving smaller and smaller commitments from its one and only aid donor, the U.S.A., down from a peak level of \$93 million in 1957 to \$56 million in 1960, \$22 million in 1962³⁰.

The shortage of foreign exchange resources to finance capital investment is most clearly reflected in the small proportion of machinery and transport equipment which averaged less than 12% of total imports from 1956 to 1960. This abnormally low level of investment goods in the import mix for a country which had hardly attained a stage where it could produce its own needs of capital goods is the best evidence that foreign (U.S.) aid cannot take the credit for Korea's subsequent industrialisation achievement except in the indirect sense of having sustained the country's consumption levels and allowed the import of some of the most basic intermediate goods. In the early 1960's, negotiations between Korea and America over support for the expansion of Korea's iron and steel making capacity (which stood at approximately 320 thousand tons until 1965) where unsuccessful and Korean leaders were made aware that not only would American aid continue to be welfare rather than growth oriented, but the total dollar value of aid flows would be gradually reduced (and was in fact discontinued in the late 1960's). Korea

responded along two fronts : in 1960, it initiated its first 'Foreign Capital Inducement Act' providing various fiscal incentives and guarantees for private foreign investors and in 1965 it normalised its diplomatic relations with Japan after 20 years of break, a move which started a rapid flow of trade, aid and investments from Japan.

1960 to 1962 witnessed great political and social instability in Korea, starting with the student uprising which precipitated the downfall of President Syngman Rhee and was followed by a short-lived second republic, continued unrest and the final military takeover and transfer of power to President Park Chung Hee in 1962. Such an unstable domestic political situation together with Korea's poor economic prospects were not conducive to any private foreign investment and it was only in the third year after its promulgation that the foreign investment law attracted the first project from an American firm to produce nylon filament in Korea⁸¹.

During 1962 to 1966, the investment law was very liberal and any foreign investment conducive to the objectives of the first five year plan was allowed. The participation of domestic firms in capital was not mandatory and tax holidays, guarantees for profit and capital repatriation were all offered on generous terms. By 1967, the Korean government expected a surge of Japanese investment and quickly moved to revise its foreign investment law in order to regulate the quality of the capital inflows. Apparently, these early changes were not effectively implemented due to inefficient administration, but in any case the total flow of investment was too small to make much difference. By the end of 1964, five years after the law was in force, a total of 4 projects had been approved with cumulative capital of \$10.5 million. The following five years (1965-1969) saw the participation of another 70 foreign investors with total approved capital inflows of \$56.5 million for that period. It was not until the early 1970's that significant direct foreign investment began to flow into Korea. In 1970 the first Free Export Zone was also established in Masan.

By 1973, Korean policy makers had gained considerable experience in managing the economy which leapt forward in the

1962-72 decade on every front : high rates of growth, the diversification of output, the acquisition of technology and the establishment of new foreign markets. Korea was now in a position to further insist on its own terms and conditions vis a vis foreign investment. In 1973 it made official what had hitherto been informal policy in its 'General Guideline for Foreign Direct Investment, a document containing some of the most restrictive set of rules ever applied by any outward looking developing country, certainly a far more selective set of conditions than those applied in Egypt. Although the 1973 Guideline has undergone some minor revisions throughout the 1970's it can be considered as the backbone of Korea's foreign investment policy during that period. The Guideline consists of three sections covering non-eligibility criteria, foreign participation rules, and minimum size of project³².

According the Guideline, non-eligible projects include those that : (a) lead to the disruption of domestic demand and supply of raw materials and intermediate projects, (b) would compete in overseas markets with domestic firms, (c) are solely aimed at providing finance for existing domestic enterprises and (d) are solely aimed at making profit from the use of land.

Although the above restrictions do not cover projects catering for the domestic market in competition with domestic enterprises, it is important to observe that this restriction is nevertheless applied by discouraging such projects altogether through licensing procedures.

If Korean rules had been applied in Egypt in the formulation of 1973's Law 43 on foreign investment or its 1977 amendment it would have avoided the entry of foreign commercial banks, as well as the setting up of investment companies whose main pursuit is the earning of huge capital gains in the so called 'development' of office and residential construction, a well disguised form of speculative investment in property. Joint ventures between foreign and existing domestic public sector firms would also have been much fewer since in most cases the foreign partner has only provided finance for expansion but has hardly made any contribution to exports or to the transfer of new products or technology. Again all import substituting

projects in consumer goods would not have been allowed in such areas as cosmetics, processed foods, soft drinks, and durables by the very strict licensing procedures in force and lastly, there would have been no projects in the services sector except for tourism and specialized industrial services.

Turning to those rules pertaining to maximum foreign participation in equity, Korea's 'Guideline' has put a ceiling of 50% for all except very high priority projects such as 1) those exporting 100% of their output (and do not compete with domestic firms in those foreign markets), 2) technology intensive projects which are in priority product areas, 3) multinationals which invest only in the form of wholly-owned subsidiaries abroad and which are desirable to induce, 4) projects which involve large capital or advanced technology and will contribute to rationalisation of the domestic structure of industry, 5) projects from a country which is expected to increase its investment in the future, 6) projects by Korean residents abroad and 7) projects in Free Export Zones. Moreover, foreign participation would have to be less than 50% wherever projects are 1) purely labor intensive, 2) purely bonded processing, 3) dependent on major domestic raw materials or 4) oriented toward local market sales.

As to the rules pertaining to the size of foreign projects, the minimum value of investment was set at \$50 thousand per project in 1973 (a very low figure), and was raised to \$100 thousand in 1974, to \$200 thousand in 1975 and half a million dollar by 1979, while reserving the Korean authorities the right to make exception for specific cases such as those where Korean residents abroad were the investors. This potential class of investors, comparable to Egypt's expatriates, was responsible for setting up 7% of all foreign projects as of the end of 1980.

With such a watertight list of regulation, it is little surprise that the distribution of foreign investment among sectors, its contribution to exports and to technology transfer as well as to employment were on balance most satisfactory. While the set of restrictions are extremely well tailored to Korea's circumstances, one can also say that they admit of sufficient flexibility so as to sometimes approve of a tiny project of only \$50,000,

perhaps fully foreign owned which can yet contribute an essential business service to domestic enterprises, and at the same time reject a mammoth joint venture with minority foreign equity which might invest many millions because it might displace an existing or potential domestic investor.

The quality of the people in charge of foreign investment in Korea, again the domain of the Economic Planning Bureau, can safely be judged as of the highest calibre in term of experience, education and integrity both by looking at the laws themselves and their changing nuances and by looking at the actual foreign investments to date. The Korean policy package also allows one to make a critical appraisal of Egypt's policy making machinery and question its many blunders and to argue the case for Egypt's adoption of a more coherent, discerning and strictly economic approach to foreign investment which could ensure that pressure groups and other interests would not twist the rules or distort the spirit of Egypt's basically competent investment law. A striking example of the conflict between rules and objectives in Egypt is the absence of exchange control (in contrast to Korea) at a time when one of the main objectives of foreign investment is to generate exports.

While the outcome of the first decade of Korea's liberal climate for foreign investment saw a very limited flow of direct investment; the following decade (1970-1980) was a great success. The total number of approvals for the 1970's was 1260 projects of which 792 were still operating as of December 1980. The average annual inflow of investment during that decade was at the rate of \$100 million per year a figure which is not very large but is consistent with Korea's emphasis on quality rather than quantity of private capital operating in Korea. The contribution of Masan (1970) and Iri (1974) Free Zones was about 10% of the total capital invested as of end of 1980.

For the entire period 1962-1980, Japan accounted for 76% of the total number of projects and 57% of the cumulative value of investment, the U.S.A. for 16% of projects and 22% of investments, Europe for 5% of projects and 12% of investments. Japanese investments were concentrated in labor-intensive export oriented industries to exploit the relatively cheap Korean

labour in an effort to relocate its own declining industries, particularly in the early 1970's (this trend was reduced and reversed at the end of the 70's as Korean labor costs began to rise rapidly). On the other hand, American and European investments were attracted to more capital intensive and technically advanced import-substituting industries. In all cases the government of Korea actively promoted those industries which it deemed compatible with the objectives of its development plans and protected domestic producers by seldom allowing any competition from foreign projects either in the domestic or the foreign market.

Looking at the distribution of foreign investment over the 1962-80 period the manufacturing sector attracted 84% of total projects and 75% of the value of investments (some \$800 million) with chemicals, petroleum refining and machinery accounting for the bulk of import-substituting investments, while textiles and electronics made up most of the export oriented investments. These five sectors together accounted for more than two thirds of total foreign investment in Korea. The largest of projects were in fertilisers, petroleum refining, petrochemicals and machinery.

Both the distribution of investments and their pattern over time have closely followed the government's industrialisation strategy, with textiles disappearing and heavy metals appearing over the decade of the 1970's while electronics have continued throughout the entire period. On the other hand foreign investment in the service sector was strictly limited to the hotel industry (3.4% of projects and 12% of investments valued at \$120 million) and some merchant banking activity.

The Economic Planning Board has maintained a meticulous record of the activity of foreign investors in Korea. Figures on domestic and export sales by sector, on employment and on capital formation, on the repatriation of profits, on imports of intermediates and on the status of license agreements have enabled an excellent appraisal of the contribution of foreign investment in Korea. The study has shown that the cost of profit repatriation (plus royalty) as a percentage of the average outstanding balance of foreign capital between 1967 and 1980 fluctuated between 3% and 21% in various years with an average

which was only slightly higher than the interest rate actually paid on commercial bank loans in these years. Foreign direct investment accumulated as of the end of 1980 accounted for 0.5% of total capital formation in the Korean economy and foreign capital in the manufacturing sector accounted for 2.6% of that sector's total. In terms of employment however, foreign investment accounted for 2.3% of total employment and 9.5% of employment in manufacturing in 1978. In terms of the impact of foreign investment on export performance, foreign investment contributed between 22% and 25% of total Korean exports in the years 1974 to 1978, what seems like an outstanding record in view of the extraordinary growth of total Korean exports during that period (annual average rate of growth 40%) and in view of the relatively small capital base utilised by those investors. Total exports by foreign firms were valued at \$2,899 million, their total domestic sales stood at \$3,075 million, their total imports at \$1,889, all figures-excluding petroleum refining-for the year 1978. Total investments accumulated by end of 1978 and again excluding petroleum can be estimated at roughly \$955 million, total profit remittances were \$44 million and total royalty payments equal to \$28 million. Whatever rough indicator one cares to calculate, the equation looks very impressive for Korea. Every dollar of foreign capital invested in the economy (outside of petroleum refining which is an atypical activity) was costing about 8% in interest and royalties repatriated, was generating about \$3 of exports, using approximately \$1.98 in imports. The overall impact on the balance of payments cannot readily be calculated without a good estimate of the border value of domestic intermediate utilised by these firms, but it seems fair to judge that Korea got a very good deal out of foreign investment, unlike so many other developing countries in Africa and Latin America.

In September 1980, the Korean government relaxed the tight control on foreign investment which it had exercised in the 1970's by substantially liberalising the areas where foreign investment was allowed, permitting majority - owned or even wholly-owned foreign firms in many subsectors, as well as reducing the minimum amount of investment back to \$100 thousand. This reversal in policy was motivated by a need to reduce the protection afforded to domestic firms and push them to raise

their efficiency and productivity, after two decades of heavy protection. Another motive may have been the need for Korea to search along with foreign investors for new areas of comparative advantage at a period of transition where so many of its early export successes were being undermined by the competition from newly industrialising low wage economies⁸⁸.

Recent data on foreign investment shows that annual inflows have increased from their average of \$100 million in 1970's to around \$140 million in 1980 and 1981, \$188 million in 1982 and \$268 million in 1983. The country's 1984 target of \$280 million was reached by June of this year and was expected to be exceeded by an additional \$200 million.

The concentration of Japanese investments has been reduced in the 1979 to 1983 period, down from 57% of total value of investments in the last decade to a new proportion of 38%. American investments have on the other hand increased their share of the total up from 22% in the 1970's to 39% in the last five years. The contribution of other nationalities to foreign investment in Korea has become important, accounting for \$192 million out of the total inflow of \$849 million over the past five years (1977-1983).

6 — KOREA'S ANSWER TO URBAN PRESSURES :

Rapid industrialisation of the past two decades has been concentrated around the larger cities and has led to a serious urbanisation problem. Whereas only 9.8% of Korea's population lived in the capital in 1960, Seoul was harbouring 22.3% of the 40 million population by 1983, bringing its size to today's 9 million people, close to that of Cairo. And yet the city of Seoul has managed to cope with the problems of housing, transport, public utilities and communications. Indicators for the quality of life such as levels of traffic congestion, noise, pollution, or the availability of housing, electricity, water, sewerage, and parks for the dwellers of Cairo as opposed to Seoul's show the striking difference in approach to problem solving between the two countries and should shame Egypt's local governors and administrators into positive concerted action.

It is estimated that there are only some 100 buildings in the entire city of Seoul which predate 1950, the downtown area having been raised to the ground during the Korean War. This allowed for several major streets to be widened and for town-planning to cater for the orderly expansion of the city. On the other hand, it also means that the city has lost its traditional style and character and is difficult to distinguish from any newly built Western metropolis. The few remaining structures from the past look conspicuous and misplaced as though transplanted from another culture into the city's main squares. In this respect the countless impeccable structures which span Cairo's one thousand years of civilisation seem so fortunate and yet so dangerously neglected and sometimes even consciously destroyed. It makes imperative the demand for a conservation campaign, for forbidding the haphazard tearing down of older houses and their gardens to simply make way for ugly multistory buildings housing government and commercial offices and new residences which distort the character of the city, and worsen an already terrible problem of congestion.

The city of Seoul has solved its traffic problems with a rational allocation of the various means of transport, a very strict set of parking regulations, and a myriad of underground foot paths in the busy downtown areas. The ugly and obstructive pedestrian bridges which have disfigured Cairo's most central squares (Tahrir, Ramses, Azhar) are nowhere to be seen in Seoul. Instead, car drivers and traffic police have the relief of knowing that pedestrians can cross every major street through an extensive network of underground roads and shopping arcades where they can find every amenity from toilet, newspaper and tobacco stall to telephones, rubbish bins and snack bars, sheltered from the summer heat, winter snows or rain. One of the most beautiful of the underground arcades caters exclusively for books, stationery, and coffee shops. All of these facilities are financially viable since the government charges commercial rents to shop keepers. Seoul is also close to completing a 75 mile subway system which will have taken up a record 5 years to construct, with the use of fully Korean technology.

Public and private car transport is another feature of Seoul which strikes a sharp contrast with conditions in Cairo. The proportion of taxis to private passenger cars flowing through the city is perhaps 6 to 1. Buses are plentiful and do not overflow with passengers. Private car use in the downtown area has been discouraged by the shortage of parking space, the stiffness of penalties for illegal parking, the high price of gasoline which sells at 90 U.S. cents per litre, and the abundance of taxi cabs which charge a relatively low fare of 75 U.S. cents per up to 4 kms after which the charge increases very slowly. A distinguishing feature relating to taxi cabs is that they fall into two categories.

There are as many taxi ranks along each road as there are bus stops, the average queuing time is 5 minutes except at rush hours where it can rise to 20 minutes. The 'special' category of taxis charges double fare (and also pays twice as much taxes) but offers the advantage of helping out the really hurried passenger who is willing to pay and be allowed to jump the queue. There is therefore no frustration : if you are about to miss a vital appointment you need not wait the extra minute, and minutes can be very valuable in a city like Seoul where efficiency, discipline and reliability are very highly valued.

In comparison with cities like London or Paris, a surprisingly large number of ordinary people make use of taxis in Korea, a reflection on the relative efficiency of this mode of transport in a highly dense environment and more evidence on the remarkably equitable distribution of income in that country. It seems also true for Egypt that the opportunity cost of utilising taxis is very low when comparing taxi with private car, even buses, both in view of the relative abundance of available labour to drive the taxis and the efficiency of their use in narrow streets together with the time and space which can be saved their widespread usage.

If one compares the distribution of the total stock of the various means of transport available to passengers between Korea and Egypt according to the most recent estimates⁵⁵, the implications for Egypt are most alarming :

	Private cars	Taxis	Buses	Rail (Pas- senger km)
Korea (1983)	293,141	79,871	87,282	21,688
Egypt (March 1984)	611,571	154,746	24,838*	12,479

* This figure includes tourist buses.

The first observation is on the astoundingly large number of private cars in Egypt which has a per capita income of only one third of Korea's. The stock of private cars in Korea was in fact well below that for its taxis for as long as its per capita income was below that of Egypt's today, and as recently as 1978, Korea only had some 100,000 private cars. When it is remembered that a good proportion of what are registered as taxis in Egypt are in fact used for private transport (taxi registration confers the advantage of paying the preferential tariff rates on car imports) it becomes painfully clear that there is a serious disease in the structure of transport in Egypt which makes all travellers dissatisfied, including car owners. If one accepts the fact that a private car owner can afford to use taxis as frequently as the average number of trips normally required per day (this fact can readily be proved by calculating the daily opportunity cost of owning a car with the opportunity cost of operating a taxi per day), one can understand that the degree of substitution of private car purchases for taxi use in Egypt is to a large extent a function of the poor organisation of the taxi system whereby the taxi has artificially (through inappropriate pricing policies and regulations) become such a scarce commodity.

Another observation is the obvious shortage of buses in Egypt (roughly one quarter of those in Korea) a good percentage of which are known to be out of operation on account of poor maintenance and bookkeeping practices. Here, the Egyptian authorities are again to blame for not making better use of their

existing budgetary resources. Whereas the elasticity of substitution is very high between private car and taxi use, there is a substantial proportion of middle and lower income city dwellers who can afford neither and will look for bus and rail transport as their only alternatives. A vicious circle exists whereby every government and public sector enterprise is now in the process of acquiring its own fleet of buses - at a much higher cost to the government both financially and in terms of the congestion created by the lack of parking facilities - an operation which could be handled much more effectively and economically by the provision of more general public transport facilities. Again, the recent trend which saw the increase in private minibus lines that cater for middle income passengers and charge reasonable fares which compare very favourably with the public bus counterpart are unfortunately being discouraged by the authorities with restrictions on their right to have any downtown terminals where they can collect their passengers.

Seoul, like Cairo (and many a fast growing metropolis) has suffered from spiralling real estate prices. One pyong (3.3m²) in the town center sells for \$10,000. But in the newly established suburban housing estates, land sells for about \$500 per meter. This means that even a young couple will be able to purchase a small but adequate flat at \$12,000 in installments through the provision of government housing loans. With an average annual income per couple of some \$10,700 (using the annual wage and salary figure of \$5,356 and doubling since females account for half the labour-force in Korea) owning a flat does not seem impossible as is the case in Egypt.

According to the monthly salary and wage earners' 1983 Household Consumption Survey for Korea's cities, average monthly rental payments (20,500 Won) account for only 4.5% of total monthly consumption expenditure (264,456 Won). For owner occupied and rent deposit housing the percentage rises to 11.8% and 7.8% respectively.

The government of Korea has also gone a long way in fighting inflation and speculation in land prices. It has instituted a 50% capital gains tax which discourages transactions in real estate and has helped the private development of earmarked

housing estates by providing all of the utilities well head of housing construction activity. In contrast to Egypt's handful of oligopolistic construction and contracting firms, Korea has fifty such large firms operating overseas, and a much larger number of those restricted to domestic construction activity.

All manufacturing activity has also been relocated out of the city proper, with some 12 large industrial parks developed by the government outside of Seoul. A series of incentives have encouraged large and small business to move their premisses to designated industrial estates, thereby reducing congestion and pollution. The easy terms on which new businesses can also find accommodation in these specified zones contrast sharply with the insuperable obstacle which the small craftsmen and technicians of Cairo meet in acquiring a location to start new businesses.

6 — The State : Top Manager and Institution Builder :

Both Egypt and South Korea have experienced a remarkably similar configuration of political, social and economic circumstances that have coloured their development path starting in the 1950's. Up until 1960-62, Egypt was ahead of Korea in terms of structural change, the diversification of industry, the performance of manufactured output and exports, and the level of per capita income. The decade of the 1960's saw a reversal in their rankings and Korea was to achieve world records in every single indicator of development : a significant reduction in population growth, the attainment of universal primary education by the mid 1960's, an increase in the share of manufacturing to GDP from 11% to 22%, and in the share of investment from 9% to 27% of GDP. Korean exports rose from a very small base in 1960 to grow at an annual rate of 24% for the first half and 37% for the second half of the 1960's, fuelling the growth of GNP at corresponding rates of 6.2% and 11.1% per year respectively³⁶.

The impact of the two countries' differential achievements can be summed up in the following statistic : Whereas Korea's average annual per capita growth rate for 1960-72 was 6.8%.

that for Egypt was only 1.5%³⁷. In the early 1970's, it seems evident that Korea had reached a stage of self sustaining growth and development, those basic changes in the structure of the economy having been completed that allow the economy to fuel its own continued expansion. Rapid growth of employment was being generated in the most productive sector of the economy - manufacturing - the domestic savings rate was consistently rising and accounting for a growing proportion of investment. Rapid GNP growth was translated into higher living standards for the common man and woman with average real wages in mining and manufacturing rising by 5.5% per year for a period of 15 continuous years³⁸. Government revenue was rapidly increasing thus enabling the state to turn its attention to incomes and productivity in agriculture - the lagging sector - to reduce the country's military burden from 1.4% to 6% of GNP, and to gradually raise its expenditure on welfare.

In contrast to Korea, Egypt's economic development in the early 1970's was meeting with many serious structural constraints, and irrespective of the temporary dislocations occasioned by war and by the country's radical shift in political and economic relations from East to West, these basic inconsistencies have continued to plague the Egyptian economy to the present day. Among the most conspicuous of the imbalances in the Egyptian economy have been the inability of the commodity sectors to generate sufficient employment opportunities, the decline in both the relative and absolute contribution of non primary exports to meet the country's growing food imports, the deterioration in the structure of the government budget and the growing dependence of the economy on external assistance.

What is most critical in assessing the relevance of Korea's experience to Egypt is to verify three propositions : the first is to ascertain that the external relations which Korea enjoyed during its transition are neither unique nor uniquely responsible for Korea's success, the second is to evaluate the role of the different policy variables in transforming Korea into a mature developing country and that these same tools can be brought to bear in the Egyptian case, and the third is to establish that Egypt can duplicate the Korean leap forward - which was effected

in the space of one decade (1962-1972) - with the same speed and momentum.

Some authors have tried to ascribe Korea's success story to a combination of fortuitous circumstances : substantial foreign assistance, substantial foreign investment, 'special' relations between Korea and its two major trade partners : the U.S.A. and Japan. None except the first of these explanations stands the test of closer analysis. We have shown that American aid was of vital importance for the reparation and reconstruction of Korea in the 1950's, and although it did not focus on the development of industry could still be considered an indirect support in complementing Korea's own meagre savings and foreign exchange resources. However, the proportion of total foreign assistance to total Korean imports was to gradually fall from a high of three quarters in 1961 to one third in 1965 and less than 15% in 1970³⁹.

Korea's growth record during the 1960's is in no way linked to direct foreign investment which was negligible until 1965 and totalled a mere \$67 million for the entire decade of the 1960's. Japan became a strong ally in Korea's development effort, but only after 1965, when the two countries resumed their diplomatic relations. In fact, throughout Korea's export boom of the 1960's, the relative share of Korean exports destined for Japan was declining from 62% in 1960 to 32% in 1964 and 21% in 1969⁴⁰. Again Korea's increased exports to the U.S.A. were not based on preferential treatment in that market which was equally accessible to other developing countries during that period. It seems fair to conclude that Korea's achievements of the 1960's were based primarily and almost exclusively on the determined and successful attempt of its policy-makers to accelerate the pace of the country's growth and development.

Although a lot of the credit for Korea's accomplishments should go to the quality of its people who are recognised for their diligence and discipline, it is the package of economic and social policies pursued by the government that was responsible for setting in motion all of the necessary mechanisms for optimising the country's growth path and for qualifying the objective of growth with the condition of maintaining the country's re-

markably equitable distribution of income. A deliberate emphasis on the role of planning led to the choice of an outward-looking industrialisation strategy. The scrupulous implementation of the plan's detailed targets was fulfilled by wielding every possible instrument of economic management to ensure consistency and maximize efficiency. Private initiative was motivated to the point of making growth and development a national goal among large corporations, small business, rural workers, school children and teachers alike. The bureaucracy at large perceived its role as a vehicle for guiding the efforts and enhancing the dynamism of the real productive sectors of the economy whether private or publicly owned.

One can identify two areas of state interventions where Korea's government has exploited its powers of regulation with great effectiveness : macroeconomic management and institution building. Although there is continuous interreaction between objectives, policies and the organisational structure built to serve them, it is useful to show how far decisions in each of the two areas have provided Korea with this rare blend of what is predominantly a private sector economy manipulated to perform according to what are publicly chosen objectives. To many observers, South Korea represents a capitalist market economy, on the narrow definition of ownership of the means of production and the role of the price mechanism. And yet the major factor behind Korea's success story is the pervasive role of government intervention within a private enterprise context. Few of the recipes used by Korea can be claimed to be innovations, and yet it is the timely and selective choice of policy tools, the emphasis on developing specialised public institutions and the continuous reassessment of both policies and organisational structure that makes the entire experiment original and worth investigating.

Relative to any other mixed economy, government regulation of the Korean economy has until very recently been comprehensive. Even today, after three years of liberalisation, Korea can be considered a state - controlled economy. Regulation of the Korean economy still includes direct exchange control, credit control, selective price controls, foreign investment controls. Indirect regulation through planning and the system of targets has also dictated the sectoral distribution and growth of invest-

ment, exports, imports and is equally responsible for regional development, the growth of real wages and the distribution of income. In contrast to Korea's judicious choice of policy instruments, Egypt is at once suffering from the absence of adequate controls in key areas such as foreign exchange allocation, the utilisation of bank credit and foreign investment, while its bureaucracy has abused of the power to enforce controls on prices, employment, wages, and foreign trade, with serious distortions in the first three of these areas. The implications for Egypt are a growing misallocation of investment resources, a level of efficiency in both private and public enterprises that is well below their potential, a lack of dynamism in the commodity producing sectors of the economy, and a total neglect of opportunity cost in decision making.

One major lesson to be drawn from the Korean experience pertains to the prerequisites for effective planning. Planning is an essential tool for analysing the present, forecasting the direction of some basic variables, predicting the future outcome of alternative choices, determining an appropriate target rate of growth, and for the coordination of sectoral investments. But without the power and determination of an enlightened planning agency, a plan is a dead book and none of its targets can hopefully be fulfilled. Planning in Korea has always been an exercise for the experienced professional, with no interference from politicians and very little fussing over the ideological implications of what economists consider to be the most practical, feasible and expedient measures for rapid development.

At the top of the entire bureaucratic structure stands the Economic Planning Board (EPB) which governs all decisions on planning; monetary and fiscal policy, exchange rate and foreign investment. The EPB has effective control over the government budget which makes the implementation of its decisions an easy task, contrary to Egypt's overlapping and often confused distribution of authority across the Ministries of Finance, Economy and Planning. The EPB also houses the country's main Statistics Department which collects data that is tailored to feed into the process of design and follow up of the plan, and that of monitoring of output, exports and monetary development for the purpose of macro policy making and fine

tuning. It also maintains an office for Fair Trade which monitors the market prices of a host of key commodities. The entire Board is staffed by a total of 1500 civil servants (including 1000 engaged in statistical work), a key to the agency's efficiency. A closely affiliated though semiautonomous agency to EPB is the Korea Development Institute (KDI) which undertakes economic research and provides EPB with direct assistance in formulating the five year plans in what is now a routine exercise⁴¹.

Other key ministries are similarly organised with a minimum of officials, a clear delineation of responsibility and detailed job descriptions which simplify procedures, save considerable time and avoid any duplication of effort. For example, Trade and Industry make up one Ministry responsible for implementation of the country's plans concerning manufacturing activity and export performance. Its own affiliate, again an independent though government supported institution is KOTRA, the country's trade promoting and foreign market survey agency. The Korea productivity Center, KPC is also closely related to the Ministry and has started under its sponsorship a Productivity Enhancement Drive. KPC is responsible for training all levels of management and also for measuring productivity in manufacturing across sectors on a half-yearly basis. It maintains close ties with international management centers to acquire the most up to date teaching material, its training facilities being in competition with some 120 other mostly private institutions in Seoul⁴².

A host of other development institutions have been established by the government over the past two decades. KAIST is the outcome of the recent merger between the Korea Institute for Science and Technology (KIST) and KAIS which was the country's center for graduate education in the physical sciences. The integration of applied research and development in fields which directly benefit industry with the graduate training of approximately one third of Korea's total demand of various science disciplines provides an efficient use of advanced research facilities and scientific manpower. The Ministry of Science and Technology has strong influence over the direction of research at KAIST, with a view to encompass now those areas of research

which are implied by the longer term directions of trade and manufacturing as dictated by the plan. KAIST is in turned called upon by the Ministry to judge upon the merit of approving technology transfer agreements with foreign firms on a case by case basis⁴³.

Each branch of Korea's manufacturing has its own Association which acts as a forum for the member firms to meet and exchange information on market trends and export plans. The Association in turn keeps very close contact with the Ministry of Trade and Industry to enable the latter to monitor output and export performance and for the Association to make requests on behalf of member firms with regards protection of the domestic market, export incentives, credit appropriations⁴⁴.

Small enterprises (establishments employing less than 300 workers) have their own association, the Korea Federation of Small Business, which promotes the interests of 195 sectoral and regional cooperatives and their member firms. Among its recent achievements, the Federation has obtained significant funds for rescuing small business with loans of up to 10 times the value of the owner's collateral. It has also secured preferential treatment for government purchases from small firms and has negotiated special tax incentives for rural non farm activity. Small firms are offered the opportunity to purchase land at any of the numerous industrial estates at one third of the price charged to larger firms with easy terms of payment including a 2 year grace period and 3 year installments. Regular contests are arranged by the Federation to award top quality producers and to evidently highlight the importance of the quality standard which is rigourously tested by the Federation itself and by the Ministry of Trade and Industry⁴⁵.

Egypt possesses a counterpart institution for each and every agency one can identify in the Korean complex of semiautonomous government organisations. Many were established long before their Korean equivalent, but their contribution to development has been minimal, on account of their isolation and alienation from the final customer they are intended to serve.

Across the spectrum of Korea's government and government supported agencies, one is impressed by the calibre and culture of the top management and officials. Salary scales are among the highest paid for the relevant qualifications and have therefore attracted the elite of the professional class. Among the top and middle management administrative echelons one can sense that there is great job satisfaction which guarantees continuity of tenure, dedicated effort and full initiative. It is these cadres which are carrying the responsibility for the country's present and future welfare, it is in those offices that critical decisions are made on a day to day basis, and the government has ensured that the people in charge are located in the most comfortable work environment, are suitably rewarded financially and are respected by society for the positive contribution they are making to development.

For Egypt unfortunately, the reverse trend has been taking place since the late 60's, when the government administration and its subordinate agencies began to fast lose their traditional elite in response to the unrealistic salary scales, the worsening work conditions resulting from overcrowding, the loss of self esteem and credibility along with the powerlessness of any senior professional to make a decision that will be carried through to its logical implementation. The general feeling that runs across Egypt's 'corridors of government' is one of impotence. No single individual or group of technocrats can see their efforts yielding a positive response. Studies are shelved, memorandums are circulated in a never ending labyrinth of committees and sub-committees across agency, organisation and government department. Egypt's administrative apparatus is close to paralysed on account of its sheer size and cumbersome structure. It has slowly become isolated from the real productive sectors of the economy which it is intended to serve, a white elephant taking a life of its own as though bureaucracy was an end in itself, multiplying in size, unable to coordinate its own limbs or lesser still, to reach out beyond the confines of its self imposed isolation.

In a recent study⁴⁶ of the relative size and distribution of government employment across 50 mixed economies (15 advanced and 35 developing countries), a pertinent set of calculations have been made to estimate whether a country employs more or fewer

employees in each of the General Government (central plus local) and in public sector enterprises and organisations than what is predicted for that country according to the patterns observed in the entire sample of countries. The estimated equation related the 'normal' or predicted level of government employment as a function of per capita income, population and the type of economic system (making an allowance for the role of central planning). The actual level of employment is then compared with the predicted level and their ratio — International Government Employment Index (IGEM) — can be used to identify the extent of excess or deficient employment in administration, defence, education, health, etc.

South Korea's total figure of 1,176 thousand employees in general government in 1981 includes its large armed forces which account for 47% of general government and result in giving Korea an obviously high IGEM index of 154%, i.e. an excess of 54% employment over the sample norm. On the other hand, Egypt's absolute figure of 1,640 thousand employees in general government occupations as reported for 1979 does not include the armed forces and its high IGEM index of 217% is therefore an underestimate of the true extent of overemployment in Egypt's central and local government.

Although Egypt had not reported the functional distribution of its government employment across administrative, education and health, the predicted figures at 18 thousand, 73 thousand and 41 thousand respectively go a long way in identifying the extent by which the actual total of 1,640 thousand departs from the predicted total.

Comparing Egypt and Korea directly is also an appropriate exercise in the sense that Egypt should seek to achieve the standard of Korea's efficient though relatively extensive bureaucracy. If we exclude the armed forces from Korea's total employment in general government and compare it with Egypt's counterpart, we have a surplus of about one million (1,640 thousand for Egypt - 623 thousand for Korea) Egyptian employees. To include another relevant dimension to the comparison, one should evaluate the relative achievements of the two countries in providing basic social services (education and health) which form two

important components of general government employment. Comparative figures on education have demonstrated that Korea had far surpassed Egypt as early as 1960 when primary school enrollment had reached 94% for Korea as opposed to only 66% for Egypt whose enrollment rate was still at only 76% in 1981. In the area of Health, the figures for Korea imply a far more balanced distribution of nurses to doctors than the case for Egypt and a much more evenly distributed range of health services on a regional basis. Population per physician fell in Korea from 3,540 to 1,440 in the period 1960 to 1980, the comparable fall for Egypt was from 2,550 to 970. Although Egypt's figures imply a much more favourable situation than Korea's, the comparison of nursing services and infant mortality rectify the optimistic impression of the state of Egypt's health services. Whereas the population per nursing persons fell in Korea from 3,240 to 350 in the 1960-1980 period, that for Egypt fell from 1,930 to 1,500 over the same interval. This remarkable achievement for Korea has had a marked effect on infant mortality which was halved over the period from 78 to 32 per 1000 births, while Egypt was only able to reduce infant mortality from 128 to 104 over the same period⁴⁷.

Korea's extensive bureaucracy has made every effort to advertise its role, its plans and its policies to the general public. It regularly communicates to the Korean people its valuable services in areas as diverse as sending a professional mission from KDI to advise the Saudi government — one of Korea's biggest customers for construction services — in relation to manpower planning for Jubail and Yanbo, or negotiating special privileges for Korea's fishing fleet in the territorial waters of a West African country in exchange for setting up an infra-structural or manufacturing project in that country. Since 1981, the government has embarked on an 'economic education' campaign, in order to enhance popular understanding of the current economic difficulties which the country was then facing and in order to achieve a broad consensus for the set of tough government measures aiming at price stability⁴⁸. The education programs were effective in lowering trade union and workers' expectations of continued inflation so that they were more willing to accept small wage increases, the programs also passed the message from the government to businesses that there would be

reduced protection and that business would have to step up efforts to improve their efficiency and competitiveness, and also important was the drive to discourage speculative activity in real estate by advertising the stiff increases in taxes and other restrictions and penalties for such unproductive activity. The government's package of fiscal policy, monetary management and exchange rate manipulations was successful in lowering the rate of inflation from a high of 26% in 1980 (accompanying Korea's first ever year of negative GNP growth) to 16% in 1981, 8% in 1982 and 2.8% in 1983 (a year when Korea's GNP growth rate was back to a high of 9.2%)⁴⁹.

Egypt's economic problems are not unsurmountable. There is every indication that the potential is there for decision makers to trigger off that series of complementary and reinforcing policies that will allow the country to regain its economic equilibrium and get back on the self sustaining road to progress and prosperity which every recent government has pursued in vain. That critical transition will require professionals and politicians to sit together and recognise the present ills, the necessary remedies. There is little disagreement in Egypt as to what are the symptoms of the economy's disease : an inflated bureaucracy which drains a good proportion of the government budget via wage payments and growing subsidies to support that class of government employees, a resulting budget deficit which feeds inflation, a widening gap between the rich and the poor, an inefficient public sector burdened with surplus workers, lacking in skilled manpower and unable to contribute any resources for growth, a persistent refusal of the domestic private sector to veer away from nonproductive activity in the realms of consumer imports and speculative activity, and foreign direct investment which has on balance made no contribution to Egypt's development.

Policy makers in Egypt are yet to agree on what are the necessary steps to correct that large set of anomalies. Even though a welcome attempt was made to reinstate planning, and even though that 1982-86 five year plan recognises problems, the series of policy tools which would set about to implement all of its commendable targets have not been spelled out and the achievement of these targets is therefore constrained. Neither

of the substantial deficits in the state budget or the balance of trade, nor the rate of inflation can be reduced without a package of stringent measures to reform the system of government employment, subsidies, relative prices, interest rates and exchange rates and to eliminate the present discrimination between public and private sectors. The government will also have to consider imposing a broader and more consistent set of incentives to encourage the positive contribution of individual savers, producers and exporters, together with a stricter but well conceived set of controls to regulate the use of foreign exchange and bank credit, the flow of foreign investment and to discourage speculative activity.

The negative short-run and long-run effects of inflation on economic activity and on income distribution in Egypt should not be underestimated. To quote from a thorough analysis of Korea's situation of 1977-81 :

"As inflation accelerated, it became clear that sustained economic growth is simply impossible without curbing inflation. Weakening export competitiveness, unproductive activities of businesses preoccupied with inflationary gains, and the growing frustration of workers confronting a widening disparity in the distribution of income and wealth, all indicated that growth potential was being seriously undermined by chronic inflation"⁵⁰.

"... household savers, experiencing accelerated inflation had very little incentive to hold financial assets at low real interest rates. In pursuit of speculative gains, much of the excessive liquidity poured into land, houses and apartments, jewelry, antiques, and even some agricultural products. Particularly pronounced was feverish demand for real estate, which sometimes doubled prices for urban land every year. This overheated situation stimulated higher inflationary expectations which in turn further accelerated inflation"⁵¹.

"Business were frequently blamed for being preoccupied with borrowing as much money as possible from banks, only to invest it in real estate or to expand

unproductive businesses... The rich made speculative fortunes overnight which far outstripped what an honest wage earner could save in a life time. Thus more and more resources, including some of the nation's best managerial talent, were enticed into speculative activities"⁵².

These are the circumstances which the Korean government boldly confronted in 1979 with a most dramatic stabilisation program which — at the cost of bringing economic growth to a halt in 1980-81 — cured the problem at its roots by the comprehensive set of measures described earlier. The above passages highlighting the harmful repercussions of South Korea's inflationary situation could be used almost word for word to describe what Egypt has endured from persistent inflation since the early 1970's, and illustrate how such a situation undermines the country's continued growth potential.

If one compares Egypt's prospects for development over the 1980's with those of Korea in the 1960's, when Korea embarked on its decade of unprecedented growth based on the mobilisation of its domestic resources, one can surmise that Egypt today is in a much stronger position than Korea then. Whereas South Korea was starting from a very modest base in terms of domestic savings, accumulated investments, growth performance, Egypt has experienced a decade of rapid GNP growth at 9% per annum, albeit based on the growth of petroleum and service exports (Suez Canal, tourism and workers remittances) at a combined annual rate of 40%.

Egypt has not taken full advantage of the opportunities offered by these partly exogenous and temporary foreign exchange resources to redress the balance in the structure of the economy, but one can still say that they have contributed to an unprecedented level of investment at more than 25% of GNP over the last decade, which is having a lasting impact on the rehabilitation and expansion of the infrastructure of the country, in areas such as power, transport and communications, as well as industrial capacity.

Another legacy of the 1970's is a significantly increased per capita income with a largely untapped potential for increased domestic savings in the form of : Public Sector Enterprise Profits, government direct taxation and household savings. It is precisely in these three areas that appropriate policies dealing with relative prices, tax incidence and interest rates would have a significant impact in boosting national savings and reducing Egypt's dependence on foreign assistance.

The mobilisation of savings into productive investments with particular emphasis on export oriented manufacturing industry is the second challenge facing Egypt's policy makers. Throughout the 1970's manufactured exports have stagnated in dollar terms, in spite of growth in installed capacity for a very wide range of exportable products. The potential is available for accelerated expansion of exports both on account of Egypt's confirmed comparative advantage in a large number of sectors⁵³ and because the response of these sectors to positive export incentives is likely to be very high after a decade of negative incentives due to an overvalued exchange rate, bureaucratic constraints and an overly protective structure of tariffs which biases production towards the domestic market.

Egypt is also endowed with several advantages in comparison with South Korea and many other developing countries. Egypt does not carry the burden of an oil import bill (which stood at \$6 billion for South Korea in 1983), its geographical location is very favourable in terms of proximity to potential markets for its manufactured exports and for its incoming flow of tourists. Egypt does not suffer from a language or cultural barrier vis a vis one of its largest potential markets — the Middle East — and its people are also well exposed to the languages and tastes of Europe and the U.S.A. Moreover, Egypt has been able to obtain substantial flows of foreign aid (the bulk of which from the U.S.A.) which are likely to continue over the decade of the 1980's and which could gradually be channelled into more of the productive type of investment projects.

It is up to Egypt's policy makers to turn the government's massive weight in the Egyptian economy (accounting for 40% of Egypt's GNP) from a liability to an asset. President Mubarak

has shown great personal interest and concern over economic issues and this concern should be translated into a national campaign which would secure the support of the masses for a comprehensive program of reforms that would deal with all problems at once, according to an appropriate schedule that agrees with the country's set of priorities and ensures that the lowest income earners can benefit rather than be harmed by the process of adjustment.

South Korea is still classified as a developing country, albeit in the higher income category. During thirty years of growth, it has perfected its government machinery which has been capable of fostering rapid development at negligible cost in terms of the domestic distribution of income or the interference or dominance of any foreign interests. This is sufficient evidence of the potential that exists among other developing countries for achieving rapid economic development based on efficient economic management, self determination, and the continuous reappraisal of what are the country's goals and priorities.

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