

Initiative for Policy Dialogue Task Force on Macroeconomic Policy

Why is Macroeconomics Different in Developing Countries? Deepak Nayyar

Institutional Setting

Macroeconomics was developed in, and for, the industrialized countries. Theory and policy were both concerned with how monetary and fiscal policy should be used in those economies and what might be expected of such policies in terms of attaining full employment, controlling inflation or stabilizing economic activity. This corpus of knowledge, with its competing schools of thought, is sought to be used in developing countries and without any significant modification. It is by no means clear that this is either justified or appropriate.

The macroeconomic aggregates are, of course, the same. So are the macroeconomic identities. For an understanding of macroeconomic systems, however, the accounting relations of aggregates need to be combined with an economic analysis of determinants. It is here that differences arise. The nature of relationships (between variables) and the direction of causation (what determines what) are both a function of the setting or the context.

Yet, the macroeconomic models used, in terms of analytical constructs, are the same: classical/neo-classical, Keynesian and monetarist. The consensus among economists, much like fashion, has changed over time. The Keynesian consensus has vanished. It has been replaced by a new orthodoxy in macroeconomics which follows the monetarist tradition for the short term (monetary-targeting) and the neo-classical tradition for the medium term (price-fixing). Macroeconomic causation is implicit in the closure of these models. Most macroeconomic models are over-determined systems, with more equations than variables. The debate on the closure of models, then, is about which equations might be dropped or which variables might be added to obtain a consistent model. The belief system of different schools of thought is revealed through the equations and the variables they select. This choice shapes their understanding and causality.

The starting point for any macroeconomic analysis is the distinction between exogenous and endogenous variables or that between autonomous and induced changes. Such a distinction is essential in macroeconomic theorizing which seeks to analyse policy

implications. It is important to recognize that this distinction is derived not from the analytical structure but from the institutional setting of models.

The most important example, perhaps, is Keynesian idea that investment is an independent (exogenous) variable to which saving adjusts as a dependent (endogenous) variable. Investment is autonomous, determined by profit expectations of firms, while saving is induced, determined by income of households. The distinction rests on the institutional assumption that firms have access to credit from commercial banks and financial institutions depending on their credit worthiness and the expected profitability of their projects, irrespective of the level of savings by households in the economy. Thus, it is the institutional setting of what Hicks characterized as an 'overdraft economy' which allows investment to be financed in advance of, and independent of, the level of saving in the economy.

A short digression is worthwhile. If credit is endogenously determined by demand, then the Keynesian perspective emerges in its sharpest focus. The independence of the investment function of firms determines effective demand (hence output), while the financial system merely plays an accommodating role without influencing the level of demand (hence output). On the other hand, if credit is assumed to be exogenously determined by the financial system, the monetarist perspective emerges as critical, in so far as banks have a role in influencing the investment decisions of firms by relaxing or tightening credit facilities extended to firms.

The moral of the story is clear. The distinction between exogenous and endogenous variables, or that between the autonomous and induced changes, is essential in macroeconomic models, which seek to analyse events or prescribe policies. But this distinction does not derive from the analytical structure of a model; it derives from the institutional setting of the model. Much can change when institutional settings, hence determinants of causation, change.

It follows that macroeconomics developed in the context of industrialized countries cannot simply be transplanted in developed countries. Starting from accounting identities, models can be built based on economic reasoning, but such models must respect institutional facts and recognize different contexts.

Structural Differences

There are important differences in the structural characteristics of developing economies as compared with industrialized economies. In the world of macroeconomics, there are three differences that deserve to be highlighted.

First, from a Keynesian perspective, in advanced capitalist economies, the main problem is the adequacy of effective demand. Such an economy possesses a productive capacity which matches the existing labour force but capital equipment remains under-utilized for lack of demand. It is not as if there are no supply constraints. But the expansion of output is primarily demand-constrained. The crucial problem of developing

economies is different. Even if its productive capacity or capital equipment is fully utilized, it cannot absorb the existing labour force. The problem then, as set out by Kalecki, is the deficiency of productive capacity and not the anomaly of its underutilization. It is not as if there are no demand constraints. But the expansion of output is primarily supply-constrained.

Second, industrialized economies are characterized by price-flexibility. It is not as if there are no price rigidities. There are, in some sectors and at some times, particularly in downward movements. But flexible prices are the norm. In contrast, developing economies are characterized by price rigidities. In fact, price formation is dichotomized by the dualistic structures of these economies. In the agricultural sector, prices are determined largely by demand and supply through market-clearing. In the non-agricultural sector, particularly manufacturing, prices are determined through markup on a cost plus basis, just as wages in the organized sector are often characterized by an indexation. Obviously, the reality is not complete price flexibility in industrialized economies and complete price rigidity in developing economies. But developing economies are characterized by significantly greater price rigidities.

Third, in the medium term, the sources of growth in output are different. In the industrialized economies, output growth is driven by productivity increase which, in turn, is a function of the level of investment and the pace of technical progress. In developing economies, output growth is, or at least should be, driven by labour absorption through employment creation in the non-agricultural sector and, in some part, through a shifting of labour from low productivity employment to higher productivity employment.

Objectives and Policies

Macroeconomic objectives, too, are somewhat different. In the industrialized economies, the traditional policy objectives were internal balance and external balance. Internal balance was defined as full employment combined with price stability. External balance was defined as equilibrium in the balance of payments, primarily with reference to the current account and, more precisely, in terms of the distinction between autonomous and accommodating transactions. The conception of internal balance, now, is confined to price stability. And full employment is no longer an integral part of the objective. In a world of capital account liberalization, the meaning of external balance is less than clear. It extends much beyond the current account as most capital account transactions are autonomous rather than accommodating.

In the developing economies, the traditional concern was economic growth in the long term. The emphasis was on savings and investment. The focus shifted to macro management in the short-term, after many developing countries, as also transitional economies, ran into debt crises or other forms of macroeconomic disequilibrium if not turbulence. Even so, the essential objective in developing countries is to step up the rate of growth as much as possible subject to two constraints: that inflation remains within limit of tolerance and the current account deficit in the balance of payment remains within manageable proportions.

Macroeconomic policies are the same. The traditional policy instruments, in both industrialized economies and developing economies, are fiscal policy and monetary policy. But the range and the reach of these policies differ in the two sets of countries.

In the fiscal policy sphere, it is appropriate to make a distinction between revenue and expenditure of the government. In developing countries, tax revenues are based much less on direct taxes and much more on indirect taxes as compared with industrialized economies. What is more, in developing countries, almost without exception, the base for taxation is significantly narrower while tax compliance is significantly lower (attributable to tax avoidance and tax evasion). And governments find it very difficult to increase their income through tax revenues. This is a problem because, as a rule, tax-GDP ratios in developing countries, are much lower. industrialized economies, where tax-GDP ratios are much higher, the debate is about taxcuts. In the sphere of expenditure, developing countries are characterized by proportionately larger government sectors where degrees of freedom are circumscribed by political compulsions, possibly more than in industrialized economies. What is more, in developing countries, the proportion of investment expenditure in total public expenditure is higher than in industrialized economies because private investment in infrastructure is not always forthcoming. Yet, in difficult times, it is such investment expenditure that is axed because governments find it very difficult to cut consumption expenditure. In industrialized economies, the proportion of public expenditure on social security and social sectors is significantly higher than in developing countries, even if the need for such expenditure is as strong in the latter. On the whole, governments in industrialized economies have much more fiscal flexibility than their counterparts in developing countries.

In the sphere of monetary policy, the differences are much more pronounced, particularly in terms of reach, because money markets are often segmented, if not underdeveloped, in developing countries. Open market operations were obviously a limited option in thin markets. And many developing countries sought to use interest rates as a strategic instrument for guiding the allocation of scarce investible resources in a market economy. In such a context, it is not surprising that, in developing countries, the volume of credit was always perceived as more effective than the price of credit as an instrument of monetary policy. The situation has changed in the recent past as the deregulation of domestic financial sectors has led to the emergence of markets for financial assets. This should have made interest rates as a more potent instrument. Ironically enough, it has not, because capital account convertibility has curbed degrees of freedom in the use of interest rates. Industrialized economies are not immune from the fetters of international financial markets, but the reach of monetary policy is much greater than in developing countries.

It is also important to recognize the somewhat different macro-economic implications of the interaction between fiscal and monetary policy in developing countries. For example, the monetary impact of fiscal policy is perhaps greater in developing countries because a much larger proportion of the fiscal deficit is financed by

borrowing from the central bank. And, in developing countries, borrowing from the central bank is the principal source of reserve money which makes it the most important determinant of monetary expansion. Similarly, the fiscal impact of monetary policy is perhaps greater in developing countries, because in situations where public debt is large as a proportion of GDP and interest payments on these debts are large as a proportion of government expenditure, even modest changes in interest rates exercise a profound influence on fiscal flexibility.

In such a milieu, the orthodox belief system that higher interest rates would help reduce macroeconomic imbalances is not always borne out by reality. Higher interest rates do not necessarily reduce government borrowing in situations where it is difficult to increase income or reduce expenditure of the government. But higher interest rates almost certainly make public debt less manageable.

In a changed international context, it is also important to recognize that countries which are integrated into the world financial system are constrained in using an autonomous management of demand to maintain levels of output and employment. Expansionary fiscal and monetary policies – large government deficits to stimulate aggregate demand or low interest rates to encourage domestic investment – can no longer be used because of an overwhelming fear that such measures could lead to speculative capital flight and a run on the national currency. The problem exists everywhere. But it is far more acute in developing countries.

Trade-offs and Adjustment

There are important trade-offs in macroeconomics, particularly in the sphere of macroeconomic policies, which must be recognized. These trade-offs are at present everywhere. However, the relative importance of such trade-offs depends on the contexts. The trade-off between inflation and unemployment is much more important in the industrialized economies than it is in the developing countries. The trade-off between short-term macro management and long-term objectives is much more important in the developing countries than it is in the industrialized countries.

The conventional trade-off between inflation and unemployment was epitomized in the Phillips Curve. But this construct is much too limited. In the near-obsessive concern of governments with the control of inflation, driven more and more by international financial markets, it is often forgotten that the management of inflation is not an end in itself. And, beyond a point, reducing inflation is at the cost of not only employment but also growth.

In developing countries, as also transitional economies, public policies have come to be pre-occupied with macro management in the short-term and re-structuring of economies in the medium term. The former is driven by quest for stabilization. The latter is prompted by the quest for efficiency. This is in conformity with the orthodoxy embodied in the Washington Consensus. There is, however, an important trade-off between short-term concerns and long-term objectives. For one, there are some long-term

consequences of short-termism. Macroeconomic policies implemented with a short-term objective and designed in a medium-term perspective may have adverse consequences for the performance of the economy in the long-term, through *hysteresis*, if the effects of short-term policies persist over time to influence outcomes in the long-term. What is more, a pre-occupation with the short-term often leads to a systematic neglect of long-term development objectives, which could also have serious implications.

The process of adjustment in economies at a macro level differs not only over time but also across space. Single models cannot suffice. And generalizations are perilous. All the same, it should come as no surprise that, as in most of economic theory, the mechanism of adjustment or the process of change must work either through prices or through quantities or through some combination of both. In general, developing countries are prone to more income adjustment and less price adjustment than industrialized economies. The essential reason is that, in developing economies, prices are characterized by a rigidity rather than a flexibility. Hence, more often than not, these economies adjust at a macro level through changes in output rather than changes in prices.

There is another significant difference between industrialized economies and developing economies which lies in the speed of adjustment. In general, the speed of adjustment in developing countries is slower than it is in industrialized countries. The reason is simple. Resources are not perfectly mobile across sectors or substitutable in uses, and prices, particularly of factors, are not completely flexible. These problems are accentuated in developing economies which are characterized by structural rigidities. The dynamics of demand are fast in expansion and contraction. In contrast, the dynamics of supply are slow in expansion even if somewhat faster in contraction.

In sum, the mode and the speed of adjustment at a macro level in developing economies are different from those in industrialized economies.

Constraints on Growth

In the context of developing countries, there is a literature around the theme of macroeconomic constraints on growth. But this literature remains in the domain of development economics. It is not an integral part of macroeconomics for development. Yet, it should be. This literature suggests that, at a macro level, economic growth in developing countries may be limited by a: (a) savings constraint, (b) foreign exchange constraint, (c) wage goods constraint, or (d) fiscal constraint. The literature on 'gap models' debates which of these constraints might be dominant and explores the macroeconomic implications or consequences of the interaction between these constraints. Such analytical constructs may not be important in themselves. But the moral of the story is important. Given such macroeconomic constraints, irrespective of which particular constraint is dominant, any attempt to step up the rate of growth in an economy spills over into an acceleration in the rate of inflation or a difficult balance of payments situation. The threshold of tolerance for inflation, determined by polity and society, may vary from as little as 5 per cent per annum to as much as 100 per cent per

annum. The manageability of a difficult balance of payments situation depends on the willingness and ability of creditors in the outside world to lend, or finance current account deficits, which also varies significantly across space and over time. But that is not all. The essential point is that an understanding of macroeconomic constraints on growth, in the context of developing countries, is important because it highlights macroeconomic interactions between the short-run and the medium-term.

Some Debated Issues

There are some issues that are a subject of debate in the context of macroeconomics for developing countries. These debates are essentially about the nature of relationships and the direction of causation between macroeconomic variables. The points of contention, more often than not, are about whether or not there are specificities in developing economies. It is worth citing two examples which are illustrative rather than exhaustive

The most important illustration, perhaps, is the debate on determinants of price behaviour. At one level, it is concerned with what causes inflation. At another level, it is concerned with what should be done about inflation. It would be no exaggeration to state that it provides a touchstone to distinguish orthodox thinking from structuralist thinking or heterodox thinking. The competing schools of thought, in terms of both perception and prescription, are the monetarists and the structuralists. The monetarist theory about inflation is a demand and supply fable, which ultimately reduces to a simple proposition that monetary expansion drives inflation. The structuralist theory of inflation is about relative price shifts which are a part of the distributional conflict and a set of rules of price formation which provide an institutional mechanism through which inflation escalates. In this discourse, the Keynesian view about supply-demand imbalances, or the Kalecki view about real disproportionalities, is no longer centre-stage, even if these are important determinants of price behaviour in developing countries. It is clear that no single explanation can suffice across countries or over time. The analysis and prescription in developing countries must depend on the circumstances in particular and the institutional setting in general.

Another interesting example of contending views is provided by the debate on he relationship between public investment and private investment. Orthodoxy, contextualised in the industrialized economies, believes that public investment crowds-out private investment. The unorthodox view, contextualised in developing countries, argues that public investment crowds-in private investment. The experience of developing countries, in general, suggests that public investment and private investment are complements rather than substitutes. But this may change with levels of income and stages of development. The essential point to emerge from this debate is that the nature of relationships and the direction of causation in macroeconomics, which shape analaysis, diagnosis and prescription, depend upon the institutional setting.