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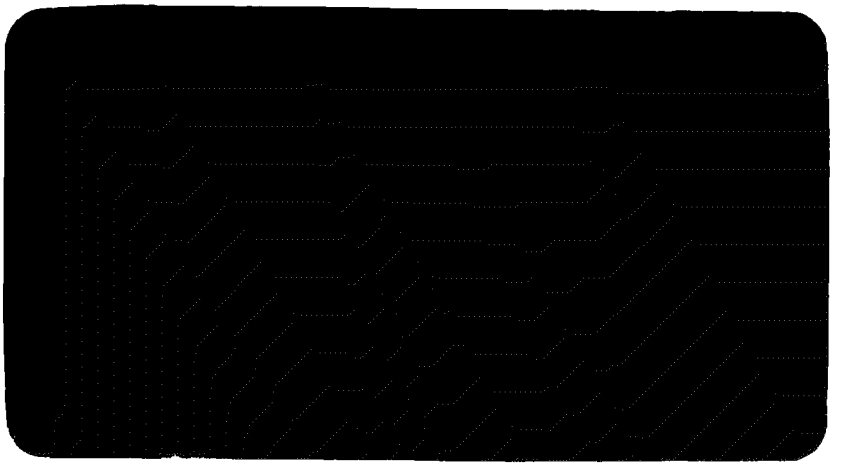

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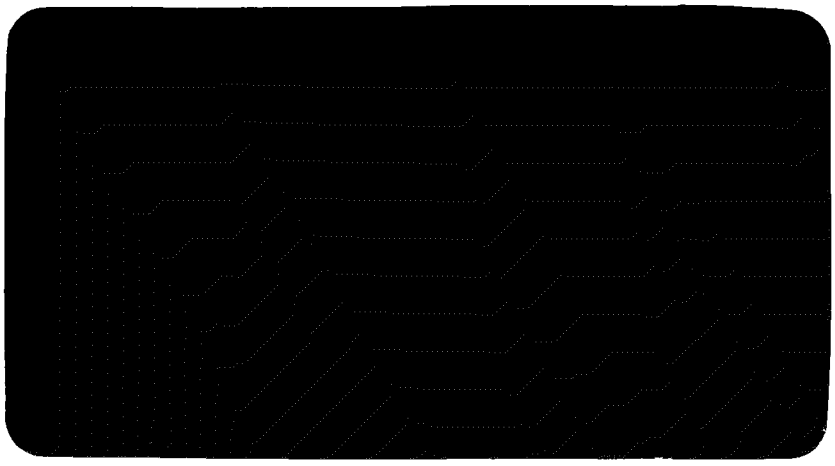

ODI WORKING PAPER

No. 5

BALANCE OF PAYMENTS STABILISATION POLICY IN DEVELOPING COUNTRIES

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BALANCE OF PAYMENTS STABILISATION POLICY IN DEVELOPING COUNTRIES[1]

The balance of payments is a prime example of an area in which governments have to make policy decisions in an environment of uncertainty. To policy makers the uncertainty must at times seem almost totally pervasive. At present there is no agreed and consistent body of theory upon which it is possible confidently to base policy, instead there are a range of often apparently conflicting theoretical approaches available to policy makers including the elasticities approach, the absorption approach and the monetary approach. To these, and particularly though not exclusively in the context of developing countries, may be added the structural approach.[2]

Although there is a large and growing literature which deals with these various approaches in isolation there is a scarcity of work which compares, evaluates, and indeed attempts to integrate the alternative approaches. The problem of choosing the appropriate policy or policies is made more difficult by the fact that the theories differ not only in terms of emphasis or the quantitative importance attached to certain relationships - though differences of this kind do exist - but also in terms of the directional or qualitative relationships implied between variables. These differences can be quite fundamental. Thus, for example, according to the conventional absorption approach rising national income tends to be associated with a deterioration in the balance of payments, while according to the monetary approach it will result in a balance of payments improvement.[3]

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1. This paper constitutes a chapter of a project entitled The IMF and Economic Management in Developing Countries based at ODI in London. It is therefore designed to be read not in isolation but in conjunction with the other chapters. Particularly relevant are Chapters 3 and 6.

2 Thirlwall (1980) has, for instance, provided a well reasoned and largely structural explanation of balance of payments problems in the United Kingdom.

3 To be more precise the absorption approach predicts that economic growth will lead to a deterioration in the current account, should the capital account improve sufficiently the overall balance of payments may improve and the predictions of the two theories may be reconciled. The monetary approach, as will be seen later, does not see any significance in the distinction between the current and capital accounts.

The purpose of this chapter is not, however, to perform such a integrating exercise. Much less ambitiously it sets out, in the context of the different theoretical models, to examine the various policy options that are available to developing countries in attempts to achieve balance of payments equilibrium. The policies include devaluation, demand management, and controls of various types, all of which have frequently featured in IMF programmes, either in terms of their encouragement or discouragement.[4] Prior to this examination, Section I reminds us of some of the definitional problems associated with the balance of payments[5] and relates balance of payments concepts to the various theories, while Section II examines the underlying nature of the policy problem. The chapter sets out to provide a theoretical and empirical backdrop to subsequent chapters which investigate the IMF's involvement with payments policy in developing countries.

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4 See Chapter 6, Killick (1981), for details of the contents of Fund programmes, see also Reichmann (1978) and Reichmann and Stillson (1978).

5 These were explained and discussed in Chapter 2, Killick (1980).

I DEFINITIONS AND THEORETICAL COUNTERPARTS

As noted in Chapter 2, overall the balance of payments always balances. Payments problems are therefore essentially compositional in nature. The balance of payments is usually divided into the current account and the capital account, with the latter being subdivided into long term and short term accounts. Different theories tend to focus on different components of the balance of payments. The elasticities approach, for example, focusses on the current account, where changes in relative prices exert their impact on the flow of goods and services. Emphasis is placed on the shape of the demand and supply schedules for foreign exchange without much attention being given to the effect that policies such as devaluation may have on the location of the schedules. To a significant though perhaps lesser extent the absorption approach also emphasises the current account concentrating on the relationship between income and imported goods and services, though in this case attention is focussed on the location of the demand and supply schedules for foreign exchange rather than their elasticities. The structural approach highlights the distinction between trade and capital flows, paying particular attention to the structure of production and trade. In sharp contrast, the monetary approach stresses the irrelevance of decomposing the balance of payments and therefore makes little distinction between the current and capital accounts. The monetary approach does not concern itself with such partial balances which are left largely unexplained. Under this approach 'accommodating' flows, which under other approaches have an only minor significance, become the centre of attention. The balance of payments is seen as reflecting the interaction between the demand for and supply of money with reserve changes being the means by which monetary equilibrium is maintained. The monetary approach is then both broad and narrow. It is broad in terms of the level of aggregation used but is narrow in terms of its identification of the causes of balance of payments problems.

From the viewpoint of most policy makers in developing countries the lack of conern over the composition of the balance of payments may be a weakness of the monetary approach. To them the distinction between the current and capital accounts is a valid and useful one in

assessing the foreign exchange gap, required capital inflows, indebtedness, debt service ratios, and the capacity for economic growth and structural change within the economy.

While strongly influenced by the monetary approach the IMF is not indifferent about the composition of the balance of payments. The Fund has set specific targets for the current and basic balances in its programmes as well as imposing limits on the extent to which countries may take on additional debt, (see Chapter 6). It is primarily concerned with encouraging countries to achieve a 'viable' balance of payments whereby any current account deficit may be financed 'on a sustainable basis, by net capital inflows on terms that are compatible with the development and growth prospects of the country' (Guitian 1980). Within the capital account the Fund takes into consideration the availability of both long term and short term capital inflows.

II THE NATURE OF THE POLICY PROBLEM

The basic policy choice between adjustment and financing

In principle, a payments deficit may initially either be financed by running down domestically held international reserves and by international borrowing or be corrected through the pursuit of adjustment policies. Whilst financing is appropriate when the deficit is transitory it is inappropriate as an exclusive policy when the deficit is persistent and reflects fundamental disequilibrium; in this circumstance financing constitutes only a short term palliative and adjustment is also required. Financing and adjustment are, of course, by no means mutually exclusive and it is likely that a combination of them will be pursued. The greater the degree of financing the less rapid need be the rate of adjustment.

The economic theory underlying the choice of the combination of financing and adjustment speed has been developed in the literature (see, for example, Clark (1970) and Bird (1980) and has been summarised by Williamson (1973) and by Bird (1978). In brief the optimum combination of financing and adjustment will be achieved where the marginal rate of substitution between current and future expenditure equals their marginal rate of transformation. Given a deficit of similar size this may not lead to the same combination of policies in an ldc as it would in a developed country. Since ldcs encounter relatively high financing costs, other things being equal, they will be encouraged to make relatively greater use of adjustment. On the other hand, if the social marginal productivity of resources is higher in ldcs this will act to reduce the net costs associated with financing and will therefore encourage them to make greater use of it; this will also be the case if ldcs possess a relatively strong preference for current expenditure.

However ldcs may be precluded from using their theoretically optimum combination of financing and adjustment by the existence of a constraint on the availability of finance and they may therefore be forced to adjust more rapidly than they would wish. Case study evidence collected by Dell and Lawrence (1980) is relevant here since it does seem to confirm that the speed and cost of adjustment

are inversely related to the availability of international finance. Furthermore, the rudimentary nature of financial systems and the large perceived uncertainty in most ldcs does not easily permit monetary policy to be used as a means of inducing capital inflows to offset current account deficits. In this context the position of the IMF is intriguing. On the one hand the Fund provides an additional source of finance and therefore, in principle, enables countries to defer adjustment; at the same time, however, a proportion of its resources are available only on condition that a suitable adjustment strategy is approved and put into effect. As reported in chapter 5, there is evidence to suggest that such conditionality deterred ldcs from making drawings on the Fund during the 1970s. This reluctance may reflect: the belief either that the speed of adjustment being requested by the Fund is too rapid, given the other macroeconomic policy objectives that a country may have, or that the specific adjustment policies favoured by the IMF are regarded as inappropriate. In either case, the countries concerned will where possible tend to opt for alternative sources of finance and for a slower speed, or a different pattern of adjustment. If other sources of international finance are unavailable the option of a slower rate of adjustment is forfeited - indeed without Fund finance the speed of adjustment will, in principle, have to be even more rapid than it would be with it - and the only benefit from rejecting the Fund as a source of finance will be felt in terms of the freedom of choice with respect to the nature of the corrective policies adopted. Any belief that adjustment may be avoided is illusory. Countries which postpone payments correction will eventually be forced to adopt policies which are likely to have a high welfare cost.

The objectives and costs of adjustment

It is one of the inescapable aspects of balance of payments theory that in a situation where real domestic output cannot be increased the correction of a deficit entails a reduction in domestic absorption i.e. consumption and/or investment. This will be the case even if the demand by foreigners for domestic output rises, since this demand may be met, in conditions of low short run supply elasticity only if the resources demanded by foreigners are freed by residents. Greater absorption of domestic and foreign output by foreigners

clearly involves lower absorption of domestic and foreign output by residents. Irrespective of whether the initial impact of any balance of payments policy is to reduce domestic expenditure or to switch expenditure from abroad, correction of the deficit will, in these circumstances be achieved only if there is a reduction in real domestic expenditure. If this reduction in domestic expenditure is not achieved, the deficit will not be corrected. Thus unless domestic output can be increased it is misguided to imagine that the correction of a balance of payments deficit may in some sense be costless.

A reduction in domestic expenditure may be achieved by means of pursuing a range of 'expenditure reducing' policies such as contractionary monetary and fiscal policy which, by lowering domestic income, serve to reduce expenditure on all goods, traded and non-traded. The greater the income elasticity of demand for traded goods, the smaller will be the fall in income that is needed in order to bring about the required fall in payments to foreigners. Expenditure-reducing policies, in as much as they reduce the demand for imports, can be sufficient on their own to correct a deficit. In addition, and to the extent that expenditure-reducing policies also induce a fall in the price of domestically produced goods, they will encourage a switch in domestic and foreign expenditure away from foreign output and towards domestic output. The resources necessary to meet this extra demand for domestic output will have been freed by the reduction in domestic expenditure, provided only that the expenditure reductions affect traded goods and not exclusively non-traded goods. However, in the case of ldcs there may be a low degree of substitutability between export goods, import goods and non traded goods; demand reduction may therefore not immediately release exportable output in ldcs where the pattern of exports does not match that of domestic absorption. This will slow down the process of adjustment since changes in the sectoral pattern of output will be required from the non traded goods to traded goods sectors.

A transfer of expenditure from residents to foreigners is more conventionally engineered by means of 'expenditure-switching' policies such as devaluation, which are designed to lower the incentive for residents to buy foreign goods and raise the incentive for both residents and foreigners to buy domestic goods. Such a switch in

real expenditure may be encouraged by changing the price of domestic output relative to that of foreign output. Unlike expenditure-reducing policies, however, expenditure-switching policies on their own may be insufficient to correct a deficit. Although, in conditions where there is usable spare capacity the additional demand for exports and import substitutes induced by a fall in the relative price of domestic output may be met in real terms in conditions of full capacity utilisation any extra demand created by the expenditure-switching policies will simply generate inflation, unless action is simultaneously taken to free the resources needed to meet the extra demand. However, as will be seen later expenditure-switching policies may themselves be demand-deflationary.

According to the monetary approach, a payments deficit will be corrected only if the monetary disequilibrium associated with it is also corrected. This necessitates either a reduction in the real supply of money or a rise in the real demand for money. A fall in the real supply of money may be brought about either by a fall in the nominal supply of money or by a rise in the general price level. A rise in the real demand for money may be brought about through a rise in the level of real national income or through a strengthening in any preference for money as opposed to other assets.

The monetary approach thus concurs with the absorption approach that unless real income is rising fast enough to induce an adequate increase in the real demand for money the deflationary implications of a deficit will have to be accepted if the balance of payments is to be improved. It emerges that any government setting out to achieve payments adjustment at zero cost is likely to be thwarted in all but limited circumstances. As Crockett (1981) observes 'balance of payments equilibrium is a constraint which cannot be escaped, even if its achievement requires sacrifices in terms of economic development'. The more appropriate objective of policy makers is to achieve a specified improvement in the balance of payments at minimum cost and with an acceptable distribution of this cost. It is not enough that policies should work in the narrow sense of reducing the deficit; they should do this while imposing the least possible damage on economic growth, employment and income distribution. In

practice it is at this juncture that disagreement over balance of payments policy tends to arise.[6]

The causes of balance of payments disequilibrium

In order to assess the appropriateness of alternative policy measures it is clearly important for policy makers to know something about the causes of the problem. As will be seen later this is not to argue that policies unrelated to the fundamental causes will fail to work in the narrow sense of improving the balance of payments but simply that they may not be the most appropriate ones.

For the purpose of classification the causes of disequilibria may be divided into those that are, in essence, endogenous to the individual country and those that are exogenous. Alternatively a distinction may be drawn between those causes that relate to the structural characteristics of the economy and impinge mainly on supply, and those that relate to domestic absorption or financial policy and impinge mainly on demand.

Structural : export instability and terms of trade.[7]

Structural causes basically relate to the type and nature of non traded and, in particular, traded goods and the efficiency with which these are produced. Two central aspects of the structural explanation of balance of payments disequilibria in ldcs are first, commodity instability and the associated instability of export receipts and import payments, and second, adverse movements in the terms of trade.

Export instability comprises both variations in the prices of primary commodities, and the level of export concentration on these products. Evidence does seem to confirm that many primary products are subject to a high degree of instability, and that a peculiar feature of ldcs is their relatively high degree of export concentration on a few primary products. Furthermore, although the precise details depend on the particular instability index used and the countries and time period studied, ldcs, as a group, generally do seem to encounter greater instability in their export earnings than do developed countries.

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6 Again Crockett (1981) argues that 'the choice of demand management measures will be the principal factor determining the transitional loss of output involved in a stabilisation programme.'

7 This section draws heavily on Chapters 3 and 4 of Bird (1978) which contains a much fuller exposition of the issues raised here.

and, as a result, their balance of payments tends to be relatively unstable.[8]

Turning to trends in the terms of trade there is a commonly held belief that those of ldcs have been subject to a long run deterioration reflecting the fact that on balance ldcs are exporters of primary products and importers of manufactured final goods, and that primary product prices have fallen relative to those of manufactured goods. Such a fall could be generated by differential income elasticities of demand for primary and manufactured goods. By assuming that the income elasticity of demand for manufactures is greater than the income elasticity of demand for primary products, it might be anticipated that, other things being constant, the prices of manufactured goods would rise faster than the prices of primary commodities in the wake of world income growth, although to some extent, the differential effects of world income growth on the prices of primary commodities and manufactured goods may be tempered by differential price elasticities.[9]

Since most ldcs exert little control over either the demand or supply determinants of their commodity terms of trade these become a largely exogenous variable in the short run.

Furthermore since differential movements in the terms of trade amongst ldcs reflect the different commodity composition of their exports and imports and the differential price movements of these commodities it might be anticipated that empirical evidence would fail to provide an unambiguous picture. Bird (1979) reports just such ambiguity, with significant variations to be found

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8 There is a large literature on all aspects of export instability. Both the theory and evidence relating to export instability has been reviewed more fully by the author elsewhere, see Bird (1978). Some discussion is also undertaken in Chapter 2 of this book. The treatment given here is therefore correspondingly cursory; the relatively small amount of space devoted to the topic should not however be interpreted as implying that it is relatively unimportant.

9 For this to be possible, however, the income elasticity of demand for primary products would have to be positive.

depending on the particular terms of trade measure used, and countries, commodities and time periods studied. The conclusion is reached, however, that a substantial number of ldcs have experienced adverse movements in their commodity terms of trade. The implications of this for their balance of payments depends on the particular configuration of the deterioration as well as on the values of foreign trade elasticities. Broadly speaking where import and export demand is price inelastic a deterioration in the commodity terms of trade will be translated into a deterioration in the balance of payments. As far as price elasticities are concerned evidence confirms that very much hangs on the particular commodity involved though it does seem to be the case that the price elasticity of demand for imports into developed countries becomes greater the less 'crude' and the more processed are the imports. Given that ldcs' exports are largely made up of 'crude' commodities it might be concluded that their export price elasticities will be relatively low. Khan (1974) confirms the existence of price inelastic demand for exports, finding elasticity to be greater than 1 for only four of the fifteen ldcs he studied. However, he also discovered the often assumed price inelasticity of demand for ldcs' imports to be largely unfounded. For ten ldcs price elasticity was one or more. In addition to having an indirect effect on prices the income elasticity of demand for exports will have a direct effect on the income termsof trade. Indeed some structuralists argue that it is differences between the income elasticity of demand for exports and that for imports that is at the heart of ldcs' payments problems. This will have an important bearing on the potential success of adjustment policies such as devaluation aimed at altering relative prices. Though relatively high price elasticities maybe a necessary condition for balance of payments improvement they may not be sufficient. Resources need to be shifted into producing goods for which the income elasticity of demand is also relatively high. Evidence suggests that with few exceptions the income elasticity of demand for ldcs exports is generally less, and often considerably less than one, and that it is rather below the income elasticity of demand for imports.[10]

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10 See Bird (1978) for fuller discussion and attribution of the evidence.

Other structural causes

Attempts to alter the structure of production and trade so as to remedy any secular deterioration in the balance of payments or to reduce its vulnerability to exogenously-generated instabilities resulting from shortfalls in export demand or supply vicissitudes are likely to be hampered by the low degree of structural mobility that is usually associated with ldcs; added to which trading patterns may reflect well defined historical and political ties which are difficult to break and which may yield other benefits for the countries concerned. Even where such changes can be achieved it is unlikely that they will be brought about during a short time span except in a minority of cases, and even where a shift away from the production of primary products and towards the production of manufactures is achieved, it may not automatically improve the balance of payments. Whether it does depends crucially on the efficiency with which the goods are produced. While many of the newly industrialising countries (NICs) have demonstrated considerable ability to produce competitively and to reap the benefits in terms of their balance of payments, this need not always be the case.

Other domestic structural weaknesses may generate payments difficulties. Frequently singled out are deficiences in the fiscal system that encourage a misallocation of resources, for example between agricultural and industrial sectors, exchange controls that encourage high cost import substitution and penalise exports, and the activities of multinationals which through the use of technology inappropriate to the conditions found in ldcs and transfer pricing policies which minimise domestic government revenue, exert negative effects on host countries. However, without getting embroiled in these diverse and complicated issues, it is difficult to see how domestic structural features of this kind can be easily used to explain instability in the balance of payments. They seem more suited to an explanation of general payments weakness.

The monetary approach

By contrast the monetary approach pays little attention to such structural features. Instead this approach explains the balance of payments exclusively in terms of domestic monetary disequilibrium. In comparison to the absorption apparoch, which may be presented in purely 'real' terms and to which monetary aspects may be appended if desired, the monetary approach views such aspects as the essence of the matter. Most commonly presented on the assumption of fixed exchange rates, the monetary approach assumes that the nominal demand for money is a stable and linearly homogeneous function of nominal income. It goes on to point out that the nominal supply of money is the product of the money multiplier and the monetary base, with the latter comprising a domestic component consisting of domestic credit created by the monetary authorities and an international component consisting of the domestic holdings of international reserves. Given a tendency toward equilibrium in the monetary sector of the economy and assuming a constant money multiplier, it follows that changes in reserves (taken as the measure of the state of the balance of payments) strictly reflect any imbalance between the change in the domestic demand for money and the change in the supply of domestic credit. An excess demand for money will be met by a net inflow of reserves, i.e. a balance payments surplus, while an excess creation of domestic credit will be reflected by a payments deficit. It is the change in reserves which restores monetary equilibrium; once stock equilibrium has been restored the flow of reserves will cease. The monetary approach therefore views balance of payments problems as essentially transitory and self-correcting, providing only that the authorities do not sterilise the effects of changes in reserves by means of compensating changes in domestic credit creation. In this sense balance of payments policy as such is not required apart from the strict control of credit creation. Measures such as devaluation and exchange controls are viewed as only influencing the balance of payments via their monetary repercussions. Their only positive contribution will be to speed up a corrective process that would have taken place in any case. Clearly, whether a payments imbalance will correct itself and how long such correction will take are crucially important policy questions.

Furthermore the monetary approach suggests that the correlation coefficient of changes in reserves on domestic credit creation is unity. The implication is that excessive domestic credit creation will have no positive long term effect on output and employment and will instead be completely offset by a loss of reserves. Similarly, it follows that to reduce the rate of credit creation in order to improve the balance of payments will have no adverse effect on these variables, though an improvement in the balance of payments will clearly imply a reduction in the net importation of goods and services and therefore reduced domestic absorption. Again, such issues are highly relevant to policy makers.

At this stage it is relevant to draw a distinction between work done on the monetary approach by the IMF and by outside academics. Significantly a great deal of research on the monetary approach to the balance of payments has emanated from the IMF's Research Department and has been conducted in the context of developing countries. Rhomberg and Heller (1977) suggest four reasons for this. First, many ldcs lacked the detailed national accounts needed for the application of Keynesian analysis, while financial data were fairly easily available. At the same time only aggregative payments data could be obtained and this ruled out an approach based on elasticities. The monetary approach therefore suggested itself almost by default. Second, analysis based on monetary aggregates was not excessively complex and could be undertaken swiftly. It was therefore suitable for the short duration of visits by Fund missions. Third, the scope for ldcs to adopt sterilisation policies was limited, and fourth, many ldcs, particularly in Latin America, already relied heavily on monetary policy as a major instrument of payments control.

It is an interesting question as to whether the Fund's version of the monetary approach may be legitimately differentiated from versions presented by academics, as summarised, say, in the volume edited by Frenkel and Johnson (1976). This issue merges into the wider one, discussed in Chapters 5 and 6, of whether the Fund may fairly be described as 'monetarist'. Unfortunately neither issue

is clear cut, not least because there may be differences between the research writings of Fund staff and what is done by the Fund in practice. To the extent that it is wise to impute an analytical framework to the policies supported by the Fund, these would seem to fit into the broad tradition of the monetary approach (see chapter 6) under which, on the basis of forecasts for the demand for money, domestic credit creation is fixed at a level consistent with the attainment of a specific balance of payments target. However, it seems to be the case that the Fund's approach is rather more eclectic than that of academic monetarists and may also fit into other (Keynesian) analytical frameworks. The Fund has also shown significantly more concern with the short run and with adjustment paths than have other versions, which have concentrated on long term equilibrium models. The Fund version is therefore of considerably more relevance to policy makers, as indeed is its intention.

Of central significance here is the transmission mechanism through which domestic credit expansion affects the balance of payments. In principle there are a number of possibilities. Starting from a situation of monetary equilibrium, the creation of credit at a rate in excess of the growth in demand for money will have the immediate effect of creating excess real cash balances; the implications of this situation will depend on the way in which individuals and firms attempt to dispose of their excess holdings. The options are to spend them on domestic and foreign real and financial assets. Spending them on foreign assets will have a direct impact on the balance of payments, either on the current account where expenditure is on real assets or on the capital account where expenditure is on financial assets. Spending them on domestic real assets will either raise real output where there is spare capacity or will raise the domestic price level. In the latter case an adverse effect on the current account will also be implied (assuming a fixed exchange rate). Spending them on domestic financial assets will, in the short run at least, tend to reduce interest rates, and this will have an adverse effect on the capital account and perhaps on the current account as well. The monetary approach conventionally concentrates on the direct impact on imports and plays down any lasting influence on real output and employment. This is particularly true of the

academic versions associated with Mundell and Johnson but it also applies to the early work in the Fund (see, for example, Polak, 1957). More recent Fund research, for example by Khan and Knight (1980), emphasises that attempts to improve the balance of payments by credit policy may impose significant and undesirable effects on output, employment and factor income, particularly in the short run. Aghevli and Rodriguez (1979) further confirm that monetary restraint may have a negative influence on real variables and they also suggest that this may still be significant even in the long run. There are some similarities, then between this work and the conventional Keynesian view which, while not necessarily at odds with the basic analytical approach underlying monetary models, tends to emphasise those aspects of the transmission mechanism that relate to the effects on output and employment. The rather more, and perhaps increasingly, eclectic interpretation of the balance of payments to be found in the Fund is clearly reflected in a recent review of the monetary approach published in the IMF Survey (Blackwell, 1978).[11] Full cognizance is shown here of the criticisms that may be made of the strong and restrictive assumptions underlying conventional monetary models. In particular, Blackwell critically

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11 Significantly the title of Blackwell's article is 'Monetary Approach to Balance of Payments Needs Blending with Other Lines of Analysis'. Blackwell specifically argues that the elasticities and absorption approaches should not be discarded, 'on the contrary, the experience of the Fund suggests that, while an almost overriding priority must often be given to monetary considerations in particular circumstances, balanced diagnoses and prescriptions usually require close attention to the problems of resource use on which the absorption approach focuses, as well as emphasis on realistic exchange rate policies based (in part) on judgements regarding elasticities.' He also points out that while, 'prices and wages have become much more variable, even under conditions of considerable slack, than would be implied by a "pure" Keynesian model...real output and employment clearly remain more variable in response to policy actions or other exogenous factors than a "pure" monetary model might suggest.

Thirlwall (1980) provides a particularly cogent summary critique of the monetary approach. He argues that balance of payments disequilibrium is quite consistent with ex ante equilibrium in the money market. When these points are combined with what he feels are the unrealistic assumptions made concerning the demand for money function, the determination of output, the absence of sterilization and so on he concludes that there is little of merit left in the monetary approach that was not already available implicitly in the absorption approach, and that it is 'not very useful and almost certainly misleading, for the understanding of the causes of balance of payments difficulties.'

investigates six premises underlying the monetary approach:

(1) the time dimension of the theoretical mechanism;
(2) the assumptions with respect to the income velocity of money;
(3) the unduly sharp dichotomy between "money" and other financial claims;
(4) the analogous distinction between "reserves" and other external assets;
(5) the broad assumptions usually made about capital mobility, the substitutability of goods and services produced in different countries or sectors, and the existence of full employment conditions;
and (6) the scope for symmetrical application of "sterilisation" policies.

He finds all such assumptions wanting in certian respects and argues that there is considerable need for qualitative judgement to supplement the use of econometric models, to allow for such factors as 'socio-political acceptability'.

Evidence already reviewed in chapter 3 by Sharpley (1980) confirms that such criticism is not without empirical support. However, any idea that the theoretical debate over the causes of payments disequilibria may quickly be resolved by empirical investigation has been shown to be erroneous. Much work has been carried out on testing monetary models in the context of developing countries but as yet no clear consensus has emerged. Following a comprehensive review of all the major empirical studies up to 1977 Kreinin and Officer (1978) conclude that the evidence is inconclusive, even though, interestingly, the Fund has in the past shown a tendency to view most of its own research findings as being broadly supportive of a monetary approach (Khomberg and Heller, 1977). Part of the difficulty is that consistency with the monetary approach does not automatically imply inconsistency with alternative approaches. A given set of results is therefore open to more than one interpretation. Indeed, even the extent to which a given set of results supports the monetary approach is often unclear - for instance the often negative interpretation given by Kreinin and Officer to specific findings does not always tally with that given by the original authors. Furthermore, there is the problem that even where a strong connection is discovered between the supply of credit and the balance of payments

this does not of itself imply the direction of causation: domestic monetary disequilibrium may simply be a symptom of balance of payments disequilibrium, (Thirlwall, 1978).

Even where causation is established,[12] the more fundamental question of why a policy of excess credit was pursued in the first place is not explained. The implication is that any policy not based on an understanding of these underlying factors will itself fail.

In terms of the prime causes of balance of payments problems in ldcs there is some evidence to support the argument that these have been relatively little to do with domestic monetary excesses and much more to do with exogenous factors beyond the control of ldcs (Dell and Lawrence, 1980 and chapters 2 and 6)[13]. This view contrasts sharply with the one that, at least until recently, was apparently held by the Fund, namely that overly expansionary domestic demand policies are the most common cause of payments deficits. These conflicting views may, of course, simply reflect the different time periods and different countries studied, but if this is the case the conclusion cannot be avoided that there is no unique cause of disequilibria. Unless one believes that the appropriateness of policies is independent of the causes of the problem, this clearly has significant implications. The IMF has generally seemed to view the distinction between exogenous

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12. Having studied certain causal relationships implied by the monetary approach to the balance of payments for four ldcs, Kincaid and Nakajima (1978) conclude that 'for the time periods tested, the assumption of a unidirectional causal relationship leading from domestic credit expansion to changes in net foreign assets ... is valid for Argentina, the Philippines, and Thailand,' while, 'the evidence for Mexico does not support the aforementioned causality'.

13. It is interesting to note that under the monetary approach an exogenously generated increase in prices will raise the nominal demand for money and, if unaccompanied by an equivalent increase in domestic credit, will lead to a balance of payements surplus and not the deficit that is more traditionally suggested. Note also that as Kreinin and Officer (1978) point out, 'the traditional prediction refers strictly to the current account component of the balance of payments and can be reconciled with the monetarist result via the capital account'.

and endogenous causation as rather unhelpful and has preferred to emphasise the distinction between temporary and permanent payments problems. Although the duration of a deficit is clearly not independent of its causes, such emphasis appears to give only a secondary importance to causation.

In conclusion of this sub section there would probably be a consensus that the monetary approach has established that rapid credit expansion is likely to result in payments deficits and that sound financial policy is necessary for the avoidance of balance of payments disequilibria. There would be less agreement, however, on whether monetary policy is sufficient to achieve a given payments target and on whether it represents a least cost solution in terms of losses of employment and output. There is a growing amount of evidence, much of which significantly comes from the Fund's own Research Department, which suggests that it may not.

III BALANCE OF PAYMENTS STABILISATION POLICIES: THEORY AND EVIDENCE

This section examines a range of specific balance of payments policies available to ldcs. Since devaluation has featured as a component of IMF programmes and has been the source of considerable public discussion between the IMF and ldcs a good deal of attention is focussed on this particular instrument, though other policies such as domestic demand management (reviewed more fully in chapter 3) and controls are also discussed. It will be seen that economic theory does not provide an unambiguous guide to the ways in which the various policies will affect the balance of payments or even a clear indication of whether they will affect it at all. Indeed, as already noted, one conclusion that emerges from the monetary approach given the assumptions on which it is based, is that in the long run no policy is required since balance of payments disequilibria are self-correcting. The only relevant question in the context of this approach is whether countries have enough time to permit the automatic adjustment mechanism to work.

Devaluation: the elasticities approach

Devaluation has traditionally been defined as falling into the category of expenditure-switching policies. In many cases, therefore, if it is anticiiated that devaluation will fail to correct a deficit it is to be anticipated that other forms of expenditure-switching policy will also be ineffective; it may be useful to bear this point in mind.

Devaluation operates in a way which increases the domestic currency price and/or reduces the foreign currency price of exports. It generates price incentives which tend to lower domestic demand for imports, raise domestic demand for and supply of import substitutes, increase foreign demand for exports, and/or lower the domestic demand for and increase the production of exports. The responses to these price changes depend on a range of demand and supply elasticities.

A prime issue of interest is whether devaluation in ldcs will cause the theoretically anticipated price changes. With regard to imports it is highly improbable that any individual ldc will be able to influence the foreign price of its imports, since its demand for any particular import will represent only a small fraction of the total world demand for the product. Even so, the domestic price of imports may not rise to the full extent of the devaluation, or may even fall if devaluation is accompanied by the removal of import controls that prior to devaluation served to maintain import prices at artifically high levels. Indeed the overall impact of devaluation has been found to depend significantly on the precise characteristics of controls (Krueger, 1978). Controls are, of course, very common in ldcs.[14] Krueger confirms on the basis of studies of ten ldcs that devaluation results not only in increased 'liberalisation', i.e. the use of the market mechanism in place of quantitative restrictions, but a greater rise in the price of exportables as compared with importables and therefore a reduction in the import substitution bias often associated with controls (see the later section on exchange controls).

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14 For a full catalogue of the import controls used by ldcs, see the IMF's Annual Report on Exchange Restrictions. Over recent years, quantitative import controls have been used by, inter alia, Argentina, Bangladesh, Chile, Colombia, Jamaica, India, Mexico, Nigeria, Peru and Pakistan; import surcharges and taxes by Bolivia, Brazil, Cameroon, Costa Rica, Ecuador, Ghana, Israel, Malawi, Mexico, Pakistan, Panama and Uruguay; systems of advance import deposits by Bolivia, Brazil, Chile, Colombia, Greece, Korea, Mauritius and Zaire; controls over import payments by Argentina, Chile, the Dominican Republic, Ethiopia, Indonesia, Peru, Sierra Leone and Zaire; restrictions on current invisibles by Afghanistan, Argentina, Bangladesh, Brazil, Chile, Colombia, Cyprus, Egypt, Ghana, Guyana, Israel, Jamaica, Lesotho, Malta, Pakistan, Peru, the Philippines, Sierra Leone, Tanzania and Zaire; and some form of multiple-currency practice by Argentina, Afghanistan, Brazil, Burma, Colombia, Ghana, Indonesia and Nepal.

With regard to exports, much depends on the significance of the ldc as a supplier of the particular export. Where it accounts for only a small proportion of the total world supply of a product, it is unlikely that the foreign-currency export price will alter as a result of devaluation, since this price will be largely determined by the interplay of supply and demand in the world market. In these circumstances devaluation will instead tend to raise the price of exports in terms of the relevant domestic currency. Again, however, a rise in the domestic-currency price of an export which is also consumed domestically is not automatically implied by the constancy of the foreign-currency price. For instance, the exchange authorities may allow export producers a less beneficial exchange rate, thus effectively taxing the windfall increase in profits that would otherwise have been associated with devaluation, or the authorities may directly impose an export tax.[15]

Even where producers do have some control over the foreign currency price of a commodity their pricing policies will be influenced by the estimated size of demand and supply elasticities, as well as by institutional arrangements, such as the existence of international commodity agreements, which discourage signatories from expanding their market share through price competition.

If, as seems likely in all but rather exceptional cases, relative price changes do result from devaluation, such that domestic output becomes cheaper in relation to foreign output, the success of the devaluation in improving the balance of payments depends on the responses to these price changes. In the case of imports, the demand in ldcs is often assumed to be price-inelastic, reflecting the developmental nature of imports though, as noted earlier, empirical evidence challenges this assumption.

On the export side, the foreign-currency price of exports will not usually fall as a result of devalution. Where the foreign-currency price of exports remains constant, the domestic-currency equivalent

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15 For example, during 1976-7 Burma established an export-price equalisation fund into which is paid the revenue from taxes levied on the surplus of export earnings over domestic export costs. The fund is used to finance losses on unprofitable exports.

will rise and the issue of crucial significance in assessing the relevance of devaluation becomes the elasticity of supply of exports.[16] This elasticity, which is of course liable to vary over time, will depend on a number of factors: it will tend to be higher the shorter the gestation period of production, the greater the domestic consumption of the good, the greater the degree of unutilised capacity, the greater the availability of investment finance, and the greater the mobility of resources. Circumstances vary as between individual ldcs, but there is some reason to believe that short run supply elasticities may be fairly low in ldcs.[17] Supply inelasticity therefore constitutes a major impediment to the efficacy of devaluation and, indeed, any form of expenditure-switching policy, as a method of payments adjustment. Such inelasticity does not imply full employment but reflects a general difficulty in expanding the output of exports and import substitutes, for example because of structural inflexibilities.

Even though the success of all expenditure-switching measures depends on the same basic factors, a significant distinction may be made with respect to the selectivity of various such instruments. In most ldcs devaluation will initially exert a fairly universal influence upon the domestic-currency price of all traded goods. Leaving aside possible influences on the capital account the impact of devaluation on the demand for foreign exchange depends on the domestic-price elasticity of demand for imports. The impact on the supply of foreign exchange depends in the first instance on the foreign-price elasticity of demand for exports if the devaluation causes a change in the foreign price, and on the elasticity of supply with respect to increased profits in the export sector if it is only domestic prices that change. For commodities subject to very small elasticities devaluation will do little to improve the foreign-exchange position.

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16 The absence of a foreign-price effect need not preclude an expansion in export demand where the increased profits of domestic suppliers finance an improvement in the quality of the export good. Such quality effects are, however, unlikely to be relevant to many of the primary-product exports of ldcs.

17 Nashabibi (1980) draws attention to the specific instance where a quite large increase in the selling price of a given crop which however still leaves its production less profitable than that of alternative crops may have less effect on output than a smaller price increase that changes the profitability ranking.

Such limited empirical evidence as is available on ldc price elasticities suggests that elasticity pessimism may be misplaced. As mentioned earlier, in a study of fifteen ldcs over the period 1951-69, Khan (1974) found that the values of foreign trade elasticities were consistent with devaluation improving the balance of payments. This conclusion does not, of course, necessarily mean that devaluation will actually improve the trade balance, since success in these terms requires the satifaction of a number of other conditions. The first is that devaluation will generate changes in the relative prices of traded and non-traded goods. Evidence on this matter is provided by Cooper (1971a and b) and Connolly and Taylor (1976b). In a study of twenty-four devaluations in ldcs over the period 1959-66, Cooper notes that in twenty cases devaluation was accompanied by some substantial measure of exchange reform or trade liberalisation, with the result that the effective devaluation differed from, and was usually less than, the nominal devaluation. Even though the effective devaluation usually varied as between imports and exports, as confirmed by Krueger (1978), reflecting different rates of tariffs and export subsidies for different traded goods, devaluation practically always generated a relative rise in the domestic price of traded goods as a whole, at least initially. Connolly and Taylor confirm this finding. Whilst devaluation appears to bring about a moderate increase in the overall price level, the rise it causes in the prices of traded goods is substantial. For the eight devaluations studied by Connolly and Taylor, over the two-year post-devaluation period the prices of traded goods rose by an amount approaching the extent of devaluation, whilst prices in general rose less than half as much. Second, the substitution effect away from imports may be neutralised if additional export earnings cause income, and therefore imports, to rise. No doubt it is for reasons such as these that an increase in imports has been observed following devaluation (Bhagwat and Onitsuka. 1974), and why the ultimate improvement in the balance of payments is small when compared with 'partial equilibrium' elasticities (Behrman, 1976).

Clearly, the success of devaluation in increasing earnings of foreign exchange is crucially dependent on the elasticity of export supply. Unfortunately, there is little precise empirical evidence

relating to export supply elasticities in ldcs. In a study, carried out by Bhagwat and Onitsuka (1974), of post-devaluation export performance in a number of non-industrial countries, it emerged that in the majority of cases export earnings and volumes did grow following devaluation. Where little or no expansion in exports resulted, or where a decline occurred, special circumstances were usually found to exist. The response of exports to devaluation appears, however, to depend very much on the level of development, the type of export, and the concentration and structure of trade. For the small, least-developed countries which export little other than tree crops, the export-supply response to devaluation is not very apparent and earnings seem to be more responsive to variations in weather and extraneous fluctuations in world demand. For the more developed ldcs which export agricultural goods with shorter gestation periods, minerals or manufactured goods, the supply response of exports to devaluation appears to be somewhat greater. Significant intermediate-term responses to changes in real effective exchange rates are confirmed by virtually all contributions to the Krueger/ Bhagvati project, with the responses of non-traditional exports usually being stronger than those of traditional exports. It is noted, however, that a realistic exchange rate does not provide a sufficient explanation of rapid and sustained export growth.

Devaluation: the absorption and monetary approaches

While the elasticities approach focusses on the expenditure switching aspects of devaluation, the absorption approach focusses on its effects on the level of real expenditure. The monetary approach concentrates on the monetary repercussions of devaluation.

Holding other things constant, there is empirical evidence to support the view that devaluation will reduce real expenditure (Cooper, 1971). First, it is possible that a demand-deflationary influence will emanate from the trading sector. Where export earnings do not respond to devaluation, but, at the same time and because of inelastic demand domestic currency expenditure on imports increases, there will be a net reduction in aggregate demand for domestic output. Where, however, the domestic-currency value of export

earnings rises then the increase in domestic-currency export receipts will tend to offset the increase in domestic-currency import payments and there will be no net demand-deflationary effect.

Second, devaluation has a redistributive effect on income. This may occur both between the trading and non-trading sectors and between the factors of production. Its precise results will depend on a range of variables and may change overtime. The key variables include: the response of money wages in the trading and non-trading sectors to the extra profitability which devaluation induces in the trading sector; the import content of traded and non-traded goods; the response in the non-trading sector to higher wage and import costs; the factor intensities in and the ownership of the various sectors; and the degree of factor mobility. A number of scenarios may be imagined. Since wage and profit recipients may differ in their marginal propensities to spend, different scenarios will have different impacts on domestic expenditure. Assuming, for instance, that money wages in both the trading and non-trading sectors rise less than the general price level, perhaps because of money illusion, real wages will fall. Assuming, further that there is a lower propensity to spend out of profits than out of wages, domestic expenditure will also fall. This deflationary redistributive effect of devaluation seems to have operated to a particularly marked degree in the case of the Argentine devaluation of 1959, where the shift of real income to landowners, who had a lower propensity to spend than the urban workers, from whom the real income was diverted, served to generate a decline in import demand additional to the price-induced decline[18] and there is little doubt that a deflationary redistributive effect has also operated in other devaluations, although investment stimulated by higher profits in the traded-goods sector may tend to neutralise it. Of course, the increase in profits may be transferred to the government, and the effect on aggregate demand will then depend on how governments use their increased revenue.

Redistribution apart, the higher the average propensity to import and the lower the price elasticity of demand for imports, the greater will tend to be the deflationary impact of devaluation. If expenditure reduction is necessary in order for devaluation to be

18 For a thorough exposition of this, see Diaz-Alejandro (1965).

successful, the extent to which higher import prices are deflationary will be significant. Increased expenditure may, however, result from attempts by exporters to expand their capacity in order to produce more exports, and this may to a certain extent offset the deflationary impact of higher import prices.

Third, if there are ad valorem taxes on exports and imports, devaluation will tend to redistribute income from the private sector to the government and if, as Krugman and Taylor (1978) argue, the government has a saving propensity of unity, aggregate demand will fall in the short run.

Apart from its impact on the overall level of real factor rewards, devaluation may also cause a change in relative factor rewards, depending on the factor intensities of different sectors, and may thus generate a movement of factors between sectors. In the case of ldcs where factors tend to be rather immobile the initial redistribution of income towards profits in the export sector may persevere. The permanence of the redistribution will crucially depend on whether those experiencing a relative loss recognise what has happened, and have the power to reverse it.[19] If, following a devaluation, all factor rewards are maintained at their pre-devaluation real levels, then devaluation will fail to exert an impact on expenditure.

A fourth potential and increasingly significant source of demand deflation which might be induced by devaluation arises from debt-servicing. Devaluation will raise the domestic costs of servicing any given external obligation expressed in foreign currency and, other things remaining constant, will exert a reducing effect on domestic expenditure. Krugman and Taylor (1978) reach the conclusion on the basis of theoretical analysis and 'casual empiricism' that in ldcs a deflationary impact on aggregate demand and real output from devaluation is 'more than a remote possibility; it is close to a presumption'. They maintain that this

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19 For a full discussion of the income redistributive effects of devaluation in ldcs, see Knight (1976). Knight argues that an approach which emphasises sectoral income differences and 'non-market pressures by socio-economic groups' is appropriate to ldcs.

view is at odds with theoretical treatments of currency devaluation which 'generally conclude that it stimulates economic activity', largely as a result of the assumed export responsiveness which in fact does not seem to exist in ldcs. A simulation model for Malaysia constructed by Ahluwalia and Lysy (1980) confirms that devaluation may have a deflationary rather than expansionary effect on economic activity, though the model also confirms that whether this is so depends on the values assumed for the relevant demand and supply elasticities. Cooper (1971) also finds evidence of a deflationary effect. Certainly it would seem less than axiomatic then that devaluation will have an expansionary effect on economic activity.[20] Where expenditure reduction is required devaluation may then be doubly blessed.

Although, for the reasons just identified, devaluation might be expected to have an expenditure-reducing impact, real expenditure reduction will be achieved only if the appropriate monetary policy is simultaneously pursued. The monetary approach sees the monetary implications of devaluation as being crucial, though, as already noted, it also sees devaluation as unnecessary provided enough time (i.e. financing) is available for automatic correction to occur. According to this approach the mechanism by which devaluation affects the balance of payments is by raising the domestic price level and thereby increasing the demand for nominal money balances. The real supply of domestic credit is reduced and monetary sector equilibrium is maintained by an inflow of reserves. To the extent that devaluation induces a payments surplus it may therefore lead to problems with inflation via its effect on the money supply, as evidence drawn from Brazil (Fishlow referred to in Krueger 1978) Chile (Behrman 1976) and Israel (Michaely 1975) confirms. However,

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20 Starting from a position of stock equilibrium the monetary approach denies that devaluation can bring about a lasting improvement in the balance of payments since any related increases in the demand for money will be perfectly offset by an equivalent increase in the supply of money via additional international reserves. Prices rise in proportion to the supply of money leaving both monetary sector equilibrium and the balance of payments, in real terms, as they were before the devaluation.

in theory, once stock equilibrium has been achieved this inflow ceases.[21] As a result the effect of devaluation is purely transitory. Relative price changes play no significant role in the monetary approach. The domestic prices of traded goods are assumed to rise by the full extent of the devaluation,[22] and to the extent that there is any switching effect in the context of the monetary approach this is internal and is between traded and non traded goods rather than between imports and exports. The monetary approach therefore contrasts sharply with the elasticities approach. It may, however, be more easily reconciled with the absorption approach since both point to the effect of devaluation on real expenditure, the former relying on this being produced via a reduction in real balances.

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21 This is not to argue that devaluation will never be associated with economic growth, nor so Crockett (1981) maintains is it the case that strong measures to improve the payments situation, backed by adequate consensus, will necessarily cause development to suffer. He argues rather that 'following the 1973-74 oil price increases, a number of countries in Asia adopted firm measures to restrain domestic demand, and sought to switch output to exports through allowing their effective exchange rate to depreciate. As a result (my italics), Korea, the Republic of China, Thailand and Singapore all maintained satisfactory growth rates in the period 1974-76.' Krueger (1977) also discovers that the effect of devaluation on economic growth depends crucially on what happens to export earnings though she finds very little evidence to suggest that devaluation leads to 'severe recession of prolonged duration.' She points out that the immediate period following devaluation tends to be particularly difficult and significant since the liberalisation of imports tends to have a quicker effect on the balance of payments than does the extra incentive to export. Failure to survive this difficult period frequently results in the re-imposition of quantitative controls and a retreat from liberalisation. Krueger advocates the use of a crawling peg following devaluation to retain the switching incentives created by it.

22 The 'law of one price' sometimes invoked within the monetary approach denies countries the possibility of 'making' their own price level. Kreinin and Officer (1973) however found no evidence to support this so-called 'law'; on this see also Blackwell (1978).

In general the monetary approach is equally dismissive of all expenditure-switching measures, including tariffs, quotas and exchange controls, since they are all seen as exerting only a transistory impact on the balance of payments by raising the nominal demand for money above its domestic supply. Tariffs clearly raise domestic prices directly, but even quotas and exchange controls, by restricting the volume of imports indirectly tend to raise the domestic price of imports and, through substitution, the general price level. The traditional view that devaluation is inherently inflationary, rather than merely raising the price level once and for all, has, however, been challenged by Krueger (1978). Evidence in many cases suggests that there are factors working in the opposite direction, particularly where prior to devaluation exchange controls have been used. Krueger concludes that for the ten countries studied in her project 'the contribution of exchange rate changes was very small compared to other types of inflationary pressures'. Assuming some inflationary impetus from devaluation, three other questions relate to first, the size of this inflationary impetus as compared with the size of the devaluation, second, the comparative effects on money wages and prices and therefore real wages, and third, the effect on the real supply of money.

It is difficult to isolate the quantitative influence of devaluation on prices and wages. Evidence presented by Cooper (1971a and b) does, however, appear to substantiate the claim that, for the first twelve months after a devaluation, the rise in prices and wages is considerably less than the size of the devaluation. The finding is confirmed by Connolly and Taylor (1976b). It also seems that real wages fall following a devaluation. Taking sixteen devaluationsin ldcs it transpires that, on average, in the year after devaluation consumer prices rose by 22.9 per cent whilst manufacturing wages rose by 17.9 per cent. On the assumption that, following devaluation, money wages in the manufacturing sector rise rather faster than in other sectors, in part because of the superior organisation of workers in manufacturing, it seems reasonable to conclude that devaluation is frequently associated with a significant fall in real wages.

Of course, where an ldc makes extensive use of wage indexation real wages will become downwardly inflexible and this will reduce the effectiveness of devaluation. In terms of its impact on monetary

variables it seems almost unknown for the nominal supply of money to fall following devaluation (Cooper 1971a and b). It does appear, however, that in certain cases the real supply of money falls after devaluation, and in about half the cases investigated by Connolly and Taylor decreases in the rate of growth of domestic credit expressed as a percentage of the money stock occurred in the year after devaluation. Indeed, in a clear majority of devaluations they studied there occurred, over the two years following devaluation, decreases in the rate of growth of domestic credit. Taking the money supply as a whole, however, Krueger (1978) finds that increases in the rate of expansion of the money supply following devaluation exceeded reductions and that in many cases this was an important factor in explaining the subsequent acceleration in the rate of inflation. This partly occurred as a direct response to a payments improvement induced by devaluation, but it may also result where devaluation, especially in combination with trade liberalisation reduces government revenue relative to expenditure, thereby increasing the fiscal deficit. Whether the effect on the fiscal balance is positive or negative depends, however, on individual country circumstances.

Devaluation: the direct evidence

Devaluation in ldcs may be evaluated empirically at two levels. At the first and as above the potential success of devaluation may be investigated by examining whether the conditions required for successful devaluation exist. At the second, and more directly, the actual impact of devaluation on the balance of payments of those ldcs which have made use of it may be examined. Cooper (1971a and b) discovers that in about 75 per cent of cases the balance of payments on current account, measured in foreign currency, improves in the year following devaluation; and that in 90 per cent of cases either the current account or the capital account[23] or both improve. In the few instances where devaluation failed to bring about an improvement special features, such as extensive import liberalisation, seemed to be significant.

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23 The inflow of capital might be responsive to devaluation where devaluation serves to improve confidence, expand opportunities for investment, and reduce the level of import and related controls. An expansion in investment might however also tend to increase the import of capital goods, whilst a lifting of import controls would tend to have a generally expansive impact on importation.

Merely to observe that in most cases the balance of payments improves after a devaluation does not of course necessarily imply that the payments position always improves because of the devaluation; other factors may be at work. In some cases the balance of payments in the period preceding devaluation might, for instance, have been particularly poor because of a bad harvest in a key cash crop, a temporary phenomenon, or even because of anticipated devaluation. Again, the balance of payments might have improved as a result of the pursuit of deflationary domestic policies rather than devaluation, or because of an expansion in world demand. In general however it is hard to believe that these factors can explain the systematic statistical relationship discovered.

An estimate of the influence of devaluation on the balance of payments may be made by trying to form an opinion on what the payments position would have been in the absence of devaluation. If it is right to assume that ldcs would have maintained their pre-devaluation market shares in the world markets for their exports, and would have experienced an expansion in imports as determined by the interaction between the growth in real income and the income elasticity of demand for imports, it would appear that in most cases devaluation resulted in higher exports and lower imports (Cooper 1971a and b).

An alternative approach to evaluating the impact of devaluation is to regress changes in the balance of payments on the rate of devaluation. Such regressions suggest that devaluation does cause a significant improvement in the balance of payments of ldcs, but that the balance of payments fails to improve to an extent even approaching the nominal extent of the devaluation over a one or two-year post-devaluation period. Regression analysis further suggests that devaluation will be considerably more effective in improving the balance of payments if accompanied by 'contractionary' monetary policy (Connolly and Taylor, 1976). This is a particularly interesting observation when it is compared with the conclusion reached by Krugman and Taylor (1978) that devaluation should in many cases be accompanied by measures to increase demand.

Alternative switching instruments

The principal purpose of devaluation as conventionally presented is to generate relative price changes which switch expenditure away from

imports and switch production into exports and import substitutes with the intention of improving the balance of payments. As already noted, significant in determining the success of devaluation is a range of demand and supply elasticities. However devaluation is but one means by which relative price changes may be brought about, and has been criticised as being insufficiently selective in its effects since it fails to discriminate between individual sectors or industries. Other expenditure switching policies are available which can, in principle, exploit the potential gains from price discrimination arising from differential elasticities. These alternatives include tariffs and overt multiple exchange rates as well as domestic taxes and subsidies which, in effect, create multiple rates. From a theoretical angle such approaches have considerable appeal since it seems highly improbable that similar elasticities exist across all sectors. Thus, even for a developing country where overall price elasticities are low - suggesting that devaluation will be unsuccessful - some form of multiple exchange practice maybe able to improve the payments position. Furthermore, it might be expected that selective measures may be more effective as a means of moving resources into sectors with high potential growth, as reflected by income elasticity of demand.

Taking the example of formal multiple exchange rates in circumstances where the price elasticity of demand for a particular import is low, a relatively high exchange rate would be applied to transactions involving this import. For transactions involving an import for which the price elasticity of demand is high, the exchange rate would be relatively low and fewer units of foreign currency would be acquired by sacrificing one unit of domestic currency.. Where the foreign price of a commodity is fixed from the point of view of any individual ldc then a relatively high exchange rate would be applied to transactions involving commodities which possess low supply elasticities with respect to the domestic currency price, and a relatively low exchange rate would be applied to transactions involving commodities which possess high supply elasticities.

The alternative is to achieve a greater degree of discrimination through using the fiscal system (Schydlowsky, 1981). However, where

incentives to certain kinds of import substitution and export promotion are provided in this way there is the important question of the effect on the fiscal balance. This clearly depends on the precise configuration of subsidies and taxes, but even if the scheme initiallyinvolves net expenditure on subsidies this may be offset by future tax revenue if export led economic growth is encouraged as a result.

The argument that a tax/subsidy scheme is inferior to devaluation because it is likely to be applied only to a subset of current account transactions and is unlikely to be applied uniformly (Laker 1981) is illegitimate in this context since the whole purpose of effective multiple rates is to avoid the perfect simulation of devaluation. However, other criticisms of effective multiple rate schemes are legitimate. First, there is the problem of identifying the optimum number and level of rates, or taxes and subsidies. Second, there are the administrative costs of implementing the schemes. Laker, drawing on the evidence of Bhagwati and Desai (1970), quotes India's experience as a model of the administrative cumbersomeness of such schemes, illustrating his point by noting that, 'the regulations covering the schemes for engineering goods and chemical products, for example, comprised 82 pages.' To minimise the practical difficulties with multiple exchange rates Streeten (1971) has suggested that it would be feasible to establish a system of dual exchange rates under which one relatively high exchange rate would be established for trade in traditional primary exports and essential imports, both of which he assumes are subject to inelastic demands; and a lower rate would be used for trade in manufactured, infant industry exports, and for 'inessential' imports where the price elasticity of demand is high. Third, there are opportunities for curruption, evasion and misuse to which the use of effective multiple rate schemes give rise. Although often difficult to document there is enough evidence to confirm the existence of such problems and that their significance increases over time, (Bhagwati and Desai, 1970, Bhagwati, 1968, see also Killick, 1978). Problems of the type listed above seem to be sufficiently important as to lead to the frequent abandonment of multiple rate schemes where they have been tried, (Laker, 1981).

The choice between switching and credit controls

The monetary approach clearly views devaluation as, in effect, an instrument of monetary policy. According to this view devaluation will only improve the short run balance of payments if it is accompanied by domestic measures which prevent an offsetting increase in the creation of domestic credit. Indeed, in principle, a similar impact on the balance of payments could be induced by a reduction in the supply of domestic credit or an increase in the demand for money. In this sense monetary policy may be seen as not only a complement to devaluation but as an alternative to it. As already noted, there is a strong theoretical argument that over the long run credit control will induce an improvement in the balance of payments. Of greater practical relevance, however, are the questions of the length of time required for such a policy to work, and the availability of alternative policies which will speed up the process of adjustment or reduce the welfare costs associated with it.

Basically, in circumstances where the marginal social cost of reducing the nominal supply of credit is greater than the marginal social cost of increasing the nominal demand for money by means of devaluation, devaluation will be the preferred policy. Building on this, although in theory devaluation and a reduction in the nominal supply of money provide alternative mechanisms for reducing the real supply of money, countries are unlikely to be indifferent about which policy they use. One reason for this relates to the structural and distributional consequences of devaluation as compared with those associated with a reduction in the nominal supply of money. Devaluation may encourage growth to be led by the foreign trade sector. A reduction in the nominal supply of money, on the other hand, is likely to leave relative prices unchanged and is therefore unlikely to bring about structural changes. Structural changes may still occur, however, inasmuch as reliance on bank credit varies across sectors and firms; an increase in the cost of credit will create problems for those firms reliant on it. If they are domestic as opposed to international, and are concentrated in say infant manufacturing industry, contractionary credit policies may have marked adverse consequences for economic development, as discussed in chapter 3.

A second reason why governments are unlikely to be indifferent between devaluation and credit restrictions relates to the effects of each on output, employment and inflation. If devaluation is successful in switching expenditure towards domestic output, it will tend to raise employment. In comparison by reducing aggregate demand monetary contraction causes output to fall and unemployment to rise. On the other hand, whilst according to the monetary approach devaluation works by means of raising the price level and reducing real balances, monetary contraction tends to lower the price level.[24] It follows that the choice between devaluation and monetary contraction will be influenced by the current rates of unemployment and inflation and the governments priorities with respect to policy objectives.[25] To some extent the cost inflationary effects of devaluation may be neutralised by opting for a gradual or crawling devaluation and by accompanying this with incomes policy. Similarly any demand inflationary consequences may, in principle, be dealt with through the appropriate management of domestic demand. The most efficient policy from an economic point of view may of course not be the one that is chosen. The political and technical feasibility of the alternatives must also be considered. If the socio-political consequences of devaluation are not well understood, it may prove more acceptable politically than monetary contraction which may in any case be technically difficult in ldcs because of the low level of central control over the rate of domestic credit expansion (see chapter 3).

Monetary contraction is, of course, not the only alternative monetary policy to devalution. All that is required in order to correct the deficit is that the excess real supply of money is reduced and this may be achieved equally well by holding the money supply at a given level and allowing the demand for money to rise, or by allowing the demand for money to rise more rapidly than the money supply. Since economic growth will normally cause an increase in the demand for money, the faster the economy is growing

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24 It may be noted, however, that the relevant monetary aggregate will depend on whether the focus of attention is the balance of payments or inflation. In the former case it will be domestic credit creation while in the latter it will be the money supply defined to include foreign assets held by the banking system.

25 These preferences may be inter-temporal in the case of a zero long-term trade-off.

the less likely it is that monetary contraction or devaluation will be required. In this way the structural and monetary approaches to the balance of payments become integrated. The issue becomes one of choosing between a policy of reducing monetary demand to a level consistent with real output and one of raising production to meet nominal demand. The structural approach places emphasis on the deficiency of domestic output in devising balance of payments policy. The question then is whether output is independent of monetary factors. Given the exogeneity of output in the monetary model, a structural solution to a balance of payments deficit is quite consistent with the monetary approach. At the same time, according to the structural approach financial policy which does nothing to remedy structural deficiencies will simply conceal the underlying payments problem since it foregoes the opportunity of achieving equilibrium at a higher level of output. Even where economic growth is slow and/cannot be accelerated the demand for money may still be increased for example by increasing the rate of interest on money holdings.[26]

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26 According to the monetary approach, of course, the real rate of interest is seen as effectively given. McKinnon (1973) and Kapur (1976) have suggested that in ldcs and especially during the initial stages of a stabilisation programme, a policy of increasing the interest rate paid on money holdings might be a better way of creating monetary equilibrium than would be a policy of reducing the rate of growth of the money supply. The reason they give is that, whilst a reduction in the money supply (or rate of growth of the money supply) will adversely affect real output, through its impact on firms which rely on the availability of bank credit, a rise in the interest rate on money holdings will induce an increase in the demand for real money balances, a related increase in the supply of real bank credit available to firms, and hence an increase in real output. This argument in fact begs a series of questions. For example, whilst an administered increase in the rate of interest on money holdings may induce an increase in the real supply of bank credit, it may also, if reflected in an increase in the cost of bank credit, lead to a reduction in the demand for bank credit. Furthermore, since an increase in money holding implies a reduction in domestic consumption, the demand for bank credit may fall. Again these issues are reviewed in Chapter 3.

Of course, even where the demand for money would eventually rise to equality with the supply or where the supply of money could, over time, be reduced to equality with demand, for as long as the supply of money exceeds the demand a payments deficit will exist, and this will have to be financed. The choice of adjustment policy is then importantly related to the time-scale of adjustment. In ldcs' circumstances the knowledge that adjustment would eventually occur automatically assuming only that countries desist from sterilising the monetary repercussions of a deficit, is of purely academic interest. Such countries do not have the option of waiting for the long run to come.

Another important aspect of the control of monetary aggregates from the viewpoint of the balance of payments relates to the precise methods and instruments by which targets are achieved. Different instruments may have different structural ramifications and therefore different implications for the balance of payments. Thus limiting credit to the government has direct implications for fiscal policy since the government is likely to be reliant on the banking system to finance its budget deficits. Indeed as was shown in chapter 3 in certain respects fiscal disequilibrium may be viewed as a more fundamental cause of balance of payments deficits than monetary disequilibrium.[27] Beyond the social and political dimensions of fiscal actions the choice between various tax and expenditure measures will have an impact on the balance of payments through their effects on the distribution of income, the pattern of demand and relative prices. Furthermore, by maintaining the availability of credit for investment rather than for consumption a more marked improvement in the balance of payments, and indeed the rate of economic growth, may be induced than would be the case if policy were to show no discrimination in the use of finance, though a policy of this type may be more difficult to implement politically.

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27 For further analysis of the fiscal approach to the balance of payments see Sharpley (1981) and Mile (1976). Laker (1981) shows how fiscal policy may be used to generate both partial and general equilibrium effects similar to those of devaluation.

It is then clearly a mistake to regard monetary control as a one-dimensional, unsubtle and inflexible approach to the balance of payments.

Exchange controls

Controls have been extensively used by ldcs in attempts to deal with their payments difficulties, though they are unpopular with the Fund which sees them as interfering with the pursuit of a liberal system of trade and payments, and as discouraging adjustment. Generally speaking the phrase 'controls' refers to some form of exchange control whereby foreign exchange receipts have to be surrendered to the monetary authorities who, in addition, have to sanction all foreign exchange payments. Exchange controls may also be imposed on capital account transactions such as overseas investment.[28]

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28 Krueger (1978) catalogues a variety of instruments that may be used in operating QR regimes, these include :

Guarantee deposits, varying in amount for different categories of import licenses.

Tariffs and surcharges.

Licenses for different categories of imports allocated by different criteria and procedures.

Prohibited lists, free lists, and special exemptions.

Regulation and licensing of exports.

Various incentives, sometimes project-specific, to encourage private capital inflows.

Restrictions on the repatriation of profits and dividends of foreign-owned firms.

Import replenishment schemes applying to some exports.

Rebates on import duties for exports.

Rights granted to exporters to resell part of their foreign exchange earnings.

Special regimes for government enterprises.

Multiple exchange rates, including special tourist rates, export subsidies, and special import categories subject to exchange auction.

Subsidies for capital goods imports.

Low-interest loans for certain classes of transactions.

The debate over controls ultimately hinges on an assessment of the efficiency of the market mechanism and raises the whole range of issues associated with government intervention. Those who believe in the relative efficiency of the price system as a way of allocating scarce resources oppose controls and prefer market related policies, while those who emphasise market failure in the area of monopoly, externalities, and income distribution, are more likely to favour controls.

More specifically, controls are seen by their advocates as having a number of advantages over other policies such as devaluation or demand deflation, of which the following are the most significant. First, controls exert a prompt, direct and predictable effect on imports, They do not rely on the intermediation of a price change and therefore on the existence of price elastic demand to improve the balance of payments. Second, they may be imposed selectively, allowing the authorities to discriminate between imports. Normally discrimination will be exercised against the importation of 'inessential' consumer goods which are regarded as making a minimum contribution to economic development. From the viewpoint of development, therefore, controls appear as a means of making the most efficient use of scarce foreign exchange. Third, as compared with demand deflation, controls do not rely on a fall in national income to induce a fall in imports and to bring about an improvement in the balance of payments. Furthermore, the allocation of import licences may be used to ensure that a given improvement in the balance of payments has the minimum adverse effect on the poor.

Against this apparently strong case a number of counter-arguments may be presented. First, in many ldcs there may be little scope for cutting down on inessentials even if it were possible toidentify what imports are inessential. Second, controls imply a complex administrative system which, even if it works as intended, will be expensive in resource costs. Further, there is the danger that it will not work as intended and that in practice 'national objectives' will not be served. Part of the problem here is that the system encourages corruption and the provision of inaccurate information (Killick, 1978). Furthermore, it will tend to lengthen the lag

between the need for particular imports arising and that need actually being met. Such delays will cause shortages and the under utilisation of capital. The latter may also result if controls indirectly encourage firms to build larger than optimum scale plants in order to obtain extra allocations of foreign exchange; evidence again suggests that some firms in ldcs have behaved in such a way (Stern and Falcon, 1970). Furthermore by adversely affecting the growth of export earnings controls may in particular accentuate excess capacity in the industries using imported materials, (Bhagwati, 1978). However, Bhagwati concludes that the overall effect of controls on excess capacity may not be substantial.

The most fundamental criticism of controls is that they suppress rather than cure a payments problem.[29] An implication of this is that, should the controls be removed, the problem will again become apparent; as a result, once introduced controls are rarely abandoned. Even if there is an underlying improvement in the balance of payments due, say, to an improvement in the commodity terms of trade, other factors encourage their retention, such as the protection of local industry or the continuation of the benefits which controls may generate for powerful interest groups. The situation may be more worrying still if controls, far from improving the underlying payments position, actually make it worse. The chief purpose of controls is to reduce imports below what they would otherwise have been at a given exchange rate to shift downwards the demand for foreign exchange. This effect is achieved not by reducing the incentive to import but by frustrating it. Neither do controls do anything to raise the incentive to export. Indeed, because controls serve to defend on over-valued exchange rate they discriminate against exports by keeping the profitability of exporting, expressed in domestic currency, below what it would be with a lower exchange rate. Although, in principle, the adverse effect on export performance might be neutralised through a system of export

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29 Empirical evidence suggests that there is no guarantee that controls will improve the balance of payments; indeed Krueger (1975) found that in the case of Turkey the balance of payments actually deteriorated following the imposition of controls.

subsidies evidence suggests that, in practice, these are themselves problematical, not least because they often tend to discriminate in favour of high cost and relatively inefficient exports, and against more efficient traditional exports (Staelin, 1974 , Frankena, 1975).

The apparent advantage of controls to discriminate against inessential imports may turn out to be a mixed blessing since, although such discrimination may help to keep down the prices of 'essentials' and therefore be of at least short term benefit to consumers, by effectively raising the relative price of inessentials through reducing their supply their domestic production will be encouraged. As a result controls have an 'import substitution bias' pushing an economy towards import substitution rather than export expansion.[30] This is the major underlying theme of the Bhagwati' and Krueger' volumes where it also found that import substitution is not the best development strategy since exports are a more efficient engine for sustainable growth. However, it may be that the potential success of an export expansion strategy for any individual ldc may decline as more ldcs try to follow it.

Again, as far as distributional consequences are concerned, evidence from the Bhagwati-Krueger project suggests that controls have the effect of promoting capital intensive import substitution, raising the capital-labour ratio (as duties on the importation of capital goods are kept low to protect investment) and increasing unemployment. While, in principle, controls may narrow income inequalities by discriminating against staple agricultural exports depending on whether these exports are based on large or small landholdings, the same source suggests that such instances are in fact quite few and that income distribution is in the long run determined largely by variables other than the trade and payments regime.

At the same time, licences have the effect of granting an economic rent to those receiving the licences, a rent that, according to some observers, recipients will be willing to share with officials

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30 However there is evidence to suggest that in the case of South Korea the extensive use of export subsidies imparted an export bias, (Frank, Kim and Westphal).

who issue the licences. The rent to licencees reflects an additional cost to consumers and militates against competition, efficiency and equality. To offset these distributional consequences other measures may, in principle, be introduced, including price controls, taxes on import licences, or the auctioning of licences so that the rent is transferred to the government. However, there is no guarantee that price controls will be effective and they are certainly not unproblematic; taxes on licences will not do anything to reduce the final price paid by consumers; neither will the auctioning of licences which is also subject to other difficulties as evidence on their use in Brazil confirms (Killick, 1980).

Structuralist prescriptions

Structuralists put emphasis on improving the balance of payments by raising aggregate supply and by changing the composition of aggregate demand rather than by reducing the level of aggregate demand. Thus attention is focussed on policies that will raise productive potential and the efficiency with which resources are used. By their very nature such policies tend to be micro-economic rather than macroeconomic, and relate generally to relative prices and individual sectors of the economy, such as agriculture, where supply bottle necks are seen as a major cause of disequilibrium. Structural policies may involve changing the ownership of the factors of production, factor mobility, wage bargaining, the degree of competition and monopoly, the activities of multinationals, and the distribution of output between consumption and investment.

A problem with policies of this kind is that they tend to exert their impact on the balance of payments only in the long run, and may, indeed, have an adverse effect in the short run. Structural policies therefore need to be accompanied by demand management policies to ensure that aggregate demand does not exceed any given level of aggregate supply, (see chapter 3 for further discussion of structural policies).

IV CONCLUSIONS

In trying to devise a balance of payments policy a government first has to determine whether the deficit is temporary or permanent. This, in turn, entails assessing the causes of the deficit. Although different theories lay emphasis on different aspects of causation - and in the case of the monetary approach exclusive emphasis on one aspect - it is sensible for a country's authorities to look at all dimensions of the balance of payments. Where the deficit appears to be temporary corrective measures may not be needed and the deficit may be financed. However, for many ldcs sufficient financing is not available so that corrective policies will have to be pursued even for temporary deficits.

Generally speaking corrective policies will be required either if the deficit is permanent or if self correction is likely too be slow given a country's access to finance. Thus, while some versions of the monetary approach stress the long run automatic corrective mechanism constituted by the financial flows induced by payments disequilibria, the IMF's attention to short run adjustment paths and policies is of more practical relevance.

The next issue relates to the choice of policy. Enough has been said in this paper to suggest that a standard policy or package of policies is unlikely to be appropriate for all ldcs in all circumstances; policy should be made to match specific country conditions. Similarly, however, in an environment of slow economic growth no individual policy or package of policies will improve the balance of payments unless the country accepts that adjustment involves real costs in terms of consumption and/or investment. In very few circumstances is there a zero cost option. The policy problem is to minimize the costs of adjustment while still achieving the necessary improvement in the balance of payments. This leads on to the debate over 'gradualism' versus 'shock treatment'. Gradualists argue that by spreading adjustment over a relatively long period of time the associated welfare costs may be kept to a minimum. By contrast those who favour rapid adjustment argue that this will in fact minimise costs over the long run, especially where expectations are rational rather than adaptive.

Turning to specific policies few would deny that monetary restraint is necessary to bring about an improvement in the balance of payments. All balance of payments theories suggest that an overly rapid expansion in domestic credit will have an adverse effect on the external balance and there does not appear to be any evidence inconsistent with this view. The importance of sound monetary policy is then not at issue. Similarly, there is little doubt in principle that credit policies may be conceived that will improve the balance of payments. The stricter and more restrictionary are these policies the more rapid will tend to be the improvement. Instead, what is at issue is the degree of reliance that should be placed on monetary policy alone. This issue involves two inter-related aspects: whether monetary policy is capable of dealing with the basic causes of the problem; and whether there are alternative instruments which would be more efficient in achieving the improvement at lower cost. According to the monetary approach credit policy does strike at the root cause of the problem. According to the structural approach, however, it will do little to improve the underlying economic situation, and may make it worse by initially discouraging both the importation of developmental goods and the expansion of exports. Since monetary policy exerts its prime effect on absolute rather than relative prices it will create little incentive for the reallocation of resources, though the manner in which monetary policy is operated will have structural consequences. A structural approach is in one sense consistent with the monetary approach since if structural changes raise real output and income they will also raise the demand for money. The structural approach only becomes inconsistent with the monetary approach where such structural changes require additional government expenditure, a larger fiscal deficit and a more rapid rate of credit creation in the short run. The problem is then that structural policies may take more time to have their effects than is available. Attention then focusses on minimising any structural damage that may be done perhaps by introducing greater discrimination or qualitative control into credit policy.

Some structural change will be encouraged through the relative price effects of devaluation which raise the profitability of producing traded goods. At the same time there are circumstances in which devaluation will exert a short run demand/deflationary effect, although the

effect of devaluation in raising prices is consistent with at least a mild version of the monetary approach. Both in terms of theory and evidence devaluation appears on balance to be a useful instrument in developing countries. Domestic inefficiency and structural immobility, as well as a failure to adopt appropriate expenditure measures, may, however, frustrate its beneficial impact on the balance of payments, and its effectiveness will vary between countries. As with all forms of demand management, the negative effects on real variables may be minimised by measures directed towards increasing aggregate supply, and in this sense management of demand and supply are complementary and not alternative policies.

Controls may exert a significant short term impact on the balance of payments. However, they do little to resolve the underlying causes of a payments deficit and seem indeed often to militate against export expansion. Various policy tools such as export subsidies, tariffs, multiple exchange rates and preferential credit may also be used to correct structural problems, but these may involve certain microeconomic distortions and resource misallocations - though it should be remembered that second best solutions may be appropriate in ldc conditions - and in any case are difficult to implement successfully.

Underlying all discussion of the balance of payments are two relationships: first between financing payments and the speed of adjustment: and second between the speed and costs of adjustment. Balance of payments policy in ldcs is usually conducted in a situation where the amount of finance available dictates relatively rapid adjustment. This in turn tends to rule out certain slower acting policies and the problem becomes that of minimising adjustment costs and attracting the necessary finance. If ldcs' balance of payments problems are long term they need long term finance. In many cases what they have got is the IMF. However, finance from the Fund is essentially temporary, and the balance of payments therefore has to be made viable over a short period of time, and this immediately imposes strict constraints on the range of stabilisation policies which may be used.

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