



**The Question is Not  
Whether "To Devalue or  
Not to Devalue?" But  
Rather "What to  
Devalue?"**

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**Inter-American  
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## **Abstract<sup>1</sup>**

In this policy brief, we review the problem of a lack of competitiveness and the policy options to improve competitiveness and hence promote economic growth. Inadequate competitiveness can be measured as a sustained current account deficit of the balance of payments. We discuss the advantages and disadvantages of three devaluation policy options: an external devaluation, an internal devaluation, and a fiscal devaluation. We conclude that the latest fashionable option, fiscal devaluation, offers gain with no pain but detailed country-specific simulations are needed to determine which option is the better one.

**JEL Codes:** E61; E62 and F32

**Keywords:** external devaluation, internal devaluation, fiscal devaluation, Caribbean

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<sup>1</sup> I thank Karl Melgarejo and Ricardo Sierra for valuable inputs.

Low economic growth, a key concern of policymakers in the Caribbean, could be due to inadequate competitiveness. In this policy brief, we review the problem of a lack of competitiveness and the policy options to improve competitiveness and hence promote economic growth.

A sustained current account deficit of the balance of payments is prima facie evidence of a lack of competitiveness. We discuss three devaluation policy options to improve competitiveness: an external devaluation, an internal devaluation, and a fiscal devaluation. These options aim to increase exports relative to imports and thus stimulate economic growth.

## **Competitiveness**

An indirect measure of competitiveness is the current account of the balance of payments. A current account deficit holds when a country's (a) imports of goods and services exceed its exports of goods and services;<sup>2</sup> (b) domestic consumption and investment exceed its production; and (c) domestic aggregate savings are less than domestic aggregate investment. In economic vernacular, a current account deficit holds when a country is "living beyond its means."

The Caribbean suffers from an increasing current account deficit relative to the rest of small economies (ROSE)—classified as countries with a population of fewer than 3 million people, a metric that is used as a comparator for the Caribbean. While ROSE experienced a trending improvement before the Lehman collapse and the ensuing world crisis, countries in the Caribbean endured an increasing deficit and, thus, a lower Caribbean competitiveness (see Chart 1).<sup>3</sup>

A country that operates with a current account deficit spends more than its income; as a result, it is compelled to balance this through private sector direct foreign investment, portfolio investment, sovereign borrowing, or a combination of the three. Lenders include international

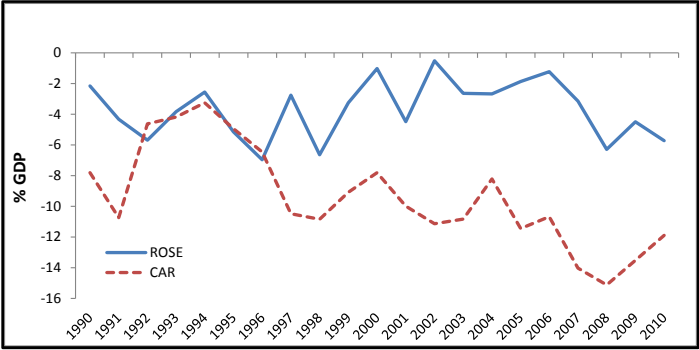
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<sup>2</sup> Strictly the current account of the balance of payments refers to the sum of the balances of the goods and services account (the trade balance), the primary income account (factor income such as that from loans and investments), and the secondary income account (transfer payments).

<sup>3</sup> The Caribbean comprises The Bahamas, Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago; ROSE encompasses 50 countries worldwide, each with a population of fewer than 3 million people.

capital markets or an official source. For countries in dire balance of payments circumstances, the International Monetary Fund is the lender.

**Chart 1. Competitiveness: Current Account of the Balance of Payments**

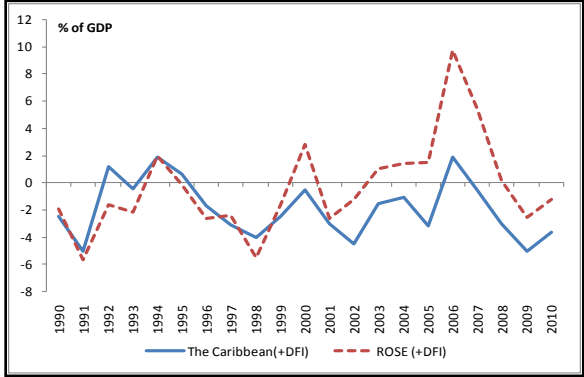


Source: WEO-April 2013 (IMF)

A current account deficit is problematic if the country uses its debt financing for consumption rather than for future growth (i.e., investment). With this in mind, conventional wisdom assumes that current account deficits do not matter—or matter less—if they are financed by direct foreign investment.

The relative competitiveness situation of the Caribbean is worse if direct foreign investment is taken into account. The current account plus direct foreign investment has, with fluctuations, become a surplus for ROSE but not for the Caribbean (see Chart 2).

**Chart 2. Current Account Plus Direct Foreign Investment**



Source: WEO-April 2013 (IMF)

## **External Devaluation**

If the current account deficit is considered a problem, as the previous figures show, then what is the plan of action? Often, a typical policy recommendation to obtain competitiveness is to devalue the exchange rate (i.e., an external devaluation). A real devaluation of the exchange rate is considered a key part of the policy response when the external position is unsustainable and competitiveness is low. Proponents of this policy argue that when accompanying fiscal adjustments, the improvement in competitiveness could help mitigate adverse growth-reducing effects of the fiscal retrenchment by the switching effect of real exchange rate devaluation.

The following is the traditional argument that an external devaluation is expansionary. An external real devaluation will increase the price of imports and make exports cheaper. Domestic demand for imports will fall and foreign demand for exports will increase and therefore the current account will improve. As the real exchange rate lowers (i.e. an increase in the price of tradable goods relative to the domestic price of nontradable goods), this results in a switch in their relative domestic demand and increases the production of tradables relative to non tradables. With unused capacity, aggregate output will rise. The deficit in current account of the balance of payments will be reduced and economic growth will increase.

However, it is argued (see Worrell 1986) that expenditure cannot be switched from tradable goods to nontradable goods in countries such as those in the Caribbean. There is no switching effect of a devaluation either in expenditure or production. Therefore, a real exchange rate devaluation only depresses real income (see also Krugman and Taylor 1978). Worse, a devaluation could result in stagflation, i.e. reduce economic growth and increase inflation. There is a high pass-through effect, i.e. the effect of a nominal devaluation on domestic inflation. The pass-through effect is higher in the instance where the proportion of imported goods in the consumer price index and imported inputs is greater and the monetary policy is more accommodative.

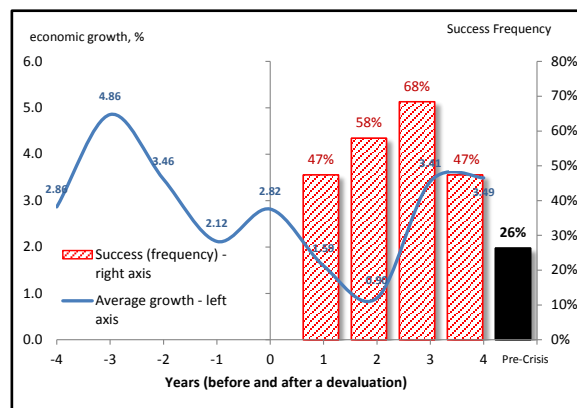
In addition, an unexpected external devaluation adversely affects a balance sheet if debts are denominated in dollars while firms' revenue is in local currency (see Allen et al 2002 and Amo-Yartey 2012). This deterioration has two consequences: It limits the firm's ability to

borrow, and borrowing becomes more expensive as the risk premium increases. Thus, the balance sheet effect has a dampening impact on economic growth.

Another downside of an external devaluation is that if an external devaluation is perceived as a sign of economic weakness, the creditworthiness of the country might be jeopardized. Thus, devaluation might reduce investor confidence and, hence, the country's ability both to secure foreign investment and roll over public debt without worsening terms.

What does the data tell us regarding economic growth and the current account after an external devaluation? Considering only small economies, and an external nominal devaluation of 50 percent or more, hence ignoring the real exchange rate consequences, Charts 3 and 4 show the average growth rates and the current account of the balance of payments for four years before and four years after the nominal devaluation year. On average, economic growth falls for the first two years and starts to accelerate thereafter. The current account as a percentage of GDP improves almost immediately and continues to do so during the four years.

**Chart 3. Economic Growth Before and After an External Devaluation**



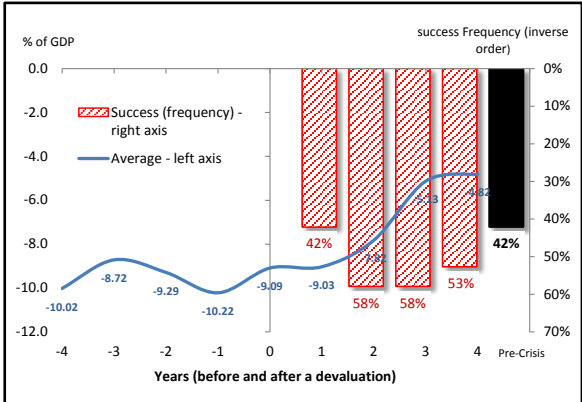
Source: WEO-April 2013 (IMF) and author's calculations

However, the columns in the charts tell a more cautionary tale. The columns in red show the percentage of countries where there was an improvement with respect to the previous year. The black columns show the percentage of countries that ended up, in the fourth year, better off than the best year (highest economic growth or smallest current account balance) in the four



years prior to the devaluation. Only 26 percent achieve higher economic growth and only 42 percent an improvement in the current account balance. The very low success rates for external devaluations in small economies reveals that there is not even an even chance of improving competitiveness through external devaluations.

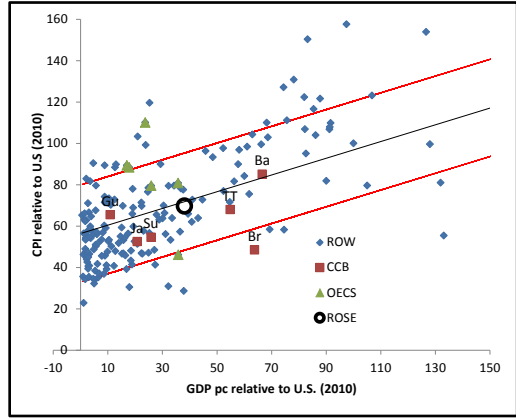
**Chart 4. Current Account Balance Before and After an External Devaluation**



Source: WEO-April 2013 (IMF) and author's calculations

But is the real exchange rate overvalued hence a nominal devaluation called for? Different measures yield different answers. Using the purchasing power parity (PPP) index as a benchmark, there is no apparent exchange rate issue. Chart 5 shows the PPP real exchange rates (a proxy for tradable to nontradable prices) and real GDP per capita in 2010. A positive relation between the two is expected given the Balassa-Samuelson effect (i.e., prices of nontradable goods and services relative to prices of tradable goods tend to be higher in high-income countries than in low-income ones). All Caribbean countries appear to fall within the equilibrium range.

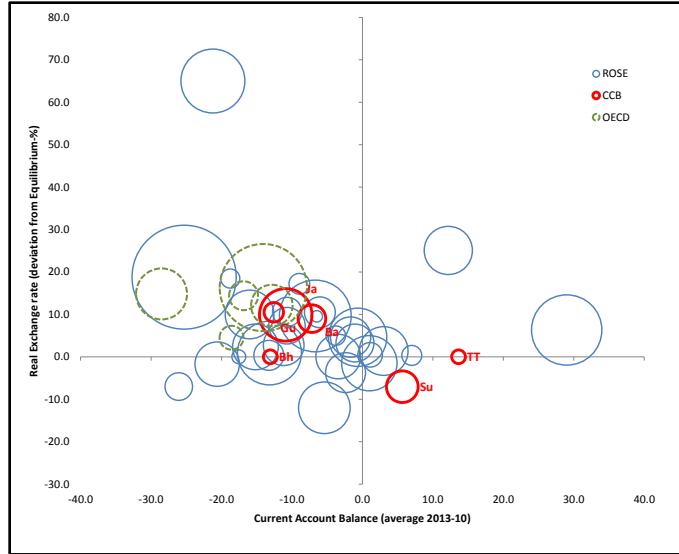
### Chart 5. Purchasing Power Parity Real Exchange Rates



Source: PENN World Tables

Another exchange rate measure of competitiveness is the real exchange rate that is consistent with closing the gap between actual current account deficit and current account norm that approximates external sustainability.

### Chart 6. Equilibrium Exchange Rate and Current Account



Source: Recent Article IV documents of the International Monetary Fund

As Chart 6 shows (where the size of the bubble indicated the size range of estimations), the Caribbean generally has an overvalued exchange rate when using a sustainable current account measure.

### **Internal Devaluation**

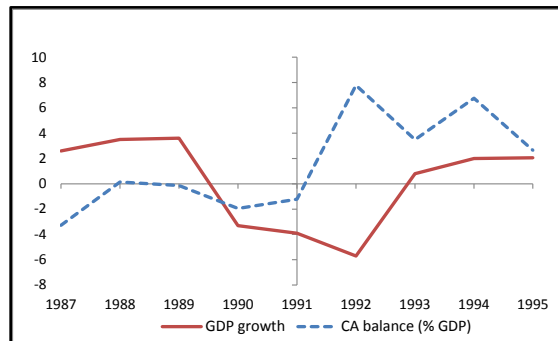
If an external devaluation is not part of the policy menu (i.e., if policymakers have determined that the benefits of a fixed exchange rate anchor outweighs its costs), then an alternative policy is an internal devaluation. An internal devaluation aims to reduce production costs—particularly labor unit costs— through deflation.

Because governments have no direct influence on overall prices, the internal devaluation approach is essentially a substantial cut in public sector wages which propagates to private sector salaries and eventually to producer prices. The direct effect is that a decrease in demand will reduce imports and thereby improve the current account. The indirect effect is that the decrease in aggregate domestic demand will lead to an increase in unemployment, which reduces wage inflation and thus price inflation. This will affect the current account through changes in competitiveness.

The typical example of success, given by proponents of internal devaluation, is Latvia. Rarely is Greece or Barbados mentioned.

Before 1991, Barbados' external position started to deteriorate rapidly (see Worrell et al. 2003). No effective preventative measures were taken until reserves were close to exhaustion. An external devaluation was unacceptable for policymakers. Instead, an internal devaluation program was implemented in late 1991. The fiscal deficit was reduced from 8 percent of GDP in 1991 to 2 percent by 1992. Capital expenditure was diminished by 50 percent, and civil service nominal wages were cut by 8 percent across the board. Output and imports fell, and the current account improved. However, as GDP recovered, the current account again deteriorated.

## Chart 7. Barbados and Internal Devaluation



Source: WEO-April 2013 (IMF)

Generally, country experience with internal devaluations reveals that several factors are needed for it to work. Among these, the most important are an open economy with high factor mobility and high degree of wage and price flexibility.

However, in general, an increase in competitiveness has been only modest because of limited pass-through to prices. Private sector firms have reduced employment rather than fully adjust wages. In addition, an inadequate shift from the nontradable sector to the tradable sector, skill mismatches, and lack of increased investments in the tradable sector also hindered full-factor reallocation. Furthermore, experience shows that balance sheet effects are not limited to external devaluations; they materialize more slowly in the case of an internal devaluation as incomes fall, but external debt service does not. Therefore, the current account adjustment has worked through import compression rather than an expansion of exports (i.e., not as a result of increased competitiveness).

The worst-case scenario is an internal devaluation that pushes a country into a downward spiral of falling GDP, rising unemployment, and increasing debt ratio. Argentina's experience in 1998–2002 illustrates such a possibility. The country underwent a downward spiral in which adjustment through internal devaluation eventually proved impossible. Argentina's eventual recovery consisted of a debt default and an external devaluation. Greece might become a more recent example of a similar economic downturn. To get a sense of what an internal devaluation

requires in terms of GDP loss to eliminate a current account deficit, Stockhammer and Sotiropoulos (2012) estimate an average of 42 percent for Greece, Ireland, Italy, Portugal and Spain.

### **Fiscal Devaluation**

The third policy option is a fiscal devaluation (i.e., a fiscal reform in which there is a change in tax composition with the direct objective of reducing labor costs, rather than wages as in an internal devaluation), hence increasing competitiveness and economic growth. This option was first discussed by Keynes in the context of the gold standard, when countries could not devalue their currencies. Recently, a fiscal devaluation has been proposed for European Union economies that are members of the Euro Zone that do not have the option to devalue. A variant practised by Caribbean tourism countries is tax expenditures and tax waivers, expended to the tourism industry.

The modern version of this policy recommendation is to reduce payroll taxes and increase value-added taxes. The argument is straightforward. With nominal wages fixed in the short run and a fixed nominal exchange rate, the reduction in payroll taxes will reduce unit labor costs. Thus, assuming symmetric full pass-through of value-added taxes and payroll taxes into prices, the result is reduced producer and export prices. Because they bear not on exports but on domestic consumption, value-added taxes will dampen imports. Thus, this policy option would reduce the current account deficit as foreign demand for exports increases and domestic demand for imports falls as a result of increased price competitiveness, hence economic growth would increase. The effect of the tax switching on net exports will be larger to the extent nontradable goods are less labor intensive than tradable goods. Further, if unemployment benefits are not adjusted to compensate for the price effect of the increased value-added taxes, and if payroll tax reductions are focused on the lower wage levels, there may be a fall in structural unemployment.

An increase in competitiveness, larger net exports, an enhancement of economic growth, a reduction in unemployment, all without increasing the fiscal deficit, seems too good to be true. But not according to the International Monetary Fund (2011): "... from both theory and simulations that fiscal devaluation can have significant effects."

Thus, if we accept that a sustained deficit of the current account of the balance of payments is a problem, then policymakers have to consider policy options for reducing the deficit. In general, three options are discussed: an internal, external, or fiscal devaluation. Which option would be better depends on the policy details and simulations of their effects. Such analysis needs to include, for comparison purposes, the current policy of tax expenditures and direct subsidies to the tourism sector (including to airlines). Whichever option is pursued, “letting it be” cannot be one.

## References

- Allen, et al. 2002. “A Balance Sheet Approach to Financial Crisis.” IMF Working Paper WP/02/210.
- Amo-Yartey, C. 2012. “Barbados: Sectoral Balance Mismatches and Macroeconomic Vulnerabilities.” IMF Working Paper WP/12/31.
- Banco de Portugal. 2011. “The Impact of a Tax Change Aimed at Increasing the External Competitiveness of the Portuguese Economy.” *Economic Bulletin*, 17(1), 39–42.
- Bettendorf, L., et al. 2013. “Study on the Impacts of Fiscal Devaluation Taxation Papers.” Working Paper N. 36, European Commission.
- Bosca, J. E., R. Domenech, and J. Ferri. 2012. “Fiscal Devaluations in EMU.” BBVA Research Working Paper 12/11.
- Correia, I. H. 2011. “Fiscal Devaluation.” Banco de Portugal, *Economic Bulletin*, Winter, 27–39.
- de Mooij, R., and M. Keen. 2012. “Fiscal Devaluation and Fiscal Consolidation: The VAT in Troubled Times.” NBER Working Paper 17913.
- EC. 2011. “Internal Devaluation and External Imbalances: A Model-Based Analysis.” *Quarterly Report on the Euro Area*, 10(3), 22–27.
- Farhi, E., G. Gopinath, and O. Itskhoki. 2011. “Fiscal Devaluations.” NBER Working Paper No. 17662.
- Farhi, E., G. Gopinath, and O. Itskhoki. 2013. “Fiscal Devaluations.” <http://www.princeton.edu/~itskhoki/papers/FiscalDevaluations.pdf>.
- International Monetary Fund. 2011. “Fiscal Monitor: Addressing Fiscal Challenges to Reduce Economic Risks, Appendix 1. Fiscal Devaluation: What Is It—and Does It Work?”
- Krugman, P. and Taylor, L. 1978. “Contractionary Effects of Devaluation”. *Journal of International Economics*, Vol. 8, pp. 445-56.
- Lipińska, A., and L. von Thadden. 2012. “On the (In)effectiveness of Fiscal Devaluations in a Monetary Union.” Finance and Economics Discussion Series Federal Reserve Board, 2012–71.
- Stockhammer, E., and D. Sotiropoulos. 2012. “Rebalancing the Euro Area: the Costs of Internal Devaluation.” PKSG Working Paper 1206
- Worrell, D. 1986. “The Effects of Devaluation on Competitiveness and Trade.” Central Bank of Barbados.
- Worrell D., H. Codrington, R. Craigwell and K. Greenidge. 2003. “Economic Resilience with an Exchange Rate Peg: The Barbados Experience.” IMF Working Paper WP/03/168.

Xing, J. 2011. "Does Tax Structure Affect Economic Growth? Empirical Evidence From OECD Countries." Oxford University Centre for Business Taxation WP11/20.



## Annex: Summary of Exchange Rates

Country	cty_code	Macro Balance Approach	External Sustainability Approach	Equilibrium Real Exchange Rate Approach	Average	Max	Min	Diff	Report No.	Publication Date	
Antigua and Barbuda	ATG	6.7	15.8	13.7	12.1	15.8	6.7	9.1	IMF Country Report No. 13/76	Mar-13	
Bahamas, The	BHS	CGER-type analysis suggest that the exchange rate has not deviated substantially from its equilibrium level							IMF Country Report No. 13/100	Apr-13	
Bahrain	BHR										
Barbados	BRB	7 - 11	7 - 11	Close to equilibrium	9	11	7	4	IMF Country Report No. 12/7	Nov-11	
Belize	BLZ	-2	-0.4	-8.75	-3.7	-0.4	-8.8	8.35	IMF Country Report No. 11/340	Dec-11	
Bhutan	BTN	REER has been stable and close to its ten-year average							IMF Country Report No. 11/123	Jun-11	
Botswana	BWA	-4.2	8.3	0	1.4	8.3	-4.2	12.5	IMF Country Report No. 12/234	Aug-12	
Brunei Darussalam	BRN										
Cape Verde	CPV	9	6.2	-12.5	0.9	9.0	-12.5	21.5	IMF Country Report No. 10/349	Dec-10	
Comoros	COM	11	22.5	-2.6 to -6.6	9.6	22.5	-4.6	27.1	IMF Country Report No. 13/32	Feb-13	
Cyprus	CYP	9.9	9.2	9.6	9.9	9.2	0.7		IMF Country Report No. 11/331	Nov-11	
Djibouti	DJI	7	5	8 - 12	7.333333	12	5	7	IMF Country Report No. 09/216	Jul-09	
Dominica	DMA	32	25	-8	16.3	32.0	-8.0	40	IMF Country Report No. 11/324	Nov-11	
Equatorial Guinea	GNQ	Overvalued, but limitations in data and methodology preclude realistic quantification							IMF Country Report No. 13/83	Mar-13	
Estonia	EST	-7.3	-9.5	6.6	-1.5	6.6	-9.5	16.1	IMF Country Report No. 11/333	Nov-11	
Fiji	FJI	3.1	6.9	-1.8	2.7	6.9	-1.8	8.7	IMF Country Report No. 11/85	Apr-11	
Gabon	GAB		1		1	1	1	0	IMF Country Report No. 11/97	May-11	
Gambia, The	GMB	17	8.5	4.5	10	17	4.5	12.5	IMF Country Report No. 12/17	Jan-12	
Grenada	GRD			5	5	5	5	0	IMF Country Report No. 10/14	Jan-10	
Guinea-Bissau	GNB	-2.7	-2.7						IMF Country Report No. 10/117	May-10	
Guyana	GUY	11.5	9.5		10.5	11.5	9.5	2	IMF Country Report No. 11/152	Jun-11	
Iceland	ISL	-5	-11	-19	-12	-5	-19	14	IMF Country Report No. 12/89	Apr-12	
Jamaica	JAM	8	24	-6.5	9.9	24	-6.5	30.5	IMF Country Report No. 10/267	Aug-10	
Kiribati	KIR								IMF Country Report No. 11/113	May-11	
Latvia	LVA	0	-2.1	15.8	4.6	15.8	-2.1	17.9	IMF Country Report No. 13/28	Jan-13	
Lesotho	LSO	-4	4	7	2.3	7	-4	11	IMF Country Report No. 12/101	May-12	
Luxembourg	LUX	-0.49	-0.1	1.61	0.3	1.61	-0.49	2.1	IMF Country Report No. 12/160	Jul-12	
Macedonia, FYR	MKD	-5.1	-0.1	5.4	0.1	5.4	-5.1	10.5	IMF Country Report No. 12/133	Jun-12	
Maldives	MDV	54.2	75.8		65.0	75.8	54.2	21.6	IMF Country Report No. 11/293	Sep-11	
Malta	MLT	-1.7	5.6	5.9	3.3	5.9	-1.7	7.6	IMF Country Report No. 12/105	May-12	
Mauritius	MUS	7.8	11.7	12.3	10.6	12.3	7.8	4.5	IMF Country Report No. 12/62	Mar-12	
Mongolia	MNG	-5		-9		-7.0	-5	-9	4	IMF Country Report No. 12/320	Nov-12
Montenegro	MNE	17.5	19.4		18.5	19.4	17.5	1.9	IMF Country Report No. 12/122	May-12	
Namibia	NAM	1	9.5	3.5	4.7	9.5	1	8.5	IMF Country Report No. 12/41	Feb-12	
Qatar	QAT	-11	15	15	6.3	15	-11	26	IMF Country Report No. 12/18	Jan-12	
Samoa	WSM	12.4 - 24.7	10.9 - 21.7	16.8	17.2	18.6	16.3	2.25	IMF Country Report No. 12/250	Aug-12	
Sao Tome and Principe	STP	22.2 - 25.2	33.3 - 37.0	-20 to 15	18.8	37.0	-20.0	57	IMF Country Report No. 12/34	Feb-12	
Seychelles	SYC	0.7	-5.2 - 4	-6.4	-1.7	4	-6.4	10.4	IMF Country Report No. 11/5	Jan-11	
Slovenia	SVN	0.6	-1.2	2	0.5	2	-1.2	3.2	IMF Country Report No. 12/319	Nov-12	
Solomon Islands	SLB	-2		2.7	0.4	2.7	-2	4.7	IMF Country Report No. 11/359	Dec-11	
St. Kitts and Nevis	KNA	13.2	12.8	17.2	14.4	17.2	12.8	4.4	IMF Country Report No. 11/270	Sep-11	
St. Lucia	LCA	3		6	4.5	6	3	3	IMF Country Report No. 10/92	Apr-10	
St. Vincent and the Grenadines	VCT	8	14.8 - 28.5	long-run equ	14.8	21.65	8	13.65	IMF Country Report No. 11/343	Dec-11	
Suriname	SUR	-4.7	-6.4	-10	-7.0	-4.7	-10	5.3	IMF Country Report No. 12/281	Oct-12	
Swaziland	SWZ	25.2	29.8 - 32.5	18.9	25.1	31.2	18.9	12.25	IMF Country Report No. 12/37	Feb-12	
Timor-Leste	TMP	A standard exchange rate assessment is not feasible because of a lack of data.							IMF Country Report No. 12/24	Feb-12	
Tonga	TON	4		6	5.0	6	4	2	IMF Country Report No. 12/166	Jul-12	
Trinidad and Tobago	TTO		also indicates that the real exchange rate is in line with the medium term fundamentals	Indicates a tendency towards overvaluation over the medium term.	REER lies in the confidence interval (10 percent) of the predicted equilibrium rate over the medium term.				IMF Country Report No. 12/127	Jun-12	
Tuvalu	TUV	Tuvalu does not publish sufficient data for CGER analysis.							IMF Country Report No. 12/259	Sep-12	
Vanuatu	VUT	13		8	10.5	13	8	5	IMF Country Report No. 11/120	May-11	

Source: The latest Article IV documents of the International Monetary Fund.

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