Preliminary and incomplete

Exchange rate variability as an OCA criterion: Are the candidates ripe for the euro?

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Abstract

One measure of whether the candidate countries in Central Europe should join the euro is the degree of real exchange rate variability they are experiencing at present. If it is high one could argue that they 'need' still some exchange rate flexibility to absorb asymmetric shocks. Our results suggest that the still remaining variability of real exchange rates in Central Europe might be mostly due to the fact that nominal exchange rates are still a source of shocks. The candidate countries have already now a lower degree of exchange rate variability (after taking into account the different degree of nominal variability) than the 'Club Med' countries during the early 1990. Moreover, the traditional OCA criteria, e.g. trade structure, do not seem to be related to real exchange rate variability. This reinforces the argument that there is little concrete evidence that the candidate countries would need to undergo a lengthy period of real convergence before they should join the euro.

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Introduction

After the successful launch in 1999 and the first 'enlargement' in 2000, the eurozone is slowly but steadily getting prepared for further expansion. Ten advanced candidate countries are heading for EU membership in 2004. Once they fulfil the Maastricht convergence criteria they are expected to adopt the euro. The exact timing of this far-reaching step is very unclear, though. So far it only appears to be certain that the candidates will be required to stay in the ERM II for a period of at least two years before they are allowed to join the 'euro club'. However, neither the entry into the ERM II has to materialise upon the assumption of the EU membership nor the stay in the system is limited by the two-year period. Therefore, the candidate countries are very little restricted in choosing the way and time of their adoption of the euro. This, of course, raises a question of optimality of such a transition.

Despite the fact that the Maastricht criteria, the only official conditions for the euro area entry, are preoccupied with convergence of nominal macroeconomic indicators, the question of balance between the costs and benefits of a monetary union membership hinges, above all, on the degree and development of real convergence between the countries sharing or willing to share a common currency. The recent macroeconomic developments in the candidate countries indicate that most of them should be capable of satisfying the nominal convergence criteria in a relatively short time period (Gros et al. (2002)). The question of real convergence seems to be much less clear-cut. The conventional view goes that the candidates are still too poor and different to be able to share currency and monetary policy with the current EU members. On the contrary, the successful integration of the 'periphery' economies into the eurozone indicates that some of the concerns might be overstated.

It is thus obvious that one would need a comprehensive theoretical framework in order to be able to arrive at a reliable assessment of the transition to the euro. It might appear that the Optimum Currency Area (OCA) theory is what we are looking for. At least its name and popularity support its ambition to become the decisive tool in deciding about further steps towards monetary integration. Unfortunately, this is not exactly the case as the OCA theory is inherently very difficult to operationalise. First, is it very contentious

to determine what values of indicators suggested by the OCA theory are still acceptable if candidate countries intend to join the eurozone. Second, empirical research has provided very mixed results which are uneasy to interpret. With these reservations in mind, we want to explore variability of real exchange rates of the candidate countries as an OCA indicator.

The rest of the paper is organised as follows: the next section provides a short overview of the OCA theory and the most commonly used OCA indicators. Then, it offers some empirical evidence on the conventional OCA indicators for the candidate countries. The third section describes the methodology and data used for computation of the exchange rate variability indicator and supplies the empirical results. Section four concludes.

2. Optimum Currency Areas and the CEE Candidates: The standard approach

As already mentioned, the Optimum Currency Area (OCA) theory is the only comprehensive approach for assessment of the balance between costs and benefits of giving up flexible exchange rates and embarking on monetary integration projects.

The traditional OCA theory approach is based on the standard line of reasoning in support of exchange-rate flexibility: if a shock reduces the demand for the exports of a country, a real depreciation is required to maintain full employment and external equilibrium. The required real depreciation could also be achieved by a reduction in nominal ('money') wages, but this takes time and can presumably be achieved only through a period of substantial unemployment. The proper exchange-rate policy could thus reduce, and possibly even eliminate, the unemployment problems that arise from 'asymmetric shocks'. Asymmetric shocks, it is often argued, will invariably ratchet up unemployment.

Therefore, Robert Mundell (1961) put the crucial point of his pioneering contribution as follows: 'A system of flexible exchange rates is usually presented, by its proponents, as a device whereby depreciation can take the place of unemployment when the external balance is in deficit, and appreciation can replace inflation when it is in surplus'. (p. 657) Most economists continue to accept the general idea behind this approach, namely

that nominal wages are usually sticky in the short-run and that it is therefore easier to adjust to external shocks and obtain changes in the real exchange rate or the terms of trade through a movement in the nominal exchange rate. Consequently, an optimum currency area can be characterised by high coherence, structural similarity and high factor mobility. Under such circumstances asymmetric shocks are unlikely to occur or the adjustment can be easily achieved through channels other than nominal exchange rates.

Therefore, the research in the OCA field has become a quest for identifying characteristics that the countries/regions willing to proceed with monetary unification should have in order to minimise the costs of losing the exchange rate adjustment tool and independent monetary policy (for comprehensive overviews see Horvath (2001), de Grauwe (1997)). In the last 40 years, the OCA theory has grown to include a number of such indicators. The list of original characteristics stressing the importance of labour mobility, trade openness and trade diversification (Mundell, 1961, McKinnon, 1963 and Kenen, 1969) has been further extended and comprises, for example, mobility of capital, degree of fiscal integration, similarity of inflation rates, co-movement of business cycles, indicators of structural similarity.

This means that studies usually do not attempt to test the OCA reasoning directly. Most of them just analyse the degree to which various macroeconomic indicators (output, trade structure, the real exchange rate, unemployment etc.) are correlated across countries. A finding that these correlations are low (they are seldom negative) is then usually interpreted as implying that the countries concerned are subject to important asymmetric shocks.

There was an upsurge of empirically oriented contributions trying to employ the OCA indicators at the beginning of 90s when the project of European monetary integration was getting its final shape. Already at that time, researchers encountered the problem of setting a benchmark for determining which values of the OCA indicators are still acceptable and which would indicate serious troubles if countries ignored the warning and formed a monetary union. Given the size of the EU countries and their level of development it was only natural to compare them with the U.S. And the results of such a comparison seemed in most cases straightforward: EU countries are not coherent

enough to form a monetary union. First years of existence of the EMU have, nevertheless, shown that differences among the member countries have not caused any significant tensions.

There are at least two conceptual arguments that can be used to oppose the pessimistic conclusions. First, as Frankel and Rose (1998) demonstrated, some of the OCA indicators are endogenous and are likely to align once the countries make the first steps towards the monetary integration. Second, some of the economic characteristics captured by the OCA indicators may substitute for the others. For example, even in the absence of labour mobility adjustment can be achieved with help of mobility of capital. Therefore, a country does not necessarily need to fulfil *all* the OCA tests in order to be considered to be suitable for the euro.

Similarly, the progress in the EU accession negotiations with the CEEC candidate countries has initiated intensive research as to whether the candidate countries are similar enough to the current euro area members and thus ripe for the euro. And the history is repeating itself. Again, the OCA approach was taken use of and a whole host of analysis previously done in the case of the then euro candidates was also applied in the case of the candidate countries. Given the still considerable differences between the candidate countries and the current EU members it is not surprising that most of the authors expressed, at least, significant caution if not straight scepticism about candidates' preparedness for the euro.

It is usually assumed to be beyond dispute that the candidates for EU membership from Central and Eastern Europe have a different economic structure. The key fact most often cited in this context is that their GDP per capita is only a fraction of the EU-15 average, and much lower than the poorest present member countries. This fact, plus a number of structural indicators, such as the importance of employment in agriculture is usually taken as an indicator that CEECs are more likely to be affected by asymmetric economic shocks than most EU-15 countries.

However, it is not certain how poor one has to be in order to be unable to share a currency with a richer neighbour. The Club Med countries which had usually been

considered as the European periphery were apparently 'above' the magical threshold. Are the candidates, or some of them above the threshold as well? Some of the economic characteristics of the candidate candidates have already aligned with their EU counterparts. Therefore, the final assessment of balance between costs and benefits of joining the euro area is often a result of personal preferences concerning the importance of various indicators.

In order to demonstrate the controversy of the OCA approach in relation to the CEE candidate countries we provide empirical evidence on several standard OCA indicators.

The following six indicators from the optimum-currency-area approach are used:

1) Intra-industry trade. An indicator of the extent to which two countries exchange similar goods, the higher this indicator the lower should be the likelihood that trade is affected by asymmetric shocks. Technically we use the Grubel-Lloyd index on the basis of the 2-digit CN-level of trade structures. This index is calculated as one minus the sum of the absolute value of net exports of each CN 2-digit sector over the sum of total exports and imports (2000 data).
2) Trade structure similarity. The measure used here is the correlation coefficient between the shares of about 100 products (at the 2-digit CN-level) in overall intra-European exports and in the exports of each EU member to other EU members (2000 data).
3) Real GDP growth correlation: Correlation coefficient between real GDP growth in EU12 and the respective country from 1993/4-2000.
4) Industrial growth correlation: Same method as above.
5) Unemployment rate (changes) correlation: Correlation coefficient between the unemployment rate of EU12 and candidate countries, 1994-2001.
6) Exports to EU15 as a percentage of GDP (2000).

The first two indicators capture the differences in economic structures that are supposed to measure the potential for asymmetric shocks. Indicators 3 to 5 measure the extent to which the economies of individual countries have tended to move together with the EU

average over the observed period. The last indicator measures the importance of trade with the rest of the EU and is thus a measure of the expected benefits from EMU.

As table 1 shows, the candidate countries have achieved significant progress in terms of structural convergence. Both, trade structure and intra-industry trade indicators in most cases approach the levels typical for the current EMU members. Rather high level of specialisation is characteristic for the Baltic countries. It might be their small economic size that contributes to the extremely low values of the indicators. They have no choice but to specialise in a limited number of industries. It is mainly these very small economies that one could argue that there exists a high potential for being affected by asymmetric shocks (but their high degree of openness might still make them interested in joining a large currency area).

Table 6, The traditional OCA indicators

	Intra-industry trade	Trade structure similarity	Real GDP growth correlation	Industrial growth correlation	Unemploy-ment rate correlation	Exports to EU15
CR	74	92	7	30	-20	39
Estonia	56	51	14	44	-19	58
Hungary	76	91	89	75	-30	43
Poland	59	84	16	16	-58	13
Slovenia	72	86	39	82	40	32
Latvia	22	10	30	29	28	24
Lithuania	36	27	-4	-12	-61	18
SR	68	88	14	72	-30	33
Average	58	66	26	42	-19	33
GER	95	77	68	90	85	14
GRE	22	26	64	56	64	5

Source: own calculations based on AMECO data.

The indicators of business cycle co-movement give a somewhat different picture as the candidates score rather poorly on this account with the correlation coefficients rather low for the growth rates of industrial production and GDP. And in the case of changes in unemployment rate the average correlation coefficient is even slightly negative. However, one could argue in line with Frankel and Rose (1998) that countries like the CEE candidates would not satisfy the OCA criterion of a high correlation with the core countries as long as they stayed outside, but that they would satisfy this criterion once they had been inside EMU for some time since the business cycle co-movements are

endogenous. Moreover, the business cycle indicators have been heavily influenced by the fact that the candidates have undergone the process of transition. The value of exports to the EU countries as a percentage of the GDP is high pointing to the fact that the candidate countries are strongly tied to the EU market and would thus significantly benefit from joining the euro area.

Therefore, it is not easy to conclude, at least on the basis of the traditional OCA approach, whether the candidate countries could safely aspire for EMU membership.

3. A different approach

Given the limitations of the standard indicators shown above we attempt to extend the analysis and look at the degree of real exchange rate variability of candidate countries' currencies as a more informative OCA criterion. The rationale of using this criterion is as follows: when we observe that the real exchange rate between two currencies is stable, it could be argued that in these two countries there were not many (asymmetric) shocks that required real exchange rate changes. Therefore, for these two countries the cost of forming a monetary union (and thus losing nominal exchange rate flexibility) is small. (See De Grauwe and H. Heens, 1991)

The variability of the exchange rates might seem to be the most straightforward and aggregate way of looking at suitability of a country for joining a monetary union. The other variables focus either on the availability or efficiency of adjustment mechanisms (factor mobility, fiscal federalism) or on the potential for asymmetric shocks (structural similarity, trade diversification, business cycle co-movements). The real exchange rate variability indicates to what extent the country is actually being affected by asymmetric shocks, or rather to what extent real exchange rates react in order to cushion such shocks.

Vaubel (1976 and 1978) considered the real exchange rate variability criterion as a crucial one for determining the currency area optimality since, as he claimed, the real exchange rates are clearly measurable and automatically give the appropriate weights to underlying economic fundamentals. However, as Bofinger (1994) notes not all the movements in the real exchange rates are attributable to asymmetric shocks. Despite the

fact that the criterion should be complemented with other ones (some of which were mentioned in the preceding section) in order to gain a more complex assessment of country's suitability for a currency union it still provides some essential information.

In this perspective it is interesting to look at the variability of the candidate countries. If it is high one could argue that they 'need' nominal exchange rate flexibility, at least at present, but also potentially in future as well.

4. Methodology and data

In the following analysis we focus on the 8 advanced candidate countries from Central and Eastern Europe which have been identified by the recent Brussels' European Council summit as capable of finalising the accession negotiations by the end of 2002. These are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. The two other CEE candidates – Bulgaria and Romania – are still somewhat lacking behind despite the fact that especially Bulgaria has managed to make important progress towards macroeconomic stability and advancing economic reforms. For these countries a high real exchange rate variability does not necessarily signal an adjustment need of the real sector, but rather weak macroeconomic management. We therefore leave countries with close to hyperinflation aside (Romania and Bulgaria until 1997). The experience of the Club Med countries (Greece, Italy, Spain and Portugal) before they joined the euro will constitute the benchmark.

We calculate the real bilateral exchange rates from the equation:

$$RER = \frac{E \cdot CPI^{*}}{CPI}$$

Where E is the nominal exchange rate of the currency of the country in question vis-à-vis DEM or the euro, CPI^{*} and CPI are the consumer price indexes in the reference country (Germany/euro area) and the home country respectively. The real exchange rates of the candidate countries are computed vis-à-vis the euro (for the period 1996-

1998, vis-à-vis ECU). In the case of the Club Med countries, the DM is used as the standard because they were members of the DM dominated EMS.

We calculate the monthly real exchange rate using the monthly nominal exchange rates vis-à-vis ECU/euro and DEM and of the monthly CPI over the period 1996-2001 for the CEEC8 and the monthly CPI over 1990-1995 for the Club Med countries. The data is taken from the Eurostat and International Financial Statistics of the IMF.

We measure the variability each year by the standard deviation of 12 monthly changes in the natural logarithm of the bilateral (real and nominal) exchange rates. We used the same methodology to measure the variability of the relative CPI. In the case of the candidate countries, the variability measures were computed for the sub-periods of 1996-1998 and 1999-2001, which are compared with the ones of the Club Med currencies in the early 1990s. We present two different data sets for the Club Med: one based on the calm period 1990-92, and one for the turbulent years namely 1993-5, which turned out just to precede the decision to join EMU.

Table 1: Variability of the bilateral real exchange rates in CEEC-8 and Club Med countries

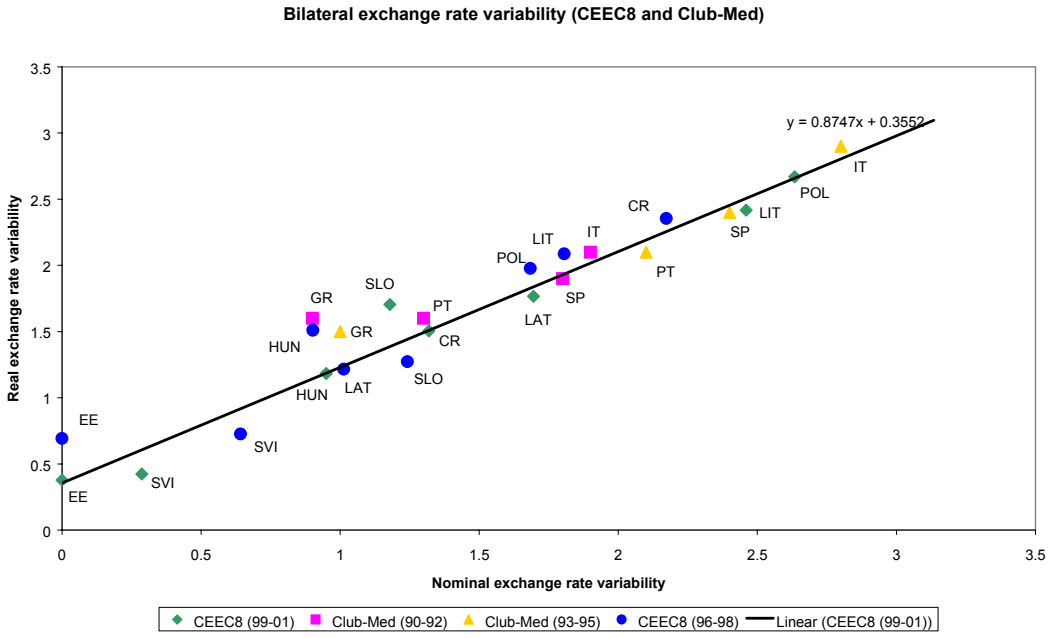
(measured by standard deviation)

	CEEC-8		Club Med	
	Average	Average	Average	Average
	1996-1998	1999-2001	1990-1992	1993-1995
Monthly data				
Variation of RER	1.5	1.5	1.8	2.2
Variation of NER	1.2	1.3	1.5	2.1
Variation of relative CPI	0.7	0.6	0.9	0.7
Quarterly data (normalised to a monthly rate)				
Variation of RER	0.9	0.8	1.3	1.4
Variation of NER	0.6	0.6	1.1	1.3
Variation of relative CPI	0.5	0.3	0.5	0.3

The resulting numbers (see table 1 and for more detailed data Appendix) are astonishing: the variability of the both real and nominal exchange rate is, on average, of the same magnitude for the CEEC8 as for the Club Med in the early 1990s. This means that the candidates with only moderate inflation rates have already now achieved a level

of real and even nominal exchange rate variability that is almost the same as that of the Club Med countries during the early 1990s, i.e. before the ERM crisis.

Table 1 shows that for all country groups real exchange rate variability is slightly higher than nominal variability. This implies that exchange rates have typically not moved to offset inflation differentials, but on the contrary, have tended to move in the opposite direction. This would suggest that in reality exchange rates constitute a source of shocks rather than shock absorbers (see Gros and Thygesen 1998).



We normalised the quarterly variability measures to a monthly rate, in order to make them comparable. Not surprisingly, table 1 also shows that variability is somewhat lower if one looks at changes over quarters.

It is also apparent from these data that the variability of the relative price levels is much lower than that of either nominal or real exchange rates. Real exchange rate variability is then dominated by nominal exchange rate variability. This is a well-known phenomenon, which can be seen clearly in figure 1.

The average degree of real exchange variability is the same for the CEEC-8, but do they show higher degree of real variability for a given level of nominal variability? If this were indeed the case, one would have to recognise that the candidates are still in need for nominal exchange rate flexibility.

The relationship between real and nominal exchange rate variability that is visually apparent in figure 1 one can also be captured by a cross-section regression equation. The regression result is:

$$rer = 0.44 + 0.90ner - 0.12dummy_{CEEC8}$$
$$\qquad\qquad (20.66) \quad (-1,73)$$

where rer is the standard deviation of the monthly changes in the natural logarithm of the bilateral real exchange rate, NER is the standard deviation of the monthly change in natural logarithm of the nominal exchange rate in the EU countries (averaged over the three years 1990-92 and the for CEECs over the period 1999-2001). We introduce a dummy for the candidate countries in order to check whether the CEEC-8 show a different relationship between nominal and real exchange rate variability. The dummy is not significant so this does not seem to be the case.

Regression statistics with dummy

Dependent Variable: RER				
Included observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.44	0.07	6.0	0.00
NER	0.90	0.04	20.6	0.00
DUMMY	-0.12	0.07	-1.7	0.10
Adj R^2	0.96	F-statistic		216.14
R^2	0.96	Prob(F-statistic)		0.00
S.E. of regression	0.15			

Re-estimating the regression without the dummy led to very similar results:

$$rer = 0.39 + 0.90ner$$
$$(19.66)$$

In order to check whether the relationship between the real and nominal exchange-rate variability is robust we introduced a number of variables in the regression. The standard OCA theory would suggest that countries which are more structurally similar would need less real exchange rate adjustments. However, both measures of structural similarity we used (intra-industry trade and trade similarity) are not statistically significant when included in the regression.

As can be expected, the measure of (relative) price level variability is related to the variability of real exchange rates. Once this variable is introduced in the regression the dummy variable for the candidate countries becomes significant, but remains negative. This means that the candidate countries have in fact somewhat lower variability than one would expect given the fluctuations in nominal exchange rates and relative price levels. The coefficient attached to the variability of the nominal exchange rates remains approximately the same.

$$rer = 0.15 + 0.89ner + 0.47cpi - 0.07dummy_{CEEC8}$$
$$(43.69) \quad (7,89) \quad (-2.18)$$

Regression statistics with relative price level variability and dummy

Dependent Variable: RER				
Included observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.15	0.05	2.98	0.01
NER	0.89	0.02	43.69	0.00
CPI	0.47	0.06	7.89	0.00
DUMMY	-0.07	0.03	-2.18	0.04
R-squared	0.99	F-statistic		684.19
Adjusted R-squared	0.99	Prob(F-statistic)		0.00
S.E. of regression	0.07			

The adjusted R^2 values from all the regressions show a strong cross-sectional relationship between the real and the nominal exchange rate variability. The strong correlation between the nominal and the real exchange rate variability can be seen also from the table 2 below containing the correlation coefficients between the bilateral nominal and real exchange rate and the relative CPI.

Table 2: Correlation coefficients between changes in bilateral nominal and real exchange rates and relative CPI

	Monthly			Quarterly		
	RER-NER	**NER-CPI**	**NER-CPI**	**RER-NER**	**NER-CPI**	**NER-CPI**
CEEC-8 (1999-2001)						
Czech Republic	46	92	7	25	99	9
Estonia	100			100		
Hungary	40	91	-2	63	73	-7
Lithuania	-6	98	-25	23	99	8
Latvia	21	96	-7	39	96	13
Poland	16	98	-3	30	98	10
Slovenia	70	64	-10	63	56	-29
Slovakia	74	75	11	83	78	29
Club Med (1990-1992)						
Greece	36	83	-21	65	67	-12
Italy	98	27	08	98	46	28
Spain	94	42	10	98	38	18
Portugal	92	61	24	95	79	56

Conclusions

One measure of whether the candidate countries in Central Europe should join the euro is the degree of real exchange rate variability they are experiencing at present. If it is high one could argue that they 'need' still some exchange rate flexibility to absorb asymmetric shocks. Based on the data for ten most advanced candidate countries we can conclude that the real and nominal exchange rate of the currencies in CEEC-s behaves in the same way as the one of Club Med countries during the early 1990s which were found ready to join the euro as part of the initial group. The candidate countries have already now even a lower degree of exchange rate variability (after taking into account the different degree of nominal variability) than the 'Club Med'. Our results also suggest that the still remaining variability of real exchange rates in Central Europe might be mostly due to the fact that nominal exchange rates are still a source of shocks. Moreover, the traditional OCA criteria, e.g. trade structure, do not seem to be related to

real exchange rate variability. This reinforces the argument that there is little concrete evidence that the candidate countries would need to undergo a lengthy period of real convergence before they should join the euro. Naturally, one cannot exclude that in the future the candidate countries might suffer from asymmetric shocks. However, their current experience has so far indicated that despite still ongoing structural changes the variability of their real exchange rates has been surprisingly low.

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Appendix: Exchange rate variability (individual countries)

Candidate Countries - exchange rate vatiability vis-à-vis ECU/EURO												
	Monthly						Quarterly					
	RER		NER		HIPC		RER		NER		HIPC	
	96-98	99-01	96-98	99-01	96-98	99-01	96-98	99-01	96-98	99-01	96-98	99-01
Czech Republic	2.4	1.5	2.2	1.3	0.9	0.6	0.8	0.7	0.9	0.7	0.4	0.1
Estonia	0.7	0.4	0.0	0.0	0.7	0.4	0.6	0.2	0.0	0.0	0.6	0.2
Hungary	1.5	1.2	0.9	0.9	1.0	0.5	1.1	0.6	0.4	0.4	0.8	0.4
Lithuania	2.1	2.4	1.8	2.5	0.7	0.5	1.4	1.1	1.0	1.0	0.5	0.2
Latvia	1.2	1.8	1.0	1.7	0.6	0.5	0.8	0.9	0.6	0.7	0.4	0.3
Poland	2.0	2.7	1.7	2.6	0.7	0.5	1.1	1.4	0.8	1.4	0.5	0.2
Slovenia	0.7	0.4	0.6	0.3	0.5	0.4	0.5	0.2	0.5	0.2	0.3	0.2
Slovakia	1.3	1.7	1.2	1.2	0.4	1.1	0.6	1.2	0.7	0.7	0.3	0.8
Average	**1.5**	**1.5**	**1.2**	**1.3**	**0.7**	**0.6**	**0.9**	**0.8**	**0.6**	**0.6**	**0.5**	**0.3**
Weighted average	**1.8**	**2.0**	**1.5**	**1.8**	**0.8**	**0.6**	**1.0**	**1.0**	**0.7**	**0.9**	**0.5**	**0.3**
Club Med – exchange rate vatiability vis-à-vis DEM												
	Monthly						Quarterly					
	RER		NER		HIPC		RER		NER		HIPC	
	90-92	93-95	90-92	93-95	90-92	93-95	90-92	93-95	90-92	93-95	90-92	93-95
Greece	1.6	1.5	0.9	1	1.5	1.3	0.9	1.2	0.7	0.7	0.7	0.6
Italy	2.1	2.9	1.9	2.8	0.4	0.4	1.7	2.3	1.5	2.3	0.3	0.2
Spain	1.9	2.4	1.8	2.4	0.6	0.3	1.5	1.2	1.4	1.2	0.3	0.2
Portugal	1.6	2.1	1.3	2.1	0.6	0.3	1.3	1.1	1	1.1	0.5	0.3
Average	**1.8**	**2.2**	**1.5**	**2.1**	**0.9**	**0.7**	**1.3**	**1.4**	**1.1**	**1.3**	**0.5**	**0.3**
Weighted average	**2.0**	**2.6**	**1.8**	**2.6**	**0.5**	**0.4**	**1.6**	**1.9**	**1.4**	**1.8**	**0.3**	**0.2**

Source: Own calculations based on Eurostat data for CEESs and IMF, International Financial Statistics for Club Med