### MACROECONOMIC POLICY AND THE EXTERNAL SECTOR

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Keywords: Absorption, Adjustment, Aggregate Demand, Assignment, Autonomy, Balance of Payments, Competition Policy, Coordination, Capital Account, Capital Mobility, Credit Markets, Current Account, Demand Management, Discretion, Distortion, Domestic Credit, Economic Structure, Expenditure Composition, Expenditure Switch, External Balance, Fiscal Policy, Fundamentals, Government Budget, Government Expenditure, Information Problems, Instrument, Interest Rate, Intermediate Target, Internal Balance, International Capital Movements, International Competitiveness, International Reserves, Intertemporal Optimization, Macroeconomic Policy, Monetary Policy, National Expenditure, National Savings, Nominal Exchange Rate, Open Market Operation, Openness, Policy Conflict, Policy Dilemma, Policy Mix, Portfolio Balance Behavior, Productivity, Public Finances, Real Exchange Rate, Resource Constraint, Rigidity, Rules, Stabilization Policy, Target

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## **Summary**

The rationale for the active pursuit of macroeconomic policy derives from the prospect, or occurrence, of systemic underperformance relative to potential level and trend over time. Core objectives include the stabilization of economic activity at full employment, price stability, and the promotion of economic expansion. Attainment of these "internal balance" objectives is constrained in open economies by cross-border transaction flows in goods and assets, and by exchange rate behavior. Consequently, in pursuing the core objectives policy makers may seek to achieve compatible "external balance" outcomes.

A stable solution to the policy problem requires that policy makers have at their disposal a number of independent policy instruments at least equal to the number of targets, and that the instruments are assigned to targets according to their relative

effectiveness. The two generic instruments of fiscal and monetary policy are implemented through the specific tools of public sector spending and central bank open market operations, respectively. Salient features of the underlying economic structure and the circumstances prevailing at particular points in time determine the appropriate mix of policy instruments. Accordingly, incomplete knowledge of that structure, nonlinear behavior relations, and changes in the economic environment limit the validity of any given policy assignment. Hence, the appropriateness of any particular policy mix is subject to sustained debate.

Progressive integration of national economies into the global network of markets has increasingly undermined the scope for independent manipulation of the external balance. In the wake of this development the focus of macroeconomic policy has shifted towards the promotion of macroeconomic equilibrium. Its foremost objective is the achievement of overall balance between national expenditure and resource availability, while the state of the external balance has become the domain of essentially microeconomic "competition policy." Accordingly, in the contemporary setting, the targets of policy are the level of national expenditure and its composition between domestic and foreign-produced goods.

### 1. Introduction

Macroeconomic policies are designed to promote national economic welfare through the active pursuit of designated targets whose potential may not be realized by the free operation of market forces. Relevant goals for economic performance include the stabilization of economic activity at the level of potential output in an environment of price stability, and the promotion of economic expansion consistent with the growth potential of the economy. These performance criteria are loosely assimilated into the composite target of "internal balance." In open economies the achievement of internal economic objectives may be impaired by spontaneous transaction flows between domestic and foreign residents. Discrepancies between aggregate, market-determined cross-border receipts and payments must be settled officially by transfers of central holdings of international reserves. Alternatively, they may be resolved by suitable adjustments of the relative price of the national means of payment, i.e., by changes in exchange rates. The finite size of national holdings of international reserves and concern about the implications of volatile exchange rate behavior for the attainment of internal objectives provide a rationale for specifying desired external balance outcomes as an additional target of macroeconomic policy.

Unlike internal balance, the external balance is determined directly by the spontaneous interplay of optimizing behavior by domestic and foreign agents. Disturbances originating abroad influence cross-border transaction flows and, hence, elicit repercussions domestically. Similarly, changes in the domestic economy are partly transmitted abroad. The state of the external balance, therefore, signals occasion for policy action as well as imposing constraints on the effectiveness of national policies. Furthermore, interdependence between domestic activity and cross-border transaction flows entails the potential for policy conflict. For instance, the simultaneous occurrence of domestic unemployment and external deficits may indicate the need for mutually contradictory changes in demand management. Operational criteria for the effective

resolution of policy conflicts and for the efficient conduct of policy are derived from systematic analysis of the macroeconomic policy setting.

## 2. The Theory of Economic Policy

The effects of particular policy measures depend on the way agents respond to disturbances, and on the set of institutions and rules that govern their behavior. These structural properties can be represented formally in terms of a set of behavioral adjustment coefficients. Provided this set is complete, it is possible to trace any shock to which the economy may be exposed through the behavioral reactions it elicits, and to identify its quantitative impact. Shocks may originate outside the economic system—the proverbial "acts of nature"—or they may be induced by deliberate policy actions by the authorities. Some measures of impact are more informative than others for the simple reason that we care more about some aspects of the economic system than others. Those measures of economic performance that we care about we may designate "target" variables. The task of economic policy is then to identify suitable changes in instrument variables controlled by the authorities to attain desired target outcomes. More formally, the "policy problem" includes identification of the matrix of structural adjustment coefficients by which changes in instruments are transmitted to targets, and specification of the desired set of target values and appropriate instrument settings. Conventionally, attention is focused more narrowly on the determination of targets and instruments.

Typically, the economic structure is taken as predetermined. It is fixed by the deep parameters that characterize the tastes and preferences of individual agents, and by the technical relations that determine the productivity of resources. Provided individual agents act rationally, they respond in a systematic, optimizing manner to economic incentives, subject to the rules and regulations that are in force. Disturbances influence agents' decisions in two ways. They may induce a reaction based on given behavior parameters, or they may provoke a change of those parameters. The imposition, or tightening, of quantity controls, for instance, restricts the feasible range of extant demand schedules. If the controls are binding, then consumers may either move to a position within the feasible range or they may adjust their preferences and switch demand towards other goods at given relative prices and incomes. Since they alter the underlying economic structure, such changes in behavior patterns may undermine the stability of discretionary policy.

# 2.1 Targets and Instruments of Macroeconomic Policy

The relatively stable relation between output, income and employment suggests that each of these measures is a potentially useful target for policy. Co-variation between these potential welfare indicators implies that only one measure can be taken as an independent target of policy at any one time. For present purposes it is convenient to ignore the specific meaning of the alternative measures and to subsume the complex of information that they convey in the general target of "internal balance" which may be proxied by either of these concrete measures of economic activity.

The rationale for the complementary target of external balance derives from the settlement and solvency implications of cross-border transactions. External balance is conceptually distinct from the internal balance target since it does not constitute a direct proxy for national economic welfare. The welfare implications of cross-border transactions are embedded in the state of the component balances of the balance of payments. For instance, net imports, reflecting excess domestic expenditure or income deficits, augment the domestically available resources from abroad, and to that extent they may be considered welfare enhancing. But they have to be financed by payments to foreign suppliers from domestic holdings of foreign assets or by borrowing from abroad. If private sources of payment are in short supply, then payment has to be made from official holdings of international reserves unless relevant prices, including the exchange rate, are free to move. In either case, significant movements in central reserve holdings or in exchange rates cannot be sustained for any length of time, and they may have adverse implications for the performance of the domestic economy. (*Determinants of Balance of Payments and exchange Rates*)

Specification of particular values for the target variables is a matter for debate. Typically, the internal balance target is loosely understood as full employment of the labor force or attainment of potential output in an environment of stable prices. Similarly, the target of external balance can be specified as stability of domestic holdings of international reserves or of the exchange rate. Conceptual ambiguity and practical difficulties in tracing the precise welfare implications of particular values of the target variables create considerable latitude for the determination of specific quantitative targets of policy.

One instrument cannot simultaneously achieve predetermined values for several independent targets, except as a matter of coincidence. Given the structure of the economy, and presuming that the authorities have full knowledge of that structure and complete control over the instrument, they can set the instrument consistent with the requirement for achieving a predetermined value for one target or another. Hence, the nature of the policy problem dictates that for a given set of mutually independent targets it is necessary to have a number of instruments at least equal to the number of targets.

The authorities have at their disposal a vast array of policy instruments associated with the determination of the government's budget, the system of money and credit, and regulations that extend to most aspects of economic activity. Structural interdependence between instrument variables—for example, between tax rates and tax revenue, or between wage controls and affirmative action in labor markets—reduces the set of potential instruments. Furthermore, for the effective conduct of policy it is necessary to select instruments that are under the direct control of the authorities and simultaneously exert a clearly discernible effect on the targets of policy. Accordingly, the set of potentially eligible instruments for the conduct of economic policy is restricted by the requirement that the instruments are mutually independent, and that their values can be determined unilaterally by the authorities. In the context of macroeconomic policy, these conditions are reasonably well satisfied by the instruments of fiscal policy and monetary policy.

Fiscal policy, loosely defined as government expenditure, is largely under the direct control of the authorities, except for endogenous items like the total outlay on transfer payments. Changes in government spending influence aggregate output, income, and employment—the internal balance—directly through their effect on aggregate demand. The associated changes in the government budget are financed by bond issues that alter conditions in domestic money and credit markets, with potentially countervailing implications for aggregate demand. Both types of fiscal policy effects feed into the external balance, through induced changes in net exports and through international capital movements. Monetary policy is implemented through changes in monetary aggregates or interest rates. However, both magnitudes are also strongly influenced by the behavior of private agents. Particularly in wide open small economies, the domestic money supply varies with cross-border payments flows while the behavior of domestic interest rates may be dominated by world interest rates. In order to satisfy the exogeneity requirement of the instrument variable it is useful to think of monetary policy in terms of the volume of domestic credit extended by the central bank, i.e. the volume of domestic assets held in the central bank portfolio. To the extent that monetary policy is conducted by means of open market operations in government bonds, changes in domestic credit provide a reliable measure of the stance of monetary policy. Changes in the cost and availability of domestic credit affect the credit-sensitive components of aggregate demand and, hence, internal balance, as well as the external balance through induced changes in net exports. At the same time, changes in the expected yield from domestic assets initiate portfolio adjustments that may affect the external balance through cross-border capital flows.

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### **Biographical Sketch**

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