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CURRENT ACCOUNT DEFICITS IN EUROPEAN EMERGING MARKETS

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Abstract

Many of the emerging market economies in Europe are presently running current account deficits which are quite high relative to any global or historical standard and are fundamentally unsustainable. This includes the three poorer European Union (EU) members of the old Europe (Greece, Portugal, and Spain), many of the EU's new member states (largely the former transition economies which have joined since 2004), most of those non-EU members in south-east Europe, and a number of the CIS economies in eastern Europe and the Caucasus. The unweighted average current account deficit for this group has more than doubled from under four percent of GDP in 2003 to well over eight percent in 2007. This trend is significantly different than what has evolved in many of the world's other emerging markets; these other economies have generally been running current account surpluses. This paper documents this development, describes the underlying factors that have brought it about, assesses the underlying vulnerability that has been created, and discusses the implications of this development for other emerging markets and global financial stability more generally. In addition, how these risks have evolved since the appearance of the global credit crisis beginning in the summer of 2007 is examined.

I. European Emerging Market Deficits

The use of foreign savings to finance investment in emerging economies was what was initially expected to happen once financial markets became globalized. The scarcity of capital in the developing world compared to the advanced economies was expected to give rise to capital flows to these economies. This was also the expectation behind the consensus developed at the Monterrey conference in 2002 regarding Financing for Development. However many emerging economies are now not receiving net foreign capital inflows but are actually exporting capital to the advanced economies. The surpluses of China and the deficits of the U.S. are a well publicized example of this so-called "upward" flow of capital but a significant number of emerging markets, especially those in Asia and Latin America, are also running surpluses. In figure 1 the projected current accounts in 2008 of the world economies are provided, with those in tan

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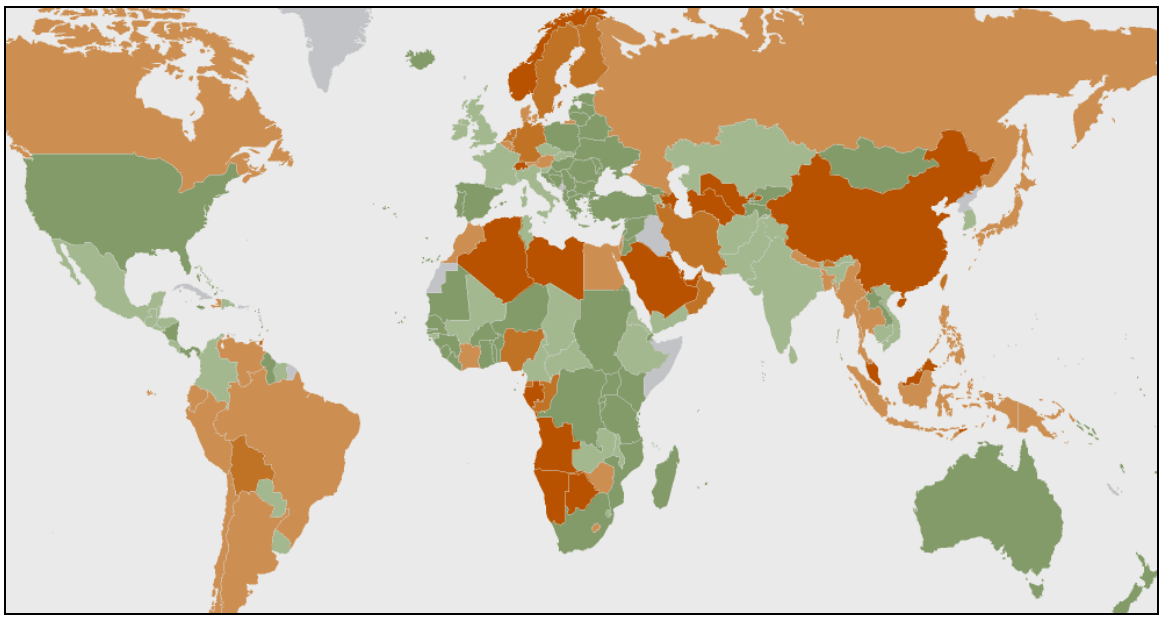
having surpluses and those in green having deficits; those in dark green have deficits above five percent of GDP. The emerging markets of Europe are a virtual sea of green. Latin America and many of the east Asian economies, having suffered numerous currency crises in the past, now have surpluses. Although a number of the economies of central Africa have deficits, the continent as a whole has a surplus.

As can be seen from figure 1, there are a significant number of economies with projected 2008 deficits as there has been in the last several years; restricting the sample to those with IMF balance of payments data (in the 2007 yearbook), there were 89 economies with deficits in 2005 and 80 in 2006. The total value of all the current account deficits in 2006 was $1.347 trillion; however if the 8 advanced economics (which includes the U.S.) are excluded there were 72 emerging market economies with a total deficit of $319 billion. Of this group, 24 are European emerging markets which had deficits totaling $249 billion or 78.2 percent of the total of all emerging markets with current account deficits. The current account of Spain alone is greater than that of all the non-European emerging market deficits combined. Thus in value terms, a discussion of emerging market current account deficits is basically a discussion of European emerging market deficits.

Figure 1

World Current Accounts in 2008

(*tan represents surpluses and green deficits ,dark green >5%*)



In appendix tables 1 and 2 the current account deficits for the emerging European economies are provided for the 1998-2007 period. The analysis in this paper focuses on 27 emerging market economies in Europe (EEM). This includes the three southern and poorest “old” members of the EU-15 (SEU-3), the 12 EU new member states (NMS), 7 economies in south-east Europe including Turkey (SSE-7), and 5 of the CIS in Europe and the Caucasus (CIS-5). The current account trends for these four basic regions are presented in chart 1. Russia is not included in this study because it is not typical of these other economies in that it has been running sizable current account surpluses due to its

extensive energy exports. However, data is not always available for all 27 countries covering the entire period, and thus smaller samples are sometimes used when examining time trends. Thus the discussion in the previous paragraph excluded Montenegro (which only became independent in 2006), Serbia (whose borders are in flux), and Slovakia (which does not produce timely balance of payments data.)

Chart 1
Current Accounts in Major Regions of Emerging Europe

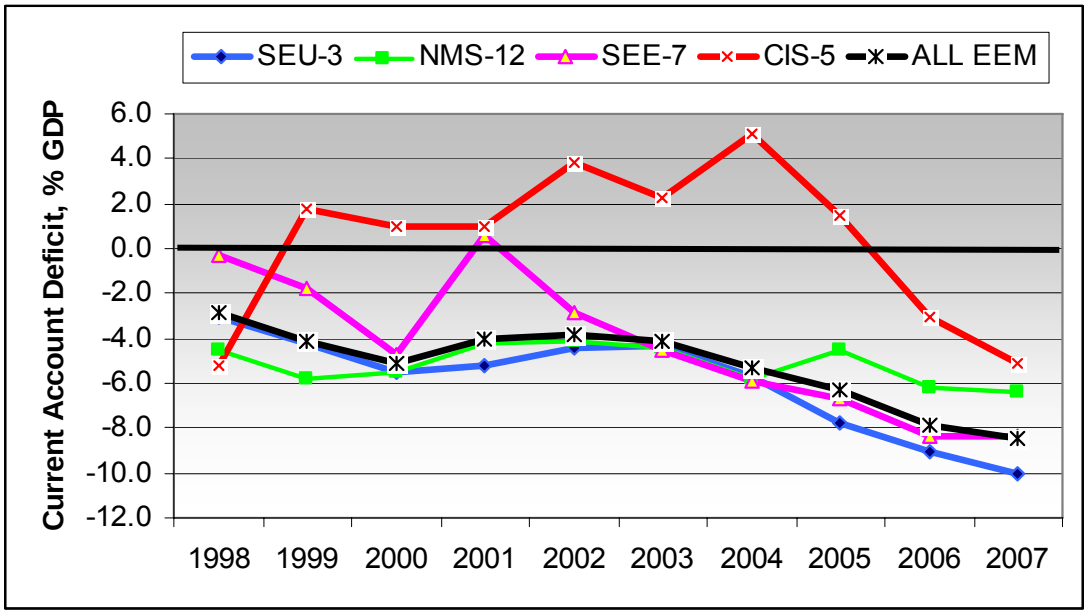


Figure 2
Projected Current Account Deficits in Emerging Europe in 2008

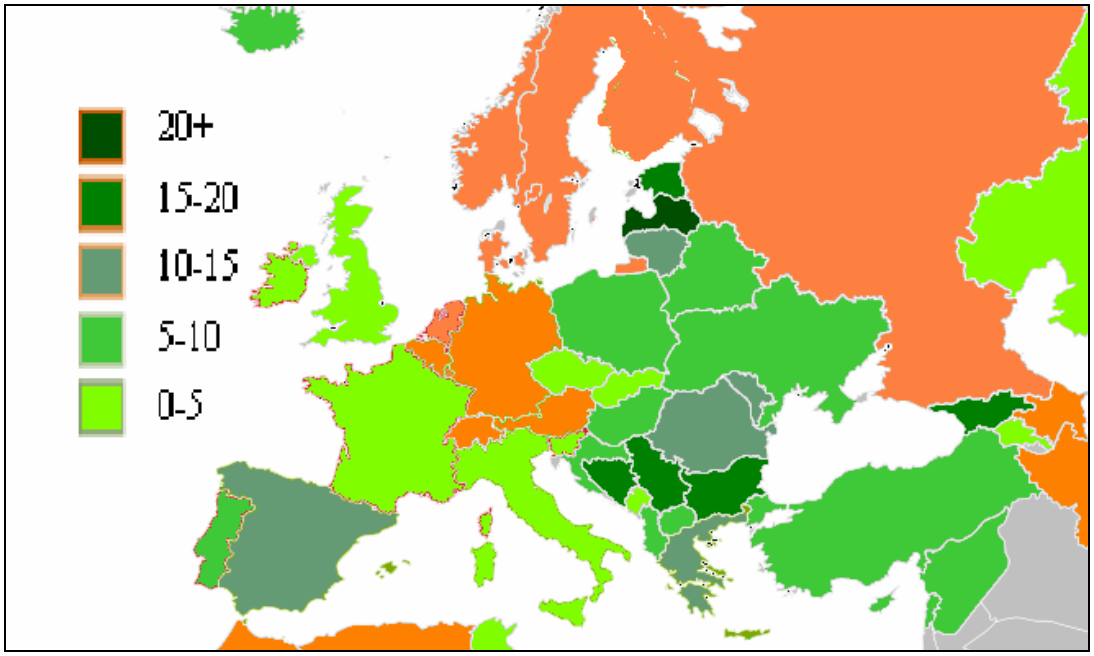


Figure 2 provides a detailed graphical presentation of the projected current accounts for 2008 in emerging Europe with fives shades of green; the darker the green, the larger the deficit (as a percent of GDP). None of the 27 emerging European economies (selected for this study) has a surplus: a few (Armenia, Czech Republic, Slovakia, Slovenia) have fairly reasonably sized deficits of under five percent of GDP; most of central Europe has a current account deficit in the five to ten percent range, which is also the case for Cyprus, Malta, Portugal, and Turkey. The remaining countries, primarily the three Baltic economies, Greece, Spain, and several in south-east Europe have truly large current account deficits. Latvia tops the list with a projected current account deficit of 27.3 percent of GDP in 2008. In evaluating the potential vulnerability of these deficits it is worth noting that the 1996 average un-weighted current account deficit in the five Asian economies (Indonesia, Korea, Malaysia, Philippines, and Thailand) that were at the core of the 1997 Asian financial crisis was only about 5 percent of GDP; these economies like their European counterparts today had reasonably good fiscal positions and were experiencing a period of strong economic growth. Also note that Turkey's current account deficit was only 4.9 percent of GDP in the year prior to its 2001 currency collapse and Russia even had a surplus 1997 prior to its crisis in 1998.[1]

These increasing large current account deficits are occurring in a global environment where countries are increasingly running sizable current account imbalances, either deficits or surpluses. According to WTO (2007) calculations, the typical OECD country with a surplus has had its magnitude increase from two percent of GDP in 1990 to over six percent of GDP in 2006, while the typical OECD economy with a deficit has had its magnitude increase from approximately two and a half percent of GDP in 1990 to almost six percent in 2006. Stated another way, the absolute value of the typical OECD current account has tripled from two percent of GDP in 1990 to six percent of GDP in 2006. Thus the relatively low levels of international capital transfers and the corresponding home bias first observed by Feldstein-Horika (1980) appear to have undergone a major structural shift in the last decade.

Some of the European emerging economies (Greece, Portugal, Slovenia, and Spain; and most recently Cyprus and Malta) are members of the eurozone. Others such as the remaining 9 EU New Member States (NMS) are members of the EU. Empirical research has shown that being in the EU increases the magnitude of the absolute value of the current account as a percentage of GDP while being in the eurozone increases it further (Blanchard and Glavazzi, 2002). According to their analysis, the so-called Feldstein-Horioka β estimate of the correlation between savings and investment was only .14 in the eurozone during 1991-2001. This suggests that in the eurozone investment is now largely independent of savings with the difference readily financed by a capital inflow.

It is worth always re-emphasizing when dealing with the (former transition) economies that the data are often of a very poor quality and what are available often differ quite significantly from one database to another. Recent balance of payments data are typically revised considerably and thus changes in the values of recent entries are to

[1] Subsequent revisions of the data years later produced a trivial current account deficit in 1997.

be expected. However major inconsistencies in data several years old in recent databases from international organizations are generally rare but are much more common in data from this region. For example, a comparison of Albania's current account deficit in 2001 shows that according to the European Bank for Reconstruction and Development November 2007 dataset (released with its 2007 *Transition Report*) it was 6.3 percent of GDP; the October 2007 International Monetary Fund *Economic Outlook* database gives a figure of 3.6 percent of GDP; the World Bank *World Development Indicators* database at the end of December 2007 had a value of 5.3 percent of GDP which was similar to that in the United Nations Economic Commission for Europe on-line database. However, the similarity of the last two sources does not provide much comfort, as they have different values for 2005. Why are they different in 2005? They have the same dollar value for the current account but different dollar values for GDP. Which GDP is correct? Neither the Albanian Central Bank nor the National Statistical Office produce official dollar GDP estimates, so their data can not resolve the difference. The Bank of Albania's estimate of its current account deficit was 6.9 percent of GDP (for 2001) in its latest available 2006 *Balance of Payments Bulletin*. When doing economic analysis drawing together different economic variables from different sources one often ends up having to combine data from databases which have inconsistent data for variables that they may share. It is therefore important to appreciate these data limitations and what their implications may be.

II. When Do Current Account Deficits Become Problematic?

There are many previous episodes when emerging markets had large current account deficits and many of these episodes ended quite poorly with some form of financial or currency crisis. A basic question that must be addressed is whether the current situation in emerging Europe is similar to these other episodes and is thus likely to turn out in a similar manner, or if the nature of these capital flows or the environment in which they are occurring is fundamentally different from these earlier episodes. An affirmative answer to this latter question, however, is no guarantee that this situation will still not turn out poorly, as the history of currency and financial crises has been one of constantly changing causes. For example, the debt crises of the early 1980s were the result of government borrowing to maintain living standards in an environment of escalating energy prices while the financial crises centered in Asian in the late 1990s had more to do with private financial market excesses and the failure of governments to establish the proper institutional regulatory mechanisms for their increasingly open financial sectors. Thus just because emerging Europe is not repeating the specific mistakes of the past does not imply that they are not repeating the more general mistake of having an over reliance on foreign capital. However, if the situation is truly different and emerging Europe has established a model whereby economies can borrow heavily abroad and grow and prosper as a result, then the current situation has very important implications for global development.

Current accounts deficits, which last for more than a transitory period are often perceived to represent an obvious economic problem, like inflation or unemployment that require a policy induced adjustment. Typical of this thinking is the concern that has been raised about the U.S. current account deficit and the calls of various kinds for policy action to address it. However, from a more theoretical point of view, when the current

account deficit is the result of rational private sector saving and investment decisions and there are no market distortions, there is no generally agreed upon justification for government action to reduce the current account deficit since (in most economic models) none of the usual policies can be shown to increase intertemporal social welfare. This would appear to be the case even in instances where the current account deficit is so large as to be unsustainable in the long run. In this case market participants supposedly will adjust their savings and investment decisions as time goes on in such a manner as to bring about the economically efficient adjustment (Blanchard, 2007). The introduction of a government which runs a fiscal surplus or deficit complicates this conclusion, but even in this case it is not absolutely clear (from a theoretical perspective) that the reduction of a government deficit to improve a current account deficit is necessarily a welfare increasing policy. The obvious qualification to these conclusions is whether or not there are widespread distortions or market failures that would invalidate them.

A current account is often viewed to be problematic if it is unsustainable. Unsustainable is usually defined as a situation in which the current account is creating an increasing debt to GDP ratio; clearly this ratio cannot keep increasing indefinitely. The general rule connecting the current account, which is a flow, to the debt which is a stock, is that the country's growth rate (g) times the desired or upper limit debt-GDP ratio (d), gives the current account (ca) that is sustainable. That being,

$$g \cdot d = ca \qquad (1)$$

The maximum likely growth rate for emerging European economies is likely to be in the range to 4 to 6 percent a year. It is less clear what the desired or maximum debt ratio should be, but it is generally felt that it is undesirable to have an external debt ratio over 60 to 80 percent of GDP. Combing these two figures implies that a current account deficit greater than 2.5 to 5 percent of GDP is unsustainable if it is financed by debt.

The current debt to GDP ratios in some European emerging economies are currently at or well over this "maximum" level and for some are at quite worrisome levels. For example the debt ratio for Latvia was 118 percent of GDP in 2006 and is likely to stay above 100 percent for the next several years. The debt to GDP ratios for a number of other European economies are already quite high, being over 100 percent in Hungary (109 percent) and Estonia (101 percent) and over 50 percent in Croatia (90 percent), Slovenia (82 percent), Moldova (70 percent), Serbia (69 percent), Bulgaria (68 percent), Lithuania (64 percent), Slovakia (58 percent), Ukraine (52 percent), and Romania (51 percent). The debt levels of the European emerging markets are put into a more global perspective in figure 3.

In chart 2 the evolution of long-term debt (LDOD) in the European emerging markets over 1995-2007 is plotted. For most countries most of their debt is long-term debt (i.e., figures for total LDOD represent most of their total external debt (EDT) in the IMF Global Development Finance on-line database). Due to limited data availability, the three older EU members (Greece, Portugal, and Spain) are not included in this chart. Long-term debt slowly increased between 1995 and 2001, but it was in 2002 that debt began to increase much more rapidly. Perhaps the most important structural shift in this debt was that most of the increase was due to the rapid growth of private debt; public

debt remained relatively constant throughout this period. Undoubtedly this shift from public debt to private debt has a number of important implications for the region. For example, there are a number of significant institutional mechanisms that have been set up through the years (Paris Club, HIPC, etc) to help countries cope with problems related to public debt but there is far less international support for dealing with problems related to private debt.

Figure 3
Total External Debt

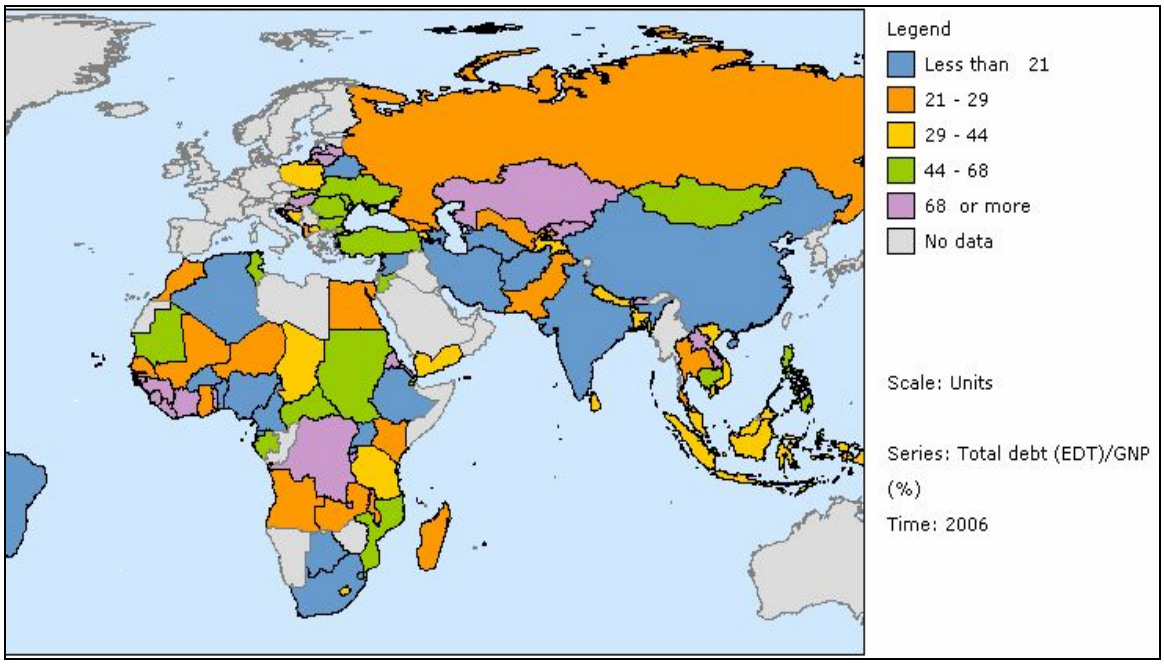
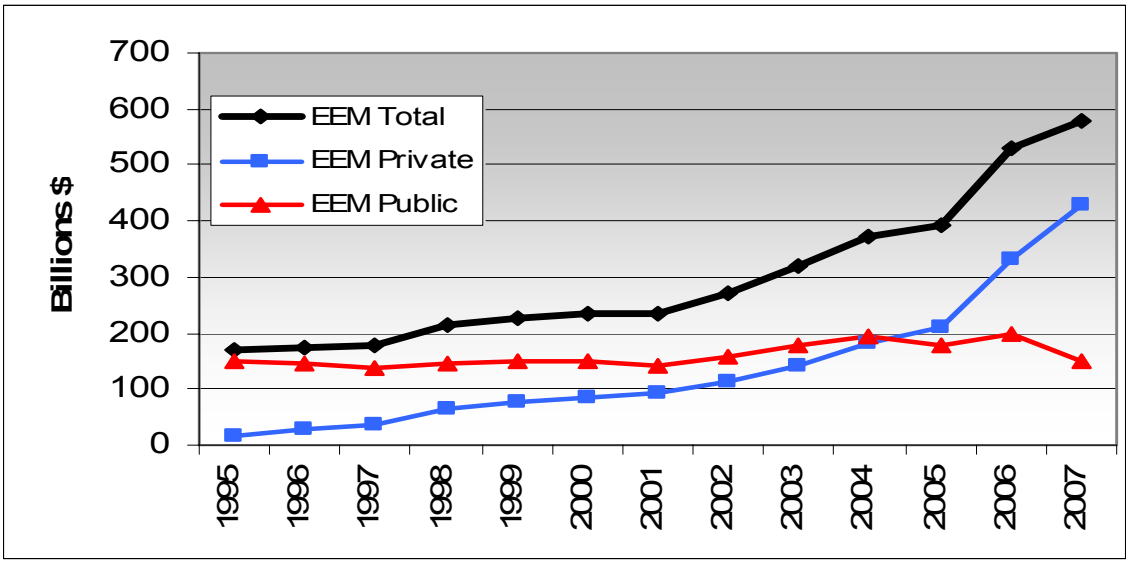


Chart 2
Long-term Debt (LDOD) in Emerging Europe in 2008



Several economies, however, do have significant short-term debt; for example, it accounts for over 40 percent of total debt in Latvia, Lithuania, and the Slovak Republic. A significant amount of this is banking debt (often borrowed from parent banks in western Europe) and is borrowed in euros. In these economies, a currency depreciation could result in significant balance sheet problems for the banking sector. Some of this borrowed foreign currency has been loaned domestically in euro-denominated loans; this has reduced the direct expose of the banking sector to currency risks, but the risks have simply been shifted on to consumers and businesses that may not be prepared to deal with them. As a result these banks' lessened vulnerability from exchange rate losses due to a depreciation has been replaced by an increased vulnerability from borrower defaults.

Of course not every dollar of net capital inflow (current account deficit) creates a dollar of debt as formally defined, as equity inflows do not produce debt. Nevertheless they do produce a "similar" foreign claim on domestic output but it is less clear what the upper limit for this "foreign claim" should be. Thus when the current account is financed by equity flows (especially foreign direct investment) as opposed to debt, it is less clear what level is unsustainable. Current account deficits financed by FDI are thought to be less problematic from a macroeconomic stability point of view, as FDI flows are generally found to be less volatile than other forms of capital inflow (portfolio equity and debt), and unlike debt, which is fixed in nominal terms, the market value of equity investments is re-priced as conditions evolve. This is a very important consideration for the region since a large proportion of the current accounts are covered by FDI in many of the economies.

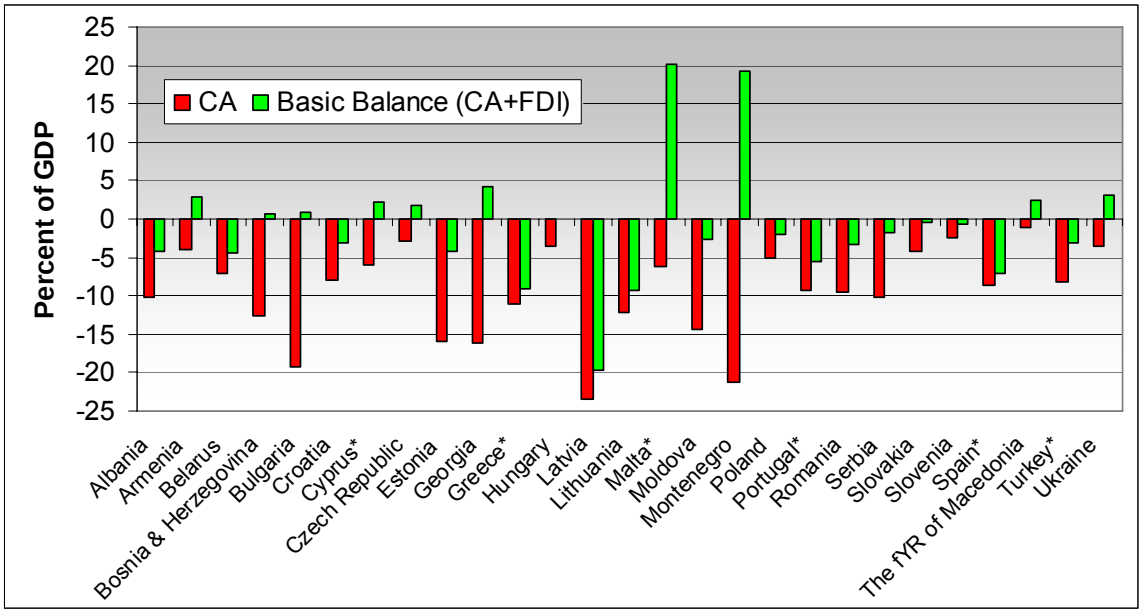
In analyzing the vulnerability of these economies to a capital account crisis, it may be useful to separate the longer-term and more stable capital inflows from the more volatile short-term flows. Historically under the old Bretton Woods system of fixed exchange rates, long-run capital inflows were added to the current account to create what was referred to as the basic balance. With the movement to flexible exchange rates this balance of payments concept has been seldom used; for example the U.S. stopped calculating it in 1976. This measure is not currently produced as part of the IMF's balance of payments presentations, and which balance of payment entries should be included in its calculation is subject to some judgment. Nevertheless some type of basic balance concept may be more appropriate than the current account for analyzing the present economic situation of the European emerging markets. Thus a slightly adjusted basic balance is defined here as the current account plus FDI inflows. In chart 3 the current accounts for 2007 are given in red along with this slightly adjusted basic balance (in green). As the chart demonstrates the (slightly modified) basic balance deficits are not particularly large; they exceed five percent for only Greece, Latvia, Lithuania, Portugal, and Spain.

However, new projects need not be undertaken and reinvested earning can instead be repatriated if economic conditions deteriorate. It should be noted that in Malaysia in 1996 the current account (4.6 percent of GDP) was fully financed by net FDI inflows (5.3 percent of GDP) and FDI fell by more than half between 1996 and 1998 ($5.08 billion to $2.16 billion). Thus although FDI may be more stable than other types of capital inflow and an analysis of the vulnerability posed by a current account deficit

may need to consider the proportion financed by FDI, it is simply incorrect to view FDI as invariant to market turmoil.

Chart 3

Current Account and Basic Balances in European Emerging Markets 2007



Note: Due to data availability, for countries with an asterisk data are for 2006.

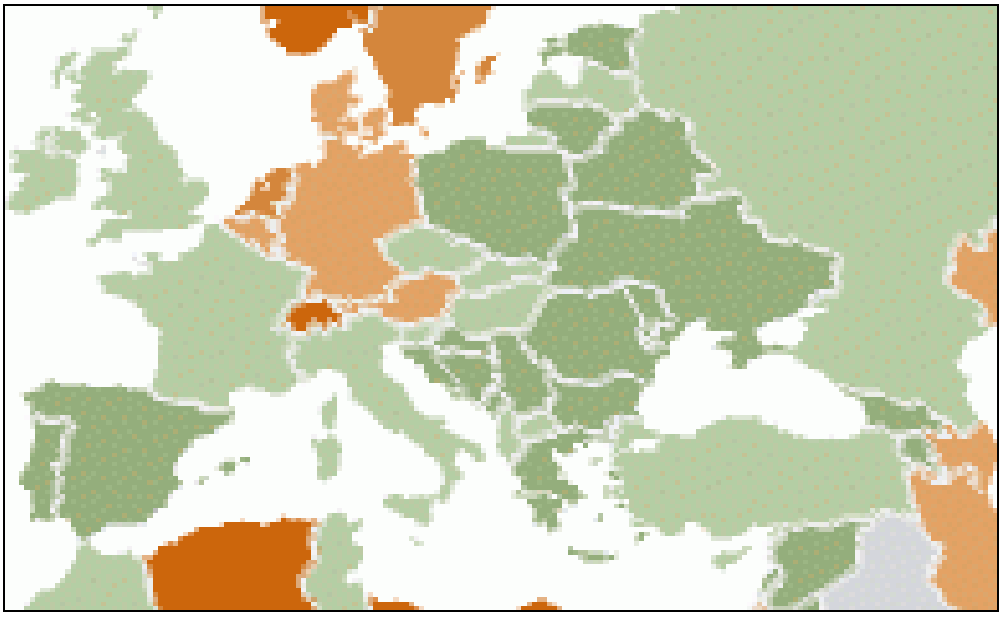
An additional consideration concerns the fact that previous FDI investments worsen the current account in that the profits appear on the debit side of the investment income sub-account of the current account. This includes the re-invested earnings and undistributed profits of firms. These latter items do not create an actual demand for foreign exchange and thus their inclusion in the current account tends to exaggerate the actual need for foreign exchange. The reinvested earnings of domestic firms do not appear in the current account although these companies have the same potential ability to transfer their funds abroad. Thus economies that have large stocks of FDI, as many of the European emerging markets do, have current accounts that probably appear larger due to this accounting technicality than they actually are from a more fundamental economic perspective. This is not a minor technical point, but one which has very significant implications for assessing the current accounts of the region. For example, in 2005 Estonia's current account deficit was $1.44 billion, while reinvested earnings were $773 million, or 53.5 percent of the current account deficit. If this item was not considered as part of the current account, Estonia's current account deficit would have fallen from 10.3 percent of GDP to only 4.8 percent.

An additional consideration for the EU emerging markets is that they receive a net transfer from the EU due to the benefits they get from the EU Social and Cohesion funds; these have been and are projected for the next several years to be several percentage points of GDP. Normally transfers would appear in the balance of payments above the current account line so they would already be included in the current account and no

further adjustment would be warranted. However, it is believed that there are a number of accounting idiosyncrasies which have the result of "artificially" enlarging the current accounts of the NMS. For example, it is generally thought that these countries' contributions to the EU are usually included above the line, but that their payments from the EU, especially for investment projects, are included below the line in the capital account. Thus inclusion of all the inward transfers, some of which currently appear in the capital account, into a loosely defined basic balance would likely further reduce their deficits. It is, however, difficult to quantify the magnitude of this problem due to the uncertainty about where these funds have been placed in the BOP statistics.

If all of these adjustments are considered, and if the basic balance deficits are not that large, then are the large current account deficits irrelevant? Besides the qualification that FDI inflows do respond in crisis situations, there is still an upper limit to what is sustainable. If the capital stock to GDP ratio is assumed to be relatively stable (as in the Harrod-Domar growth model) and approximately equal to three, then assuming GDP growth of 5 percent means that 15 percent of national income must be devoted to net capital accumulation. If depreciation is 10 percent of GDP, then gross investment must be 25 percent of GDP. Thus anytime the current account is over 25 percent, the actual domestic ownership of the capital stock must fall. Thus a current account deficit of 25 percent of GDP would set an absolute maximum as to what could be considered as sustainable even with the much broader interpretation of "foreign claims". If a country desired, however to have at least one-half of the capital stock domestically owned, then the maximum sustainable current account deficit would be only 12.5 percent of GDP.

Figure 4
IMF Projected Current Account Deficits in 2013



Just as the type of capital flow is important is assessing the vulnerability it has created, so is the degree to which it has led to higher investment and the sector in which the investment occurred. Although there is nothing in general undesirable about

investment in real estate, as it provides consumers with an important increase in their quality of life, it can be problematic when the capital inflows associated with a large current account deficit are channeled into real estate. This is due to the fact that real estate generally does not produce significant foreign exchange; the conclusion, however, may need to be qualified if the investments are of resort properties with a large percentage of foreign buyers. Real estate investment has been quite high in a number of the emerging European economies. For example, in Bulgaria almost half of all FDI was in construction and real estate in 2007 while manufacturing received slightly less that 4 percent. To some degree this is due to the fact that investment in housing was relatively low during the socialist planning period and there is a current need now to significantly upgrade this sector (Palacin and Shelburne, 2005). Thus the high levels of real estate investment in the former transition economies may not be excessive from a more fundamental supply and demand perspective, as they may have been in Spain for instance, but nevertheless the funds have been used to produce an asset that does not earn foreign exchange and is therefore unable to finance itself form a foreign exchange perspective.

Of course, these large current account deficits may not be viewed as problematic and issues of sustainability may not be relevant if there are believed to be largely temporary. However, that is not the case with the European emerging markets. In figure 4 below the current account deficits as projected by the IMF in its April 2008 Economic Outlook are presented. Green represents deficits and dark green deficits of over five percent of GDP. All of the 27 economies (which this study focuses on) are projected to still have deficits in 2013 – five years from now, and most are projected to have deficits above five percent.

III. The Underlying Cause of Europe's Deficits

Investment Levels

Since a current account deficit is an accounting identity equal to the difference between national savings and investment, it is important to understand which of the two variables is "abnormal" in Europe's emerging markets.

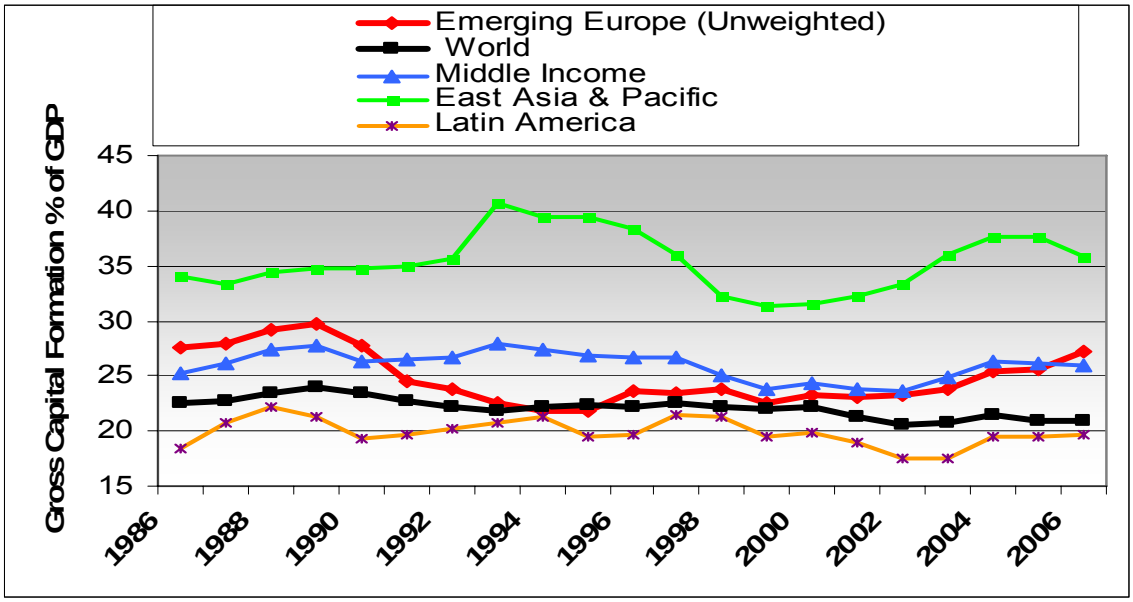
$$ca = S - I \qquad (2)$$

That being, is investment unusually high in the emerging European economies or is savings unusually low? With EU membership either obtained or on the way for many of these economies, one might think that their integration into this rich market with their significantly lower wages would have produced an investment boom. In addition, six of these economies (Cyprus, Greece, Malta, Portugal, Slovenia, and Spain) are already in the eurozone, and are thus able to borrow at euro rates without the usual emerging market penalty spread. Although investment rates in many of these economies may have been trending slightly upward over the last few years, it is nevertheless the case that the overall investment to GDP ratio in these economies is relatively close to world averages. Appendix table 3 provides data on gross capital formation for these economies and some other world aggregates for 1994-2006. In chart 4 some regional trends are compared covering the 1986-2006 period. The unweighted average rate of gross capital formation

for emerging Europe was in the upper 20s during the 1980s, fell to about 23 percent of GDP during the 1990s and has increased slightly since 2002. Emerging Europe's percentage for gross capital formation was similar to that of a large sample of 96 middle income economies (the blue line, which includes all of those with a per capita GNI of $906 to $11,115 which covers the range of most of Europe's emerging economies) during the 1980s, below that of this group in the 1990s when Europe's rate declined, and similar to this group since 2000 as Europe's rate increased back to the levels obtained in the 1980s. In this sense then, investment in emerging Europe can now be considered roughly average compared to comparable emerging market economies. Compared to the world average of all economies (the black line), which is weighted down by lower investment rates in the least developed and the advanced economies, emerging Europe has slightly greater rates of investment. Within the middle income countries, there is significant region diversity with East Asia having investment rates of almost ten percentage points greater than emerging Europe while Latin America has rates significantly below.

Chart 4

Gross Capital Formation in the Major Regions of the World



A generally similar conclusion is obtained by comparing investment data in the IMF *World Economic Database*. Using a smaller sample of countries, a weighted aggregate for Central, Eastern and Southeast Europe (CES) composed of 14 of the European emerging economies is created; this group includes ten NMS (not Cyprus or Slovenia) and Albania, Croatia, Macedonia, and Turkey. Investment in this CES aggregate is compared to investment in all emerging and developing economies (143 countries) in chart 5. Investment in CES is roughly similar now to what it has been for the last decade and is slightly below the average of all emerging and developing economies. Overall, considering several different datasets the basic conclusion is the same, that being that the current account deficits in emerging Europe are not the result of these economies having especially high investment rates.

Chart 5

Investment in CES Europe and All Emerging and Developing Economies

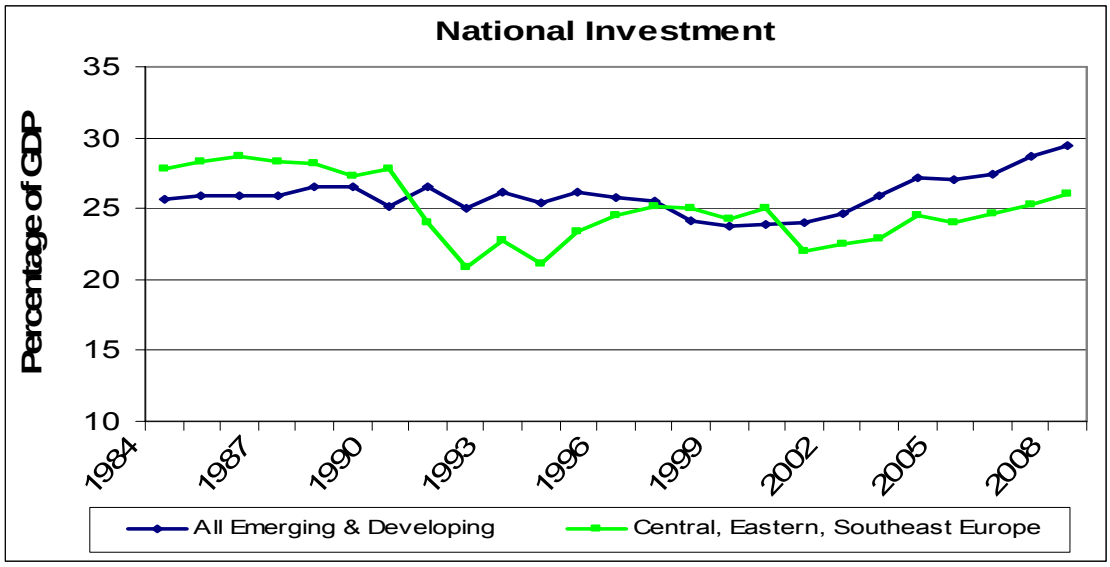
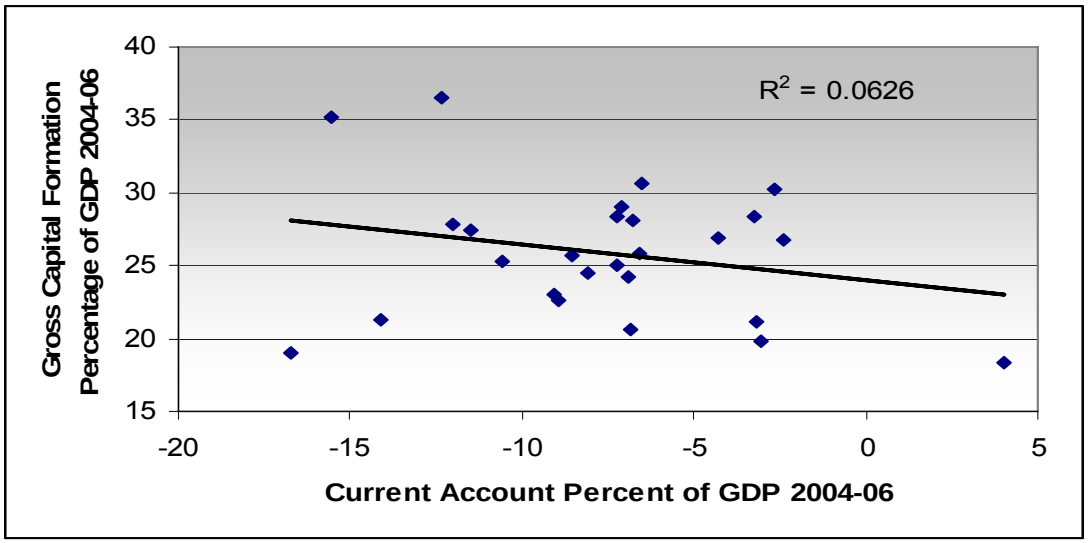


Chart 6

The Relationship Between Current Accounts and Gross Capital Formation



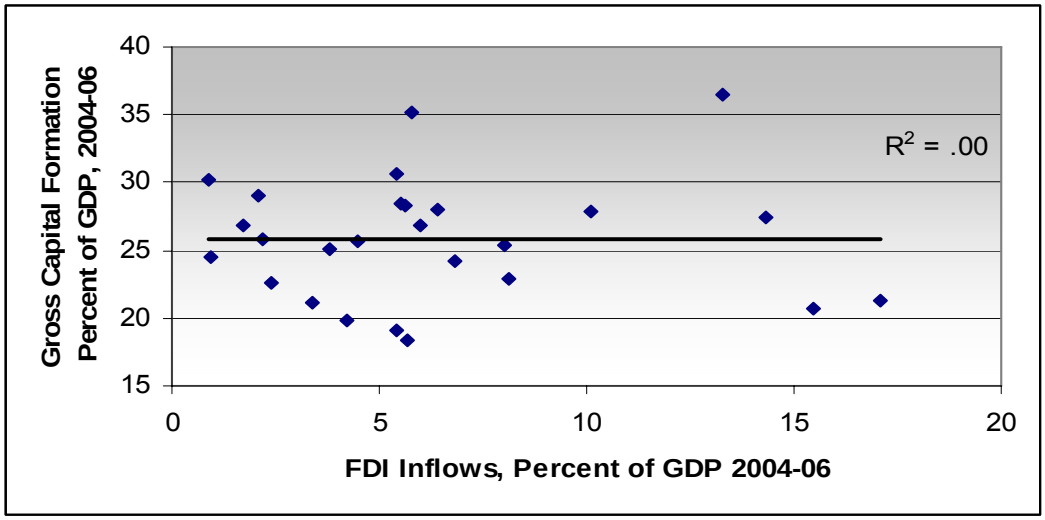
These results suggest that as a group the large current accounts have not really raised investment to levels above other economies. A similar conclusion holds if the variation in investment and current accounts amongst European emerging markets is examined. Those that have the largest current account deficits have not had higher levels of gross capital formation. In chart 6 the average current account over 2004-06 is plotted against the average level of gross capital formation. Although there is a slight trend line suggesting higher current account deficits are associated with higher rates of capital formation, the relationship is not statistically significant and the R-square of this line is

only .06.[2] Thus in conclusion, the region as a whole does not have higher capital formation despite the large current accounts deficits (net foreign capital inflows) and those economies within the region with the highest current account deficits do not have capital formation any greater than those with smaller current account deficits.

It is possible that the different types of capital inflow affect capital formation differently. For example, Bosworth and Collins (1999) found that inflows in the form of bank loans and bond funds tended to crowd out domestic investment while FDI tended to increase it. However, the recent experience of the European emerging markets does not support this generalization. In chart 7 the three year average (2004-2006) level of FDI inflows as a percent of GDP is plotted against the average (2004-2006) level of gross capital formation. The R-squared is zero. The level of FDI which varies quite significantly amongst these economies from 0.9 to 17.1 has absolutely no impact on the level of capital formation. So this result is consistent with all those discussed above; the level of capital inflows doesn't affect the level of investment in the European emerging markets and the fact that the region gets such high level of inflows doesn't result in the region having higher investment relative to other world regions.

Chart 7

The Relationship Between FDI Inflows and Gross Capital Formation in EEM



Saving Levels

The other side of the balance of payments identity is gross national savings. In chart 8, saving rates for CES Europe (as defined above) is plotted alongside that for all emerging and developing economies. As is plainly evident, in the case of savings the European economies have been experiencing a long-term decline in national savings and now have rates more than ten percentage points below the average for emerging and developing economies.

[2] Because of the lack of data on capital formation for Cyprus, it was dropped from the sample; five other economies lacked data for 2006 and their average level of capital formation is based upon 2004-2005.

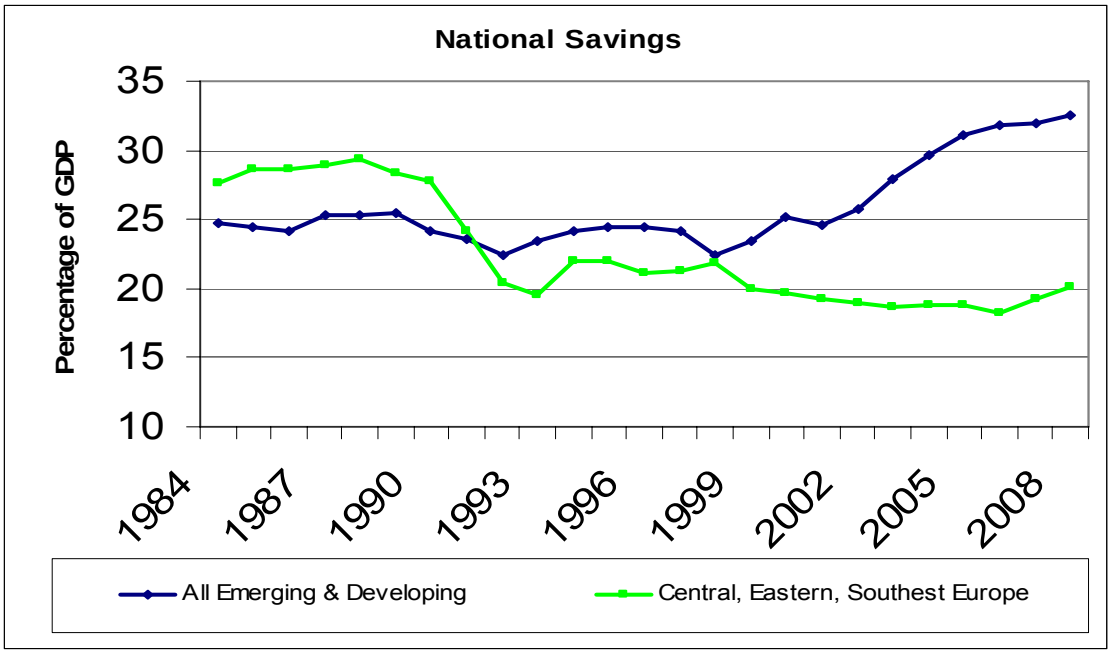
It is often alleged that a primary cause of a current account deficit is a fiscal deficit, the so-called twin deficits proposition. In the accounting identity a government deficit (S_g = T - G) reduces national savings (the sum of private and government savings), and thereby creates a current account deficit.

$$ca = (S_p + S_g) - I \qquad (3)$$

A question then would be if the very low rates of national savings found in the European emerging markets are the result of large government deficits. The reasoning being that government deficits increase interest rates which encourages capital inflows and thus a current account deficit. Under flexible exchange rates capital inflows would appreciate the currency and thus create a larger current account deficit while under fixed rates the capital inflow would increase national income and imports (assuming the inflow is not fully sterilized which is unlikely). In addition it has been suggested (Griffin, 2002 addresses the case of Armenia) that for emerging markets the access to foreign capital reduces the incentive of the government to collect taxes and this would result in a positive relationship between fiscal and current account deficits (through a slightly different chain of causality). There is also a generally well-established historical relationship between government fiscal deficits and current account crises. Nevertheless, although this *ceteris paribus* relationship is logically rigorous, the empirical relationship between the two deficits has not proven to be especially strong in cross-sectional or time series comparisons.

Chart 8

National Savings in CES Europe and All Emerging and Developing Economies

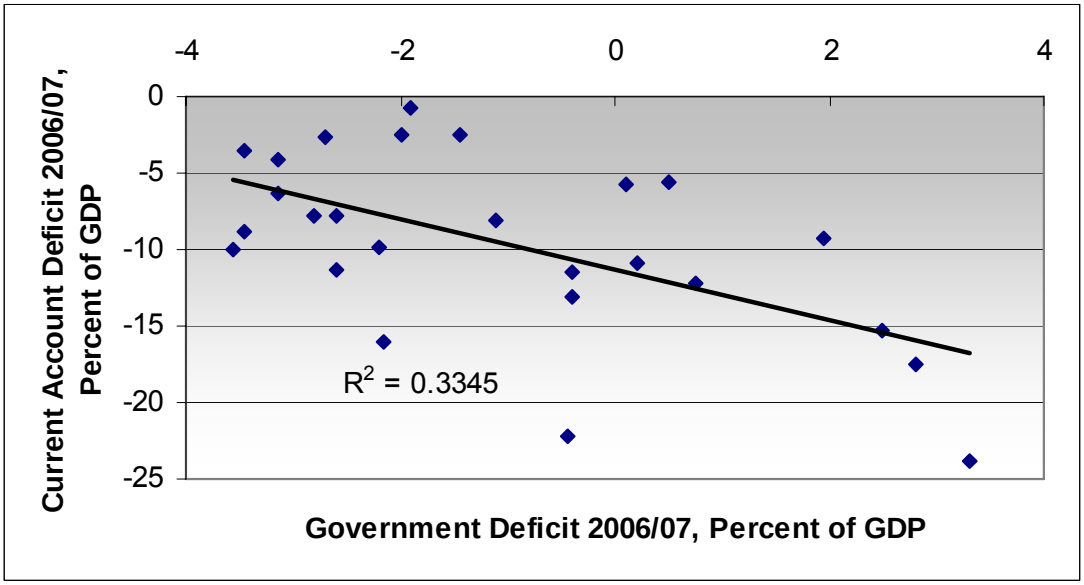


However, for the European emerging markets government deficits are not particularly large; the unweighted average for the 27 economies averaged over 2006-2007 is only -1.3 percent of GDP. In fact Hungary with a deficit of 7.8 percent of GDP is

the only economy with a deficit over these two years greater 4 percent of GDP. Empirically, the relationship between the two deficits for the European emerging markets is statistically significant (at the 99 percent level with a t-statistic of 3.47) and the magnitude of the relationship is fairly large with a coefficient of -1.65.[3] However, as can be seen below in chart 9 the sign is the opposite of that normally assumed; that being, that for each one percentage point increase in a government deficit (as a percent of GDP), the current account improves by 1.65 percentage points of GDP. There is of course no theoretical problem with this result in that the proposed relationship is a *ceteris paribus* accounting identity and essentially assumes that lower public savings does not affect private savings or investment. It is, however, possible that lower public saving could cause private savings or investment to change by an even larger amount so that the overall relationship would be the opposite of the one that would occur if these two latter variables were fixed. Given the fairly strong negative relationship between the two deficits in the European emerging markets it is worth exploring these other channels.

Chart 9

The Relationship Between Government Deficits and Current Accounts in EEM



When foreigners lend or make investments in an economy there are several factors likely to be important. For an advanced economy, a larger government deficit may be associated with a slightly higher interest rate which would attract capital inflows which would appreciate the currency or increase income and thereby increase the current account deficit. For an emerging market however, the attraction of the higher interest rate could be overwhelmed by increased concern about government default risk or a possible currency crisis. As a result, larger government deficits could possibly reduce capital inflows and thus reduce the current account deficit through income or exchange rate channels. Thus for the European emerging markets, those with better budget situations

[3] Based upon a regression with 26 European emerging markets used in this study which took the two-year average government deficit and average current account over 2006 and 2007. Hungary was dropped as an outlier; however if included, the coefficient is still highly significant and the R-squared is .325.

appear to be able to attract additional funds while there may be a reluctance to invest or lend to economies with large budget deficits.

Another possible theoretical reason weakening any positive relationship between the two deficits would be the Ricardian equivalence hypothesis, whereby a fiscal deficit increases private savings so that national savings is unaffected and there would be no need for additional foreign borrowing (and a current account deficit). Essentially the decrease in S_g creates a corresponding increase in S_p.

An additional consideration is that the current account and the fiscal deficit are likely to move in different directions during the economic business cycle. The current account is likely to be anti-cyclical; that being, during the boom phase the current account deficit is likely to increase as income growth results in import growth. In addition, for flexible exchange rate economies, capital inflows are likely to increase during the boom and this is likely to appreciate the currency (*ceteris paribus*) which would create another mechanism contributing to a deficit. The fiscal deficit, however, should improve during the boom due to the automatic stabilizers. Thus when the fiscal deficit is low, the current account deficit will be high. In terms of the accounting identity, the underlying business cycle factors that cause *Sg* to improve during a boom also cause investment (*I*) to increase, thus negating the simple correlation between *Sg* and the current account (*ca*).

Overall, however, government borrowing is fairly low in the European emerging markets and therefore does not appear responsible for the low savings in these economies, and as shown above this borrowing is certainly not responsible for these economies' current account deficits. Instead, the source of both the savings and current account problems is low private savings. There would appear to be a number of competing explanations as to why private savings are so low in this region. There are considerations regarding inter-temporal consumption smoothing: there are two important considerations here. Firstly, is the fact that most of these economies (all except the SEU-3) experienced large income declines during the transition process; as a result consumers might be expected to borrow as a way to maintain their longer-run consumption levels. Secondly, growth in these economies has been reasonably high since 2000 and, if households view this growth is likely to continue, they may choose to borrow now off their future income as a way to smooth their consumption through time. Blanchard and Glavazzi (2002) argue that current account deficits are to be expected in countries where the population has expectations that future economic growth will be relatively high compared to other countries, as households in the fastest growers will have the greatest demands for increasing consumption (absorption) above current income levels. Despite the logic of this forward-looking intertemporal utility maximization savings strategy, there is some empirical evidence which suggests that the relationship is the opposite with higher per capita income growth being positively related to savings. It is theorized that this is explained by habit formation as households are slow to adjust their expenditure levels in response to changing income levels, or by the possibility that income and savings are increasing for the younger high-saving cohorts while the dis-saving of the older retirees is unaffected by growth, so the overall effect is increased savings.

Central to this issue is the basic intertemporal consumption smoothing hypothesis of the current account as developed by Obstfeld and Rogoff (1996). Given that there has been a recent spurt of growth in emerging Europe, this theory suggests that savings should have increased and the current account improved. A possible reason that it has not is offered by Aguiar and Gopinath (2004) who argue that open advanced economies and emerging markets respond to a spurt of economic growth differently. When advanced economies experience growth, agents tend to view it as a positive transitory income shock and they therefore increase savings consistent with this hypothesis. However, when a similar growth spurt happens in an emerging market, agents interpret it not as a transitory shock but as a sign that there has been a likely increase in long-term growth and thus they increase consumption consistent with consumption smoothing. Thus in both cases households desire to smooth their consumption over time, but the key difference is how agents interpret the implications of recent growth for their expectations about long-term growth. Thus for emerging Europe, the recent growth has been interpreted by residents as meaning that these economies are now in the process of converging towards western European living standards and are choosing to borrow now to benefit from this slightly ahead of time.

Although the European emerging markets have recently experienced rather strong economic growth especially relative to their neighbors in western Europe, their growth has not been superior to that of the Asian economies. It seems that a number of the arguments advanced above would be especially true for the Asian economies, and thus they would be low savers like Europe instead of the high savers that they are.[4] Clearly there must be other factors that are important in influencing savings. A few possible reasons are discussed below.

One factor that may account for the relatively low rates of savings in the European emerging markets (generally, as well as relative to Asia) is that this group of economies is somewhat unique amongst emerging economies in that they are rapidly aging societies. Cross-sectional empirical research on savings has found that aging is associated with lower savings (as the old dis-save) and investment (due to lower labor force growth) with the effect on saving being greater, so that aging societies are more likely to run current account deficits (Bosworth and Chodorow-Reich, 2006). In the results of these authors as in those of most others, regional dummy or country-fixed effects are generally significant as the Asian economies in particular appear to save more than the tested variables are able to explain. Thus this factor may be an important reason explaining why savings are so low in emerging Europe relative to Asia despite the fact that both are fast growing regions.

Many of the non-European (especially Asian) emerging markets have adopted an export-led model of economic development based on under-valued exchange rates; thus a current account surplus is a policy goal which has been directly targeted. It appears that the export-led model has generated much higher levels of domestic savings, and thus even without the benefit of foreign savings, they have had, somewhat paradoxically, even

[4] The superior growth performance of Asia is due partly to its more rapid population growth; in most of the European emerging markets population growth is low or even negative. As such the per capita income growth differences are less than the GDP growth differences.

higher investment rates than those more open to foreign capital. The mechanism as to how setting a low exchange rate results in a high savings rate is poorly understood. It is possible that the direction of causality could run from savings to the exchange rate. Countries with high savings rates due to other reasons may choose an export-led development model as a way to maintain aggregate demand and employment (Bernanke, 2005). They may even discourage capital inflows because they do not feel that they need additional capital, and inflows would undermine their exchange rate objectives by appreciating the currency.

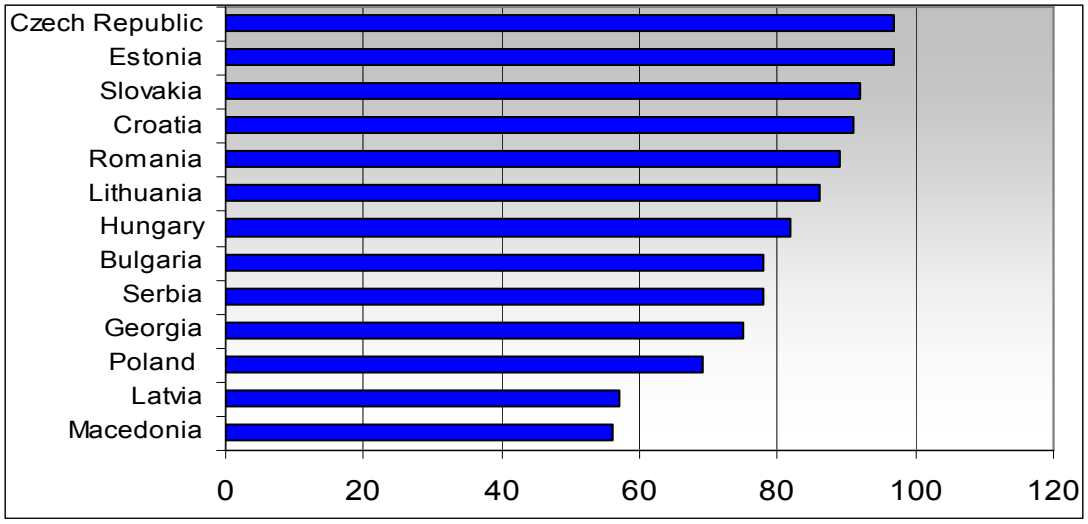
Alternatively it may be the case that an undervalued exchange rate causes higher savings; for example Diaz-Alejandro (1965) argued that a depreciation lowered the real wage and shifted the distribution of income from workers to capitalists. Since a major component of private savings is business savings and these are derived mainly from profits, a policy that increases profits and income to capitalists increases savings. An under-valued currency, by raising the prices of all goods (both exports as well as import-competing goods), is a method to increase profits. Through this channel the exchange rate policy can have an important impact on the national savings rate.[5] In the standard current account identity as in equation (2), an undervalued exchange rate increases both the current account (*ca*) and private savings (*Sp*). In emerging Europe, the capital inflows have appreciated the currency and this has lowered profits and lowered business savings. Note however, that current account surpluses need not always be associated with high domestic savings and investment. When financial intermediation is poor and domestic savings can not find a productive use at home, capital outflows can depreciate the currency and produce a current account surplus combined with low investment and low growth.

There are several additional factors likely to have kept household savings low in emerging Europe. In order for households to achieve their desired consumption smoothing, they must be able to borrow and save from the financial sector. The banking sector is relatively well developed in this region; this has been a significant achievement as banking was under developed in transition economies and did not perform its basic role in market economies of allocating capital. In order to jump start this sector, banking was privatized and often sold to foreigners during the transition process as a way of importing modern technology and managerial expertise. The level of foreign ownership of banking assets in a number of the EEM is given in chart 10. Although development of the financial sector is often promoted as a way to increase domestic savings (by getting cash hordes into the banking sector or reducing capital flight), it can also lower savings by increasing consumer loans if households were previously liquidity constrained. As will be addressed later, the fact that the source of foreign borrowing has in many cases been channeled through multinational banks and that they have tended to promote foreign-currency denominated loans as a way to minimize their exchange rate risks has created an additional vulnerability associated with their current account deficits.

[5] Levy-Yeyati and Sturzenegger (2007) have raised this line of thought as part of their thesis that the fear of floating is really a fear of appreciation and that this is the result of a government desire to keep the currency undervalued as a way to promote savings and investment; they provide empirical evidence that supports these relationships.

Chart 10

Percentage of Foreign Ownership of Banking Assets, 2007

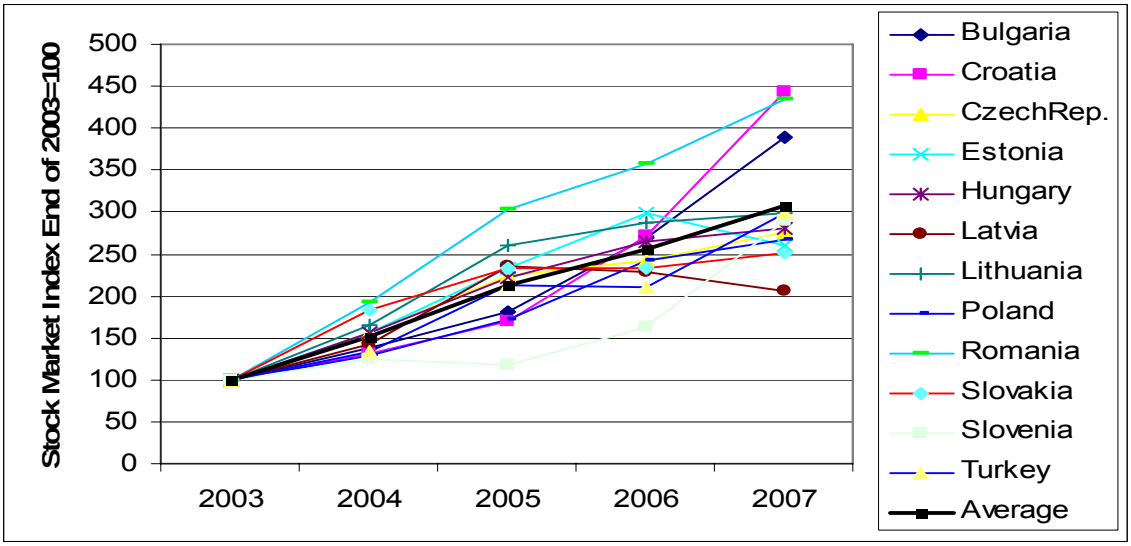


Another factor reducing household savings in European emerging markets is their relatively well developed safety nets and retirement systems. Although these institutions were significantly dismantled during the transition process in eastern Europe, they are now relatively well developed in these economies (and of course in the SEU-3). Thus households do not need to have such high precautionary savings nor do they need such high retirement savings as pension systems are now well-established. It is often alleged that in Asia savings are high because of the lack of safety nets and retirement systems.

As demonstrated by the recent discussion of the low savings rate in the United States, consumers may save little out of current income if their wealth is increasing due to asset appreciation. In most of emerging Europe the prices of housing and financial assets have been increasing quite rapidly. Egert and Mihaljek (2007) find that nominal house prices in national currency increased at an annual rate during 2002-2006 of 36.4 percent in Estonia, 23.8 percent in Lithuania, 23.5 percent in Bulgaria, 11.9 percent in Hungary, 9.9 percent in Sloveia, 9.8 percent in the Czech Republic, and 8.7 percent in Croatia. Giucci et al.(2007) find that the price of housing in Kiev increased by a factor of five in real terms and a factor of over eight in U.S. dollar terms between 2000 and 2007. Shelburne and Palacin (2006) find similar large increases in housing prices in a number of the former transition economies. Although stock ownership is not widespread in the region, the value of stocks has appreciated considerably over the last five years. In chart 11 the stock market index for 12 of the EEM between 2003 and 2007 is plotted; the average of these indexes tripled between 2003 and 2007. The index was up by a factor of four in Bulgaria, Croatia, and Romania. Most recently, the Athens Exchange ATHEX composite was up 17.9 percent during 2007 and the Cyprus CSE was up 23.6 percent. These large increases in stock prices probably also approximate the increases in various other types of assets in these economies.

Chart 11

Stock Market Index Appreciation in Selected EEM, 2003-2007



The current reluctance of many non-European (especially Asian) emerging markets to become dependent on foreign capital is often alleged to be due to their desire not to repeat the situation which led up to the Asian financial crises of 1997-98. Not only were the consequences of this "sudden stop" in capital inflows severe, but the IMF adjustment programs appeared to only further magnify the problem. This desire for current account surpluses may be a temporary choice which allows them an opportunity to accumulate a much larger stockpile of international reserves for self-insurance or may be a desire to avoid deficits perhaps indefinitely. The logic above suggests that this process has been the result of a conscious process by governments to avoid the mistakes of the past. However, the same outcome is possible if the financial sectors have become risk averse (due to their previous mistakes in the 1990s) and choose now to be very discriminating in their investment decisions; instead of investing in risky domestic ventures they prefer to invest in lower return (but less risky) foreign assets. Thus the surpluses of the non-European emerging markets need not always be due to a conscious policy of the government.

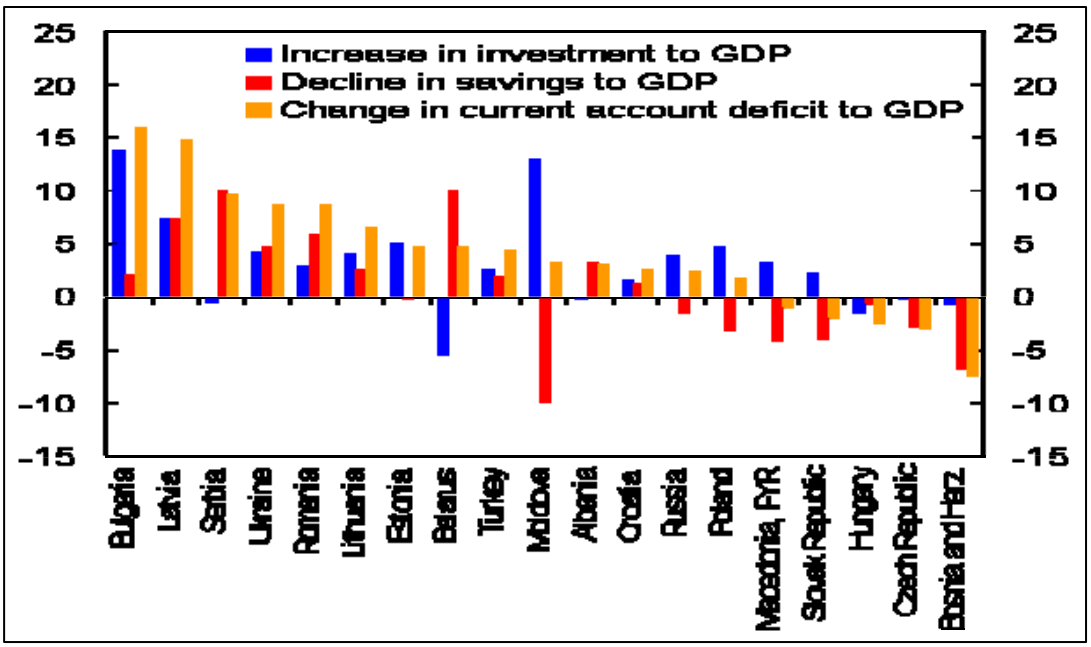
It might be suggested that this desire to avoid the mistakes of the past would be greatest in those that had actually experienced crises; however the European emerging markets have not been immune to financial crises. For example, the region had a number of currency crises including Bulgaria in 1996, the Czech Republic and Romania in 1997, Russia in 1998, Turkey in 2000-01, and several speculative attacks against Hungry in 2003.

An alternative way to assess the importance of saving and investment as an explanation for the current account is not to compare these levels across countries as examined above but to focus simply on the trend in these three variables over a period of time to see how much of the increase in the current account can be accounted for by an increase in investment or a reduction in savings. Rosenberg (2008) has made this

calculation for a number of European economies (his data, however includes Russia) for 2003-2007 and is duplicated in chart 12 below. The evidence is somewhat mixed in that most of those economies, which experienced a decline in the current account over this period, experienced both an increase in investment and a decline in savings. For example, as shown in chart 12, the increase in Latvia's current account deficit between 2003 and 2007 is due equally to an increase in investment and to a decline in savings. On the other hand, Bulgaria's is due almost exclusively to an increase in investment while Serbia's is due exclusively to a decline in savings. Although the evidence appears quite mixed, Rosenberg nevertheless concludes that of the two components, investment increases were the more important.

Chart 12

The Change in the Current Account, Savings, and Investment 2003-2007



Source: Taken directly from a presentation by Rosenberg (2008b).

In addition, he seems to suggest that an investment driven current account deficit may not be that worrisome. It is probably true that an investment driven current account deficit may create less vulnerability than a consumption driven one, simply because the country has created a capital stock which can potentially produce items that can be exported so as to close a current account deficit or to pay off debt. However, real estate investment, which has been significant in the EEM, does not generally have this property. Nevertheless, although an investment driven deficit may be less of a problem than a consumption driven one, it does not follow that an investment driven deficit is not a problem. For example, Thailand experienced a deterioration in its current account from a deficit of 3 percent of GDP in 1989 to 8 percent in 1996; over the same period its gross domestic savings actually increased from 33 to 36 percent of GDP and its gross capital formation increased from 35 to 42 percent of GDP. Thus the deterioration in its current account was entirely investment driven; nevertheless disaster struck. Also, the U.S. had a current account in balance in 1991 with savings and investment equal to 16.2 percent of

GDP; in 2006 it had a deficit of 6.7 percent of GDP with investment of 20.8 percent and savings of 14.1 percent of GDP. Thus using this procedure, of the increase in the current account of 6.7 percentage points of GDP, 4.6 percentage points are due to the increase in investment and 2.1 percentage points due to the decline in savings. Thus one would conclude that the U.S. current account deficit is due largely to increased investment and not to a decline in savings. However, few are arguing today that the U.S. current account deficit presents no problem because it is investment driven or that the problem is that the U.S. invests too much. In this sense then emerging Europe is much like the United States, and the continued foreign borrowing is not healthy and the solution is the need for higher savings.

In summary, in terms of the basic current account identity, the current accounts in emerging Europe are due to the fact that savings are low while investment is more normal relative to other emerging markets. In terms of why the current account deficits have doubled over the last five years regarding trends in savings and investment, the answer is a little more ambiguous as investment rates have increased slightly while savings have declined slightly. The fact that investment is not particularly high is somewhat surprising given the tremendous potential that most of these economies represent. With market access, relatively good human capital, an openness to foreign capital and technology, many eligible for sizable transfers from the European Union for infrastructure, and several able to borrow in the euro market without an emerging market interest premium, it might reasonably be expected that these economies would have investment rates significantly above the world emerging market average. However, they do not. What stands out, however, are the very low rates of savings for these economies. There are a large number of explanations as to why savings might be low, but generally it is likely that: households are quite optimistic about their future prospects, there are well-established retirement and safety nets so there is no real need for large amounts of precautionary savings, there is a sizable cohort of retirees, consumer loans are increasingly available, household wealth has been increasing due to increases in asset prices especially for housing which most own without a mortgage, and business savings have been kept down by low profits due to overvalued exchange rates. Government deficits, one factor commonly associated with low national savings do not appear to be important; they are relatively low and in the few cases where they are significant, the current account deficits are small.

IV. What Should Be Done About Europe's Emerging Market Current Account Deficits?

The current account deficits in the European emerging markets are large, in some cases clearly unsustainable, and generally the result of private sector savings and investment decisions. As discussed above, the economic theory of intertemporal welfare maximization suggests that possibly the situation may not need a policy induced correction. In addition, it is argued that most of these deficits are not particularly worrisome because a significant proportion of them are being financed by FDI, which is relatively stable. However, if a currency or financial crises were to occur, the FDI inflows are far from guaranteed and the costs would be borne by many groups other than those making these savings and investment decisions. As such, there would seem to be a strong reason that governments may wish to lower these current account deficits to more

sustainable levels. In deciding what action might be optimal, one question that must be addressed is, what would happen to investment if capital inflows were reduced? Would investment fall or would savings increase? Although the evidence is mixed and it is not possible to answer this question in a theoretically unequivocal manner (that being, cross-sectional patterns or time series trends are only suggestive of what might happen), the overwhelming conclusion is that foreign capital inflows into the region have reduced domestic savings more than increased investment so that although investment may suffer it is primarily consumption that would decline.

In analyzing how increased access to foreign capital markets has affected savings and investment, there is much evidence to suggest that it is savings that often falls as much as investment increases. For example, a drop in savings from increased access to international capital markets characterized what happened to Portugal in the second half of the 1990s as it became clear that it would be adopting the future euro. A similar pattern was first observed by Ingram (1962) in his analysis of the effects of large capital inflows into Puerto Rico back in the 1950s when it dollarized.

In order to contemplate appropriate policy action, it is worth discussing slightly the underlying channels that these capital inflows are taking. As previously discussed, in a number of these economies there is a significant presence of foreign banks in their financial sectors. The branch banks in the EEM have increasingly been borrowing funds from their parent banks in order to fund their operations, as domestic deposits have been limited by the low savings in these economies. These banks have also had a tendency to lend to the nontraded service sector and to households for personal loans and mortgages instead of to the traded sectors. The rate of credit expansion has been extremely fast, and although the overall credit to GDP ratios are low relative to advanced economy norms, there are significant questions as to whether the newly established financial systems including the institutional regulatory structures are sufficient to handle such a rapid expansion. Empirical research shows that the rapid growth of non-government credit is a significant factor in predicting financial crises in emerging markets. In addition, since the funds obtained from the parent banks are mostly denominated in euros, which is a foreign currency except for the few euro members, the branches have attempted to minimize their exposure to foreign exchange risks by making foreign-currency denominated loans. Although making euro denominated loans has reduced the direct exposure of the banking sector to exchange risks, the problem has just been shifted on to consumers and businesses which do not have a hedge against these risks and are therefore even less prepared to deal with them. As a result, for the banks, the lessened vulnerability from exchange risks has been replaced by an increased vulnerability from consumer default.

These trends are worrisome: the EEM are essentially selling debt and not equity, the loans are going for consumption and investment in the non-traded service and housing sectors, the expansion of credit is too fast for existing institutions to handle, and the foreign-currency denominated loans are exposing the borrowers to balance sheet effects if a domestic depreciation were to occur (Shelburne, 2007). And given the current account deficits, depreciations can not be ruled out. On the positive side, it has also been argued that the foreign bank loans are not as bad as the data would suggest because much of this is borrowing by subsidiaries from foreign parents and thus the possibility of a sudden stop is less likely. The parent banks appear to have made investments in these

European emerging markets as part of a long-run strategy to establish their presence in these economies instead of being motivated by short-term interest rate differentials. Thus they are unlikely to withdraw significantly from these markets when conditions deteriorate. Nevertheless, it is also the case that these large multinational banks are invested in a number of these economies, and thus there is an increased possibility of contagion if a problem should develop in one of the EEM.

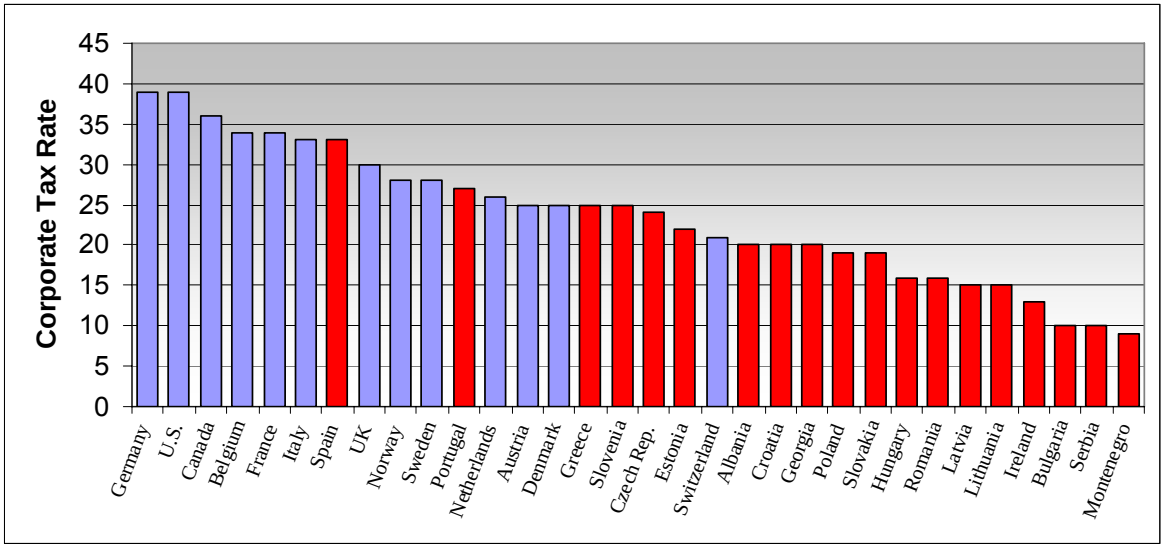
In many of the NMS the current account deficits are quite high and pose significant risks for the region; it is interesting to point out that the current account was one variable that should probably have been included, but is absent, in the Maastricht criteria for euro accession.

The underlying price trends which would allow a smooth reduction in the current account deficits are not encouraging. This is especially important in those economies with fixed exchange rates (even more so for currency board economies), since the only way that the current account can be corrected is for productivity to increase faster than wages so as to improve international competitiveness. In the Baltic economies, wages are currently rising at an annual rate of around 20 percent while real income (which can roughly be a proxy for productivity) is rising at an annual rate of only about 10 percent. Thus, despite already large current account deficits, their external competitiveness is actually deteriorating instead of improving. The only encouraging aspect of these trends is the high nominal values. Thus if wage growth could be brought down to only a few percent, competitiveness could improve rather quickly. This contrasts with the much more difficult situation where wages and productivity are growing slowly; this case would require a decline in nominal wages in order to significantly reduce real wages and thereby improve competitiveness. The experiences of those with fixed exchange rates (or those already in the eurozone) in regaining competitiveness through this differential between wage gains and productivity growth are not encouraging. The only partial success has been Germany which has increased its competitiveness over the last ten years by keeping wage increases below its productivity increases. However, these types of adjustment are quite difficult and costly in terms of higher unemployment, but there would appear to be little alternative for these fixed exchange rate economies. Given this situation, policies to increase product and labor market flexibility are warranted as a way to reduce these adjustment costs, but these invariably have negative distributional consequences (Shelburne, 2005). The flexible exchange rate economies have the option of depreciation but in those with significant foreign-currency denominated loans, this option has serious drawbacks.

Given the limitations on using exchange rate policy and the difficulty of regaining competitiveness through low wage growth, are there any other viable policy options for addressing these current account deficits? Unfortunately the tool kit available for addressing this issue is somewhat limited. Fiscal policy can play a role as increased taxes (or reduced expenditures) can increase public savings, lower interest rates, and reduce income growth. Higher corporate taxes would have the additional attraction of perhaps limiting capital inflows. As shown below in chart 13 there has been an ongoing “race to the bottom” in corporate tax rates as a way to encourage foreign investment; now that capital inflows are perhaps excessive, this trend could be reversed. Monetary policy is of limited value, as those with fixed exchange rates have no flexibility, due to the trilemma

of international finance which emasculates monetary policy when exchange rates are fixed with open capital mobility. Regulatory changes to limit asset appreciation by making mortgages harder to get may be necessary as might limitations of foreign-currency denominated loans.

Chart 13
Corporate Tax Rates in Europe, 2007



Capital flows into the European emerging markets have been even greater than the level the current accounts would suggest, as some of the capital inflows have been re-exported through international reserve accumulation. Obviously larger levels of international reserves provide some additional collateral and would be desirable as a way to insure against a sudden stop or mitigate its effects if one were to occur; they would also allow the authorities more flexibility to maintain exchange rates during a short slowdown in capital inflows. However, reserve accumulation has not been as significant in the EEM as in many other regions of the world. Their current reserve levels would not be sufficient if a major "sudden stop" were to occur. However, the accumulation of international reserves is not a totally independent policy choice but is more often an endogenous outcome of the monetary and exchange rate policy mix. For those countries with fixed exchange rates, a tighter monetary policy with sterilization can increase reserves, but this leads to increased external holdings on domestic bonds, so there is not much of a net improvement. For economies with flexible exchange rates, increased non-sterilized intervention can increase reserves but this will increase inflation which will result in a further deterioration of the current account; higher reserves but a larger current account is unlikely to increase stability. Thus the option of increasing international reserves creates its own set of new problems.

There is some further endogeneity in the sense that sometimes capital inflows directly create their own additional imports (and thus worsen the current account directly); thus if the capital inflows were to dry up the current account would improve automatically. This is in addition to the usual channels whereby lower capital inflows lower imports by lowering the exchange rate or reducing income growth. Given that most

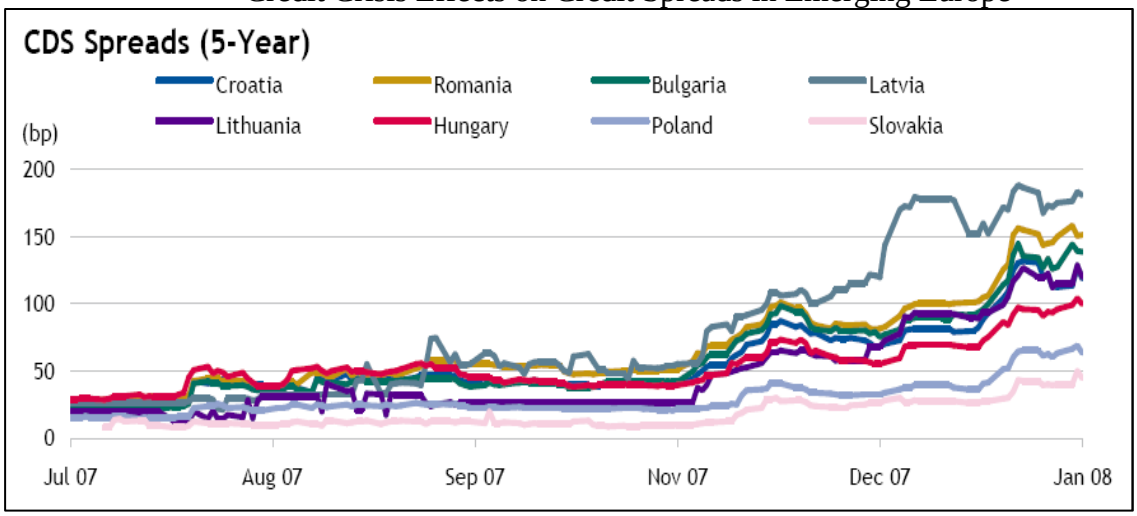
of these economies are not major producers of capital goods, additional inflows that create additional investment may result in a high propensity to import capital goods. Thus a reduction in capital inflows would lead to an immediate improvement in the current account by reducing imports of capital goods. Given these complications with the policy options and endogeneity, some exogenous factor that reduced capital inflows might be a welcomed development, and the 2007 credit crisis proved to be such as exogenous factor.

V. The 2007 Credit Crisis: The Beginning of the End?

The world experienced a significant credit crisis (stemming from the U.S. sub-prime mortgage crisis) beginning in August 2007 which is and will continue to have significant implications for the European emerging markets. As a result of the tightening of global credit and the re-pricing of risks, the credit rankings of some of the European emerging economies have declined and the spreads which they must pay have increased as shown in chart 14. In addition Rosenberg (2008b) finds that the increase in credit spreads is correlated with the size of the current account as shown below in chart 15.

Chart 14

Credit Crisis Effects on Credit Spreads in Emerging Europe

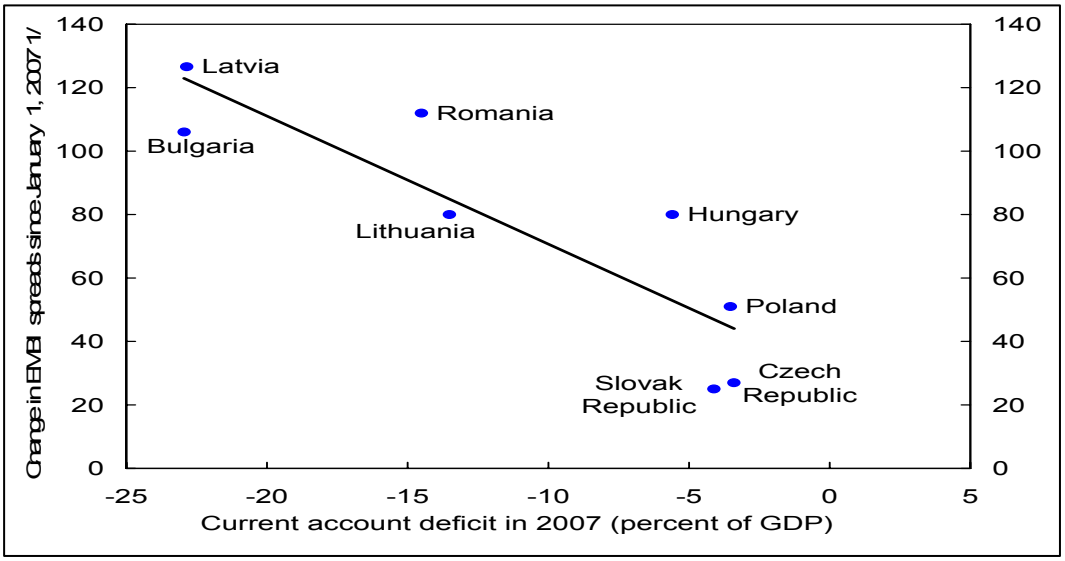


Source: FitchRatings (2008) with original data from Datastream.

Although the domestic banks in these economies were not significant holders of US subprime mortgage-backed securities and were much more prudent about making "subprime type" loans themselves, a number of their foreign parents did have some exposure to subprime securities. However, more importantly, these parent banks have been obtaining significant funding from global capital markets, and with the global credit crunch this source of funding is much more constrained. Domestic deposits are unlikely to grow to compensation for the lack of external financing. Thus as a result of tighter global credit conditions and their own or their parents' balance sheet problems, the emerging European banking systems are unable to continue to supply credit at the same levels as previously. One of the fundamental characteristics of a banking system is that it assumes the risks of having short-term deposits and long-term loans. These banks have thus made long-term loans under the expectation that they would be able to continue to roll over their liabilities at roughly a similar interest rate. Similarly, businesses in these

economies have borrowed funds to make longer-term investments with the intention of rolling over their shorter term loans until the investments matured. With the tightening of credit conditions, the ability to roll over this debt has declined, or the cost of doing so has increased substantially. As time goes on this problem of illiquidity can turn into a problem of solvency through a number of channels. For example, asset markets such as housing have a price level based upon the assumption that new entrants will be able to continue to enter the market and will be able to continue to obtain financing. When financing is not available, the demand for these assets falls along with their prices. The fall in prices can wipe out the capital or equity of the owner, at which point they may default on loans or declare bankruptcy. As a result banks become even more cautious about lending and a vicious cycle can develop. The longer the tight credit conditions remain, the more likely there will be contractions in business activity and bankruptcies. This process is very much underway in a number of these European emerging economies.

Chart 15
Credit Spreads in EEM and Current Account Deficits



Source: Taken directly from Rosenberg (2008b).

For example in Estonia, the economy contracted in the first quarter of 2008 by 0.5 percent (quarter-on-quarter), and annualized credit growth fell to 24.5 percent in April 2008 compared to 43.3 percent in April 2007. So far investment and growth have been maintained in the export-oriented manufacturing sectors while most of the downturn has been concentrated in the real estate sector. As discussed, although real estate has probably experienced excessive appreciation, there is no general oversupply of housing (as in the U.S.) in these economies. The degree to which the slowdown is able to begin to reduce the longer-term (cyclically adjusted) current account deficit will depend on the degree to which it moderates wage growth so as to improve the competitiveness of Estonian export firms.

The current credit crisis, however, is not the only "shock" that has impacted the European emerging markets; the other is the commodity price boom. This shock is largely a negative shock for the European emerging markets as they are net importers of

energy and commodities. As a result, this will further deteriorate their current accounts and thus further compound the challenges they face. In addition, the economic slowdown which has accompanied the crisis will affect the exports of the European emerging markets and their ability to service their debt. In addition to the credit crisis and the accompanying economic slowdown, another development that has increased the risks associated with lending to many of the European Union NMS is that their dates for euro accession are being pushed further and further into the future. Other than Slovakia, accession is now estimated to be more than five years away for most of the other NMS. There are a number of factors, but their difficulty in controlling inflation is probably the most important (UN, 2008, box IV.I) Thus lenders can not rely on the fact that borrowers in these economies will be paying back domestic currency debt and thus must be concerned about the potential for a currency depreciation in the coming years. In addition, EU accession for Turkey and much of south-east Europe is either more in doubt or likely to be, much further in the future. Overall then, the days of minimum risks and a sea of credit are now over, and as a result obtaining external finance will be more difficult, and that suggests there is likely to be some correction in their current accounts. As with the United States, the fundamental question is whether there will be a soft landing which is needed or a hard landing which will be disruptive.

VI. Conclusion

The current account deficits in the European emerging markets have more than doubled over the last five years. By many measures they are too large and probably unsustainable. However, at the same time they may not be as risky as the large magnitudes might suggest due to the fact that many of them are financed by what should be relatively stable inflows of FDI. Although there is some empirical justification for this in the sense that FDI flows have proven to be rather stable even during financial disturbances, there is no absolute guarantee that this need be the case. In addition, increasingly the percentage of the current account covered by FDI has been declining in a number of economies as they are increasingly relying on borrowing from foreign banks. This poses a number of additional risks, and policy action is needed to reverse this development. The financial turmoil that began in August 2007 with U.S. sub-prime mortgage securities has so far had only a limited impact on the region although in almost all cases the interest rate spreads for private sector borrowers in this region have increased. If the adjustments induced by this crisis can be achieved slowly, the crisis may prove to have been a blessing in disguise. Nevertheless, there is the possibility that the required adjustments may come too fast, in which case there could be significant market turmoil throughout the region.

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Appendix Table 1- Current Account Deficits in Emerging Europe (Millions $)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Albania	-65	-155	-156	-217	-408	-407	-358	-571	-671	-1040
Armenia	-418	-307	-278	-200	-148	-189	-162	-193	-117	-312
Belarus	-1016	-194	-338	-411	-326	-434	-1194	434	-1512	-2750
Bosnia and Herzegovina	-345	-501	-396	-743	-1191	-1631	-1840	-2156	-1233	-1713
Bulgaria	-49	-659	-698	-990	-874	-1698	-1627	-3258	-4991	-7524
Croatia	-1477	-1406	-533	-729	-1926	-2162	-1898	-2571	-3223	-4012
Cyprus	-605	-217	-455	-314	-394	-300	-789	-951	-1091	-1118
Czech Republic	-1275	-1468	-2690	-3273	-4265	-5785	-5749	-1939	-4586	-4998
Estonia	-480	-245	-299	-337	-716	-1113	-1457	-1440	-2418	-3280
Georgia	-276	-198	-269	-212	-231	-384	-421	-763	-1235	-1542
Greece	-5948	-8618	-9820	-9400	-9582	-12804	-13476	-18233	-29565	-37234
Hungary	-2279	-3763	-4011	-3193	-4637	-6701	-8584	-7565	-6206	-4897
Latvia	-640	-648	-380	-633	-615	-919	-1802	-2031	-4279	-6500
Lithuania	-1290	-1201	-680	-573	-721	-1278	-1725	-1831	-3218	-4410
Malta	-216	-126	-481	-150	106	-156	-342	-517	-421	-609
Moldova	-335	-79	-108	-37	-25	-130	-47	-248	-392	-582
Montenegro	..	..	..	..	..	-115	-149	-191	-642	-608
Poland	-6901	-12487	-9981	-5375	-5009	-4599	-10693	-4775	-11084	-12500
Portugal	-8495	-10426	-11690	-11458	-10325	-9547	-13804	-18001	-18316	-18098
Romania	-2889	-1440	-1379	-2229	-1524	-3248	-6337	-8546	-12660	-15019
Serbia	-469	-455	-153	-285	-1247	-1420	-2869	-2224	-3656	-4160
Slovakia	-1982	-980	-694	-1746	-1939	-276	-1447	-4090	-4561	-3028
Slovenia	-122	-704	-534	34	235	-220	-891	-680	-946	-1123
Spain	-7098	-18076	-22990	-24007	-22385	-31019	-54855	-83096	-106305	-141339
The fYR of Macedonia	-270	-32	-72	-244	-358	-149	-415	-81	-24	-249
Turkey	1986	-1337	-9824	3393	-1521	-8036	-15601	-22603	-32774	-39054
Ukraine	-1296	1658	1481	1402	3174	2891	6909	2531	-1617	-4680
SEU-3	**-21541**	**-37120**	**-44500**	**-44865**	**-42292**	**-53370**	**-82135**	**-119330**	**-154186**	**-196671**
NMS-12	**-18728**	**-23938**	**-22299**	**-18792**	**-20404**	**-26371**	**-41462**	**-37582**	**-58122**	**-73269**
SEE-7	**-640**	**-3886**	**-11134**	**1175**	**-6651**	**-13920**	**-22930**	**-30217**	**-42223**	**-50836**
CIS-5	**-3341**	**880**	**488**	**542**	**2444**	**1754**	**5085**	**1902**	**-4873**	**-9866**
Total	**-44250**	**-64064**	**-77445**	**-61940**	**-66902**	**-91907**	**-141442**	**-185227**	**-259405**	**-330642**

Appendix Table 2- Current Accounts in European Emerging Markets as a Percentage of GDP, 1998-2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Albania	-2.4	-4.5	-4.3	-5.3	-9.2	-7.1	-4.9	-7.0	-9.9	-10.1
Armenia	-22.1	-16.6	-14.6	-9.4	-6.2	-6.7	-4.5	-3.9	-1.4	-4.0
Belarus	-6.7	-1.6	-3.2	-3.3	-2.2	-2.4	-5.2	1.4	-4.1	-7.1
Bosnia & Herzegovina	-8.2	-10.7	-7.8	-14.0	-19.3	-19.5	-18.4	-20.0	-11.7	-12.7
Bulgaria	-0.4	-5.0	-5.5	-7.2	-5.6	-8.5	-6.6	-12.0	-15.8	-19.3
Croatia	-6.8	-7.1	-2.5	-3.6	-8.3	-7.2	-5.3	-6.6	-7.6	-8.0
Cyprus	-6.3	-2.2	-4.9	-3.2	-3.7	-2.3	-5.0	-5.6	-5.9	-5.5
Czech Republic	-2.1	-2.4	-4.8	-5.3	-5.6	-6.2	-6.0	-2.6	-4.2	-3.0
Estonia	-8.4	-4.3	-5.3	-5.4	-9.8	-11.3	-12.2	-10.3	-14.6	-16.0
Georgia	-7.6	-7.1	-8.8	-6.6	-6.8	-9.6	-8.2	-11.9	-16.0	-16.1
Greece	-4.4	-6.3	-7.8	-7.1	-6.5	-6.6	-5.9	-7.4	-11.0	-11.7
Hungary	-4.7	-7.6	-8.4	-6.0	-7.0	-7.9	-8.4	-6.8	-5.5	-3.6
Latvia	-9.7	-9.0	-4.8	-7.6	-6.6	-8.1	-13.0	-12.6	-21.1	-23.5
Lithuania	-11.5	-11.0	-6.0	-4.7	-5.1	-6.8	-7.7	-7.2	-10.8	-12.1
Malta	-5.7	-3.2	-12.4	-3.8	2.4	-3.1	-6.3	-8.0	-6.2	-9.4
Moldova	-19.7	-6.7	-8.4	-2.5	-1.5	-6.6	-1.8	-8.3	-11.7	-14.5
Montenegro	..	..	..	..	..	-7.3	-7.2	-8.6	-26.5	-21.2
Poland	-4.0	-7.4	-5.8	-2.8	-2.5	-2.1	-4.2	-1.6	-3.3	-5.1
Portugal	-7.1	-8.6	-10.4	-9.9	-8.1	-6.1	-7.7	-9.7	-9.4	-8.2
Romania	-6.6	-3.9	-3.6	-5.3	-3.2	-5.5	-8.4	-8.6	-10.3	-9.5
Serbia	-3.1	-4.9	-2.1	-2.5	-7.9	-7.0	-11.7	-8.5	-11.5	-10.3
Slovakia	-8.9	-4.8	-3.4	-8.3	-7.9	-0.8	-3.4	-8.6	-8.3	-4.2
Slovenia	-0.7	-4.0	-3.2	0.2	1.1	-0.8	-2.7	-1.9	-2.5	-2.5
Spain	-1.2	-2.9	-4.0	-3.9	-3.3	-3.5	-5.3	-7.4	-8.6	-10.0
The fYR of Macedonia	-7.5	-0.9	-2.0	-7.1	-9.5	-3.2	-7.7	-1.4	-0.4	-3.4
Turkey	1.0	-0.7	-4.9	2.3	-0.8	-3.4	-5.2	-6.3	-8.2	-8.1
Ukraine	-3.1	5.2	4.7	3.7	7.5	5.8	10.6	2.9	-1.5	-3.6
SEU-3	**-3.0**	**-4.2**	**-5.5**	**-5.2**	**-4.4**	**-4.3**	**-5.7**	**-7.7**	**-9.1**	**-10.1**
NMS-12	**-4.5**	**-5.8**	**-5.5**	**-4.2**	**-4.1**	**-4.5**	**-5.8**	**-4.5**	**-6.2**	**-6.4**
SEE-7	**-0.3**	**-1.7**	**-4.7**	**0.6**	**-2.8**	**-4.5**	**-5.9**	**-6.7**	**-8.4**	**-8.4**
CIS-5	**-5.2**	**1.8**	**1.0**	**0.9**	**3.8**	**2.3**	**5.1**	**1.5**	**-3.0**	**-5.2**
ALL EEM	**-2.8**	**-4.1**	**-5.1**	**-4.0**	**-3.8**	**-4.1**	**-5.4**	**-6.3**	**-7.9**	**-8.5**

Appendix Table 3
Gross Capital Formation in Emerging Europe (As a Percentage of GDP)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Albania	17.9	21.3	22.0	16.8	16.1	20.6	26.5	32.2	31.9	25.5	25.9	23.6	25.6
Armenia	23.5	18.4	20.0	19.1	19.1	18.4	18.6	19.8	21.7	24.3	24.9	29.7	30.4
Belarus	32.9	24.8	23.5	26.8	26.7	23.7	25.4	23.8	22.2	26.6	30.5	29.6	30.5
Bosnia-Herzegovina	..	20.0	41.2	42.0	38.0	28.0	21.2	19.4	20.1	20.4	18.8	19.2	..
Bulgaria	9.4	15.7	8.1	9.9	16.9	17.9	18.3	20.7	19.8	21.7	23.1	27.4	31.9
Croatia	17.4	17.6	21.9	27.5	24.0	23.0	20.2	23.9	29.1	31.1	30.6	31.0	30.2
Cyprus	25.5	22.0	22.3	19.8	20.0	18.7	..	..	..	..	..	..	..
Czech Republic	29.8	32.4	33.5	30.3	28.3	27.0	29.3	29.4	28.4	27.0	27.4	26.1	27.3
Estonia	27.0	26.6	27.0	30.4	30.3	24.9	28.7	28.1	32.4	33.0	36.2	35.2	38.2
Georgia	2.6	4.0	19.7	18.0	21.0	22.1	21.6	21.9	22.1	24.4	28.3	26.7	28.7
Greece	18.8	18.5	19.4	19.6	20.9	22.0	23.4	23.5	23.6	25.3	25.2	23.8	..
Hungary	22.2	22.6	25.5	26.6	28.9	28.7	30.5	26.8	25.6	25.1	26.0	23.6	22.9
Latvia	19.1	14.3	17.4	19.5	24.1	23.4	23.7	26.6	26.7	28.8	33.2	34.4	38.0
Lithuania	18.4	22.1	20.4	24.2	25.4	22.3	19.8	20.6	22.1	23.2	24.0	25.1	28.1
Macedonia, FYR	15.5	20.8	20.1	21.0	22.3	19.7	22.3	19.1	20.6	20.0	21.4	20.0	22.1
Malta	30.7	32.0	28.6	25.6	23.7	24.0	25.4	18.5	14.0	17.5	18.2	23.1	..
Moldova	28.8	24.9	24.2	23.8	26.8	22.9	23.9	20.0	21.7	23.2	25.3	29.1	30.8
Montenegro	..	..	..	..	..	..	21.4	23.0	17.6	16.6	20.5	21.8	21.6
Poland	17.7	18.7	20.9	23.4	25.1	25.2	24.8	20.8	18.6	18.8	20.1	19.2	20.3
Portugal	22.4	23.3	23.6	25.6	27.3	27.8	27.7	27.1	25.2	22.8	22.9	22.3	..
Romania	24.8	24.3	25.9	20.6	17.7	16.1	19.5	22.6	21.7	21.8	22.3	22.6	23.9
Serbia	..	..	..	12.1	9.1	10.3	8.4	15.9	17.2	22.6	32.0	22.5	21.5
Slovak Republic	20.6	24.3	33.7	34.0	33.5	27.6	25.9	29.6	29.0	24.6	26.0	29.2	29.0
Slovenia	20.6	22.9	22.7	23.9	25.1	27.5	26.8	24.1	23.4	24.7	26.8	26.0	27.5
Spain	21.1	21.9	21.7	22.1	23.5	25.1	26.3	26.3	26.6	27.5	28.3	29.7	..
Turkey	21.5	25.5	24.6	25.1	24.2	23.4	24.5	16.8	21.3	22.8	25.7	24.8	27.0
Ukraine	35.3	26.7	22.7	21.4	20.8	17.5	20.3	21.8	20.1	22.0	19.1	18.4	17.4
Emerging Europe	**21.8**	**21.8**	**23.6**	**23.4**	**23.8**	**22.6**	**23.3**	**23.2**	**23.2**	**23.9**	**25.5**	**25.5**	**27.3**
World	**22.2**	**22.3**	**22.2**	**22.5**	**22.2**	**22.0**	**22.3**	**21.3**	**20.5**	**20.7**	**21.4**	**..**	**..**
Middle Income	**27.4**	**26.9**	**26.7**	**26.6**	**25.0**	**23.8**	**24.3**	**23.8**	**23.7**	**24.8**	**26.3**	**26.2**	**26.0**
East Asia & Pacific	**39.4**	**39.5**	**38.4**	**36.1**	**32.2**	**31.3**	**31.6**	**32.3**	**33.4**	**36.1**	**37.6**	**37.7**	**35.8**
Latin America	**21.3**	**19.5**	**19.7**	**21.4**	**21.2**	**19.5**	**19.9**	**18.9**	**17.6**	**17.6**	**19.5**	**19.5**	**19.6**