## Macroeconomic Policy and Poverty Reduction

## B. Ames, W. Brown, S. Devarajan, and A. Izquierdo

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This chapter has been put together to help guide the development or strengthening of poverty reduction strategies. It is not intended to be prescriptive, nor does it provide "the answers." More generally, this chapter does not contain a "magic bullet" that will address all the difficult issues that countries will face in putting together a poverty reduction strategy. It is intended only to be suggestive and to be selectively used as an informational resource. It does not reflect the official policies or approaches of either the World Bank or the International Monetary Fund (IMF). It is an evolving document that will be revised in light of the comments and feedback received, as well as country experience in developing and strengthening poverty reduction strategies.

## **1. Introduction**

Poverty is a multidimensional problem that goes beyond economics to include, among other things, social, political, and cultural issues (see Chapter 3 "Poverty Data and Measurement" and Box 1). Therefore, solutions to poverty cannot be based exclusively on economic policies, but require a comprehensive set of well-coordinated measures. Indeed, this is the foundation for the rationale underlying comprehensive poverty reduction strategies.<sup>1</sup> So why is there a chapter in the *Sourcebook for Poverty Reduction Strategies* on macroeconomic issues? Because economic growth is the single most important factor influencing poverty, and macroeconomic stability is essential for high and sustainable rates of growth.<sup>2</sup> Hence, macroeconomic stability should be a key component of any poverty reduction strategy.

#### Box 1. Definition and Measurement of Poverty

The World Bank's 2000 World Development Report defines poverty as an unacceptable deprivation in human well-being that can comprise both physiological and social deprivation. *Physiological deprivation* involves the non-fulfillment of basic *material* or *biological* needs, including inadequate nutrition, health, education, and shelter. A person can be considered poor if he or she is unable to secure the goods and services to meet these basic material needs. The concept of physiological deprivation is thus closely related to, but can extend beyond, low monetary income and consumption levels. *Social deprivation* widens the concept of deprivation to include risk, vulnerability, lack of autonomy, powerlessness, and lack of self-respect. Given that countries' definitions of deprivation, local populations (including poor communities) should be engaged in the dialogue that leads to the most appropriate definition of poverty in a country.

Macroeconomic stability by itself, however, does not ensure for high rates of economic growth. In most cases, sustained high rates of growth also depend upon key structural measures, such as regulatory reform, privatization, civil service reform, improved governance, trade liberalization, and banking sector reform, many of which are discussed at length in other chapters of the *Sourcebook for Poverty Reduction Strategies*. Moreover, growth alone is not sufficient for poverty reduction. Growth associated with progressive distributional changes will have a greater impact on poverty than growth which leaves distribution unchanged. Hence, policies that improve the distribution of income and assets within a society, such as land tenure reform, propor public expenditure, and measures to increase the poor's access to financial markets, will also form essential elements of a country's poverty reduction strategy.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> There has been an emerging consensus on how to make actions at the country level, and the support of development partners, more effective in bringing about sustainable poverty reduction. This consensus indicates a need for poverty reduction strategies that are: country-driven, with broad participation of civil society, elected officials, key donors, and relevant International Finance Institutions; outcome-oriented; and developed from an understanding of the nature and determinants of poverty. Under the new framework, the country-led strategy would be presented in a Poverty Reduction Strategy Paper (PRSP), which is expected to become a key instrument for a country's relations with the donor community.

<sup>&</sup>lt;sup>2</sup> Macroeconomic stability is a situation where key economic relationships are broadly in balance and sustainable.

<sup>&</sup>lt;sup>3</sup> These points are reflected in the design of programs supported by the IMF's Poverty Reduction and Growth Facility (PRGF), which are derived from a country's own poverty reduction strategy. The strategy itself should be based upon fully integrated macroeconomic, structural, and social policies. See *Key Features of IMF Poverty Reduction and Growth Facility (PRGF) Supported Programs*, August 16, 2000, available at http://www.imf.org/external/np/prgf/2000/eng/key.htm.

To safeguard macroeconomic stability, the government budget, including the country's poverty reduction strategies must be financed in a sustainable, noninflationary manner. The formulation and integration of a country's macroeconomic policy and poverty reduction strategy is an iterative process. Poverty reduction strategies need first to be articulated (i.e., objectives and policies specified), then costed, and finally financed within the overall budget in a noninflationary manner. The amount of finance, much of which will be on concessional terms, is, however, not necessarily fixed during this process: if credible poverty reduction strategies cannot be financed from available resources, World Bank and IMF staff should and will actively assist countries in their efforts to raise additional financial support from the donor community. Nonetheless, in situations where financing gaps remain, a country would have to revisit the intermediate objectives of their strategy and reexamine their priorities. Except in cases where macroeconomic imbalances are severe, there will usually be some scope for flexibility in setting short-term macroeconomic targets. However, the objective of macroeconomic stability should not be compromised.

The chapter is organized as follows. Drawing upon recent literature, section 2 outlines key empirical facts about growth, as well as the implications of those facts for macroeconomic policy. Section 3 discusses how macroeconomic policies may vary depending if a country is in a state of instability, stabilization, or stability. Section 4 provides a description of the iterative process for the integration of a country's poverty reduction strategy and its macroeconomic and budgetary framework. It also discusses fiscal, monetary, and exchange rate policies that would be supportive of the objectives of sustainable growth, low and stable inflation, and, in turn, poverty reduction. Finally, the section discusses policies to insulate the poor against the impact of shock to an economy.

# 2. The Links between Macroeconomic Policy and Poverty Reduction

## 2.1 Growth Matters

Economic growth is the *single most important factor influencing poverty*.<sup>4</sup> Numerous statistical studies have found a strong association between national per capita income and national poverty indicators, using both income and nonincome measures of poverty.<sup>5</sup> One recent study consisting of 80 countries covering four decades found that, on average, the income of the bottom one-fifth of the population rose one-for-one with the overall growth of the economy as defined by per capita GDP (Dollar and Kraay, 2000). Moreover, the study found that the effect of growth on the income of the poor was on average no different in poor countries than in rich countries, that the poverty-growth relationship had not changed in recent years, and that policy-induced growth was as good for the poor as it was for the overall population. Another study that looked at 143 growth episodes also found that the "growth effect" dominated, with the "distribution effect" being important in only a minority of cases (White and Anderson, forthcoming). These studies, however, establish association, but not causation. In fact, the

<sup>&</sup>lt;sup>4</sup> Examples include the relationship between infant mortality rates and per capita income, the ratio of female to male literacy and per capita income, and average consumption and the incidence of income poverty. In all three cases, national poverty indicators improved as per capita income rose. See the discussion in the World Bank's *World Development Report, 2000.* 

causality could well go the other way. In such cases, poverty reduction could in fact be necessary to implement stable macroeconomic policies or to achieve higher growth.

Studies show that capital accumulation by the private sector drives growth<sup>6</sup> Therefore, a key objective of a country's poverty reduction strategy should be to establish conditions that facilitate private sector investment. No magic bullet can guarantee increased rates of private sector investment. Instead, in addition to a sustainable and stable set of macroeconomic policies, a country's poverty reduction policy agenda should, in most cases, extend across a variety of policy areas including, privatization, trade liberalization, banking and financial sector reforms, labor markets, the regulatory environment, and the judicial system. The agenda will certainly include increased and more efficient public investment in a country's health, education, and other priority social service sectors.<sup>7</sup>

## 2.2 Macroeconomic Stability is Necessary for Growth

Macroeconomic stability is the cornerstone of any successful effort to increase private sector development and economic growth. Cross-country regressions using a large sample of countries suggest that growth, investment, and productivity are positively correlated with macroeconomic stability (Easterly and Kraay, 1999). Although it is difficult to prove the direction of causation, these results confirm that *macroeconomic instability has generally been associated with poor growth performance*. Without macroeconomic stability, domestic and foreign investors will stay away and resources will be diverted elsewhere. In fact, econometric evidence of investment behavior indicates that in addition to conventional factors (i.e., past growth of economic activity, real interest rates, and private sector credit), private investment is significantly and negatively influenced by uncertainty and macroeconomic instability (see, for example, Ramey and Ramey, 1995).

## 2.3 Macroeconomic Instability Hurts the Poor

In addition to low (and sometimes even negative) growth rates, other aspects of macroeconomic instability can place a heavy burden on the poor. Inflation, for example, is a regressive and arbitrary tax, the burden of which is typically borne disproportionately by those in lower income brackets. The reason is twofold. First, the poor tend to hold most of their financial assets in the form of cash rather than in interest-bearing assets. Second, they are generally less able than are the better off to protect the real value of their incomes and assets from inflation. In consequence, price jumps generally erode the real wages and assets of the poor more than those of the non-poor. Moreover, beyond certain thresholds, inflation also curbs output growth, an effect that will impact even those among the poor who infrequently use money for economic transactions.<sup>8</sup> In addition, low output growth that is typically associated with instability can have a longer-term impact on poverty (a phenomenon known as "hysteresis"). This phenomenon

<sup>&</sup>lt;sup>6</sup> Examples include the relationship between infant mortality rates and per capita income, the ratio of female to male literacy and per capita income, and average consumption and the incidence of income poverty. In all three cases, national poverty indicators improved as per capita income rose. See discussion in World Development Report, 2000.

<sup>&</sup>lt;sup>7</sup> There is little empirical evidence, however, that public sector capital expenditure has a positive impact on growth, reflecting the tendency for such investment in the past to be wasteful or inefficient. This does not mean public investment is unimportant – only that efficiency considerations must be central in any public investment program. See Easterly and Rebelo (1993), Devarajan, Swaroop, and Zou (1996).

<sup>&</sup>lt;sup>8</sup> Empirical evidence confirms a strong negative relationship between inflation and economic growth at all but the lowest levels of inflation. See Fischer (1993), Bruno and Easterly (1998), Ghosh and Phillips (1998), and Sarel (1996).

typically operates through shocks to the human capital of the poor. In Africa, for instance, there is evidence that children from poor families drop out of school during crises. Similarly, studies for Latin American countries suggest adverse terms-of-trade shocks explain part of the decline of schooling attainment (see, for example, Behrman, Duryea, and Szeleky, 1999).

### Box 2. Macroeconomic Stability

Macroeconomic stability exists when key economic relationships are in balance—for example, between domestic demand and output, the balance of payments, fiscal revenues and expenditure, and savings and investment. These relationships, however, need not necessarily be in exact balance. Imbalances such as fiscal and current account deficits or surpluses are perfectly compatible with economic stability provided that they can be financed in a sustainable manner.

There is no unique set of thresholds for each macroeconomic variable between stability and instability. Rather, there is a continuum of various combinations of levels of key macroeconomic variables (e.g., growth, inflation, fiscal deficit, current account deficit, international reserves) that could indicate macroeconomic instability. While it may be relatively easy to identify a country in a state of macroeconomic instability (e.g., large current account deficits financed by short-term borrowing, high and rising levels of public debt, double-digit inflation rates, and stagnant or declining GDP) or stability (e.g., current account and fiscal balances consistent with low and declining debt levels, inflation in the low single digits, and rising per capita GDP), there is a substantial "gray area" in between where countries enjoy a degree of stability, but where macroeconomic performance could clearly be improved.

Finally, macroeconomic stability depends not only on the macroeconomic management of an economy, but also on the structure of key markets and sectors. To enhance macroeconomic stability, countries need to support macroeconomic policy with structural reforms that strengthen and improve the functioning of these markets and sectors.

## 2.4 Composition and Distribution of Growth Also Matter

Although economic growth is the engine of poverty reduction, it works more effectively in some situations than in others.<sup>9</sup> Two key factors that appear to determine the impact of growth on poverty are the *distributional patterns* and the *sectoral composition* of growth.

If the benefits of growth are translated into poverty reduction through the existing distribution of income, then *more equal societies will be more efficient transformers of growth into poverty reduction*. A number of empirical studies have found that the responsiveness of income poverty to growth increases significantly as inequality is lowered.<sup>10</sup> This is also supported by a recent cross-country study that found that the more equal the distribution of income in a country, the greater the impact of growth on the number of people in poverty (Ravallion, 1997). Others have

<sup>&</sup>lt;sup>9</sup> For any given increment in per capita income, the impact on poverty will depend on how that increment is distributed across the population. While growth is almost always accompanied by a reduction in income poverty, and negative growth is accompanied by an increase in poverty, for any given growth rate the impact on poverty can vary substantially.

<sup>&</sup>lt;sup>10</sup> Ravallion (1997), Datt and Ravallion (1992), and Kakwani (1993).

suggested that greater equity comes at the expense of lower growth and that there is a trade-off between growth and equity when it comes to poverty reduction.<sup>11</sup> A large number of recent empirical studies, however, have found that there is not necessarily such a trade-off<sup>12</sup> and that equity in its various dimensions is growth enhancing.<sup>13</sup>

The sectoral composition of growth can determine the impact that growth will have on poverty. Conventional wisdom has been that growth in sectors of the economy where the poor are concentrated will have a greater impact on reducing poverty than growth in other sectors—indeed, this is almost a tautology. For example, it is often argued that in countries where most of the poor live in rural areas, agricultural growth reduces poverty because it generates income for poor farmers and increases the demand for goods and services that can easily be produced by the poor (see Chapter 8 "Rural Poverty").<sup>14</sup> Various country-specific and cross-country studies have shown that growth in the agricultural and tertiary sectors has had a major effect on reducing poverty, while growth in manufacturing has not.<sup>15</sup> This reinforces the case for duty-free access to industrial country markets for agricultural exports from low-income countries. The links may be more complex over the long run, however. While faster growth in agriculture may address rural poverty in the short-term, reliance on agricultural activity may also intensify output variability, which, in turn, would contribute to increasing rather than decreasing poverty. A more diversified economy with a vibrant manufacturing sector might offer the best chances for a sustainable improvement in living standards in the long-run.

## 2.5 Implications for Macroeconomic Policy

What are the implications of these empirical findings for macroeconomic policy? First, in light of the importance of growth for poverty reduction, and of macroeconomic stability for growth, the broad objective of macroeconomic policy should be the establishment, or strengthening, of macroeconomic stability. Policymakers should therefore define a set of attainable macroeconomic targets (i.e., growth, inflation, external debt, and net international reserves) with the objective of maintaining macroeconomic stability, and pursue macroeconomic policies (fiscal, monetary, and exchange rate) consistent with those targets. In cases where

<sup>&</sup>lt;sup>11</sup> To the extent that people with high income save a larger proportion of their income than do those with low income, policies that redistribute income in favor of the lower-income population may impede savings and, to the extent that such savings are channeled into productive investment, long-term growth.

<sup>&</sup>lt;sup>12</sup> This refers to developing economies, where often income (and wealth) inequality is particularly acute. In general, there is likely to be a point beyond which greater equity is incompatible with adequate labor and enterprise incentives, which, in turn, would be detrimental to growth. See Alesina and Rodrik (1994); Bénabou (1996); Birdsall and Londoño (1997); Deninger and Squire (1998); Perotti (1992, 1993, and 1996); and Persson and Tabellini (1994).

<sup>&</sup>lt;sup>13</sup> By increasing the human capital of the poor, redistributive policies can increase the productivity of the workforce, thereby enhancing growth. Others have argued that there is also a political economy channel as well – in countries with greater income equality there is greater political support for public policies that are more conducive to growth. See Alesina and Rodrik (1994), and Persson and Tabellini (1994). For empirical support for this effect, see Deininger and Olinto (2000) (1999), Thomas and Wang (1998); Klasen (1999); Dollar and Gatti (1999). For dissenting views, see Forbes (2000) and Li, Xie, and Zou (1999).

<sup>&</sup>lt;sup>14</sup> It is also often argued that if growth results in the expansion of low-skilled employment, then the poor are more likely to be the beneficiaries of the growth. One recent cross-country study (Fallon and Hon (1999)) found that the more labor-intensive the growth pattern, the faster the decline in the incidence of poverty.

<sup>&</sup>lt;sup>15</sup> Datt and Ravallion (1998), Thorbecke and Jung (1996), Timmer (1997), and Bourguignon and Morrison (1998).

macroeconomic imbalances are less severe, a range of possible targets may be consistent with the objective of stabilization. Precise targets can then be set within that range, in accordance with the goals and priorities in the country's poverty reduction strategy (see Section 4.2).

Second, most developing countries will likely have substantial scope for enhancing the quality of growth, that is, the degree to which the poor share in the fruits of such growth, through policies aimed at improving income distribution. These policies (e.g., land tenure reform, changes in marginal and average tax rates, increases in pro-poor social spending, etc.) often are politically charged, and usually require supporting structural and governance reforms that would empower the poor to demand resources and/or ensure that resources intended for them are not diverted to other groups of the population. As these topics pertain more broadly to political economy, rather than exclusively to macroeconomics, they are beyond the scope of this chapter. But they reinforce the point that economic growth alone is not sufficient for poverty reduction and that complementary redistributional policies may be needed to ensure that the poor benefit from growth.

Finally, while issues regarding the composition of growth also go beyond strict macroeconomics, several general policy observations can be made. There is a general consensus that policies that introduce distortions in order to influence growth in a particular sector can hamper overall growth. The industrial policies pursued by many African developing countries in the 1960s have long been discredited (World Bank, 1981). Instead, strategies for sector specific growth should focus on removing distortions that impede growth in a particular sector. In addition, policymakers should implement policies that will empower the poor and create the conditions that would permit them to move into new as well as existing areas of opportunity, thereby allowing them to better share in the fruits of economic growth. The objectives of such policies should include: creating a stable environment and level plaving field conducive to private sector investment and broad-based economic growth, removing the cultural, social, and economic constraints that prevent the poor from making full use of their existing asset base and accessing markets, and increasing the human capital base of the poor through the provision of basic health and education services. Using these policies, and the redistributive policies described above, policymakers can target "pro-poor" growth-that is, they can attempt to maximize the beneficial impact of sustained economic growth on poverty reduction.

## 3. Macroeconomic Stability and Economic Growth

Broadly speaking, two considerations underlie macroeconomic policy recommendations. First, there needs to be an assessment of the appropriate policy stance to adopt in a given set of circumstances (i.e., should fiscal and/or monetary policy be tightened or loosened). Second, there is the choice of specific macroeconomic policy instruments that would be beneficial for a country to adopt (e.g., the use of a nominal anchor, a value-added tax (VAT), etc.). In practice, these two considerations are closely linked. Adjusting a policy stance is often done via the adoption of a new instrument (or the modification of an existing one). More important, both considerations are essential to efforts to enhance an economy's stability.

The specific stance must fit each country's particular situation. These situations can be put into three broad classes: (1) instability/disequilibrium; (2) stabilization (e.g., transition from instability to stability); and (3) stability/steady economic growth. This section briefly discusses how macroeconomic policies can contribute to stability. For countries that enjoy stable macroeconomic conditions, there is somewhat greater flexibility in the choice of appropriate stance for macroeconomic policy. The central issue for these countries will be to ensure that the

financing of their poverty reduction strategies does not jeopardize macroeconomic stability, which will be discussed in Section 4.

## **3.1 Sources of Instability**

There are two main sources of economic instability, namely exogenous shocks and inappropriate policies. *Exogenous shocks* (e.g., terms of trade shocks, natural disasters, reversals in capital flows, etc.) can throw an economy into disequilibrium and require compensatory action. For example, many low income countries have a narrow export base, often centered on one or two key commodities. Shocks to the world price of these commodities can therefore have a strong impact on the country's income. Even diversified economies, however, are routinely hit by exogenous shocks, although, reflecting their greater diversification, shocks usually need to be particularly large or long-lasting to destabilize such an economy. Alternatively, a disequilibrium can be "self-induced" by poor macroeconomic management. For example, an excessively loose fiscal stance can increase aggregate demand for goods and services, which places pressure on the country's external balance of payments as well as on the domestic price level. At times, economic crises are the result of both external shocks and poor management.

## 3.2 Stabilization

In most cases, addressing instability (i.e., stabilization) will require policy *adjustment*; whereby a government introduces new measures (possibly combined with new policy targets) in response to the change in circumstances.<sup>16</sup> Adjustment will typically be necessary if the source of instability is a permanent (i.e., systemic) external shock or the result of earlier, inappropriate macroeconomic policies. However, if the source of instability can be clearly identified as a temporary shock (e.g., a one-time event) then it may be appropriate for a country to accommodate it.<sup>17</sup> Identifying whether a particular shock is temporary or is likely to persist is easier said than done. Since there is often a considerable degree of uncertainty surrounding such a judgment, it is usually wise to err somewhat on the side of caution by assuming that the shock will largely persist and basing the corresponding policy response on the appropriate adjustment.

In most circumstances where adjustment is necessary, both monetary (or exchange rate) and fiscal instruments will have to be used. In particular, successful adjustment to a permanent unfavorable shock that worsens the balance of payments will often require a sustained tightening of the fiscal stance, as this is the most immediate and effective way to increase domestic savings and to reduce domestic demand—two objectives typically at the center of stabilization programs.

Adjustment policies may contribute to a temporary contraction of economic activity, but this contingency should not be used to argue against implementing adjustment policies altogether, as the alternative may be worse. Attempting to sustain aggregate demand through unsustainable policies will almost certainly aggravate the long-run cost of a shock, and could even fail in the

<sup>&</sup>lt;sup>16</sup> In certain cases, the return to a steady growth state may also require structural reform and measures to improve the functioning of markets.

<sup>&</sup>lt;sup>17</sup> Broadly speaking, this means leaving the underlying stance of macroeconomic policy unchanged (or, in some cases, the stance may be adjusted temporarily to mitigate the impact of the shock), and adjusting policy targets in a way that takes into account the impact of the shock. However, if such a policy stance cannot be financed in a noninflationary way, then some adjustment will also be necessary.

short-run to the extent that it undermines confidence. In the long run, greater benefits to the poor are to be had as a result of the restoration of macroeconomic stability. The appropriate policies to protect the poor during adjustment are to maintain, or even increase, social expenditures and to adopt, where feasible, compensatory measures that would insulate or offset temporary adverse impacts to the fullest extent possible.<sup>18</sup> This is best done by devoting resources to the establishment of effective social safety nets,<sup>19</sup> as an enduring part of a country's poverty reduction strategy, rather than as a response to crisis. Countries that lack such resources/safety nets could be forced to either subject their poor to the short-term adverse effects of stabilization or to delay the pace with which macroeconomic adjustment proceeds (and put off the corresponding long-term benefits to economic growth and poverty reduction).

Countries in macroeconomic crisis typically have little choice but to stabilize quickly, but for countries in the "gray" area of partial stability, finding the right pace may prove difficult. In some cases, a lack of financing will drive the pace of stabilization. Where financing is not a constraint, however, policymakers will need to assess and carefully weigh various factors on a case-by-case basis in choosing the most appropriate pace of stabilization; that is, the appropriate pace of stabilization must be determined on a case-by-case basis taking into consideration existing circumstances.

## 3.3 Elements of Macroeconomic Stability

Macroeconomic policies influence and contribute to the attainment of rapid, sustainable economic growth aimed at poverty reduction in a variety of ways. By pursuing sound economic policies, policymakers send clear signals to the private sector. The extent to which policymakers are able to establish a track record of policy implementation will influence private sector confidence, which will, in turn, impact upon investment, economic growth, and poverty outcomes.

Prudent macroeconomic policies can result in low and stable inflation. Inflation hurts the poor by lowering growth and by redistributing real incomes and wealth to the detriment of those in society least able to defend their economic interests. High inflation can also introduce high volatility in relative prices and make investment a risky decision. Unless inflation starts at very high levels, rapid disinflation can also have short-run output costs, which need to be weighed against the costs of continuing inflation.

By moving toward debt sustainability, policymakers will help create the conditions for steady and continuous progress on growth and poverty reduction by removing uncertainty as to whether a government will be able to service new debt. By keeping domestic and external debt at levels that can be serviced in a sustainable manner without unduly squeezing nondebt expenditure, policymakers can also ensure that adequate domestic resources are available to finance essential social programs.

<sup>&</sup>lt;sup>18</sup> Indeed, a key feature of programs supported by the IMF's Poverty Reduction Growth Facility (PRGF) is to assess the distributional impact of key macroeconomic policies, and to put in place countervailing measures needed to protect the poor. See *Key Features of IMF Poverty Reduction and Growth Facility (PRGF) Supported Programs*, August 16, 2000. http://www.imf.org/external/np/prgf/2000/eng/key.htm.

<sup>&</sup>lt;sup>19</sup> Social safety nets are designed to mitigate possible adverse effects of reform measures on the poor. These instruments include temporary arrangements, as well as existing social protection measures reformed and adapted for this purpose, such as limited food subsidies, social security arrangements for dealing with various life cycle and other contingencies, and targeted public works. See Chu and Gupta (1998) and *PRSP Sourcebook* Chapter 10.1 "Social Protection".

Inappropriate exchange rate policies distort the composition of growth by influencing the price of tradables versus nontradable goods. Household survey data for a number of countries indicate that the poor tend to consume higher amounts of nontradable goods while generating relatively more of their income from tradable goods (Sahn, Dorosh, and Younger, 1997). Hence, in addition to distorting trade and inhibiting growth, an overly appreciated exchange rate can impair the relative incomes and purchasing power of the poor.

By building and maintaining an adequate level of net international reserves, a country can weather a temporary shock without having to reduce essential pro-poor spending. External shocks can be particularly detrimental to the poor because they can lower real wages, increase unemployment, reduce nonlabor income, and limit private and net government transfers. The level of "adequate" reserves depends on the choice of exchange rate regime .

## 4. Growth-Oriented Macroeconomic Policies and Poverty Outcomes

Since the emphasis of this chapter is on the role of macroeconomic policy in supporting a country's poverty reduction strategy, the discussion of macroeconomic policies in this section focuses on countries that have broadly achieved macroeconomic stability. Recent data indicate that many developing countries are presently in a state of macroeconomic stability (Tables 1-3). When formulating a country's poverty reduction strategy, policymakers will need to assess and determine what is the most appropriate combination of key macroeconomic targets that would preserve macroeconomic stability in their particular circumstance. Three key issues are discussed in this section: (1) how to finance poverty reducing spending in a way that doesn't endanger macroeconomic stability; (2) what specific policies can be adopted to improve macroeconomic performance; and (3) policies to protect the poor from domestic and external shocks].

## 4.1 Financing Poverty Reduction Strategies

Once a country has developed a comprehensive and fully costed draft of its poverty reduction strategy, it will need to ensure that the strategy can be pursued and financed in a manner that does not jeopardize its macroeconomic stability and growth objectives.<sup>20</sup> To do so, policymakers need to integrate their poverty reduction and macroeconomic strategies into a consistent framework. The following paragraphs present a conceptual framework that could be useful to policymakers in determining whether their poverty reduction strategy is consistent with their macroeconomic objectives.

Given that it is difficult to determine beforehand what the growth target should be, policymakers may wish to consider developing alternative macroeconomic scenarios that take into consideration possible variations in the rate of economic growth. Such scenarios could be usefully discussed with stakeholders and development partners with a view to assessing the impact of lower-than-projected economic growth on key macroeconomic targets and poverty outcomes and to developing appropriate contingencies. The most likely or "base case" scenario would then be used as the basis for carrying out an initial attempt aimed at integrating the macroeconomic and poverty reduction strategies into a consistent framework. Once this has

<sup>&</sup>lt;sup>20</sup> Even if the strategy can be fully financed with concessional resources, policymakers will need to assess the degree to which poverty-reducing spending may place pressure on the price of nontraded goods and thereby threaten stability.

been accomplished, similar exercises could be carried out regarding the other contingency scenarios for reference during the implementation stage of the strategy.

Figure 1 shows the various macroeconomic linkages and constraints within a country and highlights the main trade-offs facing policymakers. The starting point is the *initial articulation of the country's poverty reduction strategy,* based on discussions with representatives of the government, stakeholders, and development partners. Ideally, these discussions will have resulted in the development of a comprehensive action plan that identifies priority sectoral policies to be pursued in support of poverty reduction, including in the areas of education, health, and rural infrastructure. Given that poverty is multidimensional, the action plan will also likely include priority measures with regard to governance, structural reform, and other relevant areas, each of which may have budgetary implications.

The first step will be to provide a *full costing of the envisaged poverty reduction strategy.* A comprehensive system for budget formulation of poverty reduction strategies requires the development of Medium-Term Expenditure Frameworks (MTEF), which currently exist in only a limited number of countries (e.g., Ghana and Uganda). Details regarding how such costing exercises can be carried out are presented in Chapter 5 "Public Spending for Poverty Reduction."

The second step involves an assessment of the government's spending program with regard to priority spending, nondiscretionary spending, and discretionary nonpriority spending. In doing so, policymakers should consider the scope for reallocating existing government spending into priority areas and away from nonproductive, nonpriority spending, as well as from areas where a rationale for public intervention does not exist.

The third step involves an assessment of domestic and external sources of budget finance. This would include a review of: (1) the existing tax and nontax revenue base, including the effect of any changes in the tax system envisaged under the poverty reduction strategy; (2) the scope for financing public spending through net domestic borrowing in light of the need to maintain macroeconomic stability and to ensure adequate availability of credit to the private sector in support of private sector development and economic growth; and (3) the scope for external financing (e.g., grants, net external borrowing, and debt relief) that is realistic and sustainable under the present circumstances.

Once policymakers have carried out these assessments, they can then determine whether the desired poverty reduction strategy can be financed in a manner consistent with the country's growth and stability objectives. In this regard, it is important to note that there are no rigid, predetermined limits regarding a country's fiscal stance (such as, for example, "the budget deficit must not be more than 'x' percent of GDP"). Rather, arriving at an appropriate, integrated poverty reduction and macroeconomic framework will require juggling a large number of parameters and weighing the trade-offs between multiple objectives. The linkages in Figure 1 are meant to illustrate that this is an iterative process. In this regard, quantitative frameworks that could assist policymakers in assessing the distributional implications of their macroeconomic policies would be particularly useful. Such frameworks, however, are presently only at a nascent stage of development (see Box 3).



Figure 1: Financing Poverty Reduction Strategies in a Sustainable Manner

### Box 3. Quantitative Frameworks for Assessing the Distributional Impact of Macroeconomic Policies

In developing poverty reduction strategies, policymakers would benefit from a quantitative framework that they could use to assess the distributional impact of the macroeconomic policy options under consideration. Such a framework would be useful because the links between macroeconomic policies and poverty are complex. A quantitative framework that identifies the critical relationships on which the outcome depends could therefore assist countries in assessing these trade-offs.

What would be some of the desirable characteristics of such a quantitative framework? First, the framework should be capable of identifying some of the critical trade-offs in poverty-reducing macroeconomic policies. For example, how do the costs (in terms of poverty) of higher spending (and higher fiscal deficits) compare with the benefits of targeting that spending on the poor? Second, the framework should be consistent with economic theory on the one hand, and with basic data availability, such as national accounts and household income and expenditure surveys, on the other. Otherwise, the frameworks will not be able to foster a dialogue between conflicting parties on these issues. Third, and most important, the framework should be simple enough that government officials can use it on their desktop computers. This means that it should not make undue demands on data, and it should be based on readily-available software, such as Microsoft Excel<sup>TM</sup>.

World Bank staff is presently developing alternative quantitative frameworks that could be used to evaluate some of the macroeconomic aspects of poverty reduction strategies. <sup>1</sup> It is expected that other possible quantitative frameworks will be developed over time that could assist country teams in this regard.

<sup>1</sup> See Agenor and others (2000). In developing this particular framework, the authors opted for a modular approach that allows different models to be incorporated as alternative sub-components of the overall framework.

If there remains an imbalance between spending and expected financing which could jeopardizes the country's macroeconomic growth and stability objective, one option would be to ascertain the extent to which additional external financing may be available. But, as discussed earlier, policymakers would need to assess the extent to which accommodating such expenditure could place pressure on the price of nontraded goods and jeopardize stability. Since the development of a poverty reduction strategy involves a participatory process that includes the country's development partners, the case for additional donor support can be examined. To the extent possible, donors should be encouraged to make medium-term aid commitments in support of a country's poverty reduction strategy so that the country can have confidence as it begins new spending programs that these activities can be sustained.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Ensuring there is appropriate flexibility in fiscal targets, and supporting authorities' efforts to secure commitments of higher donor flows when warranted are key features of the IMF's PRGF-supported programs. See *Key Features of IMF Poverty Reduction and Growth Facility (PRGF) Supported Programs*, August 16, 2000, at http://www.inf.org/external/np/prgf/2000/eng/key.htm.

If the desired poverty reduction program cannot be financed in a manner consistent with the country's economic stability and growth objectives, then policymakers will need to reconsider the parameters discussed above. Key questions would include: Is there further scope for domestic revenue mobilization? Can discretionary nonpriority spending be cut back more? Is there scope for cutting back certain priority spending without undermining the poverty reduction objective? Can the domestic financing target be relaxed without jeopardizing macroeconomic stability or private sector development objectives? Can the macroeconomic targets be modified in a manner that would not undermine the interrelated objectives of rapid economic growth, low and stable inflation, and poverty reduction? The answers to these questions will determine the extent to which the desired poverty reduction programs can be pursued in the current period.

## 4.2 Fiscal Policy

Fiscal policy can have a direct impact on the poor, both through the government's overall fiscal stance and through the distributional implications of tax policy and public spending. Structural fiscal reforms in budget and treasury management, public administration, governance, transparency, and accountability can also benefit the poor in terms of more efficient and better targeted use of public resources. As indicated above, there is no rigid, pre-determined limit on what would be an appropriate fiscal deficit. An assessment would need to be based on the particular circumstances facing the country, its medium-term macroeconomic outlook, and the scope for external budgetary assistance. The terms on which external assistance is available are also important. There is a strong case, for instance, for allowing higher grants to translate into higher spending and deficits, to the extent that those grants can reasonably be expected to continue in the future, and provided that the resources can be used effectively (see below).

With regard to the composition of public expenditure, policymakers will need to assess not only the appropriateness of the proposed poverty reduction spending program, but also of planned nondiscretionary, and discretionary nonpriority, spending. In so doing, they will need to take into particular consideration the *distributional and growth impact* of spending in each area and place due emphasis on spending programs that are pro-poor (e.g., certain programs in health, education, and infrastructure) and on the efficient delivery of essential public services (e.g., public health, public education, social welfare, etc.). In examining these expenditures, policymakers should evaluate the extent to which government intervention in general, and the public spending in particular, can be justified on grounds of market failure and/or redistribution.

Policymakers must also ask themselves whether the envisaged public goods or services can be delivered efficiently (e.g., targeted at the intended beneficiaries) and, if not, whether appropriate mechanisms and/or incentives can be put in place to ensure such efficient delivery. Countries should begin by assessing in a frank manner their administrative capacity at both the national and subnational level to deliver well-targeted, essential public services in support of poverty reduction. In this regard, policymakers should consider the extent to which both technical assistance and the private sector can play a role in improving the delivery of these services.

In the context of medium-term budget planning, policymakers should consider the scope for reallocating existing government spending into priority areas<sup>22</sup> and away from nonproductive spending, including areas where a rationale for public intervention does not exist. Operation and maintenance expenditure tied to capital spending should also be reviewed with a critical eye. The quality of public expenditure could be assessed in the context of a public expenditure review with the assistance of multilateral and/or bilateral donors. Policymakers could then assess the new poverty reduction projects and activities that have been identified in the context of the

<sup>&</sup>lt;sup>22</sup> "Priority areas" are defined as those activities identified as crucial for poverty reduction.

poverty reduction strategy and integrate them into the preliminary spending program. In so doing, they should attempt to rank the poverty programs in order of relative importance in line with the country's social and economic priorities, the market failure/redistribution criteria identified above, and the country's absorptive capacity in the light of existing institutional and administrative constraints. If spending cuts are deemed necessary in the context of the integrated poverty reduction/macroeconomic framework, policymakers should refer back to the ranking of the spending program based on the relative importance and priority assigned to each activity.

A key aspect of any poverty reduction strategy will be an assessment of the *impact of the present tax and nontax system on the poor*. An important medium-term objective for many developing countries will be to raise domestic revenue levels with a view to providing additional revenue in support of their poverty reduction strategies.<sup>23</sup> The existing revenue base should be reviewed relative to its capacity to provide for the poverty spending requirements from nonbank domestic financing. Revenues should be raised in as economically neutral a manner as possible, while taking into consideration equity concerns and administrative capacities (see Box 4).

In a developing country, taking account of allocational effects means that the tax system in particular should not attempt to affect savings and investment—experience indicates that aggregate savings and investment tend to be insensitive to taxes, with the result that the tax system typically only affects the allocation of those aggregates across alternative forms. As regards equity, the tax system should be assessed with respect to its direct and indirect impact on the poor. It is difficult to have a tax system that is both efficient and progressive, particularly in those countries without a well-developed tax administration. Therefore, governments should seek to determine a distribution of tax burdens seen as broadly fair rather than use the tax system to achieve a drastic income redistribution.

Tax policy should aim at moving toward a system of easily administered taxes with broad bases and moderate marginal rates. To the extent that some revenue provisions may be regressive, they should be offset through the expenditure system (e.g., transitory, well-targeted food subsidies could offset the impact of a broad-based consumption tax and cushion the adverse impact of adjustment policies on the poor). Finally, where revenue systems are being administered by a civil service that is highly constrained in terms of human resources, technical support, and funding, countries should rely heavily on final withholding, and keep to the absolute minimum any exemptions, special provisions, or multiple rates.

<sup>&</sup>lt;sup>23</sup> For a discussion of tax policy and developing countries, see Tanzi and Zee (2000).

## Box 4. Tax Policy

The best tax systems typically include most or all of the following elements:

- A broad-based consumption tax, such as a VAT, preferably with a single rate, minimal exemptions and a threshold to exclude smaller enterprises from taxation. The VAT generally should extend through the retail sector, and should apply equally to domestic production and imported goods and services. The VAT should cover agricultural products and inputs, subject to the threshold, which will exclude small farmers.
- *Excise taxes* should apply to petroleum products, alcohol and tobacco, should be collected at the point of production or import, and should apply equally to domestic production and imports.
- *Taxes on international trade* should play a minimal role. Import tariffs should have a low average rate and a limited dispersion of rates, to reduce arbitrary and excessive rates of protection. Exemptions should be kept at a minimum and nontariff barriers should be avoided altogether. Exporters should have duties rebated on imported inputs used for producing exports and export duties should generally be avoided.
- *The personal income tax* should be characterized by only a few brackets and a moderate top marginal rate, by limited personal exemptions and deductions, by a standard exemption that excludes persons with low incomes, and by extensive use of final withholding.
- The corporate income tax should be levied at one moderate rate. Depreciation allowances should be uniform across sectors, and there should be minimal use of tax incentives other than permitting net operating losses to be carried forward for some reasonable period of time.

The use of a simplified regime for small businesses and the informal sector may complement these major taxes. Real property taxes may also be used if they can be administered appropriately, though this may be difficult in developing countries.

The scope for domestic budgetary financing will depend on a number of factors, including the sustainable rate of monetary growth, the credit requirements of the private sector, the relative productivity of public investment, and the desired target for net international reserves. Sacrificing low inflation (through faster monetary growth) to finance additional expenditure is generally not an effective means to reduce poverty because the poor are most vulnerable to price increases. At the same time, since private sector development stands at the center of any poverty reduction strategy, governments need to take into account the extent to which public sector borrowing "crowds-out" the private sector's access to credit, thereby undermining the country's growth and inflation objectives. At times, public sector borrowing can also "crowd-in" private sector investment by putting in place critical infrastructure necessary for private enterprise to flourish. Given that at any point in time there is a finite amount of credit available in an economy, policymakers must therefore assess the relative productivity of public investment versus private

investment and determine the amount of domestic budgetary financing that would be consistent with the need to maintain low inflation and support sustainable economic growth.

The amount and type of available external resources to finance the budget will vary depending on the particular circumstances facing the country. Countries that have access to external grants need to consider what amount is available and sustainable under the present circumstances. The same is true in the case of external debt, but policymakers also need to determine whether the terms on such borrowing are appropriate and whether the added debt burden is sustainable. To the extent that a country is benefiting from, or may benefit from, external debt relief under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative, net resource flows—flows that are predictable over the medium term—will be freed up to finance poverty-related budgetary expenditure. Domestic debt reduction could also represent a viable use of additional concessional foreign assistance, since it would both free up government resources to be directed at priority poverty expenditure, as well as free up additional domestic credit for use by the private sector.

There may be a limit to the amount of additional external financing that a country would deem to be appropriate, however. For example, there may be absorptive capacity constraints that could drive up domestic wages and prices, as well as appreciate the exchange rate and render the country's exports less competitive, thereby threatening both stability and growth. The extent of such pressures will depend on how much of the additional aid is spent on imports versus domestic nontraded goods and services. There may also be uncertainty regarding aid flows, especially over the medium term, as well as considerations regarding long-term dependency on external official aid. In the absence of medium-term commitments of aid, policymakers may therefore wish to be cautious in assuming what levels of assistance would be forthcoming in the future.

## 4.3 Monetary and Exchange Rate Policies

Monetary and exchange rate policies can affect the poor primarily through three channels: inflation, output, and the real exchange rate. As mentioned above, inflation hurts the poor because it acts as a regressive tax and curbs growth. Fluctuations in output clearly have a direct impact upon the incomes of the poor, and monetary and exchange rate policies affect these fluctuations in two ways: first, changes in the money supply can have a short-run effect on real variables such as the real interest rate,<sup>24</sup> which in turn affect output; and second, a country's chosen exchange rate regime can buffer, or amplify, exogenous shocks. Finally, the real exchange rate<sup>25</sup> can affect the poor in two ways. First, it influences a country's external competitiveness and hence its growth rate. Second, a change in the real exchange rate (through, for example, a devaluation of the nominal rate) can have a direct impact on the poor.<sup>26</sup>

<sup>&</sup>lt;sup>24</sup> The real interest rate represents the real cost of borrowing—that is, the cost in terms of goods--and is approximately equal to the nominal interest rate minus the expected rate of inflation.

<sup>&</sup>lt;sup>25</sup> The real exchange rate represents the relative price of a basket of goods in two countries. It is commonly measured by multiplying the nominal exchange rate by the ratio of consumer price indices in the two countries. If the real exchange rate appreciates, the basket of goods becomes more expensive in the home country. This can happen if either the home currency appreciates, or if the home country's prices rise relative to those of the foreign country.

<sup>&</sup>lt;sup>26</sup> For example, as indicated earlier, recent studies have shown that in some countries, the income of the poor is more associated with tradable goods and consumption with nontradable goods than the income and consumption patterns of other income groups. In these countries, this implies that a depreciation or devaluation of the domestic currency would make the country's exports more attractive and stimulate demand for tradable goods. Since the poor's incomes are tied to the production and export of tradables, this would, in turn, increase their

Given that monetary and exchange rate policies affect the poor through their impact on inflation, output, and the real exchange rate, it might seem, at first glance, that such policies should therefore be used to target all three of these variables. However, although monetary and exchange rate policies may affect the poor through all of these channels, the monetary authorities cannot necessarily control the size and nature of the resulting impact. For example, changes in the money supply may affect output and, employment in the shortrun, but they do so in a way that is at best uncertain and imperfectly understood. As a result, monetary authorities are typically unable to exploit this impact systematically. Similarly, monetary and exchange rate policies are unable to manipulate the real exchange rate beyond a short period of time. Therefore, actively using these policies to pursue a particular short-run exchange rate goal, which may be inconsistent with underlying economic fundamentals, could introduce instability.

Monetary and exchange rate policies should target those variables over which they have the most control, namely the long-run impact of inflation on the rate of growth. Broadly speaking, this can be achieved by setting one objective for monetary and exchange rate policies: the attainment and maintenance of a low and stable rate of inflation. In practice this means (1) choosing, and firmly committing to, an inflation rate target within the context of the overall poverty reduction strategy and the associated macroeconomic framework; (2) setting a target in the single digit a year range, the precise target depending on the country's history of inflation and stage of development; (3) adopting the required policies to achieve the target; and (4) employing monetary and exchange rate policies primarily to pursue, overtly or otherwise, additional or alternative objectives. Formulated and implemented in this way, monetary and exchange rate policies can form the basis for a stable macroeconomic environment.

### **Improving Inflation Performance**

In some cases, it may be desirable to target a lower rate of inflation. What policies can help meet this objective? Ultimately, this question has to be answered on a case-by-case basis. However, policymakers should consider two general policies that are essential parts of any effort to improve inflation performance: strong and sustained fiscal adjustment; and the use of a nominal anchor and other measures (e.g., inflation targeting) to enhance policy credibility.

### Fiscal Adjustment

A loose fiscal stance can put upward pressure on prices through two channels: (1) aggregate demand and (2i) financing. Such a fiscal stance increases the demand for domestic goods which, in the absence of a corresponding increase in supply, puts upward pressure on their prices. It can also increase demand for imports, putting downward pressure on the value of the domestic currency, and hence, (in a flexible exchange rate regime) upward pressure on the prices of imported goods. Further, if the fiscal stance is financed by printing money, this expands the money supply and tends to increase inflation.

In theory, if inflationary pressures from the fiscal stance are being transmitted exclusively through the financing channel, then inflationary pressures could be reduced without fiscal adjustment if alternative (sustainable) sources of financing, such as external financing, are available. In practice, however, some fiscal adjustment is typically also necessary because either the amount of alternative finance is insufficient and/or the fiscal stance is also putting

income while the cost of their consumption of non-tradable would remain unchanged, will have a beneficial distributive impact on the poor, other things being equal.

upward pressure on prices through the aggregate demand channel. Indeed, evidence shows that successful disinflation episodes have typically been accompanied by sizable and sustained fiscal adjustment (Phillips, 1999). Therefore, countries that wish to target a significantly lower rate of inflation need to ensure that the corresponding fiscal adjustment is adequate.

#### **Credibility and Nominal Anchors**

Setting policy targets is important. Consistently achieving those targets is equally important. When targets under a policy are systematically missed, the policy loses *credibility*. If a policy lacks credibility, the private sector does not believe that the authorities are truly committed to their policy targets, and hence does not fully factor the authorities' targets into its inflation expectations, for instance when setting wage bargains. This can result in an *inflation bias*—that is, higher inflation outcomes brought on solely by the lack of policy credibility itself.

Credibility can sometimes be enhanced by imposing restrictions on policy (i.e., limiting the degree of discretion of the monetary authorities), or by adopting specific institutional arrangements. For example, the adoption of a fixed exchange rate regime involves a commitment to exchange domestic currency for foreign currencies at a predefined rate. This imposes an automatic discipline upon domestic monetary policy. In effect, control over monetary policy is surrendered to the central bank of the country whose currency has been chosen as the peg—typically a low inflation country—which, in turn, imparts *credibility* to the domestic policy objective of achieving low inflation.

More generally, evidence shows that inflation performance has been better in countries using a nominal anchor (Phillips, 1999). Using a nominal anchor involves specifying and committing to a predetermined path for a nominal variable—such as the exchange rate (i.e., the fixed exchange rate discussed above is a nominal anchor) or a money aggregate —that is to a certain degree under the control of the authorities.<sup>27</sup> If the variable threatens to deviate from its targeted path the authorities take corrective action.<sup>28</sup> In this way, inflation, and inflationary expectations, can be anchored.

In some countries, fixed exchange rate regimes have clearly been effective in establishing and maintaining low inflation. More generally, there is empirical evidence that inflation performance has been better in countries running fixed exchange rate regimes (see, for example, Ghosh and others, 1999). However, the choice of a fixed exchange rate has to be based on broader considerations than simply its merits as a nominal anchor. In particular, the underlying structural features of an economy need to be supportive of a fixed regime broadly speaking (for example, the degree of price rigidity, the nature of its predominant exogenous shocks, the degree of political support, etc.—these issues are discussed below). Adopting a fixed exchange regime to serve only *temporarily* as a nominal anchor can be risky. Exiting a fixed regime once inflation performance is satisfactory can be difficult. Moreover, if a country's economic conditions are not

<sup>&</sup>lt;sup>27</sup> Other nominal variables can also serve as anchors. What is essential is that the variable targeted be nominal, and not real, since real variables cannot provide an anchor for nominal prices. For example, countries which have targeted the real exchange rate have generally had worse inflation performance than other countries. See Phillips (1999).

<sup>&</sup>lt;sup>28</sup> The two most commonly used nominal anchors are a fixed exchange rate and a money aggregate (such as reserve money or broad money). Under a fixed exchange rate regime, whenever the market rate threatens to depart from the predetermined rate, the monetary authorities buy or sell foreign exchange for the domestic currency to ensure that the exchange rate remains fixed. Similarly, under a monetary anchor the monetary authorities specify a predetermined path for a monetary aggregate, and tighten or loosen the monetary stance when the aggregate threatens to depart from that path.

supportive, or political support for the policy insufficient, the peg could come under considerable pressure, which may, in the end, force a costly abandonment of the regime and undermine the original objective of stabilizing inflation.

Both types of nominal anchors restrict the use of monetary instruments.<sup>29</sup> A standard critique has been that, although the use of a nominal anchor may improve inflation performance, it comes at the cost of reducing the discretion of the authorities to respond to short-run shocks. In practice this tradeoff may not be significant, however. Even if the monetary authorities have full discretion,<sup>30</sup> as discussed above, their ability to influence short-run output movements systematically is limited. Moreover, their ability to exercise discretion is likely to be limited by the need to preserve, or enhance, policy credibility.

Inflation targeting has been adopted as the monetary regime in an increasing number of industrialized and developing countries in recent years. It is typically and preferably associated with a flexible exchange rate system. Inflation targeting sets an inflation target for the central bank, and gives the responsibility for achieving the target to the central bank. To enhance accountability, credibility, and efficiency, the central bank in an inflation targeting regime is generally required to be extremely transparent about its operations, explaining its decisions to the public, publishing, in most cases, a regular inflation report.

In the long run, however, only policies to which the authorities are fully committed can be credible. Imposing restrictions on policy when the necessary policy commitment is absent (or even when the private sector *erroneously* suspects a lack of commitment) can have disastrous results. For example, the private sector's belief that a country's authorities are not committed to defending its fixed exchange rate may lead to a speculative attack on the peg. Although devices may be used to accelerate the attainment of a policy's credibility, there is no substitute for commitment to the policy, as demonstrated through sustained adherence to a prudent macroeconomic stance.

### External Shocks and the Choice of Exchange Rate Regime

The choice of exchange rate regime—fixed or flexible—depends crucially on the nature of the economic shocks that affect the economy, as well as the structural features of the economy, which may either mitigate or amplify these shocks. Choosing a fixed exchange rate regime when these underlying features of the economy are not supportive leaves a country more exposed to the possibility of an external crisis, which can result in the ultimate abandonment of the peg. In addition, shocks to output can have a strong impact on the poor. Since different exchange rate regimes have different insulating properties vis-à-vis certain types of shocks, choosing the regime that best insulates the economy will serve to moderate fluctuations in output, and thereby best serve the poor.

For example, if the predominant source of disturbance to an economy is shocks to the terms of trade, a flexible exchange rate regime may be best because the nominal exchange rate is free to adjust in response to the shock and bring the real exchange rate to its new equilibrium (see, for example, Devarajan and Rodrik, 1992). Alternatively, if domestic monetary shocks predominate, such as shocks to the demand for money, output may be best insulated by a fixed exchange rate that allows these shocks to be absorbed by fluctuations in international reserves. Of course, one

<sup>&</sup>lt;sup>29</sup> Under a fixed exchange rate, the monetary authorities give up control of the money supply. Under a monetary anchor, the authorities cannot pursue an exchange rate target.

<sup>&</sup>lt;sup>30</sup> If there are no explicit policy targets, the monetary authorities have full discretion. This differs from the concept of independence of the monetary authorities.

of the challenges facing the policymaker is to identify which shocks are in fact predominant in a particular economy.

The structural features of the economy may also affect the impact a particular shock has on the economy, as well as the insulating properties of exchange rate regimes. For example, if an economy is characterized by a significant degree of nominal wage rigidity, wages will not fully adjust (at least in the short run) in response to small real shocks, and hence the effect of those shocks on output will be amplified. In these circumstances, even if domestic monetary shocks are important, a flexible exchange rate regime may well be preferable (in contrast to the conclusions above). Another important structural feature is the degree of an economy's openness. Typically the more open an economy is, the greater is its exposure to external shocks. This would argue generally in favor of a flexible exchange rate regime. However, if an open economy is sufficiently diversified (i.e., it trades a wide range of goods and services) and if its prices are sufficiently flexible, then a fixed exchange rate may be preferable because the volatility of flexible exchange rates may impede international trade, and thus lower external demand (although the evidence on this is mixed). In conclusion, these various pros and cons of fixed versus flexible exchange rate regimes need to be carefully assessed and weighed on a case-by-case basis—again, there is no universal "right answer."

## 4.4 Policies to Insulate the Poor gains Shocks

Given that the poor are adversely affected by macroeconomic shocks, what should governments do about it? The question can be divided into two parts: How should economic policy be designed to cushion the impact of shocks on the poor, in particular during times of crisis and/or adjustment? What specific policies can governments undertake to insulate the poor from the consequences of shocks by removing existing distortive policies?

### Social Safety Nets

Sound macroeconomic policies will help a country to reduce its exposure to macroeconomic shocks, but there is no cost-effective policy that will insure against *all* possible shocks. It is therefore crucial to have *social safety nets* in place to ensure that poor households are able to maintain minimum consumption levels and access to basic social services during periods of crisis (see Chapter 10.1 "Social Protection"). Social safety net measures are also necessary to protect the poor from shocks imposed on them during periods of economic reform and adjustment.<sup>31</sup> Safety nets include public work programs, limited food subsidies, transfers to compensate for income loss, social funds, fee waivers, and scholarships for essential services such as education and health. The specific mix of measures will depend on the particular characteristics of the poor and their vulnerability to shocks and should be well-targeted and designed in most cases to provide temporary support.

Equally important, the resources allocated to social safety nets should be protected during economic crises and/or adjustment, when fiscal tightening may be necessary. Governments should have budgetary guidelines approved by their legislatures that prioritize and protect poverty-related programs during periods of crisis and provide a clear course of action that

<sup>&</sup>lt;sup>31</sup> Reform programs should be designed with [to minimize unnecessary adverse effects on] the poor and vulnerable in mind. The mix and sequencing of reform measures should be designed to minimize the hardships brought about by the program. The appropriate mix and sequencing cannot, however, ensure that the adverse effects will be removed entirely and, hence, social safety nets are needed to mitigate possible short-run adverse effects on the poor. In some cases, it may be appropriate to delay reforms until adequate safety net measures can be put in place. See Chu and Gupta (1998).

ensures access of the poor to basic social services during periods of austerity (see Lustig, forthcoming). As will be discussed below, countercyclical fiscal policies can also ensure the availability of funds for financing safety nets during crises.

Another important factor to consider is that safety nets should already be operating before economies get hit by shocks so that they can be effective in times of distress (for a more detailed account, see World Bank, 2000). However, if a shock occurs before appropriate safety nets have been developed, then "second-best" social protection policies may be necessary. For instance, food subsidies have been found to be inefficient and often benefiting the non-poor, and most reform programs call for their reduction or even elimination. However, after a severe shock such as the 1997-'98 East Asian financial crisis, when countries like Indonesia lacked comprehensive safety nets, existing food subsidies were probably the only means of preventing widespread malnutrition and starvation. In the context of a country's reform process, however, these subsidies should be replaced with better targeted and less distorting transfers to the poor.

#### **Removing Market Distortions and Distortive Policies**

In addition to pursuing favorable economic policies and putting in place appropriate social safety nets, there are specific structural reforms that governments can undertake to insulate the poor from the adverse consequences of shocks. Most of these have to do with addressing the mechanisms through which the impact of shocks on the poor are transmitted (see Box 5).

To the extent that asset market distortions prevent the poor from saving and insulating themselves against shocks, policies to remove these distortions can be valuable.<sup>32</sup> For instance, foreign exchange controls can force the poor to hold their assets in domestic currency, whose value typically declines with adverse shocks. Relaxing these controls in a well-managed fashion could give the poor access to safer assets, such as foreign currency, that could protect them from devaluations, a typical outcome following negative shocks.<sup>33</sup> Similarly, severe financial repression, such as controlled interest rates, can impede the poor's ability to save.<sup>34</sup> If properly managed, financial liberalization policies can therefore have the additional benefit of increasing self-insurance for the poor.

Policies that increase borrower information and relax barriers to access to credit markets can help the poor reduce consumption volatility, since credit availability makes them less dependent on current income. Also, to the extent that collateralized credit allocation amplifies the effects of negative shocks by reducing small- and medium-sized firms' access to credit when asset prices fall, policies promoting better financial-sector credit allocation mechanisms based on project profitability and borrower information could reduce the incidence of this particular transmission channel and its indirect effects on the poor (i.e., lower employment opportunities).<sup>35</sup>

<sup>&</sup>lt;sup>32</sup> Contrary to what some may believe, the poor do save, to smooth consumption over time, as well as to guard against adverse shocks. For a recent analysis, see Deaton and Paxson (2000).

<sup>&</sup>lt;sup>33</sup> Also, capital controls that drive a wedge between domestic and world real interest rates make it possible to extract an inflation tax, which especially hurts the poor.

<sup>&</sup>lt;sup>34</sup> For many countries, domestic asset holdings of the poor are mainly composed of currency, so it would seem that this channel is not relevant. But this may just reflectithat low controlled interest rates provide a disincentive to save in bank deposits. Removing financial distortions could shift the allocation of domestic assets in favor of deposits and, to the extent that market interest rates account for expected inflation, insulate the poor's savings from inflation.

<sup>&</sup>lt;sup>35</sup> Collateralization may be initially the only way for small firms to gain access to credit markets, but its amplification effects should not be understated. Instead, policies that reduce informational problems (i.e., the reason for collateralization) should be implemented.

Finally, and most important, governments can do a lot to reduce the pro-cyclical nature of their fiscal policies by saving rather than spending windfalls following positive shocks and ideally using those savings as a buffer for expenditures against negative shocks. A cautious approach would be for the government to "treat every favorable shock as temporary and every adverse one as permanent", although judgment would also depend on, among other things, the availability of financing (Little, Cooper, and Rajapatirana, 1993). However, even this rule of thumb may not be enough. Governments need to find ways of "tying their hands" to resist the pressure to spend windfall revenues(Devarajan, 1999). For example, when the source of revenue is publicly owned, such as oil or other natural resource, it may be appropriate to save the windfall revenues abroad, with strict rules on how much of it can be repatriated. Countries such as Colombia, Chile, and Botswana have tried variants of this strategy, with benefits not just for overall macroeconomic management, but also for protecting the poor during adverse shocks, since saved funds during good times can be applied to financing of safety nets during crisis.

## Box 5; How Shocks Harm the Poor: Transmission Channels

Credit markets, as well as safe asset markets for appropriate saving, are major instruments for coping with income volatility. Distortions in these markets curtail the ability of the poor to follow consumption smoothing patterns. Government behavior in response to shocks is also a major determinant of the effects of these shocks on the poor. Financial sector behavior can also amplify the effects of shocks.

- Distortions in asset markets: To self-insure against shocks, agents need to be able to save in assets whose value does not fall when they are needed to compensate for a fall in income. Such saving instruments are typically composed of foreign assets, domestic financial assets, and domestic real assets. To the extent that governments impose controls on these asset markets, it impedes the ability of the poor to use these savings instruments, and channels their savings into less effective instruments. <sup>36</sup>
- Access to and structure of credit markets: Access to credit markets is extremely limited for the poor to buffer the effects of shocks, in part as a consequence of inadequate borrower information available to credit institutions. The structure of credit markets can also affect the poor indirectly: Firms may find that access to credit is typically collateralized. Therefore, shocks that drastically reduce the value of collateral will also reduce firms' access to credit, amplifying the effect of shocks when firms become credit constrained. Severe downturns may dramatically cut employment of the poor and, hence, their welfare, especially since the poor are usually employed by small firms that depend on collateralized credit.
- Procyclical fiscal policy: During booms, some governments have decreased export commodity taxes, reduced revenue collection effort, or heavily increased expenditures, amplifying the effects of positive shocks. These policies can make adjustment more severe during busts, since the resulting expenditure cuts following a negative shock have sometimes fallen on social programs and transfers to the poor—just when they are needed the most. Examples of these policies can be traced back to the experience of Côte d'Ivoire in 1976-79, and Colombia in 1975-1980. It has also been argued that synchronizing tax policies with shocks tends to obscure the information content of prices on which agents make their saving decisions, leading in many cases to lower saving rates than needed to buffer future adverse shocks (Collier and Gunning, 1999).
- *Financial sector vulnerability and transmission to other sectors.* Shocks can also be amplified through the banking system. For example, a negative terms of trade shock can adversely affect bank liquidity by reducing demand for domestic deposits, forcing banks to curtail credit roll-over, spreading the shock throughout the economy (IADB (1995) and Hausmann, 1999). Similarly, if a sudden stop in capital flows renders many nontradable goods producers bankrupt because of big swings in relative prices, this may in turn create financial turmoil as loans become nonperforming, spreading the effect of the shock across the financial system (Calvo, 1998). Bankruptcies in the non-tradable sector may translate into unemployment of the urban poor.

<sup>&</sup>lt;sup>36</sup> For example, in Ethiopia, livestock prices (often the poor's only asset) fall during a drought because all farmers are selling their cattle to compensate for the bad harvest.

#### Draft for Comments. April, 2001.

Table 1. Real GDP Growth(annual percentage change)

	1994	1995	1996	1997	1998	1999	1994-99 Average
High-growth countries							
Mozambique	7.5	4.3	7.1	11.3	12.0	9.0	8.5
Sudan	4.0	25.2	4.0	6.7	5.0	4.0	8.2
Vietnam	8.8	9.5	9.3	8.1	5.8	4.2	7.6
Uganda	6.4	11.5	9.1	4.7	5.6	7.8	7.5
Bhutan India	8.1	6.8	5.5	7.8	7.1	7.0	7.1
Togo	7.9 16.8	8.0 6.8	7.3 9.7	5.0 4.3	6.1 -1.0	6.2 3.0	6.8 6.6
Myanmar	7.5	6.9	6.4	5.7	5.0		6.3
Lao PDR	8.2	7.0	6.8	7.0	4.0	4.0	6.2
Angola	1.4	11.3	11.7	6.6	5.0	-0.1	6.0
Eritrea	9.8	2.9	6.8	7.9	3.9	3.0	5.7
Armenia	5.4	6.9	5.9	3.3	7.2	5.5	5.7
Ethiopia	3.5	6.1	10.9	5.9	-1.0	7.0	5.4
Côte d'Ivoire	2.0	7.0	6.9	5.9	4.5	4.3	5.1
Benin	4.4	4.6	5.5	5.7	4.5	5.0	5.0
Bangladesh	3.8	5.5	5.0	5.3	5.1	4.3	4.8
Senegal Rwanda	2.9 -50.2	4.7 34.4	5.2 15.8	5.0 12.8	5.7 9.5	5.1 5.9	4.8
Nicaragua	-50.2	54.4 4.3	4.7	5.1	9.5 4.0	5.9 6.3	4.6
Nicaragua Nepal	5.5 8.2	4.3 3.5	4.7 5.3	5.0	4.0 2.3	6.3 3.4	4.0
Burkina Faso	8.2 1.2	4.0	5.5 6.0	3.0 4.7	6.2	5.2	4.0
Malawi	-10.2	15.4	9.0	4.9	3.1	4.5	4.5
Chad	10.2	1.0	3.7	4.1	8.1	-1.0	4.4
Guinea	4.0	4.4	4.6	4.8	4.4	3.7	4.3
Mali	0.9	6.2	3.2	6.8	3.3	5.3	4.3
Mauritania	4.6	4.6	5.5	3.2	3.2	4.3	4.2
Ghana	3.3	4.0	4.6	4.2	4.7	4.4	4.2
Cambodia	4.0	7.6	7.0	1.0	1.0	4.5	4.2
Niger	4.0	2.6	3.4	3.3	8.3	2.3	4.0
Lesotho	3.4	4.5	10.0	8.0	-5.0	2.5	3.9
Zimbabwe	6.8	-0.5	8.7	3.7	2.5	1.2	3.7
Pakistan	3.9	5.1	5.0	1.2	3.3	3.9	3.7
Yemen, Rep. Of	-3.6	7.9	2.9	8.1	4.8	2.2	3.7
Central African Republic	4.9	7.2	-4.0	5.2	4.7	3.4	3.6
Mongolia Cameroon	2.3 -2.5	6.3 3.3	2.4 5.0	4.0 5.1	3.5 5.0	2.7 4.4	3.5 3.4
Tanzania	-2.5	2.6	4.3	4.0	3.5	4.4	3.4
Georgia	-11.4	2.4	10.5	11.0	2.9	2.0	2.9
Gambia, The	0.2	0.9	2.2	4.9	4.7	4.2	2.9
Kenya	2.6	4.4	4.1	2.1	1.8	1.6	2.8
Madagascar	0.0	1.7	2.1	3.7	3.9	4.7	2.7
Indonesia	7.5	8.2	7.8	4.7	-13.2	0.2	2.5
Nigeria	0.1	2.5	4.3	2.7	1.8	1.0	2.1
Solomon Islands	5.2	7.0	3.5	-0.5	-7.0	4.0	2.0
São Tomé and Príncipe	2.2	2.0	1.5	1.0	2.5	2.5	2.0
Low-growth countries							
Congo, Rep. of	-5.5	4.0	6.3	-2.4	3.6	-0.7	0.9
Haiti	-8.3	4.4	2.7	1.4	3.1		0.7
Zambia	-3.4	-2.3	6.5	3.4	-2.0	1.3	0.6
Uzbekistan	-5.2	-0.9	1.7	2.5	4.4		0.5
Guinea-Bissau	3.2	4.4	4.6	5.4	-28.1	8.7	-0.3
Kyrgyz Republic	-20.1	-5.4	7.1	9.9	1.8		-1.3
Congo, Dem. Rep. of	-3.9	0.7	-0.9	-5.7	3.0		-1.4
Comoros	-5.3	-3.9	-0.4	0.0	0.0	1.0	-1.4
Azerbaijan Purupdi	-24.3	-11.8	1.3	5.8	10.0	10.0	-1.5
Burundi Siama Laona	-3.9	-7.3	-8.4	0.4	4.8	-1.0	-2.6
Sierra Leone	3.5	-26.6	28.7	-17.6	-0.8	-8.1	-3.5
Tajikistan Turkmenistan	-19.0 -17.3	-11.8 -7.2	-4.4 -6.7	2.3 -11.3	8.2 5.0		-4.9 -7.5
Ukraine	-17.3 -22.9	-12.2	-0.7	-11.5	-1.7	-2.0	-7.5
Moldova	-31.2	-12.2	-10.0	-3.0	-1.7 -8.6	-5.0	-8.8
Afghanistan							
Korea, Dem. People's Rep. of							
Liberia							
Somalia							

Source: Country authorities.

Table 2. GDP Deflator (annual percentage change)

	1994	1995	1996	1997	1998	1999	1994-99 Average
Low-inflation countries							
Gambia, The	3.8	4.0	2.9	5.0	1.3	5.2	3.7
Guinea	2.9	5.5	2.8	2.4	5.0	4.0	3.8
Bangladesh	3.4	6.7	3.8	1.0	5.3	8.9	4.9
Comoros	9.4	8.0	2.3	3.5	3.0	3.0	4.9
Ethiopia	2.6	12.7	1.0	3.2	9.7	1.9	5.2
Mauritania	6.4	4.4	4.6	5.5	9.9	1.9	5.5
Cameroon	11.0	17.0	5.4	2.7	1.1	-1.2	6.0
Uganda	6.8	9.4	4.6	3.9	10.7	3.0	6.4
Central African Republic	22.8	10.3	1.8	0.8	1.7	1.3	6.5
Senegal	27.8 7.4	5.9 6.3	0.9 7.8	2.3 7.3	2.2 3.3	1.6 9.2	6.8 6.9
Nepal India	9.7	8.6	7.8 7.9	5.6	5.5 8.9	9.2 5.5	7.7
Lesotho	7.5	8.9	8.6	8.0	8.4	7.2	8.1
Burkina Faso	27.8	9.8	4.2	2.2	3.1	1.6	8.1
Niger	32.7	5.4	4.7	3.1	3.0	3.0	8.7
Eritrea	22.2	11.3	2.9	2.7	2.7	12.6	9.1
Cambodia	8.9	9.1	7.1	9.2	17.0	5.7	9.5
Bhutan	9.3	9.8	11.4	14.7	5.9	7.8	9.8
Mali	27.9	18.4	5.4	1.0	4.0	2.2	9.8
Solomon Islands	11.5	7.1	12.1	8.1	12.0		10.2
Pakistan	12.9	13.8	8.4	13.3	7.8	5.5	10.3
Côte d'Ivoire	41.7	9.6	2.7	3.2	3.1	2.7	10.5
Nicaragua	7.8	10.9	11.6	9.2	12.9	13.9	11.1
Togo	33.8	12.2	5.1	11.4	2.7	1.1	11.1
Vietnam	14.5	19.5	6.1	12.1	8.9	5.8	11.2
Benin	33.5	15.4	6.7	4.7	4.2	3.5	11.3
Chad	43.4	8.6	11.6	2.7	4.1	-2.1	11.4
Congo, Rep. of	36.8	22.6	-3.0	7.5	-19.1	24.1	11.5
Burundi	6.7	15.3	19.0	23.3	12.1	0.6	12.8
Kenya	35.2	11.2	8.7	15.5	10.6	5.0	14.4
Rwanda	18.0	51.3	10.5	15.6	2.6	-2.4	15.9
High-inflation countries							
Tanzania	28.2	28.9	22.3	18.5	19.3	11.6	21.5
Indonesia	7.8	9.9	8.7	12.6	73.1	17.2	21.6
Madagascar	41.6	45.2	17.8	7.3	8.4	9.8	21.7
Haiti	35.6	31.0	21.2	16.3	12.7		23.4
Nigeria	27.8	56.0	36.9	1.4	21.6	11.9	25.9
Sierra Leone	20.1	63.7	3.0	16.8	27.0	25.0	25.9
Myanmar	22.1	19.4	23.0	32.9	34.0		26.3
Yemen, Rep. of	33.2	54.8	39.6	12.9	-9.3	26.8	26.3
Ghana Guinea-Bissau	30.1 23.2	43.2	39.8 48.6	19.5	17.0	11.5	26.9
	23.2 59.4	44.7 52.0	48.6 40.9	35.5 11.1	7.6 3.8	3.1 5.2	27.1 28.7
Mozambique Mongolia	59.4 66.6	42.5	33.5	24.4	5.8 11.5	2.8	28.7
Zambia	56.6	36.9	24.3	24.4	23.2	2.8	30.2
Malawi	26.2	90.3	40.4	13.5	23.2	46.4	40.0
Lao PDR	7.7	19.7	13.9	17.7	84.0	125.4	44.7
Kyrgyz Republic	180.9	42.0	35.3	19.3	8.5		57.2
São Tomé and Príncipe	73.5	74.5	50.8	100.2	37.1	16.0	58.7
Sudan	80.8	41.1	107.4	64.9	28.9		64.6
Moldova	278.1	38.7	30.5	12.9	8.0	37.3	67.6
Tajikistan	236.2	285.0	397.9	100.2	49.9		213.8
Ukraine	953.5	415.5	66.2	18.1	13.2		293.3
Azerbaijan	1,428.6	545.7	26.4	9.2	-8.3	4.8	334.4
Uzbekistan	1,238.6	370.9	81.6	70.5	33.2		359.0
Turkmenistan	1,022.1	705.7	1,174.3	61.6	13.5		595.4
Armenia	4,107.3	161.2	19.6	17.7	11.2	1.1	719.7
Georgia	9,349.2	162.7	40.2	7.0	3.4	15.0	1,596.3
Angola	2,170.7	1,886.1	5,421.8	93.6	60.9	412.6	1,674.3
Congo, Dem. Rep. of	26,762.4	466.4	613.1	187.3	15.0		5,608.8
Afghanistan Karaa Dam Baanla's Ban of							
Korea, Dem. People's Rep. of							
Liberia							
Somalia							

Source: Country authorities.

## Draft for Comments. April, 2001.

Table 3. Primary Surplus 1/ (as a percentage of GDP)

	1004	1005	1007	1007	1009	1994-98
	1994	1995	1996	1997	1998	Average
Surplus/low deficit countries						
Mauritania	2.4	6.5	11.4	8.2	8.4	7.
Kenva	8.3	7.3	6.2	6.2	5.8	6.
Lesotho	8.1	6.3	6.5	2.1	-4.5	3.
Congo, Rep.	-1.1	5.9	7.0	4.4	2.2	3.
Cameroon	-2.2	3.2	5.0	5.4	4.1	3.
Zambia	5.2	3.8	2.1	3.5	0.1	3.
Côte d'Ivoire São Tomé and Príncipe	1.4	3.2	3.8	3.0	2.6	2.
Nigeria	0.5	8.1	-0.3 7.5	11.3 3.3	-2.8 -6.9	2.
Senegal	1.6	2.7	2.1	2.2	-0.9	2.
Fanzania	0.6	-0.5	1.2	4.7	2.2	1.
Zimbabwe	0.0	-0.7	0.7	-0.4	8.0	1.
Benin	0.8	-0.5	2.1	2.0	3.3	1.
Bhutan	-0.5	0.1	2.0	-2.1	3.0	0.
Myanmar	0.0	0.0	0.0	0.0	0.0	0.
ndonesia	1.1	1.4	1.1	-0.5	-3.3	0.
Vietnam		-0.6	-0.2	-0.8	-1.6	-0.
Gambia. The	2.6	-2.9	-5.3	-1.4	2.9	-0.
Madagascar	-3.0	-1.1	-0.2	0.7	-1.8	-1.
Uganda	-2.3	-1.9	-0.9	-0.9	0.4	-1.
Niger	-4.5	-1.5	1.4	-1.1	-0.4	-1.
Mali	-2.0	-1.7	0.2	-1.1	-1.6	-1.
Guinea	-2.0	-1.3	-1.7	-1.3	-1.8	-1.
Burkina Faso	-1.8	-2.2	0.3	-2.3	-2.1	-1.
Mozambique	-4.2	-1.6	-1.5	-1.3	-1.4	-2.
Ethiopia	-4.3	-1.4	-3.2	0.7	-2.1	-2.
Malawi	-16.2	1.0	2.3	-5.2	7.0	-2.
Central African Republic	-7.6	-2.8	-1.5	-0.9	0.6	-2.
Ghana	-4.4	-2.1	-4.4	-2.7	0.1	-2.1
Rwanda Togo	-7.0 -6.2	0.0 -3.0	-4.1 -3.0	-1.3 0.2	-1.9 -3.0	-2.9 -3.9
1020	-0.2	-5.0	-5.0	0.2	-5.0	-0.
High deficit countries						
Chad	-3.5	-3.4	-4.0	-2.9	-4.1	-3.
Solomon Islands	-5.5	-5.3	-4.4	-4.9	0.1	-4.
Burundi	-2.8	-3.1	-8.3	-3.4	-2.7	-4.
Bangladesh	-4.6	-5.3	-4.4	-4.3	-4.2	-4.
Haiti	-1.8	-8.3	-7.6	-3.1	-4.0	-5.
Sierra Leone	-4.5	-7.8	-4.4	-5.0	-5.1	-5.
Pakistan	-6.0	-5.9	-7.0	-6.4	-5.5	-6.
Lao PDR		-4.5	-5.9	-8.1	-7.2	-6.
Nepal	-7.0	-6.6	-7.5	-7.3	-7.8	-7.
Angola	-8.1	-16.5	1.1			-7.
ndia	-8.8	-7.9	-7.8	-8.5	-9.4	-8. -9.
Vicaragua Mongolia	-11.4 -22.8	-11.0 -4.1	-10.2 -8.2	-7.6 -8.6	-5.0 -11.3	-11.
Eritrea	-22.8	-4.1	-0.2	-8.0	-27.3	-27.
Afghanistan						
Cambodia						
Comoros						
Congo, Dem. Rep. of						
Guinea-Bissau						
Korea, Dem. People's Rep. of						
Liberia						
Somalia						
Sudan						

Source: Data provided by the authorities.

1/ Negative sign indicates a primary deficit.

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