Heiner Brockmann* and Horst Keppler**

Do Currency Boards Increase the Credibility of Exchange-rate Pegs?

After massive attacks against the peso in January 2002 the Argentine government abandoned its currency board arrangement. The collapse of the Argentine exchange-rate system initiated a new discussion about the pros and cons of currency boards. Why did the Argentine currency board fail? What does its collapse reveal about the conditions that have to be fulfilled for a currency board to function smoothly? What consequences can be drawn from the Argentine case with regard to the currency boards of countries in central and eastern Europe?

This article discusses an argument that is put forward quite frequently as an argument in favour of currency boards: a currency board (CB) is widely regarded as a means of increasing the credibility of a fixed exchange rate, thus protecting the local currency against speculative attacks from international markets.[1] Three factors are usually cited as underlying the credibility of a CB, its fixed exchange rate and its ability to provide protection against speculative attacks.[2]

- *Legal constraint*. The exchange rates of the local currency and the anchor currency as well as other features of CBs are usually defined by law. The legal framework of CBs is recognised as a commitment device that distinguishes CBs from conventional exchange-rate pegs.
- *Guaranteeing the convertibility of domestic money*. Domestic money is backed by reserves of the CB's anchor currency. The backing guarantees the convertibility of local money into the anchor currency at the fixed exchange rate.
- *Fiscal discipline*. In CB systems, fiscal policy loses one instrument to finance public spending since central bank financing of the public budget is prohibited. The introduction of a CB by a government is thus regarded as a commitment to a sound fiscal policy stance.

This article examines the capability of these three factors to provide a sufficient degree of credibility for CBs. The examination will take into consideration the Argentine and the Estonian CB arrangements.[3]

Is the Legal Constraint Sufficiently Binding?

The features of the Argentine CB arrangement as well as the Estonian CB are defined in specific laws, namely the "Convertibility Law" and the "Law of the Republic of Estonia on the Security of the Estonian Kroon".[4] These laws contain provisions governing the backing of the domestic currency by reserves, the anchor currency, the convertibility of the domestic currency into the anchor currency and other key features of the CB mechanism. The Argentine Convertibility Law also defines the parity of the peso to the US dollar, while the Estonian law does not specify the exchange rate of the kroon to the D-mark / euro.

Having the key features of the CB mechanism embodied in law, the costs of changing these features are relatively high compared to a conventional fixed exchange-rate peg. Costs evolve in the form of time and effort to initiate and pursue a change in the legal framework and in the form of potentially negative political consequences. These costs supposedly make politicians reluctant to opt for changes in the

* Economic consultant, Frankfurt am Main, Germany.

** Head of banking supervision section, Bundesbank's regional office, Hanover, and honorary professor of economics, Technical University of Brunswick, Germany.

[1] See H.-J. Jarchow: Feste oder flexible Wechselkurse? - Erfahrungen vom Goldstandard bis zur Gegenwart, in: Kredit und Kapital, Vol. 35, No. 4, 2002, p. 491.

[2] Cf. European Central Bank: Exchange rate regimes for emerging market economies, in: Monthly Bulletin, February 2003, p.56; U. Sepp, M. Randveer: Aspects of the sustainability of Estonian Currency Board Arrangement, Working Papers of Eesti Pank, No. 5, Tallinn 2002, p. 7; A.-M. Gulde, J. Kähkönen, P. Keller: Pros and cons of Currency Board Arrangements in the lead-up to EU accession and participation in the Euro Zone, IMF Policy Discussion Paper PDP/00/1, Washington D.C. 2000, pp. 9, 12; C. Ho: A survey of the institutional and operational aspects of modern-day Currency Boards, BIS Working Paper No. 110, Basel 2002, p.17 f.

[3] The Argentine exchange rate system was called a CB arrangement since it was different from an ideal currency board. For example, domestic money could partly be backed by domestic government securities payable in foreign exchange. In addition, the Argentine Central Bank (BCRA) was not abolished when the CB arrangement was introduced in April 1991. The BCRA kept excess reserves to be able to function as the lender of last resort to commercial banks. The BCRA also offered refinancing facilities to commercial banks. Cf. C. Ho, op. cit., p.14 f. The Estonian exchange-rate system is also referred to as a CB arrangement although the Estonian Central Bank, Eesti Pank, does not offer standing lending facilities and there is no explicit definition of the Eesti Pank as the lender of last resort. Cf. C. Ho, ibid.; U. Sepp, M. Randveer, op. cit., p. 5 f.

[4] Cf. U. Sepp, M. Randveer, op. cit., p. 5; C. Ho, op. cit., p.18.

CB mechanism – or at least more reluctant than they would be to realign a conventional exchange-rate peg.

However, there are no indications that the legal constraint involves costs that are high enough to make it an effective commitment device, thus giving sufficient credibility to a CB arrangement to insulate the domestic currencies from speculative attacks.[5] Although changes in the legal framework might involve costs, laws can still be changed. An example of how easily the legal framework might be modified is the decision of the Argentine legislative to extend the anchor of the peso to include the euro in addition to the US dollar in June 2001: the modification of the Convertibility Law was achieved quickly despite an opposition-controlled Senate.[6]

Significantly more important than the formalities of a change of rules is the consensus amongst voters to support the existing exchange-rate mechanism – including the existing exchange-rate peg. Political decision-makers will e.g. refrain from changing the status quo only if voters give monetary stability a high priority and regard the existing exchange rate as a precondition for a stable domestic currency. However, if such a consensus exists amongst voters, the exchange rate will not be changed anyway – whether there is a legal constraint or not. More important than an embodiment of CB rules in laws would be a legal definition of sanctions concerning political decisions that involve negative implications for the credibility of the exchange-rate system.

Does Backing by Reserves Guarantee Convertibility?

The backing of domestic money by foreign currency in a CB relates only to the money base, namely notes and coins in circulation plus deposits of banks with the central bank. Bank deposits, however, are not backed by foreign reserves since they are not liabilities of the currency board but liabilities of the banking system.

The limited backing of domestic money by international reserves has considerable implications for the credibility of a CB arrangement: if a crisis occurs, holders of central bank money as well as holders of commercial bank money might prefer to increase the share of the anchor currency and reduce the share of money assets in domestic currency in their portfolio.[7] However, the demand for foreign reserves by holders of domestic money will be rationed by the limited reserves of the CB. The limited backing of domestic money is a destabilising element in CB arrangements. The destabilising potential of this element relates proportionately to the potential of banks to create money, i.e. to the money multiplier: the bigger the money multiplier, the higher will be the demand for the anchor currency when a crisis occurs.

Also, speculative attacks will occur faster if the money multiplier is high, because the lower the share of domestic money backed by reserves, the higher is the probability that holders of domestic money will not be able to convert their assets into the anchor currency. This will induce holders of domestic money assets to react quickly when a crisis occurs.

A mass sell-off of domestic money would induce interest rates to rise, thus making domestic money more attractive for money holders. Yet, the effect of an interest-rate hike will most likely not be sufficient to stabilise the system if a rapid and massive loss of confidence in the local currency occurs.

The Argentine Experience

The Argentine money base was backed by international gross reserves throughout the period of the CB arrangement during 1991-2001 (Table 1). Only at the end of 2001, when the loss of confidence in the Argentine peso reached its peak, did the backing ratio slip considerably below 100 %. Calculated on the basis of net reserves the backing ratio exceeded 100 % for most years in the second half of the nineties. At the end of 2001, however, it dropped to 5 % because of diminishing foreign reserves and increasing foreign liabilities.

The backing ratio is much lower if the money of commercial banks is taken into consideration. Even in times when the CB arrangement was considered a stable and credible institution, the gross reserves of the Banco Central de la Republica Argentina (BCRA) backed only 30 % of domestic money assets (M2). This ratio had dropped to 20 % by the end of 2001.

However, the data of the International Monetary Fund (IMF) does not allow the drawing of an accurate picture of the backing ratio of domestic money assets. According to the IMF definition, international reserves do not contain net assets of the ALADI agreement and domestic government securities payable in foreign exchange, which according to the Convertibility Law may be used to back domestic money. Also broad money M2 (Quasi money, line 35) comprises foreign currency deposits with Argentine banks. However,

[5] Cf. C. Ho, op. cit., p.19.

[6] Cf. C. Ho, op. cit., p. 20, Fn 45.

[7] Cf. N. Roubini: The case against Currency Boards: Debunking 10 myths about the benefits of Currency Boards, New York 1998. http://pages.stern.nyu.edu/~nroubini/asia/ ("Exchange Rates", "The Debate on Currency boards"), "Myth 8", p. 7; C. Ho, op. cit., p.13.

Table 1
Backing of Domestic Money by International Reserves in Argentina 1991-2001
(end of period)

Year	International reserves of the BCRA		Money base	Money	Backing ratio of domestic money		
	billion pesos				per cent		
	IR gross[1]	IR net[2]	MB[3]	M2[4]	IR gross/ MB	IR net/ MB	IR gross/ M2
1991	9.01	-1.09	7.82	19.10	115.2	-14.0	47.2
1992	11.24	8.39	11.01	31.03	102.1	76.2	36.2
1993	15.45	11.77	14.99	45.45	103.1	78.5	34.0
1994	16.04	11.82	16.27	53.47	98.6	72.7	30.0
1995	15.99	9.86	13.77	51.97	116.1	71.6	30.8
1996	19.75	13.45	14.06	61.75	140.4	95.7	32.0
1997	22.81	16.94	15.98	77.52	142.8	106.0	29.4
1998	26.25	20.81	16.39	85.65	160.1	126.9	30.6
1999	27.32	22.84	16.52	89.15	165.3	138.2	30.6
2000	26.93	21.87	15.08	90.52	178.6	145.0	29.7
2001	14.92	0.94	17.77	73.15	84.0	5.3	20.4

[1] According to the IMF definition, i.e. without net assets of the ALADI agreement and without domestic government securities payable in foreign exchange (IFS: line 11). [2] Foreign assets minus foreign liabilities of the Banco de la Republica Argentina (BCRA) (IFS: line 11 - line 16c). [3] Reserve Money (IFS: line 14). [4] Currency outside deposit money banks and transferable deposits (IFS: line 34) plus time, savings, and foreign currency deposits (IFS: line 35).

Source: International Monetary Fund: International Financial Statistics Yearbook, Washington D.C. 2002.

Table 2
Backing of the Money Base and Peso Deposits with Banks by International Reserves in Argentina 1994-2001
(monthly averages for December)

Year	Liquid interna-tional reserves of the BCRA	Money base	Private and pub-lic peso deposits	Peso money	Backing ratio of domestic money	
	billion pesos				per cent	
	liquid IR[1]	MB[2]	M[3]	Peso-M[4]	liquid IR/ MB	liquid IR/ Peso-M
1994	17.938	16.069	23.649	39.718	111.6	45.2
1995	16.749	13.050	21.323	34.373	128.3	48.7
1996	17.738	14.030	26.368	40.398	126.4	43.9
1997	18.463	15.966	33.966	49.932	115.6	37.0
1998	19.775	16.370	36.810	53.180	120.8	37.2
1999	19.151	16.493	34.956	51.449	116.1	37.2
2000	18.775	15.054	34.029	49.083	124.7	38.3
2001	19.792	11.981	20.444	32.425	165.2	61.0

[1] Reservas de libre disponibilidad del Banco Central de la Republica Argentina. [2] Base Monetaria. [3] Depósitos de moneda nacional (del sector privado y del sector público). [4] Dinero (de moneda nacional) = Base Monetaria + Depósitos de moneda nacional.

Source: Banco Central de la Republica Argentina: Boletín Estadistico, Buenos Aires, various issues.

these assets are not backed by BCRA reserves but should be backed by reserves of the Argentine banks. Subsidiaries of foreign banks in Argentina were able to draw reserves from their holding companies abroad.

Using more specific BCRA data more or less gives the same picture of the backing of domestic money assets by international reserves. According to this data, the money base was backed by liquid international reserves during 1994-2001 (Table 2). The backing ratio of peso money assets – comprising the money base and deposits of the private and the public sector with Argentine banks – is much lower and amounts to only one third. In December 2001, the backing ratios increased due to the decline of the money base and the volume of broad peso money. BCRA data show a higher volume of international reserves because they comprise domestic government securities payable in foreign exchange, the share of which in reserves rose from 5.2 % in December 2000 to 23.4 % in December 2001.

The backing of domestic money by international reserves thus did not generate sufficient credibility against speculative attacks since it only referred to the money base and not to transferable deposits with banks. Holders of peso money assets – holders of notes and coins as much as holders of bank money –were thus induced to convert their domestic money into US dollars as quickly as possible in times of crisis to prevent being rationed and having to stick to their peso assets.

The Situation in Estonia

In the case of Estonia, the backing of domestic money by international reserves also refers to the money base only. Neither for gross reserves nor for net reserves as a percentage of the money base do larger differences exist between the two countries considered (Table 3).

Looking at the coverage of broad money M2 by reserves, a similar picture occurs. In Estonia as well as Argentina M2 was not completely backed by official foreign exchange reserves. However, since the money multiplier of the Estonian banking system was smaller than in Argentina, the backing ratio of the Estonian M2 was comparatively high during the 1990s. Only in 2001 did it drop to a level which is similar to the Argentine case: it decreased from 87.8 % in 1992 to only 35.7 % in 2001.

Disciplinary Effect on Fiscal Policy

Financing public sector budget deficits with central bank credit was no longer possible when in 1991 the

Table 3
Backing of Domestic Money by International Reserves in Estonia 1992-2001
(end of period)

Year	International reserves of Eesti Pank		Money base	Money	Backing ratio of domestic money		
	million krooni				per cent		
	IR gross[1]	IR net[2]	MB[3]	M2[4]	IR gross/ MB	IR net/ MB	IR gross/ M2
1992	3597	2911	1863	4098	193.1	156.3	87.8
1993	5418	3706	3787	6529	143.1	97.9	83.0
1994	5541	4029	4225	8512	131.1	95.4	65.1
1995	6688	4880	5067	10854	132.0	96.3	61.6
1996	7954	6382	6191	14853	128.5	103.1	46.8
1997	10901	9772	8527	20466	127.8	114.6	53.3
1998	10909	10493	9070	21328	120.3	115.7	51.1
1999	13334	12931	11496	26390	116.0	112.5	50.5
2000	15539	15165	13207	33177	117.7	114.8	46.8
2001	14573	14318	11910	40803	122.4	120.2	35.7

[1] According to IMF definition (IFS: line 11). [2] Foreign assets minus foreign liabilities of the Eesti Pank (IFS: line 11 - line 16c). [3] Reserve Money (IFS: line 14). [4] Currency outside deposit money banks and transferable deposits (IFS: line 34) plus time, savings, and foreign currency deposits (IFS: line 35).

Source: International Monetary Fund: International Financial Statistics Yearbook, Washington D.C. 2002.

Argentine Government introduced the CB arrangement. However, the Argentine case shows clearly that this does not suffice to induce political decision-makers to pursue a solid stance of fiscal policy. Argentine politicians simply found other means to finance public expenditure: the central government as well as the provinces used national and international financial markets as sources for funds. The Argentine debt ratio rose significantly from 29.2 % in 1993 to 41.4 % in 1998 (Table 4). Although compared to other countries the Argentine debt ratio was still at a low level, the strong increase of 12 percentage points within only 5 years revealed an irresponsibly expansive stance on the part of Argentine fiscal policy.[8]

The debt ratio increased strongly although overall economic conditions were rather favourable during the years of 1993-1998.[9] The Argentine economy enjoyed high growth rates during this period, only interrupted by a short recession following the tequila crises in 1994/1995. In addition, the Argentine government received quite substantial privatisation revenues. Finally, the country's fiscal performance benefited from the Brady restructuring of foreign debt.

Table 4
State of Public Finances in Argentina
(in % of GDP)

	1993	1994	1995	1996	1997	1998
Budget balance						
Overall budget	-0.2	-1.7	-3.4	-3.3	-2.1	-2.1
Budget of national government	+0.9	-0.5	-1.4	-2.2	-1.6	-1.3
Public debt	29.2	31.1	35.9	37.7	38.9	41.4
Interest payments	1.4	1.6	1.9	2.1	2.3	2.6
Memo: Change in real GDP (in %)	+5.7	+5.8	-2.8	+5.5	+8.1	+3.9

Sources: M. Mussa: Argentina and the Fund: From Triumph to Tragedy, Working Paper, Institute for International Economics, Washington D.C., 25 March 2002, p. 8; interest payment data from G. Perry, L. Servén: The anatomy of a multiple crisis. Why was Argentina special and what can we learn from it?, draft paper of 10 May 2002, p. 40.

Several factors contributed to the rapid increase of public debt in the nineties.

- *Structural problems of the Argentine public finance system*. The system of public finance, which is embodied in the Constitution, allowed the provinces to initiate public spending while the responsibility for financing these expenditures largely lay with the central government. Therefore, provinces had an incentive to increase spending. Not surprisingly, the deficit in the overall public sector budget reflects the inadequate fiscal discipline in the provinces.[10]
- *Bond issuing by the provinces*. Some provinces issued bonds to cater to their financing needs and to loosen their budget constraint. For example, the province of Córdoba was not able to pay public sector employees for a few months after the tequila crises. Eventually, public sector employees were paid with so-called CECORS instead of regular peso payments.[11] CECORs were issued with a 2-year maturity denominated in pesos and with an interest rate of 12 %. Since denominations were as low as five pesos, CECORs rapidly evolved as the primary medium of exchange. They were also increasingly used as a store of value and as a unit of account.
- *Elections*. The fiscal performance of the Menem presidency during the second half of the 1990s

[8] Cf. C.W. Calomiris: Lessons from Argentina and Brazil. (What have we learned from the sovereign debt crises and what can the United States and the IMF do to repair the damage, and to avoid similar problems elsewhere?), in: The Cato Journal, Vol. 23, No. 1, 2003, p. 37. In addition, official government data did not adequately gauge public expenditures. Cf. R. López-Murphy, D. Artana, F. Navajas: The Argentine crisis, in: The Cato Journal, Vol. 23, No. 1, 2003, p. 23 f.

[9] Cf. M. Mussa: Argentina and the Fund: From Triumph to Tragedy, Working Paper, Institute for International Economics, Washington D.C., 25 March 2002, pp. 5, 7 and 9; G. Perry, L. Servén: The anatomy of a multiple crisis. Why was Argentina special and what can we learn from it? Draft paper of 10 May 2002, p. 5.

[10] Cf. M. Mussa, op. cit., p. 8.

[11] Cf. M. Uribe: Argentina: Where To Go From Here?, http://www.econ.upenn.edu/~uribe/cia.pdf), p. 5. CECOR = Certificados de Cancelación de Obligaciones de la Provincia de Córdoba.

reflects President Menem's quest for a constitutional amendment allowing him to run for a third consecutive term. A prudent stance by fiscal policy clearly did not fit into these plans. The temptation to increase public spending increased even more during the election year 1999.

Recapitulating the above, the introduction of the CB arrangement did not induce a prudent stance by fiscal policy. In fact, structural features as well as the mentality of decision-makers in the public administration have remained largely unchanged since the times of hyperinflation at the end of the eighties.[12] For instance, the low level of indebtedness of the Argentine government at the beginning of the nineties was not the result of a responsible fiscal policy but the result of hyperinflation. This hyperinflation devalued most of the peso liabilities of the Argentine government and the Brady restructuring of public debt at the beginning of the nineties, which considerably reduced the foreign debt burden.

The increasing public debt finally became unbearable for the Argentine CB arrangement because the share of liabilities denominated in foreign currencies increased dramatically. In order to maintain the credibility of the CB arrangement and especially the credibility of the exchange rate, Argentina had to persuade creditors in international markets that it was capable both of raising enough fiscal revenues and of generating enough foreign exchange to service its debt obligations.[13] This task became increasingly difficult to fulfil. The ratio of foreign debt to exports had already risen to about 500 % by 1998.[14] In addition, the international competitiveness of Argentine products deteriorated after the depreciation of the real during the Brazilian crisis of 1998/99.

Unfortunate Role of the IMF

The IMF played a special role in the ability of the Argentine Government to finance its growing public debt by raising money in international capital markets, despite the increasingly irresponsible stance of fiscal policy. Observing the crises in many other emerging market economies (Asia, Russia) in the second half of the nineties, the IMF regarded Argentina as a country with a successful stabilisation policy. However, by supporting Argentina the IMF distorted incentives for actors in international financial markets as well as for Argentine political decision-makers.

Incentives for actors in international financial markets play an important role especially in CB systems with a limited backing of domestic money and thus a limited guarantee of the convertibility of domestic money. In ideal CB systems, there is no central bank to function as the lender of last resort in the case of a banking crisis. The limited backing of domestic money raises insecurity among investors, which serves as a disciplinary device for governments.

The IMF, however, undermined this mechanism by assuming the role of lender of last resort. The Fund provided considerable amounts of liquidity to the Argentine government during the tequila crisis in 1994/1995 in order to stabilise the CB arrangement. Given the financial support of the Argentine CB arrangement by the IMF and its favourable assessments of Argentina's economic policy, international investors as well as the Argentine government were induced to assume that the IMF would stand by to support Argentina in a subsequent crisis. Without this support, Argentina would have been forced to follow a responsible fiscal policy earlier in order to maintain its access to international capital markets at reasonable costs. Likewise international investors would have been induced to take a long-term view of sovereign risk.[15]

In fact, the Argentine case proves that the IMF should generally not assume the role of lender of last resort in emerging market economies.[16] Even if it is assumed that the negative effects of the tequila crisis on Argentina were not caused by internal developments but were simply negative external spillover effects, assuming the role of lender of last resort implies distortions of market incentives that do more harm to development and growth than a crisis of comparatively small extent.

The Argentine case also shows that defining conditions for the involvement of the IMF as lender of last resort – like a sound stance by fiscal policies – is not a viable option.[17] In fact, the IMF was deeply involved with Argentine economic policies for many years be-

[12] M. Mussa, op. cit, p.6, concludes: "To satisfy various political needs and pressures, the government (at all levels) has a persistent tendency to spend significantly more than can be raised in taxes. … the Argentine government is like a chronic alcoholic – once it starts to imbibe the political pleasure of deficit spending, it keeps on going until it reaches the economic equivalent of falling down drunk." According to Meltzer "Argentina´s main problem for decades has been a political system that cannot maintain credible, pro-growth, noninflationary policies." A.H. Meltzer: Argentina 2002: A case of government failure, in: The Cato Journal, Vol. 23, No. 1, 2003, p.30.

[13] Cf. C. W. Calomiris, op. cit., p. 37.

[14] M. Mussa, op. cit., p. 9.

[15] Cf. C. W. Calomiris, op. cit., p. 41.

[16] Cf. P. Pou: Maintaining Financial Stability in the Global Economy. Remarks by the President of the Banco Central de la Republica de Argentina (BCRA) at a conference of the Federal Reserve Bank of Kansas, 29 August 1997, in: BCRA: Bulletin of Monetary and Financial Statistics, July-September 1997, p. VII ff.

[17] Cf. P. Pou, op. cit., p. XIII.

Table 5
Estonian Public Finance
(in % of GDP)

	1997	1998	1999	2000	2001
Budget balance	+2.0	-0.4	-4.0	-0.4	+0.2
Public debt	6.8	6.0	6.5	5.1	4.8
Memo: Change in real GDP (in %)	+9.8	+4.6	-0.6	+7.1	+5.0
Memo: Ratio of gross foreign debt to exports (in %)	32.3	41.2	36.3	28.1	n.a.

Source: EU Commission: Regular Report on Estonia's progress towards Accession, October 2002, p. 138.

fore the collapse of the CB arrangement. Yet the IMF failed to make the Argentine authorities choose a more responsible fiscal policy.[18] Moreover, the IMF failed in not pushing for a smaller foreign debt burden.

Public Finance in Estonia

The figures on the state of public finance in Estonia show a very good picture: in 2001 the fiscal budget was balanced while public debt was – by international standards – at a very low level (Table 5). Sound fiscal policies on the part of the central government and sizeable revenues from privatisations contributed to a decline in government debt during 1997-2001.

However, the EU-Commission in its 2002 convergence report identified the local authorities as a "drain on public finances".[19] Expenditure by the 247 local authorities increased considerably during 1997-2001. The resulting deficit at the local level was offset by the surplus of the central government in 2001. The EU Commission points to the fact that local authorities are entitled to borrow up to 65 % of their total revenue or about 3.5 % of GDP. "Such a potential increase in the general government balance might be a liability to fiscal discipline and overall macroeconomic stability."[20]

The Argentine case has shown how important the responsible conduct of fiscal policy is at all levels of government. Accordingly, the Estonian problem of spending by local authorities is not negligible. However, given the extraordinary low level of public debt it does not seem very likely that fiscal policy will jeopardise the functioning of the CB in the near future. In addition, the ratio of foreign debt to exports is at a very low level, so that payments on interest and amortisation do not imply risks for the current account.

[18] Cf. M. Mussa, op. cit., p. 10 ff. For reasons for the failure of the IMF, cf. ibid. p. 12.

[19] Cf. EU-Commission: Regular Report on Estonia's progress towards Accession, October 2002, p.42 f.

[20] Ibid., p.42 f.

Conclusion

A currency board does not substantially increase the credibility of an exchange-rate peg and therefore does not make an exchange rate less vulnerable to speculative attacks. The legal framework of CBs does not imply a guarantee against changes of the CB rules, because laws can still be changed – although not as easily as e.g. a government directive. The backing of the domestic currency only provides a limited protection for the monetary value of domestic money assets, because the backing only refers to the money base (notes, coins, and banks deposits with the central bank) and excludes money created by commercial banks. Finally, the introduction of a CB is not an effective device to discipline fiscal policy. Although fiscal policy cannot rely on central bank credit to finance budget deficits, there are other means to finance public expenditure. "The ability of a currency board to discipline fiscal policy is critically dependent upon the political willingness of the government to be disciplined."[21]

The Argentine case has shown that the stability of a CB system is vitally dependent on a sound and sustainable stance by fiscal policy – just like any other system with an exchange-rate peg. The Argentine government was not willing to be disciplined by the needs of the CB arrangement, but rapidly built up a high foreign debt burden that in the end caused the collapse of that arrangement. The IMF played an important role in the ability of the Argentine government to finance its growing public debt by raising money in international capital markets. By assuming the role of lender of last resort, the IMF distorted incentives for actors in international financial markets as well as for Argentine political decision-makers.

The low levels of both public and foreign debt give high credibility to the Estonian CB system. However, the backing of domestic money by international reserves does not exceed the money base sufficiently to exclude the possibility of a speculative attack. How likely such an attack might be, and how stable the Estonian CB system will prove to be during the accession phase, are questions which were not tackled by this article but remain open to further debate. Apart from the arguments evaluated in this article, this debate will need to take into consideration the competitiveness of the Estonian economy at the given exchange-rate level, the condition of the Estonian banking sector and the flexibility of the real sector.

[21] J. Williamson: What Role for Currency Boards?, Institute for International Economics, Washington 1995.