Preface

The essay that follows was written for a conference on *The Soviet Global Impact: 1945-1991*, organised by the Centre for East European and Russian/Eurasian Studies, Department of History, University of Chicago, in May 2002, and published (with minor corrections on a proof copy) in *Russian History/Histoire Russe*, vol. 29, nos. 2-4, Summer-Fall-Winter 2002, pp.459-80. I had intended to highlight in a concluding section the continuing relevance of the Soviet model, cutting across the conventional dividing lines between socialism and capitalism. Unfortunately, I was rather late with my revisions. The main points may be noted briefly.

My basic contention in the essay is that all post-war economic miracles in the capitalist world, stretching from West Germany/France/West Europe (1950s) to Japan (1960s), and South Korea (1960s and 1970s), leaned heavily on the Gosplan practice, notwithstanding the anti-Communist rhetoric of the country leaders. India's plan strategy (1950-80) for a mixed economy was clearly inspired by the USSR. In each case, it is shown, state policies deviated markedly from the neoliberal dogma enshrined in the 'stabilisation and structural adjustment' programme imposed upon the debt-trapped developing countries by the IMF and the World Bank.

I would underline two major differences between India on the one hand, and the other countries just mentioned. (a) Feudal remnants are still very strong in agrarian Indian, thereby constricting the growth of the home market. Such obstacles did not exist in West Europe and were removed after the war in Japan and South Korea. (b) Under Cold War compulsions the USA went out its way (by pre-war standards) to foster the economic development of countries that were its strategic (military-political) allies in regions surrounding the USSR. Consequently, the allies got preferential access to the US and West European markets, while non-aligned India's exports were throttled through the Multi-Fibres Agreement from the early 1960s. These two factors explain why India lagged behind the miracle economies.

What lessons can one draw for developing countries as a whole? (a) Abolition of feudal remnants in agrarian relations is a necessary condition, but not sufficient. Vietnam after her 'final' liberation in 1975 stagnated for a variety of reasons until the late 1980s. Of late though she is growing like a 'tiger'. (b) The absorptive capacity of the OECD markets is limited, especially in the current phase of recession. As the only Superpower, the USA has no need for strategic allies. Hence growth in the overwhelming majority of developing countries must be based on the domestic market, as the Chinese are now emphasising in the official discourse. (c) The neoliberal approach calling for free trade in goods and services, and free capital flows, would be counterproductive. (d) One must go back to the 'core' of the Soviet model (see below), stripped of the ideological clichés of the *ancien régime*, as well as Western theories focusing on its 'accidental', even chronic, but not 'endemic', features like perennial shortage of consumer goods and 'autarky'.

Of great relevance in this context is the Chinese experience. Those who believe that growth can be combined with equity in its distribution must a number of questions.

- (i) To what extent did Maoist China (1949-1976) laid the basis for post-1978 growth?
- (ii) Was post-1978 growth led by exports or by domestic demand?
- (iii) To what extent the rising inequality since 1978 essential for China's growth? Would greater egalitarianism reduce the growth of domestic demand? Would a stress on egalitarianism dampen the inflow of capital into China from the Chinese diasporas in Hong Kong, Taiwan, etc. and simultaneously restrict access (for Chinese goods) to western markets?

I do not have answers to the above questions. Even if it is shown that an increase in inequality in China was necessary for China's export growth and the inflow of foreign capital into the country, it does not prove that by simply widening income disparities a country could accelerate its growth. Since the OECD markets are limited, only a tiny handful of developing countries can have privileged access. The vast majority of the latter have to rely on their domestic market, underlining once again the contemporary relevance of the Soviet model.

Soviet Impact on Economic Development in Non-Socialist Countries 1947-1991

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Introduction

Well before the Second World War the USSR became a pole of attraction for a broad spectrum of socialists in West Europe, and Japan, and even wider circles in colonial countries with a powerful national liberation movement such as China, India, Egypt, etc. Their admiration grew manifold after the Soviets successfully withstood the main brunt of Nazi attack during the war. There were several reasons behind this popular perception: a) rapid industrialisation in the USSR (**Endnote 1**) based on domestic resources *sans* foreign capital; b) achievement of full employment during a decade when the West had plunged into the Great Depression with massive unemployment; c) spectacular progress in education and health; and d) highly egalitarian (compared to the rest of the world) distribution of income and wealth. The dark side of the story, namely forced collectivisation, the famine of 1932-33, and the Gulag, was known to some extent, but was pushed under the carpet.

The Soviet impact during 1947-91 was felt at three different levels. First, the USA as the First Superpower altered radically its own policies towards its allies to foster their economic development and make the electorates there less susceptible to Soviet influence. Secondly, some key countries in W. Europe and East Asia borrowed many economic ideas and instruments from the USSR to hasten their rates of economic growth. Finally, the Soviets offered direct economic aid to several non-aligned countries keen on industrialisation.

This paper is in four parts. In section I is outlined the core of the Soviet economic system, and the scope for emulating at least parts of the Soviet system, by countries with ruling ideologies very different from that of the USSR. Next, the Marshall Plan for European recovery is taken up at some length because it led to a dramatic break with the pre-war ideas on international economic relations and there are voices over the past two decades for a new Marshall Plan catering to developing countries. The after-effects of the Marshall Plan lasted as long as the Soviet Union survived. Some key aspects of West German social market economy are underlined to challenge the neoliberal attempt look at the Marshall Plan through the prism of the contemporary structural adjustment program of the IMF and the World Bank imposed on debt-trapped developing countries. In section III is taken up the case of Japan which consciously copied many elements from the Soviet practice, and South Korea in turn patterned herself on Japan. Section IV is on Indo-Soviet economic relations.

I. The Soviet Economic System

The 'core' of the Soviet economic system consisted of: i) state ownership or control of most productive enterprises; ii) central planning of production and allocation of goods and services at state determined prices; iii) a subsidiary role for money, banking and public finance with the primacy assigned to production targets; iv) restrictions on 'free trade' (without price controls), except for foods produced on the collective farmers' private plots; v) freedom (not unfettered) of workers to choose their jobs; and v) state monopoly over foreign trade and transactions. Whether these elements are seamlessly woven together or not is debatable, but China under Deng showed that a transition from over-centralised planning to a 'socialist market economy' was feasible.

By definition, a non-socialist country (with most industries in private hands) cannot replicate all the core features just described, but can still incorporate some. Above all, it could target production and investment in critical traditional industries like steel, energy, machinery, chemicals, fertilisers, etc. To attain the targets: 1) the financial institutions must release funds according to government priorities; 2) foreign trade and transactions have to be planned to a considerable extent; and 3) domestic prices must conform to planners' preferences so that the newly created industries remain viable. In short, the domestic market must be guided by the state that must also provide a cushion against the global market forces. Such a course was taken over varying lengths of time by several major countries.

At this point it is worth looking at Stalin's views on the main tasks and constraints of Soviet planning. These are expressed with unusual clarity in Pollock's (2001?) essay, based on several rounds of Stalin's conversation with Soviet economists that were unpublished but kept in the archives.

- (a) The 'main task' of planning is to 'ensure the independence of the socialist economy from the capitalist encirclement'.
- (b) 'The second task of the planned economy consists of consolidation of complete ownership of the socialist economic system and closing off of the forces which give rise to capitalism.' [By implication, non-socialist forms would at best be tolerated for a limited period.]
- (c) 'The third task of planning is not to allow disproportions'. Because the economy is so large, it is necessary to have large reserves.

As for the means, Stalin singled out 'piecework for workers, bonuses for engineering technical personnel, prizes for the *kolkhozniki* - these are levers for the development of industry and agriculture...At one time we boasted that technical workers and engineers will receive no more than qualified workers...If we went along that path everything would have fallen apart. You [the economists who prepared an earlier draft – NKC] want to skip directly over to communism. Marx and Engels wrote with total communism in mind. The transition from socialism to communism is a difficult trick. We have yet to get socialism in the flesh and blood and we still need to put socialism right, still need to distribute according to labour as is necessary.'

Regarding profits, Stalin observed that 'if we were to develop branches of the economy depending on their profitability, we would have been able to develop only flour milling, production of toys... and textiles, but we would not have had heavy industry. Heavy industry requires great investment and is unprofitable in the beginning.' Nevertheless, 'we need profits.

Without profits we cannot raise reserves and accumulation, address problems of defence, or satisfy social needs... [W]ithout profit it is impossible to develop our economy. For our enterprises a minimal profit is sufficient and sometimes enterprises can even work without profit at the expense of other enterprises'.

Stalin rejected a draft, prepared by some Soviet economists, stating that 'the law of value has been overcome'. He clarified: 'It is not true that we are in control of prices...[To do that] you need tremendous reserves, an abundance of goods...But as of now there still is an illegal market, a *kolkhoz* market, and there still exist market prices. If there is no concept of value, there is nothing with which to measure income, and income is not measured in terms of labour. When we shall begin to distribute according to need, it will be a different matter, but as yet the law of value has not been overcome. We want to use it deliberately. We need to fix prices within the framework of the law [of value].' Stalin admitted: 'For us, the law of value determines a lot, and indirectly influences production and directly influences circulation. But the sphere of its effect is limited. The law of value does not bring impoverishment [of the masses.] The most difficult thing for capitalists is the sale of market output and the conversion of goods to money.... With us, sale happens easily, it goes smoothly.'

What has just been quoted does not contradict any of the 'core' elements of the Soviet system described earlier. The list, however, leaves out two features widely stressed in Western literature. The first is 'autarky'. For instance, Bergson (1964, pp.318-19, 337-38) asserted that the Soviets pursued such a policy, and hence the ratio of export to national income since 1928 averaged 1-2 percent, while it was much higher for the US at 6-7 percent in 1869-1913, and a low of 3.8 percent in 1960. But I do not find Bergson convincing on the factual side. (**Endnote 2**)

It is doubtful also that the Soviets aimed at autarky. The First Five Year Plan projected an increase in export from 755 to 1706 million roubles (126 percent) and in import from 910 to 2048 million (125 percent) between 1928-29 and 1932-33 (Zaleski 1962, Table XLIX p.247). This was faster than the expected rise in national income.

The Soviets were forced to rely on their own resources far more than they wanted to. They had no hesitation about importing Western technology and capital goods in the 1920s and 1930s. In the post-war era they tried to join the GATT but were frustrated by the USA and its allies on the plea that Soviets would resort to massive dumping of manufactures in Western markets. Two well-known scholars, Holzman (1974) and Nove (1986, pp.294ff.) examined these issues and dismissed such apprehensions as ill-founded and politically motivated. Even in the Gorbachev years the US position had not changed. As Costick (1987, pp.85-88), a consultant to the National Security Council, Washington, put it: 'The economic relationship [between the USSR and the West] is not normal commerce, but a form of systemic struggle'. Furthermore, the Soviet attempt to promote trade among socialist countries through the Council of Mutual Economic Assistance (CMEA), and bilateral trade with many non-aligned developing countries like India, Egypt, Algeria, etc. make little sense if autarky was a major policy objective.

Last but not least, Marx was a free trader with qualification. In a speech at Brussels, Marx (1848, pp. 463-65) declared that free trade 'under the present conditions...[is] Freedom of Capital.' The workers would be neither better nor worse off. But the 'Free Trade hastens the Social Revolution. In this revolutionary sense alone, gentlemen, I am in favour of Free Trade.' But in Germany with a nascent bourgeoisie, he observed, 'the Protective system helps to develop free competition within a nation.' The protective duties there served as weapons against feudalism and absolute monarchy. Indeed Marx's position is surprisingly close to the provisions of the GATT, 1947,

especially after the amendment in 1958 allowed only developing countries to protect domestic manufacturing for an indefinite period.

The second lacuna in my list of 'core' elements is what Kornai (1992) calls the shortage economy, a characteristic of the classical socialist model, namely the USSR from 1928 onwards. Shortages plague the entire economy -- producer goods, consumer goods and services, labour and foreign exchange, and are chronic rather than spasmodic, and affect the behaviour of all economic agents. Why does it matter?

Shortages, Kornai argued, results in a serious loss of consumer welfare. *Faute de mieux* the consumers were forced to buy goods that were available, but not those they would like. Is the phenomenon confined to Soviet-type economies? Until recently, a Japanese consumer who preferred Scotch to local whisky had to fork out much more, nor was it easy for him to locate a retail store for the purchase as Japan Inc. had a tight grip over the distribution network. It is not at all certain that non-tariff barriers are at all falling across the countries. Secondly, owing to the growing concentration of global production under the transnational corporations in an increasing number of industries, consumer choices are narrowing. An Indian might be quite happy with his PC having an Intel 386 chip, 8MB memory and Windows 3.1, but is forced to buy ever newer PCs because spares and servicing for older models tend to disappear from the market. The idyll of perfect competition is becoming quite obsolete, even if all trade and non-trade barriers across the countries were to disappear. Hence contrasting textbook capitalism and Soviet-type socialism is misleading.

More tangible is the welfare loss from queuing. There is no doubt that for most of the period from the late 1920s to the end of 1980s, the Soviet consumer faced long, if not lengthening, queues for a wide array of goods and services like housing, meat, potatoes, cars and so on. Yet there were several periods when such queues were absent. One simple measure of shortage is the ratio between official and collective farm market (CFM) prices for foods. From Chapman's (1963, table 12, p.105) data on sales to households at both CFM and official prices, I calculated the ratios at 1.00 in 1937, 1.60 in 1940, 15.65 in 1944, 1.12 in 1948, 1.11 in 1954, and 1.35 in 1954. Since the quality of CFM products are reckoned to be superior, one may infer that the excess demand for foods was negligible in 1937, 1948 and 1952. In Poland where I lived in 1959-61 as a young scholar, I spent little time in queuing. In China, before or after Deng Xioping, queues were never discussed as a major problem.

Novozhilov (1926), the future Nobel laureate, wrote about the shortage of industrial goods and blamed it on incorrect (in relation to both Marxist principles and the ground reality) pricing policy; by lowering prices across the board while excess demand persisted, scarcities were aggravated, throwing to the wind the principle of balanced development of different sectors in the economy. Bukharin (1928, pp 408-11) emphasised the latter aspect in a memorable formulation: Factories cannot be built with imaginary bricks (that do not exist). He complained that there were 'interruptions in supply, "queues" and "tails" have become a way of life, greatly disorganising our productive activities.' Consequently, as Zaleski (1962, Table LVII) showed, the First Plan targets in terms of industrial outputs, finished construction, etc. were not met despite official claims to the contrary. But such disproportions were removed in the Second Plan. In Khanin's estimate (see above) national income fell in 1928-32, but rose substantially in 1932-40.

From the late 1950s disproportions went on rising after the XXI Congress of the CPSU declared that 'full satisfaction of the needs of the whole Soviet people in food, housing, clothing --necessary and within rational limits, is possible in the not-too-distant future... [In future] state outlays [on these heads] will increase.' (Cited in Strumilin 1959, p261). Under Khrushchev bread

became virtually free leading to big wastes. State subsidies on housing, foods, public transportation, etc. reached staggering proportions as consumer prices remained frozen, but wages went up all-round. Stalin, as seen earlier, warned against a hasty introduction in the USSR of norms taken from the stage of advanced Communism. Much earlier, Engels (1872, p521) rejected Proudhon's demand that workers should enjoy rent-free housing under capitalism, and argued that even during the first phase of socialism, house rent must cover interest on the building capital (including the builder's profit), costs of regular repairs and maintenance, annual depreciation and ground rent.

The big Soviet discussion on the law of value in the 1950s and reforms in the 1960s focused on the pricing question. In practice, only piecemeal changes took place. The disproportions in the economy grew and the system eventually collapsed. However China from 1978 managed to introduce many-sided but gradual reforms within the framework of a one-Party state, with central planning and market forces co-existing. Hence I am not inclined to accept Kornai's thesis that state ownership combined with central planning will necessarily create a shortage economy. It is interesting that Bergson (1964) did not mention perennial shortages as a defining characteristic of Soviet planning.

Lastly, it is worth pointing out that for all his anti-capitalism, Lenin admired Taylorism as a management tool and tried to introduce it in Soviet factories. More than three decades later, Galbraith (1967) drew parallels between the co-ordinating role of the Gosplan and the operations of giant manufacturing conglomerates in the West engaged in a large spectrum of industries. Galbraith predicted a convergence, driven by the imperatives of technical change and production organisation, in the functioning of capitalist and socialist economies that might facilitate a détente. Of course, the USSR has disintegrated, but is there not a certain convergence between China and the West?

The Marshall Plan

Like many others I believe that the Marshall Plan, or the US-sponsored European Recovery Program (1948-51), was a major turning point in post-war economic history. American aid of about \$13 billion is those years (\$ 3.25 billion per year, or 2.5 percent of the West European national income) helped the recipient countries to attain quickly their pre-war levels of income and move on to a higher growth trajectory in the long run.

In the first two post-war years the US provided aid worth \$8 billion towards relief and rehabilitation, but West Europe made little economic progress, and the US Congress was developing 'aid fatigue' (as at present). If the drift continued, the Communists might take over power through the ballot box in France and Italy. As A. J. P. Taylor, a leading British historian, said in late 1945: 'nobody in Europe believes in the American way of life -- that is, private enterprise'. (Cited by de Long and Eichengreen 1993, note 7, p. 224). The Marshall Plan was the American response after protracted debates within the US administration. While one section insisted on the primacy of the market, the planners took a pragmatic view with emphasis on a correct sequencing of policy. The latter view prevailed. 'In the short run, the United States should insist on a supranational planning authority with the power to allocate resources, set production targets and foster integration [in W. Europe]. It should also provide basic grants for essential commodities and capital equipment that would bring immediate gains in production. And as production increased, it should encourage European leaders to permit normal mechanism to eliminate uneconomic forms of production and apportion resources on a rational basis' (Hogan

1987, p 57). Kindleberger (1987, p 61. fn 3) who was closely associated with US policy, explained that more of planning, and hence rationing, price controls, and allocation of scarce materials and fuel, were needed in the early stages of recovery, but subsequently, there should be a shift to greater freedom in pricing with a stress on monetary, fiscal and exchange rate adjustments as the main tools of economic policy. This part of the story is pushed under the carpet by two present-day neoliberal economists, de Long and Eichengreen (1993), when they characterised the Marshall Plan as 'history's most successful structural adjustment program' (SAP). The SAP was imposed mechanically ('one size fits all') on all debt-trapped developing and transition economies by the IMF and the World Bank since the early 1980s. In most respects the economic situation has remained as bad as, if not worsened, in these countries after the Fund Bank took the driver's seat. As a way out of the dark tunnel, influential circles in many countries from Russia to Latin America and Africa have been calling for a new Marshall Plan in lieu of the SAP. Cairncross (1996, ch.9) found this demand unrealistic. For the political prerequisite for the Marshall Plan, namely, containing Communism does not exist today.

The Plan had a number of its critics, some very distinguished like F. D. Graham, G. Haberler, R. Harrod and F. A. Lutz, who thought that the aid was hardly necessary. (Cairncross 1996, fn.6, p.111) But its supporters were of no lesser calibre. Latter-day critics argue that by 1947, these economies were already recovering, and in any case, the paltry figure of aid (less than 2.5 percent of national income) could not make much of a difference. The fallacy of this approach lies in looking at the problem from a purely quantitative (aid to national income ratio) perspective, overlooking other aspects. One can draw an analogy with the Soviet aid to China in building a whole set of modern industrial plants, supplying designs and blueprints, training manpower, etc. The financial magnitudes for China in comparison with Europe under the Marshall Plan were even smaller, and yet it is difficult to imagine that China on her own could have such a large array of modern industries in the absence of initial assistance from the Soviets (**Endnote 3**).

In 1947 West Europe was facing both large trade deficits (dollar shortage) and fiscal imbalance. Without American aid they would be forced to reduce the deficits by severely deflating their economies; as a consequence, the modest growth achieved till 1947 would be arrested, if not reversed. Alternatively, or at the same time, they might resort to competitive devaluation of the national currencies in a vain bid to boost exports. As Joan Robinson wrote long ago, competitive devaluation in the 1930s was in effect a 'beggar my neighbour' policy hurting one and all. Thus the Marshall aid prevented such a calamity. Moreover, American dollars helped set up the European Payments Union so that the members could trade freely without having to balance the flows in the short run. Indeed, greater regional trade speeded up European recovery, as envisaged by the forward-looking US officials.

By the end of the Marshall Plan Europe wanted, in the words of the British Chancellor of the Exchequer, Reginald Butler, not aid but more of trade, or rather, greater access to the US market. Owing to their political commitment to West European prosperity, the Americans obliged. Thus, while US overall imports increased from \$8.86 to \$21.37 billion in 1950-65 or by a factor of 2.4, imports from the UK, France and W. Germany rose 4.2, 4.7 and 12.9 times respectively over the same period. Consequently, US trade surplus as a percentage of American exports to these three countries was sharply reduced from 56 to 15 in 1950-65 (US 1966, pp 868-69). W. Germany, in particular, made spectacular progress. By 1960 she had an overall trade surplus of DM 5.2 billion but had a deficit of DM 2.2 billion against the USA; in 1969 she had an overall surplus of DM 15.5 billion and a small one of DM 0.4 billion against the USA (Mitchell 1975, Table F)

How did the Marshall Plan affect Germany? Under the Potsdam Agreement (1945) between the allied powers, German post-war production was to be pegged at 50-55 percent of the 1938 level,

and all excess equipment would be removed from the country. (Kindleberger 1987, p.15) According to Bischof (1989, pp.xvi-xxiii), many plants were actually taken away by the French and the Soviets in their respective occupation zones. This was in tune with the Morgenthau Plan of 1943-44 (mooted within the US administration but was never officially adopted) to turn Germany into a rural or pastoral, rather than an industrial, country, so that Germany ceased to be a threat to European peace in the future. This perspective was radically altered under the Marshall Plan, if not earlier.

As for aid, Stern (1997) noted that before the Plan, Germany received US goods under the earlier relief programmes GARIOA (Government and Relief in Occupied Areas) worth \$ 1.7 billion, or more than what she got under the Marshall Plan (\$ 1.4 billion). Hardach (1987, pp. 446-59) has pointed out that initially, food predominated in aid imports due to the extremely low food intake (under 800 calories/day) in certain regions of the Ruhr. But during the whole Marshall plan period 1948-52, the percentage shares in aid imports were: food and agricultural inputs 44, raw materials 39, freight and fuel 12, and machinery including vehicles just 2. This was a conscious German policy: investment goods, especially mining equipment, and vehicles could be imported to remove bottlenecks in production, but in rebuilding industry the country relied on her own 'qualified labour force with millions of people eager to find gainful employment'. The Americans gave their blessings. In July 1948, the Americans demanded that Germany set long- term targets for 1952-53 on production, foreign trade, investment etc. The German forecast of a \$500 million trade deficit in 1952-53 was rejected by the US Military Governors for failing to reflect their (US) goal of turning Germany into a major industrial power and a competitor in the world market.

Liberalisation of external transactions took place more slowly in W. Germany than in neighbouring countries. The government wanted import barriers to be used 'as a means to pry foreign markets open'. In the wake of a foreign exchange crisis, it suspended for a while the issue of fresh import licenses in February 1951. As the balance of payments turned favourable after the Korean War, the OEEC and the GATT repeatedly asked the country to liberalise unilaterally, and went so far as to threaten retaliation; still, W. Germany held forth and obliged only in 1959 along with other West European countries. (Giersch *et al.* 1993, pp 15-18). Hardach (1987, p.481) further reminds us that West German government criticised trade barriers wherever they stood in the way of German exports but maintained its own trade barriers to protect the textile industry.

Thus for Germany, Marshall aid was negligible in relation to her investment or national income. Of far greater significance was America's concern for German progress in the context of the Cold War. The main economic benefits for Germany were: the reversal of the Potsdam agreement, access to the US market for German exports, and America's quiet acquiescence in Germany's restrictive policies in regard to both trade and foreign investment.

While America stood for 'free enterprise', her European allies were free to take other paths that often ran in the opposite direction. In W. Germany the centre-right government was committed to the market economy, but it was tempered with the adjective, 'social' in Erhard's formulation. Thus the market-oriented reforms of 1948 left scope for price control over many years on basic foods, raw materials, house rent and public services (Giersch *et al.* 1993, p.23). France and Britain nationalised big swathes of their industries without incurring American displeasure.

The same Cold War logic explains America's refusal to include the USSR under the Marshall umbrella. Prodded by Britain and France, which were keen to avoid an open confrontation with the USSR, the Americans initiated discussions on the Marshall Plan with the Soviets. The latter were hesitant, but initially took a favourable position, believing that it would be like the wartime Lend-Lease agreement with no conditions attached to it. According to Mikoyan's (1944) 'secret'

report of May 21, 1944 to Stalin and Molotov, the USSR received Lend-Lease shipments from the USA during the period, October 1, 1941 to May 1, 1944, worth \$5.38 billion, including arms, equipment and food. American aid, they reckoned, would speed up recovery. Varga, a leading economist, argued that since the post-war US would face an acute demand recession, additional exports financed by aid was the only way to avert an economic crisis. The assumption proved wrong. While offering assistance the Americans insisted that the Soviet Five Year Plan as a whole needed a scrutiny by the European agencies, including American experts. It is no wonder that Stalin scornfully rejected it. Archival materials in Moscow and Western capitals confirm the view of several scholars that the French and British foreign ministers were confident that the Soviets would walk out of the talks held in summer, 1947 at Paris (Narinsky, n.d.; Parrish, n.d.)

In short, the Marshall Plan heralded a new era in international economic relations. The US would impede, as far as possible, the development of the USSR and its partners. For her own 'strategic allies' on the fringe of the Soviet Union, the USA was most generous with its assistance, overlooking the finer points of ideological differences.

The Japanese Economic System

I begin with a long excerpt from a recent issue of *The Economist* (Anon. 2002). It captures many of the essential features of Japanese economy and polity, and also sums up neatly what the weekly felt was wrong with the system.

Japan's banks are nor notably inefficient by global standard. But, as the yen appreciated after 1985, there was a huge expansion in bank credit. Land was used as a collateral in almost all bank loans. Share prices doubled in 1987-89...And because Japanese banks and businesses have long had holdings in each other, the popping of the speculative bubble brought both of them crushing down together. The banks had also been lending at the behest of bureaucrats.... to companies they happened to like. This followed a "longstanding social practice"...whereby the banks were treated as quasi-public-sector organisations to be used to get Japan's post-war business back on its feet. Next came the country's spectacular macroeconomic growth, fostered to some degree by the system of cross-shareholdings. But as the economy grew more complex the collaborative relations between banks and businesses turned in the early 1980s to collusion and even conspiracy. As interest rates fell the banks began to lend to poorly managed land developers and even gangsters. Then it all went wrong.... The politicians were desperate to avoid unemployment. They therefore used some industries, notably construction, to soak up labour laid off by other sectors. Construction was also used as an instrument of regional aid. By building roads, bridges, airports, tunnels, no matter how unnecessary, they could direct money and jobs to the many parts of the country with no efficient companies.... Construction-related spending has comfortably exceeded the budget of the American Defence Department in recent years and about 10% of Japan's workforce, some 6m people, still derive their jobs from it, far more than in other rich countries. Unsupported, about half the industry might collapse, throwing millions out of work.

Not all of Japan's industry is inefficient though...But practically all of industry has, by tradition, been to some degree influenced or controlled by non-commercial actors, if not politicians, then bureaucrats...In a heavily regulated state, the bureaucrats could and did allow the keiretsu -- the bank-centred conglomerates that dominate the economy -- to make arrangements to their own advantage.

For years it worked well. With their flows of capital assured, Japanese companies were able to take the long view. With the help of life time employment, pliant enterprises unions and a seniority system whereby labour came cheap at the outset in return for guaranteed rewards at the end, companies could invest in research and development. Productivity and profits soared, and everyone grew rich. But the bureaucrats guiding this venture were not infallible...The Japanese had a high rate of saving and the households preferred for reasons of safety to keep their deposits in the post office; including postal life insurance, the post office had 373 billion yen. [These two sources] plus the social security contributions...feed the Fiscal Investment and Loan Programme...Through this programme, the Ministry of finance lends money at subsidised rates to a variety of institutions and projects. In other words, money is distributed according to grand plan worked out in the ministries and financed by the banks and the postal system: no wonder aspects of Japan are so often likened to the Soviet Union.

This is not the occasion to discuss if the diagnosis of the decade-long stagnation in Japan is correct or not. What is remarkable is that the system produced the Japanese miracle, replicated elsewhere in East Asia, and there was widespread view only a decade ago that Japan would overtake America as the world's leading manufacturer. That it has not happened does not detract from the earlier achievement.

A recent debate among neoclassical economists has underlined an important affinity between the growth processes of the USSR and of East Asia, especially Japan and S. Korea in the post war years. In the model, GDP growth is decomposed into three components of labour, capital and technical progress, and the contribution of each is estimated from long-term time series. Krugman (1984) found that while for West European countries and the USA technical progress accounted for the lion's share of overall growth, it was much smaller in the USSR and East Asia. In these latter countries high rates of accumulation and employment expansion explained most of the rise in output. In the absence of significant technical progress, the productivity of capital tends to stagnate or decline, and once surplus labour from agriculture, etc. has been mopped up, growth of an 'extensive' kind hits a road block and eventually tapers off. In fact, growth slackened not only in the Soviet Union, but also in East Asia. Hayami (1998, pp 5-8) made fresh calculations and confirmed Krugman's findings. But other economists disagree on both theoretical and empirical grounds.

The question still remains: What contributed to the earlier miracle? The first crucial element, in my view, was the accent on self-reliance. According to Okita (1980, p.205), one of the architects of post-war planning, Japan got about \$2 billion in economic aid in 5 years following her defeat. Next, came a windfall gain thanks to the Korean War. US Army procurement in Japan in 1953 was \$800 million, or nearly one-half of her import bill of \$1.6 billion. 'Under these circumstances, the idea gradually developed that the Japanese economy could not, and should not, be dependent upon windfall sources or on foreign aid for its exchange needs, but should stand on a "self-supporting basis."

One may now highlight two broad features of Japan's planning or industrial policy up to the early 1980s.

(1) Barely 30 years ago a Japanese minister wrote: 'Compared to the economies of Western countries, the conditions for the complete functioning of the price mechanism have not yet been matured'. (Ojima 1972 p. 17). According to Tsuruta (1988, pp. 81-82), in the era of high-speed

growth from the late 1950s to the late 1970s, 'neither the government nor the public ... had the faith in the ability of price mechanism to facilitate adjustments that they have in the 1980s'.

(2) In its own publications the Ministry of International Trade and Industry (MITI), Johnson (1982, pp. 9-10) informs us, introduced the concept of a 'plan-oriented market economy system'. In his Marshall Lectures at Cambridge, Morishima (1982, p. 197) described the country as 'a kind of democratic `planned' economy ... [where] individualism, liberalism and internationalism' could not prosper. Komiya, a leading economist of liberal persuasion, in his overview of post-war industrial policy in Japan (1988, pp. 6-7) stated: 'The influence of the Soviet Gosplan model on pre-war and wartime "progressive" bureaucrats and scholars seems to have been carried over into [the immediate post-war period. In the next era of high-speed growth] a "vision" was drawn up that proposed actively fostering industries. It is exactly this type of thinking that typified the prehistoric era I characterized above, ... in general industrial policies in Japan aimed to develop industries that government officials -- with the backing of public opinion -- felt Japan should have; criteria for what comprised an appropriate industrial structure were *ex post facto* rationalisations.'

The passages quoted from *The Economist* clearly show that after more than two decades of liberalisation, Japan is yet to embrace the price mechanism or curb drastically bureaucratic interference in investment allocation – perhaps the hallmarks of textbook capitalism.

Refuting the claim of some Japanese industrialists to be free from government influence, Allen (1980, p 116) referred to the plethora of government 'regulations of foreign trade and exchange, the discriminatory lending policies of official banks, and the constant exercise of persuasion by officials and Ministers.' Lockwood (1965, p.503) put it more dramatically: 'The hand of thegovernment is everywhere in evidence, despite its limited statutory powers. The industrial bureaux of the Ministry of International Trade and Industry proliferate sectoral targets and plans; they confer, they tinker, they exhort....Business makes few major decisions without consulting the appropriate governmental authority; the same is true in reverse. The Ministries list three hundred consulting committees for this purpose.'

Several points need to be underlined.

- a) Unlike in Latin America where import-substitution policies predominated, in Japan export-promotion policies were super-imposed upon those for import-substitution (Hayami 1998, p.18). From the World Bank's *World Development Report 2000-2001*, I calculated the percentages of imported manufactures in the GDP for 1990 and 1998; these were 13 and 15 for Japan, 37 and 48 for China, 22 and 32 for India, 11 and 26 for Brazil, 53 and 69 for Germany, and 36 and 49 for the USA. Thus Japan despite her enormous trade surplus remains the world's most restrictive country in the import of manufactures.
- b) 'Developmentalism' or 'production fetishism' is the hidden ideology of Japan's policy makers (Hayami 1998, p.22).
- c) During World War II planning in Japan was modelled on the USSR. The wages were raised, shareholders' influence over company was reduced, and the purpose of business was changed from that of making profits to fulfilling the production targets (Hayami 1998, p.16; Hisataki 1997,p.59).
- d) The post-war wage system in Japan with life-time employment and wage levels depending far more on seniority (i.e., rising with age) than on the productivity of an employee, is very different from the Western practice, and is closer to the Soviet model (Hisataki 1997,p.63).

- e) Planning in post-war Japan was not just indicative in nature. Once the production target was fixed, the government often selected the firms that would expand and in what sequence, ensured appropriate funding, released foreign exchange, sometimes directly participated in contracts between local and foreign firms, and so on.
- f) In the sphere of financing, the government-owned institutions like the Japan Development Bank and the Export-Import Bank played a leading role. Loans from these bodies met only a small part of the total project requirement, but had a 'cowbell effect'; it was a signal for private banks to come in a much bigger way (Hisataki 1997, p.62)

In two highly significant respects, however, Japan differed greatly differed from the Soviet Union. First, the latter left no scope for private initiative. But many of Japan's leading firms grew without any special assistance from the government like Sony, or against the government's wishes, e.g. the entry of Honda into the car industry.

Secondly, Japan's success on the export owed no doubt a great deal to the talents of her own people. But that was not all. A *sine qua non* was America's commitment to Japanese prosperity for Cold War reason. After the Korean War "the American government was driven by the necessity to rebuild Japan as a bastion against the Soviet Union and China. Furthermore such a bastion had to be erected extremely rapidly." (Morishima 1982, p.161). The American market was opened up for the Japanese to cash in, and although regular voices were heard protesting the invasion of Japanese goods, and restrictions were imposed on a number of items, Japan's trade surplus with the USA remained very high all through. In short, America acted almost like a Santa Claus toward Japan – the very opposite of her attitude to the USSR.

IV. India and the USSR

Coming to India, her theorists in the nineteenth century, Naoroji (1901) and Dutt (1901) had formulated the 'drain theory': the country was poor because resources were drained out by the British. Anti-colonialism was deeply imbedded in the nationalist movements from the 1920s. While the country was still under British rule, the Indian National Congress set up the National Planning Committee (NPC) under Jawaharlal Nehru in 1937 to draw up a blueprint for independent India (NPC 1938); in 1944 the leading industrialists published their Bombay Plan (1944) that overlapping on many points with the former.

Comprehensive planning began with the Second Five-Year Plan (1955-59). Its basic structure was crafted, not by an economist, but by a top-rate statistician, P.C. Mahalanobis, Fellow of the Royal Society, London. He had been associated with the NPC, but lacked formal training in Economics. Yet his approach was approved at formal gatherings of professional economists (of different political persuasions) in the country, and endorsed by an impressive array of Western and Soviet economists. Such consensus was never achieved again. In the planframe, Mahalanobis (1953-A; 1953-B) sought to achieve objectives (similar to those of the NPC and the Bombay Plan) like accelerating the GDP growth rate, raising the investment rate without leaning too much on foreign savings, producing domestically all the major capital and intermediate goods, and increasing as far as possible domestic employment in the process. The author's initial model bore family resemblance to the currently fashionable neo-Keynesian Harrod and Domar models in the West and, more strongly, to a model of the Soviet economist, Fel'dman, though there is no evidence Mahalanobis had read any of these.

In fact, Mahalanobis was quite original. The Western models as well as that of Fel'dman assumed a unified, monetised national economy. But Mahalanobis posited a dualistic economy: one part was fully monetised and comprised of 'organised' industries, plantations, trade, banking, and the government, in which the economic agents acted broadly in the same manner as their homologues in a capitalist economy. The other part, employing the overwhelming majority of the workforce, was weakly integrated with, but not divorced from, the organised segment. Mahalanobis proposed that the government should try and increase resources at its command (direct or indirect) and devote a rising part of the investible resources to finance the expansion of the capital goods sector. Thanks to the Keynesian multiplier effects of investments, the growth rate of national income would rise in step with the share of capital goods industries in total investments. This would also ensure that India would manufacture all the basic producer goods in a short time and attain self-reliance as envisaged by the NPC and the Bombay Plan. But Manalanobis (1955.p 117) dismissed complete self-sufficiency as a goal. Was it not inflationary? In a typical Western economy, an attempt to raise the share of capital goods in total investment could create a shortage of consumer goods. But in India of the 1950s only a small fraction of wage goods came from the organised sectors. A lack of investment in textile mills, for instance, need not lead to a shortage of cloth as handlooms could step into the void with practically no investment funds from the government or banks in the organised sector, and with a minimum of time lag for supplies to cope with additional demand. Mahalanobis wanted the profit-driven large industries in the organised sector to focus on producer goods and those consumer goods that labour-intensive small-scale industries could not manufacture. He went so far as to recommend that big factories, turning out consumer goods that competed with those from small and village industries, should be closed down until the country attained full employment.

The Mahalanobis approach just described was no doubt inspired by the Soviet experience, but his stress on small industries was quite distinctive. [**Fn**. Curiously, the First Five Year Plan adopted by the Soviets assigned an important role to handicrafts and artisans' cooperatives for consumer goods, but in practice the sector was squeezed for ideological reasons. **End Fn**) Indeed, as Chakravarty (1987, p 16) pointed out, the 'dual development thesis' of Mahalanobis is akin to (and probably predated) Mao Zedong's famous dictum about 'walking on two legs'.

In the 1950s India had neither the technical know-how nor adequate domestic savings to set up a modern industrial complex. The test case was that of a public sector steel plant. When the Western governments refused any assistance, the USSR stepped into the void. Shortly thereafter, Britain and W. Germany changed track and agreed to construct one plant each, all in the public sector. Subsequently, all these governments provided both finance and technology for a large number of factories in heavy and capital goods industries, mostly in the public sector. Simultaneously, new plants also came up in the private sector, some of which were owned by Western transnational corporations. Apart from steel, other major sectors where the Soviets and East Europeans assisted in a major way were oil, machinery, power generation equipment, tractors, and so on. By the end of the seventies India became virtually self-sufficient in capital goods, importing barely one-tenth of her annual requirements. There is no doubt that the Soviets played a catalytic role in India's industrial transformation.

A few sectors deserve special attention, which may throw light on the exact contribution of the Soviets to India's industrialisation. The links between the two countries were probably strongest in the realm of defence production. A wide range of weapons systems used by India were either imported or produced locally under Soviet licence. As early as 1961 India selected the fighter aircraft, MIG-21, over the Western alternatives, and the same model is still in service, though

with a great deal of later modifications. Apart from the aircrafts, tanks and other military wares came under the bilateral cooperation agreement. India was not, however, entirely dependent on the USSR, and bought extensively from Britain, France and Sweden. Like the Soviet Union, Russia today remains the main source.

In oil, India was until the early 1960s completely at the mercy of the Seven Sisters, the Western oil companies that had monopolised global production, refining and distribution outside the Soviet block and China. The Soviets entered the Indian scene by offering crude oil at much lower prices than the import prices of the foreign oil companies; the latter promptly refused to process the Soviet crude. It was then that India decided to have her own oil industry with the help of the Soviets in the supply of crude and the technology for the refineries. Gradually, Indian Oil Corporation acquired the expertise, and built its own refineries with marginal imports. In the field of oil exploration the Soviets helped Oil and Natural Gas Commission (ONGC) to explore new oilfields, and 'productionise' them. Over a relatively short period the country became almost self-sufficient in oil technology from exploration to refining, as Vedavalli (1976) has demonstrated. Subsequently, the major oil firms in the public sector like the IOC, ONGC and GAIL have become globally competitive and joined the ranks of Fortune 500. Thanks to their performance, the government has desisted from privatising them so far.

In steel, soon after the agreement with the Soviets on the plant at Bhilai, there followed those with W. Germans and the British on plants at Rorkela and Durgapur respectively, each plant having a capacity of about one million tons. Subsequently, two larger public sector plants at Bokaro and Vishakhapatnam came up; the Soviets were the main consultants as well as equipment suppliers at Bokaro, and they also supplied some key technologies, but not all, for Vishakhapatnam. In the 1980s the scenario changed. Many mini-steel plants were put up by private entrepreneurs with equipment imported from OECD countries. India also emerged as an exporter of steel from both the big mills and the mini-steel plants.

On the public sector steel plants there have been controversies on three points. (a) Did the Soviets (or the Germans or the British) overcharge for the aid supplies? (b) Were the technologies offered sufficiently advanced? (c) Did the collaboration arrangements between India and the three partners encourage or hinder the development of indigenous capability in steel technology?

On the question of comparative price, systematic researches by D'Mello (1988) and Mehrotra (1990, pp.91-103) have established that there is no basis for the complaint of Datar (1972) that the Soviets overcharged. In terms of 'engineering' efficiency, for instance, fuel or pig iron consumed per ton of steel ingot, the parameters of all the plants were broadly similar. This conclusion is reinforced by a recent study by the global consultants, McKinsey (1999); Soviet labour productivity in steel in 1990 was as high as 90 percent of the American level, suggesting that the Soviets were all through frontrunners in this sector. This also disposes of Datar's (1972, p 254) sweeping statement in the concluding part of her book: 'The general experience is that public sector enterprises....have run into difficulties and are characterised by bad planning and implementation.' However, on the issue of indigenisation, neither the Soviets nor the Western donors helped much. D'Mello (1992) has shown that a systematic neglect of local talent was evident from the time the first three plants came up. Clearly, the Soviets were not guided by the spirit pf 'brotherly' assistance, but were making a business deal like any other.

Indeed, not all public sector enterprises in heavy industries were a success. Heavy Engineering Corporation (HEC), Ranchi, and Mining and Allied Machinery Corporation (MAMC), Durgapur, both built with Soviet aid, were sick almost from the beginning and never recovered. The reasons are not dissimilar. The HEC was set up on the premise that new steel plants with a capacity of one

million tons would be built in quick succession, and the equipment would be fabricated at Ranchi. The MAMC was to fulfil a similar role in coal mining. The basic premise went haywire. Investments in steel or in mines were tardy, as the overall growth rate in Indian industry slackened for a decade and half after 1965. Why did it happen is a much larger topic that cannot be broached in this essay. But by no stretch of imagination can one attribute it, even in a small measure, to the deficiencies in the planning or implementation of Indo-Soviet bilateral exchanges.

Let me now turn other aspects of these exchanges, especially to trade. India's export to the USSR expanded much faster than her total export, percentage shares being 13.7 in 1970-71, 18.3 in 1980-81, and almost 29 in 1990-91 (Mehrotra 1990, pp.165-83; RCF 1993-94, pp.202-03). Moreover, about one-half exports to the USSR consisted of manufactures. By contrast, imports were generally smaller, so that India appeared to have a trade surplus. Thanks to the stipulation of the bilateral agreement, India could not use the surplus to finance import from other areas. There is a strong possibility that the surplus paid for the purchases of Soviet arms, since 'defence imports' are excluded from India's published trade statistics.

Was bilateral trade beneficial for India? It is strange that most liberal economists approved the European Payments Union created in the 1950s that facilitated multilateral trade among its members without the use of the hard currency of these days, namely the US dollar. But many in India and abroad objected to the India Soviet bilateral trade arrangement as a departure from free trade with neither side getting the best bargain. In truth, India's export to the West stagnated from 1950 to 1969. India bore the brunt of the Multifibres Arrangement (MFA) in textiles, as she was the world's second largest exporter in the 1950s. Under the MFA each industrial country imposed unilaterally, against the GATT rules, quotas on the quantum and value of export from every developing country. And the USSR, as noted already, was never admitted into the GATT. Thus both countries faced trade discrimination from the West. So long as the two countries chose the basket of traded goods carefully, both should have been gained from the bilateral exchange.

In an earlier essay (Chandra 1977), I surveyed the Indian literature showing that Indian exports to the USSR fetched up to 10 percent more in unit values, while the unit values of India's imports from the USSR were to up to 10 percent less, compared to the unit values of India's export and import trade with the rest of the would. In short looking at India's opportunity costs, trade with the USSR was as desirable as that with the rest of the world. My own calculations focused on Soviet trade data and examined the opportunity cost for the USSR of its trade with those developing countries with which it had bilateral trade agreements. The unit values in trade with this group of countries were compared with those prevailing in Soviet trade with countries where transactions were in hard currencies. I concluded that the Soviets generally paid the same price for its imports from the two sets of countries, and obtained the same since for most its exports, excepting machinery. For machinery, the Soviets charged significantly higher prices from developing country partners than it could from hard currency buyers. Thus although both sides gained, the Soviets had a greater share of the total gain from trade. Curiously from the late 1970s, India imported very little of machinery from the Soviet Union and purchased mainly raw materials minerals and fuel.

A related issue is that of switch trade. The USSR bought, for instance, large quantities of high quality Indian tea. It was often alleged that a part of it was diverted to West European markets, thereby reducing India's export to those countries that would have fetched dollars. The available data are meagre, and the possibility of switch trade cannot be ruled out. However, considering the commodity structure of India's export, the quantum of switch trade as a proportion of total export to the USSR could not have been large (Chandra 1977; Mehrotra 1990, pp.43-46).

There were other spheres in economic policy where the Soviet influence was far from negligible. First and foremost, India had an industrial licensing system. No large industry could come up without authorisation from the central government. Once the output target was fixed by the Five Year Plan, applications were invited from potential private entrepreneurs and a selection was made according to a number of criteria examined in depth by the Dutt Committee (1969) The basic idea behind licensing was that India was capital-poor and foreign exchange (needed for importing equipment) was scarcer still; hence one cannot afford to have excessive capacities in some sectors and too little in others. Critics argued that licensing enable the incumbents to derive rent from their license, since it throttled competition; various means were adopted by entrepreneurs to pre-empt capacities and distort competition to a greater extent. There was some truth in these allegations, but the overall scenario was very different. Over time industry-wise concentration ratios (the shares of top 3 or 5 firms in the total output) tended to fall, barring some exceptions. One of the main licensing criteria was a reduction in concentration. Moreover a large number of industrial products were 'reserved' for the small sector; while an existing large unit in such a product line was allowed to carry on business, its expansion was restricted. As a result, by the 1980s there were innumerable industries where the concentration ratio in India was far lower than in OECD countries.

As in the USSR and Japan, there was 'financial repression' in India. Investment funds for large public and private sector borrowers were available only if the relevant production scheme was approved by the state; on such schemes the institutions charged very low rates of interest compared to those demanded by private moneylenders in the 'unorganised' credit markets.

Further, the Indian government had a pricing policy that did not always reflect the relative scarcities of the market, domestic or international. Prices of most foods, steel and coal were pegged at levels well below the world prices. This appeared to be a conscious emulation of the Soviet practice of cheap food and low prices for producer goods in general.

By the end of the 1970s, India had developed an extremely diversified industrial structure and yet her per capita income remained abysmally low, and poverty barely, if at all, diminished. The government decided to borrow abroad on a massive scale and threw to the wind the fiscal prudence of earlier decades in order to accelerate GDP growth. In a pattern all-too-familiar from the experience of Latin America, the government was ultimately compelled in 1991 to approach the IMF and avoid default on external debts. Since then the quest for self-reliant development has been abandoned.

ENDNOTES

Endnote 1. By using the less controversial elements of Soviet statistics, leading Western scholars like Jasny and Bergson confirmed that economic growth was indeed quite rapid in the 1930s, though much lower than the official claims. Using Soviet concepts of national income, Jasny estimated the figures for 1928,1937 and 1940 at constant 1926-27 prices. Bergson followed the same concepts but used 1928 prices for the first two benchmarks years, and 1937 prices for the last two. The annual growth rates in national income are shown below along with Soviet official calculations at 1926-27 roubles.

	1928-37	1937-40
Jasny A*	7.47	6.0
Jasny B*	9.0	n.a.
Bergson **	11.9	n.a.
Bergson ***	4.4	5.1
Soviet official*	16.7	10.0

^{* 1926-27} roubles ** 1928 roubles *** 1937 roubles

Note: Jasny A is estimated by industrial branches, while Jasny B is estimated by the expenditure method. Bergson used the expenditure method.

Source: Bergson 1961, tables 43 and 47.

In an economy undergoing rapid structural changes, the choice of the base year has a decisive impact on the growth rate; it is vividly illustrated by the enormous gap between the two Bergson figures for 1928-37. In such cases Fisher's 'ideal index' is the geometric mean of the two rates of growth, which comes to 8.1 percent; it is a shade lower than Jasny's, but less than one-half of the Soviet official estimate. These rates of Bergson or Jasny covering almost a decade is very high by international standards, not only of capitalist countries over more than two centuries, but also by those of 'miracle economies' in East Asia like Japan, South Korea and Taiwan Province of China in the post-war decades, and China after 1978.

Bergson's methodology was followed by the US Central Intelligence Agency (CIA) for estimating Soviet economic growth in post-war years. By the 1980s the CIA estimates of Soviet economic growth, though somewhat lower than the Soviet official figures, were widely criticised in the West for being too high.

In Gorbachev's USSR, scepticism about official data, especially in the recent past, was widespread. Khanin (1991) from Novosibirsk was assigned by the Party to look at the question dispassionately, covering all the years since the 1920s. The findings were startling. His estimate of industrial growth in 1961-80 was only 4.6 percent p.a. as against the official 7.2 percent. As for 1928-32, while the official source claimed a doubling of national income, Khanin found an actual decline by 15-20 percent; this was mainly due to the sharp fall in agricultural production that accounted for a major part of national income in 1928. But Khanin also observed an exceptionally rapid rise in 1932-37, and a more subdued one in 1937-40. Still, the whole period of 1928-40 was one of rapid growth, when the economy underwent a major structural shift towards heavy and capital goods industries, and there was a perceptible increase in the Soviet share of the world economy. Unfortunately, Khanin did not present national income estimates in a lucid manner.

In 1928-40 industrial production, according to him, went up by 10.3 percent per annum, after allowing for a much higher inflation rate in industrial wholesale prices (20.2 percent per year) than in the official index. But on 'national income produced', the current price figures deflated by Khanin's alternative index of wholesale prices (of industrial and non-industrial goods and services), yield an annual growth rate of just 3.9 percent in 1928-40 (Khanin 1991, pp.205-06). This would seem to contradict his own view of a significant rise in the Soviet share of world income.

Khanin's alternative price indices are far above the Soviet official indices, and also of those of Jasny and Bergson *et al*. While Khanin put the deflator for industry at 8.4 for industry in 1928-40, that of Moorsteen for machinery during 1928-37 was a mere 1.43, and that of Bergson *et al*. (at 1937 weights) for 'basic industrial products' was 2.22 only (Bergson 1961 table 44). As the

deflator for national income and gross social product for the same period, Khanin puts the wholesale price index with 1928=1.0 at 9.1 for 1940; since prices in the kolkhoz market rose even faster, the 'true' index should have been still higher. On consumer prices, Bergson cites Chapman's 1937 index at 8.7 (1928 weights) or 6.0 (1937 weights); combining it with that for 'basic industrial products', of Bergson *et al.*, the inflation index should be considerably lower than Khanin's. Since he has not presented the data base for the estimates of the price deflator, Khanin's figures on this score are suspect. For the 1930s the estimates of Bergson and Jasny remain the most trustworthy.

Endnote 2. Bergson did not explain how he obtained the ratio for the USSR. According to Vainshtein's (1969, table 6, p. 98) calculation, national income 'produced' at current prices amounted (in billion roubles) to 26.4, 30.1, 38.3 and 47.8 in the calendar years, 1928 to 1931 respectively. From MOFT (1960, pp.94,121) one finds the export values (in billion roubles) at 3.2 in 1929, 3.6 in 1930 and 2.8 in 1931. Combining the two estimates, the percentage of export to national income comes to 10.7 in 1929, 9.4 in 1930 and 5.9 in 1931. On the other hand, Davies (1996, table 13(a), p.534) used another official source and put export values in billion roubles at 'world prices' at 0.92, in 1929, 1.04 in 1930 and 0.81 in 1931. The huge discrepancy in the two sets of data on export arises from the well known fact that the *valyuta* rouble in the latter case is very different from the rouble used for estimating domestic production, consumption, etc. In my view, there is no unique measure of export/national income in Soviet-type economies and one should indicate a range of values for export/national income ratios. In that case it is by no means obvious that the USSR during her First Plan was more self-sufficient than the USA.

Endnote 3. The size of Soviet aid was quite modest. The official figure up to 1957 was 5.3 billion yuan, not all of which can be classified as 'economic aid. The range for the latter in different Western estimates for 1950-57 was 1.0 to 1.7 billion yuan. (Cheng 1964, p.82; Eckstein 1966, p.154; Li 1959, p.171) Hollister (1964, p.42) reckoned that the Soviet contribution was a mere 1.5-3.0 percent of total investment in China's modern industries over the period. China obtained two further loans totalling 1.5 billion yuan in 1960-61. But Eckstein (1966, p.170) assigned a much higher significance to Soviet assistance since it covered as much as one-quarter of China's imports in the most difficult years, 1950-55. In the absence of Soviet aid China's national income growth rate, it has been estimated, would have been lower by 2-3 percent per annum. (Eckstein 1966, p.124; Dernberg 1968, p.235) But such macroeconomic exercises, relying exclusively on financial flows, are not meaningful, as argued below.

It is important to look at some physical magnitudes. Aid covered 156 projects up to 1957, and 291 till February 1959. During the First Plan years, 1953-57, Soviet-aided plants contributed 92 percent of the *incremental* output in iron industry; the percentages for other sectors were 83 in steel, 23 in coal, 45 in power, etc. As much as one-half of state investments over these years went into Soviet-aided plants. On the manpower side, 11,000 Soviet experts went to China for varying periods till early 1960, while 38,000 Chinese were received in the USSR, including about 7,000 who received university education (Cheng 1964, p.27-43).

After the Soviet specialists left China in the wake of a political rift and took away many blueprints, it took China many years to complete the unfinished projects. If the Soviets had not come at all, and access to Western technology were limited either by China's dollar earnings or by a political embargo, it is very doubtful if China could set up even a fraction of the modern industries that she actually did during the Maoist period.

ENDNOTE 4. Even before the World War II the Japanese government made energetic interventions in the economy and much of it was extra-legal in character. However, if one takes

the share of government expenditure in national income, Japan's was one of the lowest among industrial countries in 1967; the percentage stood at 20.0 in Japan, 31.4 in the USA, 39.0-40.9 in France, W. Germany and the UK. And yet over the half-century, 1889-1939, when the investment rate was as high as 14.7 percent of the national income, the government accounted for more than one half of the total, and concentrated on capital-intensive projects. (Allen 1980, pp97, 107)

In the interwar years, the *zaibatsus* were 'an instrument used by the government for carrying out its policy'. By creating a new banking system (at the end of the 19th century) the government strengthened its grip on the economy, by virtually 'controlling and directing the private sector of the economy.'

References

Allen.G.C. (1980), *Japan's Economic Policy*, Macmillan, London.

Anon. (2002), 'How Did It Get into This Mess? Japan Inc Heads for Chapter 11', in 'A Survey of Japan', pp.5-6, *The Economist*, April 20.

Bergson, A. (1961), *The Real National Income of Soviet Russia since 1928*, Harvard University Press, Cambridge.

Bergson, A. (1964), *The Economics of Soviet Planning*, Yale University Press, New Haven and London.

Bischof, G. (1989), 'Historical Introduction', in C. P. Kindleberger, *The German Economy, 1945-47: Charles P. Kindleberger's Letter from the Field*, Meckler, Westport and London.

Bombay Plan, *Memorandum Outlining a Plan of Economic Development of India*, Part II, Penguins, London, 1945.

Bukharin, N. I. (1928), 'Zametki ekonomista', in his *Izbrannye proizvedeniya*, Moscow, 1988.

Cairncross, A. (1996), *Economic Ideas and Government Policy: Contributions to Contemporary Economic History*, Routledge London.

Chakravarty, S. (1987), Development Planning: The Indian Experience, Clarendon Press, Oxford.

Chandra, N.K. (1969), 'Aspects of Chinese Industrialisation', (mimeo), presented at the Seminar on India's Industrialisation, Indian Statistical Institute, Calcutta 27 January –1 February.

--- (1977), "The USSR and the Third World: Unequal Distribution of Gains", *Economic and Political Weekly*, 10 (5). Reprinted in the author's *The Retarded Economies: Foreign Domination and Class Relations in India and Other Emerging Nations*, Sameeksha Trust & Oxford University Press, Bombay, 1988.

Chapman, J.G. (1963), *Real Wages in Soviet Russia Since 1928*, Harvard University Press, Cambridge, Mass.

Cheng, C.Y. (1964) *Economic Relations Between Peking and Moscow: 1949-63*, Praeger, New York.

Costick, M.M. (1987), 'Military Aspects of Technology Transfer', in H. J.Veen (ed.), From Brezhnev to Gorbachev: Domestic Affairs and Foreign Policy, Berg, Leamington Spa.

Datar, A.L. (1972), *India's Economic Relations With the USSR and Easter Europe, 1953 to 1969*, Cambridge University Press, Cambridge.

Davies, R.W. (1996), Crisis and Progress in the Soviet Economy, 1931-1933, Macmillan, London.

De Long, J. B. and B. Eichengreen (1993), 'The Marshall Plan: History's Most Successful Structural Adjustment Programme', in R. Dornbusch, W. Nölling and R. Layard (eds), *Postwar Economic Reconstruction and Lessons for the East Today*, the MIT Press, Cambridge, Mass.

Dernberg, R.F. (1968), 'Prices, the Exchange Rate and Economic Efficiency in the Foreign Trade of China', in A. A. Brown and E. Neuberger (eds), *International Trade and Central Planning*, University of California Press, Berkeley.

D'Mello, B. (1988), 'Soviet Collaboration in Indian Steel Industry, 1954-84', *Economic and Political Weekly*, vol. 23/10, 5 March.

D'Mello, B. (1992), 'Indigenous Technological Efforts in Indian Steel Industry', Indian Institute of Management Calcutta, Working Paper No. WPS-170/92, January.

Domar, E.D. (1957), *Essays in the Theory of Economic Growth*, Oxford University Press, New York. It also contains an English translation of Fel'dman's essay of 1931.

Dutt Committee (1969), *Main Report*, Industrial Licensing Policy Inquiry Committee, Government of India, Delhi.

Dutt, R.C. (1902), *The Economic History of India*, vols I & II, Routledge & Kegan Paul. Reprinted by Publications Division, Government of India, Delhi, 1963.

Eckstein, A (1966), Communist China's Economic Growth and Foreign Trade: Implications for US Policy, McGraw-Hill, New York.

Engels, F. (1872), "The Housing Question", in K. Marx and F. Engels, *Selected Works*, vol. I, Foreign Languages Publishing House, Moscow, 1951.

GATT (1969), Basic Instruments and Selected Documents. Volume IV. Text of the General Agreement 1969, General Agreement on Tariffs and Trade, Geneva.

Galbraith, J.K. (1967), The New Industrial State, Oxford University Press, Calcutta.

Giersch, H., K.H. Pacqué and H. Schumieding (1993), 'Openness, Wage Restraint and Macroeconomic Stability: West Germany's Road to Prosperity 1948-1959', in R. Dornbusch, W. Nölling and R. Layard (eds), *Postwar Economic Reconstruction and Lessons for the East Today*, the MIT Press, Cambridge, Mass.

Hardach, G. "The Marshall Plan in Germany, 1948-1952", *The Journal of European Economic History*, 1987, Winter, vol.16/3.

Harrod, R.F. (1960), *Towards a Dynamic Economics: Some Recent Developments of Economic Theory and Their Application to Policy*, Macmillan, London. It also contains the author's essay, "A Soviet Model of Growth", based on G. A. Fel'dman, "K teorii tempov rosta narodnogo dokhoda", *Planovoe khoziaistvo*, 1931, November.

Hayami, Y. (1998), "Toward an East Asia Model of Economic Development", in Y. Hayami and M. Aoki, eds., *The Institutional Foundations of East Asian Economic Development*, Macmillan, London.

Hisatake, M. (1998), "Ingredients Relating to the Economic Growth of Japan", in Y. Hayami and M. Aoki, eds., *The Institutional Foundations of East Asian Economic Development*, Macmillan, London.

Hogan, M. J. (1984), 'The European Integration and the Marshall Plan', in S. Hoffman and C. Maier (eds), *The Marshall Plan: A Retrospective*, Westview Press, Boulder and London.

Hogan, M. J. (1987), *The Marshall Plan: America, Britain and the Reconstruction of Western Europe, 1947-1952*, Cambridge University Press, Cambridge.

Hollister, W.W. (1964), 'Capital Formation in Communist China', in Cho-Ming Li (ed), *Industrial Development in Communist China*, Praeger, New York.

Holzman, F.D. (1974), *Foreign Trade under Central Planning*, Harvard University Press, Cambridge MA.

Johnson C. (1982), MITI and the Japanese Miracle: The Growth of Industrial Policy, Stanford University Press, Stanford.

Khanin, G.I. (1991), Dinamika ekonomicheskogo razvitiya SSSR, Nauka, Novosibirk...

Kindleberger, C. P (1987), Marshall Plan Days, Allen and Unwin, Boston.

Komiya, R. (1988), 'Overview', in Komiya et al.

Komiya, R., M. Okuno and K. Suzumura (eds) (1988), *Industrial Policy of Japan*, Academic Press, Tokyo.

Kornai, J. (1992), *The Socialist System: The Political Economy of Communism*, Princeton University Press, Princenton N.J.

Krugman, P. (1991), 'Introduction', in P. Krugman, *Trade with Japan: Has the Door Opened Wider?*, The University of Chicago Press, Chicago.

Krugman, P.R. (1994), 'The Myth of Asia's Miracle', Foreign Affairs, vol.73, November-December.

Lawrence, R. Z. (1991), 'How Open Is Japan?', in P. Krugman, *Trade with Japan: Has the Door Opened Wider?*, The University of Chicago Press, Chicago.

Li, Choh-Ming (1959), *Economic Development of Communist China*, University of California Press, Berkeley.

Lockwood, W.W. (1965), *The State and Economic Enterprise in Japan*, Princeton University Press, Princeton, NJ.

Mahalanobis, P.C. (1953-A) Studies Relating to Planning for National Development'; reprinted in Mahalanobis (1985).

- -- (1953-B) Some Observations on the Process of Growth of National Income', *Sankhya*; reprinted in Mahalanobis (1985).
- -- (1955), The Approach of Operational Research to Planning in India', *Sankhya*; reprinted in Mahalanobis (1985).
- -- (1985), *Papers on Planning*, Statistical Publishing House, Calcutta.

Marx, K, (1848), 'Speech on the Question of Free Trade', in K. Marx and F. Engels, *Collected Works*, vol. 6, Progress Publishers, Moscow, 1976.

Mehrotra, S. (1990), *India and the Soviet Union: Trade and Technology Transfer*, Cambridge University Press, Cambridge; reprinted by Oxford University Press, Bombay, 1991.

MGI (1999), Unlocking Economic Growth in Russia, McKinsey Global Institute, October, in http://www.mckinsey.com.

Mikoyan, A. (1944), 'Report from Mikoyan to Stalin and Molotov, May 21,1944, on Lend-Lease Shipments from the United States during the period October 1, 1941, to May 1, 1944', in Open Document, Woodrow Wilson International Centre for Scholars, Cold War History Project, available on the website, http://cwihp.si.edu/>.

Mitchell, B.R. (1975), European Historical Statistics 1750-1970, Macmillan, London.

MOFT (1960), *Vneshnaya torgovlya SSSR za 1918-1940 gg.*, Ministry of Foreign Trade, Moscow.

Morishima M. (1982), Why Has Japan 'Succeeded'? Western Technology and the Japanese Ethos, Cambridge University Press, Cambridge.

Naoroji D. (1877), *Poverty and Un-British Rule in India*, London. Reprinted by Commonwealth Publishers, New Delhi, 1988.

Narinsky, M.N. (2001?), "The Soviet Union and the Marshall Plan", and S. D. Parrish, "The Turn Toward Confrontation: The Soviet Reaction to the Marshall Plan, 1947", Woodrow Wilson International Centre for Scholars, in http:cwihp.si.edu. The website does not mention the date of publication, which I have reconstructed from the list of references.

Nove, A.(1986), The Soviet Economic System, 3rd edition, Allen and Unwin, Boston.

Novozhilov, V. (1926), 'Nedostatok tavarov', Vestnik finansov, no 2.

NPC, Report of the National Planning Committee 1938: Chairman: Jawaharlal Nehru,: reprinted by the National Institute of Applied Political Research, New Delhi.

Ojima Y. (1972), "Basic Philosophy and Objectives of Japanese Industrial Policy", in *The Industrial Policy of Japan*, Organization for Economic Cooperation and Development, Paris.

Okita, S. (1980), *The Developing Economies and Japan: Lesson in Growth*, University of Tokyo Press, Tokyo.

Parrish, S. D. (2001?), "The Turn Toward Confrontation: The Soviet Reaction to the Marshall Plan, 1947", Woodrow Wilson International Centre for Scholars, in http://wihp.si.edu.

Pollock, E. (2001?), 'Conversations with Stalin on Questions of Political Economy', Woodrow Wilson International Centre for Scholars, Cold War International History Project, Working Paper No .33, in http://cwihp.si.edu/.

RCF (1993-94), Report on Currency and Finance 1993-94, Reserve Bank of India, Bombay.

Robinson, J. (1947), "Beggar-My-Neighbour Remedies for Unemployment", in her *Essays on the Theory of Employment*, Basil Blackwell, Oxford.

Stern, S. (1997), "Marshall Plan 1947-1997: A German View", in http://www.germany-info/org.

Strumilin, S.G. (1959), "Semiletnyi plan na 1959-65 gg.", in his *Ocherki sotsialisticheskoi ekonomiki SSSR* (1929-1959 gg.), (Moscow: Gosudarstvennoe izdatel'stvo politicheskoi literatury, 1959).

T. Tsuruta, "The Rapid Growth Era", in Komiya et al. eds., Industrial Policy of Japan, 1988.

US (1966), *Statistical Abstract of the United States 1966*, US Department of Commerce, Bureau of the Census, Washington, D.C.

Vainshtein, A. (1969), Narodnyi dokhod Rossii i SSSR: Tstoriya. Metodologiya. Ischisleniya. Dinamika, Nauka, Moscow.

Vedavalli R. (1976), Private Foreign Investment and Economic Development: A Case Study of Petroleum in India, Cambridge University Press.

Zaleski, E. (1962), Planification de la croissance et fluctuations en URSS. Tome 1. 1918-1932, SEDES Paris.