### SECRETS OF THE SOUTH-KOREAN ECONOMIC MIRACLE

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### Abstract

This paper proves that, in order to accomplish the highest economic development at macroeconomical level, it is necessary to maintain and manage imbalances, so that they do not become unbearable. For this purpose, South-Koreans have created the 'South-Korean essentials', an extremely complex concept, which involves multiple factors that together create the targetted effect. The South-Korean miracle challenges even the neoclassical model. State intervention in the economy is one of the key factors for success due to a planning system based on strict regulations. To these must be added the planning – market relationship, the agriculture – industry nexus and the 'two feet' economic theory.

Keywords: crossfertilization, disequilibrium, state as actor, structural adjustment, 'two feet' economic theory.

JEL classification: O11, O43, O47

# 1. CRITICISM OF THE WALRASIAN EQUILIBRIUM

The South-Korean philosophy in the economical field can be synthesized in the following words: no matter how attractive the concept of balance, a development imbalance is preferable to a stagnation balance. Indeed, this appears to be the essential issue, which implies a larger area, residing even in the evolution of human kind.

In the view of these 'German' Asians, the Walrasian equilibrium was many times abusively used, generating an extremely vulgarized form. The development theory is 'occultly' influenced by the Walrasian equilibrium, not being able to free itself from equally distributed growth and balanced development; in order to accomplish the highest development rate, it is preferable for to maintain and manage imbalances, provided that they do not generate unbearable imbalances. A growth policy involves choice of growth driver engines.

Imposibility to reach balance resides especially in the random nature of various factors effects on the market. In a system in which prices, demand and offer are repetedly disturbed,

it is not common for overdemand to be zero at any moment in time. With regard to resources, overdemand is considered to be the difference between net demand and total resources, while net demand is calculated as difference between consumption and production. If consumption is 'z', production is 'y' and ressources are 'w', G. Debreu, Nobel Prize winner for economics in 1983, defines the state of market equilibrium is x-y-w=0, more exactly when overdemand is zero or when net demand equals total resources.

An economy which evolves towards bearable imbalances offers a similar picture to the transfers of substances or energy of a system in physics until it reaches balance (in this case, external variables to the system balance and entropy reaches its maximum). The South-Korean economy is designed as a command system, in which the state acts as decision center, distributes capital and limits consumption of ressources. Therefore, this is a partially centralized economy, in which firms are autonomous. Parameters which define the system conditions are rationally variable, in order to ensure the most profitable state for the economy. It is obvious that South-Korean specialists refer to the famous Boltzmann's principle, according to which entropy is proportional to the number of microstates consistent with the given macrostate.

In this intercession, they use a set of instruments of analysis totally different from the Walrasian one (dominant units, macrounits, development poles, mobilizing or stopping effects, propellent units or industries, etc.). In the scheme of growth theory, they include reports other than exchange ones, such as power (a unit can modify conditions and results of other units' economic activity through information and/or constraints, these reports being developed inside macrounits) and group (macrounit – the structured whole, which results from a well-determined combination and not by simply adding components, its cohesion representing the ability to resist an external distorsion action).

### 2. THE SOUTH-KOREAN ESSENTIALS

The interest for the South-Korean economical miracle is often accompanied by the intention to generate an universally valid model. While many scholars have analyzed Korea's development experience, there is still no consensus on what was the root cause of its success nor whether the policies pursued in Korea hold lessons for other nations struggling to achieve more rapid growth [9].

Many times, specialists try to copy South-Korean essentials, an extremely complex concept, which involves multiple factors that create together the targetted effect. The idea of complexity is not limited to density of causes for a certain development, but it underlines the posibility of its true independence [2]. East Asia has been used as an example to understand how other countries could achieve more rapid economic development and convergence [1].

At the heart of this dramatic emergence of the miraculous economy of Korea, three crucial factors coincide: first, the rapid expansion of world trade; second, a strong interventionist state determined to pursue export-oriented economic growth; and third, the availability of a high-quality, low-cost labour force [11].

There always is a certain number of basic issues with which any independent development process is confronted with, regardless of its particular trends. In synthesis, they are:

- the state and market roles in the national and international economic policies;
- the issue of role and restructuring inter-field efficacy, mainly between agriculture and industry;

- the issue of maximization of surplus which can be invested, including the role of foreign capital;
- creating a national technological capacity;
- legitimacy of a development project to the social sectors who will bear the effort.

For example, a valid solution for programming job offers comes from the classical analysis of technical developments (see Figure 1). Therefore, before identifying solutions, we must evaluate general options for these priorities.

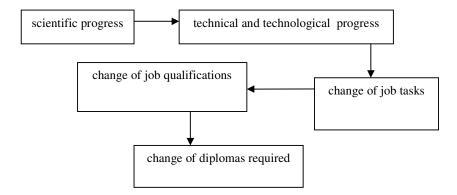


Figure no. 1 Job programming scheme

Therefore, the general interest of studying particular experiences does not reside in copying successfully applied specific procedures, but in discovering general configurations which can be included in the 'maybe' field. Compared to opponents of economy or market interventionism, on the contrary it is important to know that both factors can be useful and can work nicely together, regardless of the exact manner in which they encounter a particular experience. Also, it is interesting to evaluate the positive role of foreign investments, the necessity of agricultural reforms in order to ensure dynamic interaction with industry and how we can persuade the population to accept sacrifices required by this development project.

## 3. THE STATE - TOUGH ACTOR

The South-Korean experience shows that different forms of foreign financial ressources can have a positive role. As financial assistance, loans or direct investments, these allowed very long term financing of external deficits without affecting the autonomy of the local economic policy. This strategy led to the creation of a national project, which allowed orientation of foreign capital based on the objectives targetted by the South-Korean authorities. Hereby, South Korea was able to import equipments and industrial goods at larger values than those guaranteed by its own exports, generating a significant compression of external financial needs [3].

In South Korea, with very weak social safety nets and little experience of mass unemployment or other vagaries of capitalism, emergency measures are sought from the state.

Thus, one might say that the extent to which the state becomes involved in shaping economic activities is determined less by the pressures of globalization itself and far more by the structural, institutional and cultural peculiarities of the different countries [11].

The South-Korean economic miracle challenges even the neoclassical model. State intervention in the economy has been one of the key factors for success. Due to a planning system based on strict regulations, it orients allocation of ressources based on objectives defined by the central power. The real issue is to know in what conditions interventionism is necessary in the economy and by what means it can be exerted. In South Korea, the productive activity is mainly detained by the private sector. In order to put its plans into practice, the State exerts a strict control over the financial system, while offering the possibility to disregard production control. In its opinion, credit control is sufficient.

Doubtless, during this long period of time many mistakes were made, including some which questionned the role of the State in economy. Many dysfunctions in the process of wealth accumulation were attributed to excessive use of credits. Overinvestment phenomena in State-supported sectors, as well as reogranizations managed by the same actor are very well-known. All these have hallmarked the role of the State in economy.

Although conglomerates (chaebol) played a pivotal role in the economical and technological growth of South Korea, this government-supported large enterprises also led to two main weaknesses [5]. First, due to collusion with political power and the support of government-led banking system, chaebol were allowed to take large risks, which led to an inefficient allocation of resources. Secondly, because of the government's support bias towards large enterprises, small and medium enterprises (SME) tended to be neglected.

The high level of complexity in the economy became incompatible with the level of centralized decisions recorded up to then. Therefore, the role of the State changed. The banking system, in particular, is privately-owned and export subventions were practically eliminated. The State is still involved in credit selection and imposes tough criteria for loans, as excessive borrowing also generated non-performing loans that weakened banks and other financial institutions [10]. This evolution proves that the State can use different means of intervention and that these means need to evolve.

## 4. THE PLANNING - MARKET RELATIONSHIP

A role of the State refers to the relationship between planning and market. The South-Korean model proves that they are not contrary, by complementary [2]. Planning is especially involved in the main orientations of resource allocation. The system was designed to direct them towards private companies, the best ones carrefully targetting the main objectives. Once the funding reaches companies for projects or planned activities, these are freely organized, also by taking into account signals from their economic environment. For this purpose, means to reach agreement between the State and the private sector have been developed (on one hand, through institutionalized mechanisms and, on the other hand, through human resource migration between state institutions and the business environment). The existence of a vast and efficient general system such as the South-Korean one would not be possible without this understanding. Experience shows that it is better to request opinion from companies involved rather than rely on strategies, exclusively based on old hand officials. In South Korea, general lines are integrated with autoritary state interventions in order to persuade the private sector to develop extremely ambitious projects.

The objectives set by the State are based on precise analyses of national and international market tendencies. The process of structural adjustments, which began in the textile industry and finished in the heavy industry, was lauched by the State at the end of the 1960s. This project was based on the fact that new competitors emerged on the international markets of consumer goods, which largely required low-qualified work force.

The first oil shock led to competition intensification and to more protective policies on the South-Korean market. Decisions made by authorities were proven right after a while. If South Korea was able to overcome the oil shock without major difficulties, it was partially due to the fact that industrial reorganization had already begun. Should this process have been delayed, this country would have encountered serious challenges. The extremely profound and realistic macroeconomic vision of planners is meritory.

### 5. THE 'TWO-FEET' ECONOMIC THEORY

Another less-known characteristic of wealth accumulation in South Korea, which appeared since growth sources decomposion, is the relatively balanced spread of internal and external outlets. Among other things, this accumulation regime allowed the South-Korean industry to walk on 'two feet'. This is a big advantage compared to economies whose outlets are focused on only one source. Indeed, weakness of one outlet source would have a smaller global impact and will be more easily compensated by directing economic activity to the other source. Such compensation would be much more difficult in an economy inwards oriented, which is forced to reach very fast some levels of competitiveness necessary to identify external outlets. Between the two oil shocks, the real export rate constantly diminished, but a true investment boom was recorded. Capital accumulation has a double function. On the short term, it is an internal demand that protects global activity from underperforming exports and, on the long term, it contributes to the effort to export new products in already created production capacities.

A medium size country such as South Korea can defend itself from future attacks by expanding its currency liquidities:

- 1. external debt reduction on the short term;
- 2. accumulation of liquid international reserves;
- organizing a system of facilities for foreign currency credits, with collateral guarantees.Other costly solutions are:
  - temporary economic isolation of the country from free movements of capital by exerting control (as Malaysia acted in September 1988, based on the Chillian experience);
  - 2. a monetary council as those in Hong Kong implies keeping a reserve of one US dollar for each unit of local currency which circulates or is kept in local banks. Anyone has the freedom to exchange the local currency for the US dollar unlimitedly.

Any depreciation of foreign currency reserves will force the central bank to reduce the local money supply, therefore raising the interest rate.

With a population of about 50 million people, South Korea reached in 2008 a GDP / capita of USD 27,646  $^{[14]}$ , being considered the fourth strongest Asian economy and the  $15^{th}$  in the world. The reorganization of its five biggest companies (Samsung, Hyundai, LG, Daewoo and Sunkyung) targetted:

 concentration of activity in a few domains and closing/selling unprofitable branches;

- 2. elimination of cross-guaranteed loans (one factory applies for a loan, while another factory from the same company guarantees for it); this financial engineering boosted the money supply beyond bearable;
- 3. sales of assets, increase in corporate funds and foreign investment encouragement;
- transparency of financial management;
- the government has the right to oversee fulfillment of commitments assumed by 'the five'.

Among IMF loan conditions for the 1998 agreement for counterbalancing the Asian crisis were demands that South Korea slows down GNP growth, liquidates insolvent banks and reform the large conglomerates (*chaebol*) by consolidation and more transparent accounting practices [10].

Mother-companies offer technical assistance to selected firms in order to ensure constant cost reduction or to offer fast and efficient answers to inevitable changes in product manufacturing structure. More so, mother-companies use the policy of the 'double seller' in order to respond to the pressure of 'captive' firms, followed by sophisticated mechanisms of sanctions and rewards.

This type of relationship is less unequal than it seems. The analysis confirms once more the validity of the path which implies interpretation of South-Korean economy in terms of social and organizational innovations, rather than as effects of misterious 'cultural' practices. Surely, large companies assume high risks. The loss of a small company is loss of accumulated and immediately available know-how.

The absence of mimetic consumption and the rise in economies made by population are other important factors of the South-Korean success. Another type of lesson which results from the South-Korean experience refers to the relationship between agriculture and industry. In this country, the interdependece of these two sectors is visible at several levels.

The improvement of peasant incomes was a significant source of outlets for the manufacturing industry. The development of agricultural production together with the demand for agricultural products based on the development of the manufacturing industry avoided tensions in terms of prices, which could have suffocated industrialization.

Another benefit was the training of an important number of employees specialized in the manufacturing industry. They emanated from excedentary work force in agriculture and, in fact, this sector was freed from a disguised unemployment rate, therefore proving the theory that industrialization cannot begin until productivity in agriculture grows.

It is perceivable that the excedentary work force absorbtion in South Korea cannot be interpreted based on the Lewis model, Nobel Prize winner for economics in 1979. The basic condition of this model, stability of industrial salaries, is not fulfilled, which proves that absorbtion can be simultaneous with salary raises.

In South Korea, these were possible due to several factors, among which the most important are spectacular increase in productivity and food aid, which allows manipulation of agricultural local prices without degradation of the global offer.

## 6. WHEN PEOPLE MAKE THE DIFFERENCE

Last but not least, this final matter is related to two highly important aspects in the socio-economical and political fields. On one hand, the effort required by the development process needs to be beared by employees and, on the other hand, they need to accept it. For the first aspect, it is obvious that, in a capitalist environment, a poor and undeveloped economy cannot begin the process of improving work productivity by technological intensification of production. It can be achieved through a spectacular increase in the use of human resources, which implies work reorganization based on an increase in work time and/or work intensity, without significant changes in the capital-work ratio. South Korea began this accumulation process since the years 1960. Even though Koreans work long hours (60 hours per week), with a few payed holidays, their confort is still low. We can conclude that the entire accelerated development process relies on the sacrifice of the individual. This was not optional because employees were constrained by an autoritary and repressive regime, especially during military dictatorship.

As for the second aspect, it is highly unlikely for coersive politics to be able to maintain employees in this situation. Moreover, the current democratic regime and its very ambitious projects are largely supported. This explains the mobilization of the people towards reaching economic objectives.

Of course, other factors can justify legitimacy initially given by employees. For example, the Japanese colonisation and the civil war with North Korea created premises of an economic nationalism, encouraged by soldiers. We can add miscontents of the population, caused by immobility, corruption and social injustice characteristic to former regimes.

Ideologically, respect for hierarchy and work are primary values, promoted by confucianism. The Buddhist religion places the educated person first, followed by the farmer or craftsman and, last, by the merchant. Children do not abandon school for any reason. There are no illiterates and half of the young population goes to universities, many abroad.

Based on the Confucian values and led by remarkable planners, South-Koreans managed to competitively harmonize social and organizational innovations in a permanent process which we will call 'crossfertilization'. According to some [8], both the state-sponsored nationalism and the pro-growth Confucian values had been integral to the economic development of South Korea during the height of its industrialization from the early 1960s to the end of the 1970s. These two value systems were effectively used by the state and the industry to develop a work ethic necessary for the industrial transformation.

Today, after 50 years of accelerated economic growth, South Korea is able to prove to the world that the economic miracle is reality. Economic competition with North Korea will most certainly continue to ensure important advantages to the South.

# 7. CONCLUSION

The South-Korean experience proves that it is not easy to impose capitalistic development to a peripheral country based on employee's efforts. Basically, the development project needs a minimum legitimacy. The stronger the legitimacy and more tempered the coercion, the better the chances for success.

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