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Alice Hoffenberg Amsden: A Consummate Dirigiste on Latecomer Economic Catch-Up

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Abstract: *Until the achievement of the East economies of Korea and Taiwan in becoming developed in one generation, most works on the developing economies have encouraged the unleashing of market forces as the only recipe for such a success. Amsden's work on South Korea and later on Taiwan were to incisively prove the importance of selective interventions as necessary to spearhead latecomer development. This article presents some of her posthumous publications that shall remain major pillars that policy makers can use to chart the growth of other successful latecomer stories.*

Key words: Latecomer Development, State Intervention, Industrialization, Innovation

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1. Introduction

As the World Bank was busy putting across advocacy on how newly independent economies should organize economic development, liberalization, foreign direct investment and export-orientation were some of the key promotional instruments that filled the early World Development Reports. Indeed, governments were encouraged to limit their focus to strengthening political stability and security, expand primary education across the populations and build basic infrastructure. Along with the United Nations there was a concerted effort to promote export processing zones across the developing world since the 1960s (World Bank, 1980; UNCTC and ILO, 1988). Kaohsiung in Taiwan became the first export processing zone outside the developed world in 1965[1]. Other export processing zones that sprung up during this time were Masan and Inchon in South Korea, the Singapore Island, Clarke Freeport and Subic Bay Freeport in the Philippines and Bayan Lepas, Sungai Way, Telok Panglima Garang, and Batu Berendam

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in Malaysia. These export processing zones functioned as labour-intensive production bases for light manufacturing industries where the governments provided good basic infrastructure and security, and often tax and tariff exemptions and subsidized rental lease. Trans-National Corporations (TNCs) seeking to lower production costs and at the same to enjoy transfer pricing advantages relocated light industries, such as, apparel and electronics assembly, in these locations (Scibberas, 1977; Rasiah, 1988). Until the achievement of the East Asian economies of Korea and Taiwan in becoming developed in one generation, most works on the developing economies have encouraged the unleashing of market forces through market-friendly policies as the recipe for success.

As the Washington organizations were busy promoting free trade and flexible exchange rates in the 1950s and 1960s, a number of countries were bent on escaping the structural tentacles of their exploitative colonial past introduced instead either import-substitution (IS) policies or delinked from capitalist nations. The large countries of India, Indonesia and Brazil promoted heavy industrialization behind IS policies since the 1960s, while China, Cambodia, Laos and Vietnam introduced socialism. However, by the 1990s the IS policies have faced significant exposure to foreign markets and foreign capital, and the socialist economies had begun massive introduction of market reforms. Despite increased growth rates and structural change recorded by these economies major successful latecomer catch up accounts have yet to come from these countries.

Amidst such contrasting forays by the newly independent economies, Amsden (1989) was a pioneer to discover and unravel South Korea's success in transforming its economy from a backward and laggard one to a developed economy in one generation. It gave hope for the nascent economies that it was possible to develop and achieve economic convergence within the capitalist system. However, Amsden's work prescribed right the opposite of the path leading development organizations, such as the World Bank and the International Monetary Funds were preaching.

Hence, whereas the Washington-based organizations were calling for the removal of price distortions and inward-oriented industrialization policies, Amsden (1991) was arguing for getting relative prices wrong in the catch up phase and that exporting alone was not a recipe for sustainable rapid economic growth. We discuss some of the key arguments of Alice Amsden in the next section before introducing the remaining contributions.

2. Interventions and Latecomer Catch Up

It is South Korea and Taiwan among economies with populations exceeding 10 million that managed to drive economic catch up from low to high incomes from the developing world. Singapore and Hong Kong too managed to develop

but because of their small city-state status they have often been overlooked for lessons. The dramatic success of South Korea and Taiwan is all the more extraordinary because they had lower per capita incomes and were characterized by languages different from the international languages. Amsden (1989) was the first to systematically argue using firm-level growth trajectories the movement of South Korean firms to the technology frontier. Elements of Japanese firms' catch up over American firms from the 1950s in steel and automobiles was also advanced by Singh (1989).

The first important lesson from Amsden (1991: 283) is latecomer firms' specialization in learning, including from competitors, which she saw as the prime channel through which latecomers in East Asia charted their catch up strategies. In doing so she deployed the logic of latecomer catch up advanced by Veblen (1915) and Gerschenkron (1952). It is here that benefits accruing to latecomers are discussed at length, including the potential for skipping and leaping sequential steps in the technology trajectory (Rasiah, 2014). Lall (1987) had made these observations arguing about the significance of learning from foreign technology in India's industrialization. Similarly, Amsden's colleagues, Kim (1997) and Ernst (1990 and 1994) and Ernst and Kim (2002) recognized Korean and Taiwanese firms' ability to adapt foreign technology, which is a major route latecomers have used to progress in the technology ladder. Freeman (1987) had established the precursor on learning from the acquisition of foreign technology with the experience of Japan.

Schumpeter (1934) had criticized perfect markets as incapable of significant stimulating innovations. Implying the logic of productive rents to evolve innovation capabilities, Schumpeter distinguished between innovations that entrepreneurs typically perform that relate to incremental engineering and product adaptations. Amsden (1991) took on this argument as make the case for what characterizes the early beginnings of technological catch up among latecomer countries, though, as her work also shows firms at some stage move on to R&D-type activities in the technology trajectory.

The second major argument advanced by Amsden (1985), which shall resonate well with the classical economists, such as, Smith (1776) is that, in as much as the division of is dependent on the size of the market, the converse is also true. The evidence she advanced from Taiwan's machine tool industry persuasively shows that simply opening economies to appropriate export rents can be suicidal. Indeed, Taiwan's firms built their capabilities to participate dynamically in the division of labour so that they have managed to co-determine the share of value added going to the different actors in the global value chains. Fransman (1986) and Wade (1990) were to extend these arguments to establish the importance of interventions in Taiwan's economic growth. Amsden and Chu (2003) later provided rich firm-level evidence to show how interventions stimulated technological catch up in electronics firms in Taiwan.

While price distortions are discouraged by neoclassical economists, Amsden (1989) saw the need to get relative prices wrong for economies to stimulate firms' movement from laggard to leader status. Indeed, in contrast to the mainstream arguments of Caves and Uekusa (1976) and Porter (1990), Amsden and Singh (1994) showed efforts by Japanese and Korean policy regimes targeted at creating cartels, which were part of the logic behind competition policy these countries pursued to achieve dynamic efficiency gains. Indeed, Johnson (1982) had made the case when arguing that Japan's Ministry of International Trade and Industry (MITI) used competition policy as the basis for spearheading the creation of competitive advantage among Japanese firms internationally.

Amsden (1989, 1991, 2001, 2007) was to add the use of the stick (export quotas) to ensure that the carrots created (domestic quotas and subsidized interest rates) were translated productively as the Park government was even ruthless to jail unproductive rent seekers. In making this point Amsden (1991: 286) argued that productive rent seeking was not egregious to the early cultures of both South Korea and Taiwan as both the Chiang Kai Shek and Synman Rhee in the 1950s were not bereft of unproductive rent seeking. In countries that tried to adapt Korean or Taiwanese policies of providing rents, such as, Malaysia the lack of such stringent performance standards have been argued by some to explain the lack of successful technological catch up examples (see Rasiah, 1999).

At a time when international development organizations were promoting foreign direct investment (FDI) to stimulate scarce capital inflows, generate employment and technology transfer, Amsden (1991) considered national firms' as the channel through which economic development evolves, though, she noted that the sources of learning start with the acquisition of foreign technology, including through licensing from and acquisition of foreign firms. Indeed, South Korea and Taiwan are examples of technological catch up spearheaded by national firms through such routes.

Another important empirical observation that Amsden made was to argue that trans-national corporations (TNCs) tended to confine their R&D to the peripheral aspects of the activity. Using evidence from the foreign direct investment dominated economy of Singapore, Amsden and Tschang (2004) argued that foreign TNCs hardly performed the core aspects of R&D in developing economies. This evidence is largely the case as developing economies are generally not endowed with the high technology infrastructure, such as, quality engineers and scientists, and research-based universities essential to support firms' participation in research-intensive activities.

Amsden was one of a rare group of scholars who made outstanding contributions to our understanding of industrial policy by articulating its dynamics using detailed empirical information of selective interventions by

the state to show how it formed the basis of the rapid economic development of Korea and Taiwan. Following her doctorate from the London School of Economics she first joined Harvard University as an assistant professor, leaving subsequently for New School (Boston) before she was appointed as professor at the Massachusetts Institute of Technology (MIT). Brave and honestly blunt, she became a powerful champion of industrial policy. Sharing the coordinates of rapid economic growth and technical change of Young (1928), Schumpeter (1934, 1943), Veblen (1915), Gershenkron (1952) and Abramovitz (1956) she focused on the division of labour as equally important in driving technological catch up and economic synergies (Amsden, 1985, 1989).

A scholar with such outstanding qualities of mind and character, Alice Amsden, will be greatly missed by her scholarly fraternity. Hence, the editorial board of Institutions and Economies overwhelmingly decided to publish a special issue on Industrial and Innovation Policy, and Economic Development to honour her. Given her crusade to convince the world that industrial policy is central to propelling economic growth and technical change this special issue is targeted at unfolding the dynamics of industrial policy, and growth and structural change.

3. Issue Outline

Following this introduction, four articles present work that share some of the arguments of Alice Amsden, while the fifth shares the logic but focuses on political institutions. The fundamental theme of agreement is that governments should focus on engendering the conditions for technological catch up and that such efforts actually call be a departure from typical mainstream approaches.

In the second paper, Patarapong Intarakumnerd presents seven unproductive habits that have restricted Thailand's capacity to graduate from the middle income trap to become a high income country. In doing so he contrasts the typical black box conception policy makers have used in Thailand with the learning from the frontier firms approach that Amsden (1991) had argued to have driven the successful latecomer industrializers.

In the third paper, Jorge Katz laments the extraordinary policy transformation experienced by the Latin American countries in which IS industrialization policies have increasingly been supplanted by natural resource-based market oriented policies. He argues that the switch has not only exposed Latin American countries to the vicissitudes of volatile commodity price fluctuations, it has also undermined in an unsustainable the commons in these countries.

Rene Ofreneo argues in the fourth paper that eclectic instruments and the lack of understanding of dynamic industrial policy has caused chronic deindustrialization with deleterious consequences for employment and wages

in the Philippines. He presents evidence to show that dwindling emphasis on the dynamic elements of technological catch up has left remittances from abroad as the major segment of the country's gross national product.

In the fifth paper, Rajah Rasiah, Yap Xiao and Yap Su Fei present evidence to argue over the importance of industrial policy instruments to stimulate technological catch up in the integrated circuits industry from low to high value added activities. They make the point that market friendly policies managed to attract investment to labour-intensive locations endowed with trainable workers, security and good basic infrastructure. However, the show evidence from South Korea, Taiwan and Singapore that upgrading to the high value added stages of chip design, wafer fabrication and R&D requires the presence of high technology infrastructure, and grants.

Focusing on political institutions, Michael Rock notes in the final paper that political regimes in Indonesia, Malaysia and Thailand have mattered less than the micro institutions embedded in particular regime types in encouraging governing elites to provide the public goods and policies necessary to stimulate economic growth. Dissecting the three economies deep into history, he discusses both the drivers for the rapid growth and the shortcomings the political alliances have caused in stimulating further growth in these economies.

Overall, all contributions are in sync with Amsden's main argument - that technological advancement necessitates the use of industrial policy so that the processes of catch up can be initiated right from the beginning. Whereas Patarapong Intarakumnerd's paper dabbled with policy makers misunderstanding of technological catch up in Thailand, Rene Ofreneo's paper pointed to the downright absence of upgrading vision among policy makers in the Philippines. Jorge Katz's paper throws cold water at the current shift towards resource-based economic strategies as Latin America has increasingly abandoned its proven inward-oriented industrialization strategies. Rajah Rasiah, Yap Xiao Shan and Yap Su Fei underline the importance of interventions, which is essential to offer the institutional framework through the provision of high technology infrastructure, and grants as important to stimulate IC firms' with requisite strategies to move to the technology frontier. Rock examined the political formations in three Southeast Asian economies to conjecture on the possibility of creating catch up patterns a la through the right sort of interventions as recommended by Amsden.

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Alice Amsden passed away suddenly at her home on March 5, 2012. We wish to note that Alice was a warm and kind friend.

Note

1. Shannon International Airport in Dublin was the first export processing zone in the world.

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