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# **Building Indian Multinationals: Can India 'Pick Up the Winners'?**

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*Abstract: This paper traces the evolution of Indian industrial policy and compared it with the picking up the winners (PUW) industrial policy adopted by many industrialized and industrializing countries. The study found that Indian industrial policy still lack the sectoral and firm-level targeting which was crucial in the emergence of third country enterprises as leading global players. India must rethink its industrial strategy if it wants to build its own multinationals.*

*Key Words: Industrial Policy; Multinationals*

*JEL Classification: L52; F23*

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## **1. Introduction**

It is a national pride for every country to build enterprises capable to be market leader in international market. For India it is a long pursued desire since Independence. Being a late industrializing country single news of global success of an Indian enterprise draws considerable attention from both media as well as analysts. When Indian companies make entry into Forbes' global list of small firms it becomes important news headlines in Indian financial newspapers and business periodicals. News headlines such as 'the age of Indian MNCs' (Economic Times 10.7.2003), 'readying for more flexes' (Economic Times 10.7.2003), 'the return of the great Mughals' (Asia Times 22.8.2002), 'India leads Asia in Forbes' global list of top small firms' (Business Standard 12.10.2002), 'Indians USA: how the high tech Indians won the valley' (Business India January 22- February 4 2001), 'the great Indian takeovers of America' (Times of India 19.3.2000) are becoming frequent recently. Behind these news headlines lies the long

cherished dream of a nation to build its 'national champions' who will take care of national competitiveness in the global market place. The question is therefore 'can we make Indian MNCs?' as put forth by Narayana Murthy, the Chairman and Managing Director of reputed Indian software company, Infosys Technologies Ltd (Computer Today July 1998).

However, achieving this objective depends critically on the industrial policy pursued by India. Evidence suggests that the emergence of global MNCs in many countries were direct or indirect results of their home country industrial policies. Then what are the options before India to develop its domestic firms in the face of tremendous competition unleashed by global MNCs that have much higher technical, human and financial resources, and are strongly backed by their home country governments? Unless Indian companies are supported strongly by the government, mere rise of outward investment activities of these firms can not materialize India's dream of 'global Indian takeovers'.

The present paper attempts to provide answer to the above problem. The structure of the paper is as follows: Section 2 presents selective reviews of literature on industrial policies of selected industrialized and industrializing countries with particular emphasis on the strategy of 'picking up the winners' as a strategy for lately industrializing countries. It covers theoretical basis for industrial policy and empirical evidence on its use by selected countries to build their local capabilities to become strong contender in the global market. Section 3 analyzes historical evolution of India's industrial policy and compared it with the bench-mark policy of 'picking-up the winners' (PUW) policy. Section 4 summarizes and concludes the discussion.

## **2. ‘Picking up the winners’ policies and Industrial Development: Theories and Evidence**

### **2.1 Theoretical Background**

The role of state intervention in the industrialization process is intensely debated among theorists. The neoclassicalists including international lending agencies like World Bank argued that ‘market’ is the best mechanism to industrialize as it leads to efficient allocation as well as utilization of scarce resources. Firms operate in a perfectly competitive world with access to same knowledge, technologies, skill and perfect information. Any government intervention therefore in the operation of firms will give rise to inefficiency and result in inappropriate allocation of resources. This distorted resource allocation will not only hinder the promotion of indigenous industrial development in the country concerned but also its distorted effect spillovers to global markets through the composition and flows of trade and investment. The industrial policy which directly follows from this textbook type neoclassical theory is the promotion of large numbers of small firms so that none of them have any market significance. Often the success of industrialized and new emerging economies such as Korea, Singapore, Hong Kong and Taiwan has been attributed to the strategy of promoting competition among small firms. In this view, the growth of developing countries should be based on small-scale, labour-intensive light industries as these countries are assumed to be capital-scare and labour abundant. Once these countries advance in their path of industrialization, market forces will automatically lead to the emergence of large-scale, capital-intensive and technology-intensive industries. Hence, the use of industrial policy to nurture and develop knowledge-based industries to push forward industrialization of the developing economy is alien to the neoclassicalists.

However, the functioning of markets in the real world, particularly from developing country perspective, has little resemblance to the picture of neoclassical markets. Global and domestic markets, both factor and product, suffer from failures to a significant extent. The presence of scale economies, marketing and product differentiation, asymmetrical information, and uncertainty shape the structure, conduct and performance of various markets. All firms do not have access to identical technologies, and technological absorption is not instantaneous and costless as assumed in the neoclassical model. Importantly, it is these very market imperfections that are inhibiting the entry of developing country enterprises into knowledge-based industries dominated by developed country firms armed with their monopolistic assets like technology, skill, marketing and organizational expertise, international brand names and global distribution channels . The history of industrialization in advanced countries shows that these countries have actively or passively promoted these large firms operating today in the global markets and engaging in large-scale oligopolistic competition where market outcome will be far from being neoclassical optimal resource allocation. Unless developing countries use industrial policy to develop their domestic capability in these knowledge-based industries, market forces will not automatically lead to the same. Therefore, neoclassical argument that the market based industrialization is relatively better than the intervention assisted industrialization, should require critical examination. The World Bank's use of Asian NIEs as example of textbook type neoclassical economies in fact do not conform to the irrefutable evidence that 'winners' in these economies were aggressively picked up or created at the industry and even at the firm level with strong government intervention in production, credit allocation, technology

imports and local technology creation and diffusion, education and training, export activity and so on (Lall 1996 pp.4). Without such government intervention, depending alone on market mechanism, these economies would not have achieved the level and deepening of industrial development today they possess.

Industrial and trade policies to directly guide industrial activity and foreign trade have a long history. Way back in early nineteenth century Friedrich List, the father of American Protectionism, has advocated protection when the industries of a nation cannot compete with well-established industries of foreign countries until they have fully developed to withstand competition. The case for protection to 'infant industries' as a strategy for industrialization of the developing countries becomes louder in the writings of structuralist school of thought such as Singer (1949, 1950) and Prebisch (1950, 1959). More recently the case for government intervention comes from the works of theorist of strategic trade policy (Brander and Spencer 1981, 1985; Krugman 1986). These strategic trade theorists emphasized the issue of market failures that characterized international markets in the real world but which have largely been remained un-addressed in the dominant theories of international trade based on the assumption of perfect competition. The international market for goods characterized by scale economies, innovation, product differentiation, learning by doing etc. are dominated by relatively few firms reaping profits above the rate of return earned in purely competitive industries. These products are 'strategic' for an economy because they offer a higher rate of return to labour and capital than they could get elsewhere and government intervention actively favouring these strategic products can raise national income. The strategic trade theorists have shown that in such imperfectly competitive oligopolistic industries, government can use

industrial and trade policies to assist domestic firms to increase their market share and profits at the cost of foreign rivals.

The 'PUW' approach essentially boils down to identifying these strategic sectors and specific domestic firms and promoting them with industrial policies such as R&D subsidies, tax subsidies, preferential loans and credit allocations to become globally competitive. The basic theme of the PUW approach is to build competitive ability through government interventions which existing markets apparently could not achieve due to several imperfections and failures. This policy remains as the key to the rapid industrialization of many countries including Japan and the Newly Industrializing Countries (NICs). In what follows a brief review of industrial policies of selected countries is provided in the following section.

## **2.2 Evidence on the Use of 'Picking Up the Winners' Policies**

### **2.2.1 The United States<sup>1</sup>**

The role of government intervention had been crucial in the process of development of the U.S. economy of today. Throughout the pre- and post-Civil War periods protectionism was the hallmark of American policy to encourage and protect manufactures. In fact, 'the new protectionist tendencies after the Civil War were the main contributory factors to the rapid expansion of manufacturing production during 1870-1890, not only in the North but also in the Southern States' (Shafaeddin 1998, pp. 14). Despite the fact that US competitors in Europe were following a policy of free trade and that the Civil War had ended in 1865, the high tariff rates introduced in the early 1860s continued over 1860-1880 and again have been intensified during 1875-1883 and

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<sup>1</sup> Shafaeddin (1998) pp. 11-20; Ryan (1994) pp. 8-10.

between the late 1880s and 1913. It is important to note that during this phase goods such as textiles, iron, steel, glass, and tin plates had accorded high protection and formed the important export items of European countries.

The American policy to protect American enterprises and make them globally competitive and innovators in technology-intensive industries, continued unabated in the post-World War II era. Extensive intervention in support of sunrise industries critical to American national defense capabilities and aggressive protection of sunset industries from international competition has been important government policies (Ryan 1994). During this phase military spending has served as implicit industrial policy encouraging innovation in targeted sector like electronics, communications equipment, and aerospace industry. This military-driven pattern of innovation and resource allocation had favoured 'winning sectors' which are innovative, product design, and performance-oriented sectors in contrast to consumer-oriented and standardized-product-oriented sectors (Markusen 1985 pp.76). The military spending and procurement not only helped the USA to achieve first mover advantages in high-technology industries but also fastest growing exports of arms sales abroad and sale of first-generation technology to other countries, apart from exports of high technology products. Apart from these direct effects, the spillovers effects from military-led innovations to the rest of the U.S. economy were quite substantial.

Only when American firms emerged as globally competitive in the twentieth century that the US trade and investment policy turned to be liberal in the realization that liberal policy regime now can serve its interest best. The U.S. has taken an active role in the creation and evolution of multilateral rule-based trade regime. The U.S. also has actively promoted American investment abroad through creation of Overseas Private

Investment Council and the Export-Import Bank. To ensure security to American investment in foreign countries, the U.S. has led to the establishment of the World Bank's Multilateral Investment Guarantee Agency, the International Center for Settlement of Investment Disputes, the International Finance Corporation's Foreign Investment Advisory Services, and launching negotiations on Trade-related Investment Measures (TRIMs).

However, behind this accepted liberal policy of the U.S. the trade and investment policy does not miss opportunity to turn to be protectionist whenever the U.S. industries and employment get threatened by the foreign competition. For example, when the market share of Japanese car producers soared the American government pressurized Japan to undertake voluntary export restraints (VERs) during 1981-1985 to protect the U.S. industry. Recently the protectionist forces are becoming active against the background of growing Chinese trade balance with the U.S. in 2003 and also rising incidence of business process outsourcing (BPO) to developing countries. The U.S. policy towards inward FDI have also become less liberal when U.S. became a net-importer of FDI with growing number of foreign acquisition of American business enterprises during 1980s. The acquisition attempt of Fairchild's semiconductor equipment manufacturing operation by Japanese company Fijitsu became a major issue for Congress and led to the policy changes that made it mandatory screening of FDI by the Committee on Foreign Investment in the U.S. to prohibit foreign acquisition of U.S. production and technological capabilities important for national security.

In short, the PUW policy of the U.S. comprised of the trade and industrial strategies to put new industries in advantageous position compared to foreign rivals,

especially in high technology sectors and to promote and provide security to U.S. outward direct investment.

### **2.2.2 France<sup>2</sup>**

The PUW industrial policy has been explicitly used by France to protect and build national champions which could challenge the internationalization of the French economy by foreign producers from the U.S., Japan and other European countries. The history of tariff protection in France trace back to 1790 when for the first time a moderate tariff of 5 to 20 percent was implemented and the imports of some goods were prohibited. The tariff protection on manufactured goods was continued and further got intensified during 1805-1826. Over the period 1930s to mid-1880s France has eased protection owing to its industrial development and needs to import cheap raw materials and machinery for its industries and signing of trade treaties with Great Britain and other European countries for reduction of tariff on bilateral basis. France again reverted back to protection between 1892 and 1909 when its industry could not withstand the growing competition from the U.S. and general stagnation of the economy. The intensification of protection during this phase definitely helped the expansion of French industries, but France could not achieve the same level of industrialization achieved by the Germany and U.S. presumably on account of its small domestic size.

Apart from the tariff protection, France had historically pursued an aggressive strategy of economic development and modernization where the government financed, approved, and even initiated major business decisions. Over the period 1981-1982 major industrial corporations, investments banking firms, and regional banks have been

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<sup>2</sup> Shafaeddin (1998) pp. 21-23; Zukin (1985) pp.25-40.

nationalized. The French government had subsidized R&D and production, targeted investments, and preferred to make procurements from French suppliers. The Ministry of Finance provided subsidized finance through nationalized banks and effected forced mergers of traditionally family-run companies to create national champions. The government had specifically targeted and catered to the interests of larger firms that could be national champions. Through these national champions, the French industrial policy and business strategy intended to make a strong presence in technology-intensive 'industries of the future' such as computers, data processing, telecommunications, energy, robotics, nuclear power and weapons, and aerospace production. The state policy also had actively subsidized overseas investment for both large nationalized and private firms that have already exhausted their domestic markets. The PUW industrial policy in France has been successful in securing a place for France in the world markets of aeronautics and aerospace, nuclear power, electrical equipments, surface transport, military and business electronics and telecommunications, computer software, and engineering.

### **2.2.3 Germany<sup>3</sup>**

The history of industrialization in Germany provides another example of the use of PUW industrial policy to develop and protect national industries. Leaving the brief period from mid-1860s to mid-1870s, the protection of infant industry in Germany which begun in 1840s, had continued and intensified over the years. By the early 20<sup>th</sup> century Germany had succeeded in building a strong industrial base that could compete with the established British and U.S. industries. With the maturity of German industries the

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<sup>3</sup> Shafaeddin (1998) pp. 20-21.

government strategy shifted to securing foreign markets for German enterprises. Along with the strategy of reciprocal trade treaties with a number of neighbouring countries, Germany also took special measures for export promotion. Introduction of export bonus and exemption of raw materials, which could not be produced at home but crucial for exports, from import duties are such measures.

#### **2.2.4 Japan<sup>4</sup>**

The Japanese development strategy has employed both the import substitution and export promotion measures to secure maturity of its industrial base and leadership. A group of key industries were chosen and targeted for promotion. They were provided protection by the import substitution strategy, prohibiting import (tariffs and non-tariff barriers) and restrictions on inward foreign direct investment. The government intervened in the markets directly and indirectly to assist capital formation, R&D, production, and exports. The main thrust of Japanese industrial policy was on accumulating capability to create new technology in the targeted sectors. The Ministry of International Trade and Industry (MITI) has used licensing over FDI as a means of accessing new technologies and has used various financial and fiscal incentives to induce the domestic firms to absorb this technology into production. To encourage domestic firms' export orientation, Japanese trade policy aided domestic firms with low interest rate loans through Japan Export-Import Bank to finance exports, undervalued exchange rate, and market information gathered through JETRO (Japan External Trade Organization). An array of other policy weapons such as subsidies, tax credits, investment controls, government procurement from domestic suppliers, and competition policy have also been employed

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<sup>4</sup> Sazanami (1994) pp. 115-122.

for promoting these targeted industries. On the one hand, protection from imports and inward FDI laid the foundation for a strong industrial base and on the other hand, the competition policy and export promotion measures respectively ensure a rigorous oligopolistic rivalry in domestic markets and competitive pressure from global markets respectively. The outcome of these strategies is Japan's tremendous success in industries such as apparel, steel, machine tools, shipbuilding, automobiles, consumer electronics, computers, and telecommunications.

### **2.2.5 South Korea<sup>5</sup>**

The Korean PUW industrial policies were largely structured on the Japanese experience and were targeted at specific sectors which are important for the long-term comparative advantages and to assist few selected big firms. Under the military regime (1961-1987), the Korean government used to choose a small number of well-specified sectors under each economic plan and deliberately create few competent, high-autonomy large private conglomerates, chaebol, to assume the task of maximizing skill acquisition, securing the full economies of scale and employing and absorbing the best available technology. An array of performance-specific incentives was given to chaebol for the achievement of growth and export targets. Preferential credit and low-interest loans, favourable tax treatment, exemption from indirect taxes on exports, tax breaks, discounts on electricity and other utilities were central to Korean industrial and trade policy. These performance-specific incentives gave government effective regulation over the growth of chaebol and ensured that they grow under the discipline of foreign trade and domestic competition to maintain competitiveness. The state has not only provided incentives to

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<sup>5</sup> Cheng (1994) pp.153-166; Lall (1996) pp. 19.

cheabol but also was actively involved in ensuring that they secure the best and advanced technology. Government policy had actively promoted imports of capital goods, technology licensing and other technology-transfer agreements to acquire technology. In general, FDI was the least preferred mode of technology acquisition and whenever the FDI was resorted it was in the form of joint ventures where majority equity participation lies with indigenous 'national champions'. The Korean policy also had aggressively intervened by massive investment in building technology infrastructure and creating general and technical skill.

### **2.2.6 China<sup>6</sup>**

Chinese industrial policy during the late 1970s to the late 1990s had strongly supported the growth of a 'national team' of large firms that could challenge the world's leading corporations in sectors with strategic importance such as chemical, pharmaceuticals, electronics, aerospace, automobiles, transport, machinery etc. A wide array of policies was used to achieve this objective. According high levels of protection in the form of higher tariff levels and a battery of non-tariff barriers to domestic players had immensely benefited China to lay the industrial foundation. Exporters to China were frequently required to source from Chinese components suppliers and in certain cases were required to make technology transfers for exported goods. Foreign firms were routinely prevented from accessing domestic distribution channels and in many sectors were required to establish joint ventures with domestic partners. A 'national team' of 120 large enterprise group that was selected in the 1990s were provided with high autonomy, large-scale state financial support, state procurement preference, and right to manage

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<sup>6</sup> Nolan (2001) pp. 16-19.

other state-owned firms within the enterprise group. In order to strengthen the innovative capability of the members of the national team many state-run R&D centers were simply transferred to them.

### **2.2.7 Lessons from the above discussion**

The PUW industrial policies as pursued by the reviewed countries above suggest that heavy government intervention in various forms has played an important role in developing their industries. In general, the policy consciously targeted ‘strategic’ sectors and in majority of countries it targeted powerfully large firms to ‘pick up’ for global competitiveness. The PUW recognizes the importance of large firms to win the battle of competitiveness unlike the neoclassical economics where small firms are growth-leaders. The fact that some of the largest firms involved in international production (i.e. TNCs) are larger than many countries, if the size of both measured by value-added (UNCTAD 2002 pp. 89) and that the international production now account for one-tenth of world GDP and one-third of world exports (UNCTAD 2002 pp. xv), further evidence that large firms are crucial for achieving the goal of competitiveness. The lesson from PUW industrial policy lies in the conviction expressed by the Chinese Vice-Minister Wu Banguo in 1998:

“In reality, international economic confrontations show that if a country has several large companies or groups it will be assured of maintaining a certain market share and a position in the international economic order. America, for example, relies on General Motors, Boeing, Du Pont and a batch of other multinational companies. Japan relies on six large enterprise groups and Korea relies on ten large commercial groupings.

In the same way now and in the next century our nation's position in the international economic order will be to a larger extent determined by the position of our nation's large enterprises and groups" (Nolan 2001 pp. 17).

### **3. Evolution of India's industrial policy vis-à-vis 'picking up the winners' policies**

The post-Independence industrial policy of India has evolved from a long phase of import-substitution (IS) from 1950s to mid-1980s to an outward-looking (OL) phase from 1991 onwards with a short transition phase in between these two phases covering the period from mid-1980s to 1991. The phase-wise evolution of Indian industrial policy is discussed below:

#### **3.1 The First Phase: 1950s to mid-1980s**

To start with, recently independent India in the first phase, inherited an underdeveloped and stagnant economy with a small industrial base dominated mostly by agro-based industries such as textile, tea, sugar, vegetables, oils and tobacco. The economy was suffering from low domestic savings, inadequate infrastructure, acute shortage of general and technical skill and weak institutions. With such poor initial conditions, the task of transforming the economy into a truly industrialized one can not be left to private initiative alone. Therefore, state had to actively intervene in the economy through the instrument of planning to initiate development so as to achieve the goal of self-reliance and modernization. Although the industrial policy during this phase had accepted the importance of private and public sectors in the industrialization process, it was primarily sought to assign commanding role to the state by reserving specified

industries for exclusive development by the state and even for those industries where private sectors were allowed, state was envisaged to play an increasing role. Further, the industrial policy in the form of Industries (Development and Regulation) Act 1951 had ensured state control and regulation over the private sectors.

India's industrial policy during this phase involved increasing levels of protection to domestic industry, restrictions on FDI, shifting to a liberal patent regime, and encouraging domestic technological capabilities as done by many selected industrialized and industrializing countries reviewed before. However, there are many aspects in which Indian industrial policy greatly differs from the PUW industrial policy pursued by these countries. Unlike Japan and Korea the aforesaid policies were implemented under the classic import substitution strategy, where domestic firms were assured of a highly protected market. Un-tapered protection for a long period without strong incentives to exports and highly fragmented domestic market ultimately results in the emergence of high-cost, low quality and inefficient Indian industries. Rather than targeting and promoting 'national champions' of large business enterprises for global competitiveness like Korea or France, various policy measures such as the industrial licensing system, Industries (Development and Regulation) Act, and Monopolies and Restrictive Trade Practices Act were taken by the government to put limitations on the growth of large firms and groups. The detailed bureaucratic licensing regime resulted in rampant rent-seeking, the setting up of sub-optimal-sized plants, and over-diversification of business houses (Lall 1996 pp.76).

Another important respect in which Indian industrial policy diverged from PUW industrial policy was the role of government in the creation and acquisition of industrial

technology. The direct state intervention in the form of large and expensive public research institutions under the Council of Scientific and Industrial Research (CSIR) failed to develop strong linkages with industry and produced technologies with little commercial application. Unlike the U.S.A., Indian defence R&D had few linkages with industry and market. The deliberate attempt of government to promote and protect small-scale sectors led to the emergence of a group of small size firms that were in general lacked financial and technical resources to develop their indigenous technological capabilities. Except for a small sample of large sized firms in-house R&D was virtually non-existent in Indian manufacturing. The government technology policy also had imposed severe constraints on the industrial access to new foreign technology (Lall 1996 pp.76). Technology licensing was not allowed in some industries whose products are deemed as 'inessential' and/or where domestic capacity was adequate. For industries where technology imports through licensing were allowed it was subjected to a detailed, complex, lengthy and cumbersome approval procedure. The maximum rate of royalty for technology licensing was laid down with upper limit on permissible period of agreements and renewal were generally frowned upon. Exports and other restrictive clauses were generally not allowed and often export obligation on the part of technology importer was insisted. All these interventions in disembodied technology purchases had lowered the extent and depth of technology inflows to Indian industry. Higher protection to capital goods production and lack of OEM purchases caused by the trade policy denied Indian industries of new technologies embodied in modern equipment and of modern design and know-how respectively. As mentioned earlier, India had followed a restrictive FDI policy which had restricted the entry of foreign firms into a selected group of high priority

industries, permitted only those new FDI proposals which is accompanied by technology transfer and limiting foreign equity participation to 40 percent with exception for foreign firms operating in high priority or high technology sectors, tea plantations, or those producing predominantly for exports. As a result of such a restrictive policy regime the inflow of FDI was minimal during the first phase and hence the role of FDI as a source of foreign technology was not much significant for Indian industries.

### **3.2 The Second Phase: Mid-1980s to 1991**

In the second phase, the Indian industrial policy was marked by 'halting' liberalization process and set the movement of economic policy away from the earlier policy of import substitution albeit in slow space. The disappointing and decelerating growth performance of industrial sector during the first phase has already brought Indian industrial policy under severe attacks from analysts. The inward looking industrial policies with rigorous pursuance of import restrictions and indiscriminate import substitutions to a wide range of sectors, excessive planning, complex system of industrial licensing, trade policy generating strong anti-export bias, absence of domestic competition, were put forth as factors responsible for higher industrial production costs, poor quality and low export performance (Bhagwati and Desai 1970 pp. 312, 499; Bhagwati and Srinivasan 1976 pp. 245; Ahluwalia 1985 pp. 163).

The growing criticism of industrial policy and poor industrial performance had led to rethinking of development strategy. Government had responded with partial measures of liberalization, de-licensing and a host of incentives to break the stagnation in industrial sector and to promote exports. The government, by September 1986, had

already de-licensed 27 broad categories of industries and 82 bulk drugs and their formulations. Later computer software industry was also added to the list of de-licensed industries. The restriction on MRTP (Monopolies and Restrictive Trade Practices Act) and FERA (Foreign Exchange Regulation Act) companies were also relaxed. The list of industries where these companies are permitted to set up capacities has been increased from 19 to 31 broad groups of industries. In May 1985 the MRTP companies exempted from the MRTP clearance for either substantial expansion or setting up new units in 27 industries. Later the measure of delicensing was extended to MRTP and FERA companies in 22 industries provided they are located in a Centrally-declared backward areas. The foreign companies with 100 percent export-orientation were exempted from the general ceiling of 40 percent under FERA and the rules and procedures concerning payments for disembodied technology imports were relaxed. To promote exports, four more export processing zones (EPZs) were set up in addition to the two existing ones at Kandla (set up in 1965) and at Santacruz (set up in 1974). The 100 percent export-oriented firms were exempt from licensing requirement for production in excess of licensed capacity and were provided duty-free access to imports of raw materials, intermediate goods, and capital goods on OGL. Existing export promotion measures such as CCS (Cash Compensatory Support) and DD (duty drawback) were rationalized and new schemes were brought into effect.

### **3.3 The Last Phase: 1991 Onwards**

Notwithstanding the partial liberalization measures implemented during the second phase India faced with a massive BOP crisis in 1990-91. Following this crisis

India had implemented full-scale economic reforms in 1991 with radical changes in government policies relating to trade, industry, technology, foreign investment, exchange-rate, and so on. As a part of this reform process the New Industrial Policy (NIP) was announced on 24 July 1991 and subsequently many policy reforms have been implemented. The NIP had abolished industrial licensing system for all industries except where it is required for strategic or environmental concerns. As a result 80 percent of Indian industry was out of the licensing system. Many areas hitherto closed to private sector including foreign investment have been thrown open and the phase manufacturing programme (PMP) was abolished for all new projects. The limit of foreign equity participation was raised from 40 to 51 % in a wide range of industries as listed in Annexure III of the New Industrial Policy Statement of July 1991 and the automatic approval route has been put in place. The Foreign Investment Promotion Board (FIPB) has been established to negotiate with large international firms and to expedite the clearances required. It can also consider individual cases involving foreign equity participation over 51 per cent. Technology imports for priority industries are automatically approved for royalty payments up to 5 % of domestic sales and 8 % of export sales or for lump sum payments of Rs. 1 crore.

However, the initial industrial policy announced in July 1991 had undergone significant changes with government announcing new reforms measures in each passing year. These measures are being provided in BOX 1.1.

### Box 1.1 : India's regulatory environment 1992-2001

Year	Description of measures adopted/industries liberalized.
1992-1993	<ul style="list-style-type: none"> <li>• The dividend-balancing condition earlier applicable to foreign investment up to 51 % equity is no longer applied except for consumer goods industries.</li> <li>• FDI has been allowed in exploration, production and refining of oil and marketing of gas and coalmines.</li> <li>• NRIs and overseas corporate bodies (OCBs) predominantly owned by them are permitted for 100% investment in high-priority industries with reparability of capital and income. 100% NRIs investment is also permitted in export houses, trading houses, hospitals, EOUs, sick industries, hotels &amp; tourism.</li> <li>• Disinvestments of equity is no longer needs to be at prices determined by the Reserve Bank.</li> <li>• Adoption of national treatment principle by which companies with more than 40 % of foreign equity are now treated on par with fully Indian-owned companies.</li> <li>• Foreign companies have been allowed to use their trademarks on domestic sales from 14 May 1992.</li> <li>• India has signed the Multilateral Investment Guarantee Agency Protocol for the protection of foreign investment on 13 April 1992.</li> </ul>
1994-1995	<ul style="list-style-type: none"> <li>• De-licensing of almost all bulk drugs and allowing automatic approval of foreign equity up to 51 % in most drugs and formulations.</li> <li>• Basic telecommunication services hitherto reserved for the public sector were opened for private participation including foreign investment (up to 49%).</li> <li>• RBI based automatic approval policy for foreign investment was made applicable to mining (except for automatic minerals and mineral fuels) subject to a limit of 50 % of foreign equity.</li> <li>• Areas like development and maintenance of airport infrastructure and material handling at major airports have been opened up for private participation.</li> </ul>
1995-1996	<ul style="list-style-type: none"> <li>• The number of items requiring industrial licensing has been further reduced to 15, which account for only 15 % of manufacturing value-added.</li> <li>• The number of industries reserved for public sector has been further reduced to 6 namely defence products, atomic energy, coal and lignite, mineral oils, railway transport and minerals specified in the schedule to the Atomic Energy Order 1953.</li> <li>• Foreign investment has also been liberalized in many other sectors such as power (100%) and industries reserved for SSI (up to 24 % equity which require prior SIA approval and export obligations).</li> </ul>
1996-1997	<ul style="list-style-type: none"> <li>• The list of Industries for automatic approvals of foreign equity by the RBI has been expanded from 35 industries as mentioned in the Annexure III by including 3 industries relating to mining activity for foreign equity up to 50 percent and 13 additional industries for foreign equity up to 51 percent. These 13 industries include a wide range of industrial activities in the capital goods and metallurgical industries, entertainment electronics, food processing and service sector like health, R&amp;D, technical testing.</li> <li>• In 9 industries including electricity, non-conventional energy, construction and maintenance (of roads, bridges, harbours, runways etc), industrial and power plants, water transport, etc the automatic approval of FDI enhanced up to 74 percent.</li> <li>• For expeditious approval of FDI in areas not covered under automatic approval, the first ever guidelines for approval of foreign investment has been announced.</li> </ul>
1999-2000	<ul style="list-style-type: none"> <li>• Foreign Investment Implementation Authority (FIIA) was established within Ministry of Industry to facilitate approvals of foreign investment are quickly translated into actual. In particular, in cases where FIPB clearance is needed, approval time has been reduced to 30 days.</li> <li>• Except a small negative list, all industries are placed under the automatic route for FDI/NRI/OCB investment. The negative list includes all proposals requiring industrial license</li> </ul>

	<p>under the Industries (Development and Regulation) Act 1951; cases having foreign equity more than 24 percent in equity capital of units manufacturing items reserved for the SSI sector; all items requiring industrial license in terms of the locational policy notified under the New Industrial Policy, 1991; proposals having previous venture/tie-up; proposals falling outside notified sectoral policy/caps etc.</p> <ul style="list-style-type: none"> <li>• Foreign equity limit for FDI through automatic route for drugs and pharmaceuticals raised to 74 percent from 51 percent.</li> </ul>
2000-20001	<ul style="list-style-type: none"> <li>• 100 % FDI permitted for business to business e-commerce</li> <li>• The cap on FDI in the power sector has been removed</li> <li>• 100 % FDI permitted in oil refining.</li> <li>• 100% FDI allowed in Special Economic Zones (SEZs) for all manufacturing activities.</li> <li>• Removal of dividend balancing condition on 22 consumer items.</li> <li>• 100 % FDI permitted in telecom sector for certain activities with some conditions</li> <li>• Existing companies with FDI are eligible for automatic route to undertake additional activities covered under automatic approval route.</li> <li>• 26 % FDI in the insurance sector is eligible for automatic route subject to obtaining a license from the Insurance &amp; Development Authority.</li> <li>• Automatic route is also open to 100 % FDI proposals in the information technology sector for certain activities such as ISPs not providing gateways, Infrastructure Providers providing dark fiber (IP category), electronic mail, and voice mail.</li> </ul>
2001-2002	<ul style="list-style-type: none"> <li>• FDI up to 49 % is permitted in the private banking sector on the automatic route subject to conformity with RBI regulations.</li> <li>• 74 % FDI is permitted in telecom sector for activities involving Internet Service Provider with gateways, Radio paging, and end-to-end bandwidth subject to licensing and security requirements.</li> <li>• 100 % FDI is permitted in airports, with FDI above 74 % requiring prior approval of the Government.</li> <li>• 100% FDI is allowed with prior government approval in courier services subject to existing laws and exclusion of activities relating to distribution of letters.</li> <li>• 100% FDI is permitted with prior government approval for development of integrated township including housing, commercial premises, hotels, resorts, city and regional level urban infrastructure like roads and bridges, mass rapid transit systems and manufacture of building material in metros.</li> <li>• 100% FDI is permitted under automatic route in hotel and tourism sector and for mass rapid transport systems in all metropolitan cities including associated commercial development of real estate.</li> <li>• 100% FDI in drugs and pharmaceutical (excluding those which attract compulsory licensing or produced by recombinant DNA technology and specific cell/tissue targeted formulations) is placed under the automatic approval route.</li> <li>• The defence sector is opened up to 100 % for private sector participation with FDI permitted up to 26 % both subject to licensing.</li> </ul>

Source: Authors compilation based on various issues of Economic Surveys, Government of India.

The government policy with respect to outward FDI (O-FDI) also has been successively liberalized during this phase. The O-FDI policy that existed during 1974-91 was highly restrictive and intended to discourage outward FDI by Indian enterprises as

the country itself was suffering from resource scarcity. Joint ventures with minority Indian equity were permitted. The policy had used O-FDI as a means of export promotion by prohibiting cash remittances towards equity participation and requiring that it should be in the form of exports of Indian made capital goods and know-how. During 1990s government had instituted an automatic approval system for O-FDI and successively had raised the permissible investment limit and reduced other regulatory constraints in promoting Indian direct investment abroad.

During 1990s the trade policy of India has become highly outward oriented. Dismantling of the import licensing system, phasing out of all the non-tariff barriers (NTBs) from all tradeables, and significant reduction in tariff rates are part of the trade policy reform. Promoting exports has also become a rigorous policy objective during this phase. New policy package for enterprises in EPZs and 100 percent export-oriented units were announced and special fiscal and financial incentives have been instituted for promoting exports from India.

This sketch of India's industrial policy during 1990s shows that market mechanism had replaced the state which had enjoyed leading role in industrialization during the IS period since Independence. Domestic firms are no longer protected by the state and they have to compete against cheaper imports and foreign competitors in the domestic market and also in the overseas market to maintain their market share. Comparing with these policy changes with the bench marked PUW industrial policy reveals that India do not have any specific, coherent and systematic policy of encouraging targeted industries and/or enterprises as has been done by Korea and China. The Indian industrial policy is now encouraging export orientation but not as aggressively as done by

Korea and is an across-the-board policy devoid of any industrial targeting. The government intervention in the domestic technological development also is largely passive in nature and it confined to developing infrastructure for human resource development and scientific and technological infrastructure. The government role in the direct involvement of technology development in the public funded laboratories is minimal. The government fund in pushing R&D in knowledge-based industries is also inadequate. For example, the Mashelkar Committee had recommended the creation of a separate technology development fund of Rs. 750 crore for the pharmaceutical sector in view of the December 31, 2004 deadline for the product patent regime but government had announced only Rs. 150 crore till date to support R&D activity<sup>7</sup>. Therefore the technology policy in India still lies far away from assuming the active role that state had played in Korea and Japan. The recent concerns showed by policy makers to the problem faced by India's knowledge-based industries such as software and pharmaceutical industry was in preponderantly resulted on account of their high growth performance rather than from strategic objective of securing the place of world leader.

#### **4. Concluding Remarks**

To conclude the discussion, the PUW industrial policy has been employed extensively by many developed and industrializing countries to accelerate their process of industrialization and achieve global competitiveness. The state in these countries is continually targeting the 'winning' sectors and/or 'winning' enterprises. The targeted sectors and domestic firms were strongly promoted by heavy government interventions in various forms changing over time. In the past the government interventions in selected

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<sup>7</sup> Economic Times (27.10.2003) 'Dhindsa for Rs. 750-cr fund to boost R&D in pharma sector'.

countries as reviewed in the study invariably took the form of protecting domestic enterprises from imports and inward FDI and promoting them with credit allocation, subsidies, and incentives under strongly export oriented policy regime. This policy had succeeded in deepening the extent of industrial and technological development and the discipline of international trade ensures that such industrialization remains low-cost, innovative and competitive. The continuing process of liberalization and globalization in the world economy has not been able to reduce the incidence of protections except changing its form. Industrially established countries are now preventing developing countries from breaching their technological superiority through policy measures like anti-dumping, rules of origin, screw-driver regulations and buy local provisions in place of tariff or traditional NTBs used in the past.

The review of the industrial policies pursued by India since Independence suggests that they differed greatly from the PUW industrial policy adopted by other countries. During the import substitution period the Indian industrial policy had not only deprived private sectors from many industries by reserving for public sectors, but also had put restriction on firm's growth in permissible industries. A restrictive technology policy had resulted in choking off Indian firms' access to new foreign technologies. The absence of export-oriented policy relieved firms from the pressure of global markets and ultimately led to inefficiency. No doubt during the phase of the import substitution Indian industrialization turns out to be broad-based as compared to the domination of agro-based industries at the dawn of Independence but it had suffered from high-cost and technological obsolescence.

In the 1990s Indian industrial strategy underwent significant changes with the continuing process of economic reforms. Dismantling of licensing system and relaxation of MRTP provision had relaxed policy constraints on firm growth, liberal FDI policy and duty-free imports had increased competitive pressures and export promotion has become crucial policy objective. However, merely relaxing government restrictions on firm growth and subjecting domestic business to the discipline of international competition is obviously not sufficient to build Indian MNCs, as domestic firms have to compete with established global leaders from developed countries with a battery of oligopolistic powers backed by variety of strategic state support. As many other countries are actively indulging in strategic interventions and offering substantial production, export and R&D subsidies to promote their domestic enterprise, India should rethink its industrial strategy. It has to be target-oriented, picking up sun rise industries and winning enterprises. India like China should identify a group of large and well-performing firms in each industry to be its national champions and directly helping them with performance-specific financial, technical and fiscal incentives. For example, India can pick up leading Indian firms such as Ranbaxy, Dr. Reddy, Cipla, etc. to be national champions in pharmaceutical sector and wipro, infosys, NIIT, Aptech etc. in the case of software sector. In a faster liberalizing and globalizing world economy, it is not possible for India to target all the firms operating in a sector like pharmaceutical where more than 20000 players are now operating. Government subsidies targeted at few winning firms, as done in the case of China, can yield rich dividends than spreading them across large number of firms. India have to make choice between the following two options: (i).target a few selected firms with its limited resources and achieve a dominant place in the global market or (ii) target

all the existing firms thinly spreading its limited resources and in which case none of these firms can withstand competition from firms from developed countries.

Another important component of PUW policy was to protect the leading national firms from hostile acquisition by foreign players. The US, and France have already legal provisions to protect their national champions from takeovers in the national interest. India therefore should also adopt such provision to protect its leading firms from the threat of hostile acquisition by their foreign competitors. The hostile attempt of UK decorative paint company ICI Plc in 1998 to acquire a stake in India's largest paint company Asian Paints show the urgent need for putting such a provision<sup>8</sup>.

The evidence presented on the PUW industrial policy also indicates that developed countries have used government procurement policy as a means of promoting their domestic enterprises. This finding has implications for the ongoing attempt of developed countries to evolve multilateral rule on the government procurement through multilateral trade negotiation as per the mandate of Singapore Ministerial Conference. These attempts of developed countries must be resisted by India and other developing countries as these take away another important policy tools of development from the hands of less industrialized countries which was so actively used by developed countries in the past in furthering their industrialization.

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<sup>8</sup> Economic Times (24.10.2003) 'Asian Paints takes govt stake in ICI for Rs. 77.09 crore'.

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