

Industrial policy in the 21st century: merits, demerits and how can we make it work

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Abstract

East Asian countries may have succeeded with industrial policy, but one might argue that in today's 21st century context its applicability to other regions of the developing world is very limited. This paper explores how successful East Asian economies applied industrial policy and then discusses critical challenges in applying similar strategy by developing countries today. The paper argues that industrial policy is still relevant and applicable for today's developing countries, and more importantly is being actively applied. In choice of instruments the paper argues that between functional and targeted industrial policies, there is in reality a case of superficial dichotomy; given our scarce resources, we are doomed to choose. Hence it is very difficult to provide prescriptive industrial policies which developing countries can follow straightaway; thankfully there can be no equivalent 'Washington Consensus' view on industrial policy. The final section of the paper discusses an innovative framework to make industrial policy work better for the poor. The paper will discuss a model through which the international development community, especially donors, can assist developing countries to develop a governance structure so that these countries can organically develop and formulate effective industrial policies. It is suggested that through formation of independent Market Development Institutions, which act as facilitator and collaborate with different private and public agencies; industrial policy will evolve out of this deliberation process.

Keywords: East Asia, industrial policy, market development approach, South Korea

JEL Classifications: E60, N10, O14

1. Introduction

It is a fact seldom contested at present that East Asian economies like Japan, South Korea, Taiwan and even Singapore used industrial policy as a tool to alter their sectoral structure and foster economic growth. All these countries followed some form of industrial policy and protectionist measures to protect their industries. Often these protections were geared towards specific firms; the 'chaebol' in Korea, the 'Keiretsu' in Japan, the State owned enterprises (SOEs) in Taiwan. Evidence also shows that developed countries used industrial policy to nurture firms and in some cases even in the recent past to foster economic growth (Chang, 2002, 2003).

While many contested the success of such policies in stimulating growth these economies (Noland and Pack, 2002; Pack and Saggi, 2006; World Bank 1993), a consensus has emerged among different researchers regarding their efficacy. There is a tacit agreement that such policies have been pivotal for the meteoric growth of these economies (Amsden, 1989; Lall 2000; Hausmann and Rodrik, 2006; Chang, 2011; Lin, 2012). Debate still rages on the nature of the policies that were critical, and the realistic possibility of other countries emulating them and whether they are still relevant today. After all, the global context might have altered radically and precluded the possibility of using such mechanisms. The historical success of

industrial policy in these East Asian economies does not in itself give credence to 'industrial policy' as a panacea for developing countries to follow.

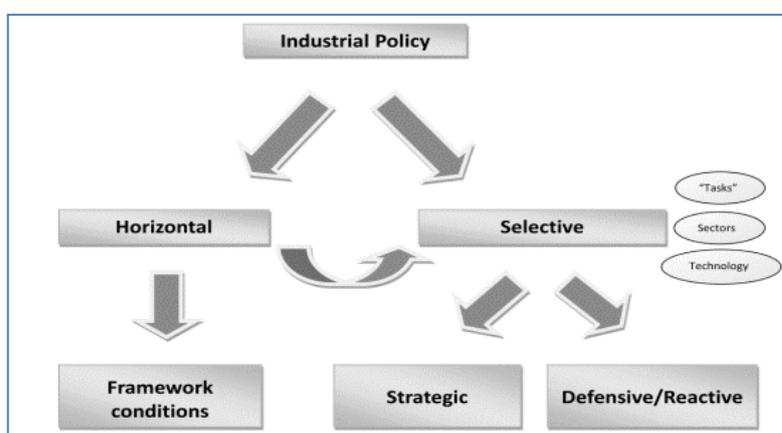
This paper first explores how successful East Asian economies applied industrial policy and then discusses critical challenges in applying similar strategy by developing countries today. The paper will argue that industrial policy is still relevant and applicable for today's developing countries, and more importantly is being actively applied. The paper will also discuss a model through which the international development community, especially donors, can assist developing countries to develop a governance structure so that these countries can organically develop and formulate effective industrial policies.

2. What is industrial policy?

Before one delves in to the efficacy of Industrial policy it is important to define the concept, since a plethora of definitions already exist, from the general *"Industrial policies are concerned with promoting industrial growth and efficiency"* (OECD, 1975) to the more nuanced and specific definition by Pack and Saggi (2006). However a narrow definition may not allow us to cover the variety of uses that are commonly associated with the term 'industrial policy'. In the present paper the author will use the definition used by OECD (Warwick, 2013) i.e. *"Industrial Policy is any type of intervention or government policy that attempts to improve the business environment or to alter the structure of economic activity toward sectors, technologies or tasks that are expected to offer better prospects for economic growth or societal welfare than would occur in the absence of such intervention."*

The definition covers both functional and targeted interventions, focuses on altering the structure of economy rather than relating only to manufacturing per se; emphasis is also placed on technologies and tasks beyond just sector promotion allowing, coverage of activities targeted towards technologies acquisition or specific tasks (e.g. R&D, design). Finally it allows for pursuing objectives beyond economic growth to include emergent social objectives like social cohesion, poverty alleviation etc (Warwick, 2013). The following Figure 1 shows the typology of such policy. The figure also includes defensive selective interventions which are similar to what OECD governments provided to major corporations and industries during the recent financial crisis; however this will not be covered in the present paper.

Figure 1: Typology of Industrial policy



Source: Warwick (2013)

Horizontal activities entail more broad based functional activities, for instance introduction of value added tax, promotion of primary and secondary educations, healthcare provision etc. What is important to note is that horizontal policies can have asymmetric and thereby selective effect on different sector/industries. Furthermore, beyond a few basic services such as rule of law, basic education, healthcare, it becomes very difficult to practically separate between functional/ horizontal and selective/targeted interventions. As Chang et al (2013) mention *"In a world with scarce resources, every policy choice you make, however general the policy involved may look, has discriminatory effects that amount to implicit targeting"*.

In the following section the author will discuss how industrial policy, as defined above, was used by the East Asian countries, specifically Japan, South Korea and Taiwan.

3. Use of industrial policy in East Asia

East Asian economies in general pursued a joint objective of infant industry protection and an export oriented growth strategy. Country policies were context specific, for instance multinational companies (MNCs) and targeted foreign direct investments (FDIs) played a much bigger role in Singapore's industrial policy, while in case of Taiwan and South Korea, domestic firms led the technological deepening and upgradation (Lall, 2004). But in most cases the state intervened with subsidies, purposefully distorting relative prices, thereby stimulating economic activities; they also ensured discipline by introducing performance standards (Amsden, 1989). The Taiwan government played the lead role in setting up the first semiconductor facilities in the country and then actively encouraged others to enter the sector; today it's a global leader in the field (Chang, 2010).

The major thrust of all these economies was to promote export by nurturing globally competitive firms and industries, particularly with a focus on technological upgradation and increased local value addition. This was achieved by employing specific policies like providing export subsidies, subsidized interest rates, and preferential allocation of foreign exchange to stimulate investment in export oriented sectors, encouraging adoption of foreign technology through investing in foreign licenses and technical assistance rather than imitation/absorption (Amsden, 1989). These economies also tried to keep real wages low through prohibition of collective bargaining, provision of government R&D facilities, tax credits for incentivizing private R&D, 'incubating' high-tech firms, regulating MNCs and directing FDIs focusing on specific technologies/sectors and enforcing local content requirement (Amsden, 1989; Chang, 2011; Weise, 2005).

The local firms, although they were nurtured and received targeted support, eventually were made to compete in the global market and in many cases were given explicit performance targets, which made them more efficient and self-reliant (Aghion et al, 2012; Weise, 2005). In case of sectors or firms that could not sustain themselves, support was either withdrawn or there were negotiated capacity cuts. For instance in South Korea, in the 1960s Shinjin was larger than Hyundai Motors in the local automobile industry, but the company could not survive competition and the oil shock in the 1970s. After the company went bankrupt, the government transferred Shinjin's holdings to Daewoo Motors (Amsden, 1989). But this approach of selectively nurturing a 'national champion' led to massive levels of consolidation; Table 1 shows the average three-firm concentration ratios of Korea, Japan, and Taiwan in all manufacturing industries in the late 80s.

Table 1: Three firm concentration

Country (Year)	Average Market Share (%)
Korea (1980)	62.0%
Japan (1981)	56.3%
Taiwan (1980)	49.2%

Source: Amsden (1989)

These countries started with a focus on technologically simple and labor-intensive goods – textile, garments, sports goods, etc and gradually moved into more capital-intensive and technologically sophisticated items, albeit in varying pace, leaving space for the next in line (Weise, 2005; Hoque, 2007), a testament to the flying geese pattern of development (Lin, 2012).

The Japanese model of industrial policy entailed some innovative features. First, they set up deliberation councils in specific industries, comprised of government officials, industry representatives, and observers (e.g., journalists, academics). These councils were responsible for fine tuning the policies and enhancing information flow between the private sector and the government i.e. providing the requisite ‘embedded autonomy’. Another feature was the improved management of cartels by allowing the existence of cartels only under clear and strict conditions in terms of their objectives; for instance avoiding duplicative investments, upgrading technology, avoiding debilitating price wars in the export market, orderly phasing-out of declining industries and life spans (Chang et al, 2013).

The unique feature of Singapore’s industrial policy was the use of specialized scheme/subsidies, such as research incentive schemes for companies or corporate tax exemptions on income from specific activities, to incentivise multinational companies to enter specific targeted hi-tech sectors which the government considered were important for the future of the economy (Huff, 1999). While at the same time in sensitive and critical sectors Singapore promoted SOEs such as Singapore Airlines, and it still has a sizable SOE sector (Chang et al, 2013).

4. Challenges in implementing industrial policy

Many argue that while East Asian countries may have succeeded with such policies, it is difficult for today’s developing countries to emulate them. In the following we discuss the key challenges that a developing country’s government faces today when it tries to use such policies.

4.1 Government capacity

Before a developing country’s government tries to protect and nurture a particular industry or firms it has to be able to pick winners ex-ante, otherwise it might end up protecting sunset industries at great cost (Harrison & Rodriguez, 2009). A common criteria that is often used is the Mill-Bastable test, which basically implies that the industry/firm should ultimately be capable of surviving international competition (protection cannot be perpetual) and the net

benefit to the society should defray the cost (through subsidy, tariff, other protection, etc.). While being simple in conception, it is extremely difficult to operationalise without adoption of restrictive assumptions that make it difficult to use for ex-ante policy prescription (Kemp, 1960; Melitz, 2005). The time horizon can also span decades; the current massive Japanese automotive industry in its early days in 1950s produced only tens of thousands cars compared to GM's millions.

A related challenge faced by a developing country's government is whether to support industries through mainly horizontal/functional interventions which conform to current comparative advantage, or defy their comparative advantage through targeted strategic interventions by actively promoting high-productive industries at the early stage of development (Lin and Chang, 2009). These issues are exacerbated by the fact that most developing countries, especially the LDCs don't have skilled bureaucrats who can develop such policies. A major reason for disenchantment with the state-led development model of the 1970s is the weakness of developing country's state machineries and their inability to translate ambitious development goals into effective action (Busch 1968; Goodwin, 1991), often leading to government failures and rent seeking behavior (Krueger, 1974; Bhagwati, 1982).

4.2 Global consolidation and cascade effect

The prospect of industrial policy is also hindered by the unprecedented level of consolidation and concentration that are happening across many industries led by the giant global players, the so called 'system integrators' (Nolan et al, 2008). The result, unbeknownst to most, is that in many industries the 'cascading effect' of consolidation and concentration has already reached maturity. Thus while Japan in the 1950s had to deal with GM, Ford, and few others, who were virtually making the lion's share of their components or procuring from numerous suppliers, today a developing country that is entering the sector not only faces these massive assemblers but also their vast array of global sub-system suppliers who are equally massive in terms of global reach and resources. This is not only common in high-tech industry but also in service sectors like banking and even the comparatively low-tech 'beverage' industry (Nolan et al, 2008). The level of consolidation is evident even in the East Asian economies discussed above (Table 1). Thus now it is much more difficult, both in terms of likelihood of success and cost involvement, to nurture national champions in global industries.

4.3 Shrinking policy space

Finally the rules of the game of international trade are heavily influenced by the transnational corporations (TNC) and the global financial organizations that are supported by the political clout ('regulatory capture') of their industrialized country of origin, through the medium of multilateral institutions like IMF and WTO (Nayyar, 2003). Some of the bilateral/regional trade agreements are even more stringent than WTO regulations, thus significantly limiting the policy space within which countries can operate. The WTO agreements on Trade Related Investment Measures and Intellectual Property (called TRIMS and TRIPS respectively), together make it either illegal or severely restrict many of the industrial policy instruments used by the successful East Asian countries, discussed aforesaid, to nurture their own firms/industries and technological capacities (Wade, 2003). Given these challenges and seemingly insurmountable level of entry barrier, what can a developing nation and especially a LDC do?

5. Overcoming challenges: how industrial policy is still applicable today

First and foremost it is important to realize, that notwithstanding the manifold challenges of implementing industrial policy, they are already widespread in the developing world and in many cases proving to be successful. Countries like Tunisia, Ethiopia, South Africa, Morocco, Brazil, and Turkey are but a few examples of countries with a well-defined industrial policy regime focused on industrial development and technological upgradation, with strong and targeted investments in capacity building and competitiveness initiatives, emulating the successful East Asian economies (OECD, 2013; Warwick 2013; Altenburg, 2011). Also developing countries have been actively developing and promoting specialized ‘export’ processing economic zones with tax holidays, curtailed labor freedom (lack of trade unions), uninterrupted and subsidized utility services, etc. This is very much industrial policy, similar to the ones used successfully by East Asian economies to attract and direct FDIs, but this has been encouraged as it is in line with the “Washington Consensus”, the primacy of export and outward orientation (Rodrik, 2004).

The National Development Bank of Brazil and the Industrial Development Corporation in South Africa are actively engaged in implementing industrial policies and have introduced new financial mechanisms to stimulate innovation in specific fields in line with national priorities (OECD, 2013). These institutions are very similar to specialized institutions like Japan’s MITI (Ministry of International Trade and Industry), and the Economic Planning Board in South Korea, which led the industrial policy of these countries. The government of Brazil has also initiated the Productive Development Policy (PDP), which is a complex policy package geared towards diversifying the export basket and boosting technological innovation (Chang et al, 2013). The PDP policy package targets specific sectors such as ICT, biotech, nanotech, aeronautics and petro chemicals among others (Balbachevsky & Bothelo, 2011). Brazil is also setting up sectoral competitiveness councils to improve policy effectiveness through improved communication flow between government and private sector (Kupfer, 2012); this is very similar in spirit to the deliberation councils set up by the Japanese government.

Second, given the pervasiveness of coordination, information failure and high transaction costs in exploring new markets, state directed industrial policy is probably a necessity. Structural transformations are path dependent and in such cases private incentives are lower than social benefit, so market based solutions are likely to be too slow (Hausmann and Rodrik, 2006). Furthermore research indicates that countries converge to the level of income predicted by their exports, or “*you become what you export*” (Hausmann, Hwang and Rodrik, 2005). Thus as Altenburg (2011) puts it “*Given the initial competitive disadvantages of latecomer countries, it is hard to imagine ways to unleash a virtuous circle of productivity development without a government....*”

5.1 Government can implement industrial policy

Numerous country specific case studies on recent application of industrial policy suggest that countries learn to implement such highly context specific policies, through trial and error, and success may depend more on political will than administrative capacity (OECD, 2013; Altenburg, 2011). As Chang (2011) shows, South Korea and Taiwan in the early days did not have a stellar bureaucracy, but they developed it gradually, a pathway that is open to any country with sufficient political will. Also during the Cold War, Korea and Taiwan were spending significant amounts on defense, a burden that is seldom carried by developing

countries today and especially LDCs. In the 1970s Korean government spent 6% on GNP in defense (Amsden, 1989), in comparison today developing country's defense budget is around 1.5% of GDP (World Bank, 2014). Finally institutions, both local and international, available to governments of today's developing countries are far superior to those that were available to these East Asian states.

Rodrik (2008) points out that potential for regulatory capture, corruption, and weak bureaucracy affect all policies including implementation of so called traditional functional policies and therefore singular skepticism towards industrial policy seems unjust. This sounds especially unwarranted and even paradoxical when WTO is at the same time also expecting the developing countries to have a first-world institutional framework with sophisticated patent enforcement and monitoring system to protect intellectual property rights. It is equally naïve to assume that open-door policy to TNCs will not result in a high degree of regulatory capture and rent seeking behavior. One is reminded of Union Carbide's legal maneuvering after the Bhopal disaster including their refusal to handover CEO Warren Anderson to a face criminal lawsuit. Bofors FB, a Swedish weapons firm, was also allegedly provided kickbacks to high officials of the Indian government, including the PM. Thus rent seeking behavior is an institutional problem and not an automatic outcome of industrial policy.

In reference to government's choice between conforming and defying comparative advantage, in reality it is messier than this dichotomy would have had us believe. For instance in the debate between Chang and Lin (2009), Chang takes the strong stance that government should defy their comparative advantage, but then acknowledges *"government should not push the economy too far away from its current structure too quickly"* or current comparative advantage. While Lin arguing for conforming to comparative advantages elsewhere (Lin, 2012) mentions governments should facilitate growth of *"industries that reflects country's latent comparative advantage"* or defying current manifest comparative advantage. Thus we see that while both took extreme positions initially, are in reality differing only in degrees.

In choice of instruments between functional and targeted, there is a similar case of superficial dichotomy. While there may be few broad functional instruments like increased credit facility through quantitative easing, or investing in infrastructure, more often given scarce resources, we are doomed to choose. As Hausmann and Rodrik (2007) point out regarding industrial policy *"The idea that the government can disengage from specific policies and just focus on providing broad-based support to all activities in a sector neutral way is an illusion based on the disregard for the specificity and complexity of the requisite publicly provided inputs or capabilities."*

Pack and Saggi, (2006) suggest that government's role in the growth of software industry in India was 'benign neglect'. However Indian government instituted an ambitious program in the early sixties to create Indian Institute of Technologies (IIT), which were declared as 'institute of national importance' (IT Act, 1961) and as early as 1964 it started offering education in computer science (Murali, 2011), taking technical support from MIT and the University of California at Berkeley among others through the Kanpur Indo-American Programme (IITK, 2014). Focusing on tertiary computer education and identifying it as of national importance in the early 1960s by a newly independent developing country was indeed a selective choice rather than functional intervention, which ultimately created the critical base of human capital to instigate economic boom in India's post 1990 reform.

Another good example is readymade garments industry (RMG) in Bangladesh which is currently one of the largest in the world exporting over USD 19 billion worth of goods per year and employing 4.2 million, mostly female workers (Farhana, 2014). The first milestone of this export oriented industry was in the early 70s when a joint venture between a local company 'Desh' and Daewoo of South Korea was setup. In the initial stage 130 Bangladeshi staff received six month long technical and HR related training in Daewoo facilities in Korea; these staffs later became industry leaders and entrepreneurs in Bangladesh's RMG sector (Yunus & Yamagata, 2012).

While the initial milestone was laid down by private entrepreneurs, later on successive governments took an active role in tailoring specific policies to support the growth of RMG industry. Based on continuous feedback from and engagement with RMG entrepreneurs, since 1980s onward the government issued licences for duty-free import of RMG related machineries; in the 90s government developed a framework to allow banks for operating back to back letters of credit thus significantly reducing working capital and foreign exchange burden; this was followed by allowing creation of bonded warehouse facilities which permitted RMG entrepreneurs to import fabrics, accessories in a duty free environment (Yunus & Yamagata, 2012). A key success factor for these policies has been the constant engagement/communication between government and RMG entrepreneurs. Although some of these policies may look 'horizontal', they were initiated at the behest of RMG manufacturers and targeted at them. In order to further strengthen the existing foothold successive governments have also taken steps to develop a competitive textile industry to improve backward linkage and increase local value addition. Textile industries can also import cotton, accessories, and machineries duty free. So it seems even a LDC like Bangladesh has been successfully able to develop targeted policies to promote and nurture globally competitive industries.

5.2 Leveraging existing foothold

Many developing countries already play a significant role in a number of global industries like Garments in Bangladesh, shoes in Vietnam, IT in India, furniture in Indonesia, among others. Although these are not as massive as the aircraft industry, they are nonetheless multibillion dollar industries employing millions of workers. Thus one strategy for LDCs and other developing countries could be to capitalize their position and nurture the firms in those sectors where they already have a global foothold and are part of the value chain.

Governments can also foster development of backward industries like the textile industry in conjunction with the competitive garments industry, thereby further increasing local value addition. It can promote growth of firms in industries where it has latent comparative advantage (Harrison& Rodriguez, 2009) and where the cascading effect hasn't reached maturity or is prone to periodic paradigm shifts (e.g. software). Table 2 shows that companies from BRIC countries have rapidly expanded and are becoming global players, in spite of the consolidation and cascade effect. Companies like Indian based Tata Consultancy Services had annual revenue of USD 11 billion in 2012-13 (TCS, 2013).

Table 2: Fortune 500 companies in 2005 and 2013

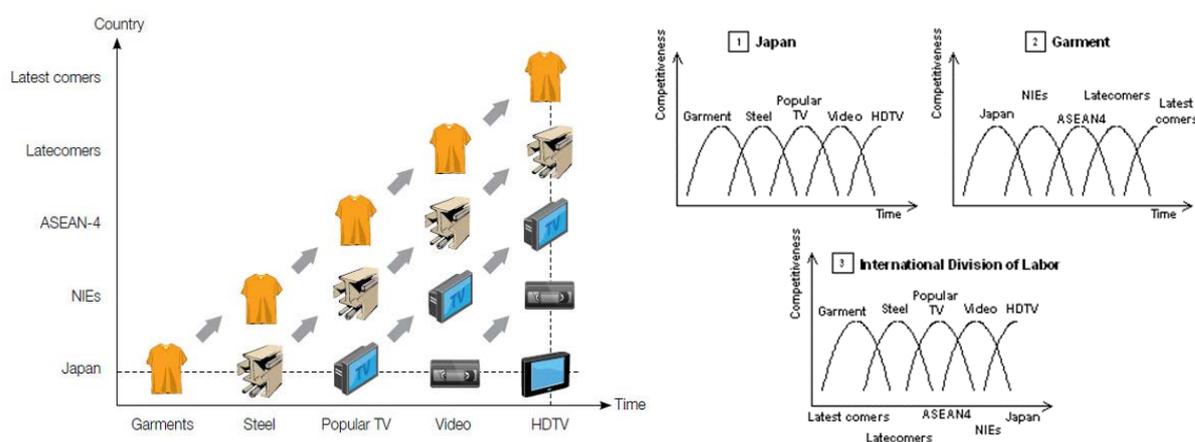
Countries	2005	2013	Change
Canada	13	9	-31%
UK	35	26	-26%

India	5	8	60%
Brazil	3	8	167%
China	16	89	456%
Thailand	1	1	0%
Turkey	1	1	0%

Source: CNN Money Fortune Global 500

For China most of these companies are state owned and are operating in a protected local market, so one can say that the picture may be misleading in some cases. But it implies that government through protection can nurture multibillion dollar firms, implying industrial policy cannot be trivial as some critics would have had us believe. But it is equally true that for LDCs it is still very difficult to develop and nurture globally competitive firms or industries. For LDCs the ‘flying geese pattern’ of development may be a salvation, i.e. when one country’s export base moves from labor intensive to more capital intensive goods, it vacates the export market segment for labor intensive goods to be taken up by late-comer countries like LDCs (Figure 2).

Figure 2: Structural transformation in East Asia



Source: GRIPS (<http://www.grips.ac.jp/forum/module/prsp/FGeese.htm>) and Lin (2012)

Note:

ASEAN4 = Indonesia, Malaysia, the Philippines, and Thailand.

NIEs = newly industrialized economies, Hong Kong SAR, China; Korea; Singapore; and Taiwan, China.

As a cautionary note, the flying geese pattern is a useful metaphor but not a necessity. Nayyar (2013) mentions that Mexico entered at a lower level of the value chain focusing on television and vehicle assembly but has yet to progress upwards. Furthermore its position is being challenged aggressively by China. But in Bangladesh, a LDC, the government has started negotiating with South Korean government to assist its nascent shipbuilding industry through technology and technical knowledge transfer, by setting up collaboration between companies and educational institutors of both countries (Ho-hwan, 2010). Bangladesh is currently targeting the market for low-tech medium sized ships, which is worth USD 200 billion dollars, and has already exported ships worth USD 500 million and has further plans to export \$2billion in the next five years (Ethirajan, 2012). This path was followed by South Korea, China and Japan, who have moved into the high-tech specialized ship industry, vacating the space for low-tech ship market to countries like Bangladesh. Thus it is up to governments

and their entrepreneurs to take advantage of the vacating export space and to upgrade themselves through structural transformation.

5.3 Manoeuvring within WTO regulations

For LDCs, WTO rules are still not stringent, for instance export subsidies are allowed, designated infant industries can be protected, albeit for a short span of time, and implementation of TRIPs regulations are much more relaxed. The TRIPs agreement was supposed to come in to effect from July 1st, 2013 but has been extended to July 1st 2021 for LDCs¹. Similarly LDCs are allowed to introduce new measures that deviate from the TRIM agreement but they have to be phased out by 2020². Thus LDCs can employ industrial policies similar to successful East Asian economies within the current WTO framework even though the timeframe has been fixed.

For developing countries prohibition of local content requirement has been circumvented to a substantial degree by the rules of origin requirement within regional agreements. Such was the case with Argentina though the MERCOSUR Automotive Policy and Mexico under NAFTA, both of which requires regional content (Elimination of TRIMS, 2007). While export subsidies are prohibited, production subsidies are not, although they are actionable and are subject to challenge³. But then one has to keep in mind that the transaction cost of engaging in legal battles are costly and so developed countries/MNCs are unlikely to engage in such battles frequently.

Subsidies which are research-related, regional or environment-related are allowed under WTO and are not even actionable⁴. Furthermore government procurement still remains outside the purview of much of the WTO rules. Thus government co-financing, subsidizing SOEs, providing subsidy in research, especially in green technology, can be followed by any developing countries under the WTO regime. Governments can create enabling environments and attract FDI to selected industries which they believe are of national importance and can assist in technological transformation.

So we can see that while global context might have changed substantially since the early days of industrial policy, there is still a strong need and applicability of using such policies to enable developing countries to bring about much needed structural and technological transformation.

6. Making Industrial policy work better for the poor

The author supports the idea that developing countries should use 'soft' industrial policy whereby there is a collaborative relationship between private sector firms and government to develop an enabling environment and provide necessary support which can enhance competitiveness and build local capability (Harrison & Rodriguez, 2009). It should be geared towards self-discovery whereby government subsidizes the search cost and informational externalities, and mitigates the coordination failure which inhibits firms entering new sector or

¹ WTO; Retrieved from: http://www.wto.org/english/tratop_e/trips_e/ldc_e.htm

² WTO; Retrieved from: http://www.wto.org/english/res_e/booksp_e/analytic_index_e/trims_01_e.htm

³ WTO; Retrieved from: http://www.wto.org/english/tratop_e/scm_e/subs_e.htm

⁴ Subsidies and WTO; Retrieved from: http://www.wto.org/english/res_e/booksp_e/anrep_e/wtr06-2f_e.pdf

unchartered territories where there can be latent comparative advantage (Hausmann, & Rodrik, 2003; Rodrik, 2004).

Rodrik (2004) provides ten design principles for developing such an industrial policy. They cover issues like what incentives should be given for new activities, how to clearly define a failure/sunset clause, how activities should have sufficient positive spillovers potential and bring sustainable changes, and what mechanisms there should be to reduce cost of mistakes but not chance of mistakes, i.e. ability to manage risk. However, as Rodrik mentions, it is more important to specify the process rather than the outcome of industrial policy. After all as most successful cases of industrial policies show, it was constant engagement and communication between private sector and government that made the policies effective. Policies are bound to be context specific, not only depending on industries and countries but also on the time, as what was once effective may not be effective now. Hence it is very difficult to provide prescriptive industrial policies which developing countries can follow straightaway; thankfully there can be no equivalent 'Washington Consensus' view on industrial policy. What can be prescribed is the process and mechanism through which effective industrial policies can be developed, and that is where Japan's deliberation councils or Brazil's sectoral competitiveness councils are worth emulating.

Although industrial policy might be a necessity for developing countries, the government's focus should not be building national champions but promoting inclusive growth and alleviate poverty. Therefore the author suggests that in order to avoid rent-seeking behavior and formation of a government-industrial complex, it may be important to create an independent market development institution (MDI) with its own highly competent technical staff, much like independent central banks. This will provide the requisite industrial support and offer sufficient level of "embedded autonomy" i.e. the government will have roots in the industry ('embeddedness') but also at the same time have its own will and independence ('autonomy') in order to be effective in its intervention (Evans, 1995). The institution will act as a facilitator and collaborate with different private sector firms and public agencies; industrial policy will evolve out of this deliberation process.

MDI should have a clear mandate from the funders (which might be combination of government and private sector associations/federations) in terms of priorities which may entail fostering employment creation, enhancing export competitiveness or promoting pro-poor growth through increasing manufacturing competitiveness. The idea is to provide the institution with clear direction while allowing sufficient flexibility so that it can respond to diversity and dynamism inherent to markets. Skilled technical staff is necessary so that they are able to understand and address underlying systemic constraints rather than symptoms. For instance lack of trained labor in industries often is addressed by increasing the number of vocational training institutes. In most cases these kinds of supply-side solutions based on symptoms miss underlying constraints which might be an outdated syllabus limiting the usefulness of such trained labour. The MDI can be an effective institution for shaping 'soft' industrial policy in the current global context.

A pertinent question could be how we can develop from scratch governance structure, requisite technical support and service markets, both at local and international level, to materialise the formation of such institutions. This is where the DFID's making the market work better for the poor (M4P) framework can come into use. Making Markets Work for the Poor (M4P) or market development is a relatively new phenomenon within the development community and has been here for less than a decade or so. It draws on learning from other

areas or methodologies like Value Chain analysis, Business Development Service framework, new institutional economics and others. The central idea is that the economically deprived individuals are dependent on market systems for their livelihoods. Thus it is believed that transforming these market systems, so that they work more effectively and sustainably, will improve the livelihoods of the economically deprived (M4P Synthesis Paper, 2008). Major bilateral donors, predominantly from European countries like Sweden, Switzerland and UK among others, have subscribed to this paradigm as one of their major private sector development strategies. Other donor countries like Australia, Canada and Netherlands, have also had experience in funding such projects.

A market development project, often called the facilitator, typically identifies the key market constraints (support functions and rules) that impinge upon a better performing market for the poor and then works with private or public sector partners to correct one or more of these key constraints, to bring about sustainable or systemic change (Kupper, 2013). In DFID, the touted 'Aid Superpower', there are 42 current or pipeline programmes following market development approach, with a total programme value of over £650m (DFID, 2014). DFID has also launched £3m project geared towards establishing a multi-donor funded Market Systems Development Platform. The platform will work with donor agencies, project managers, businesses and communities to promote market-led approaches to development programming.

Therefore there already exists a plethora of market development projects around the world, especially in developing countries, implying that there is already a structure and requisite technical support both local and international, in terms of human resource and good business practice, to materialise the formation of such MDI institutions. Bilateral donors can view this as an exit strategy whereby they can view these programmes as turnkey projects from the onset, with local government on board. After a successful run of the project, which is needed to gain traction and build networks within the local market, business community and public agencies, the donors can exit out of the funding and leave behind a fully established embedded MDI that facilitates the markets and assists in the formulation and evolution of industrial policies through self-discovery.

7. Conclusion

In this era of globalization, companies are much more footloose and so the idea of national champions is becoming less relevant. One should also remember that not all states are developmental states (Kohli, 2004). In a neo-patrimonial state, pursuit of industrial policy might be impossible or socially detrimental since it may give rise to an even higher degree of political consolidation. Today it is impossible and not even preferable to have or promote formation of a 'cohesive capitalist state', which is decidedly undemocratic. Therefore most states being "fragmented, multi-class states," it might be difficult to implement industrial policy and may require costly political settlement. In countries like Pakistan and Kenya with large 'landed gentry' and with no land-reform in sight, promoting growth of industrial elites through such policies may be politically very costly if not impossible.

Thus industrial policy like in the East Asian countries, while very relevant and applicable to today's developing economies, is highly context specific and is but an instrument, albeit a very important one, for promoting inclusive growth. Formation of independent MDIs can be a way forward which can bring in international best practices and allow both developed and

developing countries to work together in formulating a viable mechanism for developing context specific industrial policies. This will require strong buy-in, vision and moral thrust from large bilateral donors like DFID, to assist developing countries to help themselves to progress sustainably forward.

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