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The Risks of Global Financial Markets and the Importance of Credibility: Implications for Hungarian Fiscal Policy

The central issue in the controversy about the adoption of the euro in Hungary is the difficulties associated with the fulfillment of the fiscal criterion and the possible growth sacrifice it requires. In this paper the author examines the question whether the strategy of delaying entry into the euro-zone implies that fiscal consolidation can be delayed as well. In approaching the problem the paper considers the origins and history of the present-day global financial markets and argues that given the high degree of systemic risks individual countries face responsible macroeconomic policies are crucial in minimizing vulnerability to crises. Consequently in order to avoid excessive interest rates and speculative inflows (or currency crisis in the worst case scenario) fiscal deficits in Hungary would have to be cut and credibility of fiscal policy reestablished even without EMU accession. The overall conclusion from this overview is that delaying entry in order to delay fiscal adjustment is likely to increase the trade off between real and nominal convergence instead of mitigating it.

JEL classification: F33, F41, H62

I. Introduction

Following the accession to the European Union the next step in the integration process for the new member states is the adoption of the common currency. Although there are still debates about the exact size of the expected benefits of joining the euro, there is a relative agreement that because of the increased level of trade, lower interest rates as well as the disappearance of currency risk the new member states will benefit from the EMU¹. At the same time similarly to EU accession there are strict conditions for joining the euro: the Maastricht criteria set the threshold of entry related to interest rate, debt level, fiscal deficit and inflation. Among these thresholds the 3 percent limit on fiscal deficit is the most contested in the new member states given the potential trade off between real and nominal convergence: long-term growth considerations require large-scale investment into physical infrastructure, reforming the education and health care

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¹ A comprehensive cost-benefit analysis is presented by Csajboók and Csermely (2002).

sector, as well as channeling funds into research and development. Furthermore the costs of accession and the fulfillment of the *acquis* especially the environmental criteria further increase the problem of fulfilling the fiscal criterion. While some of these claims might be justified the political economy consequence of these arguments is that the importance of fiscal adjustment is often downplayed, which necessarily implies that short-term political considerations dominate economic rationality. This is the case in Hungary where before his appointment the new Hungarian Prime Minister stated that the size of fiscal deficit is only important for economic analysts². The changing of the date of introducing the euro in Hungary, which is without precedent in the history of EMU, also indicates that the political elite feels that they can postpone both fiscal adjustment and EMU accession at their discretion without significant economic costs. In this paper I will show the dangers associated with such an attitude by considering the nature of the global financial environment. In particular I will argue that given the fragility of the global financial system credible macroeconomic policies are crucial for small open economies to reduce their vulnerability to crisis. Given reputational and institutional reasons the lack of credibility of Hungarian fiscal policy implies that fiscal consolidation cannot be postponed regardless of the date of EMU accession. Failing to recognize this might ultimately augment the trade off between real and nominal convergence.

In order to show this in the second section of the paper I will provide an overview about the origins and history of the present-day global financial markets and the systemic risks individual countries face in this new environment. In the third section I will review the role of fiscal deficit in assessing the vulnerability of a country to systemic risks. The fourth section will deal with the concept of credibility as a means to minimize vulnerability, while in the fifth section these considerations are applied to the current situation in Hungary with implications for the conduct of fiscal policy.

II. History and fragility of global financial markets

Efficient allocation of scarce resources is the goal of market economy and the key factor for long-term sustainable growth. The theory behind international capital markets is to improve the efficiency of financial intermediation and channel savings into the most productive investments. Increased efficiency from global allocation of capital can come from three factors: transfer savings from low to high return jurisdictions; potential for diversifying risks and increased competition among institutional investors (*Summers 2000:3*). For the emerging economies the major implication is that a significant constraint on long-run growth, the gap between their financing needs and the level of domestic savings, can be temporarily decreased³. In spite of these theoretical benefits of international finance free flow of capital has been the exception rather than the rule over the past 150 years and even during those exceptional periods when free flow of capital was the dominant trend the costs of these gains were far from negligible.

² Reported in (Eörsi 2004:14).

³ The use of foreign savings to cover the investment needs of a country is not without limits: if exports do not cover imports and profit repatriation, eventually a high stock of foreign capital might lead to a deficit on the current account, which signals that the rate of growth cannot be sustained. See (Erdős 2003:188–194). This consideration might be behind the Feldstein and Horioka puzzle: even with high level of capital mobility the ratio of domestic savings and investment rates is close to one. See Feldstein and Horioka (1980).

The main cost of financial openness can be derived from the open-economy trilemma, which means that a country cannot have simultaneously free flow of capital, independent macroeconomic policy to support full employment and fixed exchange rate⁴. Only two of the three goods can be targeted, which means that the loss of the third good is the price to be paid for the other two. Over the past 150 years all the combinations have been tried and the choice was usually dominated by political factors and the existence or non-existence of cooperation among the major powers. The first era of global finance started in 1860 and lasted until 1914, when the gold standard ensured a fixed exchange rate and capital was moving freely primarily from capital-abundant to capital-scarce regions (*Eichengreen 2003:24*). Although even the gold standard allowed some freedom in macroeconomic policy as short-term interest rate differentials existed among the different countries (*Taylor 2004:30*), the extent of financial globalization during this period can be illustrated by the fact that world economy reached a comparable degree of integration again only by the mid-1990s (*Obstfeld and Taylor 2003:28*). Between these two periods of financial globalization different choices were made regarding the trilemma: during the interwar period the restoration of the prewar financial system proved to be unsuccessful and the Great Depression brought about the collapse of the gold standard. The emerging mass movements with the spread of democracy meant that independent macroeconomic policy could not be as easily given up as before the war (*Spahn 2001:125*). Thus the major economies opted for the strict regulation of capital flows, which meant that the previously creditor countries mostly invested at home, while the traditional debtors had no access to capital. After the Second World War the major powers realized the need for international cooperation on finances and in Bretton Woods, which later became the name of this era, they set up the International Monetary Fund, to manage the structure of exchange rates among various currencies as well as to finance short-term imbalances of payments among countries, and the World Bank to provide capital for development purposes. In order to preserve macroeconomic independence capital controls from the interwar period were maintained: financial flows were restricted to development aid and foreign direct investment by American companies, who replaced their production in other developed countries in order to overcome trade barriers (*Kenwood and Loughheed 1999:272*). Under these conditions the US dollar became the major reserve asset and was used in most payments settlements as it was the only currency, which was freely convertible to gold at a fixed rate of 35 dollar/ ounce. Other currencies were tied to the dollar and could be adjusted only upon consultation with the IMF. The Bretton Woods regime was dependent on the ability of the US to maintain its balance of payments equilibrium. However, this requirement proved difficult for two reasons: first, the financing of the Vietnam War as well as its domestic employment and social policies could not be maintained without rising inflation or running large deficits and second, the decreasing relative competitiveness vis-à-vis Western Europe, not the least because of the relocation of production by American multinationals, led to large trade deficits (*Kenwood and Loughheed 1999:274–275*). The massive outflow of dollar eventually led to the abandonment of the gold exchange

⁴ *Obstfeld and Taylor (2003:29–33)*. The idea of trilemma comes from the Mundell-Fleming model, which showed that in a world of perfect mobility of capital the choice of the exchange rate regime critically influences the effectiveness of monetary and fiscal policies in influencing employment and output. See Mundell (1963).

standard in 1971 when the convertibility of dollar into gold was suspended and the dollar was devalued. A new era of finance started when the major currencies were floating and large exchange rate volatilities were possible even for the dollar, in which most transactions were pursued in international trade and finance.

The collapse of the Bretton Woods regime meant that no currency was safe enough to rely on exclusively so there emerged a necessity for investors to hedge their risk, which was done via financial innovation and internationalization (*Kashiwagi 1986:3–5*). Financial innovation means the design of new financial instruments and techniques for unbundling the separate characteristics and risks of individual instruments and reassembling them in different combinations (*Llewellyn 1992:19–20*). Currency and interest rate swaps, futures, options and derivatives are some of the main forms of these new instruments, which allow for better pricing and allocation of risk at the cost of more complexity and less transparency. Internationalization of the financial markets started with the leaking capital controls during the 1970s, when the enormous revenues of oil-exporting countries were invested on the London-based Euro-dollar market and were lent out to developing countries primarily in Latin America at low interest rates, which were still higher than the regulated interest rates available in the US. By the 1980s significant financial transactions also took place because of the increased level of trade and thus massive capital transfers emerged between countries with large current account surplus (Japan and Germany) and current account deficit (US). Given the increasing financial interdependence among the major economies capital controls in these countries became burdensome and a widespread capital market deregulation took place first in the advanced economies then in the developing world, where the newly industrializing countries hoped to overcome the financing constraint on growth through attracting foreign funds. Deregulation referred to the relaxing control of foreign exchange movements, liberalization of interest rates, possibility of entry for foreign financial institutions and lowering tax barriers (*Kashiwagi 1986:4*). Countries, which maintained these barriers, sooner or later lost their competitiveness on the international markets. Besides the incentives for hedging risks and the wide-spread deregulation of capital movements the third factor in the emergence of global finance was the improvement of technology. The IT revolution not only made complex and diverse transactions possible with decreasing costs but also contributed to the difficulty of enforcing capital controls.

The increasing level of capital mobility starting in the 1970s implied that for an increasing number of countries the choice over the trilemma narrowed from three to two options: macroeconomic autonomy or fixed exchange rate⁵. The severe consequence of disregarding the necessity of choice between these two options was manifested almost immediately after the collapse of the Bretton Woods system by the collapse of the “Snake”, which was an exchange rate mechanism within the European Community set up in 1972 to minimize the fluctuation of exchange rates. The failure by 1975 was primarily due to the divergences in the economic policies of the members with low inflation and trade surplus in Germany and rising inflation, large trade deficit in other countries: there was a

⁵ For many emerging economies even this choice is questionable: if interest rates are set by the major financial centers and the monetary authority does not possess the credibility to conduct independent macroeconomic policy then a flexible exchange rate does not guarantee macroeconomic autonomy. See (*Calvo and Mishkin 2003:107*).

constant pressure on the German mark to appreciate and the other currencies to depreciate and thus the pegs were unsustainable (*Dinan 1999:76*). However, besides the traditional considerations of the trilemma the financial crises of the 1980s and 1990s also indicated the presence of further dangers in the evolving new era of global capital mobility.

The first major shock to the system was the Latin American debt crisis in the 1980s. The origins of the crisis can be traced back to the large build up of debt from the Eurodollar markets during the 1970s, which were first used to cover the current account deficit from the increase in oil prices but later facilitated lax monetary and fiscal policies, which seemed acceptable given the ready availability of credit. These debts eventually became unsustainable once US monetary policy became tighter: the interest on dollar-denominated debt grew instantaneously and since high rates of return were available elsewhere banks were not willing to finance the deficits anymore. An open default in the developing world was avoided only through multiple rounds of rescheduling and the eventual clearing away of the non-performing loans under the Brady Plan (*Eichengreen 2003:42–44*). The debt crisis in Latin America already demonstrated the dangers of uncontrolled global competition: financial institutions were willing to take substantial risks in order to raise profits, which they saw guaranteed by lending to governments⁶, which were later bailed out by international actors. While the presence of moral hazard issues in the system was a dangerous implication of the Latin American debt crisis, at least it was possible to forecast the unsustainability of the situation based on the available information. In contrast, the timing and depth of the East Asian crisis in 1997–98 was almost completely unexpected and revealed a numerous other problems of the global financial system apart from the existence of moral hazard. Besides the unexpectedness of the events at least two other surprising elements were present: first, many of these economies were considered as star performers by market participants and the international financial institutions and second, the magnitude of these crises in terms of capital account reversals and GDP contraction was much greater than expected (*Ortiz 2002:4*). The stylized development of these crises was rather similar⁷. First, after a period of large-scale inflow of foreign capital investors decided to reduce the stock of assets in the affected country in response to some concerns about the fundamentals such as the viability of pegged exchange rate, concern about large fiscal deficits and concern about financial sector weaknesses. Then after this process investors shifted from evaluating the fundamentals of the country to evaluating the behavior of other investors and a bank-run psychology took hold accelerating the rate of withdrawal. Such herding behavior in turn exacerbated the fundamental weaknesses and reinforced the financial market process. Adding to these factors was the contagion effect, which means that a crisis elsewhere in the world increases the likelihood of a speculative attack against the domestic currency⁸. Such an effect is not random however: empirical evidence shows that trade links and similarities in macroeconomic fundamentals have a significant explanatory power in determining whether a country will be subject to contagion or not (*Eichengreen et al 2003:184*). After the Asian crisis the fiscal profligacy in Brazil

⁶ In his book *Lamfalussy* describes how he failed to obtain support for an official risk-rating system among 57 major international banks because they feared that those, which respect the procedure, could lose out on lucrative business to the unfair competitors (*Lamfalussy 2000:13–14*).

⁷ Review based on (*Summers 2000:5–6*).

⁸ *Eichengreen et al (2003:182)* estimate this increase in probability to 8 percent.

and Russia, which had been tolerated before, was suddenly seen as unsustainable and a large-scale financial crisis followed.

The frequent crises since the collapse of the Bretton Woods regime suggest that the cost of more efficient financial intermediation at a global level is more than just giving up one of the other two choices of the trilemma. The fragility of the system implies that apart from that choice individual countries also face a high degree of systemic risk, which means that any weakness in the fundamentals might lead to an exaggerated market reaction because of herding and contagion effects. Consequently minimizing vulnerability to such factors should be a primary objective of any open economy, which aims to be a net beneficiary from capital mobility.

III. Vulnerability to systemic risks and fiscal policy

Vulnerability to systemic risks has a number of facets and any assessment should consider a wide range of indicators to make any prediction about crises⁹. However, since the main question of this essay relates to the conduct of fiscal policy I will narrow my discussion to the issue about whether and how fiscal profligacy might contribute to increasing vulnerability to financial shocks. Before the East Asian crisis the crucial role of fiscal factors used to be part of the conventional wisdom in accordance with the predictions of the macroeconomic trilemma: according to the first-generational models of financial crises with free movement of capital and any kind of exchange rate target fiscal discipline has to be observed since with expansive monetary or fiscal policies the fall in international reserves eventually leads to the abandonment of the fixed exchange rate (*Kaminsky et al 1995:3*). At the same time the apparent soundness of East Asian macroeconomic indicators questioned whether it is a decisive in bringing about crisis. Furthermore the central role the IMF and the World Bank attributed to fiscal discipline in the management of the crisis also contributed to the questioning of the conventional wisdom. However, just because other factors especially institutional weaknesses in the financial sector can also cause crisis does not mean that the conventional wisdom is mistaken: a large fiscal deficit is still one of the leading indicators for currency crisis (*Kaminsky et al 1995:12*) and the experiences of Russia and Brazil is a proof to this point. Furthermore it might be insufficient to judge macroeconomic discipline based simply on CPI or the budget balance: the large-scale credit growth in the Asian economies cannot be considered as a sign of prudent monetary policy, while the off-budget liabilities such the portfolios of state-owned developmental banks or state guarantees also implied substantial fiscal risk, which were not reflected in the central government balance (*Lamfalussy 2000:104, Kopits 2004:69*). It is less than a coincidence that in emerging economies there is now an increasing emphasis on comprehensive public sector accounts, which aim to include quasi-fiscal activities and contingent liabilities of the government in order to receive a more precise picture about the true fiscal position¹⁰.

The argument that financial markets monitor fiscal balance can also be supported by the reaction of interest rates to a change in budget balance, which has been subject to a large amount of empirical research. In a closed economy the relationship is clear:

⁹ For an overview of indicators of vulnerability see (*Kaminsky et al 1995*) as well as (*Goldstein et al 2000*).

¹⁰ For a comprehensive account of the calculation of fiscal balance see (*Mihajlek and Tissot 2004*).

if the government has to borrow to finance its spending then it competes with the domestic firms for the limited amount of financing available. Since supply is given the increase in demand has to be offset by an increase in price, the interest rate. In contrast, if the economy is open the inflow of foreign capital should offset this interest rate increase since for a small economy supply of funds can be considered unlimited so the increased level of demand should have no effect on the price. At the same time most empirical accounts find a significant relationship between fiscal deficits and interest rates and this effect is even more significant when the dependent variable is not actual deficit but the expectation of deficit¹¹. This implies that fiscal policy does matter and markets assign a certain degree of risk premium to high level of deficits. It has also been shown empirically that the effect is not linear and increases after a certain threshold of deficit and debt was reached (*Ardagna et al 2004:2*). This threshold varies across countries and is generally lower for emerging economies, which can be illustrated by the fact that between 1970 and 2001 53 percent of crisis in middle-income countries occurred with a debt ratio lower than 60 percent (*Reinhart et al 2003:13*). The general explanation for this is that characteristics of emerging market economies, such as the inherent volatility of their GDP and government revenue, weaker institutions and poor credit history, mean that the level of public debt these countries can sustain is lower than for industrial countries (*IMF 2003:120*). Thus these countries are particularly likely to face a large risk premium even for a relatively modest deterioration in their fiscal behavior. Apart from considerations of default there is a further reason for the presence of the risk premium: fiscal soundness is a key element of market assessment about the extent to which monetary policy will be able to remain independent from political pressures and fulfill its mandate for price stability (*Mihajlek and Tissot 2004:17*).

Overall empirical evidence from financial crises as well as developments in interest rates suggest that fiscal policy is an important factor in the vulnerability of a country to crisis and markets treat this variable accordingly. Thus if a country aims to minimize its vulnerability to financial volatility pursuing a credible fiscal policy has to be one of the most important elements of its strategy. Failure to observe this necessity results in vulnerability and might lead to disproportionate punishment by the markets through contagion and herd behavior.

IV. Credibility of fiscal policy

After showing the importance of credible fiscal policy in the previous section now I will consider what this concept means and what factors contribute to its improvement. The concept of credibility was first formalized by this year's Nobel price winners, Finn E. Kydland and Edward Prescott in 1977. Their main claim concerned the time inconsistency problem faced by the government, which stated that a policy, which seems optimal at time t will unlikely to be optimal at time $t+s$: since economic agents will have taken the likely course of policy into account, the government is faced with new conditions asking for new solutions (*Kydland and Prescott 1977:55*). Since the agents are also aware of the changing incentive scheme they are not going to believe the government, which

¹¹ For a summary about the research on the effects of budget deficits on interest rate see (*European Commission 2004*), and (*Brook 2003*).

thus loses its opportunity to influence their decisions. In order to illustrate their point the authors take the problem of inflation and unemployment. Once expectations on inflation were incorporated into wages and prices, the government has an incentive to create surprise inflation and thus decrease wage levels and expand employment. However, since rational agents are aware of this motive they incorporate higher inflation expectations into wage demands, which leads to a constant upward pressure on price levels and thus high inflation (*Kydland and Prescott 1977:39*). Applying this logic to global capital markets it is clear that the promise to repay a debt might be the optimal policy when signing the contract but it might not be optimal to keep it at a later time: deteriorating fundamentals provide increasing incentives for the government to default on its debt, devalue the currency or introduce capital controls. As it has been discussed in the previous section these incentives are reflected in the risk premium and the Asian crisis showed how they can ultimately lead to a herd-like investor behavior and a bank run psychology.

Since the original proposal of Kydland and Prescott the model was applied to a large number of other policies and various solutions have been devised in order to handle this problem. Acquiring and maintaining a reputation is one of the potential ways out of the problem of time-inconsistency. The first to propose such solution was Robert Barro and David Gordon in 1983. In their paper they built on the idea that in multiple games the incentive structure of the policy-maker changes: once reputation enters into the equation then long-run considerations might outweigh short-term gains and the policy-maker will be more reluctant to deviate from announced policy (*Barro and Gordon 1983:138*). Such a framework is different from the one-shot games referred to by Kydland and Prescott, and gives a potential way out of the credibility problem. Empirical research has shown that reputation effects are clearly present on the financial markets: in the already cited paper *Reinhart et al* show that the level of debt intolerance in a country can be explained by a small number of variables: repayment history, indebtedness level and history of macroeconomic stability (*Reinhart et al 2003:3*). Thus two out of three factors in explaining market confidence relate to history implying the significance of reputation in financial markets. This means that in assessing the credibility of a country's fiscal policy it is not enough to look at the actual level of deficit but the history of macroeconomic discipline also matters. Consequently large volatility in fiscal balance should be avoided in any period.

In the absence of reputation an alternative solution to the credibility problem is to institutionalize commitment to a certain policy by delegating power to an independent institution, which does not share the short-term incentives of the government. This is the idea behind the independence of the central bank, which is one of the most important applications of the credibility principle. In the field of fiscal policy significant progress has been made recently in devising institutional solutions to the time inconsistency problem. Since the goal of fiscal policy is not one-dimensional and easily measurable such as inflation, instead of an independent institution procedural rules have been devised, which constrain the discretion of government in manipulating policy for the sake of short term policy objectives over the phases of planning, adoption and implementation of the budget¹². The use of these rules in practice is generally cited as one

¹² For a detailed overview of the various solutions see (*Perotti et al 1998, Kopits 2001, Gleich 2003*).

of the main factors behind the reduction of overall deficit levels in OECD countries during the 1990s (*IMF 2001, OECD 2002*).

Overall it can be concluded that credible fiscal policy in the eyes of the market is a much more complex issue than the actual fiscal balance and historical and institutional factors also play a significant role in judging credibility. In the next part of the paper I will review how these considerations apply to present day Hungary and the implications these considerations have for the future conduct of fiscal policy.

V. Fiscal policy in Hungary

The original question of this essay is whether the postponement of the euro in Hungary also means that fiscal adjustment can wait as well. The previous section suggests that this is certainly not the case and consolidation should be a major objective of the economic policy regardless of the timing of the introduction of the euro. So far I have shown that in the fragile international environment why a small open economy with any kind of exchange rate target¹³ needs to follow credible fiscal policy in order to minimize vulnerability to crisis, which can occur not only because of a sharp deterioration in fundamentals but also because of a contagion effect. In this section I will discuss the specific situation of Hungary and the factors, which contribute to an even higher degree of vulnerability and make fiscal adjustment urgent.

As it has been shown one signal of market confidence is the level of interest rate, which has to be paid to investors to finance balance of payments deficits. In Hungary the real interest rate is persistently over 4 percent, which clearly signals a significant lack of confidence. In the previous section I have showed that credibility is a more complex concept than the actual macroeconomic indicators although those are not favorable in Hungary either: close to 60 percent debt, over 5 percent fiscal deficit, close to 7 percent inflation and over 8 percent current account deficit. At the same time there are a number of other factors, which might be even more important because unlike most emerging economies, Hungary is not characterized by large-scale volatility or low public revenues relative to the GDP, which usually contribute to high risk premium (*IMF 2003:120–122*).

The first issue relates the speculative attacks against the forint in 2003¹⁴. The three attacks against the currency within a single year should already be a forceful reminder for policy makers that EU membership in itself does not protect the currency against the volatility of the markets. Furthermore these events have implications for the current policy for a number of other reasons as well. After the speculation against the lower band of the forint in January the government became concerned about competitiveness of the economy and succeeded in forcing the central bank to lower the central parity of the currency by 2.26 percent in June. This step not only raised doubts about the ability of the central bank to remain independent from governmental pressures and

¹³ Although in Hungary the official policy is inflation targeting, there is also an exchange rate band of $\pm 15\%$ to the euro. Given the importance of foreign trade relative to the GDP the cost of the currency crucially influences domestic prices and thus any target presupposes a corresponding exchange rate band. The importance of exchange rate to fight inflation has also increased in advanced economies as financial innovations made the monitoring and control of monetary aggregates extremely difficult. See (Chouraqui 1993).

¹⁴ The following description is based on (UN ECE 2004:51–52).

led to a significant loss of credibility but also made the investors much more attentive to fundamentals. Consequently when the methodology of calculating the current account deficit changed and net reinvested profits were included thus making the deficit 2 percent higher, markets immediately reacted to the news by selling the forint. In order to protect the currency the central bank was forced to increase the interest rate by 300 basis points. Overall the legacy of these attacks is threefold: the very high interest rates make the needed fiscal adjustment much more difficult and have serious implications for long-term growth prospects, investors follow fundamentals much more closely, which is clearly not a favorable development for Hungary and finally the independence of the central bank came into question¹⁵.

Apart from the attacks on the currency the second factor contributing to the low level of confidence is the seeming lack of commitment to the introduction of the euro. The plan for an early introduction of the euro, which was declared in the 2002 Pre-accession Economic Program (PEP) was abandoned a year later as it became clear that the path of fiscal adjustment and disinflation was untenable. In the updated 2003 PEP the target date was 2008, which is now further postponed to 2010 and even that seems less and less realistic to analysts¹⁶. The continuous postponement of the date of entry is without parallel in the history of the euro. Furthermore the less-than-ambitious reduction of the fiscal deficit as presented in the 2004 convergence report also signals that the government is unwilling to implement tough measures to fulfill the Maastricht criterion. What makes the issue even more problematic is that even those convergence targets will not be achieved: the European Commission expects the fiscal deficit this year is at 5.5 percent, which is 0.9 percentage point higher than the target indicated in the convergence report.

The third problem contributing to the lack of confidence in the Hungarian economy relates to the overly politicized environment since the 2002 elections, when a sharp deterioration took place in the budget and the fiscal deficit increased to 9.2 percent. While around 2.9 percent of this deficit was due to a different method of calculation and the inclusion of quasi-fiscal activities into the budget, a significant part of it was the result of pre-election loosening and post-election populist policies to fulfill election promises. Furthermore political tensions remained significant even the following year so consolidation was not undertaken, leading to another very high level of deficit at 6.2 percent of the GDP. This means that during pre-election and election years, investors do not expect improvement in the fundamentals but rather prepare for a deterioration contributing to an increase in the risk premium. This attitude is reflected in the reports by leading international agencies such as the Economist Intelligence Unit, which emphasize that no improvement on the fiscal side can be expected within the next two years because of the pressure on the government from the party to win the next elections (*Economist Intelligence Unit 2004: 22*).

While the previous factors show that the reputation element of credibility has been highly eroded over the past two years, the institutional element appears just as problematic since fiscal processes in Hungary are extremely weak even in comparison to other

¹⁵ The recently adopted legislation, which increases the number of members in the monetary council and provides greater power to the prime minister in their nomination, does not signal the respect for monetary policy independence either.

¹⁶ The changing expectations about the date of introducing the euro in Hungary are described by Csermely (2004).

Central and Eastern European countries. This is indicated by a recent ECB study, which develops a composite index summarizing the institutional characteristics of the budget preparation, adoption and implementation phases according to their effect on solving the common pool dilemma, which emerges when spending can be targeted to particular constituencies and revenues are centralized so politicians have an incentive to internalize the benefits and assume only a fraction of the social costs¹⁷. The main results, which are presented in the table below, speak for themselves: based on the numbers it is striking that Hungary's fiscal framework is only slightly better than that of Romania and significantly worse than that of the next on the list, Bulgaria.

The strength of fiscal processes in Central Europe¹⁸

	INDEX	RANKING
Bulgaria	6.08	8
Czech Republic	7.19	5
Estonia	8.32	1
Hungary	5.32	9
Latvia	8.00	2
Lithuania	6.20	7
Poland	7.78	3
Romania	5.19	10
Slovakia	6.62	6
Slovenia	7.69	4

Hungary's low composite score comes from all three phases of decision-making over the budget. In the preparation phase the main weakness is the lack of any limit on borrowing as well as the weak position of the finance minister in the compilation of the budget. In the adoption phase the lack of constraints over the legislature in amending the draft budget only with indicating offsetting changes also contribute to the weakness of the process in Hungary and stands in contrast with the practice in other countries such as Estonia, Lithuania, Poland and Slovenia. In the implementation phase the discretion of the finance minister to transfer funds between chapters as well as the high threshold for the obligation to submit a supplementary budget to Parliament also provides room for maneuver to overspend. In Estonia, which has the strongest institutional framework for fiscal policy, the government is required to submit supplementary budget to the Parliament not only at the time of breaching the deficit limit but also when there is an unexpected surplus.

Overall the low credibility of Hungarian economic policy, which is signaled both by the current level of interest rates as well as by the weak reputation and institutional framework I have described above implies that the country can be considered vulnerable to capital volatility and contagion. Consequently there is no choice about fiscal adjustment even if accession to the euro zone might be postponed. The logic is precisely

¹⁷ Gleich (2003: 5–6). The detailed method of calculating the index can be found in Appendix A.

¹⁸ The table is a shortened version of the table in (Gleich 2003:25). The complete table is in Appendix B.

the opposite: the later we introduce the euro the longer the forint will face the volatility of global capital markets and the more vulnerable it will remain to speculative attacks. As it could be seen from the East Asian crisis strong growth performance alone is insufficient to protect an economy from contagion.

While the current rate of high growth in Hungary does not necessarily protect against speculation, it presents the opportunity for adjustment. In OECD countries empirical evidence shows that fiscal consolidation is more likely to be undertaken during a period when the economy is doing well relatively to other OECD economies (*Von Hagen et al 2001:14*). Prior to the introduction of the euro high-growth countries were more successful in reducing their debt and deficit burden than low-growth countries (*Hughes Hallett et al 2003:52*). An important reason for this difference is the procyclicality of markets, which means during periods of high rate of growth it is easier to bring about a favorable market sentiment, which eases the adjustment through an expectation effect: investors make their decision on the basis of expected lower deficit, which might lower the risk premium and thus make adjustment less costly for example through declining debt service ratio. In contrast tightening during an economic downturn might be a lot more painful as fiscal contraction during an economic downturn generally prolongs the recovery from crisis. At the same time these considerations do not mean that growth in itself will take care of the deficit: during a period of high growth there is pressure on the government to redistribute the windfall revenue and without an explicit effort to prevent such process revenue increase is likely to be followed by an expenditure increase or tax cuts (*OECD 2003:129*). Consequently, Keynes' idea about counter-cyclical fiscal policy is likely to be applied asymmetrically: there will be more spending during economic downturns but no adjustment during economic booms¹⁹. Empirical evidence also shows that growth without restraint on spending is insufficient for lasting consolidation of public finances (*Reinhart et al 2003:35*). Overall these considerations suggest that the current rate of high growth in Hungary presents a favorable opportunity for starting consolidation but it can be achieved only through an active effort of the government to restrain spending instead of distributing the additional revenue. In contrast if fiscal consolidation is delayed until an economic downturn or a crisis makes it inevitable the pain of the adjustment is likely to be significantly larger.

Starting a fiscal adjustment however is only the first step to regain the confidence of the markets. Apart from consolidation the government also has to signal that the pressures for overspending will not reemerge and the country will conduct responsible fiscal policies in the future as well. In order to make this credible institutional reforms addressing the problems of the budgetary process are indispensable. The State Accounting Agency has made a number of proposals to improve fiscal management such as decreasing the threshold for the obligation to submit a supplementary budget, changing the schedule for the budget process as well as strengthening the requirement for the submission of impact studies along with the requests for financing (*Állami Számvevőszék 2004:5–6*). The implementation of these proposals could be the starting point of building long-term credibility for Hungarian fiscal policy.

¹⁹ This is one of the main criticisms of Buchanan and Wagner (1977) against Keynesian policies in democracies, which are particularly prone to such asymmetrical application.

VI. Conclusions

The main question of this paper was whether the postponement of the euro because of the potential trade off between real and nominal convergence implies that fiscal adjustment can be postponed as well. After the review of the emergence of the global financial markets it has been shown that we are in a new era of finance when besides the choice over the traditional trilemma new costs are present in the system as well in the form of higher risks. These risks include the dangers of herding and contagion, which mean that any weakness in the fundamentals might provoke disproportionate response by market players and thus in order for a country to benefit from the ready availability of finance it has to minimize its vulnerability to these kinds of risks. While vulnerability is a composition of a large number of factors, sound fiscal policy and sustainable debt level are crucial ingredients. Thus in order to minimize vulnerability, small open economies have to pursue credible policies in these areas.

Applying this framework to Hungary it is evident that these considerations mean that fiscal consolidation is unavoidable and the low credibility of the country's economic policy both because of reputation issues as well as institutional weakness further intensify the pressure to adjust. On a more optimistic note it has also been noted that the present rate of growth provides a good opportunity to adjust and introduce institutional changes, which would contribute to the long-term credibility of fiscal policy. Overall the conclusion from this paper is that given the high degree of vulnerability neither EMU accession nor fiscal consolidation can wait in Hungary. Once we consider the risks from the global financial markets it becomes clear that the trade off between real and nominal convergence might be greatly aggravated if accession to the euro-zone is postponed for too long.

Appendix A²⁰

CONSTRUCTION OF THE INDEX : INSTITUTIONAL ARRANGEMENTS AND THEIR INDEX PARAMETERS

<i>Institutional characteristics</i>	<i>Weighting factors</i>			<i>Numerical coding</i>
	<i>Index</i>	<i>Sub-index</i>	<i>Item</i>	
A. Preparation	0.33			
1. Existence of statutorily mandated fiscal rules		0.25		
a. Balanced budget rule				4.00
b. Limits on public borrowing				2.00
c. No legal limits on borrowing				0.00
2. Sequence of budgetary decision-making		0.25		
a. MF sets forth aggregate and specific budget targets in initial budget circular				4.00
b. MF proposes, cabinet decides on targets for budget aggregates and spending limits are assigned to each ministry before spending ministries develop budget requests				3.00
c. MF proposes, cabinet decides on targets for budget aggregates before spending ministries develop budget requests				2.00
d. Budgetary targets are set on the basis of preliminary budget requests				1.00
e. No budget targets are determined				0.00
3. Compilation of the draft budget		0.25		
a. Finance ministry holds bilateral negotiations with each spending ministry				4.00
b. Finance ministry only collects budget requests and compiles summary for cabinet session				0.00
4. Members of executive responsible for reconciling conflicts over budget bids		0.25		
a. MF or PM can veto or overrule cabinet decision				4.00
b. Senior cabinet committee, then whole council of ministers or cabinet				2.00
c. Executive collectively (e.g. council of ministers or cabinet)				0.00
B. Legislation	0.33			
5. Relative power of the upper house vis-à-vis the lower house		0.20		
a. No budgetary power vested in upper house or unicameral parliament				4.00
b. Lower house has prerogatives				2.00
c. Both houses have equal rights (e.g. joint sittings)				0.00
6. Constraints on the legislature to amend the government's draft budget		0.20		
a. Deficit provided in the draft budget cannot be exceeded, or individual amendments have to indicate offsetting changes				4.00
b. No restrictions				0.00
7. Sequence of votes		0.20		
a. Initial vote on total budget revenues, expenditures, and the deficit				4.00
b. Final vote on budget aggregates				0.00
8. Relative power of the executive vis-à-vis the parliament		0.20		
a. Cabinet can combine a vote of confidence with a vote on the budget			0.33	4.00
b. Draft budget is executed if parliament fails to adopt the budget before the start of the fiscal year			0.33	4.00
c. Parliament can be dissolved if it fails to adopt the budget in due time			0.33	4.00
9. Authority of the national president in the budget procedure		0.20		
a. No special authority				4.00
b. President has veto right (president elected by parliament)				2.67
c. President has veto right (president directly elected by citizens)				1.33
d. President has veto right (qualified majority required to override veto)				0.00

²⁰ Source: (Gleich 2003:14–15).

CONSTRUCTION OF THE INDEX : INSTITUTIONAL ARRANGEMENTS AND THEIR INDEX PARAMETERS

<i>Institutional characteristics</i>	<i>Weighting factors</i>			<i>Numerical coding</i>
	<i>Index</i>	<i>Sub-index</i>	<i>Item</i>	
C. Implementation	0.33			
10. Flexibility to change budget aggregates during execution		0.25		
a. Any increase in total revenues, expenditures and the deficit needs to be approved by the parliament in a supplementary budget				4.00
b. Revenue windfalls can be used to increase expenditure without the approval of the parliament as long as the deficit is not increased				2.67
c. Simultaneous changes in revenues and expenditures allowed without approval of parliament if budget balance is not changed				1.33
d. At discretion of government				0.00
11. Transfers of expenditures between chapters (i.e. ministries' budgets)		0.25		
a. Require approval of parliament				4.00
b. FM or cabinet can authorize transfers between chapters				2.67
c. Limited				1.33
d. Unrestricted				0.00
12. Carry-over of unused funds to next fiscal year		0.25		
a. Not permitted				4.00
b. Only if provided for in initial budget or with finance ministry approval				2.67
c. Limited				1.33
d. Unlimited				0.00
13. Procedure to react to a deterioration of the budget deficit (due to unforeseen revenue shortfalls or expenditure increases)		0.25		
a. MF can block expenditures				4.00
b. The cabinet can block expenditures				2.67
c. Approval of the parliament necessary to block expenditures				1.33
d. No action is taken				0.00

Appendix B²¹

TABLE 2
CONSTRUCTION OF THE INDEX: SCORES BY COUNTRY

	A. Preparation				B. Legislation				C. Implementation				INDEX score	rank							
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.			13.	IMPLE score	rank				
Bulgaria	0	0	4	0	4	0	0	1.33	1.33	1.33	3	1.33	2.67	4	4	3.00	4	5.33 <i>6.08¹</i>	3		
Czech Republic	0	0	4	2	4	0	4	4	2.67	2.93	10	1.33	2.67	1.33	2.67	2.00	1	6.43 <i>7.42¹, 7.19¹</i>	6		
Estonia	2	3	4	0	2.25	8	4	4	0	1.33	2.67	2.40	9	4	4	2.67	4	3.67	8	8.32	10
Hungary	0	1	4	0	1.25	3	4	0	0	2.0	2.67	1.87	5	2.67	1.33	2.67	2.67	2.34	2	5.32	2
Latvia	2	2	4	4	3.00	10	4	0	0	2.67	1.33	3	4	4	2.67	4	3.67	8	8.00	9	
Lithuania	0	0	4	0	1.00	1	4	4	0	0	1.33	1.87	6	4	4	4	1.33	3.33	7	6.20 <i>6.95¹, 6.29¹</i>	5
Poland	0	0	4	2	1.50	5	2	0	0	2.67	0	0.93	2	4	2.67	2.67	2.67	3.00	4	5.43 <i>7.53¹, 7.78¹</i>	4
Romania	0	1	4	0	1.25	3	0	0	0	0	1.33	0.27	1	4	4	2.67	4	3.67	8	5.19	1
Slovakia	0	1	4	2	1.75	7	4	0	0	2.67	2.67	1.87	6	2.67	2.67	4	2.67	2.67	4	6.62	7
Slovenia	0	3	4	4	2.75	9	2	4	0	1.33	4	2.27	8	2.67	2.67	2.67	2.67	3	7.69	8	

Note: Scores in italics and with superscripts indicate recent changes in institutional characteristics. ¹ indicates changes in 1998, ² changes in 1999, and ³ changes in 2001.

²¹ Source: (Gleich 2003:25).

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