

# Enterprise Performance and Macroeconomic Control

WILLEM BUTTER, RICARDO LAGO and NICHOLAS STERN

## 1. Introduction

The main theme of the paper is that poor macroeconomic control is an important cause of poor enterprise performance. It is the government that is responsible for macroeconomic control, a pure (intermediate) public good – non-rival and non-excludable *par excellence*. Thus, a first priority for a government interested in promoting the welfare of its citizens must be macroeconomic control. We shall argue our case using both aggregate and microeconomic empirical evidence, as well as basic economic theory.

On the macroeconomic side, the focus of the paper is both on the implications of loss of control and on stabilisation policy necessitated by prior loss of control or intended to forestall it. All IFIs (international financial institutions) have an interest in these issues and several of them, such as the IMF and the World Bank, play an important role in macroeconomic adjustment programmes. As regards microeconomic decisions, processes and institutions, the focus is on project performance. Projects are the core of most IFI activity.

There are two distinct kinds of macroeconomic instability that can have a major impact on microeconomic performance. The first concerns global systemic failure and the ensuing collapse of effective demand and economic activity. The Great Depression of the Thirties is the prime example of such a catastrophic development. Fortu-

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□ University of Cambridge, Faculty of Economics and Politics, Cambridge (Great Britain).

European Bank for Reconstruction and Development, London (Great Britain).

European Bank for Reconstruction and Development, London (Great Britain).

nately, such systemic co-ordination failure is as rare as it is serious. In our view, both globally – through institutions like the IMF, the BIS, the G-7 or even the OECD – and at the regional and national levels – through multilateral agencies, national governments and central banks – the knowledge and the means are, in principle, present to cope with this contingency. We do not take this issue further here.

The second kind of macroeconomic instability concerns unsustainable fiscal and/or financial policies. It often manifests itself through outright inflationary financing or else a rising public debt-GDP ratio without a commensurate increase in the government's capacity for generating sufficient future primary (non-interest) budget surpluses. High and rising inflation, occasionally even exploding into hyperinflation, results when domestic and international markets are unwilling to absorb monetary or non-monetary debt in quantities sufficient to finance the government's budget deficit in a non-inflationary manner. Moreover, as the Mexican crisis of 1994-95 shows, high and rising inflation can also ultimately arise from unsustainable externally financed private sector spending, eventually leading to a foreign exchange crisis and to private losses subsequently underwritten, in part, by the public sector.

The amount of real resources that can be appropriated through the "inflation tax" is limited and will ultimately decrease when the rate of inflation becomes sufficiently high. This "seigniorage Laffer curve" reflects both direct currency substitution (away from the local currency and towards hard currencies) and a shift into domestic non-monetary assets that are better hedges against inflation. The ability to avoid the inflation tax is very unequally distributed: the inflation tax, in addition to being inefficient, strikes strongly at the poor and the weak. Very high inflation may furthermore increase the primary deficit – i.e. the fiscal deficit excluding interest payments – through the so-called Tanzi effect, resulting from delays in settling tax obligations when these are not properly indexed to inflation.

When the government or the country at large are (*de facto*) rationed out of the domestic and international financial markets and when the limits of the inflation tax have been reached, a crunch is unavoidable. Public and private spending will have to be slashed, revenues will have to be increased, or there will have to be default on outstanding debt. Such corrections are both unavoidable and painful. The external manifestations of retrenchment are import compression and the shifting of exportable production towards exports rather than

towards domestic absorption. The necessary reduction in domestic absorption typically leads, at least in the short run, to a contraction of production, compounding the pain.

Two points must be made about the costs associated with macroeconomic tightening. First, it makes no sense to criticise governments, or those IFIs that may advise them, for taking corrective action. The necessity to adjust arises from unsustainable policies. Second, there always is a non-trivial domain of choice as to the composition of the policy correction. There is choice about which spending categories to cut, about which taxes to raise, and about which category of debt to default on or reschedule. There may also be flexibility on timing although this will depend on the co-operation of external agents and the perceptions of markets.

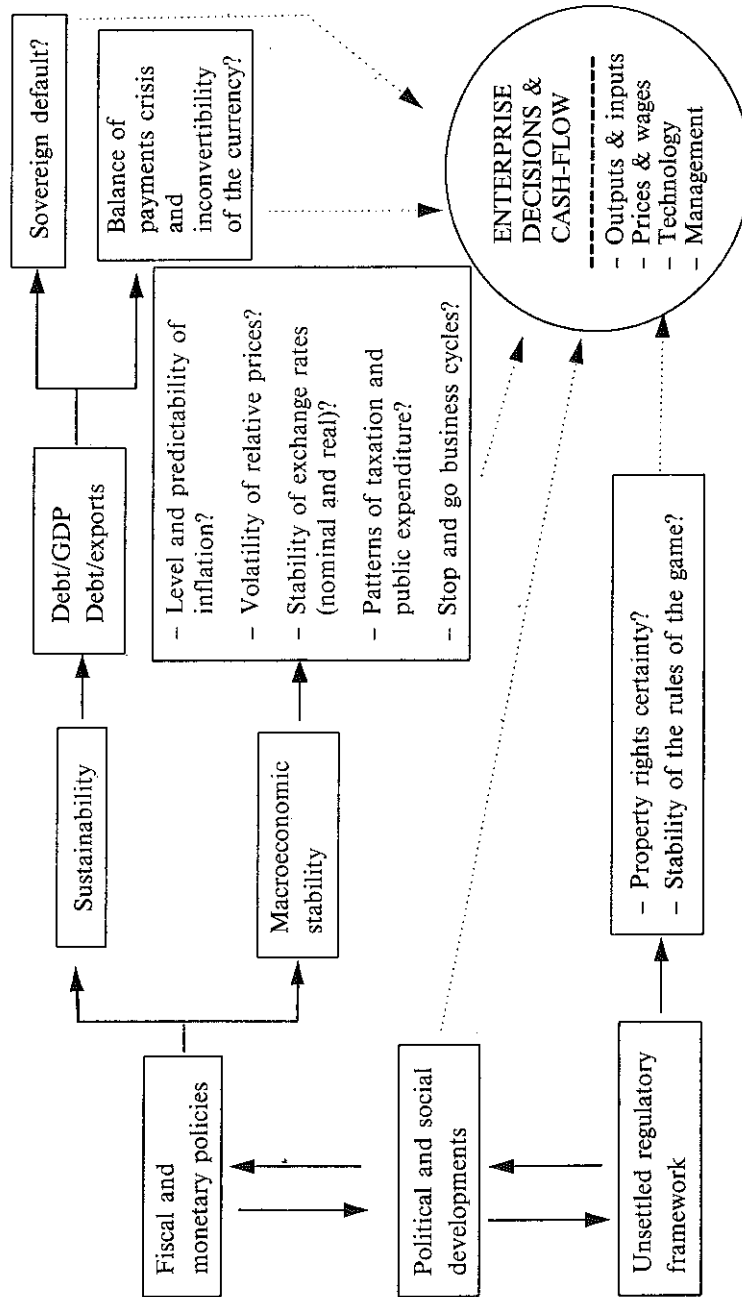
Let us now turn to enterprises. Sound performance of enterprises is key to achieving efficient resource allocation and fostering growth. Technology and inputs, and the skills of labour and management, are clearly essential to enterprise performance. However, as illustrated in Chart 1, the macroeconomic environment surrounding the enterprise is no less relevant. Comparable projects and enterprises – in terms of technology, quality of inputs and output and market size – perform very differently in countries with differing macroeconomic and regulatory frameworks. If these frameworks provide stable signals and low transaction costs the quality of enterprise decisions, and thus the odds on success, improve. As in Coase (1937), the firm can be viewed as a "nexus of contracts". From this perspective, any factors influencing the costs of or the performance under these contracts have an effect on enterprise results. In this context the macroeconomic framework is a factor of fundamental importance.

The paper is organised as follows. In Section 2 we review the empirical evidence on the relationship between macroeconomic stability and the performance of the real economy both at the aggregate and the project levels. In Section 3 we present a cursory review of the theoretical links between macroeconomic stability and enterprise performance. In Section 4 we reflect on the importance of implementing microeconomic and structural reforms alongside the establishment (or preservation) of macroeconomic stability. Finally, we make some suggestions for policy makers regarding the priorities in the development of the institutions required to achieve and preserve a stable macroeconomic framework.

CHART 1

THE ENVIRONMENT SURROUNDING ENTERPRISE DECISIONS AND CASH-FLOWS

Chart 1  
THE ENVIRONMENT SURROUNDING ENTERPRISE DECISIONS AND CASH-FLOWS



2. Macroeconomic stability and the performance of the real economy: the evidence

2.1. Aggregate evidence

Over the last three decades low or moderate inflation and reduced macroeconomic distortions (such as over-valued official exchange rates) have been characteristic of fast-growing economies, as can be seen in Table 1. Conversely, economies with a poorer growth record have also experienced higher inflation and stronger distortions. Nevertheless, the time-series and cross-sectional evidence on the relationship between macroeconomic stability, on the one hand, and microeconomic efficiency and growth, on the other, should be interpreted with care. Both macroeconomic and microeconomic performance are endogenous. There may be no straightforward causal interpretation of the correlation between the two or the incremental predictive content of the one with respect to the other. The possibility of two-way causation – and even of common third factors causing both – is especially relevant at low and moderate rates of inflation. When annual inflation begins to run in the hundreds or when monthly inflation rates get into double digits, there can be little doubt, however, that macroeconomic malfeasance depresses growth and lowers allocative efficiency.

Referring to the experience of a group of very high inflation, middle income countries, Bruno (1993b, p. 135) states:

“The fact that growth is systematically higher after a sharp stabilisation is consistent with the finding that very high rates of inflation are definitely

TABLE 1  
SOME ECONOMIC CHARACTERISTICS OF FAST AND SLOW GROWERS<sup>a</sup> (1960-1989)

	Fast growers (%)	Slow growers (%)	t-statistic
Inflation rate	12	31	-1.7
Black market exchange rate premium	14	57	-3.8
Investment/GDP	23	17	5.2
Export/GDP	32	23	2.3

<sup>a</sup> Sample of 109 countries; fast growers are the 56 countries whose growth rate of per-capita income exceeds the mean; slow growers are the remaining 53 countries.

Sources: Levine and Renelt (1992, Table 2) and Fisher (1991, p. 339).

harmful to growth. Stabilisation by itself, even before sustainable resumption of investment and long-run growth, improves resource allocation and total factor productivity".

On the other hand, at lower rates of inflation (say 15% a year or lower) there is less evidence of any clear pattern of covariation between inflation and growth or between inflation and other observable indices of efficiency, such as total factor productivity. Much of the relevant evidence is surveyed, discussed and extended in Fischer (1993). These conclusions are confirmed in a recent paper by Robert Barro (1995a), which finds that the empirical evidence from more than 100 countries over a period of 30 years suggests that the adverse effect of inflation on growth is clear only when inflation is high: the estimated coefficient of growth on inflation is statistically significant (albeit small)<sup>1</sup> when inflation averages more than 15% per year. The estimated coefficient of growth on inflation is not statistically significant when inflation averages less than 15% per annum.<sup>2</sup> Thus, in speaking of the damaging effects of inflation on performance, one must be clear that it is the high rates of inflation that are at issue.

<sup>1</sup> A 10 percentage points higher average annual inflation rate between 1960 and 1990 was associated with a 0.2 to 0.3 percentage point lower average annual growth rate of real GDP over the same period.

<sup>2</sup> In the popular dissemination of these findings, Barro's argument gets rather muddled. It is, for instance, hard to make sense of the following sentence: "But while the impact is not statistically significant when inflation averages less than 15%, this does not mean lower rates of inflation are costless: the adverse effect on growth of inflation below 15% is close to the effect when it is in the higher ranges" (Barro 1995b, p. 19). Even though the point estimates may be similar, the lack of statistical significance of the estimate for the low inflation range surely means that the point estimate should be taken rather less seriously. Actually, not only is the point estimate of the coefficient of growth on inflation statistically insignificant for the low inflation countries, the magnitude of the estimated coefficient is smaller for the low inflation countries (-0.016 with a standard error of 0.035) than for the middle range inflation countries (-0.037 with a standard error of 0.017) and the high inflation countries (-0.023 with a standard error of 0.005). Note also that Barro's research, which focuses on the medium- to long-term relation(s) between inflation and output growth, has no bearing on the existence and magnitude of the 'sacrifice ratio', the (transitional) output or unemployment cost of achieving a sustained reduction in the rate of inflation. That is, it tells us nothing about the existence or absence of a short-term trade off between inflation and some measure of real economic performance, such as output or unemployment. Here too, Barro's popularization of his research findings is only loosely connected to the actual research: "There is, in other words, no empirical support for the idea that more inflation must be tolerated to achieve higher output and unemployment" (Barro 1995b, p. 19).

## 2.2. Aggregate evidence for the economies in transition

In the 25 countries of operations of the European Bank for Reconstruction and Development (Central and Eastern Europe and the former Soviet Union) there has been, in the five years of the transition, a clear relationship between economic performance and macroeconomic control. As Table 2 illustrates, those countries which have shown the strongest commitment to macroeconomic stabilisation and economic reforms are also those countries which have had the smallest output falls and the earliest resumption of growth. They are also the countries where the social costs of transition, measured, for example, in terms of increases in age-specific mortality rates have been the lowest. Those countries, particularly in the former Soviet Union, which have seen the greatest economic and social traumas, have also been those where macroeconomic control has been lost. No doubt, as has been remarked earlier, the relationship goes both ways, but inflation has been central both to high social costs and the undermining of political support for the transition.

## 2.3. Microeconomic evidence: project performance depends on macroeconomic performance

The surge of stock markets in emerging economies over the last decade offers overwhelming evidence on the differential performance of the same type of project or enterprise across countries depending on the strength of the economic reform process. As reforms take hold and become "credible" in a country, local and international investors revise upwards the prospective cash-flows of the underlying assets and simultaneously revise downwards the applicable rate of discount. By unleashing relative price signals and establishing the "right" rules of the game, the action of governments boosts expected cash-flows of viable enterprises and makes them more predictable. In turn, the achievement of fiscal-monetary control and the liberalisation of external capital transactions prompt a reduction of the country risk markup attached to the rate of discount. The combination of both effects leads to sudden and sharp increases in selected stock prices, as those experienced in Asia since the 1980s and Latin America in the early 1990s. This 'stylised fact' provides evidence of the direction of causality going from improved macroeconomic prospects to higher and less risky returns of enterprises and projects.

## PROGRESS IN TRANSITION AND MACROECONOMIC PERFORMANCE

Countries	Private sector share of GDP Mid-94 in % (rough EBRD estimate)	Enterprise reform			Markets and trade		Institutional reform
		Large-scale privatisation	Small-scale privatisation	Enterprise restructuring	Price liberalisation and competition	Trade and foreign exchange system	
<b>Fast transition</b>							
Croatia	40	3	4	2	3	4	3
Czech Republic	65	4	4	3	3	4	3
Estonia	55	3	4	3	3	4	3
Hungary	55	2	3	3	3	4	3
Lithuania	50	3	4	2	3	4	2
Poland	55	3	4	3	3	4	3
Slovak Republic	55	3	4	3	3	4	3
Slovenia	30	2	4	3	3	4	3
Median	55	3	4	3	3	4	3
<b>Intermediate transition</b>							
Albania	50	1	3	2	3	4	2
Bulgaria	40	2	2	2	3	4	2
FYR Macedonia	35	2	4	2	3	4	2
Kyrgyzstan	30	3	3	2	3	3	2
Romania	35	2	3	2	3	4	2
Russian Federation	50	3	3	2	3	3	2
Median	35	2	3	2	3	4	2
<b>Slow transition</b>							
Armenia	40	1	3	1	3	2	1
Azerbaijan	20	1	1	1	3	1	1
Belarus	15	2	2	2	2	1	1
Georgia	20	1	2	1	2	1	1
Kazakhstan	20	2	2	1	2	2	1
Moldova	20	2	2	2	3	2	2
Tajikistan	15	2	2	1	3	1	1
Turkmenistan	15	1	1	1	2	1	1
Ukraine	30	1	2	1	2	1	1
Uzbekistan	20	2	3	1	3	2	1
Median	20	1	2	1	2	1	1

TABLE 2 (continued)

Countries	Government fiscal balance % GDP (1994)	Inflation (%) (1994)	GDP growth % (1994)	Year of resumption of growth (1994)	% increase in the infant mortality rate (1989-93)
<b>Fast transition</b>					
Croatia	0	-3	1	1994	n.a.
Czech Republic	1	11	3	1993	-14.8
Estonia	0	42	5	1994	n.a.
Hungary	-8.2	21	2	1994	-15.5
Latvia	-2	26	3	1994	n.a.
Lithuania	1.5	44	2	1994	n.a.
Poland	-3.4	30	5	1992	-16.9
Slovak Republic	-4	12	5	1994	-21.2
Slovenia	-0.9	18	5	1993	n.a.
Median	-0.9	21	3		
<b>Intermediate transition</b>					
Albania	-7	16	7	1993	7.7
Bulgaria	-7	122	0	1994	7.8
FYR Macedonia	-3.1	54	-7	Not yet	n.a.
Kyrgyzstan	-5.9	87	-10	Not yet	n.a.
Romania	-3	62	3	1993	-13.4
Russian Federation	-11	205	-15	Not yet	12.9
Median	-7	62	-7		
<b>Slow transition</b>					
Armenia	-24	1100	0	1994	n.a.
Azerbaijan	-13	1800	-22	Not yet	n.a.
Belarus	-1.5	1875	-22	Not yet	n.a.
Georgia	-9	7000	-35	Not yet	n.a.
Kazakhstan	-4.5	1000	-25	Not yet	n.a.
Moldova	-8	111	-25	Not yet	n.a.
Tajikistan	-23.6	45	-25	Not yet	n.a.
Turkmenistan	-1	1100	-20	Not yet	n.a.
Ukraine	-9.1	401	-23	Not yet	15.6
Uzbekistan	-2	423	-3	Not yet	n.a.
Median	-9.1	1000	-23		

Sources: EBRD (1994, p. 101). The qualitative index of reform in columns 2 to 7 ranges from 1 to 4. A Western European country would qualify with an index of 5. Data on infant mortality is from UNICEF (1994, p 6).

The same conclusion is reached by Kaufmann (1991) in his analysis of *ex post* rates of return on a large sample of World Bank and IFC projects. His results, presented in Table 3, show that low fiscal deficits, unified exchange rates and, in general, milder macro distortions lead to higher economic returns for projects.

TABLE 3

ECONOMIC RETURNS OF WORLD BANK  
AND IFC PROJECTS UNDER DIFFERENT MACROECONOMIC DISTORTIONS  
(Rates of return in percent)

Policy distortion index	All projects	Public projects	Private projects
<i>Fiscal deficit<sup>a</sup></i>			
High (8% or more)	13.4	13.7	10.7
Moderate (4%-8%)	14.8	15.1	12.2
Low (less than 4%)	17.8	18.1	14.3
<i>Trade restrictiveness</i>			
High	13.2	13.6	9.5
Moderate	15.0	15.4	17.1
Low	19.0	19.3	17.1
<i>Foreign exchange premium</i>			
High (200 or more)	8.2	7.2	*
Moderate (20-200)	14.4	14.9	10.3
Low (less than 20)	17.7	18.0	15.2
<i>Real interest rate</i>			
Negative	15.0	15.4	11.0
Positive	17.3	17.5	15.6

<sup>a</sup> Percentage of GDP.

\* Insufficient number of observations (less than 10) to make inferences.

Sources: The World Bank (1991, p. 82). Data originate in Kaufmann (1991).

### 3. Theoretical links between macroeconomic stability and microeconomic performance

The theoretical links between macroeconomic control and microeconomic performance are reasonably well understood, at least at a qualitative level. Not much needs be said about the "shoe-leather" and "menu costs",<sup>3</sup> associated with fully anticipated inflation.

<sup>3</sup> "Shoe leather" refers to frequent trips to the bank so that as little money can be held as possible; "menu costs" refers to the frequent relabeling of prices in restaurants.

This is economics for economists, and if there were no other costs associated with inflation, no-one would be deprived of sleep because of it.

More important is the empirical fact that high inflation tends to be associated with *i*) variable and uncertain inflation and *ii*) relative price variability and uncertainty. The reasons for this empirical association lie partly in the nature of private and public sector wage and price-setting mechanisms – and in general the setting of any contract among economic agents – and partly in the realm of political economy. High inflation is often viewed as the ultimate monetary manifestation of unresolved social conflict about public spending and its financing. The resolution of this underlying political and social conflict is a highly uncertain process. Since complete contingent markets are a theoretical abstraction, high inflation increases the incidence of false signals, and creates confusion about the interpretation of observed price changes. How does one tell whether they are permanent or transitory? are they relative price changes requiring an allocative response or just the "local" manifestations of an increase in the general price level requiring no resource reallocation? By increasing the noise to signal ratio of observed price changes, inflation therefore impairs the allocative efficiency of the price mechanism.

Inflation (especially high and uncertain inflation) and the anticipation of (eventual) future fiscal and monetary policy actions to control inflation increase the uncertainty of the economic environment within which private agents make production and investment decisions. Future fiscal correction may directly affect business profitability if it involves changes in taxes or subsidies. Changes in public sector infrastructure investment may directly impinge on future project performance. In addition, fiscal retrenchment will tend to be associated with a cyclical decline in economic activity, a reduction in employment and a depreciation of the real exchange rate (an increase in the relative price of traded to non-traded goods) as well as with changes in other key prices (i.e., real wages and energy prices), and in relative prices at large.

Investment involves the commitment of resources today in anticipation of future, uncertain returns. To a greater or lesser degree the resources committed to investment projects are "sunk"; they cannot be easily recovered or reallocated to alternative uses if the expectations of future profits which motivated the investment fail to materialise (see Dixit and Pindyck 1994). Greater uncertainty affect-

ing the future returns to private investments, subject to sunk costs, increases the *option value of waiting*, that is, it makes it rational to postpone investment until the prospects for future profits are so much better that the higher risk of being stuck with an irreversible commitment is compensated. The delayed response of investment in the aftermath of stabilisation in high inflation countries is an expression of investors exercising such a *wait and see option* (see Dornbusch 1990). Only when sufficient commitment to the reform process is shown and a track record is established does private investment resume strongly. Even risk-neutral firms will rationally choose inaction when faced with a sufficiently uncertain environment. Short-termism in the private sector is the rational private sector response to macroeconomic instability.

Short-termism arises also when private markets do not fully index the capital value of long-term outstanding debt but do fully index short-term interest rates. In this borrowing environment loans become inevitably very short-term. In those circumstances the long-term finance of investment may be impossible, borrowers are faced continuously with the problem of rolling over their debt and the risk of a credit crunch is ever present.

High inflation also diverts resources from socially productive activities to privately rational but socially unproductive activities such as hyperactive financial portfolio management and rent seeking. Typically, the financial and public relations managers of enterprises become more senior and better paid than the production manager.

Imperfect indexation in the public and private sectors means that high (and uncertain) inflation is associated with major redistributions of resources from domestic currency creditors to domestic currency debtors and more generally from the economically weak and unsophisticated to the economically agile and well-connected. Since workers' financial portfolios in developing countries are largely restricted to transaction cash balances, the inflation tax has been viewed as an outright tax on wages. The regressive nature of the inflation tax and in general the negative effects of rising inflation on real wages have been extensively documented in countries with chronic high inflation such as Argentina and Brazil (see for example Cardoso 1992 and Cardoso *et al.* 1995). In a recent study for Brazil, Kane and Morisset (1993) show, using disaggregated data by income strata, that high inflation hurts the lower and middle classes far more than the upper quintile of the population, who manage to insulate themselves

from its effects by taking advantage of high real interest rates and from better – less imperfect – indexation devices to shelter their incomes.

High inflation further weakens the public finances through the seigniorage Laffer curve and the Tanzi effect. Where tax systems are not fully indexed, as they seldom are, inflation can make official tax burdens crippling (through their taxation of paper profits). Frequently, the choice for the tax payer ranges from honesty with bankruptcy to evasion. The net result is an erosion of compliance which is very difficult to reverse. In the private sector we find something similar to the Tanzi effect, that is delayed payments and imperfect indexing of arrears which may bankrupt perfectly solvent creditors. This process contributed to the paralysis of payments systems, and thus production in many parts of the former Soviet Union (the problem of inter-enterprise arrears has been a characteristic of all the economies in transition).

Inflation is neither the only manifestation of macroeconomic instability nor the only macroeconomic evil distorting enterprise decision-making and performance. The underlying and fundamental problem is the sustainability of fiscal and financial policies. Frequently, governments are able to “repress” inflation for a while by borrowing heavily, mostly internationally. As Corden (1990) has emphasised, for a given budget deficit, governments often confront a short-run trade off between monetary financing and external borrowing (i.e., a trade off between inflation and the current account deficit). If external finance is available, the inflationary impact of a given budget deficit can be temporarily “repressed” by letting the exchange rate become overvalued. This strategy, however, may eventually lead to a foreign exchange crisis – and to the introduction of foreign exchange controls and/or outright default (see Chart 1) – and thus to a sharp adjustment of the nominal and real exchange rate and subsequent high inflation. Many of the enterprise decisions – predicated upon the relative prices and rules prevailing prior to the crisis – may have translated into investments and production processes no longer financially viable. The resulting sunk investment costs impose heavy dead-weight losses on society. A broader issue is that high inflation may be signalling not only macroeconomic mismanagement but poor performance of public sector services at large. In this perspective, the issue cannot be confined to the costs of

inflation but need to encompass the far more pervasive negative effects of poor public sector management in general.

Likewise, countries prone to social conflict and macroeconomic instability often embark on stabilisation attempts which they afterwards abandon following a recurrent pattern. This stop-go policy cycle brings about sharp swings in real GDP, real wages, sales, availability of inputs and so on, introducing volatility and noise in enterprise sales and cash flows as illustrated in Chart 1. The pattern and effects of these stop-go cycles have been analysed by Dornbusch and Edwards (1991) for Latin American countries.

A more uncertain economic environment for private agents reduces the level of investment and lowers its quality: the rate of investment goes down and its productivity decreases. Many authors, notably Schumpeter (1942), have emphasised both the quality of investment as the key to understanding the dynamism of capitalism, and a central role for the state in creating the right environment for quality investment. Investment associated with misplaced signals was described by von Hayek (1935) as "malinvestment". Without quality investment, growth is reduced and future standards of living suffer.

#### 4. Microeconomic reform and macroeconomic stability

It is clear that while microeconomic performance depends on macroeconomic stability and therefore on the sustainability of the fiscal-financial-monetary stance, there are a number of potentially important effects running in the opposite direction. These are not the main focus of the paper but we note some of them briefly.

First, postponing microeconomic reforms (especially the imposition of hard budget constraints, the privatisation and restructuring of public enterprises, the liberalisation of foreign and domestic trade, the streamlining of entry and exit rules including effective bankruptcy procedures, the elimination or reduction of subsidies and the pricing of energy in the domestic market at world levels) may undermine macroeconomic stability in addition to leaving the microeconomic inefficiency in place.

While the failure to reduce certain microeconomic distortions (especially across-the-board food subsidies, agricultural subsidies, sub-

sidies to, former, state enterprises and energy prices below world market levels) expands government expenditures, the reduction of certain other distortions (e.g. the reduction of import tariffs) may weaken government revenues and threaten macroeconomic stability. It is therefore important to keep both the microeconomic efficiency and the macroeconomic stability balls in the air simultaneously. Reform in one area will inevitably influence the other. There are very few policy measures or instruments that have their impact limited to one of the two spheres only. Indeed, if we add distributional considerations to the picture, there are very few policy measures that will not have effects along all three dimensions: microeconomic efficiency, macroeconomic stability and distribution.

Opposition to microeconomic reforms from particular interested groups can undermine government resolve, or ability, to sustain a programme of reforms. It is often easier for potential losers to anticipate short-term losses and exert political pressure than it is for potential beneficiaries of reform to lobby effectively for them.

#### 5. Policy implications

The uncertainties and deterrents to investment and good decision-making associated with macroeconomic mismanagement – and the *ex post* dead-weight losses imposed by prior decisions based on misguided signals – apply across the economy. They are like 'public bads' and macroeconomic stability, a public good. It is one of the key roles of the government in a market economy to provide this public good. In order to achieve this, institutions are required that are conducive to satisfactory macroeconomic performance. The chronicle of macroeconomic developments over the last three or four decades is laced with unsuccessful stabilisation attempts which started off with vigour but failed to take hold due to the lack of the appropriate institutions that would provide continuity to the process. This is particularly relevant to the economies in transition which have inherited the "wrong" or "no" institutions and thus need to develop those tailored to a market economy. Given that a moderate degree of macroeconomic stability is a pre-condition for efficient enterprise decisions and for the productivity of investments, governments need



to place at the top of the reform agenda the building of the institutions necessary to achieve and preserve macroeconomic stability. Institutions must be created (or enhanced) to perform the following key tasks.

1) *Tax administration.* The ability to levy taxes on a broad base, allowing both acceptable marginal rates and revenue levels, is key to the state discharging its obligations effectively. For the economies in transition the challenge is formidable. They must switch from tax collection through a single national bank, and depending on a few score large-scale public enterprises, to another system based on an array of (weak) commercial banks – in Russia over 3,000 banks – and a fast growing number of profit-making private enterprises.

2) *Banking supervision.* Mobilising domestic savings and allocating them effectively among competing investment projects is a crucial component of the engine of economic growth in a market economy. In most developing countries and transition economies, banks are crucial financial intermediaries. The supervision and regulation of this vital sector should be a top priority for any government. High real interest rates – typical in the aftermath of stabilisation – and changing profitability across enterprises and sectors – inherent to structural adjustment – can, in the absence of strong banking supervision, easily lead to sizeable non-performing portfolios. A big portion of the losses in “bad loans” will have to be eventually absorbed by the state thereby putting further pressure on the fiscal accounts.

3) *Controlling monetary emissions and/or managing the exchange rate.* This can be done through a central bank or through a currency board. A currency board issues domestic currency only in exchange for convertible currencies at a fixed exchange rate. The whole monetary base is fully-backed by international reserves and is demand driven. Small, very open economies and economies with a history of monetary irresponsibility may be advised to go for a currency board which completely rules out domestic credit expansion by the monetary authority. Panama and Argentina in Latin America and more recently two of the Baltic countries in Eastern Europe have been successful at stabilising inflation with the help of currency boards. Larger, less open economies and countries with a history of monetary respectability may opt for a central bank. Credibility is key: unless

there is confidence that a particular institutional arrangement is adopted lastingly and in substance it is unlikely to survive, let alone perform success fully. Independence of the central bank is not our main concern here but there is some evidence that independence yields a better stability performance.<sup>4</sup>

4) *Supplying the social safety net.* This is an especially challenging task in the transition economies where much of the social safety net and many national and local public goods and services were traditionally provided by state enterprises. Shifting the burden of financing the safety net and public goods and services to the general government constitutes a major fiscal challenge. There is of course no presumption that the government need supply the goods and services it finances. A part can be contracted out to the private sector or the “civil society”/not-for-profit sector.

5) *Enforcing hard budget constraints.* Enforcing hard budget constraints is the first rule of a market economy. Without it, liberalising markets, freeing prices and privatising state enterprises is pointless. There can be no allocative efficiency without hard budget constraints. Of course, the imposition of hard budget constraints implies the need for institutions and procedures to deal with firms, enterprises, other agencies and households which cannot meet their obligations, that is, bankruptcy laws, agile judiciary procedures, rules for corporate reorganisation and laws and procedures for dealing with default on household debt.

We can visualise a hierarchy of hard budget constraints.

The government/central bank should impose and enforce a hard budget constraint on the banking sector, giving banks an incentive to impose and enforce hard budget constraints on the non-bank enterprises to which they lend. The only exception to this rule would be possible lender-of-last-resort salvage operations by the central bank in the face of systemic risk to the financial system as a whole. If the government wishes to subsidise certain kinds of activities, it should do so through budgetary allocations and through explicit subsidies rather than through grants disguised as loans and other financial subterfuge.

<sup>4</sup> It seems that it is *de facto*, rather than *de jure* independence that matters (see Bruno 1994).

The primacy of hard budget constraints for achieving macroeconomic control and microeconomic efficiency is also reflected in the way in which governments throughout the world are attempting to impose hard budget constraints on themselves by establishing independent central banks or currency boards and by proposals for constitutional amendments or other legal restraints on the government ability to borrow, spend or tax.

## 6. Concluding comment

The case that loss of macro control undermines economic performance and thus welfare is surely powerful. Lack of this control erodes both the quantity and quality of investment. It diverts entrepreneurship away from the real economy. And it can make paupers out of many. Belittling the importance of macroeconomic constraints, as one often finds implicitly or explicitly in arguments for some 'vital' expenditure, does disservice to both welfare and to the quality of argument. Macroeconomic control is, *par excellence*, a responsibility of government. It is central to the role of the state in a market economy.

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