

# **The East Asian Development Experience: Policy Lessons, Implications, and Recommendations for Sub-Saharan Africa (SSA) Global Competitiveness**

**Ashford C. Chea, PhD**

School of Business, Kentucky Wesleyan College, 3000 Frederica Street, Owensboro, KY 42301  
USA

Email: [achea@ix.netcom.com](mailto:achea@ix.netcom.com)

## **Abstract**

The paper looks at the development experience of East Asia and draws lessons for Sub-Saharan Africa in building global competitiveness. It starts with a historical perspective of both regions' developmental trajectories. This is followed by an analysis of the causes of East Asia's superior economic performance and development and SSA underdevelopment. The article also draws policy lessons from East Asia development strategies for SSA global competitiveness. The paper ends with a presentation of policy implications and recommendations for building SSA global competitiveness in the region's efforts to transform from poverty to prosperity.

**Keywords:** East Asia, economic development, sub-Saharan Africa, global competitiveness, economic growth

## **Introduction**

The phenomenal economic performance of East Asia has attracted great attention from both policymakers and academic analysts. How, it is asked, were economies such as Korea and Taiwan, Singapore, Hong Kong able to achieve their high levels of macroeconomic growth and development while most other so-called less developed countries including SSA have languished in the world's economic backwaters? The developmental state has been pointed out as one of the most compelling explanations for the economic success of East Asia. The East Asian developmental states, it is argued, have been successful because governments there have acquired control over a variety of things presumed critical to economic success: they can extract capital; generate and implement national economic plans; manipulate private access to scarce resources; coordinate the efforts of individual businesses; target specific industrial projects; resist political pressures from popular forces such as consumers and organized labor; insulate their domestic economies from extensive foreign capital penetration; and, most, especially, carry through a sustained project of ever-improving productivity, technological sophistication, and increased world market shares (Woo-Cumings, 1999).

## **Objectives**

The objectives of the chapter are to outline, discuss, and analyze the followings: (1) A brief historical perspective of East Asian and SSA economic development; (2) The causes of the differences between economic performance in East Asia and SSA; (3) The role of the developmental state in East Asia's development and the stages of development of East Asian economies; (4) East Asian governments policies for global competitiveness (5) East Asian Policy lessons for SSA; (6) How to start economic dynamism in SSA; (7) Other policy concerns for SSA global competitiveness; (8) Policy implications for SSA governments; (9) Policy recommendations for SSA governments; and (10) Concluding remarks.

## **A Brief Historical Perspective**

### **Development Indicators: East Asia and SSA in Perspective**

In 1950, South Korea had a per capita income of \$146, roughly in the ballpark with Kenya (\$149) and Nigeria (\$150) and just slightly behind Egypt (\$203). Taiwan ranked somewhat ahead of these countries with \$224, but behind Brazil (\$373), about one-half the level of Mexico (\$562), and only the about 25 percent of Argentina (\$907). For the next four decades Taiwan's GNP grew at an average of 8.7 percent per year; export expanded at 20 percent per year; and the industrial share of production increased from 25 percent to 45 percent. Korea's growth was slower to start, but from 1961 to 1991 it rose by 8.4 percent per year. Both countries roared past others that were once their economic peers. Despite some slowing in the 1990s, both countries were enjoying growth rates of over 6 percent in 1997. Indeed, Korea had become sufficiently strong to acquire membership in the Organization for Economic Cooperation and Development (OECD). While Korean and Taiwanese lifestyles remained less luxurious than those in most southern European countries, they were superior to those in most of the non-oil-producing countries in sub-Saharan Africa (SSA), Asia, and Latin America and closing fast on many of the less rich European countries.

For their growth and economic transformation, all two countries have relied heavily on the export of manufactured goods. Indeed, export-oriented development has become so linked in the public mind with the hyper-growth of Korea and Taiwan that it has become new development orthodoxy." In the early 1990s, for example, U.N. trade system data shows that Korea and Taiwan accounted for 8 percent of the world's manufactured export; SSA, by way of contrast, accounted for only 0.4 percent. From another perspective, Taiwan, Korea, Hong Kong, and Singapore together account for more manufactured exports than do all SSA countries combined.

Both the Taiwanese and Korean governments pursued import substitution policies from the end of World War II into the early 1960s. But import substitution gave way to export-led growth policies in the 1970s. For Korea, much like Japan, a devalued currency and severe barriers against the import of foreign consumer and manufactured goods were critical components of policy. When Korea shifted to export-led growth, the state channeled

investment funds to specific firms in targeted industries using a vast array of export and investment subsidies. In addition, Korea followed a policy of national champions with the adoption of its new policy under the Heavy and Chemical Industry Plan of 1973.

State control over foreign direct investment by Korea and Taiwan has also been a complement of diplomacy. For Taiwan in particular, the threat of international isolation as a result of most Western states' recognition of China was acute. But by selectively opening up various investment opportunities to the multinationals of major U.S and European countries, economic hostages were created to ensure a measure of political influence not otherwise possible. Korea followed much the same strategy after President Carter raised the specter of withdrawing U.S. troops from the peninsula. The ability to export goods to the U.S. and the other advanced countries, combined with the capacity to maintain protected manufacturing and capital markets at home, was vital to the economic success of Korea and Taiwan. Doing so allowed all two to take advantage of relatively open markets worldwide as a means by which to advance their own domestic transformations. In addition, the strategic sustenance given to the two regimes by the U.S. military was of great importance. Military objectives ensured that U.S. would be the external patron for regime success in East Asia. America's strategic policies opened up space for these two economies to pursue their own economic policies. Korea and Taiwan could probably not have remained in existence without the international support provided by both the markets and the military of the United States (Woo-Cumings, 1999).

### **Initial Conditions: Comparing East Asia and SSA**

This section seeks to contribute to the debate on "initial conditions" by showing that the advantages enjoyed by East Asia economies in terms of initial conditions are nowhere as great as they are commonly assumed to be. For this purpose, this section takes a close look at the differences in initial conditions between East Asia and SSA, a region which is supposed to have been most disadvantaged in terms of initial conditions. The initial conditions examined in this section are human resource endowment, natural resource endowments, physical and social infrastructure, previous industrial experiences and foreign aid.

### **Human Resource Endowments**

Early records of literacy in SSA are difficult to come by. What is interesting to note is that around 1950, the human resource endowments of East Asian countries measured in terms of literacy were rather good, but nothing exceptional. It is not surprising that they did not have a good human resource bases as those of other developing countries, given their generally lower levels of development at that point, but notable is that, around 1950 Korea had a literacy ratio (22 percent in 1945) which was lower than those in five out of 16 SSA countries around the time for which data are available (Mauritius, 51.8 percent; Zimbabwe, 36.5 percent; Lesotho, 34.9 percent; Madagascar, 33.5 percent; South Africa, 27.5 percent; and only marginally higher than those in three more (Cape Verde, 20.8 percent; Botswana, 20.5 percent; Uganda, 19.5 percent). The data for majority of the SSA countries became available only in the 1960s, by which time Korea had already raised its literacy ratio up to 70.6 percent, which is higher than

the literacy level reached by any of the 37 SSA countries for which the data were available. However, one can at least say that the Korea of 1945 would not have looked out of place in SSA in the early 1960s in terms of literacy record. The 22 percent literacy ratio that it had in 1945 was lower than that in 10 out of the 37 SSA countries in 1960 (Mauritius, 60 percent; South Africa, 57 percent; Zambia, 41.4 percent; Zimbabwe, 39.4 percent; Namibia, 38.4 percent; Uganda, 34.9 percent; Botswana, 32.7 percent; Congo DRC, 31.3 percent; Cape Verde, 27.2 percent; Ghana, 23 percent). All in all, one can say that East Asia countries did have better human resource endowments than those of the SSA countries but that the difference was not large until the 1950s. Korea in 1945 would not have looked out of placed in early post-independence SSA in terms of human resource endowments. And more than a handful of SSA countries did better in terms of primary enrolments than did the East Asian countries even until the early 1960s. Ghana is a good example in this case. When it comes to secondary education enrolment, the gap between East Asia and SSA becomes much larger, but even here the difference did not clearly get translated into an exceptional stock advantage in terms of skilled manpower for the East Asia countries until as late as the mid-1960s.

### **Natural Resource Endowments**

While it is true that East Asian countries were very poorly endowed with land, it is not obvious that the SSA countries were particularly disadvantaged in this regard (that is well-endowed with land, according to the resource curse thesis). Research shows that, while many (but by no means all) SSA countries may have had a large amount of productive land, the gap between them and the East Asia countries becomes much smaller when it comes to arable land. When it comes to mineral resources, of the seven SSA countries other than South Africa, only Congo DRC (copper and diamond), and Nigeria (oil and natural gas) have significant reserves in more than one mineral, and all the others (Angola, Botswana, Guinea, Zaire, and Zimbabwe) have significant reserves only in one mineral each, although they all have more than their fair share in that mineral. Research shows that SSA countries in general are not exceptionally well endowed with natural resources. There are certainly several SSA countries that deserve such a description, but the vast majority of the SSA countries do not. Therefore the resource curse thesis does not hold for SSA as a whole.

### **Physical and Social Infrastructures**

It is frequently believed that the East Asia countries benefited from the superior physical and social infrastructures that they had inherited from their colonial masters, especially Japan. Is this true? Research shows the number of telephones in use per 1000 inhabitants as an indicator of the quality of a country's physical infrastructure. In 1950, Hong Kong, with, with 18.36 telephones per 1,000 people, was leading Asia in this respect but it was behind some SSA countries, such as South Africa (28.93) and the Gambia (26.02). Taiwan, with 5.37 telephones per 1,000 people as late as in 1956, was behind Zimbabwe (11.06) and Namibia (11.90), and Korea, with 0.84, was behind 17 out of the 30 SSA countries for which data are available. When it comes to railway, research shows that it is clear that the East Asia countries did not start their industrialization with much better railway systems than those of SSA countries. For instance,

between 1940 and 1960, Korea was behind such SSA countries as Benin, Botswana, Congo, Malawi, Senegal (in 1960), Sierra Leone, Togo, and Zimbabwe (1940-1950). Even Taiwan, which was about 2 to 3 times better endowed with rail infrastructure than Korea was in those days, was behind such SSA countries as Sierra Leone and Togo. In terms of social infrastructure, which, in relations to life expectancy and infant mortality, includes, among other things, the public administrative system, health care institutions, the institutions to take care of the aged and very young, and female education system. Infant mortality data are scant for 1940 and 1950, especially for SSA countries. The data became extensively available only from 1960. In that year, with 36 and 37 infant deaths per 1,000 live births, Singapore and Hong Kong were in a different league from all other countries, possibly reflecting their unique advantage as city-states. However, even Korea, with a per capita income (\$82) less than half that of Ghana (\$179) and on par with that of Kenya (\$72) had an infant mortality rate lower than any SSA country. The same picture can be found in life expectancy figure. In 1960, Korea, with 53 years of life expectancy at birth, was the worst performer among the four East Asian economies (Singapore, 69; Hong Kong, 63; Taiwan, 64), but even it outperformed all the SSA countries for which data were available. Thus, it emerges that, unlike in relation to other initial conditions, where they did not have an unambiguous head-start (Korea, especially, would not have looked out of place in SSA until the 1950s on most indicators), East Asia countries did have a clear head-start around the 1950s in terms of social infrastructure.

### **Previous Industrial Experience**

Reviving an old dependency argument, some recent studies have emphasized that Japanese colonialism was different from its European counterparts in that it developed manufacturing industries in its main colonies, namely, Korea and Taiwan. According to this story, the large industrial base that Korea and Taiwan inherited from their colonial past gave them head-starts in their subsequent industrialization. Yes it is true that in terms of the development of the manufacturing sector, one may say that in the 1940s and the 1950s, East Asian countries did have some (but not a big) advantage over many SSA countries, but that they were still way behind South Africa and Zimbabwe. However, when one broadens his horizon to include the whole industrial sector, there are a couple more SSA countries (DRC Congo and Ghana) that were ahead of East Asia even until the late 1950s. Even the gap that existed between the East Asian countries and the less industrialized SSA countries was rather insignificant until the 1940s. And even after the gap had widened during the 1950s, their figures were still within the same league, rather than in totally different leagues. Thus, the picture that emerges in relation to previous industrial experience is similar to those in relation to other indicators of initial conditions discussed so far. Overall, the East Asian economies did have some advantage over many SSA countries, but there were some SSA countries that were better placed than the East Asia countries at least on some measures. And up to the 1950s, whatever, gap that existed between the East Asian economies and the less advanced SSA countries was rather small.

## **Foreign Aid**

The East Asian countries, especially Korea and Taiwan, are supposed to have received exceptionally large amounts of foreign aid in their earlier stages of development because of their strategic positions in the Cold War. The extra resources that had come in as foreign aid are supposed to have given these countries a head-start in the pursuit of economic development over other countries that were not as lucky. However, the foreign aid story does not apply to Hong Kong and Singapore. They received very little foreign aid. But Korea and Taiwan were indeed getting rather large amounts of foreign aid during the 1960s. For example, during 1960-64, Korea and Taiwan received more foreign aid than did any other countries, say, in Latin America or Asia. However, when comparing Korea and Taiwan to SSA countries, it is not possible to say that they were in better position in terms of foreign aid. Between 1960 and 1964, assuming that all the Francophone African countries, for individual country breakdown is not available, got identical per capita foreign aid, there were 17 out of the 29 SSA countries for which data were available that received more foreign aid per capita than either Korea or Taiwan did. Between 1965 and 1968, of the 40 SSA countries for which the data were available, 13 got more foreign aid per capital than did Korea, while 24 got more than did Taiwan. Thus, foreign aid data for the 1960s shows that, while Korea and Taiwan did get relatively large amounts of aid, especially when compared to other Asian and Latin American countries, their receipts were at about the average level when compared to those of the SSA countries. Moreover, it is also very important to note that the Cold War did not just bring benefits (in the form of aid) to the East Asian countries. Korea had to spend an enormous amount of resources on reconstruction after the Korea War (1950-1953), a hot manifestation of the Cold War. The Korean War destroyed more than 50 percent of the country's manufacturing base and more than 75 percent of the country's railways (Chang and Grabel, 2004). Both Korea and Taiwan spent 5-6 percent of GDP on defense expenditure, when other countries could get away with 2-3 percent. Given all these, it is difficult to say whether their strategic positions in the Cold War gave Korea and Taiwan any large net advantage over SSA countries. In sum, research shows that East Asia was not exceptionally placed in terms of the initial conditions of economic development, as is widely believed, even when compared to SSA economies. East Asian exceptionalism based on the initial conditions argument has too long been abused as a way to get rid of inconvenient cases for particular theories of economic development—first by the dependency theorists and now by the mainstream economists. It is time that scholars of economic development stop taking an easy route out of their theoretical impasses through the initial conditions argument (Chang, 2006).

## **The Causes for the Differences in Economic Performance between East Asia and SSA**

How can one explain the differences in economic performance between East Asia and SSA? The World Bank's East Asian Miracle report identifies three alternative views on the role of public policy in East Asia superior economic performance. The first is the neoclassical view. The neoclassical view attributes East Asia success to limited government intervention and an export-oriented trade strategy. Unlike nations in SSA that followed the protectionist path of



import-substituting industrialization (ISI), the East Asian economies relied on export-oriented industrialization (EOI) since the mid-1960s to stoke global demand for their manufactured exports and to promote local industrial upgrading (Gereffi and Wyman, 1990; Haggard, 1990). Neoclassical economists and prominent international financial institutions such as the World Bank loudly touted EOI as a successful development paradigm that SSA should emulate. The explicit message directed at SSA and other countries pursuing ISI was that the economic performance of the outward-oriented economies has been broadly superior to that of the inward-oriented economies in almost all respect, most notably increased exports, employment, and economic growth (World Bank, 1987).

The second is the revisionist view. The revisionist view is that East Asia governments actively led the markets in critical ways via industrial policy and other measures (Wade, 1990). Interventionist states were central to East Asia success because of the presence of pervasive market failures, which governments remedied by altering incentives and deliberately getting the prices wrong to boost industries that otherwise would not have thrived (Amsden, 1989). The lessons to be learned from East Asia are still in dispute, as Amsden (1994) observes: "East Asia created competitiveness by subsidizing learning, whereas World Bank policy emphasizes methods that effectively cut real wages." However, the key features of East Asia's success may lie less in the area of economic policy than in the region's dynamic institutional arrangements. The East Asian institutional model is characterized by : (a) local ownership and control in the leading export and intermediate goods industries (Gereffi and Wyman, 1990); (b) substantial backward and forward linkages within the domestic economy involving a wide variety of local business groups and subcontracting network (Hamilton and Biggart, 1988; Orru and Baggart, 1991); (c) a high level of endogenous technological development, although few of these countries have made true innovative technological breakthroughs (Lall, 1994); and (d) industrialization by learning either by competitively benchmarking best practices or inventing them (Amsden, 1989; Sabel, 1994).

The market-friendly view is the third perspective. The market-friendly view advocated by the World Bank is that economic growth resulted from functional intervention in fundamentals, such as stable macroeconomic management, high investments in human capital (especially education), secure financial systems, limited price distortions, and openness to foreign technology and trade. Although selective interventions—such as mild financial repression (keeping interest rates positive, but very low), directed credit, the promotion of specific industries, and export-push trade policies—were commonplace among the East Asian economies, these industrial policies were considered by the World Bank to be largely ineffective in promoting growth and enhancing productivity. Elsewhere in the report, the Bank qualifies its assessment, "Our judgment is that in a few economies, mainly in Northeast Asia, in some instances, government intervention resulted in higher and more equal growth than otherwise would have occurred. However, the prerequisites for success were so rigorous that policymakers seeking to follow similar paths in other developing economies have often met with failure" (World Bank, 1993).

What is missing from the Bank's market-friendly position is the realization that East Asia's macroeconomic basics—high saving and investment rates, expenditures on education, and exports—are supported by micro-institutional foundations that embed the development process in a local context. Social and economic networks are one of the micro-institutional pillars supporting East Asia development because they facilitate organizational innovations and technological learning at the domestic level (Kim, 1998).

In addition to the above perspectives, research show there are other explanations for East Asia's superior economic performance relative to SSA. For example, while East Asia invested immensely in the social sectors (health and higher education, including science, engineering, and mathematics), SSA invested very little in the social sectors. Moreover, all societal stakeholders were involved in East Asia in setting development agenda and goals. There was no such partnership in SSA economic planning. Still, while East Asia had high national savings rate and high investment rate, the savings rate in SSA was negative and hence low investments rates as a percentage of GDP. Furthermore, East Asia depended less on official borrowing and managed international private loans judiciously through investment in profitable and productive projects; whereas SSA poorly managed its international private loans by spending on wasteful projects and depended on official borrowing. Similarly, East Asia followed its own policies but SSA implemented inappropriate policies designed and imposed by the IMF and World Bank to the detriment of her development. This means that East Asia economic destiny was in the hands of their leaders and they had total control over the direction of their countries' development; whereas SSA's development destiny was completely controlled by IMF and the World Bank. Unfortunately, research show that no country under the control of IMF and the World Bank had ever transformed from poverty to prosperity. Rather, countries that are under the control of the above institutions usually declined economically from relative poverty to absolute poverty. SSA is the best example. Another explanation for East Asia's high growth and development compared to SSA has to do with the fact that East Asia instituted capital controls (outflows) while SSA government officials and their cronies were exporting capital to be kept in international banks for themselves. Moreover, East Asians living overseas invested hugely in their homeland. This was because the environment was conducive for investments. This was not the case for SSA because the investment environment was poor due to bad government policies. Also, East Asia actively learned from developed nations and adapted international best practices to local situations. For SSA there were no deliberate policies in place to seek, acquired, adopt, and adapt international best practices for development. Furthermore, East Asia acquired and developed institutions to support their development. SSA had no such institutions or policies to acquire them. Finally, and more importantly, East Asian political leaders were single-mindedly focused on economic development and national interests above anything else, while SSA politicians were motivated by self-interest at the expense of their citizens and countries.



## **The Developmental State**

### **The Developmental State in East Asian**

As Lall (1994) correctly points out, economic development has been a common objective of almost all political regimes. Although policies to achieve economic development have not been equal, political regimes have pursued economic and social development regardless of ideology. In this sense, the modern political regime is a kind of developmental state. As some scholars (Wade, 1990; North, 1981) have mentioned, state intervention in the market system has been embedded in the capitalist system. Economic activities—production, distribution, and consumption of necessary goods and services—have never been free from politics or from state intervention. With the nation-state becoming the dominant form of polity, state intervention in the economy has become more sophisticated and comprehensive than ever. Although the degree of state intervention in the economy has not been constant across time and space, the state's role in providing basic rules and institutions for economic activities has been a prerequisite for capitalist development.

What then are the characteristics of the developmental state in East Asia? The developmental state model was originally suggested by Johnson (1994) to explain the role of the state in Japanese policymaking. The model describes the role of the government in organizing the economic activities of private firms. It is possible to identify six distinctive features of this particular entity in East Asia in terms of the mode of state intervention. First, the developmental states in East Asia exercised autocratic power, compulsion and oppression. For instance, in the 1960s, the military regime in Korea and the martial law regime in Taiwan have been dictatorial regimes where power is concentrated into one man, Park Jung He in Korea and Chiang Kai-shek in Taiwan. They established personalized leadership through military coup (Park Jung He) and military occupation (Chiang Kai-shek). They repressed political opposition to monopolize power, and they controlled each society in a fashion similar to that of military generals. State terror by the developmental state, including arrest and torture of dissidents, was common.

Second, by establishing centralized economic policy-making organizations, the Economic Planning Board (EPB) in Korea and Council for Economic Planning and Development (CEPD) in Taiwan, they launched a series of economic planning agencies and initiative for economic growth. Thus, state intervention in these East Asian economies has been more comprehensive and selective than that in any other capitalist country. "The state command" replaced "the market demand" in core economic decision making in private enterprises. The series of economic plans in Korea and Taiwan have constituted the major sources of industrial transformation and economic growth (Wade, 1990). State intervention in East Asia is more similar to that in Western Europe, since the state also played a role as entrepreneur as well as planner, such that state enterprises played important strategic roles in promoting exports. The state also selected several industries as strategic sectors and gave them protection from excessive competition among domestic as well as foreign enterprises. The state provided

financial subsidies and supports and scrutinized the economic performance. It controlled the number of competing enterprises in the market by restricting new entry and production capacity and frequent state-led mergers of private firms.

Third, the developmental state managed investment by controlling the flow of money. There was a complete control of capital flows (both in and out of the country). The most important factor for state control over the economy was the nationalization of the banks (Shin, 1994; Wade, 1990). The state-owned banks were strategic instruments for the anti-consumption and pro-investment policy, controlling consumption levels and prohibiting the consumption of domestic and foreign luxury goods. The state initiated nationwide savings campaigns to expand capital investment in strategic industries. Consequently, there has been a trend of high savings rates and high investment ratios in East Asia (Kim, 1998). The East Asian states have maintained very strict regimes of capital control until recently. Every economic transaction involving foreign exchange had to be made through the banks under government ownership and/or control, and there were heavy punishments for those who attempted major capital flight (they could be punished with the death sentence in Korea (Chang, 2006).

Fourth, the developmental states in East Asia initiated export-oriented industrialization as a strategy for economic growth. The main difference between the developmental state in East Asia and that in other developing is that the state in East Asia chose an outward-oriented industrialization strategy, a mercantilist strategy that stressed foreign trade. The mercantile state made export a compulsion rather than a choice for private companies (Amsden, 1989). To promote exports, the dualist trade regime—a free trade regime for export-related production and a protectionist trade regime for import-related production with a selective tariff system—was developed in East Asia.

Fifth, the developmental states created economic agencies and big capitalists and capable technocrats to carry out economic planning in the private sector in Korea, Singapore and Japan, and they created small capitalists in Taiwan. They utilized state resources and power, financial subsidies, access to foreign capital, licenses to import scarce consumer goods, and so on, to help to make domestic capitalists internationally competitive. As in the case of the chaebol groups in Korea and zaibatsu in Japan, with the help of the state indigenous capitalists can become world-class capitalists in a short period. Sixth and finally, to maintain a good business climate, the developmental states in East Asia pursued an oppressive labor policy either through exclusionary labor policies in pre-war Japan or post-war Korea or inclusionary labor policy in post-war Taiwan (Shin, 1994). Mobilizing the anti-communist ideology, the developmental states did not allow the basic rights of workers, such as freedom of association and collective actions (Shin, 1994). To prevent possible workers' revolts, the state tightly controlled the workplace through the use of an oppressive apparatus, such as legal, political, and physical measures that included state surveillance and violence (Kim, 1998).

## **Stages of East Asia Development**

Viewed through the lens of trade and technological change, development in East Asia can be divided four stages.

### **Labor-intensive manufacturing**

Starting in the 1960s, Hong Kong, Korea, Singapore, and Taiwan began investing in light, labor-intensive manufacturing industries whose products were quickly able to penetrate the lower and most price-sensitive end of markets in Western countries. The American involvement in Vietnam at that time and the interest of the U.S. in strengthening the economies of its allies in the region led to policies that eased access to U.S. markets. Access was facilitated further by the efficiency of the retail sector and the capacity of American retail chains to source products from East Asia. Having established a beachhead, the East Asian exporters consolidated their market position by improving quality and broadening the range of manufactured exports. Within a matter of years, they established a reputation not just for competitiveness and quality but also for on-time delivery, flexibility, and readiness to enter new product lines

### **Upgrading by newly industrialized economies, enter the Southeast Asian**

This first stage of export-led growth in developing East Asia was followed by a second, extending from the early 1970s through the late 1980s, during which four newly industrialized economies were joined by several Southeast Asia countries and, after the early 1980s, by China. The newly industrialized economies shifted into more capital-and-skill-intensive manufacturing industries as well as into producer services, enabling newcomers to enter the subsectors they were vacating. East Asia's gathering reputation as a politically stable region with a demonstrated track record of industrial performance and export competitiveness attracted a rising flow of foreign direct investments from Japan, USA, and Europe. Having determined that East Asia had the manufacturing capability, the supplies of educated and trainable workers, and the policy environment conducive to rapid industrialization, Western and Japanese corporations began investing in local firms and establishing wholly owned facilities to leverage the advantages of lower labor and overhead costs. Major corporations that were capable of managing geographically dispersed production facilities transferred components and machinery to overseas subsidiaries and subcontractors that engaged in labor-intensive assembly operations and exported the final product back to the parent company or to a third party. The cost advantages of parceling out production of parts and components to numerous specialized producers throughout East Asia increased as local manufacturing and intermediaries gained experience, tariff barriers fell, and logistics improved. This, in turn, led to rising trade flows within industries and within production networks led by multinational corporations. Starting with items such as garments, footwear, consumer electronics, these patterns of production and trade spread to machinery, electronic, chemicals, and transport industries.

## **Production networking gathers momentum**

By the end of the 1980s, East Asia was being drawn into a web of relationships created by intertwined flows of trade and FDI. Hatch (2003, p. 29) states, "This export of Japanese capital and technology helped weaved together the economies of Asia." He also cites the work of Tamara, who has remarked, "Japanese multinational companies are building a regional division of labor that emphasizes technology-intensive prototype production in Japan and mass production of standardized product in Asia" (Hatch, 2003, p. 31). This third stage lasted through much of the 1990s and witnessed an unusually rapid expansion of trade. Between 1990 and 2000, world trade grew at an annual average rate of 6.6 percent. In East Asian region, it grew nearly 14 percent annually. These years also saw the flowering of global production networks that were budding in the previous decade. Market deregulation, which had been gathering momentum, became widespread in conjunction with WTO-sanctioned trade liberalization, and its dramatically ratcheted up the level of market competition. An added twist was imparted by the intensifying of technological change, most notably, in the many manufacturing and service industries related to the provision, distribution, and use of information. Moreover, by simplifying the management of dispersed production and enhancing the efficiency of supply chains, information technology further encouraged firms to de-verticalize and to outsource not just a variety of production tasks but also a multitude to back-office functions.

During the space of a few years, the combined forces of trade, FDI, and organizational restructuring elaborated a system of global networking that made the tradable segments of the light manufacturing sectors in East Asia's emerging economies almost coextensive with those of Japan and the United States, and to a lesser extent, Europe. Large multinationals from these countries moved their labor-cost-sensitive activities to East Asia and, in addition, invested in other production facilities to access protected domestic markets. In industries such as autos, electronics, office equipment, and optical instruments, these moves by the large firms were matched by many of their local parts suppliers, which also set up subsidiaries in East Asia. At the same time, the big retail chains in the Western countries and producers of commodity items began sourcing entire categories of products from East Asia, extending from men's shirts to personal computers. Some of these firms, such as Nike, retained control of design and research, while others limited themselves to brand management and quality control, leaving their overseas suppliers to take the initiative in submitting new designs and fresh products.

## **Technological deepening**

By about the mid-1990s, the manufacturing subsectors of the industrializing East Asia economies were linked to the economies of leading Organization of Economic Cooperation and Development (OECD) countries through trade that was intermediated by buyer-and-producer-driven supply chains and through a host of relationships arising from FDI. However, even as integration between the East Asian region and the OECD countries appeared to be tightening, the dynamics of continuing trade liberalization, intensifying competition from China, both in

product markets and for FDI, and the apparent advantages of firm size in a globalizing world were ushering in a fourth stage of development in which competitiveness is predicated on technological deepening. There is no better exemplar of the leverage provided by steady technological capability than China, which has emerged in the short space of 10 years as the world's fourth largest trading nation in 2003 and second largest producer of information technology hardware, with close to 14 percent of the world market (Yusuf, Altaf, and Nabeshima, 2004).

### **Government Policies for Global Competitiveness in East Asia**

East Asian governments have initiated and supported technological advance through six broad policies: 1. Human capital deepening 2. Creation of publicly financed research institutions 3. Grants, subsidies, and tax incentives for private R&D activities and government contracts 4. Technology licensing policies and technology transfer arrangements through FDI in high-tech industries 5. R&D by public sector firms, and 6. Incentives for information and communication technology (Yusuf, Altaf, and Nabeshima, 2004).

### **Technology Transfer**

Several common themes emerge from the selective review of literature on technology transfer in East Asia. First, to understand imported technology, firms must actively engage in R&D, although R&D in this context should be best thought of as learning rather than creating new knowledge, which may come later. That is, the diffusion of technology is not automatic. It is one thing to import new capital equipment that may have several advanced features. Understanding how it actually works and being able to improve on such machinery are another matter. Some level of effort on the firms part—sometimes great efforts—is necessary to fully understand the technology being transferred. New technology is not given; it must be learned. Therefore, importing (or to a lesser degree, just licensing) new technologies is first step, but a second step is needed to follow it through.

In other to understand new technologies, a firm must possess some capabilities. Essentially this capability is represented by the quality of managers and employees at the firm. If the average level of education and skills is low, the likelihood of mastering technologies, let alone improving on them is small. Thus, for a firm to assimilate technology successfully, it must employ a high-quality workforce at the minimum. Of course, depending on the country's situation, obtaining such workers with advanced knowledge may be hard or close to impossible. A firm can supplement the domestic supply of highly educated workforce by recruiting globally. The cases of Acer in Taiwan and Samsung in Korea and others in East Asia illustrate the benefits of such approach. In addition, these engineers and scientists can bring with them tacit knowledge that is much harder to obtain through imported capital goods or licensing.

Because technologies traditionally flow from developed to developing countries, firms in East Asia were outward oriented and ready to exploit the advantages of licensing or of global value chains or imported capital goods with advanced technologies. Global linkage to other firms is

increasingly essential. The links may take the form of buyer-supplier relationships or collaboration in R&D efforts. For instance, Samsung accumulated valuable experience and technical capabilities through OEM, as did numerous Taiwanese firms. Also, to gain access to tacit knowledge, recruiting engineers and scientists from abroad can be helpful. Thus in some instances, East Asian firms were able to tap the global marketplace for both technologies and potential inputs (capital goods or human capital) in order to successfully transfer foreign technologies.

### **The Role of Human Capital in East Asia's Development Strategy**

Amsden (1994) puts forth the fundamental argument to consider when analyzing the role of education in East Asia economic growth and development. According to him, there are two ways in which education can enhance productivity: by improving access to available information and by improving the ability to digest this new information. Considering these, education should play an important role in economic growth, especially when economies are presented with greater opportunities for learning (Amsden 1994). Technology transfer offers such learning opportunities, and, therefore, the level of human capital should influence its success or failure. Through the review of literature, it is clear that recipient firms need to possess at least some minimum absorptive capacity—some level of human capital—in order to adopt imported technology (Kim, 1998). Without such capacity, combined with active R&D efforts, any attempt to transfer advanced technology—advanced from the perspective of the host country—will inevitably produce unsatisfactory results. At the initial stage of imported technology, workers need to have only a basic educational level (primary and secondary). In the latter part of technology adoption and assimilation, workers need to have a certain level of tertiary education to understand and follow scientific and technological development available around the world (Hatch, 2003). Among developing countries, lack of skilled workers and researchers is a typical impediment to successful assimilation and use of foreign technologies. This implies that countries which invest in human capital have a better chance of achieving technological sophistication compared with others who do not.

Korea and Singapore provide good examples in East Asia of developing the necessary human capital for technology transfer as part of the countries' development strategies. For instance, Korea had the highest number of scientists and engineers per 10,000 population among developing countries in 1994. This number was almost equal to that of France and Britain and helped Korea to move up the technology ladder faster than other countries at comparable level of per capita income (Kim, 1998). Many Korean Firms also engage in R&D efforts, aimed mainly at an incremental improvement of existing technology rather than at significant product innovation. In Singapore's case, the government not only emphasized education but also provided subsidies for in-house training to facilitate the learning experience and set up institutes to encourage research in higher-value-added activities (Kotler and Kartajays, 2000).

Moreover, an increasingly skilled labor force is critical to developing countries since most new technologies tend to be more skill intensive in nature. It follows that technologies developed in industrial countries will be used relatively inefficiently in developing countries, with lower



associated productivity. Two solutions are available to solve this problem. One is for developed countries to develop technologies more suitable for developing countries; the other is to increase the level of skills and supply skilled workers in developing countries. Given that innovations and development of new technologies are motivated by an anticipation of profits by private agents, relying on or forcing the first solution on developed countries would be impossible to implement. This leads to the conclusion that the most effective way to achieve successful technology transfer like the East Asian economies is to ensure that the workforce in developing countries including SSA is equal to the challenge posed by new technologies (Yusuf, Altaf, and Nabeshima, 2004).

### **Industrial Policy**

What role has industrial policy—defined here as a deliberately non-neutral incentive regime—played in East Asia’s rapid industrialization? This is one of the most extensively debated issues in development policy. At the risk of oversimplification, two contending paradigms have emerged. According to one, the major contribution of governments has been in getting the fundamentals (prices) right: macroeconomic stability, predictable and stable policy regimes, improved physical infrastructure and education, a reasonably adequate system of property rights and legal infrastructure, and increasing openness to international trade. An alternative paradigm accepts some or all of these prescriptions but argues that it is an insufficient recipe for industrial success. This school rejects an emphasis based primarily on economic liberalism and static comparative advantage. It argues that Japan, Korea, and Taiwan and other East Asian economies owe their success to selective industrial policies—targeting industries, picking winners, and deliberately getting prices wrong through fiscal incentives, subsidized credit, import protection, and direct investment market (Yusuf, Altaf, and Nabeshima, 2004).

### **Innovation-Based Strategies for Development: The Role of Science in East Asia’s Development**

Why has science-based innovation become the path that so many nations now seek? The reasons are not hard to find. First, the pace of competitive progress sets a very high standard. This accelerated rate of innovation results from the extraordinary progress that science has made in the past forty years especially in East Asia and discovery that science can and does contribute directly to production process quality and efficiency as well as to product conception and design. East Asian nations also seek science-based innovation because science has been proven to lead to major new products and entirely new industries. Science continues to drive the “linear model” of the innovation process. Today, the most impressive newcomer to the list of science-created new industries is biotechnology, rising from the sciences of microbiology and biochemistry.

What are the components of national capability necessary to sustain an innovation-based growth economy? It takes more than the capacity to engage in research and the resources to do so with adequate vigor. The following is a list of some them:

Intellectual and Human Capital—this includes a well-supported group of research-based universities as the primary source of fundamental science and technology (S&T) capability. It also demands participation in the world’s S&T and the ability to diffuse technology to small and medium industry. Finally, full participation must be available for women in creative and managerial roles in an innovation-based society.

Economic and Business Capital—a strong transportation, financial, and information infrastructure must exist to provide a competitive cost structure. A market-oriented national policy must be in place, based on a managerial culture that celebrates entrepreneurship and new firm creation. Finally, alliances must be made with overseas firms, providing market and technology access based on technological parity.

Social capital—Like the East Asian economies, nations must possess strong capabilities of S&T policy analysis and design, providing objective assessments of S&T and innovation performance. Also, there must be institutional and political maturity based on trust and a shared value system. Finally, political leadership must be sufficient to mobilize the society and all ministries behind a national, public-private, innovation-based development strategy (Branscomb and Choi, 1996).

### **Financial Policy and Reforms**

When it comes to financial policy and reforms, the key element of financial reform was not only the introduction of ever more complex financial instruments, the accelerated liberalization of capital account restrictions, or expanded access by foreign financial services to companies to the domestic market. But also the elimination of remaining government controls on interest rates on both deposits and loans. Throughout the early stages of development, the East Asian authorities controlled interest rates in a manner that led to a relatively low average real rate of return on household bank savings. In effect depositors were taxed so that borrowers, historically mostly state-owned companies, could have access to cheap credit.

Market determination of deposit rates eliminated the element of financial repression that imposed a high implicit tax on savers. Interest rate liberalization raised household consumption as a share of GDP through two mechanisms. First, higher real deposit rates increased household income and, for any given saving rate, also increased household consumption as a share of GDP. This might be thought of as the direct effect. Liberalization of deposit rate also spurred household consumption indirectly. Since household saving to a substantial extent motivated by precautionary demand, when the government suppresses real interest rates on deposits, households that are seeking to achieve a certain target level of savings will increase their saving rate to make up for the real return. As government liberalized deposit interest rates, household saving declined. That is, households chose to spend a higher share of their income. This might be thought of as the indirect effect of interest rate liberalization (Lardy, 2012).

## **East Asia Policy Lessons for SSA**

### **Proactive-Reactive Industrial Policy**

Nascent industries and developing countries in general must develop policies creating a gradual transition from proactive to reactive support of firms and industries. This means that policy support should initially be formulated to first promote growth and self-sufficient competitiveness. Firms within industries can be supported through programs that reduce competition and provide for a rich environment. When these firms and industries have grown in size and sophistication, competition may be induced and subsidized resources taken away. Trade barriers that had previously provided protection may be taken down to allow competition within local markets. These latter policies can be thought of as reactive in nature. By transitioning from proactive to reactive policies over the development of an industry, the government can create incentives to induce firms to climb the technological ladder.

Proactive support relies on direct intervention to promote technological capabilities and innovation, thus decreasing the risk involved in venturing into areas where production functions are unknown. Such support is especially important during the inception and incubation phases of firm and industrial development. Policymakers may provide financial and tax incentives for trade, R&D, and training as well as noncompetitive procurement-based subsidies and support to industry. Such policies also lower the cost of importing the inputs or technology necessary for the industry in question. Along with scientific and technological support, human resource support may also be extended. At the same time, the state may raise barriers against the importation of the finished products to the targeted industry. The resulting industrial structure may tolerate monopolistic and noncompetitive oligopolistic conditions to concentrate scarce resources and promote growth of domestic firms. Industrial sectors may even be carved out and allocated between a few privileged firms. In many respect, pro-action provide a resource-rich environment for nourishing targeted firms and industries. These factors promote a pull condition for the inducement of coveted foreign technologies and practices for the targeted industry.

When the pertinent firms and industries become fairly well developed, policy support should generally turn indirect and reactive in nature. Firms and industries, as well as their technologies, are now expected to have reached international competitiveness and achieved self-reliance. Proactive and direct support may linger in these latter stages, but these will be relegated to those industries and sectors that have yet to reach competitive maturity, especially SMEs. Reactive policies take away much of the resources provided under previous proactive policies. This increases the costs and risks of doing business, forcing the firms to compete for scarce resources. High rates of innovative activities and performance are induced by firms scurrying to sustain a profitable niche in the newly competitive industrial structure.

Under a reactive policy, as the targeted industry gains competitiveness, import barriers are lowered and eventually removed. Other forms of protectionism, including those aimed at

potential domestic entrants, may also be stopped. Reactive policies may eliminate tax and other financial subsidies, provide standards to which firms must conform, have competitive bidding for procurement contracts, and promote exports. The strengthening of export, design, manufacturing, and environmental-control performance standards are other types of reactive policy instruments for the promotion of technology-innovation efforts. In addition, the required localization ratio may be increased to induce greater levels of indigenous technology development, while the liberalization rate for production or technology inputs may be increased to put competitive pressures on the local producers. Likewise, a more balanced growth of the industry may be promoted, with an added emphasis on the enforcement of fair trade and competition. This is achieved by strengthening the government's role as a regulator while weakening its interventionist tendencies.

Monopolies and noncompetitive oligopolies are no longer tolerated within reactive policies. In fact, policies that actively promote the entry of new and innovative firms and support the growth of small-and-medium-size firms are introduced, creating market liberalization and increasing the presence of multinationals in the domestic market. In time, full liberalization of the market may result when firms and industries reach global competitiveness. By that time, traditional proactive policies may be more of an inhibitor than a promoter of innovation. Government investments should then be focused on science and engineering knowledge as well as human resource development (Branscomb and Choi, 1996).

In addition to the above, Michael Porter argues that six items determine the "national competitive advantage" of nations. They are:

1. **Factor Conditions:** the nation's position regarding factors of production, such as human and financial capital, physical material and energy resources, the stock of knowledge, and the infrastructure necessary to compete in a given industry.
2. **Demand Conditions:** the size, quality, nature, structure, and growth rate of domestic demand for the industry's products and services.
3. **Related and Supporting Conditions:** the presence of internationally competitive domestic suppliers and supporting industries providing complementary assets.
4. **Firm Strategies, Structures, and Rivalries:** the conditions in the nation governing how companies are created, organized, and managed, and the nature of domestic rivalry.
5. **Chance Events:** developments outside the control of firms (and usually the nation's government) such as inventions, breakthroughs in basic technologies, wars, external political developments, and major shifts in foreign market demands.
6. **Government:** government activities at all levels that can help or hinder the nation's competitive advantage through antitrust policy, regulation, investment in education, government purchases, and other development-inducing policies. In order to realize competitive advantage, government policy must address these six factors. The fifth factor calls for both a system of information that allows government to monitor and assess significant events abroad and the international relationships that may help in managing change in the international political and economic environment (Porter, 1996).

## **Technology Transfer**

An important issue in technology transfer pertains to the role of government. To resolve this, one needs to understand the kinds of impediments that local firms face. Typically, these are a lack of sufficient information concerning the availability of technology; limited financial resources; lack of technical, legal, and commercial expertise to evaluate the technologies; constraints imposed by government regulations (such as permits or registrations); and scarcity of skilled labor .

A government can actively disseminate information concerning the availability and development of new technologies and licensors around the world as Hong Kong, Korean, Taiwanese, and Singaporean governments have done. Advances in information and communication technologies (ICT) greatly reduce the cost of gathering and disseminating these kinds of information. Often, both suppliers and recipients of technology cite inter-governmental assistance and incentives as playing a crucial role in technology transfer (Lardy, 2012). Lack of skills can be overcome by increasing the supply of skilled workers through education and immigration. Beyond this, governments can facilitate the successful adoption of foreign technologies by setting up research labs and institutes, creating and nurturing incubators, assisting in licensing, and forming R&D consortia. For instance, in the early stages of development, the Korean government actively assisted firms in acquiring foreign technologies, often placing many restrictions on technology suppliers. Korean firms used these requirements to their advantage, and, as a consequence, some firms emerged as successful exporters.

Arguably the scale and efficacy of technology transfer critically depend on the level of human capital. Once a country achieves a level of technological sophistication and is willing and able to be an innovator rather than an imitator, high-quality research capabilities are needed. Therefore, strengthening tertiary education is vital. To this end, FDI can bring yet another benefit, aside from being a conduit for technology transfer. Multinationals often demand skilled workers—generally more skilled than those demanded by domestic industries—and this translates into higher demand for a more educated workforce (Chang, 2006).

Related to the supply of human capital is the mobility of skilled workers. Technologies are embedded not only in imported machinery but often in skilled workers in the form of tacit knowledge. The more the skilled workers circulate among different firms, the more the spread such tacit knowledge. For this to function effectively, a fluid labor market in terms of both domestic labor and international flow of skilled workers is an advantage (Yusuf, Altaf, and Nabeshima, 2004).

## **Implementing Technology-based Innovation**

Governments may take several kinds of actions as they seek to implement a technology-based strategy. These actions are:

### **Technology-Creating Actions**

Governments may provide direct or indirect support for the development of new technologies or the modification of existing ones. One extreme encompasses the basic research undertaken to support the creation of knowledge. The other extreme includes programs that involve direct government expenditures for the development of a product that will be placed into immediate use. Between these extremes, there are demonstration programs, mission-oriented R&D programs leading to prototypes, and so on.

### **Actions Affecting Product Characteristics**

Government's regulatory actions can include anything from relatively weak persuasion to controlling specific technologies or products in great detail through regulation. The government may regulate the standards involving the product, its performance, and its technological basis.

### **Market Stimulation**

Innovations may be induced by market incentives generated through changes in price controls, the indirect effects of regulation in related industries, modifications in the market structure (e.g. antitrust policy), or direct government purchases.

### **Capability-Enhancing Actions**

Investments to enhance information infrastructure, education and training, establishment of S&T centers, provision of subsidies, tax exemptions and patents to encourage technological innovations, and so on (Branscomb and Choi, 1996).

### **Strategic Leverage between FDI Policy and Industry Policy: Two Levels of Analysis and Challenges for SSA Policymakers**

Many governments have opted for more proactive industrial policy in recent years. The reasons for this are manifold and include, for instance, structural change and economic diversification, pressure from international competition, disappointment with the results of laissez-faire policy, the wish to "guide" development, a desire to strengthen and protect national champions, and state intervention in response to various crises. The success of industry policy in countries such as Brazil, China, India or Korea has given further impetus to this development.

FDI policy interacts closely with industrial development strategies. In general, countries promote or restrict foreign investment within this context, depending on the industry in question and on the role they want to assign to FDI in domestic development. Investment promotion policy can be an important means to build productive capacity in developing countries, as multinational corporations bring capital, technology and know-how into the host country that can be crucial for the development of individual industries. Conversely, countries



may choose to restrict FDI because they see a need to protect certain domestic industries— from foreign takeovers or competition. The interaction between FDI policy and industrial policy has both national and international dimensions.

### **Interaction at the National Level**

The interface between FDI policies and industrial policies is most pronounced in specific national investment guidelines that define the role of FDI in domestic industrial development strategies and identify the policy tools to apply in this context. A number of countries have created such documents that specify to various degrees the extent to which FDI is prohibited, restricted, allowed or encouraged, and what FDI-related policy instruments to apply (e.g. China’s “Foreign Investment Industrial Guidance Catalogue” and Catalogue of Foreign Investment Advantageous Industries in Central and Western China”, India’s “Consolidated FDI Policy”). Some guidelines specifically address the use of investment promotion instruments (e.g. the Republic of Korea’s FDI Promotion Policy in 2011”, the Malaysian Industrial Development Authority’s “Invest in Malaysia” policy, and the Thailand Board of Investment’s Investment Promotion Policy for Sustainable Development”). These guidelines may also relate to the interpretation of national laws and policies at the sub-national level.

Many countries have policies to target individual companies or specific categories of foreign investors considered capable of making a particularly significant contribution to industrial development, such as high-tech investments, environmentally friendly projects or labor intensive technologies. Investment promotion agencies (IPAs) have an important supporting role in this context, namely through the matchmaking and aftercare services. These “targeting” policies may be reinforced through linkage programs, the promotion of industrial cluster, and incubation programs to maximize spillover effects and other benefits.

Industrial policy strategies often emerge with more general fiscal or financial incentive programs. Investment incentives are subject to requirements related to development in certain industries, or regions, or with regard to specific development goals, such as export promotion, job creation, technology transfer and upgrading. Investment incentives are also used to help developing industries where as yet there is no sufficiently large market (e.g. renewable) (UNCTAD, 2012).

Industrial policy can further be supported by specific investment promotion and facilitation measures for FDI in particular industries, in line with their development strategies. The establishment of specific economic zones and incubators, such as “high-tech zones” (e.g. the “Electronic City” in Bangalore, India), “IT Corridors”) (e.g. the Taipei Technology Corridor”) or “renewable zones” (e.g. “Masdar City” in Abu Dhabi), which aim at improving the “hard” and “soft” infrastructure of the host country, are cases in point.

Industrial policy may also be pursued through selective FDI restrictions. In the past, restrictive FDI policy has been applied particularly with a view to promoting infant industries, or for socio-cultural reasons (e.g. land ownership restrictions). Nowadays, this relatively narrow policy

scope has given way to a broader approach, under which numerous countries have strengthened their FDI-related policy instruments, in particular with regard to approval and screening procedures, and where the beneficiaries of government protection also include national champions, strategic industries and companies at times of financial crisis or to discourage or restrict outward foreign investment in order to keep employment “at home”. Increasingly, industrial policy considerations to justify FDI restrictions have become blurred with other policies to protect national security, thus further enlarging the scope of state intervention vis-à-vis foreign investors. The economic performance of such policies is huge. For instance, policies to protect national champions and strategic industries usually cover core industries such as energy, natural resources, telecommunications, financial services and the transportation sector (UN 2010).

### **Interaction at the International Level**

The interaction between international investment policy and industrial policy is characterized by the dual nature of International Investment Authorities (IIAs), potentially both supporting and constraining industrial policy. With respect to their potential to support industrial policy, IIAs are expected to encourage foreign investment through their functions of (i) protecting and liberalizing investment (e.g. by easing entry or by offering national treatment); (ii) improving the overall investment policy framework; and/or (iii) enlarging markets to serve. In addition, some IIAs include specific promotion-oriented provision. However, as most IIAs apply on a cross-cutting basis, potential foreign investment enhancing effects would occur for all industries (World Bank, 1993).

On the other hand, IIAs also have the potential to constrain investment-related industrial policy. Provisions that deserve most attention in this context include, among others, IIAs rules regarding (i) the entry of foreign investors (e.g. potentially precluding countries from restricting foreign investment at the entry level); (ii) performance requirements (e.g. potentially constraining policies aimed at generating certain local linkages or ensuring positive spillover from foreign investment). A potentially constraining impact may also arise from investment-related provisions in international trade agreements, such as the World Trade Organization (WTO)’s Agreement on Trade-Related Investment Measures and the Agreement on Subsidies and Countervailing Measures. The actual extent of constraints posed by IIA obligations is hard to anticipate in the abstract, and will depend on the industry, policy and IIA clause at issue.

To avoid creating undue policy constraints, a number of flexible mechanisms have been developed in some IIAs, taking, among others, the form of exceptions/exclusions to the treaty or of country-specific lists of reservations. Those particularly relevant for industry policy include:

1. Excluding certain industries, such as aviation, fisheries, maritime matters, financial services or cultural industries;
2. Excluding certain policies, such as taxation, subsidies, government procurement, or agricultural policies; and or;

3. Including general or national security exceptions, which increasingly become relevant in the context of industrial policy (World Investment Report, 2011).

### **Strategic Challenges for SSA Policymakers**

These different kinds of interaction between FDI policy and industrial policy raise a number of important challenges for SSA policymakers to make the two policies work together for development.

#### **Picking the Winners**

One of the strongest criticisms of industrial policy relates to the difficulty in identifying the “right” industries for promotion (picking the winner). This difficulty relate not only to picking “winning industries”, but also to picking “winning firms”; the risk of wasting valuable and scarce resources if support is provided to “loser”; the risk of distorting market mechanisms to the long-term detriment of the economy; and the risk of succumbing to the pressure of lobbying.

Industrial policy can be successful if governments are able to identify those industries or activities which possess existing or latent comparative advantage, and which will thereby benefit from new opportunities arising in a multi-polar growth world. Export-generating choices do not always have the greatest impact on employment and value added; domestic industries, including services, even in developing economies, often account for more than half of value added. Policy tools are needed (a checklist of indicators against which to assess domestic potential), together with institutional mechanisms reducing the risk of governments making the “wrong” choice. Some first suggestions have already been made in this regard. Successful strategies to pick winners also include a readiness to let losers go. Sometimes even the most obvious choices for industrial priorities, seemingly sure winners, will not work out in today’s uncertain economic environment.

#### **Nurturing the Selected Industries**

The interaction between FDI policies and industrial policy also implies designing the “right” investment promotion instruments. Horizontal policies are the basis, aiming at improving the hard and soft infrastructure of the host country. What is actually needed depends on the type of business activity to be developed, the technology and skills required for it, and the form of Multinational Corporation involvement (FDI vs. non-equity modes). In countries with poor infrastructure and business environments that are perceived as unfriendly, special investment incentives may be needed to help overcoming barriers to entry. Such incentives may also be required with regard to emerging industries for which a market does not yet exist (e.g. renewable energy) or where there is a “first mover” problem, because innovation is a risky process.

By focusing on increasing industrial productivity, industrial policy can contribute to strengthening international competitiveness. This underlines the need for close coordination

between industrial policy, FDI policy and technology-related policy, so that they are coherent and mutually reinforcing. The dynamic nature of industrial development calls for regular review and adaptation of existing policy instruments. A case in point is recent changes in the international production networks of multinational corporations, resulting in a stronger emphasis on non-equity modes of international production.

### **Safeguarding Policy Space**

Managing the interaction between international investment policy and industrial policy implies striking a balance between liberalizing and protecting FDI, while preserving space for the dynamics of industrial policy. This challenge extends to identifying industries and existing/potential future domestic policies, for which flexibilities are more needed; identifying IIA provisions that are particularly likely to impact on industrial policy; and recognizing that industrial policy is likely to change over time.

The latter is important in light of the so-called “lock-in” effect, implying that once a commitment is made to open an industry to foreign investment, host countries are bound by it as long as the IIA remains in force. The problem is further exacerbated if pre-establishment treaties contain “rollback” commitments with regard to remaining FDI restrictions, or so-called “ratchet clauses” according to which regulatory changes towards further liberalization are automatically reflected in a country’s commitments under the IIA. In response, some selected IIAs establish a procedure for IIA signatories to modify or withdraw commitments in their schedules. In sum, carefully crafting IIA obligations in conjunction with exceptions and reservations can go a long way to concluding IIAs that are conducive to countries’ industrial policy objectives (World Investment Report, 2011).

### **Other Policy Concerns for SSA Global Competitiveness**

#### **Fiscal Policy and Productivity**

How does fiscal policy affect a country’s competitiveness? To answer, one needs a clear definition of “competitiveness”—which is the extent to which a nation’s companies can succeed in the global marketplace while its people enjoy a high and rising standard of living. Companies compete on the basis of production costs for a certain amount of output. The only way to lower costs while sustaining and raising workers’ standard of living is to increase productivity, or output per worker per hour. Raising productivity requires improving human capital, increasing physical capital (e.g. equipment, infrastructure, etc.), or using these forms of capital more efficiently. Let’s look at how the spending side of fiscal policy relates to these three drivers of productivity. Many public goods provided by the government contribute directly to one or more of them. Spending to improve health care and education, for instance, can increase human capital. Spending on infrastructure can increase physical capital. Publicly funded research and development (R&D), effective regulations, and incentives for private sector innovation can lead to a more efficient use of human and physical capital. In contrast, some spending, like entitlements or military, does little to directly enhance competitiveness.

The tax side of fiscal policy also has the potential to support or hinder competitiveness. Revenues are required to fund public goods, so taxes are essential to competitiveness. At the same time, by reducing the returns on investment and hard work, taxes can distort the allocation and use of both human capital and physical capital. Some taxes are much better than others.

Finally, when the government runs a deficit, it competes for funds that could be invested in the private sector capital stock, putting upward pressure on the cost of borrowing for companies. This effect is especially severe when government deficits accumulate in a large debt and lenders demand substantial higher returns (Vietor and Weinzierl, 2012).

## **Entrepreneurship**

### Promoting and Investing in Entrepreneurship: Eight Rules for Direct Investment Programs

In many nations, government attempts to do more than create a climate conducive to entrepreneurial activities—it moves into the thornier territory of directing funding. But this is the right policy to pursue. They can reduce the peril by adhering to eight principles presented below.

Let the market provide direction. A valuable lesson can be drawn from two successful programs: Israel's Yozma Group and New Zealand's Seed Co-investment Fund. Because the governments involved used a matching funds approach, public subsidies did not go to ventures unable to attract support in competitive private markets.

Don't tie managers' hands. Government funding often comes with conditions. Policymakers like to restrict such things as the locations in which firms may operate, the types of securities investors may use, and the ways in which firms may engage in acquisitions or secondary sales of stock. But research shows that limiting the flexibility of entrepreneurs and investors can be highly detrimental.

Be patient. Building an entrepreneurial sector is a long-term endeavor. Too many promising initiatives have been abandoned on the basis of partial (and often not the most critical) indicators—for instance, low initial rates of return. Creating rules that force participants to focus on short-term results is a recipe for failure.

Get the scale of the program right. If a public program is too small to have an impact, it is unlikely to succeed—and failure may discourage other efforts. If it is too big, it may swamp the local market, with too much capital chasing too few opportunities. An example, of the latter is Canada's Labor Sponsored Investment Funds Program, which not only backed many incompetent groups that did little to spur entrepreneurship but also crowded out some of the most knowledgeable local investors.

Accept that many ventures must be global. Policymakers naturally aim to encourage activities in their backyards, but many firms today need a multinational presence. Don't restrict firms to hiring and manufacturing locally. Do help local companies connect with overseas investors. Successful investments will attract more overseas capital, and local affiliate for foreign-based funds with good track records will gain the credibility needed to raise their own funds. Be careful, of course, to ensure that public money translates into enhanced local activities. Reach an understanding as to how much activities will be managed by locally resident personnel and how much by partners based elsewhere.

Evaluate performance. Policymakers often neglect to spell out how an initiative's performance will be measured. Its future should depend on its meeting clear goals, not on factors such as the vehemence of its supporters. Design evaluations to consider not just individual funds and companies but also a program's broader context.

Avoid "capture". Like zombies in a horror film, some public programs defy efforts to eliminate them and may keep rising from the dead. Economists call this problem "capture": Vested interests coalesce behind a program and use their power to sustain it. Be willing to end programs that are doing well; also end public funding for programs that have become so successful that they no longer need it. Regularly revisit program rules, knowing that changing the classes of participants who benefit may provoke an outcry.

Minimize agency problems. One might wish that public servants would work simply to maximize public welfare, but selfish interests often infect decision making. Establish clear procedures and erect firewalls between elected officials and program administrators (Lerner and Sahlman, 2012).

#### **A Four-Point Plan for Linking Innovation, Enterprises, and Job Creation**

Innovation, which has long been the key to successful economic development, rests on foundational institutions that provide fertile soil in which to seed, grow, and renew enterprises. But these institutions—such as universities, venture creators, supply chains, labor markets, and job-training programs—are less effective as economic agents when they operate in isolation. They are more likely to contribute to shared prosperity when they are networked—with smooth pathways that allow intellectual, financial, and human capital to flow to enterprises at every phase of development. Enhancing the links and collaboration among these institutions can enrich the business ecosystem and help more ideas blossom, more job-creating start-ups launch, more companies find skilled labor and innovations, and more enterprises grow and compete in global markets. And related investments in human capital can spread prosperity more widely and reverse the decline in social mobility in society. Links in four areas are essential: (a) link knowledge creation and venture creation to speed the conversion of ideas into market-ready enterprises (b) link small and large enterprises to promote the growth and success of small and midsize enterprises (SMEs) and revitalize large corporations through partnerships with innovative SMEs; (c) Improve the match between education and employment opportunities. Develop a job-ready workforce through apprenticeship and other educational-



industry links, including new structures for schooling; and (d) Link leaders across sectors to develop strategies and produce scalable models that build on local assets and attract new investment. Though sometimes considered unwieldy, collaboration can produce efficiencies and multiplier effects. Leaders should encourage policymakers to direct resources toward links that fill gaps between institutions and foster job growth and more-inclusive prosperity. The agenda includes a commitment to: (i) invest in foundational institutions that are sources of enduring strengths, including centers of knowledge creation, incubators, innovation zones, apprenticeship, and high-quality education linked to changing job skills; (ii) support integrated solutions that direct resources to public-private partnerships with coherent strategies, such as small companies mentoring or ties between business and technical and vocational institutions; and (iii) identify and reward excellence, invest in the best ideas, and spread institutional innovations. Critics and skeptics might say that the best role for business leaders is to mind their own business. But as research shows, national and international competitiveness requires the unique capabilities and involvement of companies in collaborations that produce innovative solutions and innovative growth businesses. An enriched business ecosystem move ideas into use, strengthens enterprises that create jobs, and educate people to be job-ready. This is good for individual businesses, the national economy, and society as a whole (Kanter, 2012).

### **Country Risk Analysis and Economic Health**

Country risk plays an important role in an investor's decision to invest in a country. Country risk can be divided broadly into categories. They are economic (including financial) and political risks. The two types of country risk are outlined below.

#### *Economic Factors*

Frequently used indicators of country risk include economic risks such as inflation, balance of payments deficits and declining growth rate of per capita GDP. The intention behind these measures is to determine whether the economy is in good shape or requires a quick fix, such as expropriation to increase government revenues or currency inconvertibility to improve the balance of payments. The better a country's economic outlook, the less likely it is to face political and social turmoil that will inevitably harm foreign companies (Shapiro, 2010).

#### **Financial and Economic Risk Factors**

Financial and economic risk assessments are based solely on objective economic data. Financial risk measure clearly aims to assess a country's ability to pay its foreign debts. The indicators measure (1) a country's outstanding foreign debts to GDP ratio, (2) its foreign debt service as a percentage of its exports, (3) its current account balance as a percentage of its exports, (4) Its official reserves divided by its average monthly merchandise imports, (5) exchange rate volatility, and (6) large depreciation and appreciations of a currency. But the former is considered the more risky of the two. The economic risk rating views highly developed economies (those with high levels of GDP per capita) with high economic growth, low inflation, sound fiscal balances, and positive current account balances—as having low economic risk (Bekaert and Hodrick, 2012). Moreover, macroeconomic stability, largely promoted by stable

monetary policy, reduces economic and financial risks and leads to lower inflation and lower real interest rates. The resulting increase in the willingness for people to save and entrepreneurs to invest in the domestic economy stimulates economic growth (Shapiro, 2010).

### **Capital Flight**

A useful indicator of the degree of country risk is the seriousness of capital flight. Capital flight refers to the export of savings by a nation's citizens because of fears about the safety of their capital. By its nature, capital flight is difficult to measure accurately because it is not directly observed in most cases. Nevertheless, one can usually infer the capital outflows, using balance of payments figures—particularly the entry labeled “error and omission.” The World Bank methodology estimates capital flight as “the sum of gross capital inflows and the current account deficit, less increases in foreign reserve.” (World Bank, 1987). These estimates indicate that capital flight represents an enormous outflow of funds from SSA. Capital flight occurs for several reasons, most of which have to do with inappropriate economic policies: government regulations, controls, and taxes that lower the return on domestic investments. In countries in which inflation is high and domestic inflation hedging is difficult or impossible, investors may hedge by shifting their savings to foreign currencies deemed less likely to depreciate. They may also make a shift when domestic interest rates are artificially held down by their governments or when they expect a devaluation of an overvalued currency. Yet another reason for capital flight could be increases in a country's external debt. Such an increase may signal the probability of a fiscal crisis and, therefore, induce capital flight. Common sense dictates that if a nation's own citizens do not trust the government, then investment there is unsafe. After all, residents presumably have a better feel for conditions and government intentions than do outsiders. Thus, when analyzing investment or lending opportunities, multinational firms and international banks take into account the unwillingness of the nation's citizens to invest and lend in their own country.

What is needed to halt capital flight are tough-minded economic policies—the kind of policies that make investors want to put their money to work instead of taking it out of a country. These policies include cutting budget deficits and taxes, spending wisely, removing barriers to investment by foreigners, selling off money-losing state-owned enterprises, allowing for freer trade, high inflation, investment in infrastructure and avoiding currency overvaluations that virtually invite people to ship their money elsewhere before the official exchange rate falls.

### **Fiscal Irresponsibility**

To begin, fiscal irresponsibility—excessive government spending—is one sign of a country that is likely to be risky because it will probably have an insatiable appetite for money. Thus, one country risk indicator is the government deficit as a percentage of GDP. The higher this figure, the more the government is promising to its citizens relative to the resources it is extracting in payment. This gap lowers the possibility that the government can meet its promises without resorting to expropriations of property, raising taxes, or printing money. These actions, in turn, will adversely affect the nation's economic health. Expropriation will cause capital flight and

dry up new investment; raising taxes will adversely affect incentives to work, save, and take risks (invest); and printing money to finance a government deficit—known as monetizing the deficit—will result in monetary instability, high inflation, high interest rates, and currency depreciation.

### **Monetary Instability**

According to modern monetary theory, inflation is the logical outcome of an expansion of the money supply in excess of real output growth. Large and unpredictable changes in the money supply lead to high and volatile inflation. Rapid expansion in the money supply is typically traceable to large government deficits that the central bank monetizes.

### **Wasteful Government Spending**

Another indicator of potential increased country risk is the amount of unproductive spending in the economy. To the extent that capital from abroad is used to subsidize consumption or is wasted on showcase projects, the government will have less wealth to draw on to repay the nation's foreign debts and is more likely to resort to exchange controls, higher taxes, and the like. In addition, funds diverted to the purchase of assets abroad (capital flight) will not add to the economy's dollar-generating capacity unless investors feel safe in repatriating their overseas earnings.

### **Resources Base**

The resource base of a country consists of its natural, human, and financial resources. Other things being equal, a nation with substantial natural resources, such as oil or copper, is a better economic risk than one without those resources. However, typically, all is not equal. Hence, nations such as South Korea and Taiwan turn out to be better risks than resource-rich SSA countries. The reason has to do with the quality of human resources and the degree to which these resources are allowed to be put to their most efficient use.

A nation with highly skilled and productive workers, a large pool of scientists and engineers, and ample management talent will have many of the essential ingredients needed to pursue a course of steady growth and development. Three additional factors are necessary: (1) a stable political system that encourages hard work and risk taking by allowing entrepreneurs to reap the rewards (and bear the losses) from their activities; (2) a flexible labor market that permits workers to be allocated to those jobs in which they will be most productive, and (3) a free market system that ensures that the prices people respond to correctly signal the relative desirability of engaging in different activities. In this way, the nation's human and natural resources will be put to their most efficient uses. The evidence by now is overwhelming that free markets bring wealth and the endless state meddling brings waste. The reason is simple: Unlike a government-controlled economy, free markets do not tolerate and perpetuate mistakes (Shapiro, 2010).

## **Political Risk Components**

Unlike the financial and economic risk indicators, the political risk rating depends on subjective information. These can be grouped into four categories, namely, law and order, bureaucratic quality and corruption, and political unrest. Government stability depends on a country's type of governance, the cohesion of its governing party or parties, the closeness of the next election, the government's command of the legislature, and the popular approval of the government's policies.

## **Country Credit Spreads**

When a sovereign (nation) borrower issues bonds in its own currency, there is usually no default risk because the government can simply print money to pay back the creditor. When sovereign borrowers issues bonds in a different currency, though, a default is possible because the government must earn foreign exchange to pay off the creditors (bondholders). Because of possible default, the yields offered on international bonds are higher than the yield on the government bonds of the developed country issuing the currency. The difference between the two is called the country credit spread. For example, if the yield on a 5-year U.S. Treasury bond is 6%, and the yield on a 5-year dollar bond issued by Gabon is 9%, Gabon country credit spread is 3%. These spread, which vary over time in secondary markets, are of course, an indication of country risk. The higher the spread the higher the country risk and vice versa.

An increasing number of firms in developing countries are also being rated as they seek to diversify their funding sources and access to wider investor base. Credit ratings of private companies generally fall at or below the credit ratings of the governments of the countries in which the firms are based. This "sovereign ceiling" makes sense in the case of foreign currency debt because the sovereign has the first claim on available foreign exchange and controls the ability of residents to obtain funds to repay foreign creditors. Although there are more and more exceptions to this rule, sovereign ratings remain a significant determinants of the credit rating assigned to corporations (Bekaert and Hodrick, 2012).

Based on preceding discussion, the following are some of the common characteristics of high country risk:

1. A large government deficit relative to gross domestic product (GDP)
2. A high rate of monetary expansion, especially if it is combined with a relatively fixed exchange rate
3. Substantial government expenditures yielding low rates of return
4. Price controls, interest rate ceilings, trade restrictions, rigid labor laws, and other government-imposed barriers to the smooth adjustment of the economy to changing relative prices
5. High tax rates that destroy incentive to work, save, and invest
6. Vast state-owned firms run for the benefit of their managers and workers

7. A citizenry that demands, and a political system that accepts, government responsibility for maintaining and expanding the nation's standard of living through public sector spending and regulation.
8. Pervasive corruption that acts as a large tax on legitimate business activities, hold back development, discourages foreign investment, breeds distrust of capitalism, and weakens the basic fabric of society
9. Absence of basic institutions of government—a well legal system, reliable regulation of financial markets and institutions, and an honest civil service.

Alternatively, positive indicators of a nation's long-term economic health include:

1. A structure of incentives that rewards risk taking in productive venture. People have clearly demonstrated that they respond rationally to the incentives they face, given the information and resources available to them.
2. A legal structure that stimulates the development of free markets. Wealth creation is made easier by stable rules governing society and fair and predictable application of laws administered by independent judicial system free of corruption.
3. Minimal regulations and economic distortions: Complex regulations are costly to implement and waste management time and other resources.
4. Clear incentives to save and invest. In general, when there are such incentives—that is, the economic rules of the game are straightforward and stable, property rights are secure, taxes on investment returns are low, and there is political stability—a nation's chance of developing are maximized.
5. An open economy. Free trade not only increase competition and permits the realization of comparative advantage, it also constrains government policies and makes them conform more closely to those policies conducive to increases in living standards and rapid economic growth.
6. Stable macroeconomic policies. Macroeconomic stability, largely promoted by a stable monetary policy, reduces economic risk and leads to lower inflation and lower real interest rates. The resulting increase in the willingness of people to save and entrepreneurs to invest in the domestic economy stimulates economic growth.
7. Market-Oriented Policies work. The most successful East Asia economies, such as Hong Kong, South Korea, and Taiwan, demonstrate the importance of aligning domestic incentives with world market conditions. As a result of their market-oriented policies, Asian nations have had remarkable economic success since the early 1960s as reflected in their strong economic growth and rising standards of living (Shapiro, 2010).

### **Policy Implications for Building SSA Global Competitiveness**

How can SSA policymakers create dynamism in their economies, increase productivity growth and raise living standards? The narrative that answers this question has three parts: Innovation, investment, and inclusion.

Innovation is the ultimate driver of living standards and future jobs. It comes in two forms. First, “non-destructive creation”—the development of entirely new products and business models. Policies that support this include strong government backing for basic research and financial sector regulation that considers incentives to lend as well as financial stability. “Creative destruction”, the other form of innovation, is also vital. It is important to recognize the net job creation is the difference between job creation and job destruction. In dynamic economies, both creation and destruction are high. In order to foster creative governments need to make it easier to replace failing management and relocate labor and capital. Job destruction is an important part of economic dynamism. Low tax rates makes it cheaper to sell assets, thereby helping capital flow more smoothly to its most productive use for the economy. Investment is the second driver of dynamism. Policies should ensure that both domestic and foreign capital go to productive use. This requires reducing generous subsidies to industries. Tax reform is also needed that better allocates resources for investment: reducing tax rate on corporate and individual incomes, and broaden the tax base.

Finally, it is vital that economic policy emphasizes broad inclusion in the gains from growth. Government should support the poor and jobless caught in the change that is the byproduct of economic dynamism (Financial Times, 2012).

### **Using Human Capital to Drive Strategic Innovation and High Economic Performance**

Indeed, nearly every industry includes firms that compete on innovation, product development, and service quality. These companies invest heavily in human and social capital. In the Human Resource literature, this approach is called a high-road strategy, accompanied by high-performance or knowledge-based work systems. The specific practices vary across industries, but there are some generic features: (i) selection of employees with technical, problem-solving, and collaborative skills; (ii) significant investment in training and development; (iii) commitment to building trust and relying on employees to solve problems, coordinate operations, and drive innovation; (iv) compensation systems that align the firm’s and the employees’ interest; and (v) labor-management partnerships in settings where employees are represented by a union or a professional association.

Two decades’ worth of research on high-road firms has documented their ability to achieve world-class productivity and service quality. If a country’s competitiveness is defined as the capacity to be attractive to businesses and to simultaneously create a more widely prosperous society, then high-road strategies become critical. Companies that follow such strategies generate consistent returns to shareholders and support high and rising living standards. Moreover, although employment security and longevity are uncertain even in these firms, their activities are building a rich stock of human capital on which a country’s industry can draw.



## **Call to Action by Government, Labor, and Business: The Role of public-private partnership in creating sustainable competitiveness in SSA**

Government, labor, and business must come together to develop a long-term jobs compact with a bold goal: increase productivity and job creation. Here are some options for initial discussion: (1) Pick the low hanging fruit. The first order of business should be to agree on immediate actions to jump-start job growth. They might include tax credits or incentives for job creation, and expanded investments in productivity-enhancing technologies. These actions would increase productivity and economic growth and hence living standards. (2) Invest in infrastructure. Perhaps the one big thing that experts from all quarters agree on is the importance of investing in physical and communications infrastructure. Such investments would yield significant positive economic returns and employment multipliers. (3) Capture next-generation manufacturing. Manufacturing depends on the ecosystem in which it is embedded: It needs adequate sources of capital, good technical schools and universities, a supply base that shares services and competes for talent, and so on. Perhaps the best opportunity for creating jobs and economic growth in next-generation manufacturing lies in supporting such ecosystems. (4) Start more apprenticeship program. Many employers report that despite high unemployment, they face current and future shortages of medium- and high-skilled workers. (5) Create more technology-education partnerships. Colleges and universities can help solve the shortage of workers with technical skill in IT, engineering, and life sciences if they develop stronger partnerships with local companies through internship-based programs. (6) Have a long-term focus. Clearly, long-term sustainable job and economic growth will require a great many institutional innovations. Here, briefly, are a few that are considered especially important. (a) Rebalance shareholder and stakeholder considerations. Ever since Douglas McGregor published *The Human Side of Enterprise*, in 1960, executives have been urged to think as much about stakeholders as they do about shareholders. Yet few choose to do that. Changing this will require a collective effort to transform business culture. (b) Strengthen the voice of employees and HR professionals; reinvent “Labor.” The Chief HR officer should report regularly to the board of directors regarding HR issues and performance outcomes. Another stronger option is to include employee representatives on corporate boards. Reinventing unions and professional associations to meet the needs of the 21<sup>st</sup> century workforce and economy is a critical national priority. These modern labor organizations must view knowledge, skills, and the ability to drive innovation as their key sources of power. (c) Encourage the development of regional clusters. Growing evidence shows that firms embedded in regional clusters supported by institutions providing education, training, finance, and marketing services experience higher rates of job and wage growth that comparable firms not embedded in such clusters. (d) Reinvent business schools. It is time to change how business managers and leaders are educated. MBA and executive education students need direct contact with real workers and managers—and training in how to build high-performance organizations, (e) Enact 21<sup>st</sup> century labor and employment policies. This enactment starts with restoring workers’ ability to form unions and to support and encourage labor-management partnership as the normal, not the exceptional, pattern of engagement. A wholesale review of employment regulations is also needed, both to reward high-road employers and to bring low-road employers up to a more

acceptable standard. There is no panacea for the undervaluation of human capital. But it is possible to tackle the problem systematically—if government, business and employees work together (Kochan, 2012).

### **Policy Recommendations for Making SSA Globally Competitive for FDI**

SSA has much work to do to address the fundamental causes of declining competitiveness that are driving multinational corporation location decision. Governments must tackle business environment weaknesses and the trade distortion introduced by other countries.

#### **Agenda for SSA Policymakers**

##### **Address SSA business environment weaknesses**

SSA policymakers must tackle the weaknesses in their business environment. Most pressing, in many ways, is the corporate tax code, which is highly visible in multinational corporation location decision calculations. Lowering the tax rate could attract investment without reducing government revenue. Then there is regulation. Although sound regulation is essential to level the playing field among competitors and protect society's interests, research shows example of complex or distortionary rules and administrative procedures that raise the cost of doing business in SSA without benefiting society. Whereas other governments get good marks for being responsive to business, others often do not work collaboratively with business to reduce obstacle to investment and growth.

##### **Invest in Core Strengths**

Many successful countries, including those in East Asia invest in the creation and commercialization of new ideas. They enjoy well-endowed universities with close connections to business and strong property rights that encourage people to invest in new ideas and facilities. They also offer an entrepreneurial system that funnels capital and talent to promising ventures, capital markets that reward success, and social norms that forgive failure. These strengths attract talent from around the world and, with talent, high-end-mobile activities such as research and development.

##### **Eliminate Trade and Investment Distortions that Unfairly Disadvantage SSA**

SSA policymakers must work, bilaterally and multilaterally, to reduce or eliminate the distortions that some countries and their multinationals into location choices. Countries can bias decisions, for instance, by holding down exchange rates artificially, suppressing wages below market levels, not allowing foreign ownership or control in certain sectors, or denying companies access to the local market unless they locate high-end mobile activities within the country. All of these measures encourage or pressure firms to locate activities in places other than where they can be performed most economically.

### **Avoid The Subsidy Trap**

When seeking to bring capital, jobs, and expertise into a country, many policymakers resort to large tax breaks and cash incentives. In using subsidies as the primary strategy to attract foreign investors, policymakers train business leaders to think of locations as interchangeable, and they draw to their countries the companies that are least likely to put down deep roots. Local leaders should aim to attract foreign investment not by outbidding rival locations on tax subsidies but by offering a compelling value proposition, such as access to talent, technological knowledge, supporting institutions, or a local market that fits the foreign firm's strategy and cannot be matched elsewhere. Incentives should focus on investments in local infrastructure, in workforce training, and in other assets that will be valuable to other firms and citizens even if particular companies relocate.

### **Work Collaboratively to Enhance Local Competitiveness**

Government organizations can take a variety of steps to encourage both local and foreign firms to invest in their local environments. For instance, they can match corporate funds for skills training, make supporting investments in infrastructure, streamline regulations, realign workforce development, and take many other steps. This support is often best handled at the national levels, where government and business have a common agenda, business leaders can provide effective leadership, and the connection with political leaders is greatest (Porter and Rivkin, 2012).

### **Concluding Remarks**

Four decades of sustained, high economic growth has made East Asia a "model of development." Performance of other developing countries is now often judged against that of East Asia newly industrialized economies (Korea, Taiwan, Singapore, and Honk Kong). Scholars and policymakers around the world have become curious: How did East Asia do it? Can SSA learn from the experience (Woo-Cumings, 1999)?

As discussed above, East Asian industrialization can be explained by the theory of the developmental state. Developmental state is a shorthand for the seamless web of political, bureaucratic, and moneyed influences that structures economic life in capitalist East Asia. This state form originated as the region's idiosyncratic response to a world dominated by the West, and despite many problems associated with it, such as corruption and inefficiency, today state policies continue to be justified by the need to hone the nation's economic competitiveness and by a residual nationalism. The developmental state can be "good," that is, effective, especially in terms of the "comparative institutional economics. It can also be "bad," as we have seen through the kind of corruption that is structural in a system based on state-business collusion, with the intent to hone the competitiveness of national business in the international system. It can also be ugly—undemocratic and authoritarian, explicitly or implicitly.

Western observers have had a hard time understanding the legitimacy of the developmental regime in East Asia, often confusing it with a cultural (or Confucian) penchant for political acquiescence. Something called “Asian values” must account for weak civil societies, if not their legitimacy. But the power of the development state grows both out of the barrel of the gun and its ability to convince the population of its political, economic, and moral mandate (Woo-Cumings, 1999). Under such circumstances, governments tended to be regarded as omniscient bodies, able to steer a country along the best course. They were, therefore, justified in placing order above freedom, and economic development above political development (Kotler and Kartajaya, 2000).

### **Asia’s Technological Mastery**

The dynamic growth of East Asia over a period of 40 years had at its heart the development of technological skills. Japan led Asia into the modern age, exporting outmoded technologies and industries to other countries to the south along the lines of the “flying geese” model. These efforts not only encouraged the transformation from agriculture-based to industry-based economies in many East Asian countries, but also encouraged technological development and mastery. By the mid-1980s, several Asian economies including South Korea, Taiwan, Hong Kong, and Singapore, had successfully made this transition, and had begun to approach Japan’s level of technological mastery in everything, from automotive technology to semiconductors. They even started to follow Japan’s example of relocating old technologies and industries elsewhere to countries such as Malaysia, Thailand, Indonesia, the Philippines, China, and India.

Of course, this dynamic growth was not limited to manufacturing technology, but also occurred in the field of transportation and communications. East Asia became known for its rapidly developing information and communications technology. Several economies in Asia also began to look forward to the convergence of their infrastructure development programs, exemplified by the Singapore 21 and Malaysia’s Multimedia Super-corridor. Several countries cited the convergence of information technology and communications as a point of differentiation and the key competitive advantage in competing with other nations and global regions (Kotler and Kartajaya, 2000).

### **Common Features of East Asian Economies**

Eight features are both common to the East Asian economies and sufficiently different from the experiences of other industrialized and industrializing countries to warrant particular attention. These are idealized summations of what are highly variable conditions. As such, the mixture within each of the regimes is somewhat particular, and each regime is distinct from one another. At the same time, all these economies cluster at the end points of all these variables, in a combination that makes them unique as a group from most other countries.

1. All have “strong states”—that is, states in which technocrats and bureaucrats enjoy disproportionately high levels of power and wield a variety of tools to enforce their will.

State actors are also relatively free from major populist pressures, most especially from organized labor and organized peasants.

2. There is no sharp dichotomy between state and society. The presence of semi-permanent socioeconomic coalitions closely linked to state institutions makes such a reified bifurcation meaningless.
3. All underwent land reforms that virtually eliminated large landholders as major elements in the sociopolitical landscape. Moreover, with limited natural resources and small land areas, none of them is a major exporter of agricultural products or natural resources.
4. The regimes in all East Asia economies have taken on what Bob Jessop might call “hegemonic projects” that entail two essential elements: first, the enhancement of their national economic competitiveness through the development of internationally marketable goods, and second, an ideologically and economically rooted opposition to communism, socialism, and big states.
5. In conjunction with the project of improved economic competitiveness, all regimes reject the deified Western concept of “the market,” opting instead for active market manipulation, but in ways that are market enhancing rather than market rejecting.
6. To the extent that they have been successful in advancing the overall production, national income per capita, and shares of world trade, all of the countries have also done so relatively free from the compromising effects of international capital penetration. In particular, all the regimes have retained highly effective filters over foreign direct investment and foreign capital flows.
7. All the East Asian economies are exceptionally closed linked both in economic and security policies with the United States. Moreover, they are all similarly linked to Japan.
8. All have domestic power structures that, for males at least, are open to entry largely (though by no means exclusively) on the basis of individual merit rather than inscriptive traits such as social class (Woo-Cumings, 1999).

### **The Replicability of East Asia Development Policies in SSA**

One important line of argument employed about East Asian Miracle against industrial policy was that the policy requires certain conditions in order to be successful and therefore that other countries which do not meet these conditions cannot use such policy. Two kinds of arguments were made in this regard, First of all, it was argued that, in order to make industrial policy work even to the limited extent that it worked in East Asia; a country needs certain institutions, especially a highly capable bureaucracy like the ones that can only be found in East Asia. Secondly, it was pointed out that industrial policy is not feasible anymore, because the new international trading regime (e.g. WTO) has made the tools of industrial policy that the East Asian countries had used illegal. How persuasive are these arguments? Research shows that East Asian countries acquired their bureaucratic skills from other countries. For example, Singapore and Hong Kong learned managerial skills from Britain; Korea and Taiwan acquired institutional capabilities from Japan. So it was not all about the Confucian tradition that has made their bureaucracy what it is today. The point is not that history and tradition do not

matter, but that capabilities (and the institutions that embody them) can be built and destroyed a lot more easily than is assumed in the East Asian Miracle (and by many other people). It is true that the process of capability-building often takes time, but this is not the same as saying the countries which do not have high capability should never try difficult policies (such as industrial policy). Such capability can be, and has often been, built rather quickly, not least because there is also learning-by-doing in administration as in production. Institutions are, in other words, subject to imitation and innovation, as are technologies. Therefore, it is possible for SSA to adopt these East Asian policies.

In terms of WTO regime, it is true that the WTO regime has put greater restrictions than before on the range of trade and industrial policy tools that are acceptable. However, the restrictions are by no means as wide-ranging and severe as the East Asian Miracle suggests, and there is more room to maneuver for developing countries today, especially the poorest ones (most of which are in SSA) which are given some special exemptions. Given that the pre-WTO world trading regime was by no means permissive, it seems doubtful whether the birth of the new international trading regime makes the past industrial policy practices in East Asia as irrelevant for other developing economies including SSA countries as others have been argued to be (Chang, 2004).

SSA countries are now in the process of building their economies—in many cases, they are building brand new institutions and infrastructure based on their own visions of the future. The examples of East Asian economies will continue to inspire SSA policymakers. SSA governments can learn a vast amount of good policies from the development experiences of Hong Kong, Singapore, South Korea, and Taiwan. The East Asian economic miracle sounds simple but it has worked like a miracle. Here is the lesson: Have a vision, plan meticulously and carry it through with single-minded determination and you get an economic miracle that can transform SSA from poverty to prosperity. Hong Kong, Singapore, South Korea, and Taiwan are the living examples of this (Versi, 2012).

## References

- Amsden, A. (1994). Why isn't the whole world experimenting with the East Asian model to develop?: Review of the The East Asian Miracle. *World Development* XXII (4) (April) 627-633.
- Amsden, A. (1989). *Asia's next giant: South Korea and late industrialization*. (New York: Oxford University Press).
- Amsden, A. (1981). *Asia next giant*. (Oxford: Oxford University Press).
- Bekaert, G. and Hodrick, R. (2012). *International financial management, 2<sup>nd</sup> Edition*. (New Jersey, USA: Pearson Publication).
- Branscomb, L. M. and Choi, Y. (1996). *Korea at the turning point: Innovation-based strategies for development*. (London: Praeger).



Chang, H. (2006). *The East Asian development experience: The miracle, the crisis and the future*. (New York: Zed Books).

Financial Times (2012). How to crank up the American economic dynamo. (February 15). P. 9.

Gareffi, G. (1992). The international political economy and economic development, in "The handbook of economy sociology" (N. Smelser and R. Swedberg, Eds.). (Princeton: Princeton University Press).

Gareffi, G. and Wyman, D. (1990). *Manufacturing miracles*. (Princeton, NJ: Princeton University Press)

Haggard, S. and Pang, C. K. (1994). The transition to export-led growth in Taiwan, in "*The role of the state in Taiwan's development*" (J. D. Aberbach et al. Eds). (Armonk: M. E. Sharpe).

Haggard, S. (1990). Pathways from the periphery: The politics of growth in the newly industrializing countries. (Ithaca, New York: Cornell University Press).

Hatch, W. (2003). Japanese production networks in Asia. Extending the status quo, in *William Keller and Richard Samuels, Eds., Crisis and innovation in Asia technology*. (Cambridge: Cambridge University Press).

Hamilton, G. and Biggart, N. (1988). Market, culture, and authority: A comparative analysis of management and organization in the Far East. *American Journal of Sociology* XCIV (Supplement), S52-S94

Johnson, C. (1994). The industrial policy debate. (San Francisco: Institute for Contemporary Studies)

Kanter, R. M. (2012). Enriching the ecosystem. *Harvard Business Review*. March: 140-147.

Kim, E. M. (1998). *The four Asian Tigers: Economic development and the global political economy*. (New York: Academic Press).

Kochan, T. A. (2012). A jobs compact for America's future. *Harvard Business Review*. March: 64-72.

Kotler, P. and Kartajaya, H. (2000). *Repositioning Asia: From bubble to sustainable economy*. (Singapore: John Wiley & Sons (Asia) Pte Ltd)

Lall, S. (1994). The East Asian miracle: Does the bell toll for industrial policy? *World Development*, 22 (4), (April) 645-654.

Lardy, N. (2012). *Sustaining China's economic growth after the global financial crisis*. (Washington, D. C.: Peterson Institute for International Economics)

Lerner, J. and Sahlman, W. (2012). Reinventing entrepreneurship. *Harvard Business Review*. March: 116-119.

North, D. (1981). *Structure and change in economic history*. (New York: W.W. Norton).

Orru, M. and Biggart, N. (1991). Organizational isomorphism in East Asia, in "*The new institutionalism in organizational analysis*" (W.W. Powell and P. J. DiMaggio, Eds.) pp. 361-389. (Chicago: University of Chicago Press).

Porter, M. E. and Rivkin, J. W. (2012). Choosing the United States. *Harvard Business Review*. March: 81-93.

Porter, M. E. (1996). *The competitive advantage of nations*. (New York: Free Press).

Sabel, C. F. (1994). *Learning by monitoring: The institutions of economic development*. (Princeton: Princeton University Press).

Shapiro, A. C. (2010). *Multinational financial management*, 9<sup>th</sup> Edition. (New Jersey, USA: John Wiley & Sons, Inc.).

Shin, K. Y. (1994). *Class and politics of production*. (Seoul: Nanam).

UNCTAD (2012). *Trade liberalization, investment and economic integration in African regional economic communities toward the African common market*. UNCTAD Publication (New York: United Nations).

United Nations (2010). *Global rebalancing: Effects on trade flows and employment*. UNCTAD Discussion paper no. 200 (New York: United Nations).

Versi, A. (2012). Singapore: A modern miracle. *African Business*. May: p. 13.

Vietor, R. H. K. and Weinzerd, M. (2012). Macroeconomic policy and U.S. competitiveness. *Harvard Business Review*. March: 113-115.

Wade, R. (1990). *Governing the market: Economic Theory and the role of government in East Asian Industrialization*. (Princeton: Princeton University Press).

World Bank (1993). *The East Asian Miracle: Economic growth and public policy*. (New York: Oxford University Press).

World Bank (1987). *World Development Report*. (New York: Oxford University Press).

Woo-Cumings, M. (1999). *The developmental state*. (Ithaca, New York: Cornell University Press).

World Investment Report (2011). Non-equity modes of international production and development. (New York: UNCTAD).

Yusuf, S., Altaf, M. A., and Nabeshima, K. (2004). *Global production networking and the technological change in East Asia*. (Washington, D. C. : The World Bank).