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Macroeconomic Policy and Development in India: Some Analytical Issues

Abstract

Should a developing economy, such as India, have a macroeconomic policy framework that is identical to an advanced capitalist country? The answer is a "No", because the developing economies have external constraints, that the more developed countries do not. They also, often, need to achieve a structural transformation by moving labour away from agriculture. These economies are, in addition, faced with possibility of international capital flow reversals. I argue for keeping the real exchange depreciated to have an export-led growth, emulating the East Asian experience. In today's world, given protectionism in the advanced capitalist countries, this strategy is more challenging. Also the capacity of the State to deliver this is open to question.

JEL-Codes: E600, O100, O400.

Keywords: inflation targeting, big push, exchange rates, structural transformation.

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A revised version of this will appear in a volume with the title "Economic Policy Frameworks Revisited" edited by Cesare Imbriani and Pasquale Scaramozzino to be published by Springer. This is in memory of my friend Giancarlo Marini. Previous "versions" were delivered as public lectures at the University of St. Petersburg and Vishwa- Bharati University. I have tried to retain a "chatty style" of a public lecture, keeping equations to a minimum.

1. INTRODUCTION

What should be the macroeconomic policy framework in a developing economy?[2] Are there modifications required in applying textbook macroeconomic theories to these countries? Or can one effectively relegate their “underdevelopment" to just a matter of detail? In this paper I will look at the received wisdom for the developing countries. I shall discuss both the theoretical models, and their applicability in the growth process of the advanced capitalist countries.[3] A foray into economic history is relevant, because developing countries, more often than not, are interested in a “structural transformation" i.e. moving resources from the traditional to higher productive “modern" sectors i.e. those with innovation possibilities that may enable sustained growth.[4] Although not universally true of these countries, but just to fix notions, we shall refer to this as moving labor from subsistence agriculture to industry. Structural transformation involves not just the direction of change, but also its speed--what has taken the OECD countries decades, or centuries, is sought to be achieved in a few years.

While the above statements are broadly true, these are too sweeping—mainly because there is no prototype of a developing economy. I will therefore be specific, and discuss India's experience. India itself is a continent-size country, with a lot of diversity. There are at least two India's in the aggregate data—one that is almost like a developed economy, with financial instruments and education comparable to the OECD countries; the other where there is malnutrition, lack of access to primary education and basic health.[5] Having pointed this out, I shall talk of “India”, since macroeconomics involves aggregation, and regional variations, however important, are not the focus of my analysis. My endeavor is to find out whether we are invoking the right lessons from economic theory and history, given the institutional setting of a developing country like India.

2. MACROECONOMICS AND DEVELOPMENT ECONOMICS: SOME BACKGROUND

Let us first talk about macroeconomic theory. In particular, I want to ask: what should be its nature in a developing economy context? The received tools do not really distinguish between an

[2] I have been working on the issue of financial reforms and capital flows to India for about twenty years (see e.g., Sen (2007)). While there is some overlap with that paper, especially on capital flows, the areas covered here are substantially different. The earlier paper, not unexpectedly, has not aged well.

[3] Interchangeably referred to below as the “OECD countries” or simply “the North”.

[4] When I was an undergraduate, the phrase structural transformation was not in vogue—it was referred to as economic development, without any further qualifications.

[5] A fact that was brought home by the effect of Covid-19 on the Indian economy. Years of gains in poverty alleviation were wiped out In months.

advanced capitalist economy, and a less developed one—except a small tweak about supply responses, and possibly about access to the world capital markets.[6] This is in spite of considerable evidence that the South's macroeconomic time series tend to be more volatile than the Northern counterparts—this is not surprising, given that markets tend to be "thin" (or nonexistent) in the South.[7]

The critique below of applying macroeconomic policy transplanted from the OECD countries will probably find more readers agreeing, than my take on how to achieve structural transformation. On the latter, my thinking is based on the experience of the East Asian countries; and the contrast of these countries' growth process with those in Latin America. To the extent demand creation for the "infant" industries is important, a policy of generating current account surpluses appears to be a promising candidate. And this requires an industrial policy (including an exchange rate policy). The point is moot whether the Indian authorities, having failed to provide even the minimum tasks, could ever be expected to deliver these.

Macroeconomics is a relatively new branch of economics. It was only after the Great Depression, and Keynes' General Theory, that stabilization policy (i.e. with the avowed goal of attaining full employment and low inflation) made its appearance. And from the end of the Second World War to the mid-1970s--the so-called Golden Age of Western capitalism—it delivered not just material prosperity, but also brought with it the Welfare State, with its the near-universal provision of public health and social security schemes.

The good times were, however, not to last. The first oil price shock in mid-1970s sounded the death-knell of this period of high employment. The financing of the Vietnam War also played a role, in that it finished off the dollar standard of fixed exchange rates.

It is well understood that (analytically) the Keynesian theoretical apparatus was based on demand management (fiscal and monetary policies to achieve high employment, and incomes policy to keep a lid on wages and prices). The oil price shock was a supply shock. It represented a difficult choice, in that the authorities could not stabilize both the level of output and the rate of inflation.

For quite a few years prior to this collapse, Milton Friedman (and others) had been trying to undermine the Keynesian dominance in the policy circles. He started by emphasizing the important role of money supply in demand management, but without much effect. He finally, zeroed in on a supply-side theory of output determination. This he christened the "natural rate of unemployment".[8] This level was determined by labor supply decisions (and taxes that affect those decisions), but not by aggregate demand.[9] Friedman argued that if the authorities tried to

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[6] When I wrote Sen (2007), there was an implicit belief that the North had more developed and, hence, transparent institutions. The Global Financial Crisis, the Trump Presidency and the UK's handling of Covid-19 suggest that these countries are as inept as those in the South. And as corrupt. The best example in recent times is the UK preferring those with experience in horse-racing (in Newmarket, Suffolk) to supply Covid-19 protective gears etc.

[7] See the discussion in Broner and Rigobon (2004) and Caballero (2000)

[8] See Friedman (1968). Phelps (1967) had also come up with such a concept.

[9] This is not true in general. For instance, if in an open economy the labor supply N^S depends on the consumption wage rate $N^S(W/Q)$, where W is the money wage, Q is a price index of domestic and imported goods i.e. $Q=Q(P,$

use aggregate demand to keep unemployment below this, it would be futile, and would involve ever-increasing inflation.

The profession embraced this with such alacrity that probably surprised even Friedman himself. I am certainly surprised at how durable these ideas have proved to be. Even today, these constitute the cornerstone of models used by Central Banks (with some lip-service to price stickiness observed in the data).

At least two implications follow from this thinking: (1) if fiscal policy is unable to change output, except fleetingly, the emphasis should be on balanced budgets.[10] More borrowing raises the real interest rate and makes it costly for private borrowers. Taxes should be low, and predictable. Income taxes should be eschewed in favour of taxes on expenditure; and (2) since the Central Bank cannot change the natural rate of output, it should preannounce policies for the rate of growth of money, so that it minimizes the "noise" in the system.[11] It is obvious that open-loop policies, such as these, are usually not time consistent (i.e. in a game-theoretic set-up, they are not sub-game perfect). This has led to a sizeable academic output on the issues of establishing credibility for such policies.

In the following decade, using the notion of rational expectations became the norm in macroeconomic modelling. And this brought forth the so-called "policy ineffectiveness proposition". This depended on the assumption of output being a function of price surprises of the type $\gamma(p_t - E(p_t/I_{t-1}))$, where p_t is the logarithm of the price of output in period t, and $E(x_t/I_{t-1})$ is the mathematical expectation of $x_t$formed given the information at date t-1 (I_{t-1}). This is essentially Friedman's formulation, with added bells and whistles.[12] Note that here at time t, policy reacts to current information but expectations do not. A death-blow was delivered to this proposition soon enough. A small point, but devastating for this formulation, can be outlined as follows: If agents observe current disturbances, and form expectations of future policies based on this, then the authorities can affect these expectations. Let me elaborate a little: if a shock increases aggregate demand by an amount u, a known forward-looking policy rule would have future (e.g.) money supply falling by an amount that would induce an expenditure reduction today exactly by the amount u, thereby cancelling out the increased demand—thus, known rules can stabilize output perfectly (see Turnovsky (1980) and Weiss (1980)).

Notwithstanding the resounding defeats in theoretical modelling (and later in their applications), the election of very right-wing leaders in the US and UK in the 1980s ensured that Friedman's message survived. Ergo, the private sector delivers socially desirable results. Then why should

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EP^*). Labor demand N^D depends on the product wage rate $N^D(W/P)$. Now the equilibrium in the labor market depends on EP^*/P. That is a macro variable like fiscal policy will change the equilibrium N.

[10] Fiscal Policy still has allocation effects. But as a tool for stabilization, it is not recommended.

[11] From a simple flexible price money market equilibrium, we get a rational expectations solution for today's price level p_t (all variables in logarithms),

$$p_t = (1/(1+\alpha))\sum_{j=0}^{\infty}\left(\frac{\alpha}{1+\alpha}\right)^j E_t(m_{t+j})$$

where m_{t+i} is the money supply in period $t+i$, E(.) is the mathematical expectation conditional on I_{t-1} , the information available at t-1, including the model and α is the semi-elasticity of money demand.

[12] On this see Barro (1976) and Marini (1985).

the government mess around with the economy? Leave it to technical experts, who are unsullied by politics and ideology, and, presumably, stand outside the rough and tumble of society.

In this chapter, I will be using standard macroeconomic models. I do want to point out that it would be misleading to suggest that there are other non-Walrasian candidates in macroeconomics. There was the disequilibrium school, which looked at quantity adjustments, rationing and spillovers with fixed prices. The new search theory also has bilateral matches, and costly search, Finally, there is the literature on multiple equilibria and beliefs. But it would be fair to say that in the context of policy formulation, they have not been as influential. In addition, in the "dim underworld of heretics", there are Post-Keynesians and Marxists. They are, however, not interested in details of policy that is my focus here.

The other branch of economics that is central to our discussion is Development Economics.[13] This is even younger than macroeconomics. Any discussion of a framework to spur development had to, by definition, wait for decolonization to occur.[14] As decolonization gathered speed, starting off slowly after the Second World War, sovereign governments had to grapple with a mix of inexperience, and lack of role models—i.e. they were starting from scratch—while the expectations of their citizens were sky-high. Indeed, the very definition of a developing economy itself was not a trivial task. Colonization had left deformities in the economic structure that were difficult to categorize easily. I like to invoke Tolstoy's observation that all happy families (read advanced capitalist countries) were alike, whereas each unhappy family (read developing economies) was unhappy in its own way.

A central issue that came up concerned the role of government intervention. Initially it was thought that the State would have to step in, in the presence of market failure—markets simply did not exist, the ownership of the means of production were in colonial hands, most of the investment was in extractive industries, plantations etc. The State's performance, however, turned out to be patchy—bureaucratization, inefficiency and rampant corruption were common. Over time the role of the State came to be questioned, and there was talk of government failure. Indeed, the pendulum swung to the other extreme, and everything was sought to be privatized—the baby was thrown out with the bathwater.[15]

In the above discussion, I do not, for one moment, want to convey the impression that these choices (about State ownership versus privatization) are made independent of the social and economic (read class) structures in the economies concerned. How come most developing economies, including those with high growth rates of per capita income, have abysmal levels of primary education and public health (as was laid bare by Covid-19)? Here I just want to emphasize the fact that just as it is true that the Keynesian aggregate demand policies faced challenges, and the management of the State-run enterprises were in need of a rethink, the replacement of these dominating paradigms could not have been achieved without powerful

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[13] Development Economics nowadays concerns itself with micro issues. My concern here is the framework of development—hence somewhat old-fashioned.

[14] Although, there was often a very detailed discussion of plans in anticipation of decolonization. In India, discussion on this started in the late 1920s. A formal committee was set up in 1937 by the Congress Party.

[15] Either fully privatized, or a Public-Private Partnership (PPP).

backing of those who were opposed to State intervention in the first place. Half a century of thinking and proven policies got eviscerated almost overnight.

3. MACROECONOMIC POLICY IN DEVELOPING COUNTRIES

I now turn to the issue that is my main concern in this paper, namely what is the appropriate macroeconomic policy framework in a large developing country? If one takes the discussion above seriously (with Tolstoy thrown in, for good measure!), it would be foolhardy to propose such a framework for even a few developing economies. Thus let me discuss these policies in the Indian context, although some lessons derived below may be relevant for other countries also.

It is not my desire to discuss the nitty-gritty details of the conduct of macroeconomic policy in India (although I will stray from this self-imposed boundary a few times). Rather, I want to look at the framework within which the policies are conducted. What have the Indian authorities borrowed from economics (both theory, and best practices elsewhere)? And how does this framework (or a sequence of evolving frameworks) fare? Does it just pass muster, or with flying colors? To anticipate my answer below, it is neither of these.

Even for India, it would be a fool's errand to try and discuss all the burning issues involved in the areas covered by the intersection of development economics and macroeconomics. I will choose three topics to address. The first would examine the emphasis on budget balance, and keeping the government debt under control. This is not a problem concerning developing economies only. In the context of the Eurozone economies, the obsession with budget deficits and debts is well known (as is the long shadow cast by the Bundesbank's thinking on the ECB). In India, as elsewhere, there are attempts to balance the budget by treating various items as off-balance sheet. An economy like India's, where the State has traditionally held the “commanding heights”, the possibility of subterfuge, and window-dressing, is that much greater.

The second topic concerns monetary policy and external balance, generally. What is the role of an open capital account (of the balance of payments), and the resultant capital inflows (and occasional outflows)? This will be discussed in the context of the inflation targeting framework adopted by India. Are the Indian authorities of the view that any current account deficit can always be financed by capital inflows? Does the exchange rate not have a role in creating additional demand for domestic goods?

The third area is related to the first two—if the economy has to develop how is it going to be financed? What is the role of fiscal and industrial policies in this process? And should a capital-deficient country import capital?[16] Should capital inflows be unbridled? I will try and argue for an outward-oriented growth strategy, with a reasonably closed capital account.

As mentioned above, due to a variety of reasons, the overarching Keynesian framework had fallen on hard times; free-market ideas had permeated the profession's thinking in

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[16] This was popular in the 1960s and 1970s under the rubric of “Stages of Balance of Payments Theory”. This is related our second and third points below.

macroeconomics. Around the same time, the developing economies were also turning towards the market, away from regulation and ownership by the State. In fostering this move, intellectual and logistical support was provided by the IMF and World Bank.

This switch to a market economy is not trivial decision. It is one thing to say “use the market mechanism", and quite another to trace out a viable transition path from an economy with sizeable State ownership--and thus ridden with “distortions" (as was the case with the Indian economy).

3.1 Fiscal Policy

The first point flagged above concerns budget deficits. The received wisdom suggests that a market economy, as part of a stable environment, must have low and stable taxes. A balanced budget increase in taxes and spending is ruled out. Higher tax rates discourage saving and enterprise. A discussion of wealth tax or taxes on high incomes is greeted with alarm, as if only confiscatory rates are under discussion. India has reduced direct taxes, and with the botched GST regime (and cess on petroleum etc.), its tax system today is quite regressive.

The emphasis then is on the budget deficit. There are many instances of developing economies running sizable deficits. If these are large and sustained, one ends up with the Central Bank monetizing them. This is especially true, because in developing economies the market for government debt is in a rudimentary stage, and the rest of the world is unwilling to hold its debt in large quantities (because of currency risk and default risk). Thus beyond a certain stage, deficits are accompanied by inflation— *à la* Sargent and Wallace. It does not follow, however, that any deficit will cause inflation (although this is routinely invoked). There is surely a threshold for each country—and India has historically not been a high inflation economy. The international rating agencies, who observe debt and deficit policies with a hawk-like eye, will punish a government for exceeding its promised deficit by even an infinitesimal amount. The government expecting this, ties itself to a mast. No sirens here, only self-flagellation.[17]

There are conceptual and measurement issues regarding the deficit in India. The deficit is not adjusted for cyclical variations in tax collection. It is also not honest about what constitutes taxes, and what, like selling a State-owned enterprise, is a means to finance the deficit. It is a market-driven concept—how much is going to be borrowed? Of course, as is almost universal now, off-budget items come into play, especially in a country like India, where, as mentioned above, the State-owned enterprises are still not insignificant. In the budget exercise, with its emphasis on the deficit, current consumption and capital expenditure are lumped together. Political expediency ensures primary health and primary education will never be adequately funded. The capital expenditure on infrastructure is also allowed to fall to precarious levels.

In this gerrymandering, the victim is democracy. The budget process is the only economic statement that the Government of India is constitutionally obliged to make, and is held accountable for. And that, it turns out, has nothing to do with a desirable trajectory for the

[17] The Indian Government has been most reluctant to use fiscal policy generously in the recent pandemic. It was regularly looking over its shoulder, and monitoring the budget deficit.

economy; in addition, there are convoluted tricks to make it balance. If underdevelopment is about low levels of various stocks, e.g. health of the people, physical capital, education etc., there is no accountability on these from the government (the stock of government debt is an exception because the international rating agencies care). We continue with looking at flows of income and expenditure—actually net flows (that is what a deficit is, after all). The colonial state was happy with this annual charade of a budget, because it had no interest in monitoring the stocks. And even after decolonization we carry on with this tradition, quite unmindful of, or willfully ignoring, the fact that a new set of rules are necessary. Even if balancing the budget is a desirable target in the North, should a developing country adopt it? A deficit is, as we are reminded frequently, making the future generations pay (partly) for current excess expenditure. Presumably, in a developing economy context, that would not be such problem, since we expect the future generations to be better off than those alive today.

India had recognized the need to think of a horizon longer than one year, and had set up a Planning Commission. Its performance may have left a lot to be desired, but conceptually, it addressed the issue of a longer horizon than one year. There was also a recognition that, in principle, markets are supposed to give consistency to individual plans; if these do not exist, or are at a rudimentary stage, a "plan" was required (for consistency).

Financing of development projects, say infrastructure, on a large scale requires funding—some of it comes, undoubtedly, from multilateral agencies. These are projects with long gestation periods, and also require financing that may not be available in the market. The Indian government, in a rush to embrace the market, got rid of some of the financial intermediaries (called "development banks") that had been mandated to finance infrastructure spending. Commercial banks then started lending for these projects. Commercial banks, as is well-known, borrow short and lend long; but not as long as infrastructure projects require. This gave rise to an asset-liability (horizon) mismatch on their balance-sheets.[18]

3.2 Monetary Policy

Initially, the proponents of the market mechanism were so blasé that they supported a "one-hoss shay" end for the State-directed regime—full financial liberalization could be done immediately. This was jettisoned quickly, because country after country faced crises. An example of this "cold turkey" policy that concerns us here, pertains to international capital flows. In the early 1980s, there was a debt crisis in South America (the Southern Cone), because these countries had removed all controls on international borrowing and lending; the foreign banks proceeded to lend too much to the private sector believing that there was a "sovereign" guarantee. The private borrowers defaulted and a debt crisis ensued.

Among the Latin American countries, Chile (after the military coup that overthrew President Allende in 1973) become a laboratory for free market reforms (including financial markets), as espoused by Milton Friedman and his Chicago colleagues. Other big countries, e.g. Argentina,

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[18] This added to the woes of the commercial banks. They had seen their normal loans going sour because of cronyism, and, no doubt, expecting the tax-payer to bail them out.

Brazil, Mexico, also experimented with these policies but, being democracies (off and on), with less commitment to the right-wing ideology.

While it is claimed that reforms are necessary to attract foreign capital, it has been observed that international finance capital is not too discriminating about which economies have undertaken deep market reforms. When the world is flush with liquidity, all developing countries received capital flows; and when, for whatever reason, capital flows ground to a halt, in the withdrawal phase, every recipient country was tarred with the same brush.

Calvo and Talvi (2006) document this for Latin America. They say: “Russia’s default in August 1998…represented a fatal blow for Latin America…In tandem with the rest of emerging markets, interest rate spreads for LAC-7 rose from 450 basis points prior to the Russian crisis to 1,600 basis points in September 1998... As a result, capital inflows to LAC-7 countries came to a Sudden Stop, falling from 100 billion dollars (or 5.5 percent of GPD) in the year ending in II-1998 prior to the Russian crisis, to 37 billion dollars (or 1.9 percent of GDP) one year later…(Further they point out that in response to this shock to capital account) “by definition undesirable if not impossible to smooth”-- most of the adjustment in LAC-7 came not from additional savings but from reduced investment, which fell from 23 percent of GDP in 1997, prior to the Russian crisis, to 18 percent of GDP in 2002”. They also note “That a partial debt default in Russia, a country that represented less than 1 percent of world GDP and had no meaningful financial or trading ties with Latin America, could precipitate a financial contagion shock wave of such proportions, posed a puzzle for the profession.”

India undertook “structural reform", starting in the early 1990s. This involved (some) privatization of State-owned enterprises, lowering tariffs on imported goods, and opening up the capital account to foreign inflows, Outflows from India were also liberalized, but restrictions remained on a number of categories--indicating that some lessons had been learnt from the Latin American crises. But, in my opinion, even with these restrictions, the capital account was opened up too much. In the last quarter of a century, a lot of the remaining restrictions have been removed e.g. on inflows, the FDI restrictions have been successively eased, external commercial borrowings, that was strictly regulated, have been liberalized, some outward FDI is also allowed.

It is useful to remember that inflows and outflows of foreign capital have different negative effects on the recipient economy. Inflows cause currency appreciation (nominal and real); this in turn puts a squeeze on tradable goods (the so-called Dutch Disease). Outflows hit those who had borrowed in foreign currency. The outflows often tend to be a scuttle, rather than an orderly withdrawal (see the discussion on the Sudden Stop above).

The Indian Central Bank—the Reserve Bank of India (RBI)—in a bid to stem the appreciation of the rupee, intervenes regularly to mop up foreign currency. But if this intervention were left unsterilized, there is the likelihood of inflation. The RBI, therefore, proceeded to sterilize the money supply by conducting contractionary open market operations. The magnitude of this was not insignificant; in fact, the RBI ran out of government bonds—and a new category of bonds under the so-called Market Stabilization Scheme was created (in 2004).

At least two points merit attention regarding this sterilization policy. First, there is, a quasi-fiscal cost to this—foreign exchange reserves pay little or nothing, while domestic bonds pay considerably more. Second, and this is worth repeating, because it is not understood in India, that India's foreign exchange reserves are acquired through intervention, and not current account surpluses.[19] Thus to spend it on wasteful foreign currency expenditure could have serious consequences. This is not just an academic point—over time, as mentioned above, India has opened up the capital account considerably to outflows. It must be confident that the inflows are stable, and that no reversal would take place—a big ask. Otherwise, a run on the rupee is likely. For instance, at the time of the so-called "taper tantrum" (in 2013), private players were caught with substantial sums of unhedged foreign currency borrowing, and the rupee was in a free-fall.[20]

Let me now turn to the overall conduct of monetary policy. After experimenting with different nominal anchors (including a money supply target), the RBI has moved to a regime of (flexible) Inflation Targeting since 2016. This was proposed by a committee, chaired by Urjit Patel (see Reserve Bank of India (2014)), then Deputy Governor (later Governor) of the RBI. The price index to be targeted was the Consumer Price Index (before this, the RBI used to "look at" the Wholesale Price Index). A Monetary Policy Committee was set up, with the mandate to monitor the inflation rate. It uses a Calvo-type Phillips Curve to generate some price stickiness, although no empirical evidence is provided for this in the Indian context.[21]The monetary policy rule consists of using the repo rate, whenever inflation goes outside the acceptable range. Following Taylor's rule, when inflation is above the upper threshold, it raises the nominal repo rate to get the real rate to rise, so as to compress aggregate demand.

Is inflation targeting the right candidate in its genre? Probably not, given that core inflation is about half of the CPI inflation. Supply shocks (agricultural and imported oil price) are important. As the Urjit Patel Committee noted: "… food and fuel account for more than 57 percent of CPI, on which the likely influence of monetary policy is limited" (RBI (2014) p.20). Demand compression, via the Taylor Rule, just looks at these feeding into expected inflation. On this score (but not for the external balance discussed below), nominal income targeting might have been better. The importance of these supply shocks is unlikely to wither away anytime soon, with Inflation Targeting continuing to focus on less than half of the CPI inflation. This point is more than just of academic interest, as we have seen in the wake of the Russian invasion of the Ukraine. This caused world-wide increases in the price of oil and foodgrains. Central Banks in the developed countries put up their interest rates. This was transmitted to the Indian economy as a supply shock and an exchange rate shock.

In the Urjit Patel Committee Report, there is quite an extended discussion on how various developing countries have coped with volatility of international flows (of the Sudden Stop variety). But for this discussion of turbulence, the external sector merits no consideration.

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[19] Currently (i.e. December 2022) around $ 540 billion.

[20] In the summer of that year, the rupee depreciated against the dollar by 30 percent. Other emerging market currencies depreciated much less.

[21]See the briefest of brief discussion of this in the following sentence: "The general result is that the smallest losses (of the objective function) are obtained when monetary policy responds to changes in inflation only." RBI (2014), p.12.

Fighting volatility is different from anchoring the traded goods sector's expectations about the level of the exchange rate. Surely, in a rules-based environment, where the authorities want to minimize noise, the path of the nominal exchange rate is an important input for the traded goods sector?[22] Fighting and winning against a cyclone does not guarantee potable drinking water to the citizens. In particular, there is no thinking on the external sector as a potential source of aggregate demand? If it so, where do we see this in the inflation targeting framework—and this is the sum total of the Government's thinking on monetary policy? Could there be a link from the use of the interest rate to output via the exchange rate? But even output does not figure in the RBI's optimization exercise.[23] Even with a massive trade deficit, in times of inflation, is the RBI not unhappy to see an appreciating exchange rate—after all its mandate is to keep inflation in check?[24]

Capital inflows give rise to what has been called "exchange market pressure". The response of the Central Bank to this lies between the two extremes of a free float and a pegged exchange rate. In the former case, reserves do not change, and the nominal exchange appreciates. In the latter case, the exchange rate is fixed, and Central Bank accumulates reserves. Sterilization of the money supply is possible, if domestic and foreign assets are imperfect substitutes. The RBI has chosen to perform sterilized intervention, as described above. Thus, the "impossible trinity", that Indian commentators use routinely, is a non-sequitur. But the RBI does not disclose its intervention rule--even if not the actual rule (if a speculative attack is feared), at least the range, as was the case with the Monetary Authority of Singapore. Hence, the private sector is left guessing what the nominal exchange rate path will be—thus introducing noise in their decision making.

The Urjit Patel Committee, of course, pretends to be following global best practices. It may want to appear au courant with these, but, in fact, given that it is for the Indian setting, it is a shoddy cut-and-paste job.

3.3 Macroeconomic policy in a developing country

We then come back to the issue flagged above, viz. what are the objectives of macroeconomic policy in a developing country, like India? As discussed in the preceding paragraphs, inflation has been the focus of monetary policy. Much like the Eurozone, budget deficits and government debt are to be strictly monitored and controlled, so as not to make the markets unhappy. Economic growth and current account problems are to be addressed by the invisible hand.

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[22] See Airaudo, Buffie and Zanna (2016) for a discussion of accommodating the exchange rate in an inflation targeting framework.

[23] In the literature, there is some discussion in the OECD context whether to only allow the exchange rate to affect the decision making after it has had its effect on output. No such subtleties detain the RBI.

[24] I have heard at least two Principal Economic Advisors in the Finance Ministry on television 1(Ila Patnaik and Sanjeev Sanyal), saying that in India, there is an "Almost Impossible Trinity". This is creative theorizing i.e. nonsense. The Impossible Trinity precludes sterilized intervention—there is, indeed, no need for it.

In the 1950s and 1960s, several economists (the name that comes readily to one's mind is James Meade) talked about the objectives of macroeconomic policy. These were Internal Balance (full employment, low inflation etc.) and External Balance (one cannot go on borrowing from foreign residents forever). A good representation of this thinking is the so-called Australian Model (also called the Dependent Economy Model with a traded vs. non-traded goods distinction). One can then think of the economy needing two independent policy instruments to meet the two objectives, say full employment and current account balance. A single instrument is usually unable to help realize both objectives. In a situation of underemployment, the authorities use fiscal policy to get internal balance, and a (real) devaluation to get external balance. Depending on the details of the model, the model can be extended to accommodate monetary policy and the labor market.[25]

The period until the breakdown of the Keynesian consensus was also a period of (relative) control of the financial systems. For example, in the UK, the inflexibility was referred to as the "corset"; in the US, the incompatibility of macroeconomic system with controls on the financial markets (e.g. Regulation 'Q') gave rise to the Euro-currency markets. Over time, for the advanced capitalist countries, financial integration occurred with mobile capital across the OECD countries. With that, one could say that the external balance constraint disappeared for these countries as the capital accounts (of the balance of payments) were opened up.[26] The external balance requirement refuses to disappear for the developing countries, even after years of "reform" e.g. for Chile, Caballero (2000) points out that most macro time series follow the price of copper, its main export.

There have been attempts to model the external constraint. For instance, Caballero and Krishnamurthy (2001) model this by pointing out that in the OECD countries, there is one budget constraint (i.e. their currency is convertible, and so all domestic assets and liabilities can be aggregated), but for the developing countries there are two budget constraints—one in the convertible foreign currency, and the other in domestic currency. A shock to the economy makes the foreign currency borrowing more attractive—this is accompanied by fire sales of the domestic assets. This does not happen in a developed country setting (see e.g. Caballero and Simsek (2020) where fickleness (outflows) and retrenchment (inflows), behave quite differently).

This class of models is an important step forward in explaining the difference in reaction to a shock between the less developed financial markets and a developed one—not all the collateral that the former can offer is acceptable to international lenders. Thus, this affects the external balance constraint. But this class of models needs further elaboration. While these explain how developing countries react to a "Sudden Stop", they use the Diamond and Dybvig (1983) type of liquidity provision structure –that is partial equilibrium in nature. While they flag an important distinction, from our general equilibrium perspective, it is inadequate.

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[25] No wonder the model has been used extensively for open economies. One can for instance use this to explain the stop-go cycle for the Post War UK. The go part was expansionist policy, restrained by the state part of a balance of payments deficit—under the Bretton Woods system the exchange rates were fixed.

[26] It has been pointed out that Meade in his Nobel Prize speech only talked about Internal Balance, with no mention of the External Balance (see Bean (2009)).

4. INTERNATIONAL TRADE, CAPITAL FLOWS AND ECONOMIC DEVELOPMENT

Before I go on to discuss monetary policy in India and its role in the (missing) internal balance, let me emphasize once again that India has opened up to the international markets in the last thirty years. In trade openness, India and China are neck and neck.[27] Capital inflows are also significant.

As mentioned above, India embarked on an import-substitution development strategy, with a significant participation of the State (in industry and, later, in the banking sector). This exercise provided a modern sector and a small educated work-force. But its singular failure was the inability to generate a structural transformation. The agricultural sector continued to be the single-largest source of employment (now (in 2019) at about 43 percent employment share, but 18 percent of GDP (in 2020)),[28] accompanied by continuing distress. This is a classic case of Arthur Lewis' model (see Lewis (1954)) with zero marginal productivity in agriculture. Actually, it is Arthur Lewis-plus. It is an economic and an ecological disaster. The so-called "Green Revolution Belt" in Northern India uses subsidized inputs (electricity, fertilizer, pesticides, etc.). And the State guarantees a fixed price for the produce. In recent times, the end of autumn sees stubble burning (of the previous rice crop) that produces a haze that hangs over large part of India and Pakistan. Even without this added contribution, Delhi is the most polluted capital city in the world. Commentators on agricultural subsidies often invoke an argument "It is everywhere thus" (my cross -section version of "It was ever thus"!). While, superficially at least, there is merit in the argument that agriculture is subsidized, and protected, in most countries (e.g. the EC, the US, Japan), it is the sheer number of people involved that should be a matter of concern. I suspect, the Government looks at the problem through the prism of the level of subsidies. Again the stock variables are neglected e.g. the level of ground-water, respiratory diseases and mortality, the productivity of land.

Therefore, what India needs is a large share of the agricultural labor force to move to higher value-producing sectors. A part of India's manufacturing sector, as well its services sector, is skill-intensive, and can (and is) holding its own in the world economy. But the surplus labour in agriculture has no education, and is mostly severely malnourished. The only hope is, at least in the initial phase, some crude form of labour-intensive industry.[29] Industry has accounted for about a quarter of the GDP, and fifteen percent of the work force for about a quarter of a century.[30] What industrialization needs is a push, or at least a nudge.

Openness had been emphasized even before India dismantled its inward-looking industrialization strategy. The State-owned heavy industries failed to generate the necessary forward and backward linkages, and industrialization did not happen on a desired scale. With the arrival of the so-called "Asian tigers" (led by Japan, Taiwan, South Korea, followed later by China), it was

[27]Of course, China runs persistent trade surpluses, with India doing just the opposite.
[28] During Covid-19, both employment and output in agriculture has gone up.
[29] This is how Bangladesh, next door to India, grew.
[30] Recently, there is evidence that employment in industry is falling. Is this premature deindustrialization? The services, including its exports, have done well.

pointed out that India was following the wrong strategy of import substitution. What was needed was lower trade taxes, and that would lead India to an East Asian type of growth trajectory. This analysis was based on the theory that the optimal tariff for a small open economy was zero. India should produce labour-intensive goods initially, based on a Heckscher-Ohlin comparative advantage reasoning (i.e. based on factor endowments).[31] In this view, the Government was supposed to stay out of directing the economy—this included international trade and the production of goods. Although, usually not explicitly mentioned, this view would have India running trade (and current account) deficits, which would add to domestic savings.[32]

I have two observations on this interpretation of calling upon India to emulate the Asian Tigers, with their avowed outward orientation. First, as pointed out by Dani Rodrik, that this causality of trade flows and growth resulting from lowering tariffs does not survive a detailed empirical analysis. He showed that it is more than just trade liberalization that delivers. There are other prerequisites e.g. the education of the labour force. One size does not fit all cases; the initial conditions matter.[33]

The second concerns structural transformation. The dominant thinking in macroeconomics comes from the US. Most US macro textbooks (these are used across the globe) base their exposition on a one-sector, closed economy model. Towards the end of the book, the economy is "opened up". Therefore, neither is there a role for preferring one sector over another, nor is there the possibility of getting away from incremental growth. For a structural transformation, by definition, we need more than one sector. The speed of this structural transformation would depend on the demand (and the supply) in the expanding sector. At least since Rosenstein-Rodan (1943), we are familiar the big-push hypothesis. If there is increasing returns to scale in the yet-to-be-born industry, and unless enough demand is generated, this dynamic sector would be still-born. In this set-up, presumably, the increasing returns are external to the firm[34]; thus the firms cannot, in isolation, get over the "hump". A co-ordination, or planning is called for. Increased demand via a real exchange rate depreciation could generate the right conditions for the sector to come into being. Thus industrial policy (including the exchange rate) requires the State to be

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[31] In the event, trade restrictions were not lifted in a big way until the early 1990s. And the much-awaited structural transformation has not happened.

[32] Something that flies in the face of the East Asian export-led growth experience. In the Indian policy circles, a current deficit was almost an end in itself. Sample this from Rakesh Mohan, a former Deputy Governor of the RBI : "...it would become feasible for India to sustain a wider current account deficit which is required for the non-inflationary absorption of external capital inflows. It is suggested that a sustainable level of current account deficit would increase from the current level of 1.5 per cent of GDP to 2.5 per cent in 2000-01 and 3 per cent in 2005-06" (Government of India 1996).

[33] Matsuyama shows that the export sectors have to be dynamic; static gains from trade could trap an economy in a "wrong" trade pattern. A point to bear in mind, is that developing economies have ill-defined property rights (usually due to the penetration of capitalism into areas where there was community open access)—this gives rise to overexploitation of these resources (see Chichilinsky (1994)). Hence exports of natural resource-intensive goods happen because of this apparent comparative advantage.

[34] In the New Trade Theory models with imperfect competition, a firm can borrow (implicit in static models), and reap the economies of scale. How many firms are supported, depends on the market equilibrium (usually a free entry condition). If we had borrowing constraints, the difference with external economies of scale becomes somewhat blurred.

more than just a bystander. While demand conditions are central to the story, supply side factors are also hovering in the background. Industrial jobs are more sophisticated than agricultural labor. An educated work-force is needed. Only then would learning-by-doing have a chance. Maybe FDI, with the latest technology, would be required for accessing the world markets with the new products.

A real depreciation (e.g. by limiting international capital inflows) could create demand at home and abroad.[35] This would just be reversing the Dutch Disease effects of financial capital inflows. If priced right, at the very least, some products could replace imports from China. But India needs to export these industrial goods. Nothing in this world comes for free, though. In this case, imagine what industrialization would do to India's air and water quality, given the pathetic condition of these prior to industrialization. But I, for one, don't see an alternative at the macro level.[36] Agriculture cannot sustain these numbers. It is a tinderbox, in terms of both economics and ecology.

An appreciated real exchange rate increases imports, reduces exports, and kills off potential traded goods firms. But given that it has been in place for a quarter of a century, it does have fairly widespread support (especially among the wealthy). A real appreciation raises the real value of a given income in domestic currency units. For instance, foreign holidays become cheaper, so does foreign education for one's children. It is not surprising that a sizeable amount of outward flow of funds from India occurs every year. And that the Government is willing to use the foreign exchange (acquired through sterilized intervention, as mentioned above) for these non-essential expenditure heads. Outward FDI is also a telling comment on the lack of competitiveness at home—it is after all exporting potential jobs from India.

Thus, we need an exchange rate policy, and an industrial policy, to focus on exports. Current account surpluses create additional demand (and raise GNP). The industrial policy is to provide support for this, including a beachhead in foreign markets.

This big push is unlikely to be sustained, if tried with an expansion of domestic demand. At least two imponderables present themselves. First, where is the additional demand going to come from? The Government has limited means, and would have to spend on infrastructure etc. Second, it is bound to hit the external constraint wall—the current account deficits will certainly kill this strategy. An outward orientation, can potentially overcome both of these shortcomings. An export-led growth strategy helps relax both the internal and the external balance constraints. This happy coincidence should be exploited.

5. SOME POSTSCRIPTS AND CONCLUSIONS

[35] See Rodrik (2008) detailed empirical analysis in support for the hypothesis that undervaluation of the exchange rate is good for growth in developing countries.

[36] The World Bank (see World Bank 2021) recently has advocated not even trying for industrialization; India should rely on a service-based growth strategy. I am not at all sure about this because of the numbers involved, and the low levels of initial skills of the labor force.

So far, I have tried to stick to my self-imposed boundary and refrained from discussing details of how policy is conducted. I want to briefly mention a few recent events that do have some bearing on the discussion above.

First, while the Monetary Policy Committee meets (since 2016), and discusses the evolution of inflation, the Government has clipped the RBI's wings by putting a pliant Governor. This was done to transfer some of the surplus of the RBI to the Government. Thus, instead of the Central Bank being given more autonomy, as was envisaged under the Inflation Targeting framework, it has effectively been “nationalized"! The RBI today possibly pays more attention to the output gap, and not to inflation alone.[37]

A second point concerns the poor in the rural areas. The low productivity in agriculture gives rise to migration to the cities. A large body of footloose workers is available in the urban areas. Industry can whistle up the necessary labour. With Covid-19, this set-up has suffered a big setback. Due to the pandemic, the large firms were not affected, but there is considerable distress among the smaller ones. Once the Government recognized (albeit belatedly) the severity of the pandemic, it proceeded to announce an immediate lockdown. The sources of labour demand dried up, and the workers were stuck in the cities, without jobs and housing. They were not allowed to move back to their villages, where most urban workers still have a toehold. From the discussion on fiscal policy above, the question that arises is: What should the macro policy response be to this once-in-a-lifetime shock to the economy? Here, as discussed above, the Government is in thrall to the idea of balancing the budget, and its response has been very tight-fisted. The extent of distress can be gauged from the fact that about two-hundred million people have worked this year (since April) in government projects under a scheme called The Mahatma Gandhi National Rural Employment Guarantee Scheme. This pays low wages, and is available to one member of a household for one hundred days in a financial year—it is akin to an unemployment allowance.

Third, the Ukraine crisis required the RBI to increase the repo rate. It has been reluctant to do that, its explicit mandate not withstanding—the repo rate is 5.90 percent currently (October 2022), whereas the CPI inflation has never been less than six percent in 2022. The RBI has also been waging an uphill task (but, unsurprisingly, losing the battle) in trying to prevent an exchange rate depreciation. In the event, this year the rupee has depreciated by eight percent. This is less than most other developing countries but India’s foreign exchange reserves have come down from 642 billion USD to 542 billion USD in 14 months since October 2021.

Finally, recently (after some border tensions with China), the Government of India has embarked on a scheme called Self-Reliant India. Some trade restrictions have been imposed, and production subsidies linked to domestic production have been introduced. It is too early to pass a

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[37]Some studies have found the output gap as a relevant variable in the RBI's response even after the Inflation Targeting regime. See e.g. Eichengreen, Gupta and Choudhry (2021).

judgment on this. My gut feeling is that this is just a knee-jerk reaction to a diplomatic problem. Import restrictions alone are not going to generate sustained growth—some growth will undoubtedly occur. If import restrictions strengthen domestic monopolies (or oligopolies), then this will benefit the large business in India (they are the only ones who can fill the space vacated by previous Chinese exports to India). One point that merits discussion related to this issue concerns the role of import tariffs. The principle of comparative advantage is one of the big ideas in the history of economic thought (since Ricardo). It is often forgotten that this principle as the *only* explanation of trade presumes that trade is balanced. In the recent Indian context, with the creeping protectionism, several prominent economists (e.g. Arvind Panagariya, Amartya Lahiri (in newspaper articles)) have invoked the Lerner Symmetry (viz. an import tariff is the same as an export tax) to criticize this trend. The Lerner-Symmetry, of course, presupposes balanced trade. In the Indian context, asserting that as an initial condition is akin to saying "Welcome to Disneyland". This is a serious policy issue. As India tries to sign free trade agreements with various countries (e.g. RCEP), one is often left wondering in what goods does India have a comparative advantage (barring software-related services)? For the Indian policymakers, the takeaway from this conundrum is that we must liberalize labour laws, loosen environmental safeguards etc. The overvalued exchange rate as a cause is never invoked.

To summarize, in this chapter I have tried to set out a framework for the conduct of macroeconomic policy in India. This entails stabilization, growth, and aiding structural transformation. The last objective would require the State to be more interventionist than in the recent past. In the present global scenario, that is a big ask.

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