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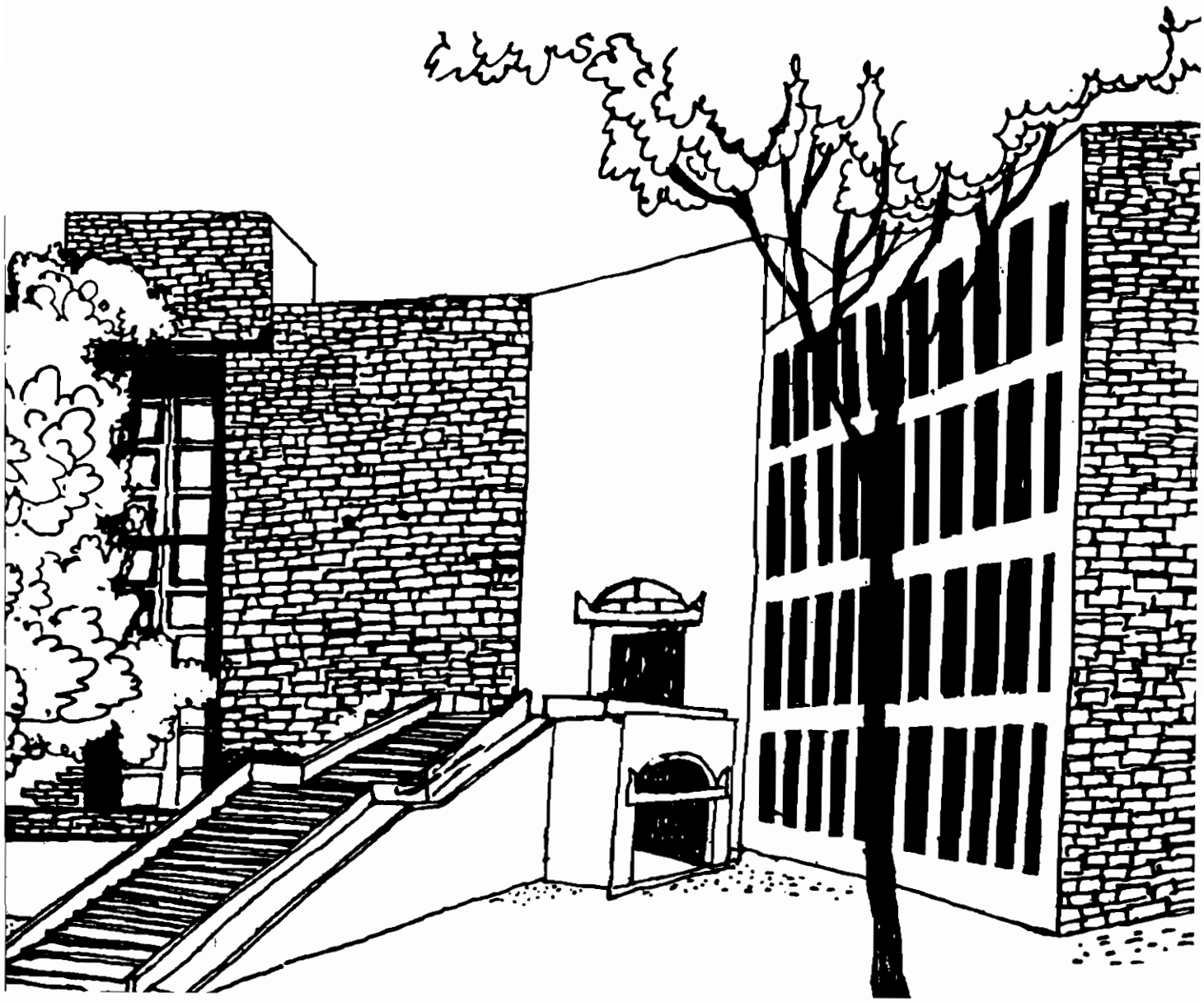
Working Paper



Why Not Push for 9% Growth?

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Introduction

The 1997-98 budget is a major landmark in the reform of the Indian economy, that was ushered in by Manmohan Singh's historic 1991-92 budget. With growth rates in excess of 6% over the last four years, there is the hope that the 'tigerisation' of the economy has begun, with India being able to look forward to a period of sustained and high growth, and the completion of its industrial transformation in less than a generation!

Yet, there are certain basic anomalies which if not corrected in the remaining years of the century can damage or considerably retard the ability of the economy to quickly transform. With six years data covering the reform period being available, it is now possible and appropriate to take a studied view of the processes at work. The immediate and obvious question that arise is how well has the policy, and especially the current budget addressed the task of bringing about 'high speed growth'. It is well known that late industrialisation has meant faster growth with the compression of the transformation phase, so that today growth at a rate below say five percent for an LDC, is suspect[1].

One quite indisputable gain of the reform has been the increasing openness of the economy. The rise in the openness ratio began in the mid-eighties and accelerated in the 90s, following from the depreciation of the currency in 1990-91. Our contention is that the present budget and exchange rate policy would lead to stagnation in the openness ratio, unless corrections are made: A bolder investment programme and a fairly large depreciation of the currency would most certainly lead to a sustainable growth in excess of 9%. Empirical evidence indicates that exports have been the most important driver of economic growth over the last several years . Moreover, there is some evidence that the economy may have been parked well below its potential growth rate, so that a wise fiscal push , today, can take it to a growth rate 9% or more, without a significant rise in the inflation rate. Without such a correction growth is likely to fall after a year to less than six percent, and would bring back the situation of a payments problem that characterised the late eighties. High growth in excess of 9% with increasing openness would in less than five years vastly enhance India's bargaining power in multilateral and bilateral economic situations. If the institutional constraints on agricultural growth can be relaxed in even a few states (Bihar, Eastern UP, Assam, Andhra Pradesh) via land reform, then the high growth would be sustainable for a period long enough to complete the industrial transformation in less then fifteen years.

The argument that the economy can grow at 9% or more is developed in five

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[1] Alexander Gerschenkron's [1966] insight was that the later the onset of industrialisation the faster is the growth or transformation. Late industrialisers have also been more activist (with the lead being played by the state). This is amply supported by nearly all the 20th century industrialisations.

sections. In Section I we conceptualise the East Asian trade strategy, and show that there is an opportunity for a disequilibrium growth, which conventional theory would have to recognise once the restrictive assumptions of a two-commodity world, and full utilisation of resources are given up. India can adopt such a strategy, because it does not demand contingent conditions such as a super efficient bureaucracy, a great political consensus or unity of purpose, a corruption free society, etc. Adoption of a disequilibrium exchange strategy would generate sufficient political and economic pressures for its continuance for at least a decade. In Section II, we review very briefly the exchange rate strategy of India in recent times discussing its political and intellectual moorings. The causal factors that have determined the high growth of the economy in the eighties and nineties are reviewed in Section III. The final prediction error (FPE) of various determining equations, is used to elicit the direction of causation. This leads to an understanding that expenditures like investment and exports, as also agricultural growth and public sector GDP have influenced non-agricultural private sector GDP. This analysis provides the basis for the decomposition in Section IV into the effects of the "exogenous" expenditures. Exports and rising private sector investments have fuelled growth in the mid-nineties. In Section V we discuss the prospects for achieving a 9% growth rate.

Section I : Conceptualising East Asian Trade Strategy

The thesis that open economies (LDCs) have grown faster than those less open, which the World Bank [WB, 1987] has been pushing, has unfortunately been rejected by many radical scholars as well as by others inclined to structuralist leanings. Actually, the thesis is stronger than what studies thus far have shown: Openness of economies is a function of the structural features, principally its population, per capita income, and land man ratio, which factors can explain as much as 70% of the variation in the ratio in large cross country studies over many years [Morris, Sebastian, 1993]. This is intuitively obvious since trade is more 'boundary' like, whereas GDP is body like , so that the openness would decline with country size. The deviation of the actual openness from the structurally determined (fitted) openness, which is the true measure of the policy determined openness best explains the differential growth rate across countries, especially Asian. Yet the thesis does not support laissez faire, with neutral trade regimes which liberal scholars like Bhagwati [1988] and others, and the WB/IMF have been arguing ad nauseum[2], but instead strong intervention by the state, and a

[2] The East Asian Miracle Report [World Bank, 1993], is the latest in the line of arguments, that little else other than stable macroeconomic policies, neutral trade regimes, investments in certain social over head capital like education, have brought about the fast growth of East Asia. The debate on the Report in the World Development [Vol.22. No.4], demolishes much of the evidence and the interpretation, and makes a case for state intervention, and industrial policy including micro-intervention. Here we have a limited objective - to show that there is another interpretation to the East Asian (including China now) trade strategy, which "appears" to be neutral to orthodoxy. While the strong and dirigistic state argument is valid, it may be of less relevance outside the political and cultural context of Korea (and Japan). The similarity of the trade strategies of Korea, Thailand, Taiwan, China, and possibly Malaysia and Indonesia, despite their obvious differences in the state structure, industrial structure, and political systems etc., means that trade strategy should be the principal focus of attention. Especially so, when their is desire to not merely understand their success but to emulate the

policy that creates purposeful disequilibrium. Such disequilibrium, in open (East Asian) economies has given a strong and sustained impetus to the faster growth of tradeables sector and to growth itself..

The liberal thesis argues that there is a trade-off between export promotion and import substitution, since a significant export promotion would discriminate against import goods production. And, hence, that real export promotion has actually meant liberal policies, without a bias in favour of either imports goods or export goods. They point to the fact that in most of the fast growing east Asian economies, the relative price of exportables to importables (Px/Pm) was close to their international prices. Hence they would argue that export promotion in fact amounts to neutral trade policies, and a movement from policies (tariffs and quota restrictions) that favour import substitution, to neutral policies is indeed a movement to export promotion. While the fact is no doubt true, the interpretation is entirely incorrect being based on the limitations of the 2x2x2 (2 factor, 2 country, 2 commodity) model of international trade. While the assumptions of two countries and two factors are not too severe an abstraction , the two commodity assumption[3] is. The recognition that Pm and Px can both be made large in relation to Pnt, the price of non-tradeables , opens the theoretical possibility within conventional trade theory of simultaneous import substitution and export promotion, even as the ratio Px/Pm is maintained close to its international value. Thus outside the restrictive two commodity world, increased openness is not because of laissez faire but because of a purposeful disequilibrium that gives a boost to tradeables production at the cost of non-tradeables. Moreover, if non-tradeables are price inelastic for domestic consumers, and tradeables are elastic (exports would face highly elastic demand being oriented to international markets), shifting resources from non-tradeables in a situation of less than full utilisation of resources can lead to great gains from trade. And these can be far in excess of what conventional theory would recognise. This insight was implicit in many empirical studies of the East Asian economies, especially of Taiwan and South Korea, in their phases of transformation. Since 1978, the Chinese policy makers have been playing the game, of disequilibrium export promotion to the great benefit of their economy. The Chinese economy, starting with a low openness ratio , raced ahead under the open door policy[4] , and China became more open than India (a smaller economy), and is today significantly more open than what its structural parameters alone would have determined. India in contrast is less open than what it should be, and even the corrections since the liberalisation have not raised Indian openness to cross its structural value, not to speak of being anywhere near the Chinese levels.

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same.

[3] With multiple commodities, and full utilisation of resources, and all of them being considered as tradeable the law of comparative advantage becomes a limited statement that, if $P_i / P_i^w > P_j / P_j^w$; where the prices are at autarky for the country and the rest of the world (w),then the country will export good j if it exports i , and import i if it imports j.

[4] Promotion of National Trading Corporations, State level trading corporations which had strong and unimaginably large incentives to export, significant and periodic depreciation of the currency, and a dual exchange rate in the early phase was all part of the open door policy which are not widely recognised. [Sung , Yun-Wing, 1991].

In a world of three commodities where the transformation of non-tradeables into tradeables in possible with the passage of time, we may think of trade and exchange rate policy as determining the point of production on a three dimensional production possibility frontier as in Fig.1. Conventional free trade policy can be represented as point "F" , with the relative vertical height of the curve that includes "F", being largely dependent upon structural features of the economy. Import substitution with "t" as the bias in favour of import competing goods as "I". Here of course as in conventional arguments there cannot be import substitution without discrimination against exports, and vice versa. India's strategy till recently implied a point such as "I", so that right through the Mahalanobis period up to the mid-eighties, the discrimination against exports were severe. Indeed in having a strong (and simple) import substitution programme, with overvalued exchange rates, the point "I" shifts to "I"", so that openness declines, and the full potential of the economy to bring into use idle resources (manpower) is retarded. The realised growth is smaller than the productive potential of the economy. In the WB sense movement from "I"" to "F" represents export promotion, and indeed it is so in the limited sense that the bias against exports is reduced.[5]

But export promotion (and import substitution) of the east Asian variety is an altogether different thing. We may represent it as the movement form "F" to "E", via a point like "I"" in the early phase, when rapid and (forced) diversification of the economy takes place. At "E" Px/Pm could well be close to its international value even as Pm,Px/Pnt is large, giving strong incentives to the production of both import and export goods. What determines the movement from "F" to "E" ? Besides, a purposive undervaluation of the currency, and dual exchange rates, there are institutional and other mechanisms that have driven real economies to "E". They include targeted exports through specially set up corporations as in China or through the chaebol as in Korea, punitive measures against enterprises failing in meeting their export targets, selective provision of credit, promotion of special export zones, special incentives for transnational corporations (TNCs) and large buying houses to locate offshore production in the country and, or make purchases from local firms.

It goes without saying that the movement from "F" to "E" is possible only for those economies with a diversified industrial sector, and with little skills constraint, and the ability to retain surpluses. For African economies with poorly diversified economies, an undervalued currency can only lead to terms of trade losses. Similarly, for many of the Latin American countries, wherein capital flight is endemic and structural, the benefits of point "E", would not be retained by the domestic economy, since the enhanced profits from tradeables production would go out as capital flight.

The one intellectual failure of the Mahalanobis Plan and of Planning in India was export pessimism, because given the early diversification of the economy a movement from "F" to "E" via "I" was eminently possible, but was never pursued. Politically a depreciation (or in a regime of fixed exchange rates a devaluation), not to

[5] So severe was the bias against exports with the ushering in of import substitution under the Mahalanobis Plan that, India from being the second largest exporter of textiles in world markets (about 18% share), reached a level of less than 1% in the course of five six years . Of course the limitations of the textile policy were partly responsible, but in many other products too India lost its markets. [Singh, Manmohan, 1964].

speak of a deep under valuation of the currency has been a problem for India, due to the strong opposition from the left and the middle classes. The inflationary potential of depreciation has been their primary concern. No doubt such a danger has been highly exaggerated. If the underlying growth rate that is achievable is high enough then the inflationary potential is attenuated. Moreover if resources are not fully utilised at "F" or "I", the inflation at a point such as "E" is much less than what simple monetarist dogma would imply. Idle resources at "E" or "I" would imply that the movement to "E" need not involve much sacrifice of non-tradeables. In other words the vertical slope on the surface at a section contained by the latitudes at "F" and "E" is quite small for densely populated economies, when they start on their transformation phase: Any additional external demand serves to utilise idle resources more than competing resources. In this scheme of things the gains from trade are far more than what conventional equilibrium theory would lead us to believe. This is intuitively obvious since if a society has idle manpower, usage of the same even under declining terms of trade[6] is a positive gain[7], as long as the income terms of trade for that activity rises faster than costs (particularly wage rates).

Nearly all the East Asian economies, especially Japan, Korea and China had significant incomes policy which sought to restrict immediate consumption among skilled and ordinary workers, because the wages of such workers tend to rise very fast during the transformation. A delay of the consumption spending arising out of current increases in income by as much as three years virtually negates the effect of rising incomes upon inflation and considerably enhances the resources for investment, and helps to realise the benefits of disequilibrium, without "overheating" the economy.

Export, import goods and non-tradeables, are not to be seen as given once for all. The very essence of growth is the realisation of dynamic comparative advantage. Taking the case of Korea since 1960, the initial export goods were natural resource based products: plywood, forest and agricultural products, whereas the import goods - manufactures largely simple capital goods, and some consumer durables. In a few years the principal export goods were the labour intensive manufactures: shoes, toys, garments etc. These were joined by capital goods and later by scale intensive capital goods and now high tech goods. Imports of natural resources of all kinds including the materials for industrial development have grown. Today imports include simple

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[6] It is interesting that both China and Korea saw declining terms of trade, when their exports expanded fast. This terms of trade decline is the inevitable tribute that the late industrialisers pay to the already industrialised for market access. But the income terms of trade have risen sharply. It is quite likely that if the terms of trade does not fall in the initial phases of expansion of manufactured goods, there may be constraints to expansive growth via cheapening through the realisation of scale economies and learning. Both groups of countries gain, because idle resources are used up in the exporting country.

[7] The corollary of this argument is that forced free trade in an economy that does not yet have a basic minimum of industries and is still only exporting natural resource based products, would tie its fortune to the limitations in its endowment of natural resources and to growth in the external demand for the same. As the material content of GDP, world over, declines with growth, the losses in the form of the opportunities forgone to utilise a growing population productively become large. This is what happened to the densely populated non-white colonies such as India.

manufactures as labour costs have risen. Thus an ascendancy of goods from import goods to export goods and vice versa is implied in the 'forward -looking' production possibility frontier. This distinct phases in the unfoldment of the dynamic comparative advantage has been documented by many scholars. [Ozawa , 1991]. What has been less understood is that non-tradeables are also mutable. There is a slow long term transformation of non-tradeables into tradeables. Garments for example was largely a local industry. The Great Wars created a market for mass produced uniforms, and this experience led to the ready made garments industry. As it remained a labour intensity activity, most LDCs were in the immediate post WWII period absolutely efficient, and any country that could gear up and develop links with advance country buying agents and discount stores, could look forward to large increases in sales. Of course certain services like electricity, that of roads and railways, haircuts, etc are strict non-tradeable, so that an infeasible region on the 'dynamic' production possibility surface is obvious.

There are major positive externalities in moving from "F" to "E", since the vast increases in export goods takes place along a learning curve, and in many goods there are significant scale and scope economies too. The de facto 'subsidisation' at "E" (unlike most other subsidies to industry) has the merit of being self subject to the discipline of the international market. Given the competition between nation states the international market can be assumed to be most competitive for the price sensitive goods that are the initial (for quite a while) export goods of a densely populated transforming economy. International competition acts to weed out the inefficient and those who cannot adapt. The import substitution that take place at "E" is at low level, if any, of protection, and creates fewer opportunities for rent seeking[8]. The problem of lobbies emerging to hold on to tariffs or explicit subsidies is not there. Indeed many industries which may have started off being protected could be coaxed to give up protection as the periodic rounds of nominal depreciation that are necessary to maintain the undervaluation of the currency take place.

The evidence in support of the hypothesis that the east Asian economies have in their transformation phases followed a strategy of undervalued exchange rates, is difficult to assemble. The usual measure of under/over valuation of the currency refers to deviations from the market/ black market rates of the currency, which are contingent upon the trade regime itself. Thus economies with highly restrictive and tightly administered import regimes would show much less overvaluation than others with looser import controls. Moreover, under/overvaluation as conventionally understood reflects a disequilibrium in the short term demand and supply of foreign currency, which has little to do with the ratio of tradeables to non-tradeables prices. The PPP measure of GDP suggests itself naturally. Yet there is a direct and systematic dependence of the PPP factor (exchange rate GDP/PPP GDP) upon structural features of the economy including the level of its development. The PPP factor tends to be smaller the poorer the economy.

Regressing[9] the PPP factor (as a percentage) on these structural measures,

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[8] Where there are severe import quotas (specific for particular source countries as in the case of garments) at the destinations, and the source country has very large factor cost advantage, as in the case of India, rent seeking, in allotment of export quotas have emerged.

[9] The data covered the period from 1950 to 1988, for about 130 countries. In all

the residuals are a true measure of the policy induced purposeful disequilibrium in the exchange rate. These residuals present a most interesting picture. See Fig.2, which plots the residuals for some of the East-Asian Economies and India. For Indonesia, China (since the Open Door Policy), Malaysia, Thailand and Korea (up to 1980, by which time it had carried out its industrial transformation), the residuals are all negative, whereas for India it has been positive and have hovered around zero during the eighties. The periods of rising openness match the periods of large negative values for the residuals. China's movement from "I" or "I"" to "E" has been quick and dramatic with exports (and imports) increasing by leaps and bounds. Malaysia, Indonesia and Thailand since the mid seventies show the same pattern that Korea showed during its transformation phase. The residuals could not be computed for Taiwan because many of the data was not available. Furthermore, the movement of exchange rates of these countries shows the deep devaluations/ deprecations that were periodically carried out. In contrast the devaluations/ depreciation of the Indian currency has been rather modest. Even after adjusting for inflation rates we do find a major difference between these countries and India.

Monetarist theory believes in the law of one price (viz that: the price level, the nominal interest rate, and the exchange rate would adjust to make the real interest rate equal the social time preference, and the exchange rate to purchasing power parity). Empirical evidence suggests that the period over which prices adjust is as long as 16 quarters. This is too long for a fast growing economy. And interest rates can remain far from any meaningful social rate of discount for too long. Similarly, the deviation of exchange rate from the purchasing power parity is more the norm. In other words, most economies, not to speak of fast growing LDCs are in hardly in any kind of equilibrium in the classical sense. This gives rise to a major role for strategic macroeconomic policy, that goes beyond "stabilisation" as such. We have already seen that PPP GDP systematically deviates from exchange rate based GDP, but even after they are adjusted for certain structural features they still deviate. The keynesian insight was that government expenditures and fiscal and monetary policy in general may be required for reducing fluctuations and to maintain output close to full employment levels. In a world of open economies actively trading with each other, this insight translates to the need for a country to purposefully undervalue its currency, if it has large undervalued resources (like labour) which are easier to exploit via tradeables (esp. export goods) production.

Section II : Indian Exchange Rate Policy

Even a casual look at the data reveals that the depreciation of the currency has helped exports. Following from the depreciation of the currency, as was expected with a lag of about a year exports began to grow at 19% or so in dollar terms. This was at a time when the sector as such got a large negative shock in the collapse of the Soviet Union, which country was a significant buyer of Indian

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3292 data points with non-missing values were used in panel form. The structural factors included population, share of consumption and investment expenditures, per-capita income in log log form. The F-ratio for the regression was 708.5 and the adjusted R sq. 0.6593. The data was from the Penn World Tables, Mark V. [NBER, 1991].

products. The left's second hand 'familiarity' with the facts of Africa and Latin America wherein it was true that depreciation has had no significant positive effects, have no doubt stood in the way of a fair consideration of the benefits of depreciation. We have already argued why India (and much of Asia) is different from both Africa and Latin America, so that an extrapolation from the experiences of these countries would be wrong. The standard argument that that because much of India's imports consist of POL products and other necessities, depreciation would not lead to much improvement in the BoP is not quite correct. Even if all imports were rigid and strictly necessities, their dollar price would not change, whereas exports (if there is a large manufactured goods component) could show large increases in dollar terms as resources shift to exports from non-tradeables. The BoP can only therefore improve ceteris paribus. The fact that since 1990-91 the BoP has only marginally improved in absolute terms is because of a simultaneous import liberalisation. The long term and sustained growth of the economy would of course demand a considerable import liberalisation, because India is natural resource scarce and would have to (like Korea, Taiwan and Japan) depend upon the rest of the world in a significant way for natural resources.

The sharp depreciation of the currency in 1990-91 was remarkable in many ways. It carried exchange reform further than ever before, and the gradual convertibility that was brought about on the trade account served to correct the bias against the exports, that had been there for long and was only slowly being attenuated in the eighties. It resulted in the nineties in a sharp rise in exports in dollar terms, and a significant shift in tradeables production. The simultaneous liberalisation in imports removed certain supply side constraints for both domestic production and exports. The openness of the economy which was rising in the seventies, but was still at very low levels (following the slowing down of growth since the mid-sixties), had begun to plateau off in the eighties since no significant currency corrections were carried out. This was reversed and corrected in the late eighties and the momentum was kept up in the nineties, so that in the nineties, for the first time, India's openness reached the level of openness of the fifties! See Fig. 3.

The export response of the economy to the depreciation may have been one of the best ever by any economy. Of course the vast increases in exports have come from small firms, and the textiles sector, which have the immediate cost advantage, and have an elastic supply response: gems and jewellery, handloom textiles, garments, powerloom cloth, leather and shoes, toys and handicrafts. What is less known is that the much maligned corporate sector too has responded. Thus the export/sales ratio shows a statistically significant jump for the average of 1993/94 over the average of 1990/91 for as many as 23 product groups out of 29 for the corporate sector . (Based on [CMIE, CIMM]). In only one industry - computers, does it show a decline. The computer industry until the corrections in the recent budgets, faced an inverted tariff structure. The Indian situation is very interesting because there is the possibility that the stages shown by Korea or Japan, which is now being followed by China and Thailand , can be compressed. There are many industries, not just those labour intensive, which can be internationally competitive: trucks, aluminium, steel, scooters and motorcycles, etc. to name just a few. In a sense the situation is ripe to encash the competencies, created by the long period of inward looking and in many ways 'a self-reliant' industrial development.

The danger now is that the openness ratio may level off since a slow down in exports is inevitable, unless corrective measures are taken now. As the latest Economy Survey observed, the real effective exchange rate has been rising ($/Rs), since domestic inflation rate has been higher than that of India's trading partners. The fall in the nominal value of the rupee has been marginal, it having stabilised around Rs.35-38 per US$ for the last several years. Export growth which in dollar terms had averaged at 19% for the years 1993-94 up to 1995-96 will in 1996-97 increase by only 8 to 10% in dollar terms. Similarly import growth which had averaged in dollar terms about 20% would grow at only 4.4%. This raises the prospects of a slow down in investment and growth in this financial year.

A large one shot depreciation of the currency, and then its maintenance over a long period of between 8 to 10 years has the additional merit in that the potential for speculative runs on the currency would be much lower since the RBI would have much larger level of reserves in a situation of rapidly rising exports. Retention of some control over imports during the next five years would provide the government with additional leverage. Spending on social overhead capital raises the productive potential of the economy only gradually. It can therefore be adjusted in the short run to accommodate for variations in the capital inflows.

Today, the currency value seems to be increasingly determined by capital account transactions rather than by the needs of the real sector. The treatment of all capital inflows as a general category is part of the problem. FDI (in the case of resource poor economies) are largely determined by the size and growth prospects of the economy given a policy framework (equal treatment, provisions against nationalisation, low tax rates etc.) that offers terms similar to what other competing countries offer transnational firms. Portfolio capital is drawn by yield rates on securities and by the interest rate differentials, and, over the short period, can fluctuate widely with anticipated changes in the currency value. An expected depreciation would hold back portfolio capital but would have little effect on FDI.

The workability of this East-Asian strategy depends crucially upon the ability of economic agents to respond to price signals, a certain basic level of diversification of the economy as argued before, availability of local skills and entrepreneurship, all of which India posses. But, India has not been able to take advantage of such a strategy. The enchantment with the east Asian model since the mid eighties and the specific and direct reference to them in several recent issues of the economic survey would indicate that the desire to emulate the east Asian model is not in doubt. The middle classes whose role in the coalition of classes whose elites govern India, is crucial. They are extremely chary of any inflation. Growth so long has been of secondary importance (having been rather slow, and having a less immediate effect). Nearly all political parties, except those exclusively representing the Kisans, depend upon the middle classes. The middle classes have a voice larger than what their growing numbers would indicate. The need for the state to mediate between the interests of competing groups and classes, and the space they therefore have in translating the needs of the poor, who are largely illiterate, in a democracy, vest them with enormous power. Inflation is against their interests and thus far the state has not been able to tolerate an inflation that is for long above 10%. The 'large' financial savings that the upper sections of the middle classes have built up over the years makes them increasingly less tolerant of inflation. Thus currency values far below equilibrium would call for political ingenuity,

and would have to result in high and visible growth for acceptability. Few would reject such a characterisation of the political economy. Nevertheless, we must not overstate this factor. We suspect that the monetarist framework that informs current policy makers, reinforced by their limited understanding of the East Asian trade and exchange rate strategy would have been more important in the adherence to conservatism.

Policy makers cannot wish away that with high speed growth the demand for imported natural resources would grow by leaps and bounds to make its import composition closer to Japan and Korea's. The fact that today the ratio of imports to exports of natural resources is only of the order of 2 and not much larger is because the Indian economy is very poor. The corollary is that the ratio of export/imports of manufactures would have to rise beyond the current ratio of a little over 1.2[10] to reach levels closer to the Korean. Nothing short of a East Asian like expansion of exports would sustain GDP growth itself. In other words the openness of the economy would have to rise rapidly. This is structurally ordained.

Moreover, there is a difference between a trade deficit of 2b$ on an export level of 10b$ versus the same on a level of 50b$. The two are the same in an accounting sense but vastly different in terms of the ease of debt service. Equally importantly, a high openness ratio enhances the bargaining power of the economy. With an import level of 100b$, the US for instance has a large stake, in the Chinese market, and so is constrained to negotiate rather than take unilateral decisions, over disagreements. The retaliatory potential of an economy depends upon the absolute level of its imports. Such potential is vital to India in the world of competing countries that we are in[11].

Sustained high speed growth for another four years can bring about the necessary political changes to make the process irreversible, and really 'tigerise' the economy. Reform of tariffs and import liberalisation is not possible unless exports can grow on a sustained basis at rates close to double the GDP growth rates for another eight to ten years, and decline only gradually, as the trade sector's share expands. The luxury of an appreciating currency is quite against the interests of the economy, and surprisingly the government has little to say about this except that it plans to liberalise import of consumer goods which would put pressure on the rupee. The pursuit of such an option to accommodate capital inflows, would in fact amount to changing the character of domestic absorption from investment to consumption Thereby the opportunity that the present situation offers to increase domestic investment expenditure, to raise still further the growth rates, (if necessary via a fiscal push), is being missed. Keeping up the pace of exports at levels between 15 and 20% in dollar terms would mean that the same planned for capital inflows would suffice. The incremental capital output ratio is bound to rise if the much delayed investments in infrastructure are to take place. Not only this, but the margin for efficiency gain in the private sector would narrow as private corporate industry's capacity utilisation has been rising. This means that for the continuation of the present growth rates the rate of investment would have to be raised.

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[10] Which is higher than that of some advanced industrial nations, which are also land-rich -US, Australia, New Zealand, Canada etc.

[11] To ignore this dimension is to neglect one of the principal drivers in the evolution of society in the modern period: nationalism. The other is class struggle.

A brief and crude decomposition of the growth rate of demand in the Indian economy in terms of its principal determinants viz agricultural performance, export growth and investments would lead us to the estimation of the minimum contribution of exports to economic growth. Before we do so it is important to show that these have indeed been the principal demand drivers.

Section III: "Causes" of Growth

Since we are interested in causation and not association alone, simple regressions would not help. We have used the technique of the minimum value of the final prediction error (FPE) as put forward by McClave[1978] and Hsiao[1979,1981], and reviewed in [Jadhav, N. 1994]. In order to reduce a time series say $\{Y_t\}$ to stationarity we carried out the operation "first difference of Y_t / Y_{t-1} on the series[12] from 1950-51 to 1994-95, and ran the regressions as described below, for the period from 1979 onwards. This period is chosen because it has grown fast, having broken away from the limitations of the "hindu growth" era, to exceed the growth rates achieved during the Mahalanobis period (1955-65).

Briefly, an objective periodisation of the economy would result in three distinct periods 1955-1965, with average growth rates of about half to one percent higher (about 5%) than the period average growth rates. Herein the state and policy were closely focused on growth and development. The basic diversification of the economy took place in this period. There was true commitment to the Plan. 1966-1979: or the "hindu" period with an average growth rate of just about 4%, during which the focus was lost and the fresh agenda of redistribution was incorporated. 1979-1990 of fast growth (around 5.5%) and crisis towards the end of the period based on a renewal of public investments, better performance of agriculture and significant productivity gains by the private sector. The high growth in this period laid the basis and confidence for the liberalisation in the nineties, which has raised the growth rate further to 6.5%. The agenda of the state and politics continues to retain a strong redistributive dimension both rhetorically and in fact, even as it pursues higher growth around the idioms of "globalisation" and "liberalisation". For a summarised presentation of the salient features of the economy and policy see Table 2.

The growth factors since 1979 have been similar to those in the earlier periods: Agriculture, exports and public sector investments. Improvements were

[12] In our view the idea of differencing (or transforming) time series to render them stationary without an a prior conceptual basis is arbitrary and can sometimes be worse than useless, despite the enormously developed statistical sophistry that follow. The amount of differencing and or the functional transformation to be carried out ought not be based on statistical considerations of the very data that is used for inference. This would be tautological. The functional form and hence the transformation and differencing to render a time series stationary has to be a priori to the inference. We know from basics that an expanding capitalist system cannot but grow exponentially from which, a exponential form is justified so that "shocks" or the "impact" on the system can be as in the text. The detailed arguments for the same are in Morris, Sebastian [1992], mimeo.

also somewhat important, the role of the public sector has been declining and that of exports grown. The period since 1990-91 is too small to be treated separately in formal analysis.

For the hypothesis that X causes Y the following regressions were carried out:

$\{y_t \longrightarrow y_{t-1}\}, \{y_t \longrightarrow y_{t-1}, y_{t-2}, \ldots y_{t-k}\}, \ldots \{y_t \longrightarrow y_{t-1}, \ldots y_{t-k} \ldots y_{t-5}\}$ and the one with the minimum FPE(k) is chosen. Next the regressions y_t on itself with lag from 1 up to k, and x_t, and adding further terms in x with increasing lag up to 5. (Six regressions), and chose the one with minimum FPE(k,n), where n is the lag on x. FPE(k,n) < FPE(k) implies that X causes Y. x and y are the transformed series to render them stationary as mentioned above. They may be viewed as the "shocks" that have acted upon the system.

We have taken various combinations of important macroeconomic variables to arrive at a picture of the drivers of the economic system. With monthly data: the index of industrial production (IIPI), real effective (5-country) exchange rates (REER5), money supply (M1), exports (EXP) and imports (IMP). With annual data we have considered GDP in agriculture, forestry and fishing (PAFF), public sector GDP (GDPPS), private sector GDP (GDPVS), non-agricultural private sector GDP (NAGVS), exports (EXP), imports (IMP) and some others. The monthly data covers the period from 4/89 to 12/96 and the annual from 1950-51 to 1994-95. The regressions reported pertain to the period from 1979-80 to 1996-97 for annual data. (Sometimes the last year is missing, with up to 16 points of data). For monthly data the reported regressions pertain to the period 1/93 to 12/96. (Sometimes two of the end data points are missing, with up to 48 points of data).

Results form Annual Data

(1) Observe that the "shocks" on public sector GDP (iGDPPS) and private sector GDP (iGDPVS) seem to have a weak mutual causation with the public to private sector being somewhat stronger. But we know that a significant part of private sector GDP arises in agriculture and related activities, which tend to be largely exogenous, the "shocks" to which largely arise out of weather fluctuations. This may well be masking the relationship between public and private sector GDP. Removing agricultural GDP from private sector GDP we obtain the non-agricultural private sector GDP (NAGVS). We find that iNAGVS is causally influenced by iGDPPS. Thus public sector GDP which ever since the Mahalanobis Plan has been an important driver in investments through the rest of the economy, may still be influencing private GDP. Since we have worked with GDP rather than investments, the effect is not strong. From the values of the coefficients of iGDPPS (not reported) the current and one year lagged values affect. This means that the effect is likely to be via expenditures, i.e., PS income raising, via expenditures, the income in non agricultural private sector. After public administration and defence are removed from the GDPPS, the relationship holds and is somewhat stronger (not reported), so that the causation is via the enterprise subsector of the public sector. But NAGVS has little or no influence on the PS, implying that the expenditures in the public sector are more autonomous than those in the non-agricultural private sector.

When the same exercise is carried out for the period before 1979-80, we observe a similar line of causation, except that the relationship was somewhat stronger. The relationship in a formal manner brings out what was known to many - that expenditures by the public sector and the incomes arising therein pull along expenditures elsewhere in the private sector economy. A significant part of the private sector is the "small scale sector", whose performance among other factors depends upon the spending of the public sector and government, and has highly elastic capacity. This insight is supported.

(2) Agriculture is well known to be an important "exogenous" variable (in any short period conceptualisation of the economy) and its importance in the eighties and nineties remain despite some attenuation form its earlier very large and dominant role as a driver of the rest of the system. The high growth of the eighties [Nagaraj, R. 1990a,b] has been inter alia due to improved performance of agriculture. The continuation of the same (with perhaps an increase!), again underlie in no small measure the high growth of the nineties once the two year adjustment had taken place. We see that the "shocks" on agriculture etc. (iPAFF), causes the "shocks" on both NAGVS and exports (iEXP). In both cases the links are positive. The reasons are not far to seek. The impact on agriculture is largely due the export of fish, certain other agricultural products exports like wheat, rice (basmati), cotton etc. The causation also runs from iEXP to iPAFF too, and is reduced to some extent by excluding from PAFF, output of fishing. The data does not allow a further investigation into which of agriculture and exports is more "exogenous".

Agriculture has only a barely perceptible influence on public sector GDP. This leads to the important conclusion that while the private sector (including the non-corporate small firm and household sector) is demand constrained the public sector GDP is more "autonomous" in the keynesian sense. Indeed the weak relation between PS and exports (iGDPPS causing iEXP) show that exports from the PS may well be arising out of supplies, so that the ability to improve and increase output may be crucial to exports from the sector[13].

(3) Exports too are important and largely exogenous since the mid-eighties. (iEXP cause both iNAGVS and iIMP [imports]). The relationship was rather weak for the period 1955-65, and better for 1969-70 to 1979-80). The strength of the relationship was increasing ever since the demand crisis of mid-sixties, but was never really exploited, till the structural adjustment of the nineties, that saw a major depreciation of the currency.

(4) Exports also cause agriculture as mentioned, so that there is mutual causation between the two, which may be arising out of both demand and supply linkages.

For a summary picture see Fig. 4

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[13] And that there is much scope to do this is not in doubt if the bulk of the manufacturing public sector enterprises could follow enterprises like the BHEL and NALCO.

We carry the analysis with monthly data. In order to remove seasonal influences we first deseasonalise all variables, except the real effective five country exchange rate (REER5), by applying an additive model on the variables to obtain seasonally adjusted series, with the seasonal component being additive to the adjusted data. For the seasonally adjusted series for exports, imports, m1 and index of manufactured goods output we next compute the "shocks". These are isEXP, isIMP, isM1 and isIIPM respectively. For the index of industrial production IIPI and for exports besides the above we also compute the detrended values from fitting a linear trend to the log of the seasonally adjusted values, which give rise to dlsIIPI and dlsEXP respectively.

Results from monthly data

(1) Exports again are the principal exogenous macroeconomic components causing both imports and to a moderate extent the index of manufacturing output That isEXP causes isIIPM, is easy to understand if the effect is via the expenditure as suggested earlier. If it was a case of excess production leading to exports then the causation should have run the other way and should have clearly shown up in monthly data. That the causation shows only a moderate effect also ties up with the notion that the multiplier operates over a longer period of a couple of years or so.

(2) Imports are also caused by exports, and to an extent, and a weak causation runs from imports to exports too. isIMP causes isEXP over the short period, which would perhaps have to do with the role of certain significant export commodities that are based on processing of imported commodities -diamonds, cashew and many of the export processing zone operations. That isEXP causes isIMP, is clearly through affordability, rather than the expenditure, since the period of dependence is small.

(3) REER5 causes dlsEXP. Here we have used REER5 (in a standardised form) rather than manipulate it. REER5 explains the deviation of exports from its exponential trend very substantially. We know a priori that REER5 if it has any effect should be via relative prices which is well known to be slow acting, hence the use of the deviations from the exponential growth path rather than the "shock" or "impact" measure.

(4) To one not familiar with the credit markets in India the weak effect of money supply (as represented by the growth rate in seasonally adjusted M1, i.e. grsM1), on the index of manufactured output, would surprise. But since a significant part of bank credit in India is through the cash-credit route, the true money stock is not adequately represented by the traditional measure that includes deposits alone. Since cash-credit a/c is checkable, M1 ought to include even the portion not drawn for use. A large increase in the cash-credit sanction would thus not show up. This is what makes output lead money supply so clearly rather than the other way round.

Section IV: Contribution of Expenditure Components to Growth.

Having established that both agriculture and exports act via expenditures (as in the keynesian system) it is worthwhile to decompose the recent growth

performance into that due the increases on these components. The treatment of agriculture is rather problematic. A correct incorporation would involve the setting up of two economies, one the productive part of the agricultural and the other the rest, with trade between the two, and both trading with the external world, so that the non agricultural economy's output is driven by investments and exogenous expenditures within, exports to the external world and exports (purchases by) to the rest of agricultural economy. Instead of doing this exercise, we have simplified and assumed that agriculture influences the autonomous part of the overall consumption function. Let

$Y \equiv C + I_p + I_v + G + X - M$, where C is consumption expenditure of the economy excluding that of government, I_v, I_p are respectively investment expenditures of the private (incl. Agriculture) and public sectors. Exports government expenditure and investments are all treated as exogenous for this simple decomposition.
$C = A_o + a \cdot A_g + b \cdot Y$, where A_g, is the index of agricultural production. a, b, m and A_o were estimated through regressions. We may decompose the growth rate of the economy as arising from growth in the expenditures as follows:

$$\tilde{Y} = \left(a \cdot \tilde{A}_g \cdot \left(\frac{A_g^{t-1}}{Y^{t-1}} \right) + \tilde{I}_p \cdot \left(\frac{I_p^{t-1}}{Y^{t-1}} \right) + \tilde{I}_v \cdot \left(\frac{I_v^{t-1}}{Y^{t-1}} \right) + \tilde{G} \cdot \left(\frac{G^{t-1}}{Y^{t-1}} \right) + \tilde{X} \cdot \left(\frac{X^{t-1}}{Y^{t-1}} \right) \right) \cdot \frac{1}{(1 - b + m)}$$

where the ~ sign implies growth rate for the period "t". We use the above equation to decompose the growth rates for each year from 1990-91 up to 1996-97 into the amounts that arise due to these "exogenous"[14] expenditures. We observe that the match between the computed value of Y (from the above equation) and its actual value is rather close. But, there are substantial differences between the actual and computed growth rates. This is largely because the computation assumes that the multiplier works out fully over the year, whereas in reality it operates over a much longer period. The rolling average over two years of the computed and actual growth rates are much closer.

Section V: Prospects for Achieving 9% Growth Rates

Observe that exports have contributed about 40% or more to overall growth rates (directly) over 1991-92 to 1994-95; and in the last couple of years it

[14] Exogenous only to the extent that we are considering a simple expenditures model, and these variables either because of weather (agriculture), or being highly unpredictable (investments), or because policy and government behaviour can directly influence them (public investments, govt. expenditure and exports and investments), are considered as variables worth focusing upon. Our prior analysis of causation provides support for such a decomposition rather than others that are also possible. For policy analysis, the usual use of the production function to break up the growth rate into that due to capital, and labour inputs, and the residual which in turn could possibly be broken up into those arising out of technological change, scale economies etc. is not useful. This is because neither technology, nor input use are actionable variables from the policy angle. Policy can at best influence them, given the assumptions of a capitalist economy. Such a decomposition no doubt has merits in other contexts, for example in a historical analysis.

has come down. No doubt the appreciation in the real value of the rupee over these two years has eroded the edge that exports had from the depreciation in the first budget that set off the reform programme. This failure to hold the real value of the rupee down, leave aside taking it down to a disequilibrium position, is the principal failure of the reform process. That the present budget has skirted this issue is quite clear. The Finance Minister has in fact threatened to liberalise import consumer (mfg.) goods to allow the absorption of the capital inflows which otherwise would in its view have only resulted in increased reserves. Forget for the moment the assumption it makes that the money multiplier is stable, for which there is hardly any evidence. More importantly a situation such this one is rare for any economy: If the govt. seriously pursues that option, an opportunity to raise the level of investment and growth rates of the economy significantly (certainly to at least sustain them at the present high level of 6.5-6.7%) would be lost. To maintain the export growth rate at 15-20% p.a. in dollar terms, a depreciation is due. The tendency for the trade deficit to fall, that this would result in, (thereby reducing realised foreign capital inflows), can be countered, by stepping up investment expenditures. The corporate tax cut is therefore in the right direction. With even these incentives, if the investments do not rise[15] substantially form its present level, the time is in fact ripe for a fiscal expansion into select sectors that presently constrain the economy: Power, major roads, and possibly ports with their vast potential to relax the supply side constraints. They can have a large effect on the output expansion, from the supply side, even as they enhance the demand side through the increased expenditure. Hence a monetisation programme[16] to raise such resources is justified. The situation cannot await the regulatory, legislative, and other legal developments and clarifications necessary for compensating private sector investments to take place in these areas[17]. The RBI in keeping with its monetarist orthodoxy does not see any need to lower the value of the rupee.

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[15] The trend growth rate in investments would have to go up, but in a short period it is difficult to check for trends.

[16] The need to reduce the fiscal deficit has been vastly exaggerated. There is of course a pressing need to cut government's consumption expenditures that are not redistributive, to reduce highly distortionary subsidies and virtual doles to the citizens (certainly not poor) of Delhi, or to reign in the vast leakages on expenditures meant for deprived groups. A budget deficit of 5-6% of GDP is entirely sustainable, and could even be increased when much of it arises on account of interest payments. The experience thus far of declining inflation at high growth rates only proves this.

[17] The experience of the electric power sector would indicate that a vibrant democracy such as ours can experience a 'Catch 22' situation with regard to private investments in infrastuctural areas. Even though investments in power are highly appropriable, unlike say in education or roads, the long period over which the capital costs are recovered, if only the real depreciation has to be provided for, implies that the state would have to allow returns (or equivalently prices for power) higher than what it could charge as a monopoly supplier. So, charges of a 'sell out' are bound to arise in a democracy, which the state would have to address. Without such benefits private capital would not be willing. And, certainly, no foreign party would be interested in a power project without a return of at least 20% in dollar terms. Enron would easily earn in excess of 28% in dollar terms! Stricter or socially more optimal terms would evaporate the prospects for private power.

Instead, it is concerned more with portfolio capital inflows, and seems to be on a single agenda to maximise such inflows.

At the present juncture, the fear that stepping up investments would result in inflation, is misplaced. Over the last six years we have witnessed (the rare situation) of rising growth rates with fall in inflation rates. This clearly means that in a modified keynesian framework, the economy has been working at well below its potential growth rate. The point of overheating may well be 9.5% or more , so that pushing for a 9% growth rate, would not mean an inflation of more than 8.5%.. [Dholakia, Ravindra, 1992], for the eighties finds that there is no inflation growth trade off; and that inflation has been generally low when the economy grew fast. The crisis of the nineties which brought about the structural adjustment programme, may not therefore have been one of excess absorption as much as a mismatch between tradeable and non-tradeable goods. An expenditure switching policy (depreciation, perhaps a sharper one than what was pursued), would have done the job of bringing about macro stability. The economy of course paid the price of orthodoxy, in suffering two years of low growth.

Investments declined sharply during the early years of the reform, and were revived only in 1993-94, and since then have contributed (via expenditures link) to growth. In 1996-97, it may have contributed as much as 45% to the growth. An important success of the reform is that private investments have gone up by leaps and bounds and by as much as 37% in 1995-96. Undoubtedly this is a remarkable success: The measures to delicense, tariff reform and import liberalisation, opening up of the economy to technology imports and foreign direct investments, and the removal of entirely dysfunctional and obvious irritants like MRTP, and the amendment of the old IPR were effective. Yet, the one shot gain in the adjustment of private investments to a higher share of overall investments may (and could) be expected to plateau off. Many areas of infrastuctural investments especially roads, railways, general education, health etc. which have large positive externalities, are problematic with regard to appropriability. This is despite developments in legal frameworks, regulation and pricing, and technological developments, which have brought about the tantalising possibility that markets can be coaxed into existence where previously there was none, and to allow for competition, and less detailed regulations and unbundling of previously integrated operations. And hence of private participation and/or ownership. Although in certain sectors this is true (telecom being a good e.g.), there is far too much hype, especially when it comes to areas like roads, education, irrigation, water, etc. Hence in these areas private investments are unlikely to fill in the void created by a precipitous decline in public investments. Unlike in the directly productive areas where the decline has been more than filled in. And private investments would have to enter infrastructure if its relative share has to go up further. Private investments in these areas would remain a slow and long drawn out affair, as the legal, regulatory, pricing frameworks etc., may not be quickly forthcoming[18]. *Thus, overall growth in the*

[18] There is the obvious alternative of giving public sector enterprises the autonomy to perform and linking their performance with rewards and punishments (i.e. giving teeth to the contracts between ministries and their enterprises). Such measures were used to great advantage by the Chinese government, to energise many of their SOEs. Its rejection, or rather avoidance, is probably because that would at one stroke considerably reduce the basis of aggrandisement and corruption.

immediate future would not be able to depend upon the maintenance of very high growth of private sector investments that we saw in the immediate past.

The next major conclusion is that agriculture contributes (via its expenditure effects on consumption alone) to between 17 and 35% to overall growth rate of about 6%. *Thus agriculture remains a powerful engine of growth.* The view that agriculture's problems stem from the supply side alone, is incomplete. The East-Asian economies have all high growth rate of agriculture, of around 5% during their transformation phase. *For India today an agricultural growth of 4.25% can easily contribute as much as 1.4% to overall growth acting via 'consumption' expenditures alone.*

Our earlier section based on causation studies showed that exports have an influence on agriculture. This means that there is a demand constraint on agriculture, and to the extent the positive "shocks" (temporarily) relaxed these, output went up. Many in the past have stressed the institutional constraints, that affect agriculture, particularly tenurial relations that do not provide the ability/ incentives, to either the tenant-sharecropper or the landlord respectively. Recent data, that could have thrown light on the reasons for the better performance of agriculture, are not available. Agriculture grew at rates in excess of 3.4 % since 1992-93, except during the year 1995-96 when it declined by 0.4%. The statewise data from 1980-81 to 1989-90 would indicate that West Bengal's agriculture grew at 3.95%, which was exceeded only by Punjab (4.96%), and Haryana's (3.2%). All other states grew at less than 3%. Operation Barga was completed in 1982-83, and over the period since then to the end of the eighties Bengal's agriculture grew at 5.5%, when till then had been a laggard among all states. The available data for food grains output cover a longer period including three years of the nineties. The increase in the average grain output of 1990-91, 1991-92 and 1992-93, over the average output of 1981-82, 19982-83 and 1983-84 was 6.02% per annum for West Bengal! The next highest was for Haryana (4.42%) and Punjab (3.76%). For some of the other substantial states it was as follows: Bihar (2.57%), Assam (2.96%), Andhra Pradesh (0.39%). [CMIE, 1996]. It is unlikely that in West Bengal, area would have shifted from fast growing crops like vegetables and potatoes to grain. From jute there was some shift, but this cannot account for the very high growth rates obtained. Its performance is likely to be truly reflective of its overall agricultural performance. Thus, there are vast gains to be made by a relaxation of tenurial constraints more widely. If agriculture in India can grow at rates close to 5% there is no stopping the 'tigerisation' of the economy.

Policy makers and the government have ears only for the rich and surplus farmers. In their consent to the reform process they have been able to successfully drive a hard bargain for the retention of agricultural subsidies, and handsome support prices. The unique opportunity for land reform on a capitalist agenda is being missed by the right. The left despite its stated commitment to land reform is not pursuing it with the seriousness, that the issue warrants, and especially so given the success in Bengal.

The privatisation agenda, which is integral to the reform process has strong political basis. Many of the public sector units especially those with undervalued assets, and/or those about to embark upon the scale economy ladder, and with not

too large a burden on account of over employment, would be attractive to private capital. Today, only the interest of the public sector employees stand in the way. Few take-overs or sales as such have taken place. And this situation can last for sometime, despite the state having shown its ability to impose upon the PSUs a severe funds constraint, and ensure that most fresh investments take place in the private sector. The government hopes for a slow attenuation of the pressures against privatisation as the PSUs are softened up. In such a situation it is important for the left to take a fresh look at privatisation. It offers the state an opportunity to compensate landlords to carry out a feasible land reform. The opposition to this from the right is not likely to be insurmountable, since it makes for a quicker privatisation, and provides the conditions for expansive growth. Most importantly it can for long secure the institution of private property. The networth of the public sector, even after adjustments for the costs of an attractive VRS would be adequate to launch a major programme of land reform in the areas that need it most Bihar, Eastern UP. The massive transfer of funds that this would entail, need not be inflationary if the buyback of the shares of PSUs is pushed to a period after eight years or so, and in a phased manner. But is this possible when both the right and the left are steeped in borrowed ideas?

The sharp fall in exports in 1996-97, when looked at a little more closely would indicate that the fall has been steepest for the industries and product groups where the small scale industry is dominant. The top eight manufacturing industries, in terms of the relative decline in growth rate of exports were primary and semi-finished iron and steel, transport equipment, handicrafts, leather footwear, ready made garments, and electronic goods, in that order. In the first the public sector is important, and the small scale industry dominates all the others except transport equipment. That both the public sector and the small firms suffered a severe funds constraint, during the year when the credit expansion was negative (see table 1), is not in doubt. Small firms face a triple squeeze when there is a credit squeeze. Over and above the average effect, they have to bear an additional burden since the banks have a tendency to impose the credit restriction more heavily on them. The asymmetric risk perception, which is severe for the small borrower, and the fact that bank officers are penalised for failure of small loans, are part of the problem. Moreover large firms in sub-contracting relations with small firms, tend to squeeze them when there is a general credit shortage. The problem of course is very basic to the credit market, which continues to be very inefficient and misallocate resources. The RBI's method of 'control' over banks is the main problem. There is a need for the RBI to move away from administrative direction of credit to incentive based direction of credit to particular sectors (either of social importance or those facing asymmetric risk). That it needs to separate the banking related directions from those related to sectoral policies, has not permeated the understanding of the RBI. Banks themselves would have to move towards internal systems of control and incentives to be able to really evaluate projects, and develop their client portfolio. Formal, and rule based evaluation is hardly the answer. The continuance of the vast spread in interest rates despite their deregulation, is the clearest indication of the banks operating as a cartel. The mode of control based on guidelines is long over.[19]

[19] The author as part of the working subgroup on financing of the SSIs for the Ninth Plan was witness to the many stories and complaints against the absurd, and sometimes possibly criminal behaviour of banks towards the SSIs. The Nayak

For the small firms, there is no alternative to the credit markets, and their efficient functioning. In 1996-97 small firm output may have grown at rates less than large firm output, for the first time in the Indian economy in many years. (India is presently at that juncture where the small industries ought to be the fastest growing sector). Capacity is most elastic in small firms, and many produce tradeables, and there are still many more waiting to produce tradeables, if only the incentives were strong enough to give the initial push to make investments to take advantage of scale economies and better quality.

Conclusion

More than political constraints, an adherence to orthodoxy on the part of policy makers may been responsible for the economy operating at well below the growth rate that it is capable of achieving. Part of the problem is orthodoxy's (limited) understanding of the East Asian trade strategy, which was as far from laissez faire as can be imagined. A purposeful and massive under valuation of their currency was part of the strategy, which while making the ratio of importables to exportables close to their international prices, provided for simultaneous export growth and import substitution; something not possible in orthodoxy's standard work horse -the 2x2x2 model of international trade. Simultaneous import substitution and export production is theoretically possible for economies with idle resources, with the introduction of third non-traded goods sector. Today, the appreciation in the real effective exchange rate, unless corrected would bring exports and growth itself tumbling down. The prospect for a sustained growth at 9% or more is real. It is well below the point at inflation can be expected to rise. The need of the hour is expenditure (investment) expansion. The current budget in providing for a tax cut for industry, has done the right thing. But that in itself would not be enough. For structural and other reasons private investment would not show the same bouncy in the years to come that it shown in the past. Further increases in the share of private investment would have to wait many clarifications of legal and other (such as regulatory) tangles. This raises the scope for renewal of public investments in areas like power, with even deficit financing. If the agricultural constraint too can be relaxed via institutional reform, and a disequilibrium exchange rate strategy is in place the 9% may itself be an underestimate of the rate of growth the economy is capable of. Of course the present orthodoxy of the policy makers and the RBI would have to go.

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References

Alagh, Yoginder; R. J. Mody and Rohit Desai (eds.), "Stability and Development: Essays in Honour of Dr. D.T. Lakdawala", Sardar Patel Institute of Social and Economic Research, Ahmedabad, Har-Anand Publications.

Committee norms which are supposed to apply to small firms have been systematically ignored by banks. The problems with regard to the functioning of banks are many, and this paper is not the right place.

Bhagwati, Jagdish (1988), "Export Promoting Trade Strategy: Issues and Evidence", The World Bank Research Observer, Vol.3, No.1, Jan.

Burgenmeier, B. & J. L. Muchielli (eds.) (1991), "*Multinationals and Europe 1992: Strategies for the Future*", London and New York, Routledge.

CMIE, CIMM, Corporate Information on Magnetic Media, database of the Indian corporate sector.

Dholakia, Ravindra (1993), "Supply Shocks and Strategy for Recovery and Stabilisation in India", in Yoginder Alagh et al (eds.).

Economic Survey, various issues, Govt. of India, Ministry of Finance, Economic Division.

Gerschenkron, Alexander (1966), "*Economic Backwardness in Historical Perspective*", Cambridge, Mass., Harvard Univ. Press.

Hsiao, C. (1981), "Autoregressive Modelling and Money Income Causality Detection", *Journal of Monetary Economics*, Vol. 7, pp.553-560.

Jadhav, Narendra, (1994), "*Monetary Economics for India*", New Delhi, Macmillan India.

McClave (1978), "Estimating the Order of Autoregressive Models: The Max X2 Method", *Journal of American Statistical Association*, Vol.73.

Morris, Sebastian (1992), "What is the Functional Form for Aggregate Income?", mimeo.

Morris, Sebastian (1993), " Structural Determinants of the Openness of Economies: The Conceptual Basis and Cross-Sectional Evidence", WP No. 1130, August , Indian Institute of Management, Ahmedabad.

Nagaraj, R. (1990a), "Growth Rate of India's GDP, 1950-51 to 1987-88. Examination of Alternative Hypotheses", *Economic and Political Weekly*, June 30, pp. 1396-1403.

Nagaraj, R. (1990b), "Industrial Growth: Further Evidence and towards an Explanation and Issues", *Economic and Political Weekly*, Oct.13, pp.2312-2332.

NBER(1991), "The Penn World Tables, Mark V: An Expanded Set of International Comparisons, 1950-1988", National Bureau of Economic Research Inc., USA; and associated article by Robert Summers and Alan Heston, of same name, also published in *Quarterly Journal of Economics*, May, 1991

Ozawa, T, (1991), "Japanese Multinationals and 1992", in *Burgenmeier, B, & J. L. Muchielli (eds.) (1991).*

Singh, Manmohan (1964), "*India's Export Trends and the Prospects for Self-Sustained Growth*", Oxford, Clarendon Press.

Sung, Yu-Wing (1991), "*The China - Hong Kong Connection: The Key to China's Open Door Policy*", Cambridge, Cambridge Univ. Press.

World Bank (1987), "*World Development Report 1987*", World Bank and Oxford Univ. Press, Washington D C.

World Bank (1993), "The East Asian Miracle: Economic Growth and Public Policy", Policy Research Report, Washington D.C.

Table 1: Certain Aspects of the Economy and the Central Budget

		1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
1	Gross domestic product at factor cost (constant 1980-81 prices)	201.45	212.25 (5.360)	213.98 (0.82)	225.27 (5.27)	238.86 (6.04)	256.10 (7.21)	274.21 (7.07)	292.90 (6.82)
2	Index of industrial production (1980-81=100)	196.40	212.60 (8.25)	213.90 (0.61)	218.90 (2.34)	232.00 (5.98)	253.70 (9.35)	283.30 (11.67)	307.95 (8.70)
3	Index of agricultural production 1981-82=100)	143.00	148.40 (3.78)	145.50 (-1.95)	151.50 (4.12)	157.30 (3.83)	165.00 (4.90)	164.30 (-0.42)	170.38 (3.70)
4	Openness ratio	0.15	0.16 (2.86)	0.17 (4.86)	0.19 (11.64)	0 20 (5.17)	0.20 (3.05)	0.23 (15.00)	0.22 (-6.94)
5	Exports (US$)	16.61	18.14 (9.22)	17.87 (-1.53)	18.54 (3.76)	22.24 (19.97)	26.33 (18.40)	31.80 (20.76)	34.34 (8.00)
6	Imports (US$)	21.22	24.07 (13.45)	19.41 (-19.37)	21.82 (12.42)	23.31 (6.80)	28.65 (22.95)	36.68 (28.00)	38 29 (4.40)
7	Total employment in organised public and pvt. sector (lakh persons as on March 31)	263.53	267.33 (1.44)	270.56 (1.21)	271.77 (0.45)	273.75 (0.73)	275.25 (0.55)		
8	Nominal effective exchange rate (5 country index) (1985=100)	56.00	42.15 (-24.73)	38.74 (-8.09)	31.84 (-17.81)	29.59 (-7.07)	28.51 (-3.65)	26.13 (-8.35)	
9	Real effective exchange rate (5 country index) (1985=100)	73.00	61.65 (-15.55)	58.56 (-5.01)	52.89 (-9.68)	52.82 (-0.13)	55.73 (5.51)	53.55 (-3.91)	
10	Unit value index of exports (1978-79=100)	276.60	292.50 (5.75)	369.50 (26.32)	421.50 (14.07)	474.10 (12.48)	494.60 (4.32)	484.20 (-2.10)	
11	Net terms of trade (1978-79=100)	121.10	109.30 (-9.74)	119.50 (9.33)	127.30 (6.53)	144.90 (13.83)	152.40 (5.18)	137.90 (-9.51)	
12	Income terms of trade (1978-79=100)	211.80	212.20 (0.19)	249.30 (17.48)	283.80 (13.84)	373.10 (31.47)	446.00 (19.54)	530.00 (18.83)	

13	Implicit deflator for GDP at factor cost	202.86	225.12 (10.97)	258.32 (14.75)	280.01 (8.40)	306.40 (9.43)	335.16 (9.39)	359.50 (7.26)	389.10 (8.23)
14	M1 (money supply with the public as on March 31)	42.59	44.32 (4.05)	46.71 (5.40)	46.80 (0.20)	53.07 (13.39)	57.36 (8.08)	59.52 (3.76)	58.60 (-1.55)
15	M3 (Aggregate monetary resources as on March 31)	117.91	123.32 (4.59)	126.96 (2.95)	135.31 (6.58)	147.58 (9.07)	158.56 (7.44)	167.98 (5.94)	175.73 (4.61)
16	Bank credit to the commercial sector (as on March 31)	77.28	79.40 (2.74)	76.38 (-3.80)	81.25 (6.37)	79.85 (-1.72)	87.34 (9.38)	95.75 (9.63)	92.64 (-3.25)
17	RBI's net credit to the government (as on March 31)	36.32	39.47 (8.66)	36.39 (-7.79)	35.16 (-3.39)	32.41 (-7.82)	30.28 (-6.58)	33.70 (11.30)	33.32 (-1.13)
18	Other banks' credit to government as on March 31	21.89	23.33 (6.57)	24.99 (7.12)	28.14 (12.58)	34.85 (23.87)	36.08 (3.53)	37.31 (3.39)	42.93 (15.06)
19	Net foreign exchange assets of the banking sector as on March 31	3.36	4.70 (39.85)	8.22 (74.82)	8.91 (8.45)	17.18 (92.74)	23.21 (35.12)	21.46 (-7.52)	23.73 (10.55)
20	Total expn. of central govt. final outlays on consumption expenditure	10.25	9.93 (-3.06)	9.47 (-4.64)	9.59 (1.30)	10.38 (8.22)	10.41 (0.22)	11.67 (12.15)	12.36 (5.93)
21	Total expn. of central govt. final outlays on gross capital formation	4.01	3.82 (-4.74)	3.58 (-6.20)	4.24 (18.33)	4.17 (-1.77)	4.27 (2.61)	5.03 (17.58)	4.64 (-7.64)

NB: Items (14) to (21) are values deflated by the implicit deflator; All rupee values are in thousand crs., Dollar values in millions; Figures in brackets are percent change over previous year.

Table 2: Basic Features and Orientations of State and Development Since 1955

Aspect/Orientation	1955-1965	1965-1979	1979-1990	1990 -1997
Growth	high (4.5-5.0%)	low (≅ 3.8 %)	high (≅ 5.5%)	high after adjustment (6.5%)
Agricultural growth	≅ 3.0%	< 3.0 %	≅ 3.2%	> 3.5%
Agricultural surplus	low	low but increasing	high	high
Terms of trade of the mfg sector	favourable	adverse	favourable	neutral
Thrust of economic policy	developmental	redistributive	redistributive, emergence of efficiency	efficiency, growth
Strategic intervention	high	significant	little	very little
Rhetoric of state and policy	nationalism, transformation	'socialistic' development	cachophony	globalisation
Subsidies to people	low	increasing	high	high, decreasing?
Rent seeking potential	low	high	very high	high, declining
Militancy of labour	low	high	high, declining	low
Bias against exports	very high	high	high, declining	low
Basis of foreign exch allocation	license/ bureau	license/bureau and politics	policy, market and politics	market and policy
Protection level	high	very high	declining, water in tariff	low; tariff inversion for many labour intensive mfg
Corporate sector's external orientation	practically nil	via outward FDI	via exports, decl. outward FDI	exports
Import repression	high	very high	moderately high, declining	low

Table 3: Causal Regression Results

No.	y	x	DEL_FPE	percent	Type	Period	No.of Obs.	k	n	FPE(R)	FPE(UR)
1	iPAFF	iEXP	3.1690E-03	51.21	A	1979-94	16	4	2	0.006188	0.003019
2	iNAGVS	iPAFF	6.3000E-04	48.88	A	1979-94	15	2	4	0.001289	0 000659
3	iNAGVS	iEXP	6.0700E-04	47.09	A	1979-94	15	2	5	0.001289	0.000682
4	iIMP	iEXP	2.3200E-03	35.15	A	1979-94	16	4	1	0.006600	0.004280
5	iNAGVS	iGDPPS	4.4800E-04	34.76	A	1979-94	15	2	4	0.001289	0.000841
6	iEXP	iPAFF	1.4920E-03	17.19	A	1979-94	16	1	1	0.008678	0.007186
7	iGDPVS	iGDPPS	9.7000E-05	4.04	A	1979-94	15	4	0	0.002400	0.002303
8	iGDPPS	iNAGVS	1.4000E-05	3.86	A	1979-94	15	1	0	0.000363	0.000349
9	iGDPPS	iGDPVS	8.0000E-06	2.20	A	1979-94	15	1	0	0.000363	0.000355
10	iEXP	iGDPPS	1.1100E-04	1.28	A	1979-94	15	1	0	0.008678	0.008567
11	iGDPPS	iPAFF	3.0000E-06	0.83	A	1979-94	15	1	0	0.000363	0.000360
12	iEXP	iIMP	9.0000E-06	0.10	A	1979-94	16	1	0	0.008678	0.008669
13	iEXP	iNAGVS	6.0000E-06	0.07	A	1979-94	15	1	0	0.008678	0.008672
14	iGDPPS	iEXP	0.0000E+00	0.00	A	1979-94	15	1	0	0.000363	0.000363
15	dlEXP	REER5	5.0570E-03	67.78	M	1993-96	44-40	1	1	0.007461	0.002404
16	isIMP	isEXP	3.8410E-03	45.35	M	1993-96	48	5	6	0.008470	0.004629
17	dlIIPI	dlEXP	2.0960E-03	45.19	M	1993-96	46	2	1	0.004638	0.002542
18	dlEXP	dlIIPI	2.7720E-03	37.15	M	1993-96	46	1	1	0.007461	0.004689
19	isEXP	isIMP	1.5990E-03	26.60	M	1993-96	48	3	2	0.006012	0.004413
20	isIIPM	isEXP	1.1000E-04	13.21	M	1993-96	48	5	6	0.000833	0.000723
21	grsM1	isIIPM	9.0000E-06	3.54	M	1993-96	48	1	0	0.000254	0.000245
22	isIIPM	grsM1	1.7000E-05	2.04	M	1993-96	46	5	1	0.000833	0.000816
23	isEXP	isIIPM	1.7000E-05	0.28	M	1993-96	48	3	0	0.006012	0.005995
24	isIIPM	isIMP	1.0000E-06	0.12	M	1993-96	46	5	0	0.000833	0.000832

Table 4: Results of a Decomposition of Growth Rates based on a Simple Expenditure Model

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
GDP (at MP), at 1980-81 prices (000 crs)	227.367	240.238	241.255	253.979	263.871	280.502	300.342	320.815
Computed GDP (000 crs)	227.367	241.723	233.341	251.659	254.313	278.478	306.775	321.522
Growth rate of GDP		5.66%	0.42%	5.27%	3.89%	6.30%	7.07%	6.82%
Growth rate of comp. GDP; of which contributed by:		6.31%	-3.47%	7.85%	1.05%	9 50%	10.16%	4 81%
Agriculture		1.36%	-0.69%	1.43%	1.31%	1.67%	-0.14%	1.16%
Govt. cons.		-0.25%	-0.35%	0.09%	0.56%	0.02%	0.81%	0.42%
Exports		0.66%	1.95%	1.59%	2.55%	1.30%	3.17%	0.15%
Public sector fixed capital formation		0.53%	0.34%	-0.95%	0.39%	2.19%	0.19%	
Private sector fixed capital formation		2.98%	-2.02%	3.86%	-0.12%	2.43%	7.10%	
Change in stocks		1.03%	-2.69%	1.83%	-3.64%	1.89%	-0.97%	
Capital formation (all)		4.54%	-4.37%	4.74%	-3.37%	6.51%	6.32%	3.08%
Difference of actual and comp. GDP		-0.65%	3.89%	-2.58%	2.84%	-3.20%	-3.09%	2.01%
Two year rolling diff. of actual and computed GDP			1.70%	0.79%	0.18%	-0.10%	-3.14%	-0.51%
Rate of change of implicit deflator for GDP (inflation rate)		10.97%	14.75%	8.40%	9.43%	9.39%	7.26%	8.23%
Change in inflation rate			3.78%	-6.36%	1.03%	-0.04%	-2.12%	0.97%

Fig. 1

Conceptualising East Asian Trade and Exchange Rate Strategy

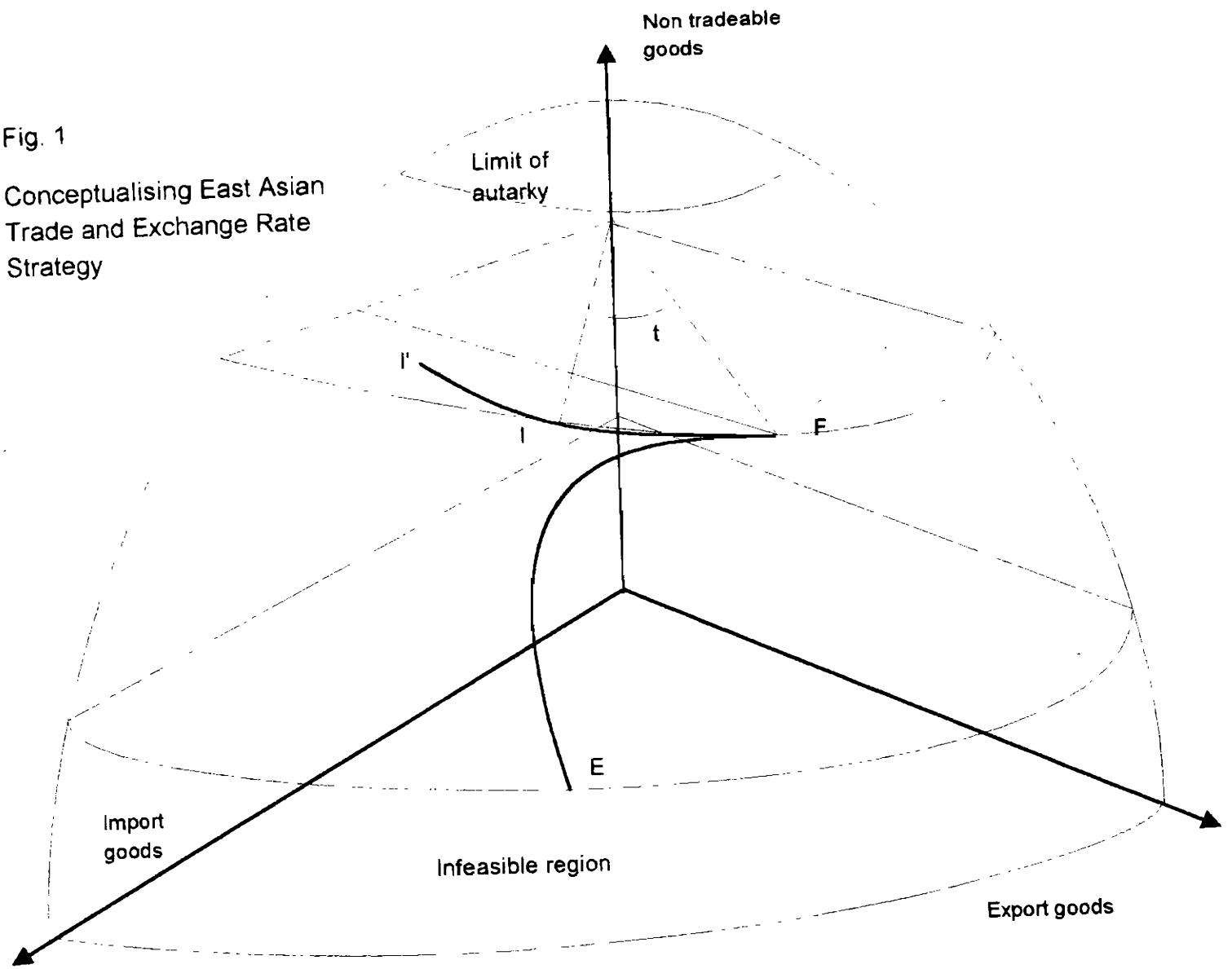


Fig.2: Deviations of PPP from Structurally Determined Values

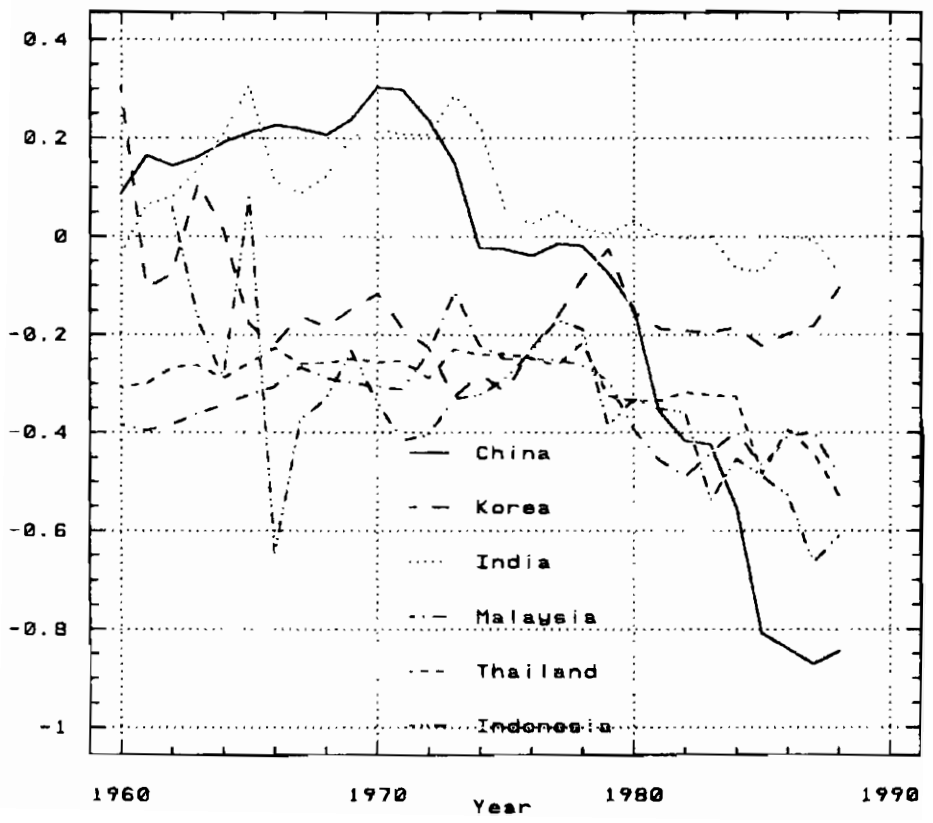


Fig.3: Openness, Exports and Imports Ratio

(to GDP at current market prices)

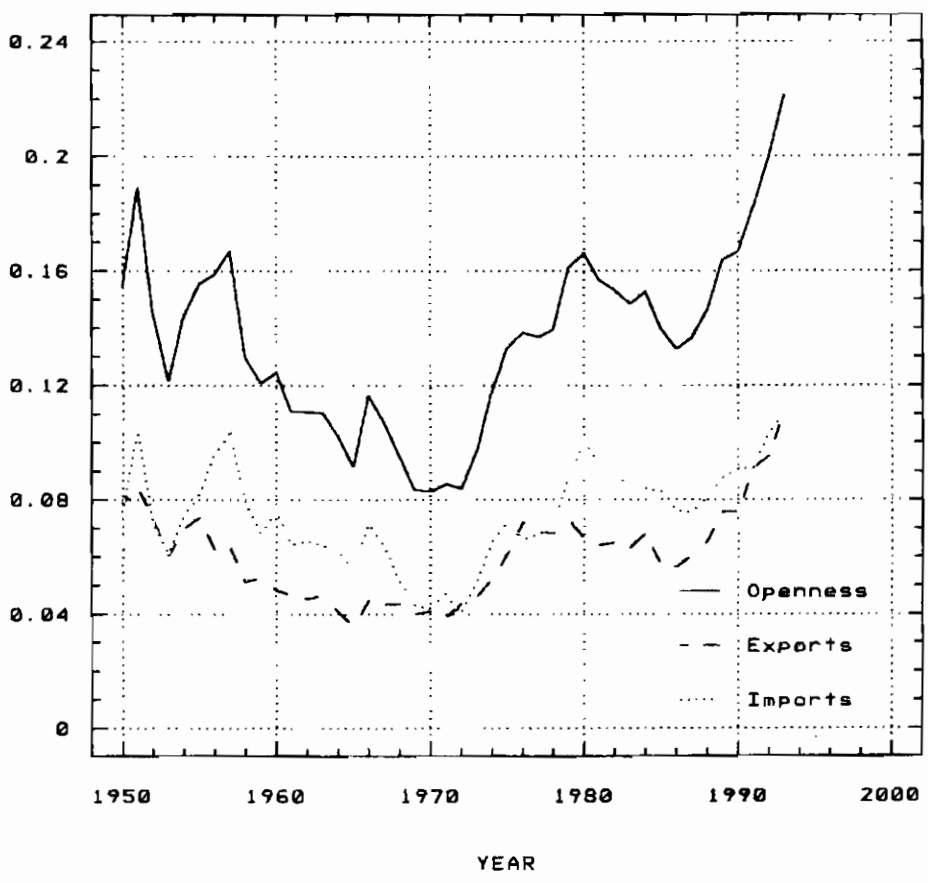
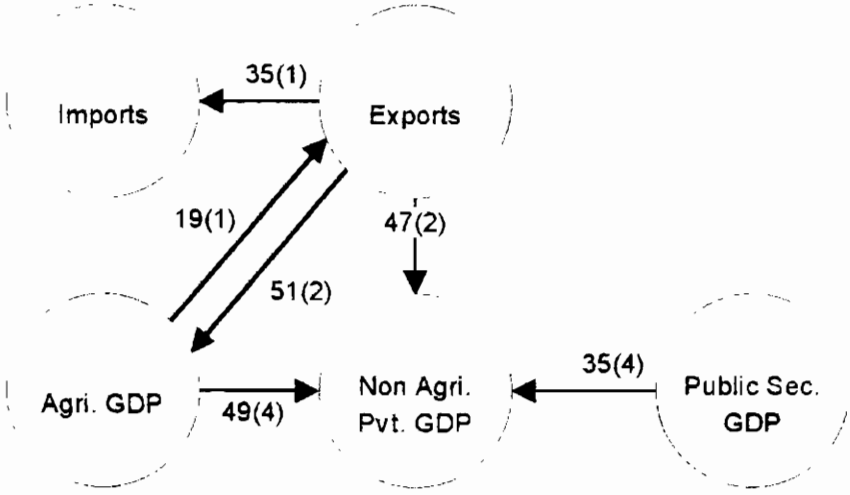


Fig. 4:Causal Relationships between Certain Macroeconomic Variables based on Annual Data (1979-80 to 1995-96)



NB: The numbers along the arrows indicating the direction of causation, refer to the per cent reduction in FPE in determining the caused variable. Figures in brackets give the maximum lag of the explaining variable