

# The Recovery of India: Economic Growth in the Nehru Era

PULAPRE BALAKRISHNAN

This paper investigates the relationship between the policy regime and growth during 1950–64, termed here “the Nehru era”. While there exist valuable early appraisals of the period, access to new data and fresh information allows for a longer and more comparative view of the outcome. We find overwhelming evidence not only of resurgent growth, but also of a lasting transformation of a stagnant colonial enclave into an economy capable of sustained growth. It is useful to recognise the economic policy of this period as distinct, not only from what preceded it but also from what came after, for it facilitates an understanding of the political conditions needed for economic interventions that are growth inducing. The paper also addresses some lingering perceptions of policy of the time, notably its impact on agriculture and the governance of the public enterprises.

**T**his paper investigates the relationship between the policy regime and economic growth in India over the period 1950–64 which I term “the Nehru era”. Recall that this spans the interval between the formation of the Planning Commission and the death in office of Jawaharlal Nehru. While the choice of the beginning may be easily understood, or in the context even accepted, as marking the initiation of planning for growth, the choice of the ending needs a justification at least in passing. The justification is that the economic policy of the Nehru era had a certain integrity to it, a characteristic that needs to be understood far better than is even attempted in this paper. The use of the term “integrity” here is not normative in its intent. It is meant to describe economic policymaking that is relatively free of narrow political considerations, when the goals adopted are independent of economic vested interests and the political imperatives of Westminster-style democracy the hallmark of which is party politics. Thus the distinctiveness to the politics and economics of the Nehru era is that almost never since has the leadership of India been able to maintain as much autonomy from sectional interests, economic and political. In this sense, the economic policy-regime of the time conveys a certain integrity with respect to the choices made, if not always in their implementation. Unlike what was to come after the Nehru era when, within the same overall framework of state-directedness, much of the intervention was solely aimed at maintaining<sup>1</sup> the political power of a ruling dispensation.

## 1 Introduction

This paper is prompted by two developments. In the public sphere there is today an unusual degree of interest in India’s recent past, especially the Nehru era. Much of this is negative in its judgment. Perhaps buoyed by the extraordinary current rates of growth of the Indian economy, there is a certain despondency induced by a sense of an allegedly “wasted past” [Das 2000; Srinivasan 2004]. Indeed some<sup>2</sup> have gone on to lay the blame squarely on Jawaharlal Nehru and the policies adopted under his leadership. These are serious allegations and need to be addressed.

A positive charge for the current project comes from a more academic direction. Researchers on economic growth in India, among whom I count myself, have long been interested in growth transitions. Apparently finding somewhat narrow the focus on the last two decades or so of the 20th century as the site for the sighting of the hand on the throttle, Hatekar and Dongre (2005) have cast their net wider, taking on the entire 20th century when they search for a shift in the growth of the gross domestic product

Pulapre Balakrishnan ([pbkrishnan@yahoo.com](mailto:pbkrishnan@yahoo.com)) is senior fellow at the Nehru Memorial Museum and Library, New Delhi.

(GDP). It may come as a surprise to some that the most significant break of the century is now found to be centred around 1950. Then it is natural to enquire what it is about the mid-20th century that marks it out as a watershed as far as economic growth in India is concerned. As we know that post-colonial economic policy had aimed to make a break from the immediate past, one is led to look at the relationship between public policy and economic growth in the Nehru era. This may be expected to serve two purposes. First, as the period appears to mark a growth transition, we may get an idea of what factors drive growth. Secondly, as it was also a period of high state-directedness, it enables us to assess how, if at all, such intervention can facilitate growth and how it can hold it back. In the context of the current global debate [Rodrik 2006] on the drivers of growth the exercise may even be expected to have an audience beyond those interested in the recent history of India.

## 2 Nehru-Mahalanobis Strategy

Though narrowly identified as the model for the Second Five-Year Plan, nothing is more iconic of the economics of the Nehru era and representative of the means adopted to pursue its goals than the "Mahalanobis model". The famed model had first appeared in an essay<sup>3</sup> on growth by the polymath. The model was intended to provide the analytical foundation for the project of raising the level of income via industrialisation already deliberated upon in the National Planning Committee of the Congress which was chaired by Nehru at the request of Subhash Chandra Bose in his capacity as the short-lived party president. For this reason it is often referred to as the Nehru-Mahalanobis strategy.<sup>4</sup> This was a model to serve the end of rapidly raising the level of income through accelerating growth, as raising the level of income was considered the means to eliminating poverty.

Mahalanobis had conceived of an economy with two sectors, each producing capital and consumer goods, respectively. Being the model of a closed economy without government, their outputs would thus sum up to GDP or national income. The capital good enters into the production of the consumer good and of itself. In an interesting departure from the economic theory of the time, capital was not subjected to diminishing returns. This implies that a greater initial allocation of investment to the production of capital goods would leave the economy with a higher stock of the same in the future. With these capital goods being the physical counterpart of investment, a higher initial allocation to capital goods production enables a higher investment in the future. Assuming that all thus feasible investment is undertaken, a higher level of investment – in the context no more than "putting (all of) the capital good to work" – is actualised. Now future-dated output is higher than what would have been the case were the initial allocation skewed more towards the production of consumer goods. Higher too would be the rate of growth of the economy in relation to the starting point. Now the planner's problem is to arrive at the share of investment to be allocated to the capital goods sector given the target level of income. I have here provided a bare-bones description of the model and its logic. However, it is important when trying to understand the economic policy of the 1950s to recognise that, even for its architect, the

model was meant only as a guide to a strategy for industrialisation. Therefore, it is equally important to understand<sup>5</sup> the practical aspects of the strategy as manifested in what in the language of the day was referred to as "the plan frame".

### The Heavy Goods Sector

At the heart of the Nehru-Mahalanobis strategy was a fast growing "heavy goods" sector. What are these heavy goods? They have been aptly described as "machine-building complexes with a large capacity for the manufacture of machinery to produce steel, chemicals, fertiliser, electricity, transport equipment, etc" [Joshi 1979]. The means of bringing about a fast-growing heavy-goods sector was to invest disproportionately in these machine-building complexes. It was implicitly recognised that as the sector was characterised by long gestation lags in the production of output the rate of growth inherent in the Mahalanobis model would be lower in the short-run than that which would result from a strategy of investing disproportionately in consumer goods production. However, the long-run rate of growth resulting from the Mahalanobis strategy of shifting the investment allocation towards heavy goods would be higher,<sup>6</sup> even for the consumer goods sector, as it enhances productive capacity across the economy.

In a sense the underlying idea of the model is a kind of accounting. It estimates growth prospects based on current investment allocation, and chooses the allocation that maximises the rate of growth for any given investment outlay. It is not entirely value-free of course, in that it implicitly adopts a lower social rate of discount than could have been the case. It has been castigated as having been based on ideology.<sup>7</sup> This criticism begins to make sense only when one is told that the model had been inspired by the Feldman model from the Soviet planning literature, even though Mahalanobis has stated<sup>8</sup> that he was not aware of the work of Feldman at the time of formulation of his own model. Presumably, the criticism justifies itself by identifying any choice based on the Soviet experience as ideological. However, in the light of the quite spectacular expansion demonstrated by the former Soviet Union of that time, such a criticism would be ideological of itself, even though into the 21st century we were to have the hindsight to deduce that whatever was happening there was not sustainable. In the 1950s, however, newly independent countries with ambition could hardly have been faulted for aspiring to what the Soviets had achieved, namely rapid industrialisation and the consequent increase in income within a remarkably quick time. It is not as if the entirely compromised politics of the Stalin regime, even without the gulag and the genocides, was overlooked. Only that Nehru was clear that India would avoid them at the cost of aiming at a lower rate of growth. It was clear that neither forced collectivisation as a route to raising the agricultural rate of growth or the suspension of democracy as a way of quelling dissent on the chosen strategy were even conceivable to the Indian leadership. So a relevant criticism of the strategy would only be of its economic logic and what it leaves out rather than of its provenance. Here the comment by Desai (2007) that Mahalanobis' model has in it no unemployment, inflation or balance of payments is far more to the point. But once again, it is

important to separate out the model from the strategy, and most of these except perhaps inflation were addressed by Mahalanobis in his writings on the Second Plan.

### **Supply-side Model**

There was, however, a flaw in the model that is indeed related to where it had originated but this is far from having been constituted by ideology. As more or less an accounting scheme the Mahalanobis model was exclusively a supply-side model. There was no recognition of a possible demand constraint to capital accumulation and little scope for slackening demand growth to subvert the growth process. A model based on the purely physical relationship between inputs and outputs made sense in the Soviet Union, the classical "command economy" where investment can be decreed by planners and enforced by commissars. Not so in India with a ubiquitous private sector that invests only in response to growing profits or its anticipation. Demand is now the lubricant. In the command economy the surplus could be constantly reinvested irrespective of market signals, thus maintaining a more or less constant growth dynamic, at least for some time. In the language of "growth economics" the savings are always invested, which since Keynes we recognise as a fiction at least for a market economy which India mostly was then. The only constraint to a seemingly endless growth in a command economy would be a declining investible surplus, which of course could also arise for entirely non-economic reasons such as political disaffection.

Something of this sort perhaps describes the decline and fall of the Soviet economy after about five decades of rapid growth. However, even as late as the 1960s there was no inkling of any impending collapse. But again, it is important to draw the distinction between model and plan as it were, and the plan did explicitly recognise the role of demand as I shall demonstrate below.

While the hubris that the state could direct investment indefinitely and at will within the economy appears to have carried away the planners of India, the criticism often encountered that they failed to recognise the importance of agriculture is merely ill-informed judgment. I intend to establish this. This is not so much as to rehabilitate the planners as much as to establish that they may not have succeeded as much as they would have liked, thus throwing some light on what should be done in India today. This indeed is the one of the uses of history for the economist. But before I turn to the role envisaged for agriculture within the Nehru-Mahalanobis strategy, I must consider what in the mind of some constituted a plan for an alternative development for India and a serious challenge to the Mahalanobis plan. This was the plan presented by C N Vakil and P R Brahmananda of the Bombay school.

### **Wage Goods**

The centre-piece of the Vakil-Brahmananda plan was a "wage-goods sector". An entrée into what had gone on in the minds of these two economists is made when we appreciate the reason

*Call for Papers*

**International Conference**

**Population, Health and Human Resources in India's Development**

Institute of Economic Growth, Delhi

24-25 March, 2008

The Institute of Economic Growth, Delhi is organizing a two-day International Conference on "Population, Health and Human Resources in India's Development" as part of its Golden Jubilee Celebrations. The proposed International Conference aims to highlight policy and programme implications of population and health transition towards social and economic development processes in India. The Conference will focus on the following sub-themes:

1. **National Rural Health Mission:** The potential impact of the Mission on health and family welfare needs of vulnerable sections, especially children, women and other weaker sections of the society.
2. **Population and Health Policy Evolution:** Evolution and paradigm shifts in India's population policies since Independence and their impact on population and health transition, and social and economic development processes in India.
3. **Current Population and Health Scenario in India:** Regional, social, economic and cultural dimensions of the prevailing population and health scenario in India and their development implications.
4. **Future Population Prospects in India and their Development Implications:** Regional dimensions, demographic dividend, human resource development and implications for social and economic development.
5. **Challenges in Population and Health:** Gender discrimination; age structure transition; RTIs/STDs; HIV/AIDS; fertility, mortality and morbidity transition; population, health and human rights; migration and urbanization.

Research papers are invited for presentation, discussions and deliberations during the Conference. Abstract of the research paper not exceeding 300 words may be submitted to Professor S. C. Gulati, Population Research Centre, latest by **30th November 2007**. Full papers, not exceeding 6000 words (excluding tables and graphs) may be submitted by **15th January 2008**.

The Institute would reimburse travel to and fro Delhi (up to a maximum of II AC rail fare by shortest route) and provide free boarding and lodging to the participants whose paper is accepted for presentation.

For further details, please contact,      Professor S. C. Gulati  
(Ph. 91-11-27667101; email: [Gulati@iegindia.org](mailto:Gulati@iegindia.org))

Professor Kanchan Chopra,  
Director  
Institute of Economic Growth, Delhi.

for their scepticism regarding the relevance of the Keynesian problematic<sup>9</sup> for India. As recaptured by Brahmananda in an interview more recently [see ‘Brahmananda’ in Balasubramanyan 2001] Keynesian unemployment assumes “excess capacity” including “stocks of wage goods and other circulating capital” while in India “... unemployment of labour exists because supply of labour wage goods to sustain labour as a cooperator factor with land and labour is inadequate.” Note the self-consciously classical terminology, for when Brahmananda is pressed to name the wage goods he chooses “corn and clothing”. He had gone on to list 14 items but we may rest with “foodgrains and textiles”. Essentially for Vakil and Brahmananda the multiplier mechanism cannot work in the absence of wage goods, and this led them to the proposition that employment cannot expand without wage goods. “So you see, for these reasons, agricultural development becomes fundamental. It has to be accorded priority independent of whatever you posit for industry.” And again, an observation quite relevant for India 50 years later, “The service and industry sectors cannot absorb more than a small proportion of the labour force. The service sector is (more?) important, but services can be expanded only with growing wage goods surpluses.”<sup>10</sup>

### **Appraisal of Vakil-Brahmananda Plan**

So what is the proper appraisal of the Vakil-Brahmananda plan? There can be no doubt that in focusing on unemployment they had honed in on a key reality of India in the 1950s. Also, the centrality accorded to agriculture could not have been faulted. However, the authors of this plan appear to have underestimated the importance of capital goods for raising agricultural production. There is the suggestion [*Ibid*] that these could have been imported in return for the wage goods, but if wage goods were scarce enough to limit the expansion of employment in the first place it is not clear how easily a sufficient export surplus could have been generated. This question precedes any proclivity to “export pessimism”.

Next there is the question of competitiveness to be reckoned with. The much vaunted sterling balances had been built up during the war when India had supplied the Allied effort in a virtual seller’s world market. These goods – being minor armaments, clothing and equipment – would no longer have been demanded to anything like the same extent after the war. As for the agricultural sector, the primary source of wage goods, it had been unable to supply even the domestic population adequately (evidence on this is to follow) during the first 50 years of the 20th century. This apart there was also the question of the very availability of capital goods to be purchased in the world market. This is convincingly argued by Chibber:

In the years after the war, capital goods in the form of plant and machinery were extremely scarce; not only did India not have any capital goods industry to speak of, but imports from the developed world were not on the near horizon, as European powers embarked on the reconstruction of their own economies and because the United States did not regard south Asia as a pivotal region. The problem with plant and machinery was mirrored by the problems with raw materials and intermediate goods, especially since, after partition, much of the Indian cotton and raw jute was now in Pakistan. In both these cases, businesses constantly called for the assistance of the state in securing the requisite import of goods [Chibber 2003:147].

Far from being a tangential comment on the credibility of the Vakil-Brahmananda plan, recognition of Indian export and import possibilities in the late 1940s is suggestive of the prospects for an Indian economic development through trade based on comparative advantage.

But the egregious absence in the wage-goods-led model is the economist’s “dues ex machine”, the “engine of growth”. Some of this is evident in Brahmananda’s assertion that, “If the system is expanding and you have a supply of food, people could stay in their homes and produce wage goods” [Balasubramanyan *op cit*]. This agreeable picture begs the source of demand for the expansion in the macro economy. With hindsight, we can see that the Vakil-Brahmananda model was classical more than just in its terminology, with employment determined in the labour market. There is no autonomous investment function, which would imply that the demand for labour as a derived demand gets determined in the goods market – independent of its price – and, in the context of their framework, independent of whether there is an adequate supply of wage goods. Of course, prices could still rise in the absence of wage goods and this would hold back the multiplier mechanism. However, as the unemployed are surviving as it is, it is possible to exaggerate<sup>11</sup> the degree to which the expansion in output is curtailed following the expansion in aggregate demand.

It is possible to espouse a strange symmetry between the Mahalanobis and the wage-goods models with the former downplaying the importance of capital goods and the latter downplaying the importance of consumer goods! In fact, in the Mahalanobis two-sector model *per se* the absence of consumer goods cannot constrain output growth. However, once the overall Mahalanobis strategy is taken into account, we find that its oversight of a crucial ingredient for growth of the Indian economy – namely consumer goods – is arguably less than that of what had been projected as a rival, the underestimation of the importance of capital goods by Vakil and Brahmananda. At least, Mahalanobis saw industrialisation as an input into agricultural growth and industrialisation was to be promoted by public investment.

No serious scheme for transformation of the wage goods sector appears in the Vakil-Brahmananda plan. But it is with respect to the crucial role of demand in the sustained expansion of an economy that the Mahalanobis plan looks set to win us over. Explaining its logic even before the launching of the Second Plan in 1956, Mahalanobis had this to say,

The basic strategy is (now) clear. We create demand by a planned expansion of the basic industries and of the social sector, that is, health, education, etc. We meet the demand by a planned increase in the production of consumer goods as much as possible in the small and household industries, and the rest in factories. As both production and income increase, we divert a portion of the increase in income for new investments again in a planned manner to balance new demand by new production, and the process continues. At each stage, we must be careful that the right quantity of raw materials is available at the right time for production; and the right quantity of consumer goods is available at the right time to meet the demand.

Of course, we can see the heroic assumptions of physical planning at work here – notably the question of planning without full control of prices in a private enterprise economy – but at least

on the drawing board Mahalanobis' plan had hung together a little better than anything else that was on offer<sup>12</sup> for India at that stage in history as it demonstrated an eye for the big picture.

Finally, and as an aside, one might observe that critics of Indian economic policy in the 1950s who saw the Mahalanobis plan as violative of economic freedoms due to its reliance on controls [notably Shenoy 1955] are unlikely to have taken much comfort from the Vakil-Brahmananda plan as its authors had placed it squarely in the field of planning. Indeed, once employment rather than output is targeted it is difficult to conceive of reallocation of labour without envisaging forced migration, Brahmananda's vision of cottage industry notwithstanding. Direct force in shaping development was ruled out of court by Jawaharlal Nehru who held firmly to the belief that the only kind of economic progress worth having was "progress by consent".

### **Link between Agriculture and Industry**

Returning to the question of agriculture, not only was Mahalanobis acutely aware of its role in the scheme of things but he had incorporated this awareness into his strategy, if not so fully into his model. He had instantly recognised that in the 1950s Indian agricultural growth was severely constrained by the availability of the most basic kind of industrial inputs. Thus agricultural growth was itself linked to industrialisation even though the extent could have been debated; that is, while brick and mortar were clearly essential, it is certainly not true that aircraft and automobiles were. Nevertheless the suggestion of a role for industrialisation in launching the transformation of Indian agriculture is not so entirely far-fetched.

At this juncture I quote from the late Raj Krishna, an economist, who having placed himself at an obtuse angle vis-à-vis the establishment that had donned the Nehruvian mantle is unlikely to have ever been in thrall to it. Yet he has stated,

In a subcontinental economy with a very large market, abundant natural resources of every kind, and vast reserves of unskilled and skilled manpower, the building up of a strong and diversified capital-goods base was a historical necessity. If today we can boast of a large measure of self-reliance, it is because considerable capacity has been created in the metallurgical, mechanical, chemical, power and transport sectors. These sectors are basic precisely because they are equally indispensable for defence, for large-scale consumer goods production, for small-industry development and rural development. The technical linkages between agriculture and industry are such that even a 4 per cent rate of growth in agriculture is not possible without a high rate of growth in industries which supply the input requirements of a growing agriculture in the form of cement, bricks, pipes, pumps, electric power generation and transmission equipment, agricultural implements, diesel oil, fertiliser, pesticides, roads, vehicles, etc. And a 7 per cent growth in industry is not possible without a high rate of agricultural growth, because nearly half the modern industrial sector either processes agricultural output or supplies agricultural inputs [Krishna 1982:59].

Notice that the links conceived of between agriculture and industry in India at that early stage of development were both rudimentary and fundamental at the same time, and, for that very reason, recognition of it would have been central to any serious growth strategy. It would be difficult to credibly argue that the Nehru-Mahalanobis strategy had ignored, by design or by default,

these links. To emphasise, I quote [Mahalanobis 1960:96] from the Second Five-Year Plan document,

It was appreciated that, in India, surplus is the key to industrialisation. It is not only essential to grow enough food and fibres for our own requirements but it is also necessary to produce a surplus in the form of either industrial or food crops. In India agriculture and manufacturing industries are completely interlocked. Economic progress depends on the advance of both. Advance of one step in agriculture would supply food and raw materials for advance of one step in manufacturing industries which again, in its turn, would speed up irrigation and increase the supply of fertilisers and pesticides and help in the promotion of scientific research, which would lead to further advances in agriculture.

### **Increase in Income Levels**

While the raising of the level of income is widely recognised as the main objective of planning in the Nehru era, Mahalanobis himself was additionally engaged with another one, a feature that is not widely known. This was to release India "permanently" [ibid:74] from the balance of payments constraint. Indeed, in his view this was the very logic of planning for industrialisation. This feature is seldom recognised, but it needs to be and when it is we are given an internal criterion, so to speak, by which to judge the economic policy of the Nehru era. After all, autonomy was at the core of the Nehruvian vision of economic development, not to mention of post-colonial India, and nothing would epitomise this more than a strong balance of payments position. Indeed, if an independent development was the objective this would never be achieved if India were strapped permanently to a balance of payments deficit. Having flagged this I return to the more recognisable objective of the economic policy of the time, namely the accelerated growth of income.

So a rapid increase in the level of income was the objective and this was to be brought about via greater investment in heavy industry. We have also seen that this was central to the plan for the transformation of Indian agriculture, a process that would require increased industrial inputs. But how was this to be resourced? The planners were fully aware that the step-up in investment envisaged in the Second Five-Year Plan was very substantial. Indeed, in retrospect, they appear to have had a better sense of the role of resources in a credible economic plan than is found in the public discourse on growth today when the issue of the "policy regime" is given much too important a role. This is apparent from two elements of the plan to raise the level of income. First, no major foreign assistance was envisaged. This was in keeping with the idea of an independent development, a project incompatible with excessive reliance on foreign aid or, even, foreign direct investment. Taking the Second Plan as a case, foreign assistance was put down at less than 5 per cent of total public expenditure in the proposed plan budget [Planning Commission 1956] for 1956-57 to 1960-61 even as the investment rate was to be raised by over 50 per cent from 7 to 11 per cent of GDP. Of course, what the actual achievement with respect to foreign savings was we shall have occasion to study later. The second point to note is that the envisaged contribution of the public enterprises was significant, revealing the Indian state's understanding of their role in the economy. The item "additional taxes and loans and profits from state enterprises" along with the "contribution from the railways" together equalled "loans from the public" and were over twice what was to be taken

as foreign assistance. I shall return to this central premise of public policy in the 1950s that the public sector was expected to contribute resources to the larger project of national development.

### Nehru's Speeches

Thus far I have been concerned with trying to establish what the leadership of the Nehru era had in mind as the ends and means. We have a reasonably good picture already but this gets crystallised when we read the speeches of Jawaharlal Nehru himself. Recall that Nehru was the chairman of the Planning Commission and was closely involved with the planning process. These speeches would be of interest to us today not only in revealing the arduous process of deliberation by which policy was formed but point to the remarkable grasp that as an active career politician Nehru had on matters economic.

The first of these, made in 1952, gives us two insights into the economic calculations of the political leadership. It reveals that the idea of industrialisation as a goal to raise incomes was adopted even before the Mahalanobis model that had undergirded the Second Plan was written down. Further, it conveys the full recognition among the planners of the importance of agricultural growth to the industrialisation project. The extract follows,

There is much talk of industrialisation. In the initial chapters of the Plan, certain figures pertaining to the amounts allotted to industry, agriculture, social services, transport, etc, are given. In this respect, industry does not seem to occupy as important a place as agriculture. If I remember correctly, a very large sum is to be spent on irrigation. We certainly attach importance to industry, but in the present context we attach far greater importance to agriculture and food and matters pertaining to agriculture. If our agricultural foundation is not strong then the industry we seek to build will not have a strong basis either. Apart from that, the situation in the country today is such that if our food front cracks up, everything else will crack up, too. Therefore we dare not weaken our food front. If our agriculture becomes strongly entrenched, as we hope it will, then it will be relatively easy for us to progress more rapidly on the industrial front, whereas if we concentrate only on industrial development and leave agriculture in a weak condition we shall ultimately be weakening industry. That is why primary attention has been given to agriculture and food and that, I think, is essential in a country like India at the present moment.<sup>13</sup>

This speech was made at a relatively early stage of the economic transformation that was being attempted. I now quote from two sets of speeches made almost at the end of Nehru's tenure as prime minister, indeed close to the end of his life. The first is really a politician's justification of the policies pursued by his government, and reads as such, but it does contain a clear understanding of the inter-temporal distribution of gains that was central to the economic strategy that was being pursued. It also reflects a certain understanding of the uniqueness of India, not in a civilisational sense but in the sense of the challenges it faces given its economic backwardness and its democratic polity. The extracts follow,

Planning has of course been done in other countries; but not through democratic processes. Other countries which are democratic have not accepted planning. But the combination of these two concepts is rather unique... The first thing we realised was that it was no good copying America or Russia or any other country. The problems of India are her own. We can learn from America or Russia, as certainly we should. But the economic problems of India are different. We learn from them, of course, as they have acquired great experience. We always realised

that the fundamental factor was growth in agricultural production. Agriculture is basic to us because however much importance we attach to industry unless we have surplus from agriculture, we cannot progress in our economy. We cannot live on doles from other countries. We have always to choose between benefits accruing today, or tomorrow, or the day after. From the country's point of view, if we spend the money we now have for some petty immediate benefits, there will not be any permanent benefit. One has to find a healthy balance between the immediate benefits of today and the long-range benefits of tomorrow. All the money we have put in heavy industries is for tomorrow's benefit, though it brings in some benefit today also. It will take some years before this investment yields fruits... So, our strategy of economic development is essentially modernisation of agriculture and training of our rural masses in the use of new tools and new methods. At the same time, it seeks to lay the foundations of an industrial structure by building the basic or heavy industries, above all by producing electric power. Middle and small scale industries will inevitably come in their train.<sup>14</sup>

A clearer articulation of the central issues in investment planning, namely, the choice of the long-run output-maximising allocation of investment across activities would be hard to find.

The second set of speeches that I had referred to show us a Nehru somewhat despondent regarding the extent of progress made on the agricultural front. He even suggests that agriculture has been neglected relative to its importance. The first extract is from a speech made to the chief ministers at the annual meeting of the National Development Council in 1963. It goes,

Emergency was declared in the wake of Chinese invasion. ... Emergency does not merely mean raising soldiers or getting aircraft. It means production, production for defence specially. All other types of production, more particularly on the agricultural front, is equally necessary. ... We have done many things which are creditable to us. But the overall picture is not one of fast progress, specially in the agricultural domain. This is rather distressing because agriculture is the basis of all our development work. If we fail in agriculture, it does not matter what else we achieve – how many plants we put up – our economic development will not be complete. ... Agriculture is more important than industry for the simple reason that industry depends on agriculture. Industry, which is, no doubt, very important, will not progress unless agriculture is sound and stable and progressive. I find there is a passion in many areas of India for industrial plants. Well, all good luck to those who want them. Let them have it. People seem to think that an industrial plant solves all the problems of poverty, which it does not. It has a long-term effect on the economy, no doubt. And I have no doubt in my mind that the problem of poverty will not be solved in India except through industrial progress, industrial progress of the latest type. That is the truth. However, at the present moment, whichever way you start in India, you come back to agriculture. We dare not be slack about it, as we have been, I'm afraid, in many places.<sup>15</sup>

The final extract that I wish to quote is from a speech delivered less than six months before Nehru's death. It goes,

Though we all know that agriculture is essential and basic, it has been rather neglected. I say neglected in the sense that people hoped that crops will grow by themselves and not by much effort on our part. Now, greater attention is being paid to it and I hope this will bear results. There are all manner of things that go into agriculture. We have large irrigation schemes, but it takes a long time for us to take advantage of them fully. We first, spent a lot of money and energy in building them. Between the two there has been a long gap. We should plan for their full utilisation in advance.<sup>16</sup>

As is often the case, political leaders are too close in time to historical events to be able to evaluate them dispassionately. In retrospect, Nehru was to prove himself unduly pessimistic! A growth

transition in agriculture was to come within years of this speech made to India's chief ministers at the annual meeting of the National Development Council in December 1963, on which occasion Nehru had had the gall to also pronounce that, "... agriculture is more important by itself than any chief minister". An acceleration in the agricultural growth rate was to take place in the mid-1960s probably<sup>17</sup> even in 1964-65, the year of his death. Though he did not live to see its beneficial effects spread cross the Indian economy by stimulating other sectors, there can be very little doubt, as I demonstrate later, that this transition has much to do with the policies implemented by his government. At another level it would be difficult for a citizen in the 21st century to encounter a member of the political class as self-critical as we find Nehru in the passages that I have quoted from above. Across the world's democracies today, introspection would not be considered a virtue of political practice.

I now turn to economic growth in the India of the Nehru era.

### 3 A Record of Growth in the Nehru Era

We may use two sets of comparators to evaluate the growth performance of an economy. One is the record of preceding growth in that economy itself. The other is the contemporaneous growth of other economies similarly placed and the growth of leading economies at early stages of their own growth. We start therefore with a comparison of growth in the Nehru era with growth in the first half of the 20th century, more precisely the period 1900-47 which marks the second half of the British raj in India.

In Table 1 are arrayed growth rates over time of the three main sectors of the Indian economy. The layout of the table enables us to see the economic performance of the Nehru era in century-wide perspective. In column 1 are the data for the years 1900-47. In column 2 are the data on the same indicators for the rest of the 20th century including the 17 years of Jawaharlal Nehru's prime ministership. In column 3 are presented the same indicators for the period 1950 to 1964, the year of Nehru's death. Read together the data convey two important points. First, not only does growth in the Nehru years amply exceed what was attained in the final half-century of colonial rule, but the quickening of the economy observed in the second half of the 20th century may be seen to have been *already* achieved<sup>18</sup> in the Nehru era. Secondly, not only is there an acceleration of growth across all sectors but also the ranking of sectors by growth is reversed early with the commodity-producing sectors now growing faster than services which had been the fastest growing segment of the colonial economy. Following Kuznets's work on economic growth, high services growth in a low-income economy would be treated as pathologically. In a poor economy with a low level of consumption of even the most basic goods, a faster growth of the commodity sectors is a desirable outcome.

### Drawing Parallels: Industrial Revolution

The broad-based expansion of the economy during the Nehru era amounts to a transformation of the economy is, perhaps, more likely to readily recognised as such by economic historians. To

**Table 1: The Trend Growth Rate of GDP (in 1948-49 prices)**

Sector	1900-01 to 1946-47	1947-48 to 1999-2000	1950-51 to 1964-65
Primary	0.4	2.5	2.6
Secondary	1.5	5.5	6.8
Tertiary	1.7	5.0	4.5
GDP	0.9	4.1	4.0
GDP per capita	0.1	1.9	1.9
Population	0.8	2.0	2.0

The pre-1947 figure is for 'Undivided India' which includes the Indian princely states and Pakistan, but excludes Burma. Population growth is the compound growth rate.  
Source: Sivasubramonian (2005).

stretch my argument a bit, I refer<sup>19</sup> to a debate among economic historians on the true significance of the industrial revolution agreed by them to have taken place in Europe in the middle of the 18th century. In this connection Joel Mokyr, a historian of technology, has observed that growth after the industrial revolution was not just higher but qualitatively different in at least three different respects from what had gone before. First, growth ceased

to be a "niche phenomenon". Before 1750, it had been limited to relatively small areas or specific sectors. Second, while pre-1750 growth had seen "institutional change in the widest sense", technological change though not absent was far too slow and localised compared to the role it was to play afterwards. Third, "pre-modern" growth

was vulnerable to setbacks and shocks both man-made and natural that made doubtful its sustainability. While it may not be entirely appropriate to transfer this description to the transformation of India during the Nehru era, as a certain amount of modern industry was in place by 1947, the parallels are there to see.

Though not all three of Mokyr's observations are evident from the data I have presented in Table 1, it would be agreed upon that the Nehru years witnessed widespread growth across the economy, a technological advance was fostered, and we now see that the growth in income has not only been sustained for over 50 years but the growth rate itself has actually been "hastening slowly".<sup>20</sup> However, two of Mokyr's comments on the significance of the industrial revolution appear to have been tailor-made for the period that we are studying here. First, in response to the observation that the growth achieved in the early stage of the revolution was not that much, he has responded that the change must not be seen as one of mere degree: "There is a qualitative difference between an economy in which GDP per capita grows at 1.5 per cent and one in which it grows at 0.2 per cent" [Mokyr 2005: 286]. While the parallel here between the data for the period Mokyr speaks of and India for our period is, as is evident from Table 1, close indeed, it is Mokyr's more general comment on the significance of the industrial revolution that is, in my view, of greater import. His evaluation is that, "It may have been slow, it may have been not all that industrial and even less revolutionary, it may not even have been wholly British, but it was the tap root of modern economic growth" [Ibid: 286].

To seek parallels between the growth following the industrial revolution in Britain and the growth of India during the Nehru era is a promising line of inquiry for a historian of the Indian economy. On the other hand, I shall now put to use Mokyr's characterisation of the industrial revolution not to draw a parallel but to highlight a difference between the two periods under comparison here. While growth in the Nehru era was distinctly Indian, in that it was not dependent on either foreign trade or foreign aid, it certainly was "not all that industrial". Indeed the greatest expansion of the economy in the Nehru years is not in industry at all. While the categories for which growth is recorded in Table 1 are somewhat broad, the data reveal that growth acceleration in the primary sector, largely comprising agriculture, had exceeded

that of the secondary sector, more or less synonymous with industry. This has generally gone unrecognised, and I shall return to consider at length both the approach to agriculture and the record of its performance in these years. But for now it is worth repeating Sivasubramonian's (2005) apposite assessment of the economic achievement of this period. He speaks of the economic recovery of the Nehru era as having been "swift, smooth and remarkable."<sup>21</sup>

Before moving on I might raise a point crucial to the comparison of growth over time. As the comparison has to be made at constant prices to be of any value, the choice of the base year for prices is crucial. I have used Sivasubramonian's estimates of GDP as they provide data at constant prices for the entire 20th century. There are of course alternative estimates for the period 1900-47 and these give way to a very different insight into the period. For instance, Angus Maddison's estimates<sup>22</sup> of GDP growth in 1938-39 prices for this period show the average annual growth rate of per capita output during this period almost stagnant at 0.04 per cent per annum. This estimate would suggest a far more significant turnaround following the end of the colonial era.

### Growth Comparisons

I now turn to the second of the two standard comparators of the growth performance of an economy, the performance of other economies. Two sets of economies have been chosen here for comparison with India during the Nehru era. The first is a set of Asian economies. These were more or less on par with India in terms of per capita income in 1950. The second is a set of the world's best-performing economies of all time. In Table 2 are presented growth rates attained by these two Asian economies. Of the two sets of economies for which data are presented, a comparison of India's performance with that of the Asian economies is of greater interest for two reasons. First, the data are for the same period and secondly, as stated, in terms of per capita income Korea and China had economies that were more or less on par with India in 1950. A noteworthy finding emerges. From the work of De Long (2004) we know that though India has grown faster than most of Africa during the last five decades it has performed worse than east Asia. If Korea is taken as synonymous with east Asia this feature holds also for the period 1950-64. Korea's growth rate is 50 per cent higher than India's for this period. However, we find that India's growth rate is 25 per cent higher than that of China. This is little known but is not entirely surprising. Actually, China was to pull ahead of India only a decade and a half beyond the Nehru era, in the late 1970s and following the reforms unleashed by Deng Xiao Ping. Possessed of this information we are led to speculate that admiration for Mao in India during his lifetime must have been based on grounds other than mere economic achievements. This is clear, for the revelations of the disastrous consequences of the Great Leap Forward – including an estimated 30 million deaths allegedly due to famine in the late 1950s – were received sanguinely here in India. While this may well be expected of the ideologically committed, one thing is

clear from our comparison. In a comparison with China it now appears that Nehru had not left the Indian economy at any great disadvantage. The subsequent tearing away of China, and the falling behind of India in the growth-league tables, owe itself to causes other than his leadership.

### Comparison with OECD Economies

No less revealing is a comparison of the growth in India during 1950-64 with long-term growth in the leading Organisation for Economic Cooperation and Development (OECD) economies. We

find from Table 2 that the former had exceeded the latter, often substantially. It is now possible to place in perspective Raj Krishna's lament [Krishna 1982] that independent India's record of growth till the late 1970s placed it lower than 100 economies world-wide. Krishna had used per capita GDP as his measure. This succeeds in masking the degree of progress made

in the Nehru era. An altogether unexpected consequence of the transformation of the economy had been a very significant rise (Table 1) in the rate of growth of population. Now the measured rate of growth of per capita GDP is lowered. Two observations are in order here.

From Table 1 we can see that were the rate of growth of population to remain at the colonial rate the rate of growth of per capita income during 1950-64 would have exceeded 3 per cent. This is more than twice [Maddison 1995] the rate of growth of per capita income of the US and UK during 1820-1992, and exceeds that attained by Japan during the same period. Before I move on to my second observation I might remark that, actually, the counterfactual considered is quite absurd as the growth of population is very likely endogenous with respect to the growth of income. This leads me to the observation itself. The rise in the rate of growth of population per se serves as an indicator far more vivid of the extent and nature of the economic transformation than any estimated rise in the rate of growth. Life expectancy at birth rose from 32 years in the 1940s to 37 years in the 1950s and to 43 years in the 1960s [Bhat 2001]. Demographers (*ibid*) have put the rise in the rate of growth of population in the period that we are studying down to the increase in the fertility rate itself due to the decline in the incidence of malaria and widowhood, presumably due to improving public health outreach.

A methodological point needs to be made here that is more than a mere justification for the method that I have pursued. Note that in Table 2 I have compared growth in India during the Nehru years with very long-term growth of the advanced OECD economies. Far from loading the comparison in favour of the former, as it may appear, this actually tilts the balance in the direction of the latter. For we know that long-term growth of the industrialised economies has accelerated [Romer 1986] over the last couple of centuries. Therefore the longer the time period we consider the greater the likelihood of observing a higher growth rate for these economies when compared with a shorter series commencing from a time when their per capita income was the same as that of India's in, say, 1950. This observation has, in addition, the virtue of placing in perspective the achievement

**Table 2: Economic Growth in India Compared**

	1950-64	1820-1992
India	4.1	—
China	2.9	—
Korea	6.1	—
United States	—	3.6
United Kingdom	—	1.9
Japan	—	2.8

Data are annual average growth rates.

Source: Maddison (1995).

of the Nehru era. In the presence of increasing returns to scale the observed growth cannot be dismissed<sup>23</sup> merely as the arithmetic consequence of measuring a given increase against a “low base”. That would at best be a statistical commentary. It misses that from an “economic” standpoint, “initiating” growth in the presence of increasing returns to scale, a low base is actually a serious impediment to growth, for the lower the scale of production the lower, proportionately, is the surplus available for investment.

Thus high growth on a low base is non-trivial; and the recognition as a substantial achievement its initiation in the 1950s – after half a century of stagnation – the compelling conclusion. Interestingly, at the time, Nehru himself had demonstrated a clear idea of the magnitudes involved in the task of raising the rate of growth: “We have aimed at 5 per cent in this plan, and 5 per cent is going to be a hard job. We shall have to work very hard, because we have started at such low levels, with such low surpluses. India is almost at the lowest rung of the income ladder. Even China, I believe, is a little higher. So was Russia at the time of the Revolution.”<sup>24</sup> The challenge had been sharply appraised.

It is incontrovertible that the Nehru era witnessed resurgent growth. I have in a companion paper [Balakrishnan 2007] provided an account of the mechanism by which this had come about. Here I only state that this expansion was achieved mainly by a step-up in public investment within the guiding framework of the Nehru-Mahalanobis strategy described above.

#### **4 Caricature of a Vision: Through a Glass, Darkly**

In a final section I address some lingering misperceptions regarding the Nehru-Mahalanobis strategy and the outcome of the policies that had been adopted as a consequence. Though these are propagated by simplistic or, worse still, sentimental readings I consider it important to do so as the allegation that we continue to pay for a misguided road map is a serious one.

##### **4.1 The Neglect of Agriculture**

There are two ways in which a sector can be neglected. First it could be ignored in the policy discourse itself, with insufficient attention devoted to its problems. Negligence could also take the form of insufficient resources being devoted to the desired expansion of a sector. I have already suggested in the course of the discussion so far that agriculture had received direct attention and considerable resources during the Nehru era.

To widen the window I first present the view on the matter of two economists of the time, and then return to provide my own perspective. V K R V Rao, an early doyen of Indian economists, had had a ringside view of the Indian economy for over five decades starting about 1940. He has had the following to say,

It has been alleged that the priorities assigned ... in India's planned development have been based on a mistaken imitation of Soviet planning and that higher priority should have been given to agriculture and consumer industries instead of to capital goods industries. ... The emphasis placed on capital goods industries was the result of

an understandable desire to furnish the country with domestic supplies of the crucial inputs of economic growth so that the rate of growth could be much faster than if the country had to rely essentially on foreign aid for its requirements of capital and intermediate goods. Apart from this it is not correct to suggest that planning under Nehru did not give sufficient priority to agriculture. In fact, of the total investment undertaken during the first three Five-Year Plans...agriculture, including irrigation, accounted for Rs 3,446 crore, or 22.7 per cent, while economic infrastructure, like transport and communications, and power, accounted for Rs 5,737 crore or 37.7 per cent and social services for Rs 2,760 crore or 18.1 per cent. Industry accounted for only Rs 2,651 crore or 17.2 per cent of investment in the public sector during the 15 years covered by the three Plans [Rao 1971:72].

Raj Krishna was an economist in a very different mould from V K R V Rao. Chicago-trained and, in the political climate of the time, with a reputation for being somewhat of a right-winger, he was perhaps a more acute observer of the Indian economy than most of his peers. Overall, Raj Krishna suggests that there may have been mistakes only in the proportions in which investment had flowed into different channels rather than “...in the choice of the plural strategy which had always characterised Indian planning”. On the specific issue that we are considering he has stated:

...Nehru, as indeed all planners, attached prime importance to agriculture. Nearly a fifth of the public sector plan outlay has been consistently allocated to agricultural development. In addition, heavy investments were made in industries producing agricultural inputs and processing agricultural outputs. There was a massive increase in the flow of credit to the agricultural sector from Rs 70 crore in 1950-51 to Rs 2,000 crore in 1975-76. Almost all agricultural inputs are subsidised; agricultural income is lightly taxed, and during the last 13 years minimum prices, covering the full cost of production have been guaranteed for all major crops. This set of policies can hardly be described as embodying the neglect of agriculture. But the fact still remains that the allocations for agriculture (particularly irrigation, extension and fertiliser production) and for rural infrastructure and social services could and should have been higher [Krishna 1982:60].

The facts of the case, at least with respect to the allocation of resources, as presented by Rao and Krishna must persuade all but the wilful disbeliever. Of course, it would be the case that in per capita terms the direct allocation to agriculture was certainly lower than that to industry as the rural population dwarfed every other cohort in the economy. But this would be a myopic approach to things. To state somewhat differently a point already made, planned industrialisation was hardly a rival to agricultural expansion as Mahalanobis had seen it. On the contrary, faster agricultural growth it was diagnosed needed more industrial inputs, whether fertiliser for nutrient replenishment, iron and steel for implements or cement for irrigation conduits. Moreover, agricultural production was relatively free from controls in the Nehru era while private industry was subject to stringent policy controls, notably licensing.

There is of course an entirely different approach to assessing the belief that agriculture was neglected. This is to account for intent by outcome rather than pronouncement. Now only the performance matters. We have already looked at the data on agricultural growth in the Nehru era though nested within the larger category of “primary sector”. The data presented in

Table 1 shows unambiguously that the agricultural sector grew very impressively under Nehru, recording the highest growth among all sectors and making a dramatic recovery from the colonial era. This can hardly be seen to result from negligence.<sup>25</sup> Indeed, the scale of this achievement and the role of political agency in the form of leadership is fully comprehended only when we study in some detail the state of Indian agriculture in 1947.

Though it is the deindustrialisation of India under colonial rule that has received most attention it is decimation of the countryside that is perhaps the leitmotif of the British raj. For a century and a half, ending with the Bengal famine of 1943, there had been some devastating famines in India with one particular famine in Bengal under the East India Company in the 18th century wiping out an estimated one-third of the population. These famines were directly related to the policies of extortionate taxation and forced commercialisation of agriculture pursued by the Company. As historians have provided outstanding accounts and analyses of these events I go directly to summarise the findings of George Blyn on the trend in output in the first-half of the 20th century. Blyn had divided the period 1891-1947 into 10 overlapping 10-year slices which he termed "reference decades". He then estimated the average annual rate of growth and the change in the rate of growth across these reference decades for foodgrains and non-foodgrains separately. To help focus a little better on his findings I have collected in Table 3 the estimates for foodgrains. This data presents us with an unedifying picture of Indian agriculture under the raj. First, the rate of growth of foodgrains as a whole is far lower than the rate of growth of population implying, declining availability. The output of rice, the grain consumed by the largest number in India then (and now), actually declines. His findings are summarised thus by Blyn: "In the most general measure of the change in rates over time, the trend in reference decade rates, all eight foodgrains showed retardation" [Blyn 1966:96]. The record of non-foodgrains is better with a far greater average growth rate in the aggregate. However, this reflects precisely the nature of the colonial project which was the exploitation of the natural resources and commandeering the market of the colony for the benefit of metropolitan industry. Indeed, the glacial progress of foodgrains production is directly related to this strategy, implemented partly through price incentives and partly by brute<sup>26</sup> force. Food supply for the native population faced collateral damage.

The performance of the economy in the Nehru era must be evaluated in light of the agricultural legacy of colonialism. To have brought about two accelerations<sup>27</sup> in the rate of growth of agriculture within two decades of the end of colonial rule is nothing short of spectacular, and places in perspective the lingering grievance that agriculture was ignored in comparison with the attention paid to industrialisation in the Nehru-Mahalanobis strategy. Indeed we need to recognise the reversal of the retardation of the agricultural sector in the first-half of the 20th century

as one of the great achievements of independent India, and this was entirely achieved in the Nehru era. I submit this radically revised reading of the period.

#### 4.2 The Public Sector Enterprise as a Black Hole

The second misperception of the policies of the Nehru era pertains to the idea of the public sector. In India today there is an unmistakeable frustration with the public sector. It is associated with a poor performance record, resented for its lack of innovation, disdained for its contempt of social responsibility and considered a draft on the public resources. On the last, an additional consideration from further left, beyond the left-wing parties often in power in some states, would be that it is financed disproportionately by the poor who are not among its principal beneficiaries. Much of this is not off the mark as a description of the true state of affairs. However, the belief, among most, that this outcome is intrinsic to the Nehruvian conception of the public sector is far from correct. In this section I undertake two tasks. I first establish the rationale for the setting up of a public sector in

India. I then consider one indicator of its performance during the Nehru era.

I choose to analyse the original idea of the public sector and its performance record during the Nehru period within the overall project of resource mobilisation. This would not be considered unusual, for the hallmark of any successful developmental effort is the mobilisation of resources. It is not necessary that the resources mobilised must be contained within the public sector. After all, private investment is an equally legitimate component of aggregate investment in an economy. However, in the context of Indian industrialisation, launched in the 1950s, a large part of this mobilisation would necessarily have had to be in the public sector as it was intended that the state would have the leading role here.

For planning to be effective, there is required, if not a concentration in its hands, at least an adequate<sup>28</sup> fund base for the state. Where an economy is at a low income level the requirement is likely to be large, in turn requiring the productive surplus to come progressively into the public sector thus enabling it to maintain command over resources.<sup>29</sup> In this section, I first present views on resource mobilisation and the role of the public sector enterprises within that overall objective of both the government and of independent economists then active. Subsequently, I study the evidence on both resource mobilisation and the contribution of the public sector to it.

#### Resource Mobilisation

As the Second Five-Year Plan constituted the single largest instance of resource mobilisation during the Nehru era its documentation is likely to be the best source of the government's view on the question of interest to us here. In the section titled 'Financing' of the *Recommendation for the Second Five-Year Plan* by the Planning Commission (1956) we find, "Large financial resources would be required for the second plan. A small portion would

**Table 3: Agricultural Growth in British India**

Crop	Average Annual Growth over Ten Reference-Decades	Change in the Reference-Decade Rates of Growth
Aggregate	0.11	-0.17
Rice	-0.09	-0.03
Wheat	0.84	-0.09
Jowar	0.05	-0.12
Gram	0.26	-0.34
Bajra	0.72	-0.11
Barley	0.02	-0.55
Maize	0.51	-0.17
Ragi	-0.37	-0.23
Population	0.67	0.11

Source: Blyn (1966), p 96.

come from sterling balances or foreign loans and aid; and the bulk of the resources must be found from within the economy. The tax system would be directed to collect an increasing part of the growing national income in order to permit greater capital formation in the public sector and to finance an expansion of social services. The public sector would be extended to industrial and commercial activities where necessary for raising resources for public purposes" [Planning Commission 1956:27]. This is echoed in the Industrial Policy Resolution of 1956, which states that the public sector was expected to "...augment the revenues of the state and provide resources for further development in fresh fields" [cited by Krishna 1988]. We find that the official idea of the public sector was not welfarist. In particular, the idea of having a public sector at all was to raise resources for public purposes. Of course, this is not inconsistent with a strong welfare orientation. The issue point though is the role imagined for the public sector when planned economic development was launched in India.

The need for very significant resource mobilisation and the role of the public sector in relation to that task was also recognised by the independent economists of the day. Emphasising that "... the effort involved in this increase is considerable, and will strain the economy a very great deal...", the economists empanelled by the Planning Commission had spoken of

... the great difficulty of increasing tax proceeds unless a fundamental revision in current concepts that underlie the tax system is accepted. One of these concepts relates to the exemption of essentials from the scope of an important part of commodity taxation. When so large a measure of effort is necessary to increase the proportion of tax revenues to national income, which has remained so obstinately static, one cannot escape the logic of the fact that the mass of consumption is by the mass of the people. Unless this bears a somewhat higher burden of taxation, no perceptible change in the stubborn ratio of public revenues to national income can be achieved. We wish to endorse in particular, the Recommendation of the Taxation Enquiry Commission to the effect that Article 286(3) of the Constitution may be amended to remove the present exemption of articles 'essential to the life of the community' from the scope of state sales taxation. Simultaneously, measures to secure a practical ceiling on incomes through a steepening of taxes on income and wealth, including estate duties, becomes an imperative necessity. *A revision of the price policy of important public enterprises with a view to obtaining a larger surplus as a contribution to the resources for economic development is similarly required.*

Besides the general increase in rates of direct and indirect taxation that will be involved in the considerable stepping up of tax effort will be part of the challenge to administrative efficiency that the big development effort for putting through the next Plan entails."<sup>30</sup>

Apart from the replication of the views of the government on the role of the public sector, quoted earlier, two points may be noted. First, the independent economists had recognised the serious resource mobilisation effort entailed in the plan to industrialise. Secondly, note the complete absence of populism in the recommendation that in the short run even the convention of excluding essentials from taxation may have to be put in abeyance. The unstated expectation of the public sector are reflected in the government budget proposed in the document *Recommendation for the Second Five-Year Plan*. There, as I have pointed out once already, the profits from state enterprises along with "additional

taxes and loans" exceed the amount of foreign assistance allowed for and when combined with the contribution from the railways amounts to close to one-eighth of the total outlay. Finally, it is most instructive in the context to read Mahalanobis:

In the highly developed countries of the west, taxes on commodities are usually looked upon as 'regressive', as being a burden on the poor. Public enterprises are also expected to be run on a no-loss-no-profit basis. Fortunately, our outlook is changing and it is being realised that in an underdeveloped country like India excise and customs duties, purchase tax on commodities or a levy on services would be convenient and adaptable methods to raise resources. It is also agreed in principle that public enterprises should earn and contribute increasing returns for purposes of national development [Mahalanobis 1960: 97].

One thing is clear from these records of the time. Unlike today, populism was clearly treated with contempt by the architects of economic policy in early independent India.

### **Performance of Public Sector**

While we may by now have an idea of the original conception of the role of the public sector in India, we are yet to have a picture of its performance. First, it may be repeated that a surge in public investment had been achieved in the Nehru era, a 15-year record of expansion that has not been surpassed. Secondly, the share of public savings in total savings had risen [Rao and Sen 1995] by the end of the period. Though the extent of this increase is not much greater than that of the private corporate sector it is still noteworthy that the expansion of investment was led by an expansion of public saving, as was intended. We have in this an index of the role of the public sector in resource mobilisation. Of course, this is not an argument regarding the sufficiency of that mobilisation. While yet on the topic, I present evidence on the behaviour of public sector savings during the period that we are looking at here. In Table 4 (p 63) are presented data on savings of the public and private sectors. The public sector has been classified further into the public authorities – comprising government administration and departmental commercial enterprises – and the non-departmental enterprises – comprising government companies and statutory corporations. Note from Table 4 that while the expansion of savings in the public sector as a whole is as it is faster than the expansion in savings of the private corporate sector, within the former the non-departmental enterprises turn in a vastly superior performance compared to all groups. Though the non-departmental enterprises continue to improve steadily for the next 20 years or so, during no other phase is the quite spectacular growth in their savings during 1950-64 matched [Table 3 in Rao and Sen 1995]. Three caveats need to be introduced, however. First, the rise in aggregate profits is not incompatible with instances of chronic loss-making by individual units. Secondly, the data cannot serve as a measure of profitability for which purpose we would need to factor in the volume of capital invested. And finally, this is not to be taken as a mark of the efficiency of the public sector, as we are almost certainly dealing with monopolies here.

Emerging from our discussion so far is a view of the public sector held by the leadership in the Nehru era that is entirely at odds with the perception of that period. It has not been sufficiently well recognised that the public sector was originally conceived of as an active agent of resource mobilisation for development. Its

transmigration into a flaccid employment-granting welfarist agency was to come only after the death of Nehru. For that very reason what we might today view with shock horror the extraordinary record of public sector savings highlighted in Table 4 is very likely to have been taken as *comme il faut* by Nehru himself. Consider the following extract from a speech made on the occasion of the inauguration of the second Hindustan Machine Tools (HMT) factory at Bangalore in 1961:

There is a certain uniqueness about this function and the factory. The uniqueness lies in the fact that this factory has been made out of the profits or the surplus of the older Hindustan Machine Tools factory and, rightly, therefore, it is called a gift to the nation by those who have been working in the old factory. This should be a matter of great satisfaction to all those who are concerned with the HMT factory.<sup>31</sup>

However, though the record of the public enterprises during his time may have been seen as entirely appropriate the data presented in Table 4 must challenge somewhat some economists of today. Thus, referring to "the losses made by public enterprises", Jagdish Bhagwati has stated, "Capital-intensive white elephants in the public sector were supported on the basis of models that deduced that this choice of techniques would yield a higher savings rate and hence higher growth: a conclusion that would now sound laughable, had its consequences not been so tragic" [Bhagwati 1998: 6-7]. In the face of such strident commentary it is worth repeating that during the Nehru era the savings of the public enterprises actually grew faster than that of the private corporate sector.

Neither the official approach to them nor the actual record of the public enterprises during these years suggest that the public sector was one of the wasteful legacies of the Nehru era. Their drift in this direction owes more to the pure politics of a subsequent era when the public sector was turned into a vast machine for dispensing patronage and buying out politically the vested interests of the day. The evidence presented here also allows us to evaluate the assertion that 'dirigisme' is recipe for a fiscal crisis of the state [see Introduction in Lal 1999]. The growth of the central government's tax revenues, as share of GDP, in the 15 years since 1950 had not been exceeded<sup>32</sup> even by the year 2000. However, my aim here has been to establish that the public sector was a strategic intervention in the cause of growth, and that during the Nehru era it had delivered to a reasonable extent.

### Neglect of Primary Education

The foregoing discussion must have served to dispel the notion that policy in the Nehru era had neglected the crucial role of agriculture and the savings potential of the public sector enterprises. However, there is one area that appears to have been neglected very severely then, and that is primary education. Rare are the interventions from contemporary Indian economists on the relevance of primary education, but there is a particularly forceful one by Krishnamurti,<sup>33</sup> an economist then with the Bombay school. In a

note written in 1955 within months of the publication of the *Recommendation for the Second Five-Year Plan* brought out by the Planning Commission, Krishnamurti was writing "... how absurdly low are the sums allotted for education in the Mahalanobis plan", speaking of it as being lopsided, with little importance given to education and other social services, and calling for a reallocation to expenditure on this account from the outlay on heavy industries.

More important are Krishnamurti's reasons for a greater expenditure on education and interesting is his explanation for why it is so low. "A concerted effort to educate the mass of the population, specially in the rural areas, would undoubtedly have far-reaching

benefits of a cumulative expansionist character. This would greatly lighten the task of the government in bringing about rapid economic development." Pointing to the government's lack of even-handedness in dealing with education in comparison with "heavy industries or river valley projects" for which it was willing to adopt deficit financing, he speculates whether this has to do with the fact that "being brought up in the traditions of mid-Victorian finance" it continues to "apply the calculus of the private grocery merchant to a matter like education".<sup>34</sup>

Interestingly, in all the counterfactual scenarios that are sketched for India it is openness to trade that tends to get emphasised, the implicit suggestion being that the possibilities of trade were neglected. There may well be a point to this observation, at least surely for the period starting the early 1960s. However, the absence of primary education from these exercises of counterfactual analysis is striking. One cannot overlook the likelihood that the very face of India, not to mention the rate of growth of output via human capital accretion, may have been vastly different had much more attention been paid to primary education at the very outset. As this study is also an evaluation of the contribution of Nehru to the growth and transformation of India, I am reminded of the comment made to me by a civil servant in Bangalore that the man whose birthday is celebrated as Children's Day in India had actually managed to do very little for her very young. Cruel as it may sound, and appearing as outrageous given Nehru's known empathy with children, the verdict is very close for it is indeed correct that primary education was severely neglected in the Nehru era. It is of course technically true that, given the constitutional distribution of powers in India, "Education" – being a "state subject" – was then at least partially a responsibility of the states, but this does not absolve the policymaker of the Nehru era of a grave error of judgment regarding the factors that drive growth, leave alone development. Of course, even into the 21st century, we continue to neglect the continued neglect of primary education.

### 5 Conclusions

The public policy of the Nehru era had set in motion a more or less stagnant colonial economy. A proliferating bureaucracy, corruption, closedness to foreign capital and the consequent

technological backwardness in production, the lack of competition and the consequent shoddiness of the consumer goods, an unaccountable public sector and the consequent low productivity all, perhaps unintendedly but surely tragically, "came along", so to speak. But it cannot be denied that the economy had been got moving, and in any case specific policies were open to correction. A course-correction could well have been applied, but it was not. Instead, after the death of Nehru was witnessed what has been described as a "lurch to the left" characterised by increasing trade and industrial policy controls and at times reckless expansion of public-sector employment. What precise role these policies had in shoring up the post-Nehru political establishment remains to be analysed. To attempt to answer this would take me far from the objective of this essay, but there exist accounts by political scientists.<sup>35</sup>

However, one thing is clear. Many of these policies were at a tangent from those of the Nehru era, notably the deteriorating performance of the public sector and the use of public monies to buy out economic disaffection with subsidies. This came to be termed "Nehruvian socialism" even though the elimination of economic waste, unaccountable governance and inefficiency of resource use were the very arguments for socialism in the first place, and not just in India. But more to the point, no matter that all of it bore no resemblance to what had been practised in the Nehru era. Its consequences were serious for India. As Chandra, Mukherjee and Mukherjee (2000) have commented, "The controls, restrictions, interventions .... were paradoxically often resorted to in the name of introducing "socialist" principles and equity but actually ended up building a distorted, backward capitalism"...[Chandra, Mukherjee and Mukherjee 2000:359]. From the point of view of understanding the past, Desai's comment "Today when people criticise the Nehruvian model, little do they know that it began with the daughter, and not the man himself."<sup>36</sup> is apt. While it was a disappointing end to a high-minded journey, it is important to place the outcome in proper perspective when we evaluate the Nehru-Mahalanobis strategy.

### Achievements of Nehru Era

I would hope that this paper restores some perspective to the recent economic history of India. The Nehru era witnessed the recovery of India and the igniting of a growth process that has remained undimmed for over five decades, during which time the economy has been hastening slowly. The repeated acceleration of the growth rate implies that drawing a likeness between the policies of the Nehru era and the Soviet Union is false as growth in India has been sustained in a way that it was not in the former Soviet Union. Actually, India's growth rate has accelerated and it may be suggested that this is not incompatible with the Nehru-Mahalanobis strategy. Within the recovery engineered I have flagged two specific achievements of the Nehru era: the quite spectacular transformation of agriculture as reflected in the acceleration of production and the unprecedented mobilisation of resources by the Indian state as reflected in the hike in public investment. There have been errors of commission, such as the proliferation of an unregulated economic bureaucracy,

and of omission, such as the gross neglect of primary education. But there have been four decades after Nehru to correct these. To suggest that this is due to a "lock-in" [Chibber 2003] effect of the Nehruvian strategy and that nothing could have been done to alter the situation is only to confirm that we have not understood the lessons of our recent past.

This paper has studied economic growth in the Nehru era. The picture that has emerged has a bearing on two unrelated questions. The first is a generic one of perennial interest to economists, the role of government in economic growth. The second is the historical role of Jawaharlal Nehru with respect to the Indian economy in general, and long-term growth in particular. I deal with these together in what remains of this concluding section.

Even though I have not focused on the particular role of Jawaharlal Nehru in the formulation and implementation of the economic policy of his time, I have here, however, presented an account of his views on the economy including, to an extent, of their evolution. Arguably, no Indian leader since at the helm of this country has been as crucial to the navigation of its economy. The economic record of this time serves as one important indicator of the effectiveness of his role. Under Jawaharlal Nehru the Indian economy had been transformed from a colonial enclave to one with at least some of the prerequisites for sustained long-term growth while at the same time maintaining an autonomy from the superpowers vying for influence on a newly independent subcontinent.

As a particular icon of this transformation we may consider the rate of growth achieved in the Nehru years. I have provided both historical and comparative perspective on this variable and argued that the achievement was indeed remarkable. The framework within which it had been achieved reflects upon today's thinking on the ideal economic architecture for growth. Central to this purported ideal is the construct of economic freedom, defined as absence of restraint. Considered "economics" since the implosion of the Soviet Union, this idea is sharply at odds with the recent history of China where the longest ever recorded boom is occurring in an environment that severely<sup>37</sup> restricts freedom. While the situation in the Nehru era was a far cry from contemporary China, both in terms of economic and political freedoms, the growth performance of that period engineered almost entirely by the state is a serious challenge to the thinking on growth encapsulated in the "Washington consensus", a recipe for prosperity highly influential in the 1990s but by now [Rodrik 2006] under challenge.

By implication, this study has also provided an evaluation of the historical role of Jawaharlal Nehru albeit in a limited sphere, the economy. The exercise is not itself of limited interest though, as even the most authoritative<sup>38</sup> appraisals of the man tend to dwell less on his role as an economic architect. But I am aware of my appraisal being radically at odds with broader evaluations of the man from across the political spectrum. I shall present the briefest possible accounts of what I consider a representative set. The first is that of Hiren Mukerjee, a close contemporary of Nehru's, a lawyer and a member of the Communist Party of India. Author of an affectionate portrait of Nehru as a "gentle colossus",

published in the year of Nehru's death, Mukerjee had had the following to say,

But for him, India would have felt much less the winds of change that had been blowing over the world; he made us aware of them and also more receptive. Yet he failed his people insofar as he could not adequately execute the great mandate he had from them because he just was not relentless enough. He was our beautiful but ineffectual angel, beating his beautiful wings largely in vain [Mukerjee 1964:223-24].

The second view of Nehru that I wish to present here comes from India's far right. The Rashtriya Swayamsevak Sangh (RSS) leader K S Sudarshan speaking in New Jersey in 2005 has said, "We hoped that things would change after the (sic) Indian independence...but that did not happen. Nehru was the last Britisher to have ruled India, therefore nothing at all changed" [Sudarshan 2005]. While Sudarshan's concerns in the speech are mostly focused on culture, it does suggest that little changed in India under Nehru. Only rank ignorance would lead one to equate the colonial and early post-colonial economies of India. Finally, I quote someone who by his sympathies and intellectual reach would be deemed a "global Indian". An enthusiast for the reforms of 1991, some have seen him as a spokesman for India's corporate sector, but it is apparent from his writings that Gurcharan Das is nevertheless deeply concerned of the well-being of his compatriots. He has argued that, "...Jawaharlal Nehru and his planners attempted an industrial revolution through the agency of the state. They did not trust the private entrepreneurs, so they made the state the entrepreneur. Not surprisingly, they failed, and India is still paying a high price for their follies" [Das 2000].

We have here a conspectus of views on Jawaharlal Nehru covering a wide angle. I believe that in the light of my account of the growth of the Indian economy in the Nehru era they appear without credibility. On the other hand, the estimate of Nehru by his partner in the charting of India's economic journey compels our attention. For a statistician, likely to have been alert to the need

for weighing-up of probabilities, Mahalanobis' forecast for the economy, made in the late 1950s, is markedly free of confidence intervals! He had remarked,

One thing can be said with complete certainty. Whether there is a smooth transition or whether India has to pass through storms on her way to progress, it will be impossible to go back to a stagnant economy. Through his leadership, he has brought about profound changes in social and productive forces which will continue to influence the course of events in India in the most decisive way" [Mahalanobis 1960:563].

This forecast has accredited itself. It must encourage us to begin to view the recovery achieved by the policies of the period as a bridgehead to the higher growth rates that have followed. The shibboleth "Hindu rate of growth", presumably a broad brush description of the period prior to the liberalisation of the economy, manages to obscure rather than illuminate the extraordinary economic dynamics of the Nehru era.

[This paper is based on my project 'Understanding Economic Growth in India' being undertaken on a fellowship of the Nehru Memorial Museum and Library, New Delhi. I am indebted to the foundation for enabling this research and encouraging its publication. Aditya Bhattacharjea, Bharat Ramaswami, M Parameswaran and M Suresh Babu generously commented on an earlier draft and provided vital suggestions for its re-organisation. I have benefited from discussions with G Arunima, Amresh Bagchi, V N and Ahilya Balasubramanyan, Amitava Bose, M P Chandrashekaran, Dayakar Bangara, Francine Frankel, Ajit Ghose, Jayati Ghosh, Ramachandra Guha, C T Kurien, N J Kurien, K C Mohan, Balaram Menon, Venugopal Menon, Dilip Mookherjee, Aditya Mukherjee, K R S Murthy, R Natarajan, Jayendra Nayak, Sushil Kumar Pillai, K N Raj, Murkoth Ramunni, Mahesh Rangarajan, Jairam Ramesh, M Govinda Rao, S K Rao, Rammanohar Reddy, K Saradamon, C Selvaraj, Arunava Sen, Parthasarathi Shome, Ashok Soota, E Sridharan, T N Srinivasan, Arvind Subramanian and Guilherme Vaz. I have also benefited from the comments of participants in seminars at the Nehru Library, Administrative Staff College of India at Hyderabad, Centre for Development Studies at Thiruvananthapuram and Centre for Policy Research at New Delhi. Finally, I gratefully acknowledge the role of K Jayakumar, Mridula Mukherjee and N Balakrishnan, administrators of the Nehru Library, whose unstinting support alone has made this work possible. All responsibility is mine.]

#### NOTES

- 1 See Hankla (2006) for an examination of subsequent Indian economic policy from such a perspective.
- 2 Thus the iconic American central banker Alan Greenspan, treated as an oracle by the global money markets, is widely reported to have commented in a recent book on the adverse influence on Nehru of the Fabians and proffered the advice that India give up this "socialism" for "optimal" (sic) growth. See the report 'Give up socialism: Greenspan', *The Times of India*, September 24, 2007.
- 3 See Mahalanobis (1955). Most of Mahalanobis's important writings on planning are contained in Mahalanobis (1960).
- 4 Two outstanding interpretations of it may be noted, a "synoptic view" of Chakravarty (1987) and a compleat deconstruction – encompassing philosophy, mathematics and empirical detail – by Srinivasan (1996).
- 5 I am indebted to K Narayanan Nair for this distinction.
- 6 Demonstrated by Mahalanobis via simulation experiments.
- 7 For example, see Price (1967), and the interchange between Vasudevan (1968) and Price (1968) that had followed.
- 8 See the passage reproduced in Chakravarty (1987).
- 9 Of course, this had already been queried by Rao (1952). Rao had been a graduate student at Cambridge immediately prior to the publication of the *General Theory*, and is likely to have been *au fait* with its inner workings.
- 10 All quotes are as reported in Balasubramanyan (2001). Question mark is mine.
- 11 See the response to Rao's paper by Raj (1954), and a conceptualisation of how macroeconomic equilibrium is restored when aggregate demand expands in an India-type economy by a very young Bhagwati (1956).
- 12 Desai (1998) has studied the Vakil-Brahmananda Plan as an alternative to the Mahalanobis one. To be sure, there was also the Gandhian model of the self-sufficient village economy, but it had been explicitly rejected by Nehru himself, and stood no chance of being adopted by an almost entirely urban post-colonial leadership of India.
- 13 "Economic Democracy", speech made in Parliament on December 15, 1952; Jawaharlal Nehru's Speeches 1949-53, Publications Division, Ministry of Information and Broadcasting, Gol.
- 14 From 'Our Policies Justified', speech on the no-confidence motion against the government, Lok Sabha, August 22, 1963, reprinted in *Jawaharlal Nehru's Speeches*, ibid.
- 15 'Agriculture – Basis of Economic Development', speech made to the National Development Council, New Delhi, November 8, 1963, reprinted in *Jawaharlal Nehru's Speeches*, ibid.
- 16 'Irrigation and Power', speech to the Conference of Ministers of Irrigation and Power, New Delhi, January 3, 1964, reprinted in *Jawaharlal Nehru's Speeches*, ibid.
- 17 See Balakrishnan and Parameswaran (2007). However, while the point estimate for the date of acceleration is 1965-66, the estimate itself comes with confidence intervals that allow for an acceleration to have taken place anywhere between 1964 and 1966, inclusive. But precise dating is not so essential here, as I shall argue below. In any case, the rate of growth registered in 1964-65, the year of Nehru's death, was at close to 12 per cent the highest annual production increase in crop agriculture in a decade and a half. See Government of India (2003): *Agricultural Statistics at a Glance*, Ministry of Agriculture, New Delhi.
- 18 Of course, finer partitions of the data points over 1950-2000 would yield a higher rate of growth from the late seventies. However, it is the case that the acceleration during the Nehru years outweighs by far the ones that followed, for which see Balakrishnan and Parameswaran (2007).
- 19 I thank M Suresh Babu for having drawn my attention to this literature.
- 20 To use the remarkably prescient expression made relatively early in the movement by an Indian economist closely associated with policymaking in the Nehru era. The accelerations in the growth of GDP during the second half of the 20th century have been statistically established by Balakrishnan and Parameswaran (2007).
- 21 Sivasubramonian (2005), p 563. This is noticeably at odds with the customary assessment of the economic record of the Nehru era by economists. Historians, it appears, bring a greater objectivity to the study of the economy that economists as they privilege economic theory less.
- 22 Reported by Sivasubramonian (2005), Table 6.3.
- 23 An instance of this tendency may also be found in the reported comments on economic growth in India by Alan Greenspan. Having first castigated Nehru's "Fabian socialism", Greenspan acknowledges the higher growth in recent years, but plays down the acceleration as having been from "off a low base". See

- 'Give up Socialism: Greenspan', *Times of India*, New Delhi, 2007. Apart from its oracular nature the observation displays an empirical oversight in that India had already grown at over 5 per cent per annum in the 1980s which was the highest rate of growth outside of east Asia by then.
- 24 From "The Second Five-Year Plan", speech initiating the debate on the Second Five-Year Plan in the Lok Sabha on March 23, 1956, reprinted in *Jawaharlal Nehru's Speeches* (op cit).
- 25 For a rejection as "simplistic" of the claim of the neglect of agriculture under planning see Srinivasan (1996).
- 26 "Not a chest of indigo reached England without being stained with human blood". British colonial civil servant quoted by Winchester and Winchester (2004), p 56.
- 27 The information presented in Table 1 reflects only the first acceleration as we have there treated the entire period after 1950 as one. For a demonstration of the acceleration in agriculture towards the end of the first half of the 1960s see Balakrishnan and Parameswaran (2007). Even if the acceleration per se is established to have occurred immediately after the death of Nehru, the "green revolution" ought not to be seen as episodic but the result of some years of preparation of the seed bed, so to speak, in terms of the spread of irrigation, the diffusion of best practices via an extension, and preparatory measures such as field trials under the auspices of the public agricultural research system ICAR some of these commencing in the First Five-Year Plan. The comment by Mitra (1964), "despite all the gains of the last 17 years, in many respects we have to make up for the lost time of these very years, during which all of us have grown a little less romantic and during which our per capita availability of food has not gone up by a single grain", is appropriately cautionary but wrong in its claim regarding the progress in agriculture. The per capita net availability of grain had grown slowly but steadily over the Nehru era despite the significant rise in the population growth rate. Of course, that the performance could have been better is unexceptionable, but two caveats are in order here. First, subsequent growth in availability of foodgrains in India has barely matched the record of this period. See 'Economic Survey 2006-07, Table 1.17. Secondly, the Nehru era is the only phase in the history of post-independence India when the relative price of food crops actually declined (see Appendix Table 4.4 in Misra). Apart from the fact that this would be considered the pre-eminent marker of development, it is the best imaginable evidence that the Nehru-Mahalanobis strategy encompassed the Vakil-Brahmananda plan which had predicated a wage-goods constraint binding Indian economic growth.
- 28 Oddly enough, while this is barely recognised by professional economists it is widely recognised within civil society. See the report on a debate in Kerala today in Mathrubhumi (2007).
- 29 A strong public sector resource base is required also in high-income economies with substantial welfare interventions, for instance, the economies of western Europe.
- 30 From 'The Second Five-Year Plan: Basic Considerations Relating to the Plan Frame', memorandum prepared by the panel of economists constituted by the Planning Commission, published in *Sankhya* (1955), p 115, Italics are mine.
- 31 From 'A Gift to the Nation', reprinted in *Jawaharlal Nehru's Speeches 1957-1963*, op cit. Interestingly, Nehru was not squeamish about acknowledging assistance from the west when he felt it necessary to do so. For the speech continues; "May I also refer to those who originally set up the plant here, the well known Swiss firm of Oerlikons who laid the foundations? They built the first HMT plant and helped in training our people in the early stages, and their work has yielded this fine result."
- 32 See 'Public Finance Statistics 2004-05', Ministry of Finance, Government of India, New Delhi.
- 33 See 'Krishnamurti' in Balasubramanyan (2001). I am indebted to Ramachandra Guha who brought this extraordinary document to my attention.
- 34 All quotations are from 'Krishnamurti' in Balasubramanyan (2001).
- 35 See Hankla (2006). For a less theory-laden but historically richer, in that it is related to specific events, account see Chandra, Mukherjee and Mukherjee (2000).
- 36 Desai (2007), p 40. See also the distinction 'Nehru versus Nehruites' by Dhar (1989).
- 37 Labour has limited rights of geographical movement and none of trade union mobilisation in China.
- 38 See Gopal (1975, 1979, 1984). See also the more recent tribute by Malhotra (2007).

## REFERENCES

- Balakrishnan (2007): 'Visible Hand: Public Policy and Economic Growth in the Nehru Era', mimeo, Nehru Memorial Museum and Library, New Delhi.
- Balakrishnan, P and M Parameswaran (2007): 'Understanding Economic Growth in India: A Prerequisite', *Economic and Political Weekly*, 42, pp 2915-22.
- Bagchi, A and P Nayak (1994): 'Public Finance and the Planning Process' in A Bagchi and N Stern, *Tax Policy in Developing Countries*, Oxford University Press, Delhi.
- Balasubramanyan, VN (2001): 'Conversations with Indian Economists', Macmillan, New Delhi.
- Bhagwati, J (1956): 'Deficit Financing and Economic Development', *Indian Economic Review*, 2, pp 40-60.
- (1998): 'India's Economic Reforms: Dismantling the Machine for Going Backwards', *Vikalpa*, 23, pp 5-7.
- Bhat, P N M (2001): 'A Demographic Bonus for India?', keynote address at the symposium 'Our Common Future', Population Research Centre, University of Groningen, November 22.
- Blyn, G (1966): *Agricultural Trends in India, 1891-1947: Output, Availability and Productivity*, University of Pennsylvania Press, Philadelphia.
- Chakrabarty, S (1987): *Development Planning: The Indian Experience*, Oxford University Press, Delhi.
- Chandra, B, M Mukherjee and A Mukherjee (2000): *India after Independence 1947-2000*, Penguin, New Delhi, first published in 1999 by Viking.
- Chang, H-J (2003): 'The East Asian Development Experience' in H-J Chang (ed), *Rethinking Development Economics*, Anthem Press, London.
- Chhibber, V (2003): *Locked in Place: State-Building and Late Industrialisation in India*, Princeton University Press, Princeton.
- Das, G (2000): *India Unbound: From Independence to the Global Information Age*, Penguin, New Delhi.
- DeLong, B (2004): 'India since Independence: An Analytic Growth Narrative' in D Rodrik (ed), *In Search of Prosperity, Analytic Narratives on Economic Growth*, Princeton University Press, Princeton.
- Desai, M (1998): 'Was There an Alternative to Mahalanobis?' in *India's Economic Reforms and Development: Essays for Manmohan Singh* by Isher Judge Ahluwalia and I M D Little.
- (2007): 'Our Economic Growth: 1947-2000' in 'India 60', *IIC Review*, Winter 2006-Spring 2007.
- Dhar, P N (2003): 'Nehru versus Nehruites' in *The Evolution of Economic Policy in India*, Oxford University Press, Delhi, first published in 1989.
- Gopal, S (1975, 1979, 1984): *Jawaharlal Nehru: A Biography* in 3 volumes, Oxford University Press, Delhi.
- Gol (1956): *Recommendation for the Second Five-Year Plan*, Planning Commission, Government of India, New Delhi.
- Hankla, C R (2006): 'Party Linkages and Economic Policy: An Examination of Indira Gandhi's India', *Business and Politics*, 8, Article 4, <http://www.bepress.com/bap/vol8/iss3/art4>.
- Hatekar, N and A Dongre (2005): 'Structural Breaks in India's Growth: Revisiting the Debate with Longer Perspective', *Economic and Political Weekly*, 40, pp 1432-35.
- Joshi, P C (1979): 'Dimensions of Agricultural Planning: Reflections on the Mahalanobis Approach', *Man and Development*, 4, pp 9-31.
- Krishna, R (1982): 'Assessing India's Economic Development', *Mainstream*, October 25.
- (1988): 'Ideology and Economic Policy', *Indian Economic Review*, 23, pp 1-26.
- Lal, D (1999): *Unfinished Business: India in the World Economy*, Oxford University Press, Delhi.
- Maddison, A (1995): *Monitoring the World Economy 1820-1992*, OECD Development Centre, Paris.
- Mahalanobis, P C (1955): 'The Approach of Operational Research to Planning in India', *Sankhya, The Indian Journal of Statistics*, parts 1 and 2.
- (1960): *Talks on Planning*, Indian Statistical Institute, Calcutta.
- Malhotra, I (2007): 'Nehru's Luminous Legacy' in 'India 60', *IIC Review*, Winter 2006-Spring 2007.
- Mathrubhumi (2007): 'Vikassanathine Panam Ilya', (There is no Money for Development), report, January 1.
- Misra, VN (2004): 'The Terms of Trade', Volume 15 of *State of the Indian Farmer: A Millennium Study*, sponsored by the Ministry of Agriculture, Academic Foundation, New Delhi.
- Mitra, A (1964): 'We, the People of India', *Economic Weekly*, 16, pp 1195-98.
- Mokry, J (2005): 'The Intellectual Origins of the Industrial Revolution', *The Journal of Economic History*, 65, pp 285-351.
- Mukherjee, H (1964): *The Gentle Colossus: A Study of Jawaharlal Nehru*, Manisha Granthalaya, Calcutta.
- Nehru Memorial Fund, *Speeches of Jawaharlal Nehru*, several volumes.
- Price, R B (1967): 'Ideology and Indian Planning', *American Journal of Economics and Sociology*, 26, pp 47-64.
- (1968): 'Reply: On 'Ideology and Indian Planning'', *American Journal of Economics and Sociology*, 27, pp 217-18.
- Raj, K N (1954): 'Definition and Measurement of Deficit Financing', *Indian Economic Review*, 2, pp 34-51.
- (1965): *Indian Economic Growth: Performance and Prospects*, Allied Publishers, New Delhi.
- Rao, M G and T K Sen (1995): 'Public Finance and Economic Development: Lessons from India', *Asia Pacific Development Journal*, 2, pp 25-44.
- Rao, V K R V (1952): 'Investment, Income and the Multiplier in an Underdeveloped Economy', *Indian Economic Review*, 1, pp 55-67.
- (1971): *The Nehru Legacy*, Popular Prakashan, Bombay.
- Romer, P (1986): 'Increasing Returns and Long-run Growth', *Journal of Political Economy*, 92, pp 1002-37.
- Rodrik, D (2006): 'Goodbye Washington Consensus, Hello Washington Confusion? A Review of the World Bank's Economic Growth in the 1990s: Learning from a Decade of Reform', *Journal of Economic Literature*, 44, December.
- Sivasubramonian, S (2000): *The National Income of India in the Twentieth Century*, OUP, Delhi.
- Shenoy, B R (1955): 'A Note of Dissent on the Memorandum of the Panel of Economists', *Basic Considerations Relating to the Plan Frame*, a memorandum prepared by the Panel of Economists, Planning Commission, New Delhi.
- Srinivasan, R (2004): 'The Nehruvian Penalty: 50 Wasted Years', <http://www.rediff.com/news/2004/jan/14rajeev.htm>.
- Srinivasan, T N (1996): 'Professor Mahalanobis and Economics' in A Rudra (ed), *P C Mahalanobis: A Biography*, Oxford University Press, Delhi.
- Sudarshan, K S (2005): 'Hindu Spirituality Should be Spread in America', speech at *Dharma Summit*, New Jersey, August 13-15, <http://www.theuniversalwisdom.org/category/speakers/k-s-sudarshan>.
- Vasudevan, A (1968): 'On Ideology and Indian Planning', *American Journal of Economics and Sociology*, 27, pp 214-16.
- Winchester, S and R Winchester (2004): 'Calcutta: A Brief History' in *Simon Winchester's Calcutta*, Lonely Planet Publications, Footscray, Victoria, Australia.

## Economic &amp; Political WEEKLY

**Unbound Back Volumes** of *Economic and Political Weekly* from 1976 to 2006 are available.

Write to:

Circulation Department,

**Economic and Political Weekly**

Hitkari House, 284 Shahid Bhagat Singh Road, Mumbai 400 001.

Circulation@epw.org.in