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Macroeconomic and financial stability: transition and East Asian “contagion”

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Abstract

The contagion effects emanating from the recent East Asian turmoil provide an interesting test of the strength of the foundations for macroeconomic and financial stability laid by the post-communist transition and how this strength varies across central and eastern Europe and the CIS. The analysis reveals considerable variation across the region with respect to both macroeconomic fundamentals and the ability to withstand shifts in the portfolio allocations of investors. This variation, moreover, has been reflected in the impact of events in East Asia on money and securities markets across the region, although the post-communist countries as a whole have withstood these effects fairly well. The relative stability of the region leaves no room for complacency, however. There remain significant macroeconomic imbalances and vulnerabilities. And many of the structural weaknesses observed in East Asia, particularly in its financial sectors and patterns of corporate finance, can be found in the transition economies, albeit on a smaller scale because of the time that has been required to expand finance in the transition.

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1 INTRODUCTION

Unstable capital flows and fragile financial institutions can severely disrupt macroeconomic performance. And macroeconomic instability can undermine investor confidence and impair the soundness of banks and other financial institutions. These linkages between international and domestic finance and the macroeconomy have been repeatedly demonstrated in the post-communist transition and in developing and industrialised market economies.¹ Moreover, disturbances originating in one country can spawn “contagion” effects which operate through financial and real linkages in the international economy to embroil other countries. The recent turmoil in East Asia, for example, has had a powerful influence on many emerging market economies, not only within East Asia itself, but also in other regions. They include some of the post-communist countries in Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS), thereby testing their foundations for macroeconomic and financial stability.

The purpose of this paper is to analyse the vulnerability of transition economies to macroeconomic and financial instability. The conduct of macroeconomic policies, the extent and effectiveness of structural reforms (progress in transition) and stable access to international capital markets are clearly central to sustainable internal and external macroeconomic balance as the transition to a market economy advances. The contagion effects emanating from the East Asian turmoil provide an interesting test of the strength of the foundations laid in the post-communist transition and how it varies across the region. The recent experience of East Asia also points to potential vulnerabilities that can arise in the absence of further progress in transition.

The analysis in this paper reveals considerable variation across the region both with respect to macroeconomic fundamentals and the ability to withstand a sudden shift in the portfolio allocations of investors. This variation is reflected in the impact of events in East Asia on money and securities markets across the region, although the post-communist countries as a whole have withstood these effects fairly well and no country has had to abandon its exchange-rate commitment. In general, those post-communist countries that have shown signs of greater stress have had weaker macroeconomic fundamentals and have been more vulnerable to changes in the perceptions and preferences of investors.

The relative stability of the region leaves no room for complacency, however. There remain significant macroeconomic imbalances and vulnerabilities. And many of the structural weaknesses observed in East Asia, particularly in its financial sectors and patterns of corporate finance, can be found in the transition economies, albeit on a smaller scale because of the time that is required to expand finance in the transition. Unless these weaknesses are addressed, the post-communist countries will remain vulnerable to both macroeconomic and financial instability. Indeed, their vulnerability is likely to increase if the inevitable expansion of finance takes place without strong market-oriented reforms to overcome the current deep distortions in the financial systems of the region.

¹ See, for example, Gavin and Hausman (1995), Lindgrin, Garcia and Saal (1996), Kaminsky and Reinhart (1996); Kaminsky, Lizondo and Reinhart (1997). For a discussion in the context of transition, see Buch and Heinrich (1997).

While the main focus of this paper is on the transition economies, it is useful to note at the outset several key factors in the East Asian turmoil. There are two broad hypotheses regarding the causes of the recent events in East Asia. One emphasises weak economic fundamentals and the other financial panic by investors.² The “fundamentals” perspective focuses on the significant real appreciation of the East Asian currencies, large and growing current account deficits, and a vicious circle of competitive devaluations within East Asia. It also holds that the high leverage of borrowers and misallocated credits by local financial institutions resulted from the moral hazard associated with (perceived) government bailout guarantees. The “financial panic” perspective emphasises the boom in international lending to East Asia in the 1990s, primarily in the form of short-term debt, and the subsequent panic by investors as macroeconomic fundamentals in the region weakened. The hypothesis is that it became rational for each creditor to withdraw its credits from otherwise solvent borrowers as other creditors were seen withdrawing their finance. These two perspectives are not mutually exclusive and the paper presents evidence in support of each as comparisons are drawn between transition economies and East Asian countries.

The remainder of the paper is organised as follows. Section 2 examines the major macroeconomic and financial sector policy challenges posed by the transition. In particular, it relates the nature and extent of macroeconomic imbalances and the pace of expansion of finance to a country’s stage of transition (earlier or more advanced).³ This perspective enables judgements to be formed about the relative strengths of the foundations for macroeconomic and financial stability among selected post-communist countries and permits comparisons to be drawn between them and several East Asian economies.⁴ Section 3 sets out two complementary analytical frameworks for understanding the nature of exchange-rate crises under fixed or managed exchange rates. These frameworks illustrate the relationship between macroeconomic fundamentals and the timing of exchange-rate crises, and the vulnerability of an exchange-rate commitment to shifts in investor behaviour. Section 4 turns to an examination of the impact of events in East Asia on several CEE and CIS countries with fixed or managed exchange rates, focusing on movements in money-market interest rates and share prices. The extent of this pressure is related to the assessments of macroeconomic imbalances and financial sector weaknesses (described in Section 2) and to indicators of vulnerability to shifts in investor behaviour (described in Section 3). Section 5 concludes by drawing key lessons from the East Asian turmoil for the outstanding challenges in macroeconomic policy and financial sector reform in the transition economies.

² Representative of the former are Krugman (1998) and Corsetti, Pesenti and Roubini (1998) and of the latter are Radelet and Sachs (1998a, 1998b).

³ Countries are grouped according to their progress in transition as of the middle of 1997 using the EBRD’s transition indicators. See Chapter 2 of EBRD (1997).

⁴ This paper covers 11 countries of CEE and the CIS – Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Poland, Romania, Russia, Slovak Republic, Slovenia and Ukraine – and five countries of East Asia – Indonesia, Korea, Malaysia, Philippines and Thailand. The selected post-communist countries, with data availability determining the extent of country coverage, account for about three-quarters of the region’s population and GDP and provide a reasonable cross-section of countries at different stages of transition. The five East Asian countries are those which have been influenced most seriously by the turmoil in international capital markets.

2 TRANSITION, MACROECONOMIC IMBALANCES AND FINANCE

The transition to a market economy requires extensive and deep structural (institutional and organisational) changes, particularly within the financial sector. This sector is key to a well functioning market economy, yet barely existed under the old regime. The vast extent of the required transformations, in addition, poses a number of challenges for macroeconomic policy, the nature of which changes as the transition advances. This section examines some of these challenges and how they have influenced macroeconomic performance. In particular, it focuses on two transition-related macroeconomic imbalances. The first arises from reform of the public sector and associated fiscal imbalances, while the second emerges from the recovery of fixed investment, adapting and rebuilding distorted and depleted capital stocks, and the associated private sector imbalances. In general, the first imbalance tends to dominate at earlier stages of transition and the second at its more advanced stages. Because of the importance of the financial sector in ensuring that fiscal and private sector imbalances, as well as fixed investment, are financed in an efficient and sustainable way, the section also examines challenges in laying the foundations for the expansion of stable, market-oriented finance.

2.1 MANAGING THE FISCAL TRANSITION

While the start of transition and market liberalisation in most post-communist countries brought with them large upward shifts in price levels, resulting primarily from years of repressed inflation, the subsequent persistence of inflation has varied sharply across the region. Inflation has now been brought down to moderate rates in most countries, but this progress has been more rapid in Central Europe and the Baltic region than in Eastern Europe and the CIS. Moreover, the strength of the foundation for this relative stability in prices varies widely, with heavy reliance on monetary control in the face of large fiscal deficits in some countries. The pace and strength of the disinflation effort has been largely determined by the way in which governments have responded to the fiscal imbalances associated with extensive structural changes required in the public sector.

On the revenue side, transition requires that a government raise revenues rather than retain resources by *diktat*. Under central planning, taxation was largely notional, with the revenue of government arising in effect from the difference between the output produced and the resources it released to households and enterprises. In a market economy, where goods and services are produced primarily in the private sector, a government must raise revenue, primarily through taxation, if it is to command resources. Tax reform was thus an inevitable priority of transition and an urgent one. The old (notional) tax base lay mainly in the profits and turnover of enterprises. The emergence of market prices, competition and obsolescence of many existing enterprises early in the transition meant that profits and output fell sharply and, along with them, government revenues. This fall was exacerbated in some countries by the breakdown of administrative arrangements for tax collection.

The requirements of a well-functioning tax regime in a market economy are demanding and include: minimal distortion to market-based incentives, simplicity and transparency for both authorities and taxpayers, and adequacy of revenues to allow for the provision of basic public goods and services. The response to the challenges of tax reform has varied widely across the region. In broad terms, most countries in Central Europe and

the Baltic region have overhauled their tax regimes, introducing value-added and personal income taxes and rationalising corporate profits taxes so as to reflect economic profitability and to allow an adequate return to capital. In contrast, most east European and CIS countries have yet to respond effectively to the reform challenges. In these countries, the structure of taxation remains to be adapted to the requirements of a market economy and the necessary capacity for tax administration has yet to be built. The tolerance of tax arrears, particularly by loss-making state enterprises, has been a key factor in the fall in government revenue in these countries and has undermined the market discipline that is crucial to the restructuring of the economy.

On the expenditure side, the transition-related pressures have been equally demanding of governments. While market liberalisation has allowed for significant reductions in budgetary subsidies to enterprises, various forms of “off-budget” support have emerged. In addition to toleration of tax and energy payment arrears, politically directed lending by state-controlled banks continues in a number of countries. The recent collapse of the Bulgarian banking system under the weight of soft lending to loss-making state enterprises is perhaps an extreme, but not isolated, example. These costs are usually met either through recourse to the inflation tax or through direct fiscal outlays to recapitalise banks. In addition, market liberalisation and privatisation have significantly eroded the central pillars of the pre-reform social safety net: low prices for rationed goods, guaranteed employment and state pensions and provision of social benefits by state enterprises. These arrangements have been replaced with budgetary outlays on social security and other social benefits and have led to the accumulation of large contingent liabilities in state pension systems. In some countries, particularly in Central Europe, these expenditures and commitments have expanded sharply to place significant strains on current and future budgetary resources, while in others, particularly in the CIS, the social safety net remains under-funded, poorly targeted and largely ineffective.

Chart 1 portrays key aspects of the fiscal pressures in post-communist countries and how these pressures vary with progress in transition. This chart reveals that, among the countries covered and over the period 1996-97, those countries at more advanced stages of transition in 1997 – Croatia, Czech Republic, Estonia, Hungary, Poland and the Slovak Republic, according to the EBRD’s transition indicators – tended to have higher general government revenues and lower general government deficits, both expressed as a share of GDP, compared with countries at less advanced stages. Countries at less advanced stages of transition – Bulgaria, Romania, Russia and Ukraine – continued to exhibit fiscal pressures in the form of both relatively low revenues and high deficits (although the Bulgarian stabilisation programme introduced in the middle of 1997 significantly strengthened that government’s fiscal position). To the extent that these countries have succeeded in bringing down inflation, there has been a heavy reliance on market-based finance of fiscal deficits, including the mobilisation of foreign savings.

The stock of public sector debt reflects the cumulation of past fiscal imbalances and determines in part the ability to finance new deficits. Among the countries continuing to exhibit the fiscal strains of transition, in the form of low revenues and high deficits, both Bulgaria and Russia have high stocks of outstanding public debt relative to GDP compared with other transition economies (Chart 2). By diminishing the capacity to finance further fiscal deficits, this combination of stocks and flows emphasises the priority of fiscal reform in these countries.

A further and significant comparison can be drawn between the transition economies in CEE and the CIS and the East Asian countries hit by the recent financial turmoil. The East Asian economies ran general government surpluses over the period 1995-96, with relatively low government revenues as a share of GDP (relative to other market economies with similar levels of GDP per capita).⁵ This long-standing combination of fiscal prudence and relatively limited taxation has often been viewed as a source of strength of the East Asian economies.⁶

2.2 RECOVERY AND PRIVATE SECTOR IMBALANCES

With progress in market liberalisation and reducing inflation, economies across the region have begun to recover from the steep falls in recorded output during the first half of the 1990s, albeit with widely varying intensities. This recovery in output has brought with it growing confidence and expectations of rising incomes, particularly in countries at more advanced stages of transition. These countries have also experienced rapidly deteriorating trade balances. There are two reasons to have expected this development. First, there are offsetting pressures on the aggregate savings rate as output recovers. Although enterprise profits tend to improve with the resumption of growth, household savings rates are likely to fall as expectations of future incomes rise and uncertainty recedes. Second, since much of the accumulated capital stock has been both rendered obsolete by the introduction of market prices and product market competition and depleted by years of neglect, the demand for fixed investment tends to surge with growing output and increasing confidence.

Under central planning, aggregate savings rate were high compared with those of market economies with similar income levels, with much "forced savings" accumulated in the enterprise sector. Given guaranteed employment and state pensions and few consumer durables, there was relatively little incentive (or ability) for households to save. In the early stages of transition, aggregate savings rates fell precipitously from about 30 per cent of GDP to about 10 per cent, owing primarily to the deterioration in enterprise profits.⁷ As the transition advances and growth returns, aggregate savings rates have tended to recover along with enterprise profitability, but remain well below both their pre-transition levels and those of comparable middle-income developing countries. A restraint on aggregate savings rates arises from the growing confidence of households and the prospect of rising real incomes.⁸

The latent demand for capital goods is substantial owing to the obsolescence of much of the old capital stock, the scope of complementary investment in its restructuring, and the

⁵ The data for the East Asian economies are for the period 1995-96 to reflect as closely as possible economic conditions at the onset of the financial turmoil. As these events took place in the course of 1997, there was considerable adjustment in the stance of macroeconomic policies, including the floating of exchange rates and the adoption of IMF supported-adjustment programmes in some countries. The fiscal and external balances and domestic credit expansion realised in 1997 reflect the impact of these measures. East Asian contagion affected the transition economies only late in 1997, with relatively little impact on fiscal and external balances and on domestic credit expansion in that year. The data for the post-communist countries is thus for the period 1996-97 to reflect as closely as possible the economic conditions prevailing at the time when East Asian influences were at their height.

⁶ See, for example, World Bank (1993) and Sachs and Warner (1996).

⁷ See EBRD (1996), Chapter 7, and Denizer and Wolf (1998a).

⁸ See Denizer and Wolf (1998b).

need to accumulate new capital. However, only as favourable investment conditions emerge with macroeconomic stabilisation and progress in transition, does this latent investment demand translate into rapid fixed capital accumulation. In fact, there is significant evidence that both foreign direct investment and private investment in infrastructure in post-communist countries are positively correlated with their progress in transition.⁹ And several countries at more advanced stages of transition where data on the components of aggregate demand are available (Hungary, Poland and the Slovak Republic) have seen rapid advances in total fixed investment in 1996-97.¹⁰

The combination of downward pressure on household savings rates and of a strong impetus to fixed investment points to possible deterioration in the private-sector saving and investment balance and in the trade balance as the transition advances. Chart 3 confirms that countries at more advanced stages of transition tended to have both higher rates of output growth and larger external deficits in terms of GDP in the period 1996-97 than did countries at less advanced stages. Five of the seven countries at more advanced stages of transition registered both high rates of output growth and large current account deficits, with Croatia, Estonia and the Slovak Republic having the largest deficits. In contrast, those countries at earlier stages of transition tended to have smaller current account deficits, or in the cases of Bulgaria and Russia, small surpluses, as well as lower rates of output growth.

The extent to which foreign investors are willing to finance an external imbalance depends on their assessment of an economy's ability to generate current account surpluses in the future and to allow repatriation of capital and investment income. This assessment will depend on a number of factors, including whether the foreign savings supplied are being used to finance consumption or investment and, if investment, its quality and expected rate of return. The level of outstanding external debt will also influence a country's ability to attract additional foreign capital flows. Most post-communist countries had low levels of external debt relative to GDP (and to other appropriate scale measures) in 1997, with the exceptions of Bulgaria and to a lesser extent Hungary and the Slovak Republic. Note that a country with an external debt to GDP ratio of more than 60 per cent is, according to a widely used "rule-of-thumb", considered heavily indebted.¹¹

A comparison between the post-communist countries in CEE and the CIS and the east Asian economies affected by the recent financial turmoil reveals that, like the advanced transition economies, those in East Asia tended to have both high rates of growth and large external deficits in the period 1995-96. Indonesia and Thailand were also relatively heavily indebted at the end of 1996 (Chart 4).

2.3 EXPANDING FINANCE IN THE RECOVERY AND MACROECONOMIC STABILITY

In the post-communist countries, potential demands for market-oriented finance are large, but the capacities of domestic financial sectors are limited. These sectors must play crucial roles in financing the fiscal and private sector imbalances and the recovery

⁹ See EBRD (1996), Chapter 4, and Lankes and Venables (1996).

¹⁰ See EBRD (1998).

¹¹ See World Bank (1998) and, on the economic determinants of a country's external borrowing capacity, Calvo (1996).

in fixed investment examined above. The demand for financial services by enterprises and households, in particular, is likely to increase strongly as the transition advances and the recovery gathers momentum. In fact, the expansion of finance is already under way in some post-communist countries. However, there remain serious weaknesses in its institutional and organisational foundations – in the capacity and performance of governments, banks and other financial institutions. It is essential that the capacity for providing stable, market-oriented finance advances in step with demand so that the financial sector neither constrains growth nor sows the seeds of future instability through mis-directed credit allocation.

At the start of transition, there was essentially no such capacity. The financial sectors were dominated by state-owned banks which were largely passive participants in the politically directed allocation of credit to enterprises. Financial sector reforms in the transition must thus promote two types of institutional and organisational change. First, these reforms must serve to redirect the role of government in the financial sector away from involvement in credit allocation to become the maker and enforcer of the rules which underpin a decentralised financial system. Second, the reforms must promote private ownership of financial institutions and effective competition so as to foster the expansion of market-oriented finance, both deepening and broadening the provision of financial services to meet the rapidly growing demand for them.

Most post-communist countries have implemented at least basic prudential and legal frameworks in the financial sector and, in more advanced countries, the process of harmonisation with European Union and other international standards is now advancing. However, within these frameworks, there remain areas of particular difficulty: in banking, loan classification and provisioning requirements and connected and concentrated lending; and, in securities activities, inadequate financial disclosure and protection of shareholder rights. Enforcement of compliance with prudential regulations and laws, moreover, remains an important challenge in most countries, including the independence of regulatory authorities from arbitrary political influence.

In addition to an adequate legal and regulatory framework, improving the provision of financial services requires competition among service providers and private ownership of financial institutions. Effective competition among financial institutions is necessary to foster a process through which the market selects those service providers which are best able to meet the needs of savers and borrowers. This process is particularly important in the transition economies because the dominant financial institutions in most countries emerged from the old system. Private ownership of financial institutions, moreover, reinforces the regulatory function and the competitive process in several ways. It is instrumental in reducing government interference in credit allocation; it underpins effective competition by putting private equity at risk in the institutions; and it helps to attract high quality management teams necessary for prudent and effective operation. Even among the countries more advanced in the transition, only Hungary and Poland have achieved substantial progress in privatisation of the dominant state banks. And new private banks have played only minor roles in most financial sectors, with the notable exceptions of those in Estonia and Russia.

Among countries at more advanced stages of transition, Estonia and, to a lesser extent, Croatia and the Slovak Republic have witnessed a rapid real expansion of domestic credit to the non-governmental sector over the period 1996-97 (Chart 5). However, as

Chart 6 shows, the levels of outstanding domestic credit to the non-governmental sector relative to GDP remains relatively low in two of these countries (Croatia and Estonia).

The recent experiences of East Asia underscore the importance of developing the financial sector capacities of both governments and financial institutions. In the recent turmoil, it was the combination of excessive short-term borrowing by local institutions and of adverse macroeconomic developments squeezing the cash flows of highly-leveraged borrowers that led to a sudden loss of investor confidence and a sharp reversal in capital flows. The peculiar financial structures in East Asia have as their root causes, *inter alia*, inadequate financial regulation and liberalisation of capital flows while there remained weaknesses in the legal and institutional foundations of long-term finance. Moreover, these weaknesses persisted as the financial sectors expanded rapidly (Charts 5 and 6).

3 SUSTAINABILITY OF EXCHANGE-RATE COMMITMENTS

In response to the challenge of containing inflationary pressures in the face of strong fiscal pressures and of emerging private sector imbalances, many post-communist countries have adopted either a fixed exchange-rate regime or a crawling peg with an intervention band. Among the post-communist countries considered in this paper, only Romania maintained an independently floating exchange rate regime in the last quarter of 1997, when the impact of the East Asian turmoil was observed (Table 1). However, as an immediate response to this spreading turmoil, the Romanian monetary authorities acted to stabilise the exchange rate.¹² There are strong reasons for adopting the exchange rate as a “nominal anchor”. A commitment to a fixed or sliding exchange rate parity can serve to coordinate inflationary expectations with policy actions. In particular, a credible exchange rate commitment can act as a discipline on fiscal and monetary policies, committing a government to prudence and non-monetary financing of any deficits.

Table 1. Exchange-rate regimes of selected transition economies, 30 June 1997

Country	Monetary and Exchange Rate Regime
Bulgaria	Pegged to the Deutschmark (currency board)
Croatia	Managed float (monetary policy targets a stable exchange rate <i>vis-à-vis</i> the Deutschmark)
Czech Republic	Managed float (monetary policy targets an inflation rate which is expected to be consistent with a stable exchange rate <i>vis-à-vis</i> the Deutschmark)
Estonia	Pegged to the Deutschmark (currency board)
Hungary	Managed float (pre-announced crawling peg <i>vis-à-vis</i> a currency basket with an intervention band)
Poland	Managed float (pre-announced crawling peg <i>vis-à-vis</i> a currency basket with an intervention band)
Romania	Independently floating
Russia	Managed float (sliding corridor for the exchange rate <i>vis-à-vis</i> the US dollar)
Slovak Republic	Pegged to a currency basket
Slovenia	Managed float (an objective of monetary policy is a stable exchange rate <i>vis-à-vis</i> the Deutschmark)
Ukraine	Managed float (intervention band around a central parity rate <i>vis-à-vis</i> the US dollar)

Source: EBRD and International Monetary Fund.

Although exchange rate commitments can be a factor in stabilising prices, they also contain inherent risks associated with their sustainability. These risks can materialise from an inconsistency among fiscal, monetary and exchange rate policies which can eventually trigger an abrupt shift in money demand or from changes in the perceptions and preferences of investors which can affect their willingness to hold claims in or against a particular country. Sudden and pronounced swings in money and asset demands can quickly render an exchange-rate commitment untenable and can force a

¹² Over subsequent months, though, growing domestic political uncertainty contributed to a weakening of macroeconomic policy and to an accelerating fall in the exchange rate.

shift in the macroeconomic policy stance, including abandonment of the exchange-rate goal. This section considers such risks using two simple analytical frameworks.¹³

3.1 INCONSISTENT MACROECONOMIC POLICIES

Pressure on an exchange-rate commitment becomes manifest, in the first instance, as accumulation or decumulation of international reserves. From a monetary perspective, pressure on reserves arises from an imbalance between the supply of and demand for money balances. Under a fixed exchange rate, an expansion of the money supply beyond the demand for real money balances tends to place pressure on international reserves in at least two ways.¹⁴ First, excess holdings of money balances can be spent on goods and services. As a result, the price of nontradable goods and services would rise and the supply of domestically produced good tradable goods would fall as profits in this sector are squeezed by wages driven up by the nontradables sector. The fall in tradables output can place pressure on the current account balance and thereby on international reserves. Second, investors can substitute out of excess holdings of domestic money into international currencies and assets, directly depleting international reserves. The source of excess money creation can be central bank financing of a government's fiscal deficit, resulting in the creation of additional base money (currency in circulation and commercial bank reserves with the central bank), or credit expansion to the private sector fuelled by lax monetary policy.

A macroeconomic policy stance which results in the steady depletion of international reserves clearly becomes unsustainable once the reserves are fully exhausted and the macroeconomic imbalance can no longer be financed with available hard currency reserves. However, with forward-looking savers and investors, there arises the possibility that confidence in the macroeconomic policy stance will collapse well before the stock of reserves runs out. Such a collapse in confidence can take the form of a large, discrete substitution of international currency for domestic money. Equilibrium in the money market requires that this substitution will occur at the point where the shift in demand for real money balances exactly exhausts the remaining stock of hard currency reserves. At this point, the change in liquidity preferences can be fully accommodated without a discrete jump in the exchange rate.¹⁵ Any such a movement in the exchange rate would be inconsistent with money market equilibrium because it would create the potential for investors to earn arbitrage profits.¹⁶ The elimination of reserves by such a "speculative attack" forces the exchange rate to float.

The extent of the shift in money demand at the crisis point depends on expectations of the post-crisis jump in the inflation rate. Consider the simple case of a fiscal deficit

¹³ The simple frameworks outlined below draw extensively on Calvo (1996), which distils key insights from a number of analyses of exchange-rate crises, including Krugman (1979) and Flood and Garber (1984). The simple treatment of exchange rate crises in this paper omits, for example, consideration of strategic interactions between investors and governments (see Obstfeld (1996)) and among investors themselves (Radelet and Sachs (1998a, 1998b)).

¹⁴ Note that the argument could be generalised to include a crawling peg regime.

¹⁵ This argument assumes that the shift in demand for base money cannot be accommodated by open-market operations, say because of the absence of a domestic money market.

¹⁶ For example, such profits could be earned by investors substituting out of the domestic currency at an earlier point in time.

financed by the central bank leading to the excessive creation of base money and of investors having rational expectations with respect to the inflation rate. Let $m(i + \pi_t)$ denote the demand for real base money under the fixed exchange rate, where i represents the real international interest rate (constant) and π_t the pre-crisis domestic inflation rate. The demand for real base money, which does not yield a nominal return, is negatively related to the nominal interest rate. The post-crisis demand for real base money is $m(i + \pi_{t+1})$, where π_{t+1} denotes the post-crisis domestic inflation rate. Therefore, at the crisis point, the change in international reserves in terms of a convertible currency, ΔR , equals

$$\Delta R = m(i + \pi_t) - m(i + \pi_{t+1}), \quad (1)$$

which in turn must equal the remaining stock of reserves, R_t , in an equilibrium. Once international reserves are exhausted and are no longer available to finance the fiscal deficit by absorbing the excess money supply, the inflation tax on domestic money must restore internal and external balance, leading to the post-crisis increase in the inflation rate.

This simple framework illustrates why investment analysts typically examine macroeconomic fundamentals such as the fiscal balance, domestic credit expansion, external balance and level of international reserves in assessing the sustainability of an exchange-rate commitment. Section 2 above examined the nature of macroeconomic imbalances of transition economies in a way that allowed identification of relative weaknesses. In general, the countries at earlier stages of transition (Bulgaria, Romania, Russia and Ukraine) exhibited significant fiscal strains, while countries at more advanced stages of transition tended to have larger external imbalances (Croatia, the Czech Republic, Estonia and the Slovak Republic). One advanced country (Estonia) also experienced a domestic credit boom. In comparison, while the East Asian countries had large external deficits and rapid credit growth, they also had much higher levels of domestic and foreign indebtedness than did the more advanced transition economies.

The above framework, however, is incomplete in that it depicts an exchange-rate crisis as being entirely “home grown” or endogenous, with no role allowed for exogenous factors. One type of exogenous “shock” which could be readily incorporated into this framework is an unanticipated real exchange rate appreciation caused by the devaluation or depreciation of another country’s currency. Such an external event could squeeze the profitability of the tradables sector and weaken the external balance. In fact, some analysts have argued that the devaluation of Chinese yuan in 1994 and the depreciation of the Japanese yen (*vis-à-vis* the US dollar) in 1996 and the first half of 1997 contributed to the significant real appreciation of the currencies of those East Asian countries (pegged to the US dollar) which were buffeted by the recent financial market turmoil. Another type of exogenous disturbance which can affect the sustainability of an exchange-rate commitment is the sudden shift in portfolio allocations of investors, particularly international investors. This factor is the focus of the next sub-section.

3.2 VULNERABILITY TO SHIFTS IN PORTFOLIO PREFERENCES

As a simple example of an exogenous change in asset demands, consider a shift in investor preferences away from broad money into international assets under a fixed exchange rate. Assume that the relationship between broad money and the monetary base is fixed (say by a binding reserve requirement) and that the stance of monetary and

fiscal policies is both constant over time and consistent with the fixed exchange rate. The central bank would then have to defend the exchange rate by swapping base money for international reserves in proportion to the shift in demand for broad money. For a sufficiently large shift in money demand, the necessary contraction in the money supply to accommodate this shift could exhaust the stock of international reserves. The exchange rate and price level would then have to adjust to clear the money market.

A simple measure of an economy's vulnerability to a shift in money demand can be derived as follows. Let M_t denote the demand for real broad money balances at time t . and suppose that the demand for money follows a simple process of the form

$$\log(M_{t+1}) = \log(M_t) + \varepsilon_{t+1}, \quad (2)$$

where ε_{t+1} is a random disturbance term. In other words, the demand for real broad money one period ahead equals the current demand for money (due to the consistent stance of fiscal, monetary and exchange rate policies) times a random disturbance term. This disturbance term serves to capture external factors such as shifts in the perceptions and preferences of investors due to events abroad.

The real money supply takes the form of constant money multiplier, b , times the real monetary base, m_t . That is,

$$M_t = bm_t. \quad (3)$$

Money market equilibrium, of course, requires that the demand for and supply of real money balances are equal.

Under a fixed exchange rate regime, a large negative shock to money demand can give rise to a balance of payments crisis if the implied contraction in the real monetary base exceeds the stock of hard currency reserves. To contract the monetary base and clear the money market, the central bank must sell international reserves in exchange for base money (in the absence of domestic money market). This requires that

$$m_t - m_{t+1} \leq R_t, \quad (4)$$

where R_t is the stock of international reserves. Otherwise the shift in real money demand cannot be accommodated, forcing the abandonment of the fixed exchange rate.

The three above conditions provide the basis for a measure of a country's vulnerability to exogenous shifts in demand for broad money. Note that, as in the preceding subsection, an exchange rate crisis will occur if

$$m_t - m_{t+1} > R_t. \quad (5)$$

Multiplying this expression by the money multiplier, b , and rearranging terms yields

$$\varepsilon_t < \log[(v_t - b)/v_t] \quad (6)$$

where $v_t = M_t/R_t$. The probability of a balance of payments crisis is thus an increasing function of ratio of broad money to international reserves, v_t . This measure of vulnerability to shifts in broad money demand is, in effect, the capital account counterpart to the index of reserve cover of imports (in months), which provides an indication of the extent to which international reserves can be used to ensure stable trade flows.

The analysis of vulnerability to shifts in portfolio preferences can be extended to include a broader range of assets. However, the relationship between changes in portfolio preferences and pressure on international reserves is more complex than in the simple case above. For domestic assets such as equity, a pronounced shift in demand will in the first instance lead to a corresponding movement in share prices to restore market equilibrium. This asset-market adjustment will help to curb the capital outflow and the resulting pressure on reserves by raising expected returns.

Short-term domestic and foreign debt pose a greater risk to the exchange rate commitment, however, than do equities. If a substantial amount of debt is coming due and investor sentiment about the country deteriorates, government policy must restore asset-market equilibrium in one of three ways. The shift in portfolio preferences can be accommodated: (i) by exchanging international reserves for domestic or foreign debt as it matures, (ii) by tightening the stance of monetary policy and raising interest rates to retain the investments or to attract new funds or (iii) by letting the exchange rate depreciate. The likelihood of being forced to abandon the exchange rate commitment in this case depends, *inter alia*, on constraints in raising interest rates, such as the banking sector's exposure to interest-rate risk and its financial strength and the exposure of households and enterprises to short-term movements in interest rates. It also depends on the central bank's ability to access international liquidity in private markets or from official bilateral and multilateral sources. Investor actions are likely to be significantly influenced by both the adequacy of reserves relative to short-term debt and the constraints on government policy.

The above analysis of the domestic asset market and short-term external debt associates the vulnerability of the exchange rate to the exogenous shift in portfolio preferences with two indicators. One is the ratio of liquid domestic liabilities (broad money plus money market instruments) and the other is the ratio of short-term external debt to international reserves. Chart 7 contains the former indicator for selected post-communist countries, revealing considerable variation among them. Those countries which appear to have been more vulnerable include Russia and Ukraine, and to a lesser extent the Czech and Slovak Republics. The vulnerability of Russia had arisen in part because of the large outstanding stock of short-term government securities (so-called GKO's). Those countries which appear to have been less vulnerable include Bulgaria and Estonia, which have currency boards. These exchange rate regimes require that international reserves equal the monetary base.

Chart 8 reports the ratio of short-term external debt to international reserves. Again, there is wide variation among the selected post-communist countries, with Russia appearing to have been more vulnerable to portfolio shifts than other countries in the region. The three of the East Asian economies (Korea, Indonesia and Thailand) were particularly vulnerable to changes in the perceptions and preferences of international investors through the large short-term debt exposures relative to international reserves.

3.3 SUMMARY

The above analysis of potential pressures on exchange-rate commitments examines both the role of macroeconomic fundamentals and of exogenous factors such as shifts in the perceptions and preferences of investors. The two aspects are complementary and, indeed, these factors can interact to precipitate a crisis. For example, exogenous factors can push an economy close to or beyond the point at which an inconsistency between

the stance of monetary and fiscal policy and the exchange-rate commitment would trigger a foreign exchange crisis. In fact, an important finding of empirical research which examines the relationship between these indicators and the incidence of balance of payments crises is that crises tend to occur when several indicators highlighted above point to multiple weaknesses.¹⁷

¹⁷ See Sachs, Tornell and Velasco (1996) and Kaminsky, Lizondo and Reinhart (1997).

4 EAST ASIAN CONTAGION: IMPACT ON CEE AND THE CIS

How did the East Asian turmoil affect the post-communist countries, in light of the preceding assessment of their foundations for macroeconomic and financial stability and analysis of exchange-rate crises? This section provides an answer to the question by examining East Asian contagion effects which operated through international financial linkages.¹⁸ The methodology used to identify the impact of key East Asian events on the selected post-communist countries is to associate these events with movements in interest rates and asset values in the money and securities markets in CEE and the CIS. The focus is on money and securities markets and on international reserves because all the post-communist countries considered in this paper except one had exchange rate commitments at the start of the turmoil and maintained them through the period of instability. In the one country which had a floating exchange rate regime, Romania, the authorities responded initially to the turmoil by defending the then prevailing level of the exchange rate. The analysis therefore begins by reporting key events in East Asia. It then examines interest-rate and asset-price movements and changes in international reserves of the selected post-communist countries during the period of turmoil.

4.1 CHRONOLOGY OF THE EAST ASIAN TURMOIL

On 2 July 1997 the Bank of Thailand abandoned the fixed rate which had pegged the baht to the US dollar and allowed the currency to float. Pressure on the Thai currency had been building for much of the year as the widening external deficit, slowing economy, emerging strains in the financial system and growing political instability combined to weaken investor confidence. The Thai finance companies were a particular source of vulnerability because of their heavy short-term borrowing abroad. The weakening of investor confidence intensified in late May when the rescue of the largest Thai finance company (Finance One) failed. One month later, the Thai central bank suspended the operations of 16 cash-strapped finance companies and ordered them to submit merger or consolidation plans. The exchange-rate anchor finally gave way in early July after the country's foreign exchange reserves had dwindled to the equivalent to two days imports. In the wake of the floating baht, the Philippine peso, Malaysian ringgit and Indonesian rupiah were knocked in succession from their exchange rate pegs (11 July, 14 July and 14 August). In late July, the Thai government requested financial support from the IMF. An international rescue package totalling US\$ 17 billion and involving the suspension of 48 finance companies was announced in early August.

The turmoil gathered renewed force in October following the devaluation of the Taiwan dollar in the middle of the month, despite the country's substantial foreign exchange reserves. This event heightened concerns about the sustainability of Hong Kong's long-standing peg to the US dollar. In the week beginning 20 October, the Hong Kong stock market suffered its heaviest losses ever, shedding nearly a quarter of its value in four days. At the same time, the Hong Kong Monetary Authority was forced to raise overnight interest rates to over 300 per cent to defend the fixed exchange rate. The collapse in Hong Kong unleashed the first major contagion effects to other parts of the world, with the New York Stock Exchange and the main Latin American bourses (in Argentina, Brazil and Mexico) suffering record losses. Brazil was seen as particularly

¹⁸ Expectations about the impact of real linkages may also influence financial contagion effects by increasing the probability of a future devaluation.

vulnerable because of its wide current account deficit, weak fiscal position and over-valued currency, and the central bank was forced to double nominal interest rates to fend off currency speculation. Financial pressures in East Asia also intensified, spreading to South Korea where the external deficit, already weakened by the sharp fall of the Japanese yen against the US dollar, threatened to widen yet further with the collapse of the other East Asian currencies. Amid this renewed turmoil, Indonesia reached an agreement with the IMF on 31 October on a US\$ 43 billion international rescue package.

On 17 November, South Korea abandoned its defence of the battered won, sending the currency through the psychologically important level of won 1,000 per US\$ 1. Four days later, faced with the pressure of a slumping currency and crumbling investor confidence, the South Korean government announced that it would seek a rescue package from the IMF. After one premature announcement, South Korea and the IMF reached agreement on 4 December on an international rescue package totalling US\$ 60 billion. However, the breathing space created by this announcement was short-lived, as it soon became apparent the amount of short-term foreign debt owed by Korean borrowers was underestimated in the analysis for the IMF agreement and that the financing plan could be inadequate. With approximately US\$ 15 billion in short-term loans due at the end of December, the IMF agreed on 15 December to accelerate delivery of a portion of the rescue package announced at the beginning of the month and, nine days later, 11 countries pledged to speed US\$ 10 billion in support to South Korea. On 29-30 December, the world's major banks agreed in principle to roll over maturing short-term debt. The international banks and the South Korean government reached a formal roll-over agreement on 16 January 1998 and a comprehensive re-financing agreement on 29 January.

On 15 January 1998, Indonesia reached a second rescue agreement with the IMF, after the first one was almost completely abrogated. This agreement called for the dismantling of politically-privileged monopolies and the consolidation or closure of insolvent banks in exchange for a US\$ 43 billion bailout. The Indonesian government began to implement terms of this agreement on 27 January, with the announcement of the liquidation of 16 insolvent banks and the temporary cessation of debt service payments until a framework could be agreed between international lenders and private Indonesian borrowers on how to restructure an estimated US\$ 66 billion in international loans.

By the beginning of February 1998, the financial markets in East Asia and in other regions entered a temporary period of respite, lasting until mid-May. However, with the outbreak of the political crisis in Indonesia, culminating in President Suharto's resignation on 22 May 1998, a new shockwave has affected emerging financial markets, especially in Russia and Ukraine, underlining these economies' ongoing vulnerability. For the purpose of this paper, the empirical analysis of the impact of the East Asian crisis on the transition economies is restricted to the period from 20 October 1997 (the collapse of the Hong Kong stock exchange) to the end of January 1998 (the effective resolution of the South Korean liquidity crisis and the first steps in Indonesia's implementation of its second agreement with the IMF).

4.2 IMPACT OF THE EAST ASIAN TURMOIL THROUGH FINANCIAL LINKAGES

There were two ways in which the turmoil in East Asia spread to the money and financial markets in CEE and the CIS. The first was direct and involved the repatriation of foreign investments made in the transition economies by investors resident in East Asian and Latin American countries who were facing a severe liquidity squeeze. The second arose from a generalised shift in investors' perceptions and portfolio preferences against emerging markets, including those in CEE and the CIS. This channel involved primarily the reallocation of foreign portfolio investment, since capital controls in many transition economies limited the immediate potential for capital flight by domestic residents fearing an exchange rate devaluation.

The direct financial linkages were significant in transmitting the East Asian turmoil to Russia, in particular. As the financial pressure on South Korea mounted in the second half of November 1997, Russia also came under severe strain. Between 11 November and 1 December, three days before the Korean government signed an agreement with the IMF, inter-bank interest rates doubled to 26 per cent from 13 per cent. Russia's difficulties arose in part from the substantial foreign holdings of GKO relative to the country's international reserves (see above). Moreover, of the US\$ 18–25 billion GKOs held by foreign investors, approximately US\$ 4 billion were with South Korean and Brazilian institutions. With US\$ 5 billion of GKOs maturing in the first week of December, there was a substantial capital outflow and reserve drain due in part to the repatriation of South Korean and Brazilian capital.

The East Asian contagion, however, extended beyond the liquidation of investments in Russia by South Korean and Brazilian investors. The shift out of Russian GKOs was much more extensive than that by investors from these two emerging markets. In addition, several other post-communist countries were caught up in the turmoil even in the absence of direct financial linkages.

To identify the impact of the direct financial links between East Asia and CEE and the CIS and of the generalised shift in the portfolio allocations of international investors, the analysis focuses on the money and securities markets in the transition economies, the international bond market and international reserves. This focus reflects the fact that the post-communist countries analysed in this paper (with the exception of Romania) maintained their exchange rate commitments throughout the period under consideration (20 October 1997 to 29 January 1998).¹⁹ The main indication of a shift in portfolio allocations away from the transition economies would thus appear as a rise in money market interest rates, a fall in equity values, a widening of spreads on international bonds and a decline in international reserves.

Chart 9 depicts the movements in three-month inter-bank interest rates over the period January 1997 to February 1998. The chart is split in to two panels with the first showing short-term interest rates for those countries that witnessed the greater increase in rates over the period 20 October 1997 to 29 January 1998 and the second depicting those which saw less of a rise. The first group includes Estonia, Romania, Russia and Ukraine and the second Bulgaria, Croatia, the Czech Republic, Hungary, Poland and the Slovak

¹⁹ The exchange rate of the Romanian lei to the US dollar depreciated by 7.7 per cent from 7,613 at the end-September 1997 to 8,248 at end-January 1998, with 60 per cent of the depreciation concentrated in December and January as the coalition government became increasingly unstable. Over the preceding four-month period the lei depreciated by 6.6 per cent.

Republic. The average increase in the level of short-term interest rates for the first group was 104.9 per cent and that for the second group was 6.4 per cent. The difference between the two averages is significantly different from zero at the 95 per cent confidence level.²⁰

A similar grouping of the post-communist countries emerges from an analysis of the equity markets in Chart 10. Again, Estonia, Romania and Russia witnessed larger decreases in equity prices over the period 20 October 1997 to 29 January 1998 than did the other transition economies considered here (Bulgaria, Croatia, the Czech Republic, Hungary, Poland and the Slovak Republic). No stock market data are available for Ukraine. The average fall in the stock market indices of the first group of countries between the two dates corresponding with the period of East Asian contagion was 38.8 per cent, while that for the second group was 14.6 per cent. The difference between the two averages is significantly different from zero at the 99 per cent level of confidence.

Evidence from international capital markets on investors' differentiation among the post-communist countries is available from the international bond market. Again, the post-communist countries fall into two groups, one experiencing greater impact of East Asian contagion and the other less. The average increase in the spreads on Eurobonds issued by Croatia, the Czech Republic, Hungary and Poland between 20 October 1997 and 31 January 1998 was 1.0 percentage point, while that for Romania, Russia and the Ukraine was 5.1 percentage points. The difference between the two averages is significantly different from zero at the 90 per cent confidence level.

The change in international reserves of the selected post-communist countries provides further evidence on the extent of shifts in investors' portfolio allocations. The group of countries that exhibited signs of strain in the money and securities markets also experienced the larger percentage decline in reserves, by 11.8 per cent on average between the end of September 1997 and the end of January 1998. The group of countries that showed less strain in money and securities markets saw their reserves increase slightly, 0.3 per cent on average. However, this comparison is dominated by the sharp decline in international reserves in Russia over the period (by 44 per cent). It is not possible to distinguish statistically the change in reserves between the two groups of countries.

Given the analysis of how the investors in their portfolio allocation decisions discriminated among the transition economies, the next step is to link this differentiation to economic fundamentals – the indicators of macroeconomic stability and of vulnerability to portfolio shifts discussed in Sections 2 and 3. As noted above, an important finding of the empirical research on exchange rate crises is that crises tend to occur when there are multiple sources of weakness. One way to assess the extent of such weaknesses in the transition economies is to examine the various dimensions of macroeconomic and financial stability and to identify the extent to which countries are an "outlier" compared with the other transition economies. A simple measure of relative weakness along a particular dimension is whether the observed value for a particular country lies beyond one standard deviation from the average for the group of transition economies as whole. This measure is taken as indicating that a country is an outlier on this dimension.

²⁰ This calculation assumes that the first-difference of interest rates is stationary and that this difference has a log-normal distribution.

Table 2 reports for each dimension of macroeconomic stability and vulnerability to portfolio shifts, for the countries that have indicator values for the period 1996-97 which lie beyond one standard deviation from the sample mean in the direction of greater vulnerability. This simple statistical filter, combined with the empirical association between multiple weaknesses and exchange rate crises, provides a useful first pass at classifying countries as stronger or weaker according to economic fundamentals. Those countries which the table reveals as having multiple weaknesses include Bulgaria, Estonia, Russia and the Slovak Republic. Bulgaria, in fact, experienced a serious bout of macroeconomic instability in 1996 and early 1997, which had been resolved through an IMF-supported stabilisation programme and the adoption of currency board in March 1997, just ahead of the onset of the East Asian turmoil.

Table 2. Country outliers along dimensions of macroeconomic instability and vulnerability to portfolio shifts

Dimension of macroeconomic stability and vulnerability to portfolio shifts	Country outliers
General government deficit in per cent of GDP	Bulgaria, Russia
General government revenue in per cent of GDP	Bulgaria, Romania, Russia
Public debt in per cent of GDP	Bulgaria, Hungary
Current account deficit in per cent of GDP	Estonia, Slovak Republic
External debt in per cent of GDP	Bulgaria
Real credit growth to non-government sector in per cent	Estonia, Slovak Republic
Credit to non-government sector in per cent of GDP	Czech Republic, Slovak Republic
Ratio of liquid domestic assets to international reserves	Slovak Republic, Russia, Ukraine
Ratio of short-term international debt to reserves	Russia

Sources: See Charts 1 - 8.

The simple approach to grouping countries into weaker and stronger categories meets with partial success in explaining the impact of East Asian contagion on the selected post-communist countries. Among the countries more severely affected by East Asian contagion (Estonia, Romania, Russia and Ukraine), two countries, Estonia and Russia, had multiple weaknesses in economic fundamentals according to a simple statistical filter. The other two countries which were more adversely affected by East Asian contagion, Romania and Ukraine, had a single outlier along a dimension of macroeconomic instability and vulnerability to portfolio shifts.

The grouping of countries as stronger and weaker, however, suggests that both Bulgaria and the Slovak Republic would have been among the transition economies more severely impacted by East Asian contagion. The case of Bulgaria can be readily explained. The Bulgaria indicators for 1996-97 reflect more the conditions which prevailed in 1996 and early 1997, when the country was experiencing extreme macroeconomic and financial instability, than the new policy stance adopted in March 1997. The indicators do, of course, provide at least a partial explanation for the extreme macroeconomic instability which prevailed in Bulgaria prior to the stabilisation. The robustness of the Slovak Republic to East Asian contagion requires further

investigation, although part of the explanation may lie with the nature of capital controls in that country.

The analysis of the impact of East Asian contagion on the post-communist countries of CEE and the CIS thus reveals that three of the four countries that experienced significant financial pressures were exhibiting relatively large fiscal imbalances and, in some, vulnerability to portfolio shifts. Russia and, to a lesser extent, Ukraine were vulnerable to contagion primarily because of their reliance on foreign savings to finance structural fiscal deficits. In Romania, structural fiscal weakness combined with growing instability in the coalition government to increase perceived country risk. The pressure on exchange rate commitments stemming primarily from fiscal imbalances in three post-communist countries at earlier stages of transition bears a strong similarity to previous episodes of macroeconomic instability in Latin America.

In contrast, Estonia, the only post-communist country at a more advanced stage of transition which experienced significant pressure from East Asian contagion, had a booming private sector fuelled by rapid credit expansion and large capital inflows. The experience of Estonia bears some similarity to the origins of the turmoil in East Asia, where large imbalances between saving and investment in the private sector and rapid credit growth (from an already high base) contributed to the collapse of confidence. While the causes of the loss of confidence in East Asia are complex, distorted local financial sectors and patterns of finance, in particular excessive reliance on short-term debt to finance long-term fixed investment, appear to have been important contributing factors.

5 CONCLUSION

The impact of East Asian contagion on the transition economies both recalls important lessons learned from the Latin American crises of the 1980s and reinforces the significance of the lessons now being drawn in the aftermath of the East Asian turmoil. Those countries at earlier stages of transition which were affected by events in East Asia had significant structural weaknesses in fiscal policy, including low general government revenues and high deficits. Combined with these weaknesses was a heavy reliance on short-term debt to finance the (transitory) fiscal deficits. In many post-communist countries at earlier stages of transition reform of taxation and tax administration thus remains an important priority. Such a firmer foundation for fiscal policy, moreover, would enable the governments to extend the maturity of their borrowing without having to pay high risk premia.

In countries at more advanced stages of transition, such as Estonia, the priority is to strengthen the foundations of the financial sector to support the sustainable financing of private sector imbalances and of private investment. The weakness of these foundations was a major contributing factor to the intensity of speed and intensity of the East Asian turmoil. And many of the structural weaknesses in finance seen in East Asia are also present in CEE and the CIS, albeit on a much smaller scale because of the time that is required to expand financial intermediation in the transition.

Central to the stable financing of fixed investment in the transition economies is the creation of a legal, regulatory and institutional framework which is supportive of long-term finance. This requires, in addition to sustained macroeconomic stability, the legal framework for secured transactions and collateral and for bankruptcy to provide long-term creditors with the means to enforce the claims. An effective mechanism for corporate governance is also necessary so that outside investors in corporations can invest with confidence that they will have a voice in corporate affairs.

Stable expansion of market-oriented finance in the transition economies, in addition, will require sound financial institutions to provide the intermediation which is so vital to sustained recovery and growth. This expansion will require strengthening the process of competition in the financial sector, including the licensing of banks, the easing of restrictions on foreign entry and the effective management of failed financial institutions so that there is meaningful exit from the sector. Private ownership of financial institutions is crucial, not only to the performance of the institutions themselves, but also to underpinning the process of competition in the financial sector. Governments also have an important role to play establishing and enforcing prudential regulation of financial institutions and securities activities.

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