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**Economic Nationalism in Motion:
Steel, Auto, and Software Industries in India**

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Anthony P. D'Costa

INTRODUCTION

With increasing economic interdependence, the scholarly treatment as well as the practice of economic nationalism has become passé. The flows of goods and services, capital, technology, and the international mobility of people are allegedly undermining the nation-state, particularly the peripheral states, which have inherited weak states since the colonial era. Regulatory mechanisms available to states in general are becoming less effective due to the porosity of national borders and past inward-looking models of development have been challenged by newer forms of outward-looking competitive strategies in the global economy. Innovations in information, communications, and transportation technologies have rendered distance to be a less formidable barrier today. Also, IMF-imposed structural adjustment programs in many indebted countries have coerced them to adopt neo-liberal policies. These developments suggest that economic nationalism as we have known it today is no longer intellectually accepted or practically easy.

Contrary to this conclusion, I share the argument that economic nationalism is not inconsistent with globalization (Pickel 2005). Just because global integration links foreign economies and allows transnational corporations to penetrate far-flung markets through organizational and technological flexibilities does not mean the disappearance of economic nationalism (Marshall 1996, Jones 2000). Alternatively, the economic success of several East and South-East Asian economies does not imply the absence of economic nationalism in these countries. There is plenty of evidence to suggest that the Japanese, South Korean, and Taiwanese states have intervened precisely on nationalist grounds to strategically exploit opportunities available in the global economy (Amsden 1989, Johnson 1982, Gold 1986). If states intervene to reap the benefits of globalization then how are we interpret economic nationalism, especially when nationalism has been viewed as a set of policies adopted against foreign capital and governments in favor of national firms? Given that the identity of national

firms is being blurred due to cross-border investments compounds the application of discriminatory nationalist policies. Yet, for all practical purposes firms do not disown their nationalities and home governments continue to support them in their overseas operations. Governments also take great pride in their international success. This suggests that ideologically economic nationalism is being redefined by incorporating an internationally recognized national identity or “presence” in the global economy, which transcends purely economic might. It is suggestive of the cultural and intellectual influence that the state could exercise in a world vastly circumscribed by commercial interests.

This paper argues that economic nationalism typically expressed in opposition to foreign capital (and by extension foreign governments) must be seen as a dynamic concept, where the meaning of economic nationalism itself changes. This implies that economic nationalism need not be inconsistent with globalization. It takes up the Indian case, which historically has demonstrated its penchant for conventional economic nationalism and yet today presents itself as a champion for global participation in a variety of ways. Three industry cases from India are used to capture the fluidity of nationalism in rhetoric and practice. These industries – steel, auto, and software -- represent a continuum in which the concept of economic nationalism is dynamically captured for India (1950-present). The steel industry was pivotal in India’s heavy industry, where the classic form of economic nationalism was practiced, whereas the software sector is a good illustration of India’s global presence. The automobile industry represents an intermediate case where the orthodox practice of nationalism gave way to more modest integration with a large presence of foreign firms. Today all three sectors are globally situated and leveraged by the state for international acknowledgement.

The paper is divided as follows. Section two briefly discusses the shifting relationship between the state and economic nationalism to bring out the rationale for domestic industrial development in India, especially to reduce balance of payments vulnerability. Section three presents the three industry cases to bring out both the continuity and change in the idea and practice of economic nationalism in terms of policy and outcomes. It brings out the recurring balance of payments concerns and the ways by which each industry has been made to respond to this potential vulnerability. Section four presents a brief discussion of the changing contexts of economic nationalism as seen through the three industries. The final section concludes.

THE SHIFTING CONTEXTS OF ECONOMIC NATIONALISM

For the purposes of this paper, the critical question is how can economic nationalism be consistent with globalization? To put it another way, what is the motivation for economic nationalism in a state system which has changed in some fundamental ways? At a rudimentary level economic nationalism is largely about economic security in a competitive capitalist world economy. One way of assuring such security is national economic independence from foreign influences. Today, however, such a conception of economic nationalism is redundant due to the growing interdependence of economies. Hence, economic nationalism is often expressed through international competence of national firms. The implicit assumption is that international profits are tied to domestic well-being through employment, growth, foreign exchange earnings, and shareholders dividends. A handful of staunchly nationalist peripheral economies such as China, India, and Brazil have institutionally managed to meet global performance standards. It seems the very motives for economic nationalism have changed by adopting market-friendly, outward-looking policies.

Intuitively we can explain this turnaround in state posture by a several interrelated factors such as exhaustion of previous strategies, external coercion, and new global opportunities. However, one of the motivations for global engagement, which has been underemphasized, is the emergence of new social forces such as the economic maturity of national business and their confidence in exploiting new global opportunities (D'Costa 2007).¹ This has been shown to be the case for Japan, where the motive for economic liberalization has been led by Japan's competitive sectors (Hall 2005: 122). This is not all together different from the Indian case, where embourgeoisment (or the rise of the Indian middle class) has structurally influenced India's greater engagement with the world economy (D'Costa 2005). Just as in the Japanese case where external pressure (*gaiatsu*) has been responded to through calibrated reforms to sustain a "national project" (Hall 2005: 127), I argue that the Indian government is also pursuing economic nationalism within the globalization context. This is not a result of foresight but of pragmatic responses to changing global circumstances, which have continued to reproduce varying forms of economic nationalism.

¹ The literature on state-society suggests a varying relationship from which nationalism may be aggregated (Kohli 2004, Evans 1995, Scokpol 1985, Poulantzas 1973, Bagchi 1987) or state interests independently projected (Miliband 1983, Sen 1984). But that change comes from state initiatives only has been challenged by those who see non-state actors as important (see Chowdhury 1999).

As it will be shown later, the Indian state, aside from its usual international political engagements, is also making its international presence felt through its diaspora of expatriates, professionals, and students. Conceptually then economic nationalism cannot be equated with “statism” per se (Helleiner 2005: 221). This shift from simple defensive protection of domestic business at home to greater international visibility is, albeit unwittingly, a product of past forms of economic nationalism. It is not that different from the earlier form of nationalism that asserted “the nation’s proprietary rights” (Burnell 1986: 2). The property in question here, of course, has more to do with the protection and promotion of the national brand name abroad.

For most developing countries, economic nationalism has been aimed at self reliance (and preservation) in a system of competitive, sovereign states. Faced with industrial and technological backwardness and heavy dependence on the primary sector, structural problems of balance of payments (BOP) imbalances were inevitable and nationalist states were acutely aware of this weakness. Persistent trade deficits were not compensated by greater capital inflows due to a focus on domestic development, including postwar reconstruction of Western Europe and Japan, and export pessimism (Cypher and Dietz 2004). The new international division of labor and multinational investments induced a rethinking of development policy in favor of exports and global integration. The maturity of capitalist economies in selective developing countries has also contributed to their greater global integration, which Hoogvelt (1997) refers to a “reconstituted core.” Under these changed circumstances economic nationalism cannot be understood in the usual way. Rather it must be seen as a dynamic concept resulting from policies in a “specific historical context” (Pickel 2005: 8). In the past, economic nationalism implied fending off multinationals, today it is a matter of how best to collaborate with them (Dicken 2007). Acquiescing to global expectations theoretically spells disaster for state autonomy but this position rests on the assumption of only one kind of economic nationalism, namely, protection of domestic business from foreign ones. The possible gains from global participation could entail a significant presence of national capital globally and an enhanced state ready to leverage its new found identity.

I take up the issue of changing notion of economic nationalism as practiced by the Indian state by examining policy shifts in three industries: steel, auto, and software. The intrinsic merit of this approach is capturing the evolving dynamics of economic nationalism under

changing domestic and international environments. Since its independence in 1947 India has pursued, initially, a strong anti-imperialist economic policy by promoting self-reliance (D'Costa 1995a). Following the Leninist strategy of controlling the commanding heights of the economy, India's Fabian-inspired Nehruvian socialism brought major industries under state control. Economic nationalism de jure was expressed by curtailing the expansion of private capital in certain critical sectors and protecting domestic capitalists from foreign competition. It established a basic industrial foundation and a technical-education infrastructure to sustain future growth but fell behind the global technology frontier due to increasingly autarkic and sometimes dysfunctional regulatory policies (Bhagwati 1993). Paradoxically, India witnessed persistent deficits in its international financial position, the very outcome that economic nationalism was expected to avoid (Sen 2000). India was characterized by a slow-growing, high-cost economy with shoddy and scarce products. Hence, the ideological anti-capitalist, anti-globalization stance was short-lived as domestic politics combined with the rise of the Indian bourgeoisie eroded the practical feasibility of the more orthodox version of economic nationalism (D'Costa 2001, 2005).

Subsequently, since the 1980s, various economic and industrial sectors were gradually and selectively deregulated, privatized, and internationalized. However, what makes the Indian case of economic nationalism heuristically useful is that even within the broader shifts toward "denationalization" and globalization, national policies have been devised to promote domestic business, sustain their global competitiveness, and cope with balance of payments challenges by encouraging FDI (capital inflows) and net exports. The increased participation of foreign capital in India and India's greater engagement with the world economy suggest that since 1950 economic nationalism has changed in form and substance. Even as the state moved in a neo-liberal direction it continued to pursue policies that projected its presence in the global economy. Theoretically state support for national capital to succeed in the global economy is evidence of a new kind of nationalism, in which the presence of the state globally is heightened.

The steel industry illustrates the hard case of economic nationalism whereby state ownership was pivotal (D'Costa 1999). Neither foreign ownership nor new private domestic player was permitted, although foreign technical collaborations were sought especially, from the former Soviet Union. The automobile industry represents an intermediate case whereby the industry similar to steel was initially heavily protected but not promoted. However, cumulatively

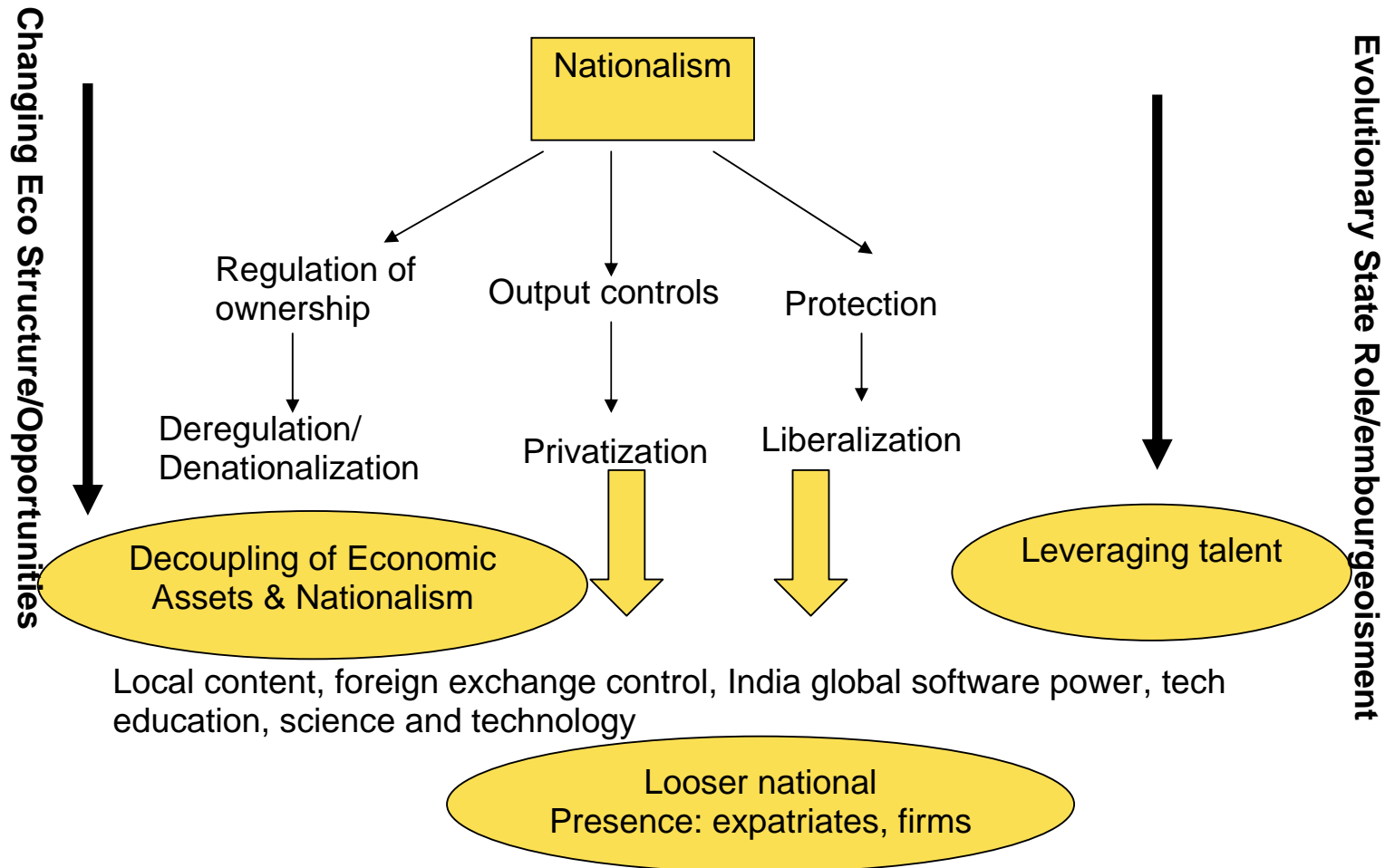
political exegesis and social forces such as an emerging middle class gave way to a curious partnership between the Indian state and Suzuki Motors of Japan in the early 1980s (D'Costa 1995b). It enabled state entry into an industry hitherto absent and yet diluted national private ownership of the industry by partnering with a Japanese multinational. This joint-venture fundamentally altered the Indian auto industry in the country's favor but did generate nationalist sentiments regarding local content, technology transfer, and management representation (D'Costa 2005).

The Indian software industry represents an industry in which the vocabulary of economic nationalism is explicitly absent. Far from the expulsion of IBM from India in the late 1970s, the Indian information technology (IT) industry is thoroughly globalized (D'Costa 2002). In fact IBM and other IT multinationals today are using the Indian market and skills for its global growth strategy (Rai 2006). Driven by a highly successful export model for software services, virtually all IT multinationals are present in India and there is considerable international mobility of Indian technical talent (D'Costa 2006, 2004). But discussed later the Indian state has been behind the rise of the IT industry through education and communications infrastructure. The co-evolution of these three industries in India suggests that economic nationalism practiced must be seen dynamically. While conventional form of economic nationalism is difficult to sustain today, policies designed to support national capital, even in alliance with foreign capital, need not be inconsistent with economic nationalism if national economic welfare and national prestige is perceived to be promoted.²

A framework to examine the changing meaning of economic nationalism in India in a changing economic and institutional environment is presented in Figure 1. Economic nationalism based on self-reliance has been pursued by regulating private capital through investment limits and output controls, state-ownership and private business protection from foreign countries. Anxiety over balance of payments persisted. However, with changing structure of the Indian economy and an emerging middle class in favor of greater openness, the previous model of development has been abandoned. Consequently, neo-liberal imperatives, often externally driven, have been internalized by the policy-making and academic circles.

² Of course what is national welfare may be hard to pin down. But increasing growth, employment, and locally retained value of production constitutes national welfare.

Figure 1: Transposing Economic Nationalism



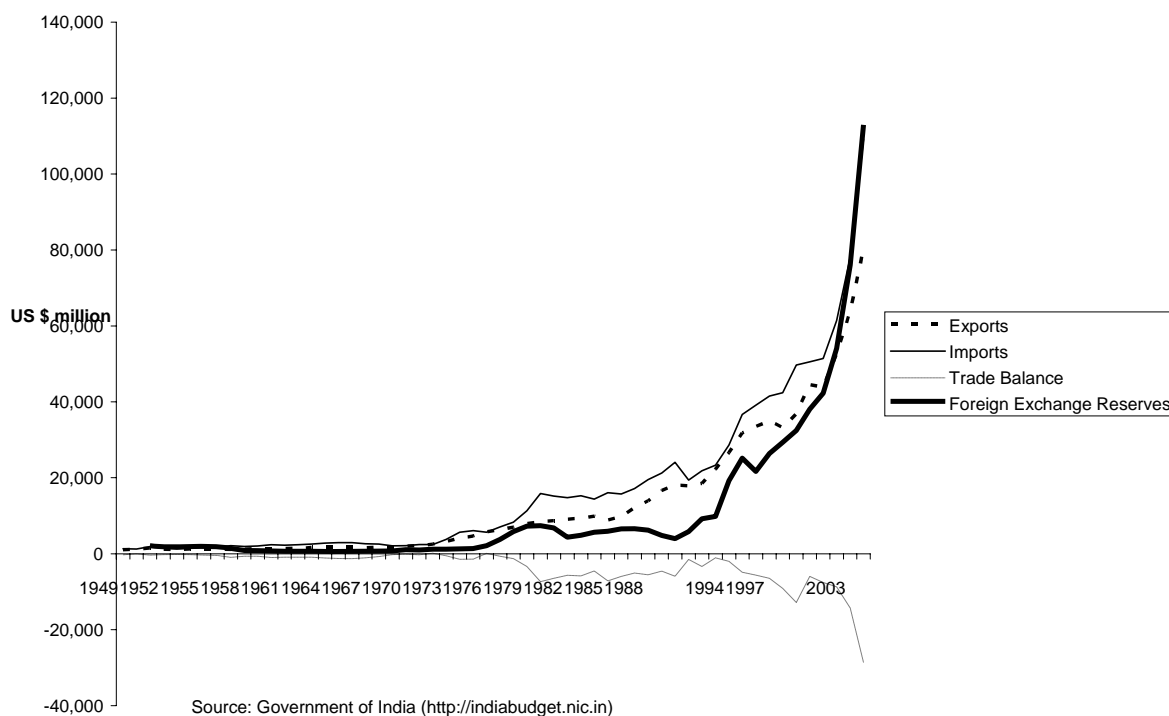
At first cut, nationalism can be interpreted to have been substantially diluted through deregulation, privatization, and liberalization. As more foreign firms enter the market a decoupling of national assets from the national economy can be inferred. At the second cut, when the successful Indian IT sector with its vast talent pool is introduced in a global setting we can infer state's global presence. This can be attributed to state's efforts in creating such a pool and its pragmatic support for the international mobility of its technical talent. This can be inferred to promote the brand name "India" abroad but also permits the leveraging of foreign companies and governments for market access, investments, and entry into more exclusive state gatherings. While tensions may still persist over local content, foreign exchange use, etc. the state is able to make its global presence by the success of its firms, talent mobility, and its public science, technological and educational infrastructures. With such developments the meaning of nationalism is transposed from the defensive, protectionist stance that is both subtle but globally more aggressive. The presence of expatriates overseas and their selective return and the expansion of national businesses abroad create webs of commercial, intellectual, and strategic links which in the end redefines the notion of economic nationalism. Foreign players, competition, and integration are embraced by the state and international economic performance of national firms is leveraged to reinforce the national identity. In the sections below we take an evolutionary understanding of economic nationalism to demonstrate that the Indian government has been practicing nationalism in historically contingent ways.

The Balance of Payments Dilemma and Economic Nationalism

The motive for economic nationalism in India has significantly rested on balance of payments concern. To break out of this impasse India adopted an import substitution industrialization program, focusing on capital and intermediate goods (Griffin 1991). Through infant industry protection it aimed to limit import dependence and thus stem foreign exchange outflows. However, the actual situation has been somewhat different. Inheriting a weak trade and foreign exchange reserve position (see Figure 2) India's economic nationalism did not fundamentally alter the structure of the economy nor enhance its external macroeconomic position. What it did do is insulate the economy from global engagement between 1950 and 1975 and maintain a slow-growing economy, unfortunately accompanied by exogenous crisis of famines and regional conflicts. However, by the mid 1970s (post OPEC era), India

perceptibly moved up to a higher growth rate in foreign trade. India's foreign exchange reserves followed a similar trajectory.

Figure 2: India's Trade and Foreign Exchange Trends



India's foreign exchange reserve fell from \$2.2 billion in 1950-51 to an average of \$736 million during 1957-70 (Government of India, Ministry of Finance 2001:S-69-S70). From the mid-1970s, India's foreign exchange reserves gradually increased until 1990-91, after which it rose dramatically. In mid-2002 it stood at over \$55 billion and over a \$140 billion in 2004-05. India's trade balance has been persistently negative, despite growing exports (Figure 2). Trade deficits widened further as India's global economic integration increased. The share of oil imports to total imports ranged from 8 to 11% between 1970 and 1973. In 1973-74, after the price hikes, the share increased to 19%, rising to 42% in 1980-81. The trade balance with respect to oil doubled in 1979-80 from the previous year, to over \$4 billion. Based on trade statistics, India's trade vulnerability has been more sharply reflected by the rate of change in imports.

India's mostly negative trade balance could not be offset by increased exports partly because of low-value shoddy products, partly because of intense global competition in labor-intensive and extractive industries, and partly because of India's special relationship with the former Soviet Union as a captive market. Aside from primary products, India competed in labor-intensive semi-finished manufactures using materials such as leather, jute, textiles, carpets, precious and semi-precious stones, and metals. In 1970-71, nearly 40% of its exports were in such manufactured goods, with about 4% in finished goods. At the end of the 2000-01 financial year, India's manufactured exports had reached \$34.5 billion, representing 20% of manufactured exports and over 15% of total exports (D'Costa 2005: 77). These exports nearly equaled India's exports of agriculture and allied products for that year. Bilaterally arranged barter exchange between India and the Soviet Union shielded the Indian economy from exchange rate fluctuations and high prices but it did not induce technological competence that often arises out of competitive pressures (Mehrotra 1990). Consequently, India's ability to compete in international markets was seriously impaired and its international financial position remained precarious until the early 1990s.

ECONOMIC NATIONALISM IN MOTION

The changing policies of the Indian government are indicative of dynamic perceptions and practice of economic nationalism, although some policy shifts were motivated by political expediency. The pre-independent Statement of Government's Industrial Policy³ of 1945, followed by post-independent legislation in 1951 (Industries Development and Regulation Act) established the basis for state intervention in the economy. Five-year plans were initiated with the first beginning in 1951 (see Marathe 1989). Regulated expansion of industrial capacity by the state was accepted as promoting the national interest. Subsequently, the Industrial Policy Resolution of 1956 carved up industrial sectors specifically for the state. For example, all new capacity in the iron and steel industry for example was reserved for the state.

³ In 1969 all commercial banks were nationalized and regulations enacted to monitor large domestic business houses under the Monopolies and Restrictive Trade Practices Act (MRTP). By regulating big firms, the government wanted to promote the small-scale sector. India-based companies with more than 40% foreign equity came under the Foreign Exchange

³ Assurance was given to existing private firms, such as Tata Iron and Steel and Indian Iron and Steel, that there would be no nationalizations of their industry.

Regulations Act (FERA) of 1973, which was designed to limit spending of foreign exchange. However, all of these restrictive policies were relaxed gradually and selectively since the late 1970s, aggressively in the mid-1980s only to be slowed down, and wholesale since 1991 (D'Costa 2005). The three industries, discussed below, illustrate the dynamic nature of the notion of economic nationalism, from outright protection and state ownership to state enthusiasm for national business presence in the global economy (D'Costa 2003a).

The Steel Industry at the Commanding Heights

To escape from economic backwardness, the project of industrial transformation called for strategic investment by the state (Gerschenkron 1962). Following various “big push” thinkers such as Rosenstein-Rodan, Hirschman, and Malahanobis, India attempted to strategically control a core sector such as steel to bring about national industrial transformation (Cypher and Dietz 2004). The state with greater resources directly participated in large-scale, integrated mills and overcame the capital and technology barrier faced by private firms.⁴

State ownership of steel plants in independent India began in the 1950s. Three large, privately-held plants existed prior to India=s independence in 1947. The Indian Industrial Policy Resolutions of 1948 and 1956 reserved all new capacity in the iron and steel industry for the state and denied the Birlas, one of the largest family-owned, highly diversified business houses, an entry into the steel business (Krishna Moorthy 1984: 60). The government, by virtue of a nationalized financial system since 1969, also owned 37 per cent of TISCO=s shares (Krishna Moorthy 1984: 308). After several years of disastrous performance, in 1972 IISCO was nationalized. The state also bailed out failing private firms, though mostly compelled by political necessity. Roughly 60 per cent of total steel output was under state-owned mills (Steel Authority of India Limited, various issues). In the mid-1980s, the share was even higher at 70 per cent. In India state ownership in 1996--97 stood at 56 per cent (Joint Plant Committee 1997).

⁴ The entrepreneur Mr. Jamshed Tata, the founder of Tata Iron and Steel Company (TISCO) failed to raise capital in London at the turn of the century but could do so later in India itself (Etienne et al. 1992: 49).

The Indian state actively promoted heavy industry through its five year plans (Table 1). From less than 2 per cent of total public sector outlays during the first plan, the Indian steel industry steadily gained nearly 8 per cent of total outlays in the third five year plan. While steel's share of public sector outlays fell, overall outlays in nominal terms roughly doubled in each successive plan period. Correspondingly state's steelmaking capacity increased from 3 mt to nearly 15 mt, capturing over 80 per cent of the country's integrated capacity.

The bulk of funds for state-owned steel industry came from the state treasury and the rest from foreign sources. India's poor economic status and its geo-political alliances ensured relatively easy terms and conditions for financing capital equipment purchased for the first three one million ton plants.⁵ For India's fourth integrated plant in Bokaro, the Soviets came forward with assistance after President Kennedy could not persuade the US Congress or the American steel industry to participate in Indian state ventures. In subsequent years India also upgraded its three 1.0 mt plants and added two integrated greenfields -- at Bokaro in the eastern state of Bihar and at Vishakapatnam in the southern state of Andhra Pradesh as part of its steel expansion plan.

The Indian steel industry has not been immune from financial hemorrhaging. Various construction delays and operating losses led to a precarious resource position (Steel Authority of India Limited 1987: 25). Between 1982 and 1984 the state company (SAIL) racked up net losses of over Rs. 3 billion. A price hike was the only way that SAIL could redress its financial predicament (personal interview, Joint Plant Committee, New Delhi, July 1987), undermining the very mechanism by which the national economy was to be nurtured.

⁵ For the details of financing of steel plants see D'Costa (1999).

Table 1: Investment and Expansion of India's Integrated Public and Private Sector Steel Industry

Five Year Plans (FYP)	Overall Allocation (Rs. Billion)	Share of Public Sector Steel Outlay to Total Outlay (%)	Share of Public Sector Steel Outlay to Total Outlay (%)	Share of Public Sector Steel to Total Public Sector Outlay (%)	Annual Rated Capacity of Crude Steel at the end of FYP (million tons)		
					Public Sector	Private Sector	Total
1st (1951-56)	37.60	52.13	0.88	1.68	-	1.5 ^a	1.5
2nd (1956-61)	77.20	60.52	4.53	7.49	3.0 ^b	3.0 ^c	6.0
3rd (1961-66)	126.71	67.69	5.29	7.81	5.9	3.0	8.9
4th (1969-75)	247.59	63.73	4.53	7.10	6.9	2.0	8.9
5th (1975-81)	671.45	59.72	3.33	5.58	8.6	2.0	10.6
6th (1981-85)	1,722.10	56.62	2.32	4.10	9.4	2.2	11.6
7th (1986-90)	3,481.48	51.70	1.84	3.57	12.4	2.3	14.7
8th (1992-97)	7,980.00	45.24	1.83	4.04	14.85	3.1 ^d	17.9

Source: Steel Authority India Limited (1996).

Notes: Total of six public sector integrated plants and one private sector plant, - negligible, ^a Two private sector plants (TISCO 1.0 mt and IISCO 0.5 mt); ^b Three 1.0 mt public sector plants; ^c capacity expansion TISCO 2 mt and IISCO 1 mt; ^d IISCO's capacity phased out to 0.45 mt, new greenfield Vizag with 3.0 mt commissioned.

The Auto Industry from Protection to Internationalization

In 1949 the government of India banned the import of completely built vehicles and since 1953, under the aegis of the Tariff Commission, refused permission to Indian manufacturers to assemble imported vehicles without increasing local content. This emphasis on gradual but mandatory increase in local content was termed phased manufacturing program (PMP), in force since the 1970s and revamped in the 1980s. It stipulated a local content ratio of 90% to be attained in five years. With this measure the government reduced the number of assembly firms from twelve to five (Kathuria 1990:2). Unwilling to invest in India, both General Motors and Ford shut down their operations, while Hindustan Motors of the Birla family and Premier Automobiles of the Walchand Group entered the fray. It was only since 1970 that the automotive industry was gradually added to the core list that gave it a strategic status by the government.

After the energy crisis of the early 1970s, the Indian government encouraged unlimited production capacity for non-luxury vehicles produced by non-MRTP (Monopoly Restrictive and Trade Practices Act) and non-FERA (Foreign Exchange Regulations Act) companies, which comprised commercial vehicles and two wheelers (Pinglé 1999:99). The market for two wheelers exhibited considerable growth, reflecting the latent consumer demand that had already built up. Over time imports of capital equipment for replacement were allowed as long as the net foreign exchange outflow was zero. This implied an export commitment of some sort. In addition to raising the amount of permissible imports, the bureaucratic process of permits for imports was significantly simplified. This indicated the government's interest in upgrading technology, promoting exports, and deregulating the business environment.

The Industrial Policy Statements of 1977 and 1980 marked the beginning of the liberalization process. The state's tight grip was loosened in favor of increased competition at home and greater participation of foreign capital by relaxing regulations governing production licenses, foreign collaborations, asset size, and scope of industrial operations. To reap the benefits of economies of scale the policies aimed to do away with stifling limits on capacity. Through delicensing both the large business houses and foreign companies under FERA were also permitted to enter several areas reserved for the state sector. The

liberalization of the automobile industry was aimed primarily at the components manufacturing segment for which the government had previously reserved a large chunk of the industry for the officially defined small-scale sector.

In 1982, the Government of India created Maruti Udyog Limited, a public sector company as a joint-venture with Suzuki Motors Corporation of Japan. The government owned 80% of the equity. For the first time the state became an investor in a car project and in a successful monopoly (D'Costa 1995b).⁶ The selection of Suzuki Motors as a partner, aside from the routine technical and financial criteria, was also based on its specialization in small cars and fuel efficiency. The government of India was concerned about its oil import bill. In the Japanese market in the 1980s, Suzuki's total market share was around 7%, doubling its output every five years in the decade (Japan Automobile Manufacturers Association 1991:16). It was the sixth largest producer in Japan (Toyota Motor Corporation 1990:2). Also, with the rising cost of production in Japan, surplus foreign exchange, and domestic market saturation it became imperative for Japanese firms such as Suzuki to invest outward.

With the entry of MUL the structure of the Indian car market changed perceptibly (Table 2). Until the 1960s there were three producers of cars, Hindustan Motors (HM) and Premier Automobiles Ltd. (PAL), and Standard Motors Private Ltd. (SMP), each with very small output. In 1984, two years after it was established, MUL manufactured over 12,000 cars mainly from imported completely knocked down (CKD) kits. In 1990 MUL produced over 50% of all passenger vehicles produced in India, a higher share if only passenger cars are included, while India's output increased by nearly 400%. By the next decade, India's output more than doubled, while MUL held on to an average of 53% of the car market in 2001 (calculated from ACMA 2002:10).

⁶ The government in the 1970s had established Scooters India Ltd. to capture the lucrative two-wheeler market. However, it failed miserably because of industrial strife and managerial and technological incompetence (Nayar 1992).

Table 2: Changing Market Structure of Car Production in India (1955-2001)

	HM		PAL		SMP		SAL		M&M		MUL		TELCO		Others##		Total	
	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share	# of units	Mkt. share		
1955	4,874	37.9	3,581	27.8	1,526	12.0	-	-	2,864	22.3	-	-	-	-	-	-	-	12,865
1960	9,217	37.5	6,616	26.5	3,364	13.7	-	-	5,501	22.4	-	-	-	-	-	-	-	24,598
1970	22,703	51.0	12,054	27.0	448	1.0	-	-	9,334	21.0	-	-	-	-	-	-	-	44,539
1980	21,752	47.7	8,729	19.1	6	0.0	51	0.1	15,068	33.0	-	-	-	-	-	-	-	45,606
1990	26,204	12.0	42,737	19.5	-	-	924	0.4	32,706	15.0	116,194	53.1	*265	-	-	-	-	218,765
1997	24,059	5.0	14,169	2.9	-	-	-	-	69,277	14.3	349,780	72.0	6,302	1.3	22,545	4.6	-	486,132
2001	23,987	3.5	0	0	-	-	-	-	56,380	8.3	356,608	52.7	82,195	12.2	157,076	23.2	-	676,246

Source: Association of Indian Automobile Manufacturers (AIAM) and Automotive Components Manufacturers Association (ACMA) (various issues).

Notes: See list of firms and acronyms for full name of auto firms, * for 1991.

Others include Daewoo, General Motors, PAL-Peugeot, Mercedes-Benz and 1999 onward Hyundai and Fiat.

In 2001, Daewoo, Fiat, PAL-Peugeot, and PAL had stopped operations.

In 2001, Hyundai and Toyota had 57.3% and 18.1% of "Others" shares respectively.

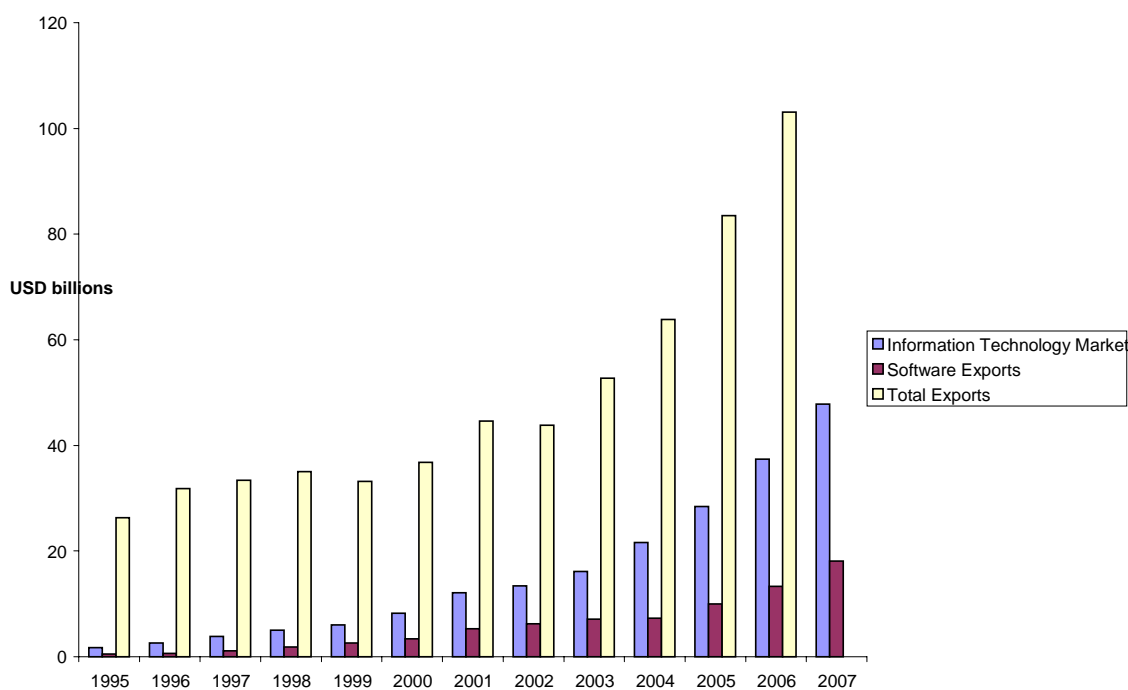
The internationalization of the Indian auto industry is also evident in the commercial vehicle segment and the parts and components industry (D'Costa 1998: 307, D'Costa 2004a, D'Costa 2005: 93-98). In 1993 the Indian passenger car segment was completely delicensed and Indian companies tied up with foreign ones. With severe infrastructural and supply bottlenecks, resulting partly from past government policy of neglecting infrastructure and reserving components for the officially defined small scale industries, manufacturers were compelled to encourage partnerships among their suppliers to reduce mutual vulnerability (D'Costa 2004a). Besides, best practice standards in the industry dictated flexibility and hence a greater reliance on outsourcing. From August 1991 to April 2002, the auto industry garnered 5.48% of the total foreign direct investment approved during this period (Government of India, Ministry of Commerce and Industry 2002). Of this, 0.8% was for the components sector, which was equivalent to 10.75% of the transportation sector.

The Indian auto industry today is highly internationalized with foreign collaborations aimed to serve both domestic and foreign markets. Today 100% foreign equity is permitted with no local content requirement. India's auto exports are rising and so is the number of technical collaborations, suggesting increased links with the world economy. Export of vehicles, though small by international standards, is rising absolutely. However, with greater output for the domestic market the relative share of exports has been declining. In 1992-93, India exported 4.3% of car output, 8.8% in 2001-02, and 13% of passenger cars in 2005-06 (ACMA various years). Similarly, Indian exports of auto components, especially the more labor-intensive type, are also increasing. Its export share has been stable around 10%, notwithstanding a higher share in the early to mid-1990s varying from 13% to 16% (ACMA 1998:29, 67). In 1999-2000, India exported auto components worth \$417 million -- roughly 10% of its total components output and crossed the \$1 billion mark in 2003-04, representing nearly 15% of output (ACMA various years, ACMA 2004). In 2005, exports reached \$1.8 billion and are projected to touch \$6 billion in 2009 (ACMA 2007). This is a clear sign of India's increased participation in the global economy and dramatic denationalization of the auto industry. The Indian auto industry from a sheltered environment is now fully integrated with the global one.

The Hyperglobalized Software Sector

Unlike the steel and auto industry, the Indian software sector is highly globalized (D’Costa 2004b). Soon after the 1991 reforms, the Indian software industry expanded rapidly, meeting the global demand for services with an abundant supply of highly-skilled but low-cost labor. In 1990, India’s software exports were \$131.2 million, which by 2006 had reached \$18 billion (NASSCOM, various years) (Figure 3). In this frenetic expansion software exports became an important foreign exchange earner for the country. In 2003-04 software exports were 21.3 % of total exports and the IT industry as a whole represented 3.82% of GDP (NASSCOM 2004). Today the Indian IT industry boasts nearly 1,000 firms, with many of them operating overseas.

Figure 3: Globalization and Expansion of India's IT Industry



Source: NASSCOM, various years, Ministry of Finance, Government of India, various years.

The rise of the Indian software industry and its deep engagement with the global economy suggests the absence of economic nationalism as conventionally understood. After all, the sector is heavily driven by market-friendly reforms, export markets, multinational investments in India, and expatriate Indian professionals in overseas markets (D’Costa 2003b,

2006). However, a more dynamic and historical understanding suggests that the sector is not only a product of India's earlier nationalist policies of import substitution industrialization but even today the state continues to support the industry in myriad ways. First, the link between the rise of the software segment and state-supported tertiary and technical educational institutions is strong in India. Second, the off-shore development model (exports of software services) would not have been possible without state-provided infrastructure support for Software Technology Parks. In 1991 the Software Technology Parks of India (STPI) was created under the Ministry of Communications and Information Technology. The main charge was to facilitate software exports by reducing bureaucratic regulations, fiscal incentives, and investing in critical communications infrastructure (http://www.stpn.soft.net/html/about_us.html). There are several STPIs in the country, with NOIDA (a region near Delhi) having the largest park in terms of export volume and Bangalore, the most internationally known Indian software city.

State-sponsored tertiary education had an impact on the growth of the industry. There are nearly 10,000 schools (compared to less than 1,500 in 1961) that are above the degree level. Seventy percent of these are focused on general education, while about 20% are professional and technical schools. Of India's 2,428 degree and diploma granting technical institutions, nearly half are found in the three southern states of Andhra Pradesh, Karnataka, and Tamil Nadu. Their state capitals B Hyderabad, Bangalore, and Chennai B have also emerged as leading software cities of the country. Since the 1950s, a total of seven Indian Institutes of Technology have been established. These along with along with Regional Engineering Colleges (RECs), and the private sector but subsidized renowned Birla Institute of Technology and Science (BITS) are the elite technical institutions of the country. The Indian government also established several renowned Indian Institutes of Management (IIM) in the country. The IIMs have attracted engineers, often from the IITs, BITS, and RECs, who pursue an MBA program and serve the export-driven IT industry. The success of India's software exports led to the establishment of the Indian Institute of Information Technology (IIIT) in two key IT cities – Hyderabad and Bangalore. Behind the two IIITs are the government of India, the Indian software industry association (NASSCOM), state governments of Karnataka and Andhra Pradesh, and multinational IT companies.

The state's setting up infrastructure as well institutions of higher learning has been also complemented by public funding of research institutions for industry and defense (Naidu 2003).⁷ For example, Bangalore has been the head quarters for the Indian air force and the Ministry of Defense established Bharat Electronics limited in 1954 mainly to support India's defense needs. Soon, the Indian Telephone Industries, Hindustan Aeronautics, and state funded R&D centers were established in Bangalore. The Department of Atomic Energy and the Electronic Corporation of India (ECIL), located elsewhere, the civil aviation industry, and the information broadcasting sector all sourced electronic components from BEL. Later ECIL itself poised to serve the computer needs of India. The establishment of the Department of Electronics in 1970, rechristened the Department of Information Technology (DIT) has been very instrumental in providing a state-supported technical infrastructure supporting the Indian IT industry. For example, the National Informatics Center, Computer Maintenance Corporation (CMC), the National Center for Software Development and Computing Technology, and regional computer centers were established.

The government itself became an important importer of computer hardware through several of its public sector organizations such as Electronics India Ltd., Administrative Staff College of India, and private sector firms such as Tata Consultancy Services, all of which were involved with DIT projects. In addition to establishing key public sector units in the electronics industry, more recently the state has been responsible for building infrastructure development for the IT industry, especially for export promotion. The government provided satellite-based communication systems, established standards, testing and quality certification processes, and set up the internet-based education and research network (ERNET) with UNDP.

TRANSPOSING NATIONALISM UNDER GLOBALIZATION

This brief exposition of three Indian sectors over time shows that economic nationalism in India has changed in form and style but not abandoned. The concern with foreign exchange outflows has only been recently set aside. The steel industry represented a high degree of state ownership, price controls, and protection. Today of course the story is quite different with foreign and domestic firms competing vigorously in the world market. Businesses of

⁷ For Bangalore's institutional arrangements in the IT industry see D'Costa (2007b).

Indian origin such as Mittal Steel have become the largest steel company world. Its recent acquisitions include steelmaking and DRI (raw material for steel making) plants in Trinidad and Tobago, Mexico, Canada, the US, Kazakhstan, and Germany. It has steel operations in Indonesia, its first overseas venture, and several facilities in India. Its recent acquisition of Arcelor of Belgium and France has catapulted the company to new heights. In India, the South Korea steel giant POSCO has vied for India's raw materials and steel market by a planned investment over \$10 billion. Many smaller Indian companies such as Essar Group have demonstrated their entrepreneurial mettle by adopting innovative technologies (D'Costa, 2003a, 2005).

The auto industry was also highly protected from foreign competition but was not perceived as strategic. Much later in the 1980s economic nationalism was visible in the industry through the idiosyncratic formation of a joint venture between the state and foreign private capital with 80% equity under the state. This is paradoxical since deregulation and liberalization of the economy had already begun and hitherto there was no state ownership in vehicle production. Initially state ownership relatively displaced private capital through the alliance with Suzuki Motors. However, with deregulation of the industry since 1993, the industry has been thoroughly restructured by foreign capital. This does not mean that economic nationalism disappeared since the old, uncompetitive manufacturers such as HM and PAL have not exited.⁸

The software industry also shares a common initial state-led development thrust. This may appear to be less glaring relative to the other two sectors, given that the sector is highly globalized with an aggressive export-driven business model, multinational involvement, and considerable international mobility of Indian technical talent. However, the roots of the industry have been very much sown by the state as part of its overall imports substitution strategy of self reliance and more recently its efforts to nurture strong partnerships with private business in high technology sectors (Sridharan 2004). For example, the role of the STPI in fostering Indian software exports and the establishment of the IITs for the IT industry are both suggestive of future possibilities of collaboration between the government and industry.

⁸ See D'Costa 2005, Chapter 6 for HM's restructuring challenges.

Based on the three-industry study it is evident that economic nationalism as practiced in India is very much rooted at the intersection of a particular historical and intellectual juncture and influenced by changing objective economic conditions and political feasibilities. Over time there has been a consistent movement of deregulation, privatization, and global economic integration of industries in various ways. Economic nationalism is no longer perceived in terms of rigid notions of state ownership or absence of foreign firms. Rather the meaning has become far looser with the erosion of state ownership, increasing foreign partnership, and a higher degree of global engagement. Yet in all three industries the vestiges of economic nationalism can be found, even as the role of the state is transformed, suggesting alternative interpretations of nationalism and its practice.

The main difference among the three sectors is that the software industry is the most globalized with a heavy reliance on export markets. This suggests a clear avenue for earning foreign exchange. Foreign companies do not compete with Indian companies directly. Since the software industry is skill- and labor-intensive, foreign companies utilize Indian talent for their in-house or export markets. In either case the Indian economy benefits in terms of employment and export revenue generation. Here nationalism has been transposed by India's reliance on foreign companies to use Indian labor and thus ensure domestic economic growth. This is quite different from the approach of shutting out foreign firms. Furthermore, given the rapidity of technological change and the leading role of Indian technical talent in the US high technology industry, it means that both expatriates as well as foreign companies are influential in India's export business model.

The presence of professionals and highly educated Indians overseas gives the Indian state an extended presence in the global economy. As discussed elsewhere (D'Costa 2006), India holds a large share of global talent pool. India's current stock of young talent pool is roughly 14 million, which is roughly one and a half times and double China's and US' stocks respectively (Bound 2007: 11). Even at the level of PhD in science and engineering India is rapidly increasing their doctoral pool. For example, the share of India's PhDs in the US increased from 8,383 in 1991 to 13,733 in 2003 (US National Science Board 2006: A2-123). During 1983-2003, 30% of science and engineering doctorates earned by foreigners in the US were earned by students of Chinese and Indian origin (US National Science Board 2006: Figure O-32). Whether these students remain or return, they represent India overseas in economically and technologically in an influential way. Those who return home often

establish commercial links between the domestic and export markets, thus contributing favorably to India's balance of payments position.

With the demand for foreign workers growing as evident by the large share of Indian H1B and L1 visas for the US, economic nationalism is extended abroad in a big way. Between 1997 and 2006 India's share of H1B visas increased from 39% to 48%. Interestingly, some of the leading sponsors (or visa petitioners) in 2006 were Indian firms (www.myvisajobs.com). Transnationalization of Indian IT firms entails not only the exports of professionals and software from India but also the export of capital, which in turn hire back talent from India. This is further reinforced by Indian companies opening offices in the US for marketing as well as R&D purposes and staffing them with Indian professionals. This movement of people is a form of intra-company transfers made possible by the L1 visa program. Here too the share of India under L1 visa has been the highest at 44%, having increased ten-fold since 1997 (D'Costa 2007).

This growing visibility of successful Indians abroad has prompted the Indian government to leverage its presence overseas for both economic and national identity purposes. Beginning with various financial incentives for non-resident Indians (NRIs), the government of India has extended many of the benefits to its expatriate communities, especially those from the OECD economies since they are likely to be highly trained and experienced professionals and entrepreneurs. Two schemes to encourage expatriate Indians to engage themselves with the Indian economy and society are Persons of Indian Origin (PIO) and Overseas Citizen of India (OCI). The Indian government gives a 15-year visa to PIOs and, more recently instituted, the Overseas Citizen of India (OCI) a life-long visa. Both these programs are an effort to link the globally networked expatriate Indian professionals and facilitate their mobility between their adopted country and India. A special Ministry of Overseas Indian Affairs has been created to look after the overseas interests of Indian diaspora, emigrants, and employees and various incentives offered in India for them, whether they are citizens or not. Among awards to prominent Indians overseas, there is also an annual gathering celebrating overseas Indians in India. These state-led activities suggest that economic nationalism (or national pride) is quite consistent with globalization.⁹

⁹ The government of India has justified the logic of globalization when mollifying irate US white collar workers who claim job losses due to global outsourcing of IT to India.

CONCLUSION

It is evident that the concept and strategy of economic nationalism is dynamic and contingent on particular social circumstances. It is also quite consistent with economic globalization. In this evolutionary process the role of the state changes fundamentally from one of direct intervention in favor of local capital against foreign capital and economic interests to one of leveraging local resources for extracting economic benefits from the global economy. In playing this game of international competitiveness whatever protection existed under economic nationalism is largely dismantled. While competitive pressure on local firms no doubt increases but domestic firms are not necessarily left to fend for themselves. The state continues to provide economic incentives but this time in terms of penetrating global markets rather than in terms of keeping foreign firms at bay from national markets.

The decoupling of national ownership at home from to a more internationalized, diffused form of ownership challenges the orthodox variety of economic nationalism but does not result in the loss of a national prestige. However, rather than simple protection domestic firms are expected to rise to the occasion and compete with foreign producers either at home or abroad. Conceivably, if the underlying motive for shifts in policy has not changed i.e. the concern for conserving foreign exchange, domestic employment growth, and economic development then the demise of economic nationalism is perhaps premature. The 2004 Indian elections is a case in point. The incumbent party riding on the wave of India Shining in the global economy with high economic growth and exports was routed by the opposition. India's successful global participation, which coexists with an impoverished rural and urban constituencies was not acceptable. National concerns about equity and employment such as the recent Common Minimum Program have been designed for the rural poor. This is consistent with the state's attempt to sustain India's image abroad and sustain the prestige enjoyed by Indian technical and professional talent.

While there may not be a coherent vision of nationalism in the era of global economic integration, especially with decoupling of national ownership, it may be expressed in looser terms of national "presence" at home and abroad. The IT industry is a case in point where Indian firms in India and overseas enjoy considerable prestige alongside major multinationals. Relatedly, the millions of expatriate Indians living and working overseas, especially the highly visible professionals in industry, research establishments, hospitals, and academia are

seen as India's "presence" abroad. They are also perceived to benefit the national economy through family ties, remittance income, and transfer of knowledge. Similarly, the pursuit of Mode 4 under the WTO by several developing countries (with India playing a leading role), which would allow the temporary movement of service providers to OECD economies is another version of this national "presence" in the global economy. Thus contemporary economic nationalism may entail yielding the segments of the national economy to foreigners in ways that might benefit the local economy and at the same time extending the "presence" of the national economy overseas through talent, investment, and trade flows. Few developing countries have the option of transposing economic nationalism in this manner. Those who do understand perfectly well that the postwar notion of economic nationalism is practically infeasible, although alternative forms of economic management and social policy for national welfare are not quite exhausted.

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