## Why Devaluations Often Appear to Fail

HARRY G. JOHNSON\*

The majority view that devaluationsand on the other hand revaluations-of currencies are "bad things" to be avoided at all costs (or, in practical terms to be accepted only in the face of the application of external "force majeure") is usually supported, when questioned, by a battery of arguments of various degrees of profundity. The most fundamental, probably, are: first, the desirability of the equivalent of a single world money, to be secured by the establishment of ineluctably fixed exchange rates among national currencies, as a foundation for a liberal international system of trade and investment permitting the fullest possible exploitation of the economies of international specialisation and division of labour; and, second, the virtues of fixed exchange rates in disciplining the propensities of governments to resort to inflation as a covert means of extorting taxation or reconciling social conflicts over the division of national income that they are unable to effect by overt political methods.

Recent developments in the international monetary system, culminating in the transition to a system of "dirty floating" of exchange rates, have demonstrated the fragility of the idealism underlying both of the cited arguments, and the system of dirty floating of exchange rates seems highly likely to be the regime to prevail for the next few years. Correspondingly, much of

the controversy over fixed versus floating rates that has dominated international monetary discussion in the last decade or so would seem to be an archaic relic of a bygone era, not worthy of serious further attention. This, however, would be a dangerously short-sighted view, because experience of and theorizing about the normally fixedrate, actually "adjustable peg," I.M.F. system was just in the process of producing new and fundamental insights into exchange rate phenomena when the adjustable peg system broke down into the system of "dirty floating." In addition, there is a standard tendency against which one must be on one's guard, to blame floating rates for the defects of the fixed rate system that made the resort to floating rates necessary in the first place. The period before the present floating rate regime began has been no exception in leaving behind it a residue of hazy opinion to the effect that floating rates are a poor alternative to a fixed rate system.

The present article seeks to deploy some of these insights in the examination of a specific question that emerged most clearly and urgently in (roughly) the winter of 1972–73 in connection with the effects of the December 1971 devaluation of the U.S. dollar, though it had appeared earlier in 1966–68 in connection with the 1967 devaluation of the pound sterling: namely, why devaluation did not (and in the British case, was not in advance expected to) produce the fairly substantial and speedy improvement

<sup>\*</sup>Professor of Economics, The London School of Economics and Political Science and the University of Chicago

in the balance of payments that was expected of it.

As a preliminary, it is essential to appreciate the fundamental character of the distinction between the balance of trade of a country, and its overall balance of payments. The trade balance on current account, especially if sizably in surplus or deficit, shows the extent to which a country is making its current output available as capital in one form or another to foreigners, or conversely drawing on foreign current output to supplement its own current production by borrowing of one kind or another, using the proceeds generally for economic growth, though sometimes (in the strict sense of the pejorative phrase) for "living beyond its means." The overall balance-of-payments position, on the other hand, reflects the net acquisition or decumulation of international money in consequence of the net balance of all its other international transactions. Correspondingly, correction of a balance-of-payments surplus or deficit requires policies to alter the net balance of international money flows; and these policies need not necessarily and generally will not have any implications for the structure of a country's international economic relationships.

As a consequence, studies of subsequent developments of exports and imports may be quite irrelevant to the assessment of whether or not a devaluation has "worked."

With this preliminary observation out of the way, the first and most obvious question to be raised is, why do countries devalue and what do they hope to gain from it? The typical mental impression conjured up by the literature and conventional imagery is of a country that has normally held a comfortable stock of international reserves, has experienced some inflationary shock (perhaps as the result of governmental error) which has made its prices internationally uncompetitive, devalues in order to avoid the painful process of fighting its price level back down through experiencing a period of abnormal unemployment, and at the same time pursues policies sufficiently deflationary to offset the inflationary effect of successful devaluation itself and permit the accumulation of reserves back to their normal level.

This mental conception implies that the need for devaluation should be indicated by a run-down of international reserves, and a "successful" devaluation be followed by an accumulation of reserves. But this in turn assumes that countries have and hold reserves which they run down and replenish in this buffer-stock fashion; and this assumes in turn that reserves are an attractive enough asset to be used in this fashion (like money on short-term deposit in a bank).

But, in the first place, for many countries international reserves are such a relatively low-yielding asset, in terms of interest yield and depreciation through inflation, that they are held as an extraordinary emergency reserve rather than as a buffer stock; and the country relies for its "first-line" reserves on extraordinary intergovernmental or even private credits whose fluctuations appear not in the official reserve figures but, if at all, in footnotes to tables and official explanations interpreting balance-of-payments developments.

Secondly, according to standard theory, a country has three alternative means (at least in the short run) of coping with a prospective balance-of-payments deficit apart from devaluation. One is to have the deficit and finance it by the use of international reserves, taking corrective domestic measures gradually to eliminate and reserve the deficit. A second is to enforce and endure an abnormally high level of unemployment, again trusting to corrective measures in the longer run. A third is to impose trade and payments restrictions designed to reduce

foreign exchange expenditure and/or increase foreign exchange earnings. This alternative may or may not be intended as temporary, to be superseded by longer-run adjustment policies. However, it is fairly certain that in the longer run such restrictions will lose their effectiveness through evasion or avoidance in the case of capital controls and through the inflationary effects on domestic wages and prices in the case of trade controls. In any event, a country that eventually devalues may do so, not after a period of loss of reserves at an unsustainable rate and with the intention of rebuilding its reserves back to a normal or above-normal level, but as a consequence either of a decision that unemployment levels have been too high for too long and that devaluation is desirable to permit a higher level of domestic activity consistent with balance-ofpayments equilibrium, or of a decision that balance-of-payments restrictions on trade and payments are having significantly deleterious effects on the efficiency of the economy and that the implicit devaluation of the currency—reduction in the usefulness and purchasing power of domestic money that they represent would be more efficiently accomplished by an explicit devaluation accompanied by a reduction in balance-ofpayments controls.

In the first case, a successful devaluation would be signalized, not by an improved balance-of payments position and growth of international reserves, but by an increase in the level of domestic employment and activity. In the second case, it would be signalized by the reduction of balance-of-payments controls it made possible, again without necessarily any significant improvement in international reserves.

Apart from the possibility that devaluing nations are rationally implementing a policy that happens to be different than that conventionally assumed to be the typical frame of reference for devaluation analysis, there are a number of possible reasons why a devaluation may fail through failure of the devaluing government concerned to understand what it is doing.

One of these will be mentioned only briefly because in the case of the country to which it mainly applied—the United States in the period 1958-71—it manifested itself not in an unsuccessful devaluation but in unsuccessful efforts to apply high interest rates and trade and capital movement controls as an alternative to devaluation. This is the case in which a continuing deficit incurred by a major country reflects basically not an exchange rate disequilibrium, but an overall shortage of basic international liquidity, made good by the use of increasing amounts of its national money as international reserves and/or continuing drafts on its (initially abundant) stock of basic international liquidity (specifically, gold reserves). In this case the resort to devaluation by the country in question would be frustrated in practice either by matching devaluations by other major countries or more subtly by alterations in the behaviour of private entities and governments in other countries whose effect would be to continue the outflow of reserves from the devaluing country. The "failure" of devaluation would be the result of a failure of the devaluing country to realize that a general shortage of international liquidity (apart from its own money) and not a disequilibrium level of its exchange rate was the true source of its problem.

A second possibility is that the authorities of the devaluing country systematically underestimate the time required for a devaluation to take effect or to take effect on a scale as large as desired. In particular, export volume increases and import substitution on a substantial scale typically will require time-consuming new investment in the creation of new production and marketing facilities. Here the traditional theory of de-

valuation tends to be somewhat misleading, in the following sense. That theory indicates that the foreign exchange market must be stable, and by erroneous implication (see below) devaluation effective in improving the balance of trade, if the sum of the elasticities of demand for imports of the home country and the rest of the world sum to more than unity (in the simple case of initially balanced trade); but that if there is inelasticity of export and import supplies the critical elasticity value will be less than unity. Slow adjustment of supply in consequence of the time taken for home investment and foreign disinvestment would therefore seem to favour immediate success of devaluation in improving the trade balance. But, quite apart from the inadequacy of elasticity analysis as an approach to devaluation theory, inelasticity of supply broadly speaking is favourable only when demand conditions alone would indicate market instability; otherwise, it operates to reduce the magnitude of the favourable effect.

EASTERN ECONOMIC JOURNAL

A third possible reason why devaluation may fail to work as expected is that the government concerned may either fail to understand the basics of the theory of economic policy involved, or disregard them, or deliberately act in contravention of them.

The last case is particularly likely to arise when a government is forced by the external pressures of other governments' opinion to devalue its currency when it does not wish to, and particularly when it is suspicious of and ideologically opposed to the use of the price system that devaluation entails, and consequently inclined to take measures to counteract the effects that the price system would otherwise produce.

The middle case, disregard of the economic theory of the policies that should accompany devaluation, is likely to arise when the devaluation is forced, not by the opinion of other governments (since such opinion is

likely to include recognition of and prescription for the policy errors that have made devaluation necessary) but by the action of private speculators in developing such a massive run on a currency that the country's central bank and the central banks of other major countries are unable to cope with it and yield to the pressure of the market. The term "unable to cope" is of course an euphemism or an illegitimate substitution of an apparently objective description of reality for recognition of an institutional defect in the machinery of central bank co-operation or of either a failure of nerve or lack of trust of central bankers in each other's country's national economic policies, because there is no inherent reason why central banks, as the ultimate controllers of the suppliers of domestic money, could not counter-speculate against the private speculators to whatever extent proved necessary to validate a particular exchange rate. But in fact private speculation against a currency on a large enough scale can and often has led nations and their central banks to devalue (or in some cases to revalue) contrary to their repeated declarations of absolute commitment to the defense of the existing exchange rate.

A particular case in point, though it is difficult to classify as between the case of disregard of the relevant policy theory and the case of ignorance of that theory, is the British devaluation of November 1967. forced by a wave of speculation against the pound. On that occasion, the Chancellor of the time saw no reason to advance the Budget from its usual date in March, even though the relevant theory (developed, ironically, largely by the British economist James Meade some fifteen years earlier) indicated clearly the need for strong deflationary measures to complement the devaluation (a proposition that would hold true even for an economy without obvious initial excess domestic demand).

clear that for political reasons the deflationary tax measures to come would have to be concentrated on indirect taxation rather than direct taxation, so that a tax increase expectation was added to a generally-expected devaluation-induced price inflation expectation as a motive for consumers to buy now rather than later, thus temporarily adding to the inflationary consequences of the devaluation.

Whether the behaviour of the British authorities on this occasion was due to unpreparedness for the speculation-enforced devaluation, or to ignorance of the basic theory of policy involved, is as mentioned a debatable question. That ignorance of the relevant theory played some part is strongly suggested, however, both by the tone of the Chancellor's comments and approach to the need for complementary deflationary measures at the time, and by the fact that deflationary fiscal measures were accompanied by a substantially inflationary monetary policy. The result was that devaluation failed to produce the rapid improvement of the balance of payments, to the extent that the IMF considered it necessary to send a top-level team to Britain to conduct a "seminar" with top-level Treasury officials, as a result of which the Chancellor agreed to set limits to the permissible amount of "domestic credit expansion."

The "domestic credit expansion" issue involves the larger issue of the monetary aspects of devaluation and errors in basic theory which constitute the fourth possibility of devaluations ending in apparent failure, to be discussed next. For the present, it is sufficient to comment that devaluations are unlikely to be successful in their intended purpose if the governments responsible for them do not understand the theory of how to make them work.

This brings us to the fourth possible reason why devaluations may fail, namely er-

Moreover, to make matters worse, it was rors or inadequacies in the prevailing theory. In broad and brief outline one may distinguish three phases in the formal development of balance-of-payments policy theory, of increasing theoretical consistency and adequacy, of which the first two in various variants and mixtures tend to dominate policy discussions and determination, the third having emerged only recently and being as yet the preserve of a group of international monetary theorists.

The first and most naive, but still most appealing in terms of apparent common sense, is the simple notion that devaluation lowers the prices and/or increases the profitability of exports, increasing the volume and under normal circumstances the total earnings from exports in terms of foreign money, and increases the cost and therefore reduces the volume of imports, and their value in terms of foreign money. Hence devaluation (in normal circumstances) increases a country's net foreign currency earnings and therefore its balance of payments and acquisition of international reserves. The central defect of this superficially plausible theory is that it fails to examine the consequences of increased export earnings and reduced import expenditures, contenting itself with the immediate effects on international money flows. Increased export proceeds must mean increased income, which will in large part or all be spent on something; similarly, reduction of expenditure on imports will in large part or whole lead to spending on something else. Where does the process end up, and what is its end result for the overall flow of trade and the balance of payments? In other words, the analysis is a partial equilibrium or "impact" one which provides no basis for prediction about the effects of a devaluation on trade flows and the balance of payments. Yet this theory is the main underpinning of the test usually applied to the success or failure of devaluation.

The second, and more sophisticated, theory of the balance of payments and balance of payments policy recognizes that increases of export earnings and diversions of expenditure from imports towards home goods will have multiplier effects on domestic income which will in part at least cancel out the initial favourable effect of devaluation by increasing imports and possibly diverting exports towards the home market. In this theory, while a favourable "impact effect" of a devaluation requires the satisfaction of certain "elasticity conditions" on foreign demand for exports and domestic demand for imports, a favourable "general equilibrium" or "total" effect depends on the multiplier process leading in some part to the accumulation of international reserves as income rises (and conversely, decumulation of reserves as income falls abroad). The assumption that there is a propensity to accumulate international reserves as income rises has often been concealed, even from fairly acute international monetary theorists, by the frequent identification of this propensity with the Keynesian propensity to save (i.e. not spend on current consumption), which can fairly safely be taken as substantially positive. But a positive propensity not to spend on current consumption is a quite different thing from a propensity to accumulate international reserves, as distinct from real and monetary domestic and foreign assets; even if there is a positive propensity to acquire foreign assets, it does not necessarily follow that there is such a propensity directly or indirectly to acquire international money as income rises.

In short, the sophisticated theory like the unsophisticated theory really provides no basis for expecting that a devaluation will result in an improved balance of payments position and a continuing acquisition of international reserves, even if the devaluation is accompanied by the recommended deflationary fiscal and monetary measures—especially if deflationary monetary measures are identified with higher interest rates, which may imply nothing whatever about incentives to domestic residents to acquire additional cash balances indirectly through the accumulation of international reserves in the hands of the central bank.

This brings us to the most recent emerging formulation of balance-of-payments theory, the "monetary approach to balanceof payments theory." so called in recognition of its scrapping of elasticity and multiplier analysis in favour of concentration on domestic monetary policy as the key determinant of the effects of devaluation. For simplicity, and also for more approximate realism concerning the unity of the world market for goods, services, and securities than is provided by the 1930's and subsequent picture of a world in which capital movements were assumed to be so restricted as to justify analytical abstraction from them, and in which each nation was assumed to be a monopoistic competitor producing highly differentiated national products of limited and relative-pricedetermined substitutability for one another, this new approach adopts the opposite extreme assumption of perfect substitutability internationally of goods and securities, so that there is effectively one world market price level and one interest rate level. This raises the initial conceptual difficulty that if the assumption were strictly true all balance-of-payments problems could be dealt with by monetary policy alone, with no need ever for devaluation, but as an approximation it makes more sense than the alternative which focuses all the attention on relative price effects. Similarly, also at the risk of some violence to reality but justified by the general characteristics of the postwar world, the approach assumes that the economy maintains full employment of

productive resources, so that the multiplier effects of fluctuations on income and employment can be ignored.

The effect, as mentioned, is to concentrate attention on the monetary aspects of devaluation, and particularly on the fact that a devaluation is exactly analogous to a domestic monetary contraction in a world in which additional money can be obtained through net sales of goods or securities on the world market, the deflationary effect coming through the rise in domestic prices back to world levels after the devaluation. This leads to three propositions: First, that the effect of a successful devaluation will be a stock-adjustment process involving a transitory process of accumulation of international reserves, to back the additional supply of domestic money demanded at the higher level of domestic money prices; second, that this effect will not take place if the monetary authority instead provides the additional domestic money demanded by an expansion of domestic credit; and third, that a continuing balance-of-payments surplus will only occur if the monetary authority keeps contracting domestic credit, or, more realistically, continues to expand domestic credit at a slower rate than the growth of the economy and its demand for domestic money requires the stock of domestic money to grow.

In terms of the criteria for a successful devaluation under discussion in this paper, it follows, first, that the improvement of the balance of payments may come through the capital account and not through the trade balance or current account; second, that improvement will not occur as expected if the policy makers are unaware of the crucial part that domestic credit contraction (relative or absolute) must play in the process, and permit the desired extra supply of money to be created by domestic credit expansion rather than international reserve acquisition; and third, that successful de-

valuation should be reflected in an increase in the stock of international reserves and a transitory and possibly relatively shortlived balance-of-payments surplus rather than by a persistent change towards a surplus balance-of-payments position maintained for several years after the devaluation. (Moreover, it follows from previous argument that even these points may not be relevant if what matters is not holdings of official reserve assets but a country's "liquidity" in the sense of capacity to borrow if necessary). A fourth point is that in view of the fact that a country is likely to encounter the need for devaluation because it has a propensity to excessive domestic credit creation and inadequate holdings of international reserves, it is likely to modify or abandon the restrictive policies used to make the devaluation effective well before it has actually run a balance-of-payments surplus for a substantial period of time or accumulated impressive stocks of reserves.

For all these various reasons, it is obviously necessary to be cautious in forwarding the conclusion that devaluation typically does nil or very little and uncertain good for a country in balance-of-payments difficulties. The evidence adduced, in brief, is too simplistic to permit any such conclusion. The new monetary approach however, does provide new grounds for scepticism about the use of devaluation and preference for improvement of the system of fixed exchange rates, in the sense that if, as this approach suggests, devaluation is essentially a substitute for a more carefully controlled monetary policy, and if as is true devaluation involves the shocks and strains on the economy of a once-over inflationary impulse of highly uncertain micro-economic consequences, there is much to be said for strengthening the autonomy and economic understanding of central banks as the controllers of monetary policy, as contrasted with the present practice in many countries

of using monetary policy for short run political purposes and relying implicitly on the possibility of devaluation as a last resort in case of trouble. This of course would make more urgent the question of establishing international control of the stock of international monetary reserves and of the rules governing the provision of secondary inter-

national liquidity (international credit); but the question of control of international liquidity and domestic money supplies is likely to remain a live issue so long as countries, even though nominally on a floating rate system, continue to have and implement views about the desirable relativities of their national exchange rates.