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**Is There a Latin-American Debt Crisis
Building Up in Eastern Europe?
A Comparative Analysis**

Dagney Faulk and Marcelo M. Giugale

Working Paper 97-WP 186

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Abstract

This paper reports on an analytical comparison between the foreign debt build-up that preceded the 1982 debt crisis in Latin America and the current debt accumulation process taking place in Eastern Europe. In the whole, Eastern Europe's debt position seems more sustainable than Latin America's in the early 1980s. While the former is equally indebted and shows higher country concentration (around Russia), greater potential for fiscal impact, and no superior macroeconomic environment, its debts are less globally significant, have better repayment terms, are supported by better repayment capacities (in turn due to larger trade openness and virtually no capital flights), and are accumulating at a slower pace in a much more favorable international economic situation (faster growth in World-wide output and trade, and low and declining interest rates). This sets Eastern Europe apart from Latin America in the early 1980s but, of course, does not mean that its indebtedness is sustainable.

J.E.L. Classification: F34, G15

IS THERE A LATIN-AMERICAN DEBT CRISIS BUILDING UP IN EASTERN EUROPE?
A COMPARATIVE ANALYSIS

“As banking developed from the seventeenth century on, so, with the support of other circumstances, did the cycles of euphoria and panic. Their length came to accord roughly with the time it took people to forget the last disaster -- for the financial geniuses of one generation to die in disrepute and be replaced by new craftsmen who the gullible and gulled could believe had, this time but truly, the Midas touch.”

John Kenneth Galbraith (1975)

Introduction

Between 1990 and 1996, the net flow of capital¹ to the developing countries almost tripled to US\$ 285 billion; their net inflow of long-term debt more than doubled (to just under US\$ 100 billion p.a., or about 2 percent of their combined GNP, in 1996); and their inflow of foreign direct investment more than quadrupled (to US\$110 billion p.a.)². This dramatic increase in capital inflows did not spare the countries of Eastern Europe and the Former Soviet Union (FSU) who saw, and continue to see, their annual net intake of capital increase from under US\$ 15 billion in 1990 to about US\$ 45 billion (or 3.5 percent of their combined GNP) in 1996; in cumulative terms, over half of that intake has taken the form of debt.

¹ / “Net flow of capital” refers here to “aggregate net resource flows”, that is, the sum of official development finance (grants and loans) and private flows (debt, foreign direct investment and portfolio equity). See World Bank (1997a) for further explanation.

² / Our definition of ‘developing country’ follows the definition used in World Bank (1997b).

The literature on debt accumulation, sustainability and crises is plentiful. Outright lender myopia (Galbraith, 1975; Devlin, 1989); the ‘pull’ attraction of favorable domestic policy settings and the ‘push’ conditions in international financial markets (Fernandez-Arias, 1996); and the determinants of flow ‘reversals’ (Dadush *et. al.*, 1994; Shadler, 1994) have all been offered as possible explanations for seemingly cyclical surges in debt flows that can be traced back to the early nineteenth century (Eichengreen and Lindert, 1989). Lessons from past debt crises have also been widely drawn by the literature (Stallings, 1987). Similarly, the latest increase in capital flows to the group of developing countries (which began in the late 1980s) has been the object of vast empirical analysis as well (Schadler *et. al.*, 1993; Fernandez-Arias and Montel, 1996; Dooley *et. al.*, 1996).

There has been, however, relatively little specific focus on the debt flowing toward Eastern Europe. Its rapid accumulation of liabilities is of particular interest, though--it is taking place among economies that are undergoing a formidable transition away from central planning.³ This raises a critical question: Is that debt accumulation sustainable, or are those economies heading for a debt crisis? Kapur and van der Mensbrugge (1997) point to the Eastern European (and other FSU) countries’ fast borrowing performance and to the potential negative effect that easily forthcoming financing could have on their policy commitment to structural reform.

This paper attempts to advance the analysis of Eastern Europe’s on-going debt accumulation process by comparing it to the debt accumulation process that preceded the Latin American debt

³ / For a thorough description of the transition experience, see World Bank (1996).

crisis of the early 1980s. It reports on key country and international conditions in both situations, and places Eastern Europe in the quantitative context of the Latin-American crisis in-the-making of the late 1970s and early 1980s. This allows for the identification of some reassuring, as well as some worrisome, trends (Section II), and for the drawing of some broad sustainability-related conclusions (Section III).

II. A Tale of Two Accumulations: Comparing Latin-America to Eastern Europe

The analysis presented in this section is based on four Latin American countries (Argentina, Brazil, Mexico, and Venezuela) which, in 1981, the year before Mexico stopped servicing its debt and unlocked a series of country defaults, accounted for 70 percent of that region's US\$ 224 billion long-term debt, and on four Eastern European countries (the Czech Republic, Hungary, Poland, and the Russian Federation) which, in 1996, held 55 percent of the US\$ 346 billion long-term debt of their region (including the FSU)⁴. Our basic data and calculations for those economies are presented in Tables 1 and 2.

a) The Bad News

Four main characteristics of Eastern Europe's current debt position as compared to Latin America's in the period leading to the 1982 debt crisis raise concerns over the former's sustainability. First, *the Eastern European countries are as indebted today as their Latin American counterparts were right before their debt crisis*. In both cases, total debt to GNP ratios move around 30 percent. Hungary, the most indebted of the two samples (63 percent of GNP) has at present proportionally twice as much debt as Mexico did in 1981.⁵

Second, a larger portion of the Eastern European debt is public or publicly-guaranteed, and a larger portion of it is officially supplied. This, while possibly reducing financing volatility, sets

⁴ / Our samples include 29 countries in the Latin American and Caribbean region, and 27 in Eastern Europe and the FSU.

⁵ / It is worth mentioning that the notion that Eastern European countries started their post-Soviet-Union debt accumulation process from very low levels is not univocally supported by the data: in 1990, total debt to GNP ratios were 20, 67, 88, and 10 percent for Czech Republic, Hungary, Poland and Russia, respectively.

the stage for a larger fiscal impact in case of an exogenously-driven crisis. In average, about 70 percent of the Latin American debt was guaranteed by the borrowing country's state in 1982; that proportion hovers around 90 percent among the Eastern European countries today (and is virtually 100 percent in Russia). Surprisingly, and with some variation across countries, private resource flows⁶ are much less important than official ones in Eastern Europe today compared with Latin America in the early 1980s. For each US dollar flowing into Latin America, less than ten cents were from official sources in the pre-crisis period; that proportion ranges from seven cents --Czech Republic-- to 6 dollars --Russia-- in Eastern Europe.

Third, Eastern Europe's debt is much more concentrated than Latin America's during the 1980s.

Russia holds 60 percent of the total debt stock of our four-country Eastern European sample, and 28 percent of the total debt stock of Eastern Europe and the FSU. Brazil, the largest Latin American debtor in 1981, held just over a third of our country sample's debt (Mexico held the other third), and a quarter of the region's. And, in comparable dollar prices, Brazil's total debt stock in 1981 was only 8 percent larger than Russia's in 1996.

Fourth, the domestic macroeconomic frameworks among Eastern European countries are not fundamentally different from those in Latin America in the period leading to the 1982 debt crisis.

With the exception of the Czech Republic, the Eastern European are running fiscal deficits that, in proportion of GDP, are similar to those seen among Latin American countries in 1981 (Russia's fiscal deficit is worse than Mexico's in 1981). Also similar are gross domestic saving

⁶ / For definition of resource flows, see footnote 1.

ratios (Poland's is far lower than any Latin American comparator in the sample). With the exception of Hungary, real effective exchange rates amongst Eastern Europeans are on as steep an appreciation path as they were in Latin America in the the five years leading to the 1982 crisis (Russia's 46 percent average annual appreciation over each of the last four years beats the *tablita*-led real effective appreciation of Argentina's currency in the four years before 1982). Also, while the Latin American economies were growing apace before the 1982 crisis, the Eastern European countries, involved in major market transitions since the early 1990s, only recently reached moderate, positive real GDP growth (not yet Russia).

While current account imbalances in Eastern Europe are not as serious a problem as they were in Latin America, their sustainability cannot be taken for granted (although Russia shows a surplus, Hungary's deficit -- -3.8 percent of GDP --is not very different from Mexico in 1981).

Following Dadush and Brahmhatt (1995), we have computed the deviation of each country's current account position at each point in time from the so-called 'sustainable' current account ratio (according to this rule-of-thumb indicator, deviations above 2 are considered non-sustainable in the long-run because export growth fails to cover for foreign liability servicing). Eastern Europe's deviations are 'sustainable' (i.e., consistently below 2), but so were Latin America's, every single year, and in every single sampled country, before the 1982 debt crisis.

Finally, the risk rating (as measured by Standard and Poor's indexes) of the sovereign debt of the Eastern European countries in our sample have been, in the whole, encouraging (Hungary and Poland have been upgraded from speculative to investment grade), signaling market confidence

in, among other things, these economies macroeconomic environment. It should be pointed out, however, that similar (also S&P) ratings for Venezuela (the only Latin country we have found ratings for in the early 1980s) were consistently triple AAA, even a year before the advent of the debt crisis.

b) The Good News

The factors described above point to a debt position of doubtful sustainability among Eastern European countries. There are, however, six main positive characteristics that differentiate Eastern Europe's current debt build-up from Latin America's in the late 1970s and early 1980s. First, the relative international significance of those regions' indebtedness: in 1982, Latin America's long-term debt stock was equivalent to 2 percent of the World's GNP, 9 percent of its global trade, and about half of the liabilities of the group of developing countries. *Eastern Europe's debt is much less globally significant than its Latin counterpart in the early 1980s*: the corresponding indicators for Eastern Europe and the FSU in 1995 were 1, 5, and 20 percent, respectively. Two main factors account for that difference. First, capital flows to the developing world are now much less regionally concentrated (in 1981, 48 percent of the net aggregate resource flows to developing countries had Latin America as their destination, while in 1995 no region attracted more than 40 percent of that flow, and only 17 percent went to Eastern Europe). Second, although net capital flows to the developing World are currently over 60 percent larger than in the early 1980s (US\$ 285 billion in 1996 *vis-a-vis* US\$ 173 billion in 1981, in 1996 constant US\$ prices), their instrument composition has dramatically change away from debt in

favor of equity. Today, over half of those flows take the form of stock purchases and foreign direct investment.

Second, *the Eastern Europe countries appear to have a better repayment capacity than their Latin American counterparts in the early 1980s.* This is due, primarily, to the much larger degree of openness among the European economies. Even Russia, the ‘most closed’ economy among the Eastern Europeans (with a ratio of exports and imports of goods and non-factors services to GDP of about 40 percent in 1996) is ‘more open’ than Venezuela, the ‘most open’ among the Latins in the early 1980s (30 percent in 1983). This translates into much lower debt, debt service, and interest payments to export ratios. For instance, although total debt to GNP is higher in Hungary in 1996 than in Mexico in 1982, Hungary has half the rate of debt to exports. Similarly, while the Latin American countries saw a sharp and continuous decline in their international reserves (expressed in months worth of imports) in the years leading to the 1982 debt crisis, the Eastern European economies have witnessed a virtually uninterrupted increase in their reserves since 1990, reaching levels that are far more reassuring than those seen in Latin America in the 1980s (5, 7, 5, and 3 months worth of imports in Czech Republic, Hungary, Poland, and Russia in 1996, respectively, *vis-à-vis* 3, 0.8, 0.4 and 4 in Argentina, Brazil, Mexico, and Venezuela in 1982).

Third, *the average terms of Eastern Europe’s debt are, in general, not only better than those governing Latin American debt in the late 1970s and early 1980s, but have also been improving since 1990.* The proportion of short-term debt to total debt increased constantly in all the Latin

countries in our sample over the five years that preceded the Mexico-led debt crisis, reaching levels that were clearly difficult to maintain (from about a fifth of the total debt in Brazil to more than half in Venezuela). The debt maturity structure is sharply different in Eastern Europe: with the exception of the Czech Republic (where a rather-constant third of the debt is short term), these countries have been systematically reducing their proportional short-term indebtedness since 1990, from about a fifth to about a tenth or less at present (notably, Poland virtually eliminated its short-term debt). Similarly, the proportion of concessional debt⁷ to total debt shrank continuously to almost negligible levels in Latin America in the five years before the debt crisis (from low starting levels; e.g., in 1978, the country with the highest proportion of concessional debt was Brazil, with only 4 percent). In contrast, the Eastern European countries have increased the share of concessional debt in total debt manifold since 1990 (a fifth of Russia's debt and a quarter of Poland's is now on concessional terms). Finally, the Latin American debt of the early 1980s was about twice as expensive as Eastern Europe's today. After a continuous increase since 1978, the average interest rate on new commitments to private creditors ranged, in 1981, between 12 percent p.a. (Argentina) to 17 percent p.a. (Venezuela). In Eastern Europe, that rate has fallen by about a quarter since 1990, and ranges from about six percent p.a. (Hungary) to about eight percent p.a. (Poland)⁸. Put together, the better terms of the Eastern European debt also imply a lighter debt service burden on the Government's budget as compared to Latin economies (that ratio was as high as 70 percent in Latin America in 1981-- Argentina--, and is at most a third --Hungary-- among Eastern Europeans).

⁷ / Defined as loans with an original grant component of 25 percent or more.

⁸ / Latest available data: 1995.

Fourth, *Eastern Europe's debt is not accumulating as rapidly as Latin America's in the late 1970s and early 1980s*, putting less pressure on the country's overall absorptive capacity and, ultimately, on its capacity to repay. For instance, in Argentina, the fastest Latin borrower, the total stock of debt (in current dollar terms) grew by an average 35 percent each year during the five years that preceded the 1982 debt crisis. No country in our Eastern European sample can match that speed, not even the Czech Republic with its average debt growth of about 18 percent p.a. over the last six years.

Fifth, *among the Eastern European countries, there is no evidence of the kind of pre-crisis capital flight (i.e., large outward shifts of capital from residents) that was common among Latin American economies in the late 1970s and early 1980s*. Claussens and Naude (1993) provide an inventory of methods to calculate capital flight; here we have followed the so-called World Bank methodology. Our calculations confirm that all Latin American countries experienced large (and increasing) capital flight in the four years that preceded the 1982 debt crisis [a finding that has been documented elsewhere in the literature --Cumby and Levich (1987), for instance]. In contrast, capital flight from Eastern Europe have been more episodic: Hungary in 1990 and 1994, Poland in 1991 and 1992, and Russia in 1994 (we find no evidence of capital flight in the Czech Republic).

Sixth, the international economic setting that accompanied the Latin American debt build-up deteriorated rapidly over the half-decade before the 1982 crisis. *The Eastern European*

economies are conducting their borrowing in a much more favorable global environment.

Growth in the World's GDP and in global trade fell continuously from 1978 until 1982, when they came to a virtual stall (0.2 and -1.2 percent p.a., respectively). At the same time, LIBOR rates increase by more than half (reaching almost 14 percent in 1982). International economic conditions have been very different during the 1990s: the World's economy has been growing steadily (currently, at well over two percent p.a.), international trade has boomed (increasing by more than five percent p.a. each year since 1990), and LIBOR rates have hovered around 6 percent p.a.

III. Concluding Remarks

This paper has reported on an analytical comparison between the foreign debt build-up that preceded the 1982 debt crisis in Latin America and the current debt accumulation process taking place in Eastern Europe. In the whole, Eastern Europe's debt position seems more sustainable than Latin America's in the early 1980s. While the former is equally indebted and shows higher country concentration (around Russia), greater potential for fiscal impact, and no superior macroeconomic environment, its debts are less globally significant, have better repayment terms, are supported by better repayment capacities (in turn due to larger trade openness and virtually no capital flight), and are accumulating at a slower pace in a much more favorable international economic situation (faster growth in World-wide output and trade, and low and declining interest rates). This sets Eastern Europe apart from Latin America in the early 1980s.

Our findings coincide with Dadush *et. al.* (1994) who, analyzing the possibility of capital flow reversals for developing countries in general, see no immediate signs for concern. Their judgment is based on four reasons: foreign direct investment accounts for a majority of the flows; much of the recent debt accumulated in developing countries is in the form of bond and equity issues rather than the more volatile commercial loans that were common in the 1970s; capital flows to developing country are a small share of the portfolios of OECD investors; and a substantial, protracted increase in international interest rates is unlikely.

The above can hardly guarantee a debt-crisis-free Eastern Europe, though. The fact that debt accumulation among these countries is proceeding on a sounder track than it did among their

Latin American counterparts in the late 1970s and early 1980s does not necessarily mean that the accumulation is sustainable. Equally important, the currently very favorable global economic environment cannot be taken for granted; it was the deterioration of this environment that triggered the Latin American debt debacle. [Brock *et. al.* (1989) offer a thorough analysis of the main factors which contributed to the debt crisis]. In this sense, this paper's comparisons provide a useful reference check (e.g., had Eastern Europe measured poorly *vis-à-vis* 1980s Latin America), rather than an absolute indication of long-term debt sustainability.

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Table 1: Selected Economic Indicators for Selected Eastern European Countries, 1990-1996

	Czech Republic							Hungary						
	1990	1991	1992	1993	1994	1995	1996	1990	1991	1992	1993	1994	1995	1996
I. Debt Statistics (millions US\$)														
Total Debt Stock	6383.3	8031.9	7571.7	9173.8	10694.9	16576.0	17937.0	21276.5	22624.0	21975.1	24249.8	28082.7	31247.7	30178.0
Long-term debt	3983.3	4974.9	4700.7	6099.2	7806.0	11503.7	12404.0	18006.4	19187.7	18484.8	21013.7	24544.7	27660.1	26599.0
Public and Publicly Guaranteed	3983.3	4972.9	4690.2	5887.6	7037.7	9609.9	9842.0	18006.4	18931.1	17843.3	19795.7	22156.9	23571.6	22005.0
Private Nonguaranteed	0.0	2.0	10.5	211.6	768.3	1893.9	2562.0	0.0	256.6	641.6	1218.0	2387.8	4088.5	4594.0
Public and Publicly Guaranteed Debt as a % of Total Long-term Debt	100.0	100.0	99.8	96.5	90.2	83.5	79.3	100.0	98.7	96.5	94.2	90.3	85.2	82.7
Private Nonguaranteed Debt as a % of Total Long-term Debt	0.0	0.0	0.2	3.5	9.8	16.5	20.7	0.0	1.3	3.5	5.8	9.7	14.8	17.3
II. Credit Worthiness Indicators (%)														
Total Debt/Exports	..	..	..	50.2	54.2	67.4	56	172.8	180.5	157.8	212.4	245.5	174.2	151
Total Debt/GNP	20.2	33	27.1	29.5	29.7	37	34	67.2	70.7	61.7	65	70.2	72.8	63
Total Debt Service/Exports	..	..	..	7.6	12.7	10.5	9	34.3	31.9	35.7	38.7	49.3	39.1	26
Interest Payments/Exports	..	..	..	2.6	2.5	3.7	4	13.7	13.2	13.3	13.3	15.1	11.8	10
Interest Payments/GNP	1.6	1.7	2	1.5	1.4	2	..	5.3	5.2	5.2	4.1	4.3	4.9	..
International Reserves/Imports (monthly)	..	..	..	3	4	7	5	1	4	4	5	5	7	7
International Reserves/Total Debt	..	..	..	49.6	65	88.2	76	5.6	17.8	20.3	28.1	24.4	38.7	42
Short Term/Total Debt	37.6	26.7	23.7	21.8	27	30.6	31	13.8	9.6	10.4	8.3	8.5	10.3	11
Concessional/Total Debt	2.8	6.8	9.9	9	8.6	6.1	1	0.4	0.4	0.5	0.8	1.2	1.7	2
Multilateral/Total Debt	0	0	0.4	0.6	0.8	0.8	6	12.0	14.7	14.7	13.3	12.3	10.5	11
III. Official Flows/Private Flows (%)														
Official Development Finance (millions US\$)	-24.0	433.7	502.1	222.9	145.5	78.9	94.0	587.4	1183.3	238.2	135.0	196.5	-213.0	338.0
Total Private Resource Flows (millions US\$)	843.0	1000.1	93.9	1982.7	1623.2	5595.4	1346.0	-307.9	1011.0	1159.4	4711.5	2763.4	7841.0	272.0
IV. Capital Flow Instruments (millions US\$)														
Total Private Flows	843.0	1000.1	93.9	1982.7	1623.2	5595.4	1346.0	-307.9	1011.0	1159.4	4711.5	2763.4	7841.0	272.0
Portfolio Flows	0.0	182.9	35.2	670.9	-12.0	120.0	-375.0	1071.2	1166.3	1011.4	3310.2	2595.5	2576.5	-508.0
Bonds	0.0	182.9	4.5	632.7	-126.0	38.1	210.0	921.2	1166.3	977.4	3297.3	2255.3	2093.7	1050.0
Equity	0.0	0.0	30.7	38.2	114.0	81.9	-165.0	150.0	0.0	34.0	12.9	340.2	482.8	542.0
Foreign Direct Investment	207.0	400.0	600.0	654.0	878.0	2568.0	63.0	0.0	1462.0	1479.0	2350.0	1144.0	4519.0	-9.0
Commercial Banks	414.2	685.9	-165.9	578.1	717.0	3195.8	3000.0	-1319.9	-1558.3	-1235.9	-817.6	-749.4	925.2	1700.0
Other Private Creditors	221.8	-268.7	-375.4	79.7	40.2	-288.4	4244.0	-59.2	-59.0	-95.1	-131.1	-226.7	-179.7	2505.0
V. Risk Ratings														
<i>Standard and Poor's Sovereign Debt Rating</i>														
Foreign Currency Long-term Rating	..	..	..	..	BBB+	A	A	..	..	BB+	BB+	BB+	BB+	BBB-
Outlook	..	..	..	..	Positive	Stable	Stable	..	..	..	Positive	Stable	Negative	Stable

Table 1: Selected Economic Indicators for Selected Eastern European Countries, 1990-1996

	Czech Republic							Hungary						
	1990	1991	1992	1993	1994	1995	1996	1990	1991	1992	1993	1994	1995	1996
VI. Spread over LIBOR (%)	-0.3	2.0	3.3	3.7	2.5	1.7	..	1.0	3.2	4.8	4.3	2.5	0.2	..
Avg Interest Rate of New Commitments to Private Creditors	8.1	8.1	7.2	7.1	7.6	7.8	..	9.4	9.3	8.7	7.7	7.6	6.3	..
VII. Capital Flight (+) (millions US\$)	..	..	..	-1098.8	-1089.0	-3307.8	..	1816.5	-949.3	-1060.0	-4573.0	370.3	-4027.1	..
VIII. Fiscal Indicators														
Overall budget deficit (% of GDP)	..	..	..	2.7	0.9	0.5	..	..	2.1	-5.4	-8.0	-6.4	-3.7	..
Debt Service to Government Revenues Ratio	..	..	..	11.6	19.3	15.7	..	..	23.1	24.6	21.3	26.3	33.1	..
Debt Service to Government Expenditures Ratio	..	..	..	11.7	18.9	15.5	..	..	24.9	25.3	21.0	26.0	34.0	..
IX. Other Indicators														
Real Effective Exchange Rate	100	101.6	109.4	128.3	132.8	135.3	142.7	100.0	110.3	113.1	118.2	112.3	106.2	109.4
Real GDP growth (%)	-1.2	-14.2	-6.4	-0.9	2.6	5.0	..	-2.5	-6.9	-3.1	-0.6	2.9	1.5	..
Gross domestic savings (% of GDP)	..	36.8	27.4	20.2	20.1	20.2	22.9	28.0	19.5	15.8	11.8	15.7	20.6	23.4
Government Consumption (% of GDP)	19.8	18.8	20.7	23.5	22.3	20.3	19.2	10.6	10.6	11.4	13.8	12.1	11.4	10.7
Private Consumption (% of GDP)	..	44.4	51.9	56.3	57.6	59.5	57.9	61.4	69.9	72.8	74.4	72.2	68.0	65.9
Gross Domestic Investment (% of GDP)	28.6	29.9	27.1	18.4	20.4	24.7	30.9	25.4	20.5	16.1	20.0	22.2	22.8	..
Gross Domestic Fixed Investment (% of GDP)	..	..	..	..	..	..	..	..	19.8	15.5	19.9	21.6	20.0	..
Current Government Revenues (% of GDP)	..	..	..	..	..	..	..	..	51.9	54.4	53.8	52.3	50.8	51.4
Current Government Expenditures (% of GDP)	..	..	..	..	..	..	..	..	48.2	52.9	54.6	52.9	50.8	50.6
Exports (G&S) (% of GDP)	..	..	..	56.7	52.4	59.3	56.9	..	32.8	31.5	26.5	28.8	29.6	30.8
Imports (G&S) (% of GDP)	..	..	..	54.5	52.8	63.7	..	..	33.8	31.8	34.7	35.7	33.3	33.4
Current account balance (% of GDP)	..	..	..	2.2	-0.2	-3.1	-8.6	1.1	1.2	0.9	-11.0	-9.8	-5.8	-3.8
Imputed Private Savings (% of GDP)	..	..	..	..	..	..	..	..	15.1	13.7	12.5	15.3	16.3	16.6
Services, etc., value added (% of GDP)	44.4	44.2	49.2	54.0	55.2	54.6	56.8	49.6	55.0	58.0	60.3	60.8	59.2	59.0
Exports f.o.b. (millions US\$)	..	..	..	13001.8	14037.2	21476.8	21706.9	9151.3	9687.5	10096.6	8118.7	7648.2	12864.1	14183.8
Average Export Growth Rate 1990-95	..	..	..	..	0.207	0.207	0.207	0.072	0.072	0.072	0.072	0.072	0.072	0.072
Current Account (millions U.S.\$)	..	..	..	681.4	-81.1	-1373.7	-266.9	378.6	403.2	351.9	-4262.5	-4053.6	-2535.4	-1411.0
Current Account Export Ratio	..	..	..	0.052	-0.006	-0.064	-0.012	0.041	0.042	0.035	-0.525	-0.530	-0.197	-0.099
Deviation (using average annual growth rate 90-95)	..	..	..	..	-0.408	-0.350	-0.401	-0.185	-0.185	-0.179	0.381	0.386	0.053	-0.044
LIBOR	8.4	6.1	3.9	3.4	5.1	6.1	5.6	8.4	6.1	3.9	3.4	5.1	6.1	5.6
World GNP growth (annual %)	2.1	1.0	1.5	1.8	2.8	2.4	..	2.1	1.0	1.5	1.8	2.8	2.4	..
World Exports of goods and services (annual % growth)	6.2	5.1	6.5	5.1	8.9	7.9	..	6.2	5.1	6.5	5.1	8.9	7.9	..

Table 1: Selected Economic Indicators for Selected Eastern European Countries, 1990-1996

	Poland							Russian Federation						
	1990	1991	1992	1993	1994	1995	1996	1990	1991	1992	1993	1994	1995	1996
VI. Spread over LIBOR	0.1	2.7	2.4	3.3	1.6	1.7	..	-0.05	1.7	2.4	0.8	-0.4	1.3	..
Avg Interest Rate of New Commitments to Private Creditors	8.5	8.8	6.3	6.7	6.7	7.8	..	8.3	7.8	6.3	4.2	4.7	7.4	..
VII. Capital Flight (+) (millions US\$)	..	..	6919.4	2745.4	-8658.8	-9224.0	-6755.9	..	..	..	..	22295.1	-1399.6	..
VIII. Fiscal Indicators														
Overall budget deficit/surplus (% of GDP)	..	..	..	..	-2.3	-1.8	-2.8	..	..	-21.8	-8.7	-11.3	-6.1	-8.5
Debt Service to Current Revenues Ratio	..	3.0	3.9	4.2	7.1	7.4	..	..	..	0.4	6.2	5.4	5.4	..
Debt Service to Current Expenditures Ratio	..	2.8	3.7	4.2	7.1	7.4	..	..	..	0.3	5.6	4.9	4.3	..
IX. Other														
Real Effective Exchange Rate	100.0	132.4	123.9	132.9	132.3	137.8	143.1	..	..	46.3	100.0	180.6	232.1	311.0
Real GDP growth (%)	-10.8	-6.3	2.0	3.7	4.6	6.6	..	-3.6	-5.0	-14.5	-8.7	-12.6	-4.0	..
Gross domestic savings (% of GDP)	32.8	18.0	16.7	16.5	16.9	18.6	16.7	31.9	39.4	38.4	35.0	29.1	25.6	28.2
Government Consumption (% of GDP)	19.3	24.1	25.2	20.4	18.8	18.2	17.3	20.8	15.0	13.7	20.0	20.9	15.9	11.2
Private Consumption (% of GDP)	48.0	57.9	58.1	63.0	64.3	63.2	66.0	47.4	45.6	47.9	45.0	50.0	58.4	60.6
Gross Domestic Investment (% of GDP)	25.6	19.9	15.2	15.6	15.9	17.0	20.6	30.1	36.4	33.4	31.0	27.0	25.0	24.0
Gross Domestic Fixed Investment (% of GDP)	..	19.9	15.2	15.6	15.9	18.3	19.8	..	23.3	23.9	20.4	21.8	20.5	20.5
Current Government Revenues (% of GDP)	..	42.1	44.7	46.8	47.2	46.6	44.7	..	..	43.6	38.6	36.7	32.7	28.8
Current Government Expenditures (% of GDP)	..	45.7	46.6	46.7	47.4	46.6	45.9	..	..	57.9	42.7	40.7	33.6	32.5
Exports (GNFS) (% of GDP)	..	23.5	23.7	22.9	24.0	24.9	25.5	..	..	55.6	35.5	28.4	26.3	22.3
Imports (GNFS) (% of GDP)	..	25.4	22.2	22.0	23.0	24.8	27.5	..	..	50.4	31.6	23.1	23.6	18.1
Current account balance (% of GDP)	5.2	-2.8	-3.7	-6.7	-2.8	-3.6	-1.0	0.7	0.9	0.1	0.7	3.0	2.8	2.7
Imputed Private Savings (% of GDP)	..	21.6	18.6	16.4	17.1	18.4	19.0	..	..	43.4	28.4	31.1	24.1	28.4
Services, etc., value added (% of GDP)	41.6	46.1	52.0	53.4	53.8	54.1	..	35.8	39.6	46.4	44.7	54.6	49.0	49.0
Exports f.o.b. (millions US\$)	15837.0	14393.0	13929.0	13582.0	17121.0	23463.0	24440.0	..	..	..	..	67716.0	81496.0	98299.0
Average Export Growth Rate (1990-95)	0.108	0.108	0.108	0.108	0.108	0.108	0.108	..	..	..	..	..	0.205	0.205
Current Account (millions U.S.\$)	3067	-2146	-3104	-5788	-2590	-4245	-1352	..	..	..	..	11328	9499	11806
Current Account Export Ratio	0.194	-0.149	-0.223	-0.426	-0.151	-0.181	..	..	..	..	..	0.167	0.117	..
Deviation (using average annual growth rate 90-95)	-0.022	-0.067	0.007	0.210	-0.064	-0.035	..	..	..	..	..	..	-0.526	..
LIBOR	8.4	6.1	3.9	3.4	5.1	6.1	5.6	8.4	6.1	3.9	3.4	5.1	6.1	5.6
World GNP growth (annual %)	2.1	1.0	1.5	1.8	2.8	2.4	..	2.1	1.0	1.5	1.8	2.8	2.4	..
World Exports of goods and services (annual % growth)	6.2	5.1	6.5	5.1	8.9	7.9	..	6.2	5.1	6.5	5.1	8.9	7.9	..

Table 2: Selected Economic Indicators for Selected Latin-American Countries, 1978-1983

	Mexico						Venezuela					
	1978	1979	1980	1981	1982	1983	1978	1979	1980	1981	1982	1983
VI. Spread over LIBOR	0.9	-0.05	-1.4	-0.4	1.5	1.0	-1.0	1.1	-1.7	0.2	2.4	1.6
Average Interest Rate of New Commitments to Private Creditors	10.1	12.1	12.6	16.3	15.1	10.9	8.2	13.3	12.3	16.9	16.0	11.5
VII. Capital Flight (+) (millions US\$)	..	1491.6	3508.8	3365.5	5329.4	9657.3	1133.9	3700.8	6261.2	6798.2	3945.4	10138.8
VIII. Fiscal Indicators												
Overall budget deficit, including grants (% of GDP)	-2.5	-3.1	-3.0	-6.4	-14.8	-7.6	-3.3	1.6	0.0	-1.2	-3.7	-1.3
Debt Service to Government Revenues Ratio	67.3	77.3	36.8	37.6	57.7	56.0	9.8	26.2	39.0	25.1	30.5	25.8
Debt Service to Government Expenditures Ratio	53.1	60.8	30.8	26.3	32.7	38.4	9.0	29.8	46.4	28.9	30.2	27.2
IX. Other												
Real Effective Exchange Rate	126.9	134.2	146.2	162.6	118.2	110.1	168.53	163.71	172.90	191.03	208.98	222.04
Real GDP growth (%)	8.2	9.2	8.5	8.7	-0.7	-4.1	2.4	0.8	-4.5	-0.3	-2.1	-3.8
Gross domestic savings (% of GDP)	20.7	22.3	24.9	24.9	28.0	30.3	32.7	34.5	33.3	29.3	25.1	20.5
Government Consumption (% of GDP)	9.9	10.0	10.0	10.8	10.5	8.8	11.7	11.2	11.8	12.7	12.5	11.8
Private Consumption (% of GDP)	69.4	67.7	65.0	64.3	61.6	60.9	55.6	54.3	54.9	57.9	62.4	67.6
Gross Domestic Investment (% of GDP)	22.3	24.7	27.2	27.4	22.9	20.8	43.9	33.2	26.4	24.4	27.7	12.2
Gross Domestic Fixed Investment (% of GDP)	21.1	23.4	24.2	25.7	22.2	17.3	42.5	31.6	25.2	24.5	24.1	19.1
Current Government Revenues (% of GDP)	19.6	27.1	20.0	20.4	23.8	27.2	26.9	25.8	27.6	35.3	28.7	27.8
Current Government Expenditures (% of GDP)	17.9	19.1	20.2	21.4	29.8	27.5	18.3	16.7	17.9	20.8	23.1	23.0
Exports (GNFS) (% of GDP)	9.9	10.4	11.8	11.7	16.2	18.2	20.4	26.0	28.8	26.8	22.2	19.5
Imports (GNFS) (% of GDP)	10.5	11.8	14.4	13.7	11.6	8.6	31.2	24.3	21.7	21.9	24.8	11.2
Current account balance (% of GDP)	..	-3.8	-5.3	-6.5	-3.4	3.9	-11.9	60.7	6.8	5.1	-5.4	5.5
Imputed Private Savings (% of GDP)	18.7	13.9	21.7	24.7	32.7	27.4	23.1	24.0	22.6	15.0	16.0	22.6
Services, etc., value added (% of GDP)	59.5	59.9	59.0	59.9	61.5	58.6	52.1	48.9	48.8	50.7	53.3	55.7
Exports f.o.b. (millions US\$)	..	11512.0	18031.0	23307.0	24056.0	25953.0	9174.0	14360.0	19275.0	20181.0	16516.0	14759.0
Average Annual Export Growth 1978-83	..	..	0.242	0.242	0.242	0.242	0.103	0.103	0.103	0.103	0.103	0.103
Current Account (millions U.S.\$)	..	-5409.0	-10422.0	-16240.0	-5889.0	5866.0	-5735.0	350.0	4728.0	4000.0	-4246.0	4427.0
Current Account Export Ratio	..	-0.470	-0.578	-0.697	-0.245	0.226	0.625	-0.024	-0.245	-0.198	0.257	-0.300
Deviation (using annual export growth)	..	..	-0.555	0.112	0.181	-0.384	-0.525	-1.106	-0.439	0.104	0.106	0.513
Deviation (using average annual growth rate 90-95)	..	..	0.093	0.212	-0.240	-0.711	-0.831	-0.181	0.040	-0.007	-0.462	0.095
LIBOR	9.2	12.2	14.0	16.7	13.6	9.9	9.2	12.2	14.0	16.7	13.6	9.9
World GNP growth (annual %)	4.1	3.7	2.4	1.0	0.2	2.8	4.1	3.7	2.4	1.0	0.2	2.8
World Exports of goods and services (annual % growth)	5.7	7.4	4.3	3.6	-1.2	3.5	5.7	7.4	4.3	3.6	-1.2	3.5

Table 2: Selected Economic Indicators for Selected Latin-American Countries, 1978-1983

	Argentina						Brazil					
	1978	1979	1980	1981	1982	1983	1978	1979	1980	1981	1982	1983
VI. Spread over LIBOR	0.9	-0.05	0.3	-4.2	-2.3	2.5	0.8	-0.4	-1.1	-0.3	-0.9	1.4
Average Interest Rate of New Commitments to Private Creditors	10.1	12.1	14.3	12.5	11.3	12.4	10	11.8	12.9	16.4	12.7	11.3
VII. Capital Flight (+) (millions US\$)	1986.8	3007.7	4126.2	7093.5	6323.7	1053.5	12526.4	6763.2	10193.5	9927.6	12478.1	4593.0
VIII. Fiscal Indicators												
Overall budget deficit, including grants (% of GDP)	0.0	0.0	-2.6	-6.7	-5.0	-7.9	0.0	0.0	-2.2	-2.2	-2.7	-4.0
Debt Service to Government Revenues Ratio		31.5	45.2	70.6	140.9	136.7	18.3	22.5	28.0	27.7	27.2	24.8
Debt Service to Government Expenditures Ratio							21.2	27.8	31.0	33.4	32.6	30.8
IX. Other												
Real Effective Exchange Rate	123.61	169.71	199.48	186.96	132.52	122.60	88.8	80.0	71.8	88.1	95.7	73.2
Real GDP growth (%)	-4.5	8.9	3.7	-5.9	-3.2	3.8	3.2	6.8	9.1	-4.4	0.6	-3.4
Gross domestic savings (% of GDP)	30.7	26.0	23.8	22.2	24.3	24.2	21.8	20.7	21.1	22.7	20.4	19.1
Government Consumption (% of GDP)	11.2	11.0	..	..	..	..	9.7	9.7	9.2	9.3	10.0	9.7
Private Consumption (% of GDP)	58.1	63.0	..	..	..	..	68.6	69.5	69.7	68.0	69.6	71.2
Gross Domestic Investment (% of GDP)	27.8	25.9	25.3	22.7	21.8	20.9	23.0	22.8	23.3	23.1	21.1	16.7
Gross Domestic Fixed Investment (% of GDP)	22	22.0	22.8	20.1	15.4	14.1	24.4%	22.3%	21.8%	21.2%	21.2%	16.1%
Current Government Revenues (% of GDP)	36.2	33.1	35.5	34.6	32.3	34.2	..	28.2%	27.9%	29.9%	31.8%	32.0%
Current Government Expenditures (% of GDP)	30.8	29.9	34.4	39.3	39.6	41.0	..	29.6%	29.9%	32.9%	35.3%	35.6%
Exports (GNFS) (% of GDP)	13.5	12.2	11.4	12.9	14.1	14.7	6.4%	6.8%	8.5%	9.0%	7.6%	11.2%
Imports (GNFS) (% of GDP)	8.8	12.7	18.3	17.7	10.8	10.0	7.6%	8.8%	10.6%	9.4%	8.2%	8.9%
Current account balance (% of GDP)	3.2	-0.8	-6.3	-6.1	-2.8	-2.3	-3.5	-4.7	-5.5	-4.5	-5.8	-3.4
Imputed Private Savings (% of GDP)	21.3	18.3	14.8	20.0	26.0	25.6	..	21.7%	21.7%	23.9%	24.0%	22.2%
Services, etc., value added (% of GDP)	46.4	48.2	..	53.2	49.3	49.8	48.3	48.3	45.2	45.5	45.4	45.1
Exports f.o.b. (millions US\$)	6401.0	7810.0	8021.0	9143.0	7623.0	7835.0	12473.0	15244.0	20132.0	23276.0	20173.0	21898.0
Average Annual Export Growth 1978-83	0.064	0.064	0.064	0.064	0.064	0.064	0.116	0.116	0.116	0.116	0.116	0.116
Current Account (millions U.S.\$)	1856	-513	-4774	-4712	-2353	-2436	-6996.0	-10516.0	-12831.0	-11764.0	-16317.0	-6834.0
Current Account Export Ratio	0.290	-0.066	-0.595	-0.515	-0.309	-0.311	-0.561	-0.690	-0.637	-0.505	-0.809	-0.312
Deviation (using average annual growth rate 90-95)	-0.417	-0.061	0.468	0.388	0.182	0.184	0.328	0.457	0.405	0.273	0.576	0.080
LIBOR	9.2	12.2	14.0	16.7	13.6	9.9	9.2	12.2	14.0	16.7	13.6	9.9
World GNP growth (annual %)	4.1	3.7	2.4	1.0	0.2	2.8	4.1	3.7	2.4	1.0	0.2	2.8
World Exports of goods and services (annual % growth)	5.7	7.4	4.3	3.6	-1.2	3.5	5.7	7.4	4.3	3.6	-1.2	3.5

Notes on Sources and Calculations for Tables 1 and 2.

Sections I (Debt Statistics) and II (Credit Worthiness Indicators)

Data was extracted from the 1997 Global Development Finance CD-ROM. Data for 1996 are preliminary and from the World Bank Debtor Reporting System.

Section III (Official Flows/Private Flows) and IV (Capital Flow Instruments)

Data was obtained from the World Bank Debtor Reporting System. Data for 1996 are preliminary.

Section V (Risk Ratings)

Data on sovereign debt ratings from Standard and Poor's Creditweek International, various issues and Standard and Poor's Research Office Ratings Desk. We used the rating from December of each year. AAA indicates an extremely strong capacity to pay interest and principal. AA indicates a strong capacity to repay. BBB indicates an adequate capacity to repay. BB, B, C, CC, CCC indicates a speculative ability to repay where BB indicates the lowest degree of speculation and CCC the highest. A plus or minus represent relative standing within a rating category.

Data on Country Risk Ratings from Euromoney, various issues. A lower rating (ranking) means lower credit risk.

Section VI (Spread Over Libor)

Average Interest Rate was obtain from the 1997 Global Development Finance CD-ROM. Data for 1996 is not available.

LIBOR, the average London Interbank Offered Rate on 6 month U.S. dollar deposits, was obtained from the IMF International Finance Statistics.

Section VII (Capital Flight)

Capital Flight was calculated using the World Bank Method:

Capital Flight = Current Account Balance + Net Equity Flows + Change in Reserves + Change in External Debt. A negative number indicates a net outflow while a positive number indicates a net inflow. Data from IMF Balance of Payment Statistics Yearbook, various years and 1997 Global Development Finance CD. See Claessens and Naudé (1993) for further explanation of capital flight calculations.

Section VIII (Fiscal Indicators)

Government Expenditures, Revenues, and overall budget deficit (% of GDP) calculated from various World Bank Country Economic Reports.

Total Debt Service from 1997 Global Development Finance CD-ROM. Data for 1996 is not available.

Section IX (Other Indicators)

Real Effective Exchange Rate from JP Morgan's broad measure currency basket of 22 OECD currencies and 23 LDC currencies. The series for the Czech Republic, Hungary, Poland and the Russian Federation are based on more limited currency baskets and are not strictly comparable to other countries.

Current Account Balance is from IMF Balance of Payment Statistics Yearbook, various years.

Real GDP Growth, Gross Domestic Savings, Government Consumption, Private Consumption, Current Account Balance, Gross Domestic Investment, Services, value added (all as a % of GDP), World GNP Growth and World Exports of Goods and Services are from the 1997 World Development Indicators CD-ROM. Figures for 1996 are preliminary estimates.

Gross Domestic Fixed Investment, Current Government Revenues, Current Government Expenditures, Export and Imports of Goods and Nonfactor Services (all as a percent of GDP) are estimates.

Imputed Private Savings was calculated as Gross Domestic Fixed Investment - (Government Revenue - Government Expenditures) + (Exports - Imports).

Deviation = Current Account Deficit/Exports - 2 * (Average Annual Export Growth Rate)
A general rule of thumb for assessing the sustainability of the current account deficit is the foreign liabilities to export ratio should not be greater than 2, so in the long run a sustainable current account deficit as a proportion of exports equals twice the export growth rate. See Dadush and Brahmhatt (1995) and Dadush, Dhareshwar and Johannes (1994).

Exports f.o.b., LIBOR and Current Account Deficit from IMF International Finance Statistics, various issues.