# FROM AID DEPENDENCE TO AID INDEPENDENCE: SOUTH KOREA.

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I shall base my comments on my experience as major economic adviser in the design of South Korea's Second Five Year Plan, which changed its policy orientation radically.. In interpreting Korea's strategy, I shall also draw upon my comparative and historical statistical studies ( with Professor Cynthia Taft Morris) on how interactions among economic, social and political institutions change systematically during the process of national development.

## SOUTH KOREA

South Korea is relevant to the subject of this session because, within a span of only fifty years, it made the transition from economic underdevelopment to membership in the club of developed nations. Its achievement is frequently referred to as "The Korean Miracle" and is widely considered as the most successful process of economic development in the 20$^{th}$ century. Korea's development is also remarkable because it constituted development with equity, with rapid poverty reduction and no increase in inequality throughout the development process.

### Initial Conditions

The potential relevance of South Korea's experience to a wider set of developing countries is given by its initial conditions. The country had just emerged from two bloody wars: the war of independence from Japan and a civil war, during which most the population was decimated and displaced. The countryside was denuded; land was scarce and mountainous; the climate was harsh and not well-suited for multi-cropping; and poverty was widespread. Per capita income in 1964 was about 300 in 2000 US dollars ( 80 in contemporary US dollars).Infant mortality rate was extremely high (90). Life expectancy was 57. And over 60% lived below the absolute poverty level.

On the plus side, the country was one of the most ethnically homogeneous in the world. Values were communitarian and egalitarian, and accorded educated individuals the highest social status The distribution of assets was extremely even, due to two waves of land reform in which holdings exceeding 3 acres (!) were redistributed to previous tenant- farmers, and due also to the destruction of other capital assets caused by the wars. And the distribution of income was very even– one of the most even in the world. The level of social capital was extremely high.. Levels of education were quite high. School enrollment ratios in primary school exceeded 100% of the relevant age group and University enrollments surpassed those in Great Britain. The potential work-force also had a high level of pent-up energy, borne from both a high work-ethic and from sheer desperation.

In addition, there had been a thorough anti-corruption drive: The heads of all major conglomerates had been jailed, government employees above bureau-chief in rank were all fired, and all other bureaucrats were sent to two-week reeducation camps. As part of the New Deal, the heads of the conglomerates were released from jail on the condition that, henceforth, they would put the national interest ahead of the profit-motive. And government-bureaucrats at the bureau-chief level and higher were systematically rotated every six months to prevent new ties with the corporate sector from emerging.

Nevertheless, the general assessment of South Korea in 1965 by the foreign-aid establishment was that it was “the hell-hole of foreign assistance”, a “bottomless pit” and a “hopeless case”.

## Import-Substitution ( 1963-66)

The main aim of economic activity during this period was to increase employment. Another goal was to improve the balance of payments. The basic strategy for labor absorption was to apply labor-intensive methods to the construction of new infrastructure, including roads, dams, irrigation projects. For balance of payments improvement, the main thrust was on import-substitute industrialization starting with industries that produce inputs for other industries– cement, fertilizer, refined petroleum, iron and steel and synthetic fiber– that were capital-intensive. Self sufficiency in grains was to be achieved within five years through stress on agricultural productivity increases, mainly through multiple cropping.

In 1965, the list of prohibited imports comprised 600 commodities and a third of actual imports were restricted through import quotas. In addition, the exchange rate was used to further import-substitution goals. The effective exchange rate for exports was, on the average, 10% above that for imports, due mainly to exchange premiums and cash subsidies. The rate of protection was highest for consumer goods and lowest on intermediates

Results were mixed: On the one hand, the rate of growth of GNP was a high 7% and manufacturing production had increased by almost 50 %.. On the other, despite a significant increase in labor absorption, and a substantial shift in employment from a low-productivity sector (agriculture) to a high-productivity sector ( manufacturing), open unemployment remained quite high (15.5%). Rather than decreasing, the trade deficit had actually risen by quite substantially (50%), since the import-substitution effort forced a whopping increase of 75% in industrial imports. Poverty remained high, with two-fifths of all households falling below the absolute poverty line. But overall inequality remained very low– one of the lowest in the world.

## Export-led Growth (1967-1972)

Clearly, the initial conditions ruled out an agricultural-development based program. Instead, they implied that development would have to be based on labor-intensive industrialization. Such a program would capitalize on Korea's existing comparative advantage and result in the quickest poverty reduction. In addition, Korea's President was anxious that development should follow a stable economic path. The latter, implied the need for industrial diversification. But the combination of low per-capita income with small population size (28.5 million) suggested that a domestic-market oriented industrialization program ( i.e. a program based on import-substitution) could not provide the scope for diversification needed to achieve greater economic stability. A labor-intensive, export-oriented industrialization development plan was the only answer that would fit both Korea's constraints and its goals. (This, incidentally, was revolutionary for the period, when developing countries were advised to rely on land and natural resource intensive development, and follow an industrialization program that is based on import-substitution).

The process of plan construction introduced several technical and institutional innovations. From a technical point of view, a sectorally disaggregated econometric model was used to find the rate of growth of overall GDP that was consistent with the foreign capital inflow levels that the US was willing to provide. Once the feasible rate of output-growth was established, an input-output model with dynamically varying coefficients was used to find the expansion in capacity needed by each industrial sector anc calculate the investment needs and employment opportunities by sector Investment proposals were then solicited from the private sector.. A special unit for project evaluation was set up to evaluate these project proposals using internal-rate-of return, financial feasibility, import requirements, and technical and management capacity criteria. Where the totality of project proposals exceeded the investment needs implied by the input-output model, only the top-ranking proposals were selected for inclusion in the Plan. And, where the totality of proposals fell short of anticipated needs a second round of proposals was solicited: if they fell short, the government undertook to spearhead the investment itself, with a Plan for phased divestment to the private sector.

From an institutional point of view, the government took the lead acting through both the Economic Planning Board (EPB) and the financial system. The Economic Planning Board ( EPB) was made independent of the Ministry of Finance (so that short-run considerations would not trump long-run considerations) and given direct access to the Ministers concerned with Economic Affairs as well as to the Deputy Prime Minister. Industry Committees were formed to forecast the coefficients of the input output table as new capacity anticipated in the investment plan came on line. And monthly meetings of the EPB and the economic Ministers were held to provide information and receive guidance. From time to time, Press releases were made so that, when the Plan was finally enacted, it had a wide support base.

## Plan Implementation and Results

The government aggressively sought to expand exports. Its activities ranged from non-discretionary market-oriented measures to direct presidential pressure on individual firms. To favor new industries, manufacturers of exports were granted a protected domestic market. A list of prohibited imports and/or import quotas was set up enabling exporters to recoup on domestic markets potential or actual losses from exporting There was also a myriad of direct export incentives. These included long term low-interest government-subsidized loans and price controls on critical inputs and wages. In addition, there were income-tax reductions, loan guarantees on foreign loans to stimulate direct foreign lending, access to subsidized foreign exchange for the purchase of machinery and raw materials without import-duties and, ingeniously, a wastage allowance that allowed the purchase of more raw-materials than actually required for imports that could then be resold to other domestic firms. The system resulted in commodity-specific effective exchange rates that varied widely. In addition, the government established a number of government-financed institutions for trade promotion, set ever rising export-targets for each firm and used both carrots and sticks to see that the export targets were met. The president himself took a keen interest in export performance by firms and held monthly meetings with large exporters to hear their complaints and honor the best-performing firms.

Unfortunately, however, most of the incentive measures listed above that were offered to Korean exporters to promote export-led growth are now either completely banned or severely restricted by World Trade Organization (WTO) rules . Tariffs and quotas for the protection of the domestic markets of exporters are prohibited outright. WTO rules place strong limits on permissible export-subsidy levels. And export-quotas and domestic-content rules for direct foreign investment are banned. Nevertheless, the technological changes responsible for the globalization of production still make export-led growth possible.

The economy grew very rapidly during the initial phase of export-led growth averaging an annual rate of 9.6% between 1967 - 1972. Per capita GNP increased by a factor of more than 2.5. Exports expanded at a phenomenal rate of 46% annually and the share of manufacturing in exports rose from 60 to 70%. The labor-market became tight. The average wage of unskilled workers tripled. The distribution of income became even more equal, with a doubling of the income-share of the poorest ten percent. Social development rose rapidly, with school enrollment rising by 25% primarily due to an expansion in secondary education. Infant mortality dropped 30% and life expectancy rose by five years.

## Heavy Industry Promotion (1973-1978)

This phase in Korea's economic development, initiated in 1973, occurred at the direct instigation of Korea's President and was considered premature by most economists who feared the potential impact of both its capital and its import intensity on a capital and natural resource poor economy. Its negative effects on economic growth, balance of payments and income distribution were mitigated, however, by the continuation of most of the previously adopted policies for encouraging labor-intensive, export-oriented economic growth and by combining heavy-industry promotion with a new program aimed at improving the harsh "quality of life" in the country-side. The latter emphasis was again suggested by the President, who had himself been a subsistence farmer before entering the army.

The heavy and chemical industry (HCI) promotion plan was initiated in 1973, just as the world economy was hit by the first oil shock to which it responded by tightening import-restrictions. Together with the planned withdrawal of one third of US troops from the Korean peninsula, these developments emphasized the need for import substitution in the HCI sectors. .

Specific investments to be undertaken under HCI were in the manufacture of steel, non-ferrous metals, machinery, shipbuilding, electronics and chemicals. Together, these investments absorbed 77% of investment in all manufacturing equipment. A special industrial-park for the HCI industries had already been built prior to the plan's implementation In addition, the plan was implemented by ordering specific private firms to undertake specific HCI projects as well as by direct government-investment in state-owned enterprises. In return, HCI- firms were protected from competition from imports with high tariffs (43%, on average); state-owned banks were enjoined to provide loans to HCI-firms at low (on the average, negative) real rates of interest; HCI-firms were given preferential tax-treatment ( 16  to 19% in the late 1970s as compared to an average of 50% for other firms), and benefitted from direct intervention by the President himself to remove any roadblocks that arose.

The initial results of the HCI drive were disappointing.  The HCI plan had been intended as an import-substitution program.  But the size of the domestic market was insufficient to enable full-capacity plant utilization.  In addition, the HCI-program had many negative effects on other parts of the economy: labor-intensive sectors were starved of funds and foreign exchange; HCI-firms that had borrowed money became insolvent and could not repay their loans threatening the solvency of the financial system; the government's budget became strained ; a shortage of skilled workers developed ; the ditribution of wages became more uneven and inequality became more pronounced. In addition, overall capital-intensity increased. Foreign indebtedness rose, as light industry firms were forced to borrow abroad because of the tightness of domestic financial markets.

The regional and rural quality- of- life objectives of the development plan were implemented through massive government investment in rural infrastructure and in income-augmentation projects; these expenditures  absorbed about half of total government investment. Also, a new, differential price-policy for rice was instituted:  the price paid to farmers  by marketing boards was increased above the price at which rice was sold to urban consumers, with the loss being covered  by the government.  As a result, on the average, farm-income rose above urban income and poverty fell dramatically.

## Stabilization, Liberalization, Globalization and Economic Maturity (1979-1996)

The previous period left the economy with high inflation, a large current account deficit and a substantial foreign-debt problem. An orthodox deflationary program consisting of monetary and fiscal stringency, withdrawal of incentives from HCI industries, and an incomes-policy was therefore adopted. Naturally, it led to a downturn in the economy between 1979-81. This was followed by a liberalization program for financial markets leading to a positive real interest-rate, and a rise in private savings. Trade liberalization turned the chronic trade deficits into surpluses. Korea's real growth rate rose to enviable levels (about 8.5%). Furthermore, the HCI industries matured, became the core of the manufacturing sector, and their exports started exceeding those of light industry.

There has also been substantial improvement in average welfare and social development status. By 1995, average per capita GNP had exceeded $10,000. Average real wage levels were 30% above those in Great Britain (!) and had grown faster than labor productivity . South Korea ranked 12$^{th}$ among all nations in social development status: The average number of years of education was 10; life expectancy was 72; only 8% of households were poor; and unemployment was only 3%. But it is not clear what happened to the distribution of income. Government statistics indicate that the distribution of income has become more even, but there are reasons to doubt this findings. For one, non-government estimates suggest the opposite. For another, the distribution of wealth has definitely become less equal, and government estimates exclude capital gains.

In 1996, Korea became a member of the OECD.

## Economic Maturity, Financial Crisis, Reform and Resumed Growth (1997–).

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Korea's globalization in commodity markets made it very vulnerable to cyclical conditions in other economies, especially its important trading partners. When a prolonged recession hit Japan, Europe and the United States, Korea's exports of computer chips, ships, automobiles and garments plummeted. The current account deficit widened to 5% of GNP and the financial position of conglomerates became precarious. 8 out of 30 of its largest conglomerates went bankrupt. Their bankruptcies, coupled with the government's prior pressure on domestic banks to provide rescue packages, made the position of the banking system precarious. The stock market dropped precipitously, losing 50% of its va;ue.. However, these developments would most likely led merely to domestic recession rather than a complete meltdown had there not been contagion from financial crises in other Asian countries.

In preparation for membership in the OECD, Korea had removed its restrictions on foreign capital movements. In the 1990s, Korea enjoyed an A1 rating from Moody's. The combination of this fact with the high-interest rate policy Korea had adopted during the 90s( to combat inflation) while other OECD countries were pursuing low- interest-rate policies (to combat recession) made Korea very attractive for portfolio investment by foreign banks, mutual funds and hedge funds. This enabled Korea to build up a very sizeable foreign debt

The financial crisis started in Thailand and spread quickly to Malaysia. As a result, Moody's reassessed its rating of Korea to junk bond level, making it ineligible for portfolio investment by foreign banks. There was a currency-run on Korea, with foreign lending dropping by about $120 billion between October of 1997 and the end of the year. Korea reluctantly applied to the IMF for a rescue package, which, when granted, came with a (to my mind mistaken) conditionality imposing a deflationary economic policy on Korea

The consequences were disastrous. The conglomerates became insolvent. The asset markets fell precipitously. Exports slowed substantially, as the won crashed and even exports could no longer be financed by the insolvent banking system. There were 23000 bankruptcies of small and medium-sized firms. GNP per capita declined by 34%. Unemployment quadrupled. Real wages contracted by about 9%. Poverty tripled. And inequality mushroomed. Families that were no longer able to feed their children deposited them in orphanages (!!).

Amazingly, Korea recovered within two years. The combination of conventional Keynesian deficit- financing of major dimensions, a recovery in the global economy, plus resumption of foreign capital inflows enabled firms to resume production and exports. Reforms in the asset-structure of both the business and financial sectors have improved their financial soundness. By 1999, GNP had recovered to its pre-crisis level and the rate of economic growth had rebounded to 10%.

## Some Policy Lessons for Other Developing Countries.

First, perhaps the most important lesson is that development is possible.

Second, the essence of development policy consists of the creation of *dynamic* comparative advantage. The development process entails continual, *coordinated* change in many aspects of the economy, society and polity: production patterns and technology; social development; economic, social and political institutions; and patterns of human development. Creative evolution, redirection and destruction constitute the essence of successful economic development.

Third, the critical factors needed to generate economic development are both tangible and intangible. Foremost among them is leadership commitment to development. Next, comes social capital, which includes not only the level of human resources but also the degree of social cohesion, the willingness to act for the social good, and the extent of social trust, cooperative norms and the density of interpersonal networks. Institutional and social resilience and malleability are also critical. Finally, come the traditional elements taught in courses on economic development: appropriate policy design, particularly in investment, capital accumulation and technology policies and the general overall thrust of trade policy and trade incentives.

Fourth, the "Washington Consensus" notwithstanding, Korea's experience indicates that the government has a central role in the promotion of economic development. But its functions must adapt dynamically with development evolving from prime-mover and direction-setter into a quasi Smithian State. The nature of the State and its relations to civil society therefore matter a great deal. A sound economy requires a sound State. Corrupt, venal, rent-seeking states must be transformed into developmental states for successful long run economic development.

Fifth, the economy, society, institutions and policies must be malleable and capable of even abrupt change.

Finally, the prospects for economic development are intimately linked not only to the country's own institutions and policies but also to existing *global* economic and political institutions.