Chapter 3 EAST ASIAN EXPERIENCE RECONSIDERED: COMPLEMENTARITIES, INCREASING RETURNS, AND BULLISH ENTREPRENEURS

Shigeaki Fujisaki*

Continual per capita income growth, or conversely, continual increase of labor productivity has characterized the episode of modern economic growth. The continual labor productivity growth, in turn, has been based on perpetual technological progress, including innovations in production systems or organizations, as division of labor to be typical. The division of labor and specialization on the one hand, and the indivisibility (scale economy or increasing returns technologies) on the other, jointly bring about complementarities, which in turn cause various forms of externalities. Thus what allow some but not other countries to industrialize are complementarities. The rapid growth of the countries of East Asia showed that development was possible, and that successful development could be accompanied by a reduction of poverty, widespread improvements in living standards, and even a process of democratization. The main objective of this article is to reexamine the experience of those countries from the viewpoint of "high development theorists"2 one of whose key concepts used in common are complementarities. The article sheds light on the role of private entrepreneurs rather than government. Then this in turn reveals the fact that relative equality of income and wealth were a significant initial condition of economic development in the region, since "mass production ... would not be possible if it did not mean production for the masses."3

Complementarities and the Big Push

Multiple equilibria vs. a chain of disequilibria

In recent years, there has been plenty of theoretical literature discussing increasing returns, complementarities, and multiple equilibria. And what we learned from the recent discussions are:⁴

^{*} Visiting Research Associate, UPSE & Overseas Senior Research Fellow, Institute of Developing Economies (Chiba, Japan). The author is grateful to all the faculty and staff of UPSE, as well as the members joint IDE-UPSE study team for FY 1999-00. He also thanks Dr. Eduardo Gonzales (President, DAP), Dr. Federico Macaranas (President, Clemente Asia Phils.), and Ms. Ofelia Templo (Assistant Director-General, NEDA) for their insightful comments during the December 15, 1999 joint IDE-UPSE workshop; Josephine P. Esteban, Ma. Jocelyn Paren, Archimedes Gatchalian for research assistance; Odie Santos for secretarial assistance.

¹ See Stiglitz, J.E. (1998 b).

² See Krugman, P. (1993).

³ Nurkse, R. (1953), p.20.

⁴ See, for instance, Ray, D. (1998).

- 1. Because of complementarities, there may be "multiple equilibria" in a system, or multiple Pareto-comparable (Pareto-rankable) equilibria can only occur when there are complementarities;
- 2. The particular equilibrium does depend on the history of that society (path dependence). History and externalities may combine to create some lock-in effect.

Those literatures have shown that people's interest in a set of questions raised in the early development economics of the post war era were revived. I, however, have to point out that concerns of both the recent and early theorists are not quite the same. For instance, while recent literatures are mainly interested in the existence of multiple equilibria and its consequences, say poverty trap, the early theorists rather preferred to talk of the process of development, in particular its disequilibrium nature.

For instance, in his celebrated book, *The Strategy of Economic Development* (1958), Hirschman describe the development process as a chain of disequilibria. According to him, the aim of development policy must be to keep alive rather than to eliminate the disequilibria of which profits and losses are symptoms in a competitive economy. The task of development policy is to maintain tensions, disproportions, and disequilibria. The sequence that leads away from equilibrium, then, is precisely an ideal pattern of development from his point of view. It is worthwhile to note that such an idea, however, was, by and large, common among economists during the 1940s and 1950s. In his well-known article, for example, Scitovsky (1954) argues as follows:⁵

Profits are a sign of disequilibrium; and the magnitude of profits, under free competition, may be regarded as a rough index of the degree of disequilibrium. Profits in a freely competitive industry lead to investment in that industry; and the investment, in turn, tends to eliminate the profits that have called it forth. This far, then, investment tends to bring equilibrium nearer. The same investment, however, may raise ... profits in other industries; and to this extent it leads away from equilibrium. ... The profits of industry B, created by the lower price of factor A, call for investment and expansion in industry B, one result of which will be an increase in industry B's demand for industry A's product. This in its turn will give rise to profits and call for further investment and expansion in industry A; and equilibrium is reached only when successive doses of investment and expansion in the two industries have led to the simultaneous elimination of profits in both.

⁵ Scitovsky, T. (1954), pp. 148 – 149.

Hirschman concedes that the passage is a most pertinent portrayal of how development is set and kept in motion, but he also blames Scitovsky for proposing to short-circuit the proceedings and reach in a single jump a new point of equilibrium. In either case, both agree with each other that the induced investment generated by disequilibrium leads further toward expansion of economy. The point here is that it is not the induced investment in the same industry, but one in the other industry, which gives rise to the expansion of the economy. And this is precisely a definition of the concept of production complementarities, or simply complementarities.

The complementarity effect of investment ("investment begets investment")

According to Hirschman, complementarities mean that "increased production of A will lead to pressure for increasing the available supply of B." This simple definition of complementarities is broadly applicable to numerous articles during the 1940s and 1950s, including Scitovsky's mentioned above. To put it differently, or more generally, the term complementarities points to the fact that an agent takes some action and increases the incentive for others to take the same (or similar) action. Thus my decision and your decision to invest are complementary in the sense that a greater amount of investment on my part raises your incentive to do so. What is important is that, for Hirschman, the existence of complementarities itself provides the essential mechanism by which new energies are channeled toward the development process

Due to the existence of production complementarities, for instance, investment in the production of A sets up strong pressures for an increase in the production of B and strong incentives for the start of production of C. It is such a contagious characteristic of investment on more investment that Hirschman calls the complementarity effect of investment, and he claims that:⁸

The complementarity effect thus reinforces and supplements the slowly growing ability to invest of underdeveloped countries. The investments of one period call forth complementary investments in the next period with a will and logic of their own; they block out a part of the road that lies ahead and virtually compel certain additional investment decisions. ... The complementarity effect of investment is therefore the essential mechanism by which new energies are channeled toward the development process and through which the vicious circle that seems to confine it can be broken. To give maximum play to this

⁶ Hirschman, A.G. (1958), p. 69.

⁷ See, for instance, Ray (1998).

⁸ Hirschman, A.G. (1958), pp. 42 - 43.

effect must therefore be a primary objective of development policy.

Let us recall the fact that the complementarity effect of investment in the sense of Hirschman is a familiar concept for most Japanese who lived in its high growth era, i.e., in the 1950s and 1960s. During that era, even the official documents of the government such as *Keizai Hakusho* (the economic white paper) frequently used a phrase that "Toshi ga toshi wo yobu" (investment begets investment).

Complementarities and coordination failure

While Hirschman considers complementarities as the mechanism to channel new energies toward the development process, most of the economists in the 1940s and 1950s discuss the possible coordination failure, and consequently failure of industrialization which complementarities give rise to. Among the economists were Rosenstein-Rodan (1943), Nurkse (1953), Scitovsky (1954), and Fleming (1955).

The necessity of division of labor and specialization, on the one hand, and the indivisibility, on the other, jointly bring about complementarities, to be explained in some details later on. Furthermore, complementarities in turn cause various forms of externalities. And, according to Hirschman, these are externalities that achieve the sequence leading away from equilibrium, the ideal pattern of development, as mentioned earlier. Pecuniary external economies are typical cases that many economists hitherto have talked about in the context of economic development. If such external economies exist, however, they may give rise to market failures (or, coordination failure), and the role of government in economic development has hence become a matter of no small concern to economists. The big push arguments are typical of those of economists.

Now recall what Scitovsky claims in his paper cited above: "the same investment, however, may raise ... profits in other industries." Whatever creates the profits, the profits in the other industry are called pecuniary external economies, which benefit firms in the industry. They are economies external to A but appropriable by B, and conversely are external to B but internal to A. How does it come about, however, that pecuniary external economies lead to market failures? To put it simply, when an investment causes pecuniary external economies, its private profitability understates its social desirability. First, investment market is imperfect in the sense that an individual entrepreneur's knowledge of the market is bound to be insufficient. Secondly, individual entrepreneurs cannot appropriate the pecuniary external economies that their own activities give rise to. Or, neither can they foresee the sequence that they will eventually be recipients of economies external to other firms but internal to themselves. Naturally, private profit

⁹ Scitovsky, T. (1954), p. 148.

calculations underestimate actual social benefit, and Scitovsky hence concludes, "profits in a market economy are a bad guide to economic optimum as far as investment and industrial expansion are concerned; and they are worse, the more decentralized and differentiated the economy.¹⁰

If the central problems facing developing countries were those of externalities mentioned above, coordinated investment, which governments could promote, would be an appropriate remedy. As a matter of fact, Scitovsky suggests the necessity for centralized investment planning or for some additional communication system:¹¹

Market prices, however, reflect the economic situation as it is and not as it will be. For this reason, they are more useful for co-ordinating current production decisions ... than they are for co-ordinating investment decision be governed not by what the present economic situation is but by what the future economic situation is expected to be. The proper co-ordination of investment decisions ... would require a signaling device to transmit information about present plans and future conditions ... and the pricing system fails to provide this. Hence the belief that there is need either for centralized investment planning or for some additional communication system to supplement the pricing system as a signaling device.

Rosenstein-Rodan (1943) also advocates that "the whole of the industry to be created is to be treated and planned like one huge firm or trust." He further asserts that: 13

It might easily happen that any one enterprise would not be profitable enough to guarantee payment of sufficient interest or dividend out of its own profits. But the creation of such an enterprise, e.g., production of electric power, may create new investment opportunities and profit elsewhere, e.g., in an electrical equipment industry. If we create a sufficiently large investment unit by including all the new industries of the region, external economies will become internal profits out of which dividends may be paid easily.

¹⁰ Scitovsky, T. (1954), pp. 149 - 150.

¹¹ Scitovsky, T. (1954), p. 150.

¹² Rosenstein-Rodan (1943), p.204.

¹³ Rosenstein-Rodan (1943), p.207.

This is precisely an idea of the big push that simultaneous industrialization of many sectors of the economy can be profitable for them all, even when no sector can break even industrializing alone.

Increasing Returns, Market Size, and Income Distribution

Division of labor, increasing returns, and complementarities

Now let me raise the following questions to begin with. What brings about complementarity at all? Or, how will an increased production of A cause pressure for increasing the available supply of B? To be able to give a positive answer to these questions, we must recall Allyn Young's celebrated article titled "Increasing Returns and Economic Progress" (1928). In the article, he explores the main implications of Adam Smith's famous theorem on the manner of operation of economic forces, focusing on the division of labor. The examples he gave in the article elucidate our problem. He claims that: "it would be wasteful to make a hammer to drive a single nail; it would be better to use whatever awkward implement lies conveniently at hand." Also, he asserts that: "Mr. Ford's method would be absurdly uneconomical if his output were very small." Let me take the former to answer the questions.

Suppose that you need to drive a single nail. It would be clearly better to use "awkward implement," say, a stone in your backyard. If you need to drive hundreds of nails, however, you would decisively buy a hammer and use it. A society as a whole drives thousands of or millions of nails daily, and consequently there are factories producing hammers as well as nails in the society. It is thus obvious that increased production of A (nail), due to, say, a construction boom, will lead to pressure for the increasing available supply of B (hammer). To sum up, the necessity of division of labor and the indivisibility (in the sense of minimum economic scale or increasing returns technology) give rise to complementarities.¹⁵

As far as the initial stages of industrialization are concerned, then it is surely plausible to think that the economy moves from the use of constant returns to scale technologies, or even from the use of decreasing returns to scale technologies, to the use of increasing returns to scale technologies. Consider the events that are commonly linked to industrialization, such as labor migration from

¹⁴ Young, A. (1928), p. 530. According to Lee Iacocca, "When Ford left the family farm at age 16 ..., only 2 out of 8 Americans lived in the cities. By World War II that figure would double, and the affordable Model T was one reason for it. People flocked to Detroit for jobs, and if they worked in one of Henry's factories, they could afford one of his cars – it's a virtuous circle, and he was the ringmaster (*Time*, December 7, 1998)."

¹⁵ Complementarities can be considered as a form of increasing returns to scale, taking place at the level of society, rather than at the level of individual producer or firm. See, for instance, Ray (1998).

the agricultural to the manufacturing sector, mass production in the manufacturing sector, etc. It seems very likely to associate such events with increasing returns technologies. And if, in fact, industrialization is taken to be substitution of increasing returns to scale technologies for constant or decreasing returns to scale technologies, size of market would turn out to be an important issue to consider. 16

Market size and income distribution

In his celebrated book, *Problems of Capital Formation in Underdeveloped Countries* (1953), Nurkse claims that investment incentives are constrained by the extent of market or, in his own words, "the inducement to invest is limited by the size of the market" (p.6). Following that, he acknowledges that this proposition is no more than a modification of a well-known Adam Smith thesis: the division of labour depends upon the extent of market. As Young emphasized, however, Adam Smith's dictum consists of two parts: the division of labour depends upon the extent of the market, *but the extent of the market also depends upon the division of labour*. Young thus asserts that:¹⁷

Adam Smith's dictum amounts to the theorem that the division of labour depends in large part upon the division of labour. This is more than mere tautology. It means ... that the counter forces which are continually defeating the forces which make for economic equilibrium are more pervasive and more deeply rooted in the constitution of the modern economic system than we commonly realise. ... Thus change becomes progressive and propagates itself in a cumulative way. The apparatus which economists have built up for the analysis of supply and demand in their relations to prices does not seem to be particularly helpful for the purpose of an inquiry into these broader aspects of increasing returns.

It is this circumstance or circular causation in which the possibility of economic progress lies. The vicious circle of poverty to which Nurkse refers is one of such circular causation. With respect to a way out of the vicious circle of poverty, Rosenstein-Rodan (1961) suggests a virtuous circle that an increase in investment gives rise to an increase in income, and the additional income results in more savings, which, in turn, allow additional investment. Naturally, however, due to the independence of investment and savings decisions, more savings does not necessarily lead to additional investment. Nurkse thus claims that capital formation requires an act of investment, as well as a capacity to save, and, as mentioned above, he also asserts that investment incentives are in turn con-

¹⁶ See, for instance, Murphy, Shleifer, and Vishny (1989 a, b).

¹⁷ Young, A. (1928), p. 533.

strained by the size of market. Thus the virtuous circle which Nurkse suggests is one in which capital investment boosted personal incomes, leading to increased domestic demand and an enlargement of market, thus giving an increased incentive to invest and eventually bringing about more capital investment.

Now the possibilities of both the vicious circle of poverty and the virtuous circle suggest that multiple equilibria may arise, the former as a bad equilibrium and the latter as a good one. Then we may also interpret the big push into industrialization as a move from a bad to a good equilibrium. Nurkse thus suggests the idea of balanced growth (or the big push) as an escape from the deadlock of the vicious circle, saying that:¹⁸

The difficulty caused by the small size of the market relates to individual investment incentives in any single line of production taken by itself. At least in principle, the difficulty vanishes in the case of a more or less synchronized application of capital to a wide range of different industries. ... Here the result is an over-all enlargement of the market.

Hirschman strongly blames the advocates of balanced growth in the sense of simultaneous multiple development, explicitly including Nurkse, stating that there are tasks that simply exceed the capabilities of a society. Aside from the huge amount of money required for the simultaneous industrialization of many sectors, he claims that development is held back primarily by the difficulties of changing existing or potentially existing savings into available productive investment opportunities, i.e., by a shortage of "ability to invest," in developing countries. Hence, he asserts that, in order to utilize most effectively the scarce resource, or the ability to invest, it is necessary to select some limited sectors to be invested in and to let induced investment generated by disequilibria be the driving forces to expand the economy (the theory of unbalanced growth). Keeping the concept of production complementary in mind, Hirschman claims that: 19 "development has proceeded in this way, with growth being communicated from the leading sectors of the economy to the followers, from one industry to another, from one firm to another. In other words, the balanced growth ... is the end result of series of uneven advances of one sector followed by the catching-up of other sectors."

Mentioning Schumpeter's theory, which assigns a central role to the creative entrepreneur, however, Nurkse also shares the same view with ${\sf Hirschman}$:

¹⁸ Nurkse, R. (1953), p. 11.

¹⁹ Hirschman, A.G. (1958), pp. 62 - 63.

²⁰ Nurkse, R. (1953), p. 13.

Even if an innovation tends each time to originate in one particular industry, the monetary effects of the initial investment ... are such as to promote a wave of new applications of capital over a range of different industries. These waves result, in Schumpeter's own words, 'each time ... in an avalanche of consumers' goods ... although in the first instance they spell disturbance, losses and unemployment'.

It is worthwhile to note that he never forget to add that the composition of the increased consumable output, in which the waves result, must correspond, by and large, to the pattern of consumer demands. Again in his own words, "mass production ... would not be possible if it did not mean production for the masses." This statement offers the virtually same insight with an article of Murphy, Shleifer, and Vishny (1989b) which emphasizes the importance of equally enough distributed income to create large markets for domestic manufactures. They are saying that, "for industrial market to expand, the composition of demand must concentrate buying power in the hands of consumers of manufactures. Large population, homogeneous tastes, and concentrated population all help to create large markets for manufactures. But also of great importance to industrialization is the distribution of income, since the middle class are the natural consumers of manufactured goods."²¹ Recall that it is in East Asia which we have been seeing the phenomenon of an avalanche of consumer goods. And, conversely, recall that the shortage was the pervasive phenomenon in the former planning economies, the cause of such was not lack of investment activities, but lack of the correspondence of supply and demand (Kornai, 1980).

Bullish Entrepreneurs and East Asian Experience

Government vs. private entrepreneurs

The received wisdom of a well-known report of the World Bank, the East Asian Miracle (World Bank, 1993; henceforth referred to as EAM) is that it tries to explore a third way between the market-friendly view and the development-state view. Most economists especially in East Asia are seemingly sympathetic with this basic orientation.²² As its subtitle — Economic growth and public policy — shows, however, EAM puts too much emphasis on the role of government. It looks as if East Asia's economic success, which EAM called miracle, were entirely attributable to the governments. Somehow an interesting, or, more frankly, a peculiar feature of recent literatures of development economics, including EAM, is that an important player in development process is missing in them: the private entrepreneurs. Or, more precisely, private entrepreneurs have no explicit place in

²¹ Murphy, Shleifer, and Vishny (1989 b), p.538.

²² See, for instance, Aoki, Kim, and Okuno-Fujiwara (1996).

the arguments due to, probably, pervasive market failures. Reviewing recent arguments, it seems that only the market, as a mechanism or an institution, and government matter, and that the only central problem is hence whether the market and government are substitutes or complements, or which is more harmful, market failures or government failures. But, is there no explicit place at all for private entrepreneurs, to which Schumpeter and probably Nurkse assigned a central role, whose ability to invest Hirschman shed light upon? Recall, for instance, that most of the Japanese excellent companies, such as Sony, Toyota, and Honda, have been highly independent of government intervention.²³

While the advocates of the big push emphasizes the necessity for coordinated investment, some of them even advocates centralized investment planning, playing down the role of private entrepreneurs. Rosenstein-Rodan (1943) claims, "If the industrialization of international depressed areas were to rely on the normal incentive of private entrepreneurs, the process would not only be very much slower, the rate of investment smaller and (consequently) the national income lower, but the whole economic structure of the region would be different."²⁴

As long as centralized investment planning is concerned, however, historical evidence has clearly shown that it did not work quite well. Simply stated, the government is also imperfect in the sense that the government's knowledge of the market is bound to be insufficient, too, and due to such information problems, "governments are not well equipped to identify projects and motivate project managers." It is worthwhile to note that Hirschman rightly criticizes the central planning thesis as early as the 1950s:²⁶

²³ EAM acknowledges the special role of government intervention, particularly in Japan, Taiwan, and Korea. According to EAM, the governments in these countries actively intervened to develop specific industries with high potential for growth and thus job creation. Among the policy instruments for the intervention are (i) preferential allocation of foreign exchange, (ii) tax incentives, (iii) subsidized loans, etc. The report consequently shows somewhat negative evaluation against such intervention, saying that although intervention under these special circumstances could be effective, it was neither a powerful nor necessary element of the East Asian miracle [See also Fishlaw, A., and C. Gwin (1994)]. But, even whether the assertion that intervention could be effective holds or not is still highly questionable. With respect to the case of Japan, for instance, Itoh, Kiyono, Okuno-Fujiwara, and Suzumura (1991) asserts that: "As noted earlier, the rapid growth era began in the late 1950s. Throughout this period, rapid growth was experienced not only by the industries that were already in the process of developing but also by number of other industries that had just been targeted for fostering. One is tempted to jump to the conclusion that this is proof enough to show that the industrial policies were indeed effective. However, it is not clear whether it is appropriate to attribute to industrial policies either the unprecedented high growth since this period or the fact that a large number of industries targeted for nurturing did indeed develop. This is because a number of other factors - an extremely competitive market environment based on vigorous entrepreneurial spirit, rapid and steady expansion of domestic as well as foreign markets, an abundant supply of imported foreign technology, and superior adaptability of Japanese firms to such technology - were also responsible for bringing about rapid economic growth in this and the subsequent periods." (p. 19) See also Ranis (1995), Krugman and Obstfeld (1994).

²⁴ Rosenstein-Rodan (1943), pp. 206 – 207.

²⁵ Stiglitz, J.E. (1993), p. 43.

²⁶ Hirschman, A.G. (1958), p. 65.

The fact that private entrepreneurs will be unable or unwilling to do certain jobs which we would like to see done does not in itself ensure that the government can handle them. We must examine whether these jobs are likely to be performed satisfactorily by public authorities, which function after all in the same society as the entrepreneurs.

Moreover, it is also worthwhile to notice that if entrepreneurs are spontaneously "bullish" enough,²⁷ it may give rise to the similar outcomes as those of coordinated investment. Murphy, Shleifer and Vishny cite a historian's view on America's industrialization process, "According to Sawyer, even when a cold economic calculation dictated otherwise, irrationally bullish and overoptimistic American entrepreneurs insisted on investment. But with enough people making this mistake, optimistic projections became self-fulfilling." It is Keynes himself who calls these "optimistic projections" animal spirits. If this is the case, then it may be possible to get an alternative perspective of East Asian development in the past several decades, based upon not only coordinated investment, but also bullish entrepreneurs. The alternative perspective may in turn show that one of the important roles of government is simply to make entrepreneurs bullish "enough." ²⁹

Japan and its private entrepreneurs

Now allow me to recall briefly the historical experience of the Japanese. Thirty or forty years ago Japan was still a developing economy. Income levels were low, and there was an extremely strong yearning for affluence. This was Japan's high-growth era period, a time when "investment begets investment." Entrepreneurs' enthusiasm for investment was sustained by dynamic changes in the patterns of consumption, and by the belief that Japan was moving rapidly toward the attainment of American lifestyles.

The high-growth era also brought a revolution in consumption. Ownership of a television, washing machine, and refrigerator symbolized affluence. Parents were forced to buy television when their children started to visit neighbors' house to watch television and failed to return home for dinner. Husbands bought wash-

²⁷ Murphy, Shleifer, and Vishny (1989 a), p. 1014.

²⁸ Murphy, Shleifer, and Vishny (1989 a), p. 1014.

²⁹ Complementarities generally mean that my decisions positively rely or depend upon your decisions. We can rewrite this as follows: my "expectations" positively rely or depend upon your "expectations." As a matter of fact, the source of multiplicity of equilibria is the "expectations" that each entrepreneur holds about others. Then, (i) If entrepreneurs are simultaneously and spontaneously bullish "enough", this would give rise to the situation in which investment begets investment, even without coordinated investment (by government?), (ii) otherwise, it would lead to coordination failure and consequently failure of industrialization. (iii) If entrepreneurs are spontaneously, or at least simultaneously bullish "too much," then bubble phenomena would come about.

ing machines for their wives who complained that washing clothes was hard labor. Refrigerators became part of the Japanese family life after households were told by itinerant fish sellers that theirs were the only houses in the neighborhood to which it was necessary to bring ice in order to sell *sashimi*. These three products had a revolutionary impact on people's lives. The entrepreneurs who produced and sold them, notably Konosuke Matsushita who was known as the "god of business," became national heroes.

These symbols were later replaced by the three Cs—car, cooler (air conditioner), and color television. Although the products changed, the high growth of the Japanese economy continued to be driven by the powerful urge of the Japanese people to achieve affluence. A virtuous circle in the sense of Nurkse thus characterized Japan's high-growth era. What is noteworthy is that Japan in its high-growth era, had never heavily depended upon external demand as recent Japan has been doing.³⁰

In sum, the Japanese entrepreneurs in the high-growth era were bullish enough and the waves of innovation that they originated resulted in the phenomenon of an avalanche of consumer goods. They had both eye of faith to see the potential market and act of faith to realize the market. The secret was the advantages of backwardness in the sense that it was not as difficult for the entrepreneurs to foresee on what the Japanese people would spend their wages.

The export-push strategy and domestic markets

Unlike Japan, East Asian developing economies' success has been attributed to its high dependence on external demand. Observing rapid industrialization in the region, many economists assert that it relies largely on an export promotion policy. Another form of "circular" relation may help understand how such a policy boosts economic growth. Suppose that, first, a government encourages entrepreneurs to export their products with some policy measures, and thereby an increased investment creates more export capacity. Suppose further that the export capacity successfully increases the country's ability to earn foreign currency, hence, its capacity to import. Now again the government encourages the entrepreneurs to import capital goods for expanding their export capacity, leading to more investment. This relation, of course, never forms a virtuous circle based upon any circular causality, since the circle does not automatically work without intended policy measures as mentioned above, at least at its initial stage. Hence EAM calls such policy measures as a whole the export-push strategy, and furthermore, it asserts that, "Export-push strategies

³⁰ Saito, M. (1991), p. 188.

³¹ Table-2 of Fujisaki, S. (1998) shows that how Taiwan, one of notable High Performance Asian Economies, had been depending heavily upon external demand, especially up to the middle of the 1980s.

have been by far the most successful combination of fundamentals and policy interventions, and hold the most promise for other developing economies."³²

It seems that such a strong emphasis on the export-push strategy is somewhat misleading. Recall that we have been seeing the phenomenon of an avalanche of consumer goods in the region. Ranis and Stewart (1987), for example, pointed out a strong tendency for rising expenditure on consumer durables in rural areas in Taiwan, even during the period before 1980. Even if the export-push strategies boosted the economic growth in the region at the initial stage and has, by and large, maintained the momentum of economic expansion. the sustained growth has continually raised the income level there on the other hand. The increased income level has consequently led to the sustained growth of domestic markets. The phenomenon of an avalanche of consumer goods clearly shows that the virtuous circle, such as the one observed in Japan's highgrowth era, already has worked in the region as well. The virtuous circle begins with increased investment, whether the investment is originated in the export sector or not. Furthermore, as Aoki, Kim, and Okuno-Fujiwara (1997) suggest, "in Japan the leading export industries of various phases of economic development (textile and garment industries in the prewar period and the 1950s; shipping and electric appliances in the 1960s; car, manufacturing machinery, semiconductors, and electronics products in the 1970s and 1980s) were those industries whose products been first widely marketed and tested in domestic markets. They were not necessarily nurtured by government industrial policy (except for shipbuilding) because of their intrinsic export capability.33

In sum, the export-push strategy used so far to account for one of the essential reasons of the rapid growth of the region is insufficient as an explanation. If the growth of domestic market is a main rocket engine, export-push strategy only plays the role of booster rocket, especially at the initial stage of development. Murphy, Shleifer, and Vishny's (1989a, b) claim of the importance of domestic markets is, thus, valid in this light. Furthermore, if the main objective of economic development is the alleviation of poverty, the economic development should eventually result in the growth of domestic markets, or the ultimate target should be placed upon the latter.

Income distribution and industrialization

One of the important aspects of the experience of East Asia including Japan is that the economic growth has, by and large, resulted in poverty alleviation, the eventual objective of development. EAM hence describes the experience as "shared growth." Naturally, and as EAM itself acknowledges, "few political leaders anywhere would reject, on principle, either the desirability of growth or that the benefits of growth should be shared." EAM, then, asserts that "what

³² World Bank (1993), p. 24.

³³ Aoki, Kim, and Okuno-Fujiwara (1996), p. 28.

distinguished the HPAEs' leadership was the extent to which they adopted specific institutional mechanisms tailored to these goals, and that worked."³⁴

Apart from such mechanisms as the comprehensive land reform programs in Korea and Taiwan, rice and fertilizer price policies to raise rural incomes in Indonesia, however, EAM's argument over the institutional basis for shared growth is highly questionable. As Rodrik (1994) claims, the relative equality of income and wealth, landholding in particular, was a significant initial condition rather than a consequence of economic development in the region. Let us remember the fact that we have been seeing the phenomenon of an avalanche of consumer goods in the region, and also the Nurkse's words that mass production would not be possible if it did not mean production for the masses, including especially the lower income groups. Recall that Murphy, Shleifer, and Vishny (1989b) point to the importance of equally enough distributed income to create large markets for domestic manufactures. They raise a historical episode to uphold their argument in the article. Let me cite:³⁵

...in the first half of the nineteenth century, the United States greatly surpassed England in the range of consumer products it manufactured using mass production techniques ... Whereas in England manufactures were demanded by the quality-conscious upper class, that could not have possibly generated a large market, the American demand came from a large number of relatively well-off farmers. The large demand from this land-rich middle class enabled American manufactures to profitably sustain mass production.

Furthermore, emphasizing the significance of rapid expansion of domestic markets in the case of Taiwan, Ranis (1995) points out that:³⁶

Given the equal distribution of land on Taiwan (China), plus the shift toward more labor-intensive crop mixes and technologies, the demand for nonagricultural products was increasingly directed toward small- and medium-scale enterprises ... largely in the rural areas ... The preponderance of small- and medium-scale firms clearly represented a central feature of the landscapes, helping to explain the multidimensional success of the system in terms of growth, employment generation, and enhanced equity.

³⁴ World Bank (1993), p. 157.

³⁵ Murphy, Shleifer, and Vishny (1989 b), p.538.

Ranis, G. (1995), p. 514. According to Ranis, "although exports began to play an increasing role ... in Taiwan (China) 60 percent of overall growth between the early 1950s and mid-1960s was still domestically oriented, a fact that is often overlooked when the East Asia experience is cited." (p. 515)

A recent empirical study shows that although redistribution of assets that is associated with increased aggregate investment is likely to lead to a considerable increase in the welfare of the poor, the study results also caution that attempts at asset-redistribution or land reform that are associated with a decrease in aggregate investment may slow down overall growth and hurt both the poor and the rich. Thus, the study concludes that policies that increase aggregate investment and facilitate acquisition of assets by the poor might be doubly beneficial for growth and poverty alleviation.³⁷

Finally let me recall that when Nurkse refers to the primary determinant of a mass market, he asserts that the determinant is high productivity of workers or workers being well equipped with capital instruments. How do workers become well equipped with capital instruments? Of course, it is investment that brings about high productivity, following which investment the complementarity effect results in cumulative advance and eventually in a mass market. As Hirschman suggests, thus, the primary objective of development policy must be to give maximum play to the complementarity effect of investment.

References

- Aoki, M., H.K. Kim, and M. Okuno-Fujiwara (eds.) (1996). *The Role of Government in East Asian Economic Development Comparative Institutional Analysis.* Oxford: Oxford University Press.
- Deininger, K. and L. Squire (1998). "New Ways of Looking at Old Issues: Inequality and Growth," *Journal of Development Economics*, 57:259-287.
- Fishlow, A., and C. Gwin (1994). "Lessons from the East Asian Experience," in Fishlow, A., C. Gwin, S. Haggard, D. Rodrik, and R. Wade (eds.), *Miracle or Design? Lessons from the East Asian Experience*. Washington D.C.: Overseas Development Council.
- Fleming, J.M. (1955). "External Economies and the Doctrine of Balanced Growth," *Economic Journal*, 65:241-256.
- Fujisaki, S. (1998). "Complementarity, Linkages, and Economic Development," in Balisacan, A.M., and S. Fujisaki (eds.), *Growth, Poverty, and Income Inequality in the Philippines*. Tokyo: Institute of Developing Economies.
- Hirschman, A.G. (1958). The Strategy of Economic Development. London Westview Press.

³⁷ Deininger, and Squire (1998).

- Itoh, M., K. Kiyono, M. Okuno-Fujiwara, and K. Suzumura (1991). *Economic Analysis of Industrial Policy*. California: Academic Press.
- Kaldor, N. (1972). "The Irrelevance of Equilibrium Economics," *Economic Journal*, 82: 1237-1255.
- Kornai, J. (1980). Economics of Shortage. Amsterdam: North-Holland.
- Krugman, P. (1993). "Toward a Counter-Counterrevolution in Development Theory," *Proceedings of the World Bank Annual Conference on Development Economics* 1992. Washington: World Bank, 15 38.
- Krugman, P., and M. Obstfeld (1994). *International Economics: Theory and Policy*, 3rd ed. New York: Harper Collins.
- Murphy, K.M., A. Shleifer, and R.W. Vishny (1989a). "Industrialization and the Big Push," *Journal of Political Economy*, 97: 1003-1026.
- Murphy, K.M., A. Shleifer, and R.W. Vishny (1989b). "Income Distribution, Market Size, and Industrialization," *The Quarterly Journal of Economics*, Vol. 104, 537-564.
- Nurkse, R. (1953). *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford University Press.
- Ranis, G. (1995). "Another Look at the East Asian Miracle," *The World Bank Economic Review*, 9:509-534.
- Ranis, G., and F. Stewart (1987). "Rural Linkages in the Philippines and Taiwan," in Stewart, F. (ed.), *Macro-Policies for Appropriate Technology in Developing Countries*. London: Westview press.
- Ranis, G., F. Stewart, and E. Angeles-Reyes (1990). *Linkages in Developing Economies: A Philippine Study.* San Francisco: International Center for Economic Growth, ICS Press Publication.
- Ray, D. (1998). *Development Economics*. New Jersey: Princeton University Press.
- Rodriguez-Clare, A. (1997). "Positive Feedback Mechanisms in Economic Development: A Review of Recent Contributions," in Szekely, I.P., and R. Sabot eds, *Development Strategy and Management of Market Economy,* Oxford: Clarendon Press.

- Rodrik, D. (1994). "King Kong Meets Godzilla: The World Bank and The East Asian Miracle," in Fishlow, A., C. Gwin, S. Haggard, D. Rodrik, and R. Wade (eds.), *Miracle or Design? Lessons from the East Asian Experience*. Washington D.C.: Overseas Development Council.
- Rosenstein-Rodan, P.N. (1943). "Problems of Industrialization of Eastern and South-Eastern Europe," *Economic Journal*, 53: 202 211.
- Rosenstein-Rodan, P.N. (1961). "Notes on the Theory of the 'Big Push'," in Ellis, H.S. and H.C. Wallich (eds.), *Economic Development for Latin America*, New York: St. Martin's.
- Saito, M. (1991). Kokumin-keizai-keisan (National Accounts). Tokyo: Sobunsha.
- Scitovsky, T. (1954). "Two Concepts of External Economies," *Journal of Political Economy*, 62:143 151.
- Stewart, F. and E. Ghani (1991). "How Significant are Externalities for Development," World Development, 19: 569 594.
- Stiglitz, J.E. (1993). "Comment in 'Toward a Counter-Counterrevolution in Development Theory' by Krugman," *Proceedings of the World Bank Annual Conference on Development Economics 1992.* Washington D. C.: World Bank, 39-49.
- Stiglitz, J.E. (1997). "The Role of Government in Economic Development," *Annual World Bank Conference in Development Economics 1996.* Washington, D.C.: World Bank, 11 23.
- Stiglitz, J.E. (1998a). "Sound Finance and Sustainable Development in Asia," Keynote Address to the Asia Development Forum (Manila, the Philippines).
- Stiglitz, J.E. (1998b). "Towards a New Paradigm for Development: Strategies, Policies, and Processes," The 1998 Prebisch Lecture at UNCTAD, Geneva.
- World Bank (1993). The East Asian Miracle Economic Growth and Public Policy. New York: Oxford University Press.
- Young, A. (1928). "Increasing Returns and Economic Progress," *Economic Journal*, 38: 527-542.