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MACROECONOMIC DEVELOPMENTS AND SELECTED ISSUES IN SMALL DEVELOPING STATES

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- The **Staff Report** on Macroeconomic Developments and Selected Issues in Small Developing States, prepared by IMF staff and completed on March 9, 2015 to brief the Executive Board on March 20, 2015.

The Executive Directors met in an informal session, and no decisions were taken at this meeting.

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MACROECONOMIC DEVELOPMENTS AND SELECTED ISSUES IN SMALL DEVELOPING STATES

EXECUTIVE SUMMARY

This report builds on the work in the 2013 Board paper on Fund Engagement with Small States, the 2013 background papers on Asian and Pacific small states and Caribbean small states, and the 2014 staff guidance note. It provides a deeper analysis and policy recommendations in respect of three challenges identified in these papers. Looking ahead, the paper also analyses the impact and possible policy responses to two global economic trends—lower oil prices and diverse movements in major currencies.

Macroeconomic trends and outlook. Vulnerabilities for many small states remain high. The outlook for small states is for generally sluggish growth, higher fiscal deficits after a temporary narrowing in 2013, and an upward drift in already relatively high public debt ratios, even after taking account of lower oil prices which represent an economic windfall for the majority of small states.

Fiscal management. Expenditure rigidity and revenue volatility in the face of limited fiscal buffers often results in procyclical fiscal policy, requiring efforts to streamline and prioritize recurrent spending to create fiscal space for capital spending. The quality of expenditure could be improved through fiscal anchors and public financial management reforms.

Exchange rate devaluation. Several analytical approaches find that the effects of devaluation are not significantly different between small and large states—including its impact on growth—although the transmission channels are different. Devaluation results in lower consumption and higher investment in small states and its effectiveness can be strengthened by complementary wage and anti-inflation policies.

Financial inclusion. Access to financial services is a challenge in many small states, as the banking sector is typically small and highly concentrated and the lack of competition constrains the delivery of financial services. For lower-income small states in particular, weak financial inclusion limits access to credit, with consequences for investment and growth. Where possible, small states should foster competition as a way to develop financial inclusion.

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Abbreviations and Acronyms

AFR	African Department
APD	Asia and Pacific Department
CPIA	Country Policy and Institutional Assessment
DSA	Debt Sustainability Analysis
ECCU	Eastern Caribbean Currency Union
EMDCs	Emerging Market and Developing Countries
EUR	European Department
HIPC	Heavily-Indebted Poor Countries
LICs	Low-Income Countries
MIC	Middle Income Country
MFI	Microfinance Institution
M-LML	Micro Lower-Middle and Low Income
M-UMH	Micro Upper-Middle and High Income
PICs	Pacific Island Countries
PRGT	Poverty Reduction and Growth Trust
OFC	Offshore Financial Centers
S-LML	Small Lower-Middle and Low Income
S-UMH	Small Upper-Middle and High Income
SPR	Strategy, Policy and Review Department
WEO	World Economic Outlook
WHD	Western Hemisphere Department

INTRODUCTION

1. This report focuses on macroeconomic developments and policy issues in small developing states. This grouping, comprising 33 countries with populations of less than 1.5 million, had a combined 2013 population of 14 million and a cumulative GDP of around $100 billion (see Text Table 1).[1] The three largest members—the Bahamas, Mauritius, and Trinidad and Tobago—account for close to 50 percent of group output and 21 percent of population. Most members are middle-income countries, but the group also includes one low-income country (Comoros) and five high-income countries (all in the Caribbean).[2] Caribbean small states represent about half of total group income, reflecting their higher income levels. In terms of population, the grouping is broadly evenly divided between the Caribbean, Asian Pacific, and Africa (with just one country, Montenegro, in Europe). Three-quarters of the group are island states.

Table 1. Selected Macroeconomic Indicators, Small States and Rest of the World, 2013

	Number of Economies	GDP (US dollars, billions)	GDP (in Percent of Small States)	Population (millions)	Population (in Percent of Small States)
Small States	**33**	**98.6**		**14.3**	
Regional Groups					
Caribbean	12	55.0	55.8	4.3	29.9
Asia Pacific	13	17.8	18.0	4.6	32.0
Africa	7	21.4	21.7	4.8	33.7
Europe	1	4.4	4.5	0.6	4.4

Source: World Economic Outlook, and IMF staff estimates

2. Small developing states face unique vulnerabilities. The challenges associated with diseconomies of scale were discussed in the 2013 Board paper on Fund Engagement with Small States, the 2013 background papers on Asian and Pacific small states and Caribbean small states, and the 2014 staff guidance note. The papers highlighted that "smallness" adds to production and distribution costs, undermines competitiveness, hampers the delivery of public goods, poses other administrative capacity constraints, and leaves small states with minimal diversification against external shocks, including natural disasters. In the absence of strong and sustained policy responses, these factors have contributed to weaker growth among small states, higher macroeconomic volatility, and high debt levels since the 2000s.

[1] The report excludes advanced market economies as well as high-income fuel exporting countries, following the approach adopted in "Macroeconomic Issues in Small States and Implications for Fund Engagement", SM/13/43, February 20, 2013.

[2] Middle income countries have a GNI per capita of between $1,046 and $12,746. The five high-income Caribbean countries are included in the study because of their economic similarities with middle-income Caribbean small states.

3. This report provides four perspectives on the economic outlook and policy challenges faced by small states:

- **Economic prospects through 2016**. The report opens with a discussion of recent macroeconomic trends and the outlook through 2016. This analysis, which draws on February 2015 WEO projections, envisages generally sluggish growth for small states as a whole, somewhat higher fiscal deficits after a temporary narrowing in 2013, and a general upward drift in already relatively high public debt ratios. The recent sharp decline in global oil prices and more general easing of other commodity prices will contribute to maintaining low inflation. While creating pressures on commodity exporters, it will reinforce growth prospects and provide scope to improve domestic and external balances for other small states. However, prudent fiscal policies and a supportive structural environment will be needed to sustain these gains, and structural reforms to boost competitiveness will be even more critical for countries experiencing a real exchange rate appreciation on account of currency linkages to the US dollar.

- **Challenges of fiscal management**. The first of three selected issues chapters focuses on challenges of fiscal management. Reflecting diseconomies of scale in providing public goods and services, recurrent spending by small states typically represents a large share of GDP. For some small states, this limits the fiscal space available for growth-promoting capital spending. At the same time, government revenues are often volatile for small states. With limited borrowing options, this can result in pro-cyclicality of expenditures, with capital spending bearing the brunt. Policies for smoothing spending and safeguarding fiscal space for capital investments are discussed.

- **Exchange rate devaluation**. Given the greater openness and relatively undiversified economic base of most small states, it is commonly suggested that exchange rate devaluation will be less successful in achieving external adjustment than for larger states. This issue is addressed in a second analytical chapter, with insights drawn from macro modeling, event analysis, and econometrics. The chapter concludes by discussing policy elements that can maximize the likelihood of successful exchange rate adjustment in small states.

- **Financial inclusion**. Provision of banking services to small and sometimes widely dispersed populations is costly, and many small states have a small and highly concentrated banking sector. For the smallest states, financial inclusion, measured by the number of bank branches or deposit accounts per capita, is low. This poses challenges for access to credit, with consequences for investment and growth. Options for fostering improved financial inclusion in small states are discussed.

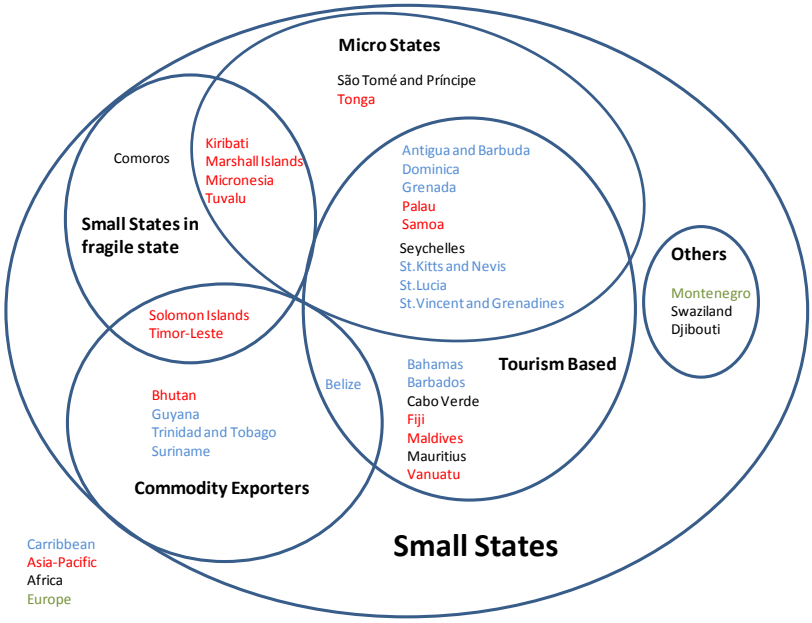
4. Small states are considered in this report from several analytical perspectives. The conjunctural chapter distinguishes between tourism-based economies, commodity exporters, and small states in a fragile situation (Box 1, and Table 2). These categories are not exclusive, with several states belonging to more than one analytical group. Consideration was also given to the performance of micro states: however, trends for this group are very similar to that for tourism-based economies, given the considerable overlap in coverage. In some instances, distinction is also made between small states based on regional characteristics (distinguishing, for example, between Caribbean and Pacific Island small

states). The chapter on financial inclusion also gives particular attention to the distinguishing features of small states that are offshore financial centers.

Box 1. Definition of Analytical Groupings of Small States

The analytical breakdown of small states is as defined below:

- **Tourism based countries** are those where exports of tourism services exceed 15 percent of GDP and 25 percent of total exports. Approximately half of the small developing states are tourism based, rising to three-quarters in the Caribbean region.



Carribbean countries are in blue, Asia-Pacific countries are in red, African countries are in black, and European country is in green.

- **Commodity exporters** are those countries where at least 20 percent of total exports in 2008–2012 were natural resources. The group includes two fuel exporters (Trinidad and Tobago, and Timor Leste) as well as other diverse commodity exporters: Guyana (gold); Belize (petroleum, citrus, sugar and bananas); Suriname (alumina, gold and oil); Solomon Islands (logs and minerals); Bhutan (hydroelectricity and steel). Trinidad and Tobago is the only commodity exporter that falls in the high-income group.

- **Small states in a fragile situation** are defined as having weak institutional capacity (three year average of the Country Policy and Institutional Assessment (CPIA) score below 3.2) and/or being subject to significant political conflict and also face (a) severe domestic resource constraints; and (b) vulnerability to shocks. About a quarter of small developing states are in a fragile situation, and all except one (Comoros) are in the Asian-Pacific region.

- **Micro states** are defined as having populations below 200,000. Almost half of all small states are micro states and combined they have about 10 percent of the total population of small states. All microstates are islands.

- Three countries do not fall into the above analytical groupings—Djibouti, Montenegro, and Swaziland.

Table 2. Profile of Developing Small States [1/]

Country / Region	Income Group [2/]	Fragile States [3/]	Commodity exporters [4/]	Tourism Based [5/]	Offshore financial center [6/]	Island States	Micro States	Exchange Rate Regime [7/]	Monetary Union [8/]	PRGT Eligibility [9/]	Current Program	Debt Risk Rating or Assessment [10/]
Caribbean												
Antigua and Barbuda	HIC			✔	✔	✔	✔	Fix-U.S. dollar	✔			Higher Scrutiny
Bahamas, The	HIC			✔	✔	✔		Fix-U.S. dollar				Higher Scrutiny
Barbados	HIC			✔	✔	✔		Fix-U.S. dollar				Higher Scrutiny
Belize	UMC		✔	✔	✔			Fix-U.S. dollar				Higher Scrutiny
Dominica	UMC			✔	✔	✔	✔	Fix-U.S. dollar	✔	✔		High Risk
Grenada	UMC			✔	✔	✔	✔	Fix-U.S. dollar	✔	✔	ECF(14-17)	In Distress
Guyana	LMC		✔					Fix-U.S. dollar		✔		Moderate Risk
St. Kitts and Nevis	HIC			✔	✔	✔	✔	Fix-U.S. dollar	✔			Higher Scrutiny
St. Lucia	UMC			✔	✔	✔	✔	Fix-U.S. dollar	✔	✔		High Risk
St. Vincent and the Grenadines	UMC			✔	✔	✔	✔	Fix-U.S. dollar	✔	✔	RCF(14)	Moderate Risk
Suriname	UMC		✔					Fix-U.S. dollar				Higher Scrutiny
Trinidad and Tobago	HIC		✔		✔	✔		Fix-U.S. dollar				Lower Scrutiny
Asia-Pacific												
Bhutan	LMC		✔					Fix-Indian rupee		✔		Moderate Risk
Fiji	UMC			✔		✔		Fix-basket peg				Lower Scrutiny
Kiribati	LMC	✔				✔	✔	Fix-Australian dollar		✔		High Risk
Maldives	UMC			✔	✔	✔		Fix-U.S. dollar		✔		High Risk
Marshall Islands	UMC	✔			✔	✔	✔	Fix-U.S. dollar		✔		High Risk
Micronesia	LMC	✔				✔	✔	Fix-U.S. dollar		✔		High Risk
Palau	UMC			✔	✔	✔	✔	Fix-U.S. dollar				Lower Scrutiny
Samoa	LMC			✔	✔	✔	✔	Fix-basket peg		✔		High Risk
Solomon Islands	LMC	✔	✔			✔		Fix-basket peg		✔	ECF(12-15)	Moderate Risk
Timor-Leste	LMC	✔	✔					Fix-U.S. dollar		✔		Low Risk
Tonga	UMC					✔	✔	Fix-basket peg		✔		Moderate Risk
Tuvalu	UMC	✔				✔	✔	Fix-Australian dollar		✔		High Risk
Vanuatu	LMC			✔	✔	✔		Fix-basket peg		✔		Low Risk
Other Regions												
Cabo Verde	LMC			✔	✔	✔		Fix-Euro		✔		Moderate Risk
Comoros	LIC	✔				✔		Fix-Euro		✔		High Risk
Djibouti	LMC							Fix-U.S. dollar		✔		High Risk
Mauritius	UMC			✔	✔	✔		Float				Higher Scrutiny
Montenegro	UMC							Fix-Euro				Higher Scrutiny
São Tomé and Príncipe	LMC					✔	✔	Fix-Euro		✔	ECF(12-15)	High Risk
Seychelles	UMC			✔	✔	✔	✔	Float			EFF(14-17)	Higher Scrutiny
Swaziland	LMC							Fixed				Higher Scrutiny

Sources: Staff guidance note on small states, WEO, LIC-DSA and MAC-DSA databases, and Fund staff calculations and estimates.

1/ Following the guidance note on small states, "Small States" are defined as developing countries that are Fund members with populations below 1.5 million while "Micros States" are a sub-group with populations below 200,000 as of 2011.

2/ High-income countries (HIC) have per capital annual incomes of $12,746 or more; Upper middle-income countries (UMC) of between $4,126 and $12,745; lower middle-income countries (LMC) of between $1,046 and $4,125; and lower-income countries (LIC)$1,045 or less based on the World Bank Atlas method, updated July 2014.

3/ Based on the World Bank definition of (a) an average CPIA rating of 3.2 or less, or (b) a UN and/or regional peace-building mission within the country within the last three years.

4/ Commodity-exporters are countries with the relevant characteristics used in the stylized facts have either natural resource revenue or exports at least 20% of total fiscal revenue and exports, respectively, over 2008–12 (average).

5/ Exporters of tourism services (the ratio of exports of tourism services to output exceeds 15 percent and the ratio of exports of tourism services to total exports exceeds 25 percent; covers 10 percent of economies)

6/ A country or jurisdiction that provides financial services to nonresidents on a scale that is incommensurate with the size and the financing of its domestic economy

7/ Data is from the 2014 Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)

8/ This category combines the countries that are members of WAEMU, CEMAC and ECCU.

9/ PRGT list effective as of 2014.

10/ For PRGT-eligible members the *risk rating* is based on the latest available LIC-DSA. For the others, the *risk assessment* it is based on the latest available MAC-DSA or assigned according to criteria in the MAC-DSA guidance note.

MACROECONOMIC TRENDS[1]

Two important global developments will shape the near-term macroeconomic environment for small developing states—the recent fall in commodity prices, notably for oil, and movements in major currencies. The majority of small states are oil importers, and a balance is needed between using lower oil import costs to strengthen fiscal balances, which should be a priority where energy subsidies are high, and reducing costs to consumers, which can boost spending power and growth prospects. Where fuel is taxed on an ad valorem basis, fiscal policies also need to weigh a possible loss of tax revenues. Staff projections point to a moderate growth boost from lower oil prices in 2015, though the pace of expansion is expected to remain below that achieved prior to the global financial crisis. Overall, the windfall from lower oil prices is not expected to strengthen budgets significantly across the small states community—and oil exporters will see significant strains. With only modest growth and continuing high spending needs, public debt ratios are projected to rise further from an already generally high level. Many small developing states will experience more appreciated real exchange rates in 2015 on account of pegs to the US dollar or to currency baskets that include the dollar. Against a backdrop of slow recovery in advanced economy markets and less competitive exchange rates, small developing states should seek to exploit opportunities to strengthen links to faster-growing EMDCs. Given the narrow economic base in most small states, the required transformation will be challenging, and determined efforts to facilitate structural reform and foster competitiveness will be needed. In most cases, the private sector will need to play a key role.

A. Recent Macroeconomic Performance and Near Term Outlook

Economic growth continues to disappoint …

1. Growth remains well below pre-crisis levels. In 2013, real per capita GDP growth averaged 0.7 percent across small states, with one-in-three experiencing a decline. Preliminary estimates suggest a pick up to one percent growth, on the same basis, in 2014, down from an average of about 3 percent in 2000–2008. Small states have generally tracked the growth performance of advanced economies—which represent important markets for tourism, financial, and other service exports. As a result, their growth has fallen well short of that for larger emerging market and developing countries (EMDCs) (Appendix Figure 1a). For 2015-16, per capita GDP growth is projected to edge up to around 2 percent, reflecting differential performance between oil and non-oil economies.

2. Natural resource exporters face a more challenging environment. Small commodity exporters saw generally robust growth over the past decade, reflecting strong performance, in particular, by the fuel-exporting states of Timor-Leste and Trinidad and Tobago (Appendix Figure 2a). However, growth slowed in 2012–2014 as a result of weaker export market conditions as well as

[1] Prepared by a team comprising Xavier Maret (lead), Mai Farid, Sarwat Jahan, and Calixte Ahokpossi, under the guidance of Peter Allum (all SPR).

adverse supply shocks.[2] With the latest decline in oil prices and softer commodity prices more generally, resource-exporting small states are projected to see only modest growth in 2015–16.[3] Given that a significant element of the decline in oil prices is projected to be permanent, a priority is to adjust spending to sustainable levels, while using available financial buffers to smooth the adjustment. Structural reforms to promote growth in the non-fuel economy should also be a priority.

3. Lower oil prices offer a modest growth boost for oil importing small states. In 2015–16, the recent drop of oil prices and other factors have led to slight upward revisions of real GDP growth in most cases, compared with the Fall 2014 projections (see Figure 1). The strengthening economic recovery in North America will also benefit tourism in the Caribbean, and some Indian Ocean and Pacific tourism destinations (Mauritius, Fiji, Maldives, Seychelles, and Vanuatu) are seeing strong growth in tourist arrivals from Australia and China (though the latter from a low base). However, with only a sluggish recovery in the global tourism market, per capita GDP growth in tourism-based small states is projected to remain around 1¾ percent in 2015–16; for Caribbean states, this is about half that seen in the pre-crisis period. Many tourism-based economies also remain at particular risk from natural disasters.[4] A few tourism-based economies have fared better: Mauritius has had sufficient policy space to support growth through expansionary domestic policies, and the Seychelles is benefitting from a program of strong structural reform initiatives.

Inflation is projected to remain low, benefitting from strong nominal anchors…

4. Inflation in small states is projected to remain generally low, reflecting the anchoring role of pegged exchange rates and lower international commodity prices.[5] After temporary spikes in inflation in 2008 and 2011 driven by international food and fuel prices, inflation averaged 2½ percent in 2013 and 2014. Across small states, differences in inflation tend to reflect demand strength, with slow-growing tourism-based economies experiencing the lowest inflation, on average (Appendix Figures 1a and 2a). Inflation is projected to decline further in 2015, mostly as a result of lower global oil prices, before increasing slightly in 2016 (Figure 1). Inflation remains higher than in advanced economies, however, contributing to real exchange rate appreciation.

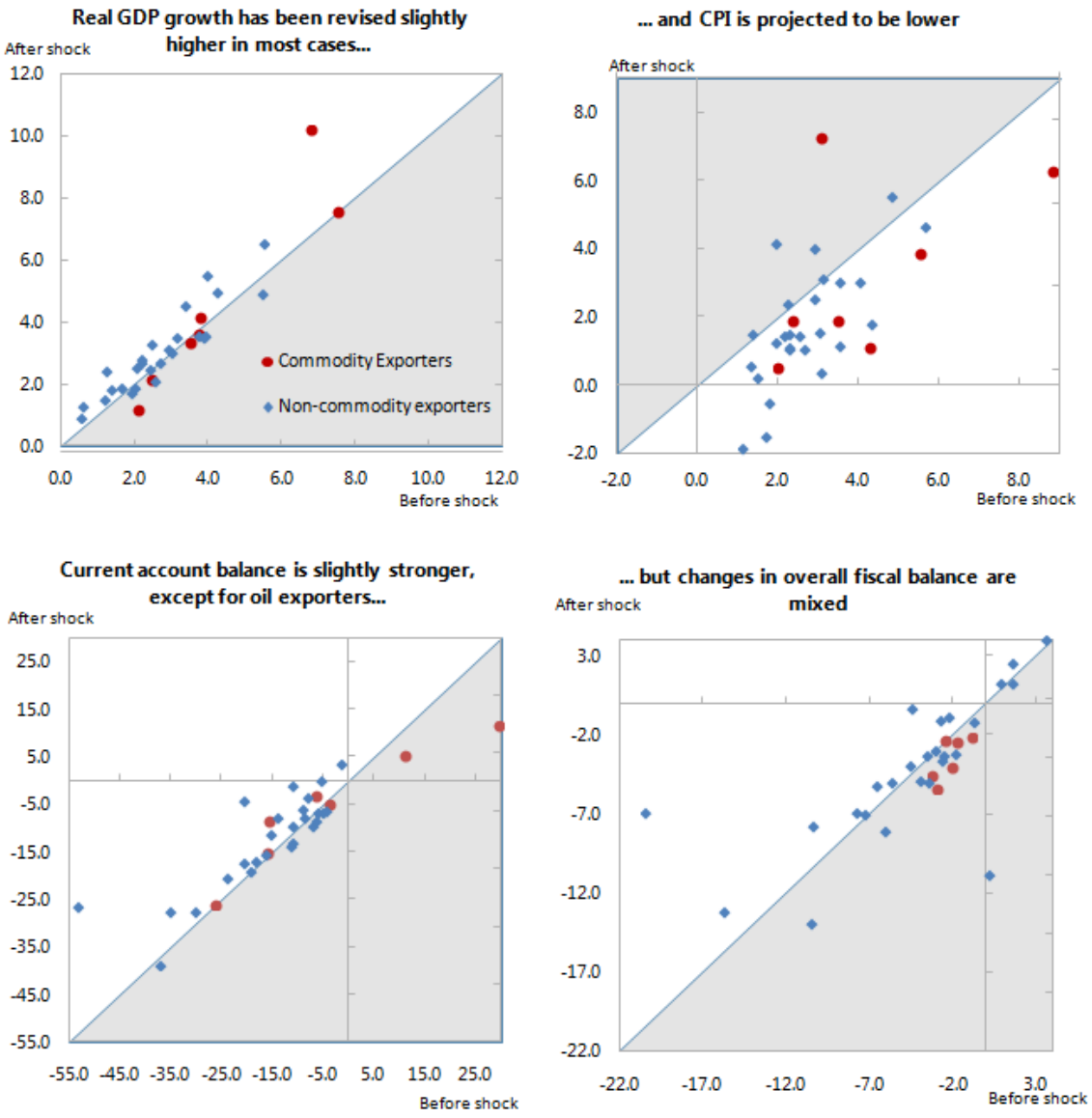
[2] According to IMF estimates, GDP per capita in Timor-Leste contracted 13 percent per year over2012–14 and is projected to rebound by 7 percent in 2015, reflecting variations in oil production.

[3] Studies show that for Latin American and the Caribbean, growth among commodity producers in the last decade was related to the commodity price windfall, without which growth would have been close to its long run trend of 2.5 percent. The same conclusions are likely to hold for small states that recently benefited from strong commodity prices.

[4] Samoa is still recovering from the December 2012 cyclone which caused estimated damage and production losses of about 30 percent of GDP, and the Bahamas, Fiji, Solomon Islands, and Tonga were also hit by natural disasters in 2012–14.

[5] Eighteen small states (primarily but not only in the Caribbean) peg to the US dollar or use the dollar as legal tender; three African small states peg to the Euro; and four Pacific island countries peg to baskets that include the US and Australian dollars, Euro, and other currencies. Only two out of 33 small states follow a floating exchange rate regime (see 2014 Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)).

Figure 1. Impact on 2015 Projections of Lower Oil Prices and Other Factors 1/



1/ WEO Fall 2014 is used as projections before shock, and the latest WEO is used as projections after shock.
Source: World Economic Outlook, October 2014 and latest.

After narrowing in 2013, fiscal deficits have subsequently widened …

5. The post-crisis rebuilding of fiscal buffers has not been sustained. Small states, like larger peers, saw fiscal deficits surge in 2009 with the onset of the global financial crisis. With steps to rebuild revenues and reduce spending ratios, deficits declined, on average, through 2010–2013. This process has been short-lived, however, with deficits widening again in 2014, and projected to stabilize at an average of around 3¾ percent of GDP in 2015–16 with a mixed impact of lower oil prices on fiscal outcomes (Appendix Figure 1a, and Figure 2).

6. The increases in fiscal deficits are driven by developments in commodity exporters and small states in fragile situations. Among commodity exporters, Timor-Leste and Trinidad and Tobago (both fuel exporters) saw sizeable fiscal surpluses in the 2000s, as did Solomon Islands (exports of logs and minerals). In each case, fiscal positions have deteriorated on account of weaker commodity prices, and the projected lower oil prices in 2015–16; for Timor Leste, the depletion of resources and spending pressures from projected large capital projects are also factors. For small states facing fragile situations, fiscal performance was buoyed in 2012–2014 by temporary positive developments, including debt relief under the enhanced Heavily-Indebted Poor Countries (HIPC) Initiative (Comoros), revenues under an Economic Citizenship Program (Comoros), and a surge in fishing license revenues (Kiribati and Tuvalu). With a return to more normal levels of fiscal receipts including lower grant revenues (Micronesia and Marshall Islands), the overall fiscal position of fragile states is projected to revert to deficits in 2016.

7. A mixed pattern of generally higher fiscal deficits is projected for tourism-based economies through 2015–16 (Appendix Figure 2a). The picture varies across the country grouping. Deficits in excess of 6 percent of GDP are projected for Barbados, St Lucia and Cabo Verde and in the 15 percent of GDP range for the Maldives, reflecting expansionary fiscal policies, weak revenues, and natural disaster-related reconstruction costs and social spending. At the same time, continuing fiscal surpluses are projected for Seychelles (benefitting from a successful adjustment program launched in 2008) and St Kitts and Nevis (with incomes from a Citizenship-by-Investment program). Recently adopted adjustment programs are projected to strengthen fiscal performance in Grenada, the Bahamas, and Samoa.

External current account balances of most non-commodity exporters will strengthen with lower oil prices …

8. After deteriorating in line with fiscal performance in 2014, external current account deficits of most non-commodity exporters are projected to improve somewhat in 2015–2016, mostly on account of lower oil import bills (Appendix Figure 1a). Given the dominant role of the public sector in small states, external imbalances largely mirror fiscal performance. Consistent with this, wider external deficits are largely associated with the declining earnings of commodity exporters and the unwinding of temporary positive earnings shocks for small states in fragile situations (Kiribati and Tuvalu) (Appendix Figure 2a). Excluding commodity exporters, Kiribati, and Tuvalu, the average current account deficit of small states is projected to decline by 2 percentage points to about 11 percent of GDP in 2015-16.

Exchange rate-based measures of competitiveness have diverged across small states …

9. Reflecting the role of currency pegs, real effective exchange rates have been dominated by major currency movements. The average real effective exchange rate across all small states has been relatively stable since 2000 (Appendix Figure 3). The pattern varies depending on the denomination of the currency peg. For countries pegged to the US dollar, real exchange rates depreciated through 2007-08, subsequently appreciating through 2013. By contrast, Pacific Island countries have seen a sustained real appreciation, following the trend in the Australian dollar. The immediate impact of real exchange rates on competitiveness and external imbalances is secondary,

in many cases, to the dominant role of fiscal performance in determining trade and external balances; indeed, grant receipts and associated import-intensive capital spending dominate external accounts for many Pacific Island economies. That said, the weaker US dollar has been beneficial, on balance, for Caribbean tourism-based economies as they have sought to rebuild markets after the global financial crisis. To this extent, the recent strengthening of the dollar could pose new challenges for these economies, while the weakening of the Australian dollar could help tourism competitiveness for small states in the Pacific.[6]

External buffers have narrowed …

10. Total public debt has continued to rise in small states. The public debt-GDP ratio in small states has edged higher reflecting sizeable fiscal deficits and generally sluggish growth (Appendix Figure 1a). Tourism-based small states face the worst debt dynamics, with already high levels of public debt projected to rise further over 2015–2016. The majority of the highly indebted tourism-based small states are in the Caribbean, and debt ratios are projected to rise significantly for Grenada,[7] The Bahamas, Barbados, St. Lucia, and St. Vincent and the Grenadines, mainly due to high fiscal deficits.[8] Outside the Caribbean, Cabo Verde, the Maldives, and Bhutan are also projected to see public debt–to–GDP ratios exceed 100 percent in the near term, also generally reflecting projections for wider fiscal deficits.

11. External debt is also projected to increase. Average external debt-to-GDP ratios are projected to rise from about 50 percent in 2013 to 53 percent in 2015–16. For small states, single large projects can have a major impact on debt ratios. For example, the construction of new hydropower projects in Bhutan is projected to add significantly to external debt, albeit with projected strong growth and export dividends. Similarly, external debt ratios have increased in Djibouti on account of infrastructure investments. In a few countries, external debt burdens have been significantly reduced through strong adjustment programs (Seychelles) and HIPC debt relief (Comoros).

[6] For countries considering exchange rate devaluation as one option for addressing external imbalances, the chapter on external devaluation provides analytical and empirical contributions on the transmission channels and effectiveness of such measures in small states.

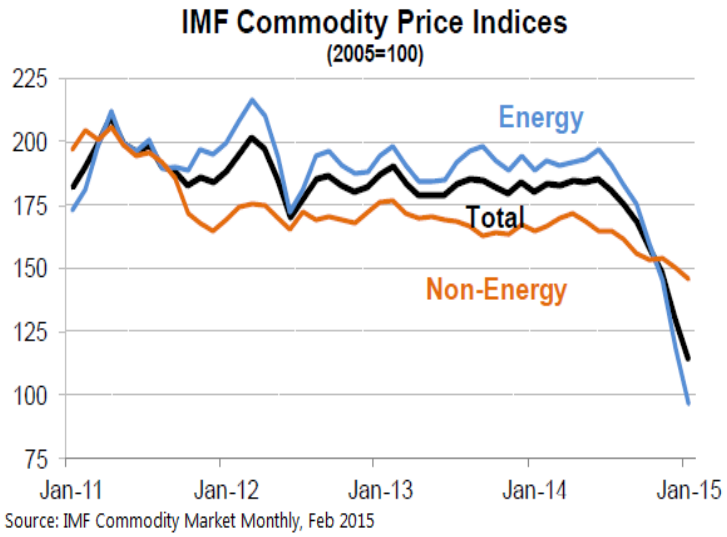
[7] Grenada is currently in debt distress and will need to achieve primary surplus accompanied by a debt restructuring to bring debt back to sustainable levels.

[8] An exception is St. Kitts and Nevis, where debt ratios are declining reflecting debt restructuring accompanied by strong fiscal reforms generating fiscal surpluses since 2012. Seychelles has also reduced debt burdens through debt restructuring and strong fiscal adjustment.

Box 1. Effects of Commodity Price Decline

About one-quarter of small states are commodity exporters. They have faced declining prices in recent years for gold (Suriname, Guyana) and oil prices (Belize, Trinidad and Tobago, Timor Leste). Export earnings in 2015 are projected to decline by more than 15 percent for Trinidad and Tobago, and by more than 10 percent for both Suriname and Guyana. In each case, fiscal balances will be adversely impacted.

At the same time, many small states will benefit from lower world oil prices. In comparison with the Fall 2014 WEO, growth has been revised upwards, on average, by 0.2 percentage points for 2015-16. The lower oil import costs and pass-through to transport and power generation costs will boost household and corporate spending power, stimulating private consumption and investment. Reflecting lower energy costs, the forecast for CPI inflation has been revised down in 2015 by about 0.7 percentage points, while projections for current account balances have strengthened by an average of 1.4 percentage points of GDP. With offsetting fiscal effects from lower fuel subsidies and lower fuel tax receipts, the updated projections for small states do not show a major change in fiscal balances.[1]



Source: IMF Commodity Market Monthly, Feb 2015

Countries in the Caribbean with access to financing through Petrocaribe could be vulnerable. This financing covers a large share of the current account deficits in many of these countries (for example, 40 percent in Belize, 20–25 percent in Guyana, and up to 10 percent for ECCU countries). The sharp drop in world oil prices is straining Venezuela's public finances. As a result, it may need to revisit its stated policy of preserving financing through Petrocaribe. This could pose financing challenges for Petrocaribe beneficiaries who do not have access to alternative concessional or market financing.

[1] See Robert Rennhack and Fabian Valencia (2015), *Effect of lower oil prices on the Caribbean.* Caribbean Corner, Issue 02, January 2015.

12. Debt sustainability is a challenge for most small states. About two-thirds of small states are categorized as in "high risk" of debt distress based on the latest debt sustainability analysis (LIC-DSF) conducted jointly by the IMF and WB[9] (with one small state in debt distress and recently launched a debt restructuring), or "higher scrutiny" based on the latest available DSA for market-

[9] For PRGT-eligible members the risk rating is based on the latest available LIC-DSA. For the others, the risk assessment it is based on the latest available MAC-DSA or assigned according to criteria in the MAC-DSA guidance note.

access countries (MAC-DSA). By contrast, only about one-in-seven small states are categorized as in "low risk" according to the LIC-DSF or "lower scrutiny" according to the MAC-DSA. Commitment to fiscal consolidation and growth-enhancing reforms would help address debt overhangs and lagging growth.

13. Reserve buffers have improved, but could benefit from further increases. Levels of international reserves among small states in 2013 were higher than the 2000–12 average (Appendix Figure 3). Reserve cover is approaching the average of 4 months of imports seen, on average, for advanced economies. However, it remains well below the average of 8 months cover for emerging markets. Given the need to defend currency pegs and smooth external shocks (including natural disasters and volatile aid flows) in the context of generally limited access to international capital markets, somewhat higher reserve cover appears warranted.[10]

B. Vulnerabilities and Structural Issues

14. Growth performance is vulnerable to external shocks. Based on the "growth decline vulnerability index" (GDVI) methodology, small states' vulnerabilities in the event of a global shock are calculated to have diminished slightly in 2014, but remain higher than before the global financial crisis.[11] Moving against the general trend, vulnerabilities have risen significantly for tourism-dependent economies, to the point that they are now seen as more vulnerable than fragile small states (Figure 2).

15. Several factors contribute to the vulnerabilities of small states. An underlying factor is the generally low quality of economic institutions. Empirically, countries with weak institutions do not typically conduct effective countercyclical macroeconomic management to smooth external shocks.[12] In addition, debt levels are high for many countries and reserves could be higher, leaving little fiscal space to mitigate the impact of external shocks. More generally, government revenues and grants are volatile and often depend on economic developments in advanced country trading partners. Last, the geography of most small states put them at risk of natural disasters.[13]

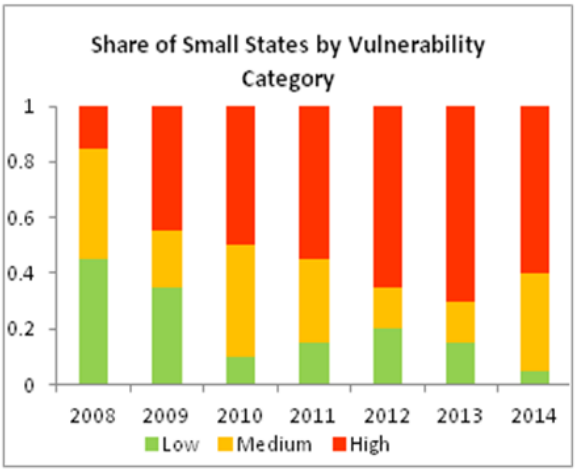
[10] See IMF 2013, Asia and Pacific Small States: Raising Potential Growth and Strengthening and Enhancing Resilience to Shocks.

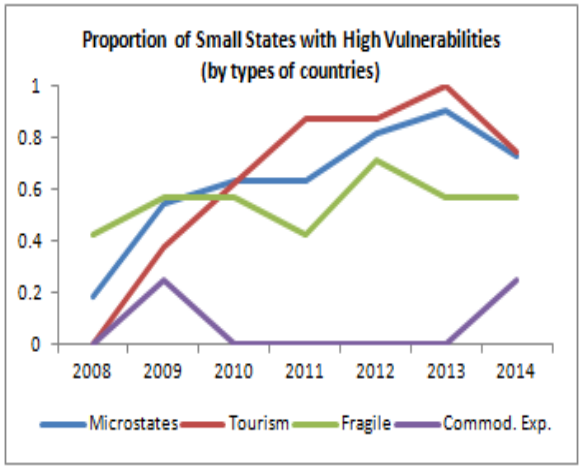
[11] See 2013 Low-Income Countries Global Risks and Vulnerabilities Report. This analysis covers 20 small developing states subject to a regular IMF vulnerability review. The results may be unrepresentative to the extent that the richest small states are excluded. The GDVI does not measure the *absolute* probability of a growth slowdown, but rather the *conditional* vulnerability of a country in the event of an external shock. The GDVI reflects current levels of real sector, external, and fiscal variables in relation to their position at the time of past growth crises. For a detailed description of the methodology see IMF (2013).

[12] This factor is compounded in small states by expenditure rigidity and revenue volatility in the face of limited borrowing capacity, as discussed in the chapter on strengthening fiscal frameworks and improving the spending mix.

[13] See Macroeconomic Developments in Low-Income Countries 2014 Report.

Figure 2. Vulnerability Profile for Small States





16. A protracted global slowdown, would have a substantial impact on small states. Scenario analysis conducted using the Fund's G20MOD and Euromod models suggest that small states are particularly vulnerable to risks of a slowdown in advanced economy growth. This reflects the importance of the latter for tourism, financial services and other exports, as well as for remittances, aid, and other investment inflows.[14] Some small states have also diversified to BRIC markets and are vulnerable on this front.

17. Growth in small states has been held back by structural impediments. A comparison of the 2010 and 2013 World Bank Doing Business Indices suggests little progress. One exception is in regard to access to finance, where commodity exporters and fragile small states narrowed the gap with tourism-based counterparts.[15] Progress in achieving economic diversification has also generally been limited (Box 4).[16] A deepening of structural reforms to strengthen governance and improve the business environment is needed to boost the competitiveness and economic attractiveness of small states.

[14] Small states were not found to be vulnerable to a scenario featuring a sharp normalization of global monetary policy conditions.

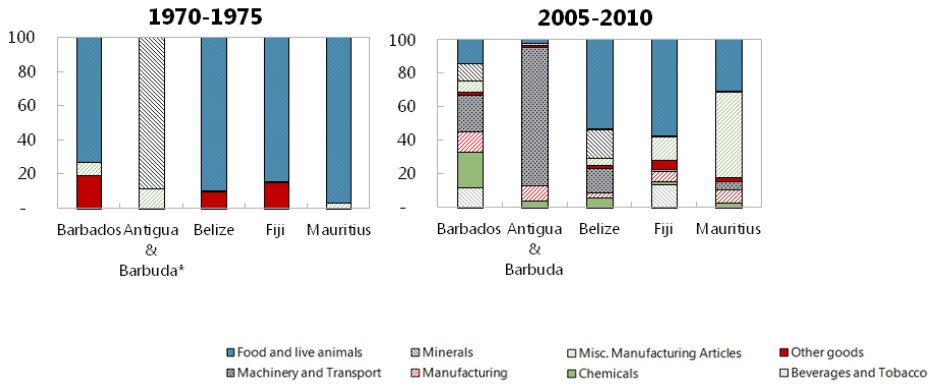
[15] Timor-Leste adopted a Financial Sector Master Plan to promote financial development; Tuvalu is implementing a multi-phase policy reform matrix; and Comoros is seeking to develop microfinance institutions. The implications of financial inclusion on access to credit is discussed in the chapter on financial inclusion.

[16] Structural impediments facing small states have been the subject for various studies, including *The Eastern Caribbean Economic and Currency Union: Macroeconomics and Financial Systems.*

Box 2. Diversification in Small States

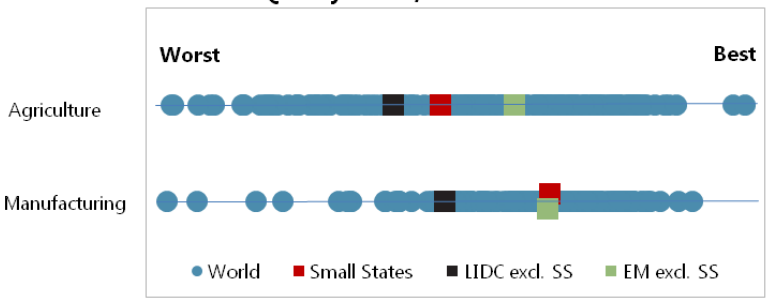
Volatility in growth for small states partly reflects their limited diversification. Several small states are an exception, showing improved diversification in recent decades (Mauritius, Barbados, Belize, Fiji, and Antigua and Barbuda). These states also have relatively higher levels of income, though the direction of causation is difficult to establish.

Evolution of Most Diversified Small States - Export Shares by Product



The process of diversification would benefit, in some cases, from better product quality.[1] Surprisingly, data suggest that many small states produce manufacturing goods that are comparable in quality to larger emerging markets—though this may reflect participation in a supply chain, assembling goods produced elsewhere.[2] There appears to be a clearer scope to strengthen product quality in the agricultural sector, which is important as agricultural products comprise about half of small states' exports of goods.

Quality index, 2010

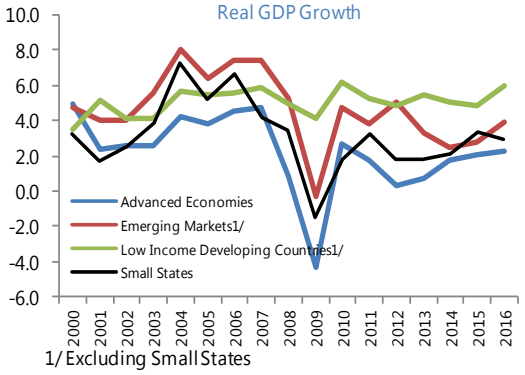


[1] In the chart, the blue dots represent product quality in 2010 for individual countries. The red dot represents the median for small states while the black and green dots represent the medians for LIDCs and EMs, respectively.

[2] The available data and methodology do not allow for a breakdown of commodities by position in the value chain.

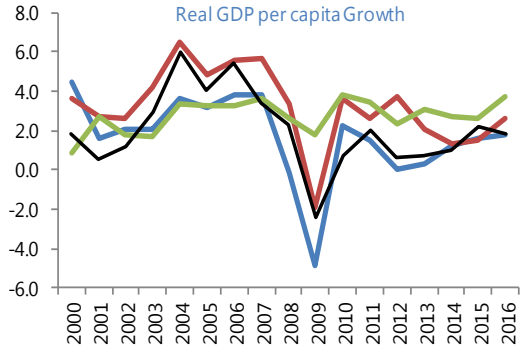
Appendix Figure 1a. Selected Macroeconomic Indicators for Small States 2000-2016

Small States continue to lag EMDC growth rates...

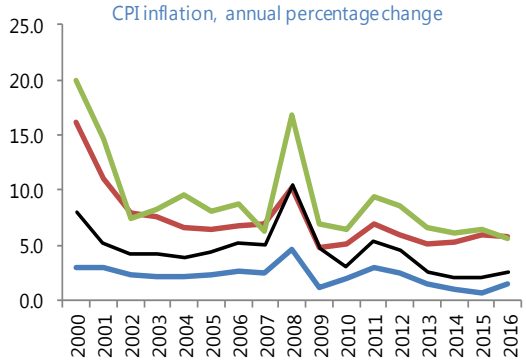


1/ Excluding Small States

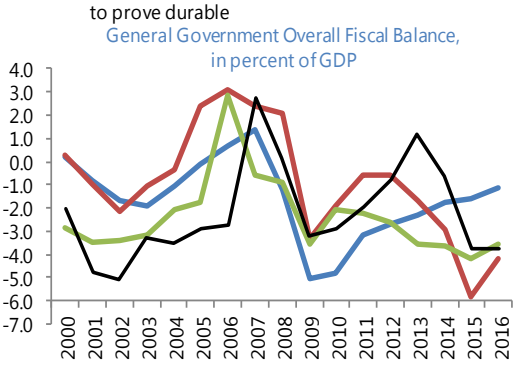
...and income per capita remain sluggish.



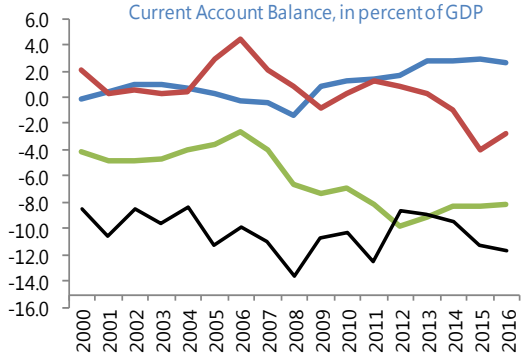
Inflation is generally low



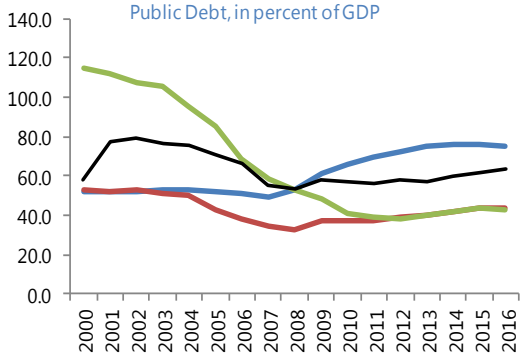
Stronger fiscal performance in 2013 is not expected to prove durable



...Contributiong to wider current account deficits...

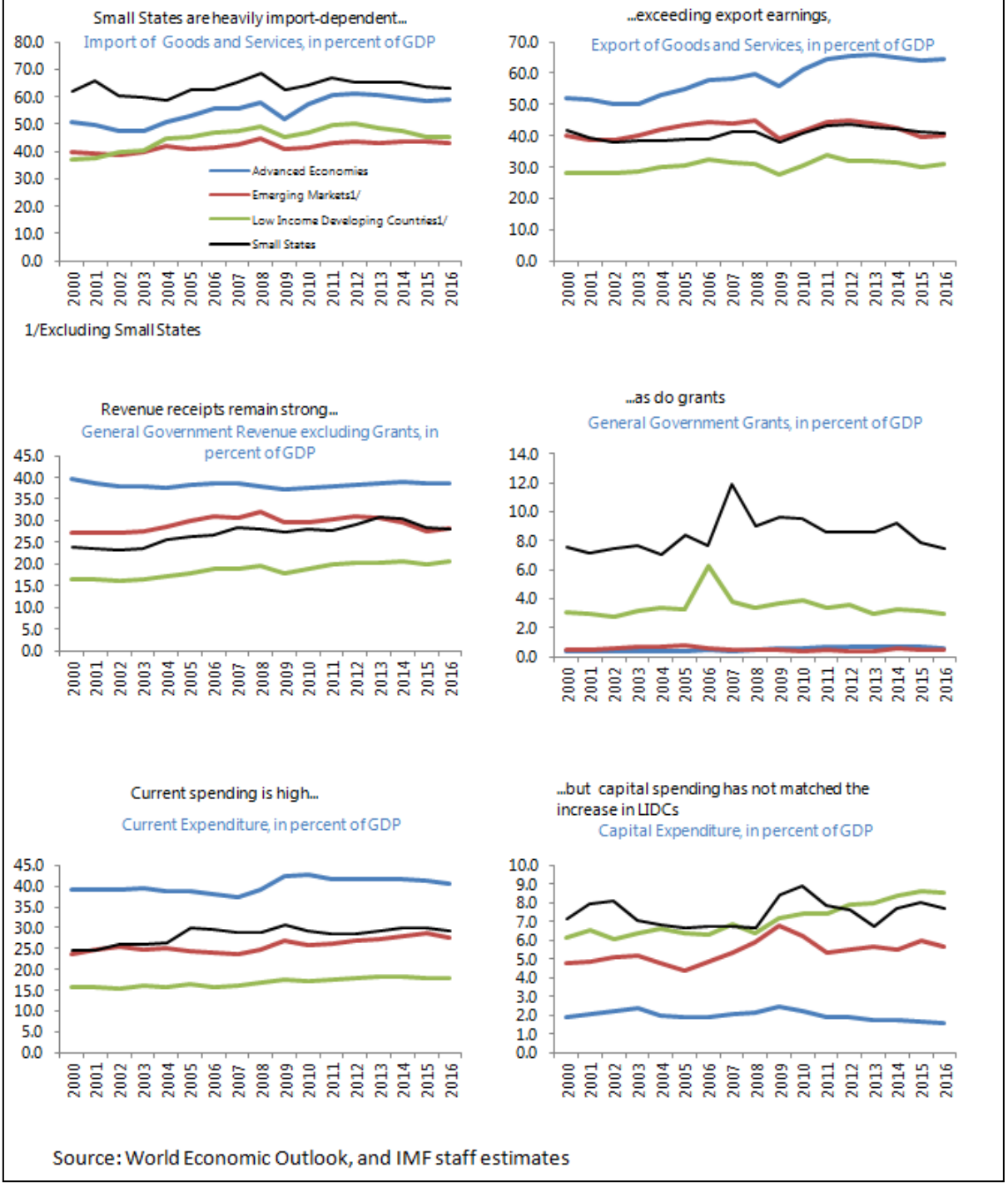


...and slowly rising public debt ratios.



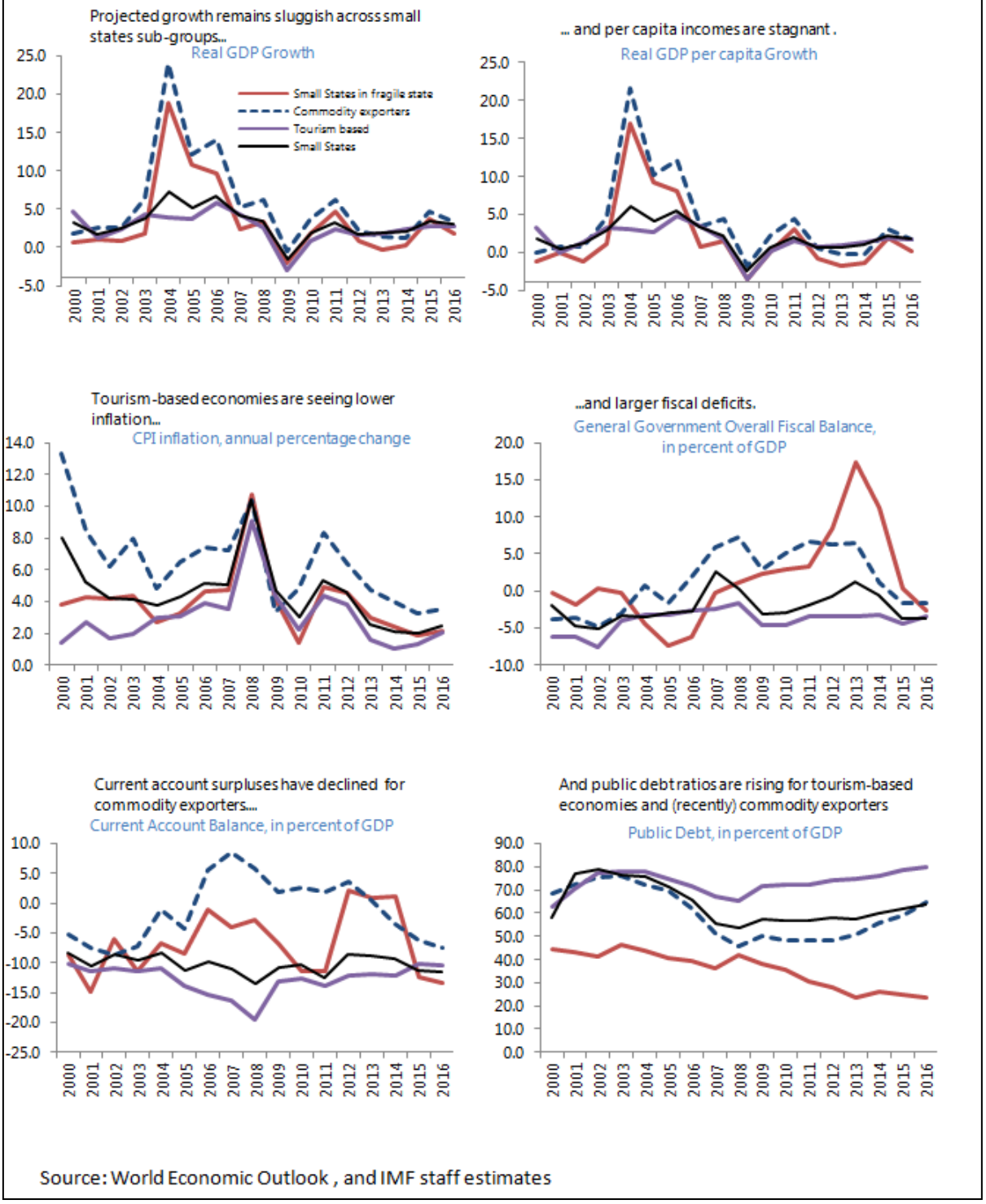
Source: World Economic Outlook, and IMF staff estimates

Appendix Figure 1b. Selected Macroeconomic Indicators for Small States 2000-2016



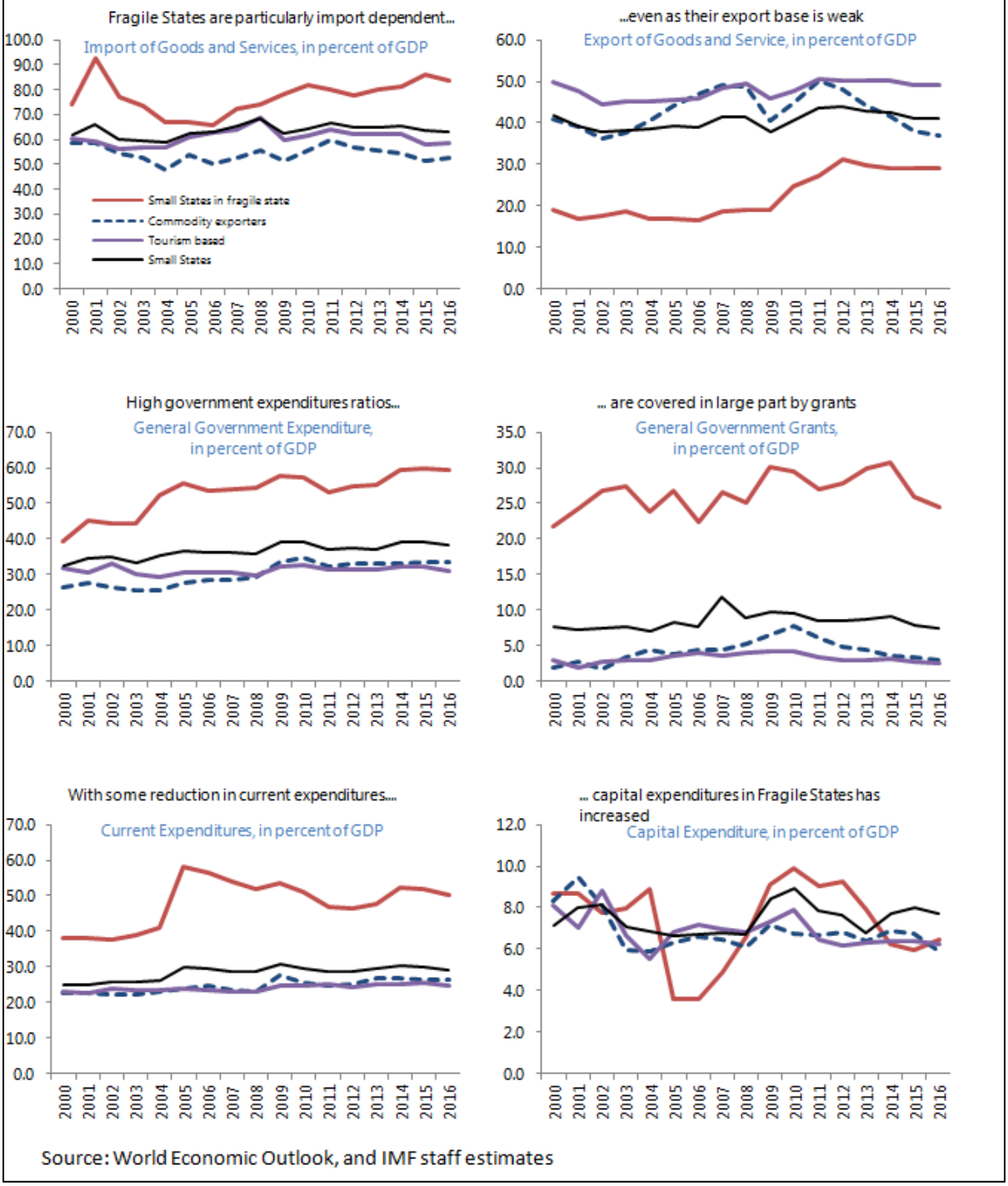
Source: World Economic Outlook, and IMF staff estimates

Appendix Figure 2a. Trends in Small States sub-groups 2000-2016



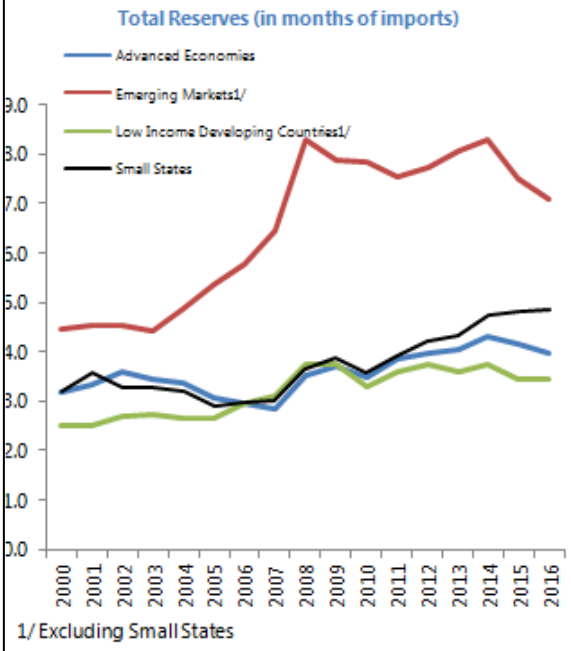
Source: World Economic Outlook , and IMF staff estimates

Appendix Figure 2b. Trends in Small States sub-groups 2000-2016



Source: World Economic Outlook, and IMF staff estimates

Appendix Figure 3. Exchange Rate Development of Small States 2000-2016



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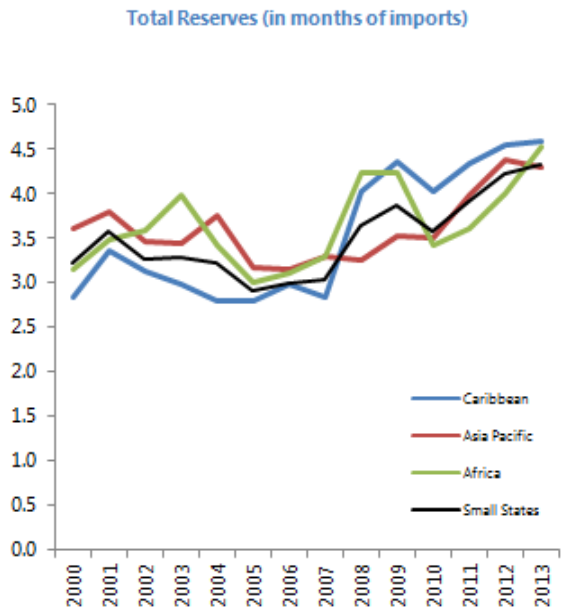
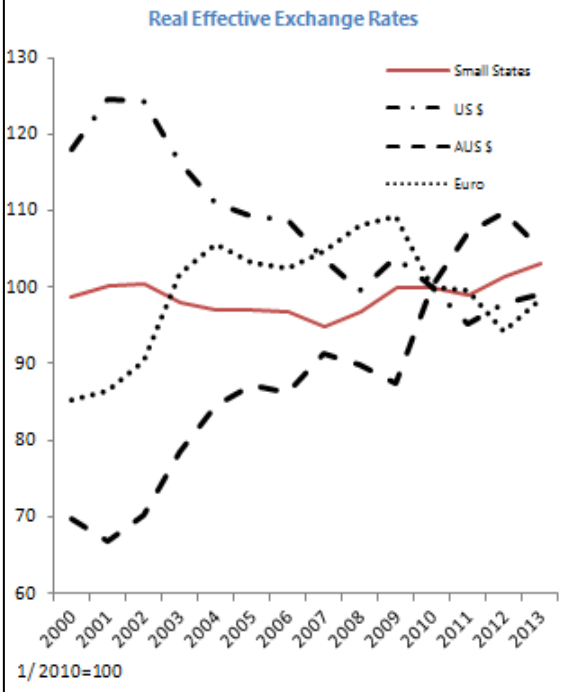
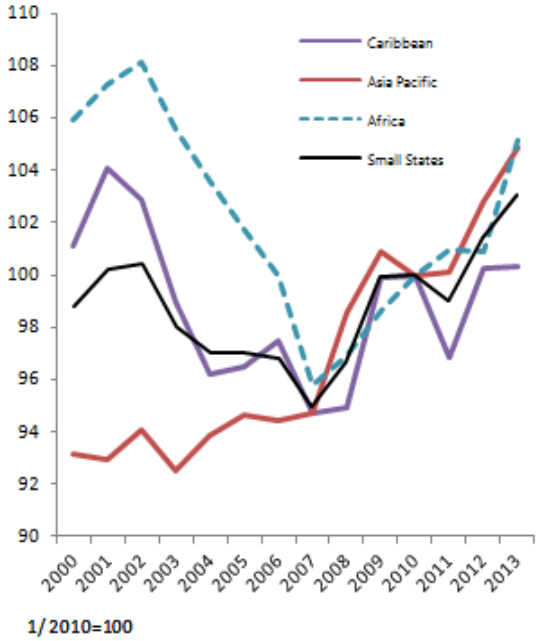




1/ 2010=100



1/ 2010=100

Source: World Economic Outlook, and IMF staff estimates

STRENGTHENING FISCAL FRAMEWORKS AND IMPROVING THE SPENDING MIX IN SMALL STATES[1]

This chapter focuses on key challenges for fiscal management. Reflecting diseconomies of scale in providing public goods and services, recurrent spending by small states typically represents a large share of GDP. For some small states, this limits the fiscal space available for growth-promoting capital spending. At the same time, with limited buffers, revenue volatility often results in procyclical fiscal policy. To strengthen fiscal frameworks, small states should seek to streamline and prioritize recurrent spending to create fiscal space for capital spending. The quality of public spending could also be improved through public financial management reforms, fiscal anchors and multi-year budgeting.

A. Introduction

1. The unique characteristics of small states make fiscal management more challenging than elsewhere. Most importantly, the indivisibility in the provision of public goods and the public sector being the main employer introduce rigidities into the budget, tilting the composition of spending toward recurrent outlays. With limited fiscal resources, high recurrent spending can crowd out capital spending, leading to under-investment in infrastructure and other growth-enhancing areas. At the same time, small states generally face greater revenue volatility than other country groups (IMF 2013a, b), owing to their exposure to exogenous shocks and narrow production bases. This is particularly true for fragile states and commodity exporters. Small states often lack the capacity to weather revenue volatility for two reasons: they cannot finance temporary fiscal shocks because domestic banking systems are shallow, and they have limited access to international capital markets (Holden and Howell, 2009).

2. Despite the lumpiness (relative to their small GDP) of capital projects, fiscal frameworks are not typically designed with a multi-year perspective to allow smoothing of expenditures over the business cycle. Although foreign assistance has provided some countercyclical support during downturns to aid-dependent small states, the volatility of revenue has generally resulted in volatile spending patterns and procyclical fiscal policy. Reflecting the rigidities in recurrent spending cited above, budget pressures typically affect primarily capital spending. This means that already strained capital budgets face further cuts in the event of external shocks, which further undermines longer-term growth prospects.

3. Assessing the fiscal stance in small states is complicated. Because of revenue volatility, especially in the Pacific, headline fiscal balances do not always accurately reflect the underlying fiscal position. However, data deficiencies, capacity constraints, and structural changes in the economy make it difficult to estimate meaningful cyclically-adjusted or structural balances based on output gaps (IMF, 2014c, Appendix Box 1). The existence of several extra budgetary funds that are not integrated in the

[1] Prepared by a team led by Patrizia Tumbarello and comprising Ezequiel Cabezon, Antoinette Kanyabutembo, and Yiqun Wu (all APD).

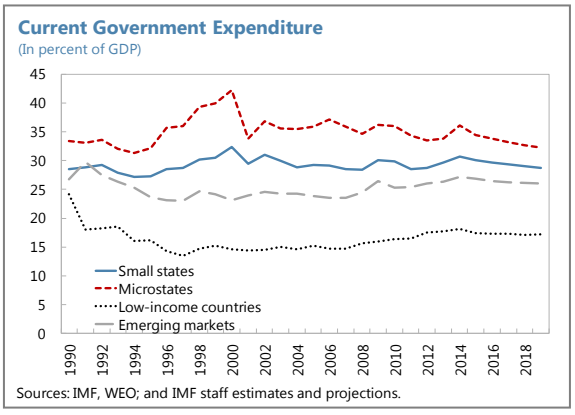
budget presentation and the difficulties in measuring capital spending, when projects are implemented outside the central government or controlled by planning ministries using charts of accounts differing from that used by finance ministries, add additional challenges in evaluating the fiscal position.

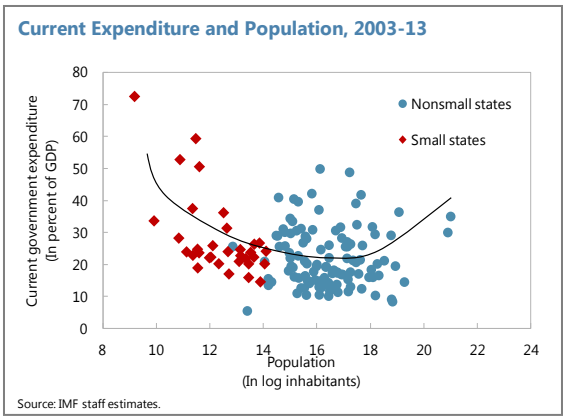
4. Strengthening fiscal frameworks by isolating the budget from revenue volatility and shielding public spending (especially capital) could help increase small states' resilience to shocks and boost their potential growth. This means using fiscal anchors to smooth the volatility of revenue and capital expenditure over the business cycle and creating policy space for spending on infrastructure, health, and education. It also means strengthening the medium-term orientation of fiscal policy as fiscal policy should not be formulated on a year-by-year basis only. And improving the quality of public spending through public financial management reforms is key to supporting growth.

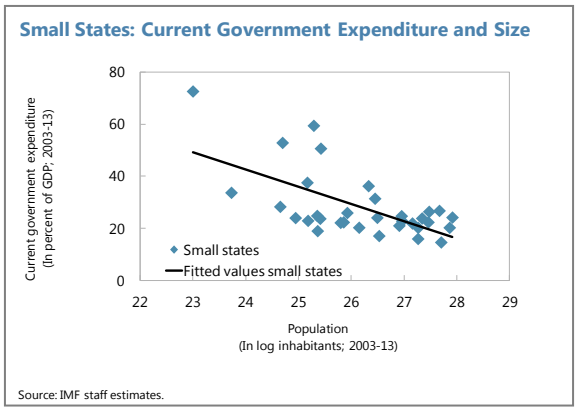
5. However, policies need to be tailored to the special challenges of small states. The design of fiscal anchors should be country-specific and kept simple. Medium-term fiscal estimates could focus only on main aggregates to facilitate the adoption of a multi-year budget framework. Using such a framework could also help—from a political economy point of view—contain spending pressure, particularly acute in small states given their development needs by better sequencing the implementation of capital projects.

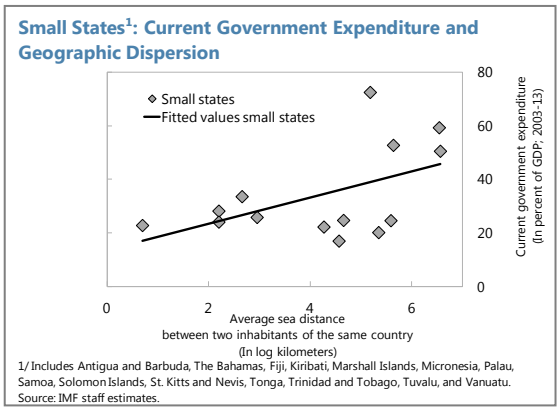
B. Improving the Mix of Public Spending

6. Current spending rigidity is a key issue in small states. It results from the large share of current spending in GDP relative to other countries. In providing public services, small states face higher per-capita government costs relative to other groups. This is because of the indivisibility of public goods and diseconomies of scale since broad public services must be provided despite small populations. Indeed, the relationship between the size of the country and current spending is U-shaped. Distance from key markets also raises import transport costs. These effects are worsened in microstates. Pacific Islands' challenges are also compounded by their extreme remoteness and large dispersion. These characteristics lead to an inverse relationship between the size of the country and current government spending.



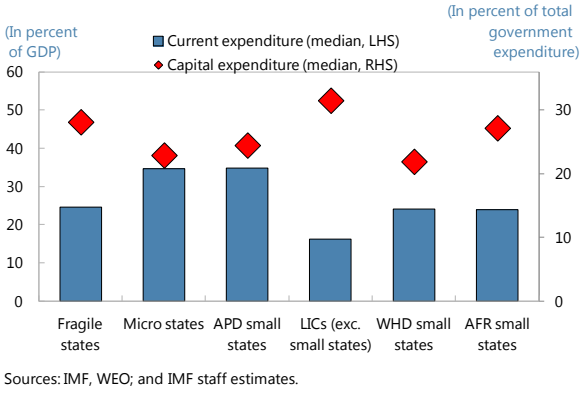


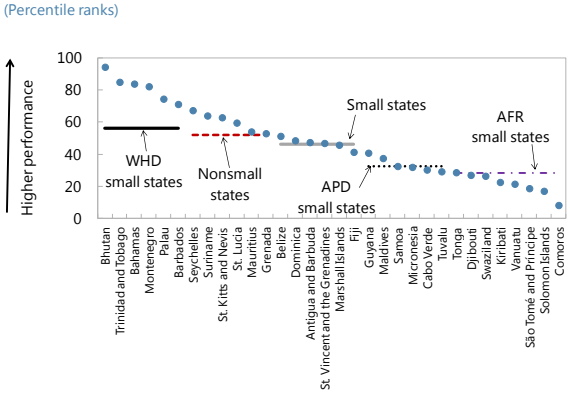




7. The spending mix is tilted toward current spending, despite infrastructure bottlenecks (Figure 1) and this could impede higher real GDP per capita growth. This under-investment impedes sustainable growth. Despite large development and infrastructure gaps over the last ten years, capital spending in the small states accounted for less than 20 percent of government spending—well below the average of low-income countries which is 32 percent of government spending. An exception is Cabo Verde which in the past decade embarked on a large investment program, at the cost of recurrent spending.

Figure 1. Small States: Spending Mix and Infrastructure Gap



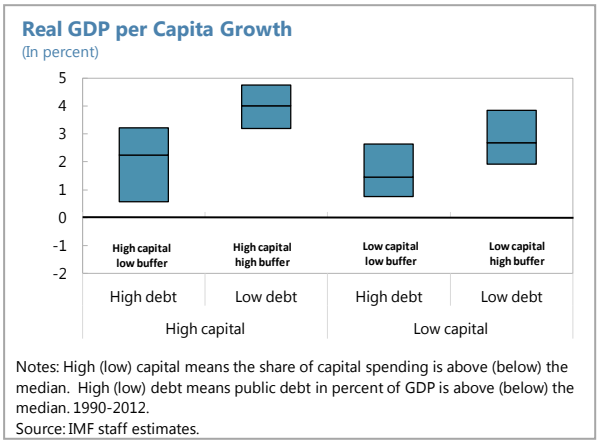


Sources: World Bank, WDI; and IMF staff estimates.

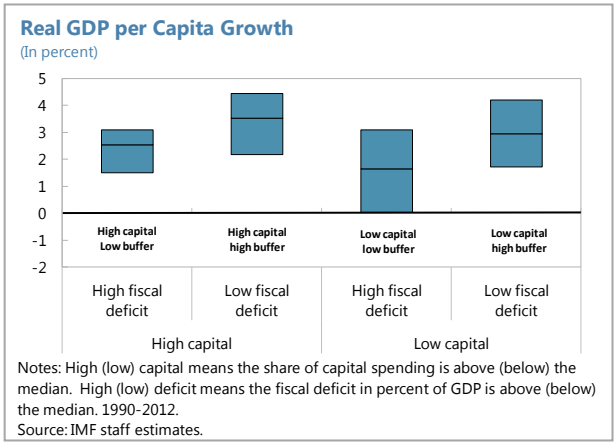
8. The composition of public spending matters in determining the impact of fiscal policy on growth in small states. Econometric results suggest that the higher the share of public investment for a given amount of public spending, the higher the per-capita growth (Appendix 1, Table 1). Moreover, the impact of capital spending on growth is stronger in small states than in other country groups. The effect is even stronger in Asia and Pacific small states, consistent with their large development needs, both in terms of capital and human infrastructure. Staff analysis also suggests that increasing the share of capital investment will boost per-capita growth but expanding the deficit and increasing public debt after a certain threshold do not support growth. The threshold derived within the model, after which debt negatively affects growth, is 30 percent of GDP for the Asia and Pacific small states—well below the 50 percent threshold that applies to the full sample. This calls for

building buffers (keeping the debt at manageable levels and having low fiscal deficits) and tilting the composition of spending toward capital outlays.

9. Staff statistical analysis presented below suggests that building buffers (i.e., keeping deficits or debt low) is good for growth, even more so when spending is tilted toward capital investment. Higher capital spending is good for growth but less so when it expands deficits too much and raises debt unduly. This calls for preserving fiscal space for growth-enhancing investment, including infrastructure spending.



Notes: High (low) capital means the share of capital spending is above (below) the median. High (low) debt means public debt in percent of GDP is above (below) the median. 1990-2012.
Source: IMF staff estimates.



Notes: High (low) capital means the share of capital spending is above (below) the median. High (low) deficit means the fiscal deficit in percent of GDP is above (below) the median. 1990-2012.
Source: IMF staff estimates.

10. Additional staff findings based on an event analysis show that in small states, government spending expansion led by capital spending results in higher real GDP per capita and lower public-debt-to-GDP ratios than do expansions led by current spending. In the small states, government spending expansions driven by capital lead to a minimum increment in public-debt-to-GDP ratios (about 2 percent), while during government expansions led by current spending, the public-debt-to-GDP soars by about 10 percentage points of GDP. The impact on growth of government expansion led by capital is also much higher during and after the episode than the impact on growth led by increased current spending.[2]However, one important caveat is that event analysis does not determine causality. This is because it does not control for the endogeneity of the variables and should therefore not be interpreted as indicating a causality relationship among them. The endogeneity issues are solved within the econometric analysis presented in Appendix I, Table 1 by using the generalized method of moments (GMM).[3] These results are in line with a recent IMF World Economic Outlook (WEO) analysis (IMF, 2014g) which found that public investment raises output in a wide range of countries. However, relative to the WEO, this chapter finds that for small states the

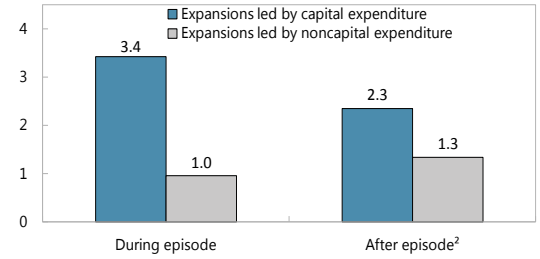
[2] Specifically an episode of expenditure expansion is defined as an increment in the government expenditure-to-GDP for a least two consecutive years. Government expansion is assumed led by capital expenditure if capital expenditure explains at least ⅔ of the government expenditure growth.

[3] On the impact of public spending policies on growth, the ongoing debate shows that the growth dividend of public capital spending also hinges on the return of investment (see Box 1), the sources of financing (Gemmell and others, 2012; and Romp, and de Haan, 2007), and the quality of the investment processes in terms of project selection and implementation (Gupta and others, 2014).

impact of public investment on real GDP growth is somewhat lower than for larger states. This could be due to lower fiscal multipliers in small open economies whose capital inputs are mainly imported as well as weaker PFM frameworks that could prevent efficient public investment.

Small States: Real GDP per Capita during Episodes of Government Expenditure Expansion[1]

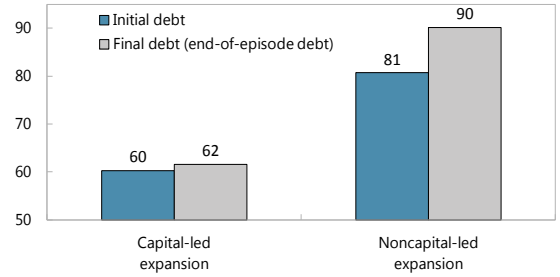
(Year-on-year percent change)



1/ Includes only public expenditure episodes that resulted in higher fiscal deficits. 1990-2012.
2/ Three-year average after the episode.
Source: IMF staff estimates.

Small States: Public Debt during Episodes of Government Expenditure Expansion[1]

(In percent of GDP)

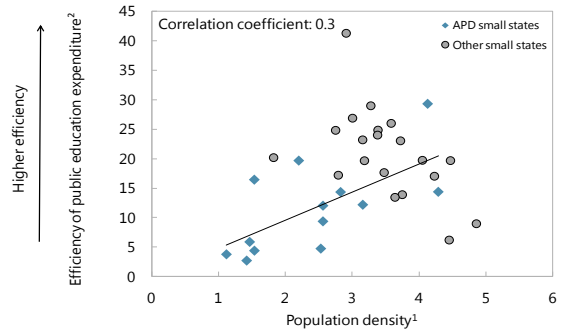


1/ Includes only public expenditure episodes that resulted in higher fiscal deficits. 1990-2012.
Source: IMF staff estimates.

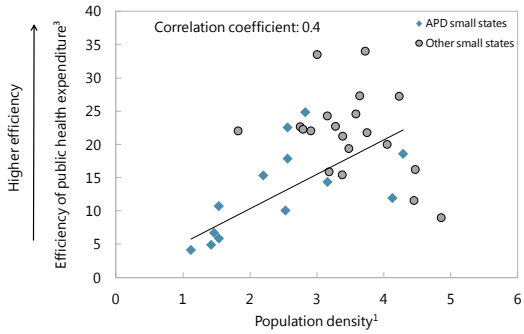
11. Public spending efficiency in small Pacific states is lower than in other small developing states (Figure 2). In the Pacific Islands, a large share of government spending (combining both current and capital) is allocated to health and education, relative to other small states, consistent with these states' large development needs (Figure 3). However, relatively poor outcomes in terms of human development indicators can be explained by the high cost of providing these services in small remote islands. By looking at the relation between population dispersion and efficiency in public expenditure (proxied by the ratio between education and health outcomes and the share of health and education spending as a percent of GDP), we find a positive relationship between population density and efficiency indicators in public expenditure (Figure 2). High population dispersion is associated with lower efficiency education and health expenditure (i.e., positive slopes) with a correlation of 0.3–0.4. While remoteness and dispersion matter, recent analysis (Haque and others, 2014) points to the need to improve the quality of public spending by accelerating public financial management reforms.

Figure 2. Measures of Efficiency of Public Spending and Population Dispersion

Efficiency of Public Education Expenditure



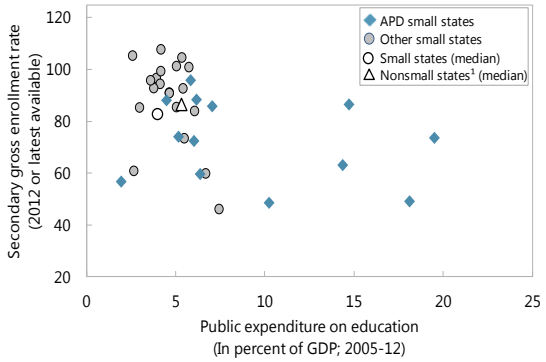
Efficiency of Public Heath Expenditure



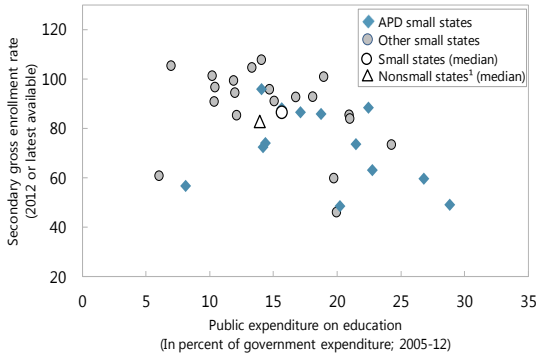
[1] Density computed as inhabitants per square kilometers. The variable was rescaled by taking log of the density multiplied by 1,000. Efficiency measured as secondary enrollment rate divided by public education expenditure-to-GDP ratio. Efficiency measured as life expectancy divided by public health expenditure-to-GDP ratio, 1990-2012.
Source: IMF staff estimates.

Figure 3. Health, Education Expenditure, and Selected Human Development Indicators

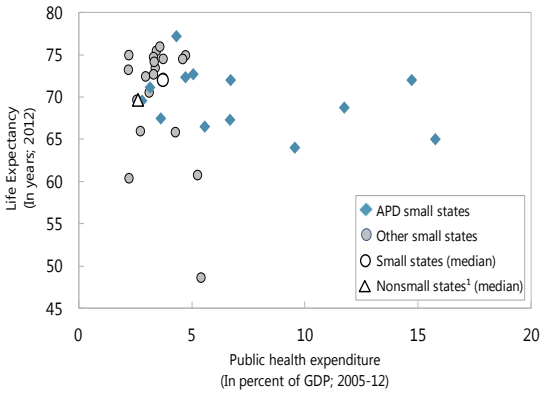
Public Expenditure on Education and Secondary Enrollment



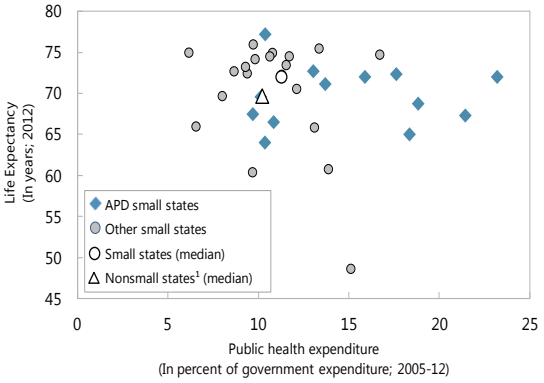
Public Expenditure on Education and Secondary Enrollment



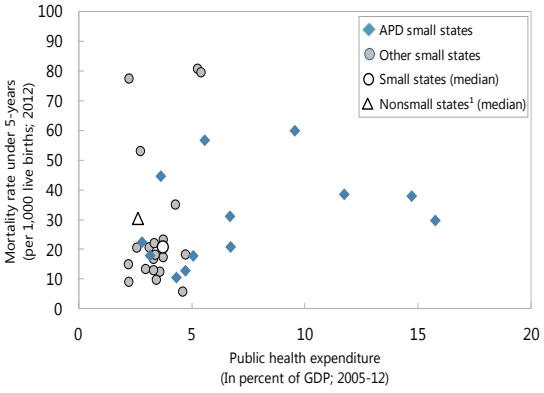
Life Expectancy and Public Health Expenditure



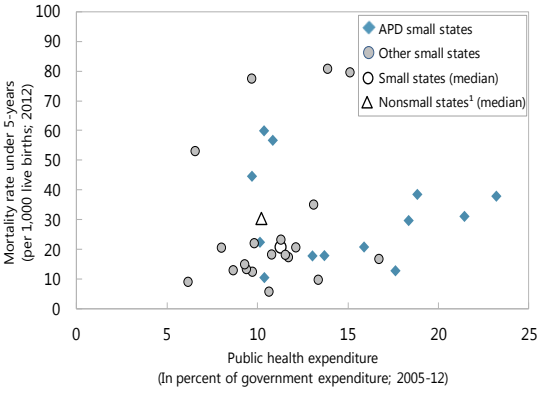
Life Expectancy and Public Health Expenditure



Mortality Under 5-years and Public Health Expenditure



Mortality Under 5-years and Public Health Expenditure



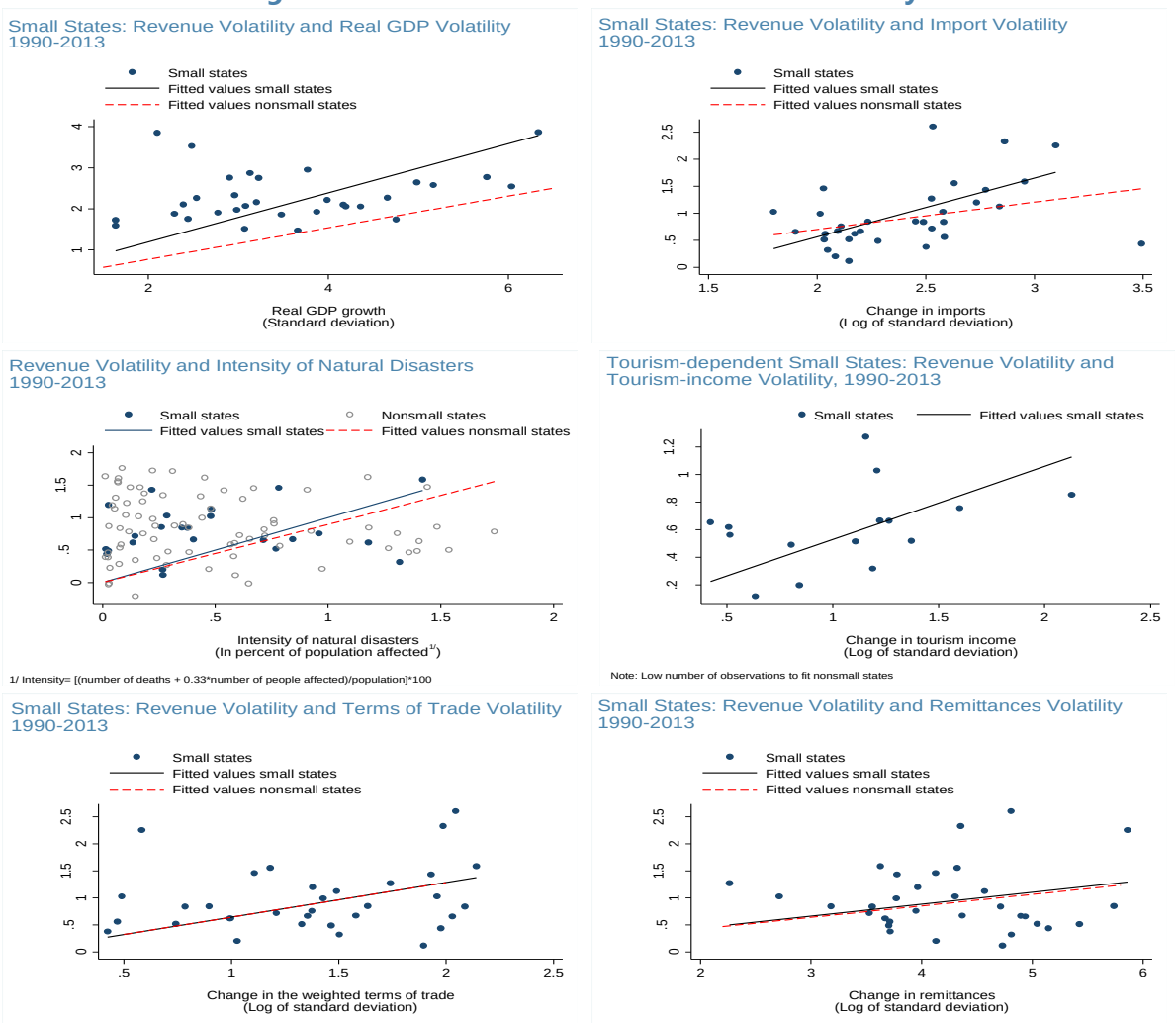
[1] Excludes advanced economies.

Sources: World Bank, WDI; and IMF staff estimates.

C. Coping with Revenue Volatility

12. Revenue volatility in small states is larger than in developing non- small states. The revenue base is narrow and is subject to several exogenous shocks. The volatility in revenue is expected to continue due to the recent large drop in oil prices.

Figure 4. Small States: Sources of Revenue Volatility[1]



[1] Revenue excludes grants. Developing non- small states are defined as developing countries excl small states.
Sources: IMF, WEO; and IMF staff estimates.

13. The sources of volatility vary across small states and depend on cyclical and non-cyclical factors (Figures 4 and 5, and Appendix I, Table 2). On average, revenue shows strong pro-cyclicality, especially in net commodity importers. Revenue volatility in small states also owes to terms-of-trade shocks attributable to a lack of diversification and narrow production bases. The elasticity of revenue to terms of trade, after controlling for GDP, is much higher in resource-rich small states than in other comparators. Revenue in small states also depends on their vulnerability to natural disasters. Staff analysis suggests that a natural disaster that affects 1 percent of the population causes a drop in real

revenue of 0.2 percentage point. Further analysis of the small states of the Pacific points to a contraction in tax revenue of 0.2 percentage point of GDP in the year of the disaster, followed by a revenue rebound in the following year (Appendix I, Figure 1). After controlling for GDP, the volatility of trade flows (including tourism) and of remittances also affects revenue volatility. In Asia and Pacific small states, most of the volatility is also caused by fishing license fees, which are independent of the economic cycle.

14. The degree of revenue volatility differs across small states, with fragile states, commodity exporters, and microstates affected the most. The volatility of tax revenue is highest among most resource-rich countries (Solomon Islands, Trinidad and Tobago, Guyana, and Suriname) as a result of commodity price shocks as well as uncertainty regarding the size and exhaustibility of resources. The volatility of non-tax revenues is extremely high, especially in APD micro states that rely on fishing license fees (e.g., Kiribati and Tuvalu—where these fees represent about 50 percent of revenues) and in such resource-rich countries as Timor-Leste, Sao Tome and Principe, and Bhutan, owing to the volatility of royalties associated with natural resources.

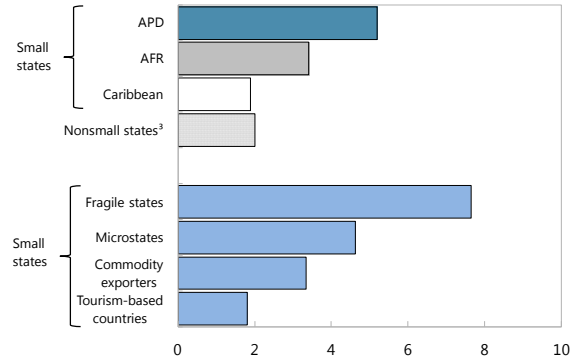
15. The volatility of revenue is a potential source of vulnerability. High revenue volatility may lead to significant output volatility and undermine overall fiscal performance in the absence of a stabilization fund (IMF, 2012).

Addressing Procyclical Fiscal Policy

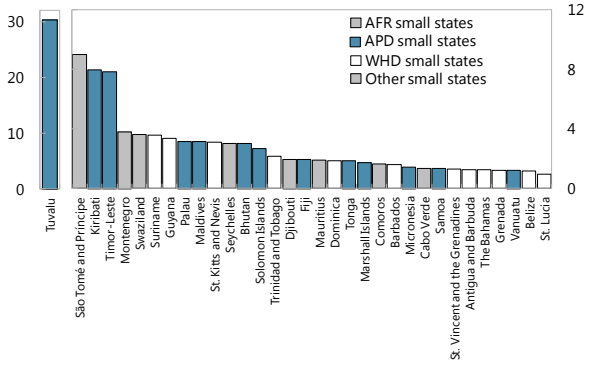
16. The combination of revenue volatility and current spending rigidities, compounded by small states' low access to finance, has prevented expenditure smoothing over the business cycle and has thus fostered fiscal pro-cyclicality (i.e., namely spending went up together with revenues during upturns and vice versa during recessions)—Figure 6. The volatility of revenue has generally been translated into spending volatility, especially capital spending. Staff analysis suggests that revenue shortages have resulted in cuts to capital spending. Econometric results also confirm the pro-cyclicality of capital spending (Appendix 1, Table 3).

Figure 5. Small States: Revenue Volatility Across Different Groups

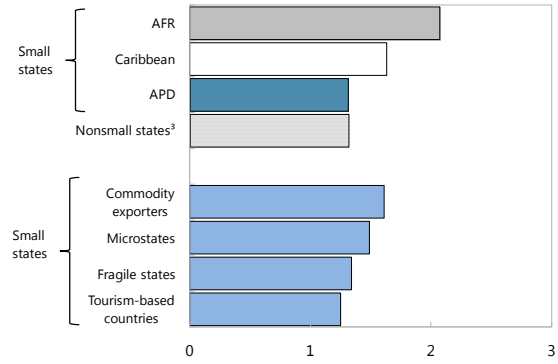
Volatility of Revenue[1,2]
(Standard deviation of detrended revenue-to-GDP ratio; 1990-2013)



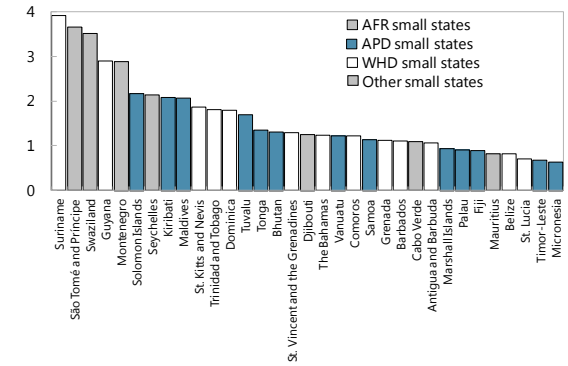
Volatility of Revenue[1,2]
(Standard deviation of detrended revenue-to-GDP ratio; 1990-2013)



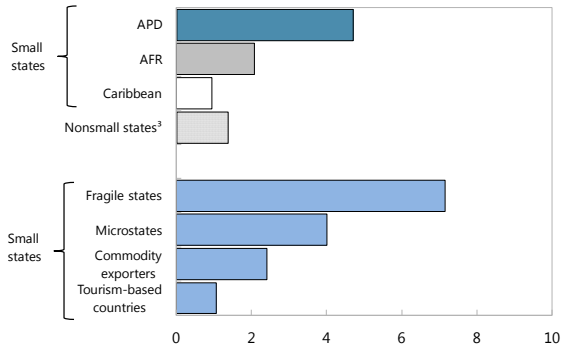
Volatility of Tax Revenue[1]
(Standard deviation of detrended tax revenue-to-GDP ratio; 1990-2013)



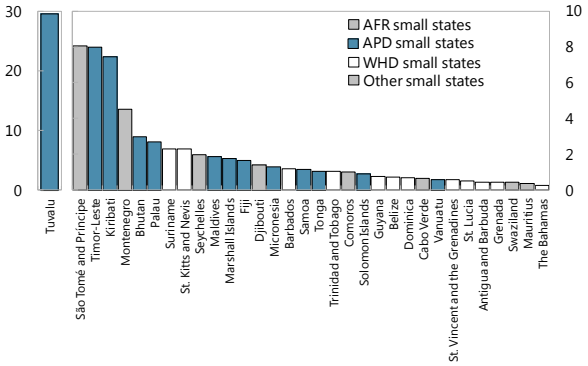
Volatility of Tax Revenue[1]
(Standard deviation of detrened tax revenue-to-GDP ratio; 1990-2013)



Volatility of Nontax Revenue[1,2]
(Standard deviation of detrended nontax revenue-to-GDP ratio; 1990-2013)



Volatility of Nontax Revenue[1,2]
(Standard deviation of detreneded nontax revenue-to-GDP ratio; 1990-2013)

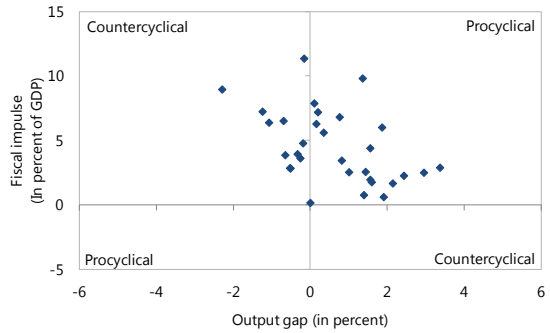


[1] Volatility after excluding time trend in the underlying ratios to remove structural factors. 2/ Excluding grants. 3/ Excluding advanced economies.

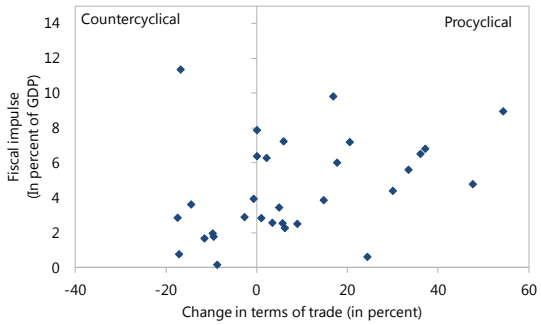
Sources: IMF, WEO; and IMF staff estimates.

Figure 6. Small States: Procyclical Bias in Fiscal Policy

Fiscal Impulse and Economic Cycle, 2005-12

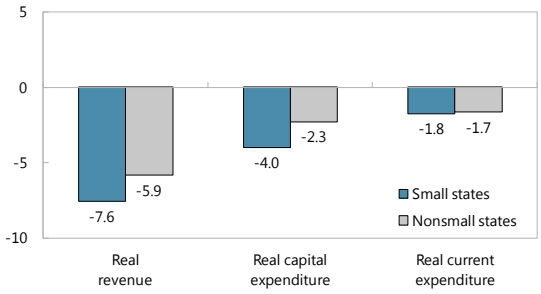


Fiscal Impulse and Terms of Trade, 2005-12



Episodes of Revenue Drops: Impact on Expenditure[1]

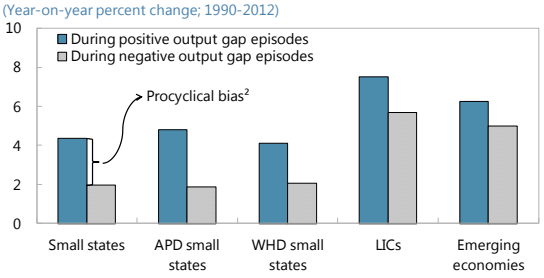
(Year-on-year percent change; 1990-2012)



1/ Bars show the change in the variables when revenue drops by at least 2 percent of GDP after removing the cyclical impact. All variables are corrected for GDP cycle.

Real Government Expenditure During Positive and Negative Output Gap Episodes[1]

(Year-on-year percent change; 1990-2012)

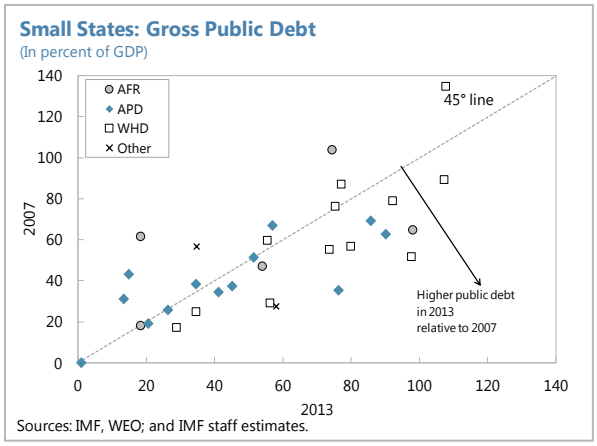


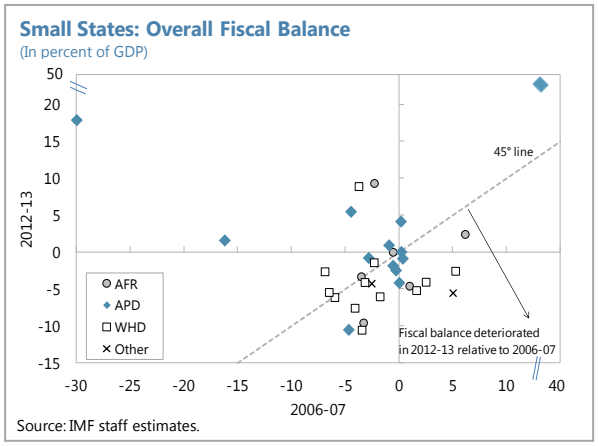
1/ Primary government spending.
2/ The procyclical bias is measured by the difference between the bars within each group. For each country output gaps are estimated using HP filters.

Sources: IMF, WEO; and IMF staff estimates.

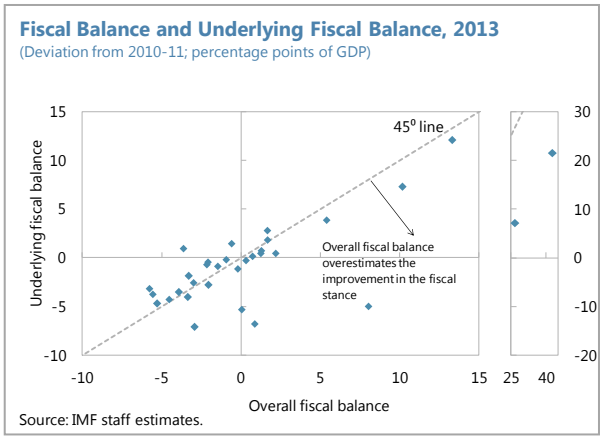
Building Fiscal Buffers to Enhance Resilience: The Role of Fiscal Anchors

17. Policies that manage revenue volatility and avoid procyclical fiscal bias could foster resilience in small states. Given small states' vulnerability to shocks, enhancing resilience requires building adequate fiscal buffers for countercyclical support during rainy days and creating policy space for spending on infrastructure to boost potential output. Indeed, some small states have made progress in rebuilding fiscal buffers after the 2008–09 crises, but more than half still have less comfortable buffers (higher debt and lower fiscal balances) than before the crisis.





18. Because of revenue volatility, small states' headline fiscal balances do not always reflect accurately the underlyling fiscal position. The improvement in the fiscal position of small states, defined by the change in the underlying fiscal balance (see definition used below), appears to be smaller than the change in the overall balance suggests in a quarter of the small states.



19. Strengthening fiscal frameworks by using fiscal anchors to insulate the budget from revenue volatility is key. A country-specific fiscal anchor could help illustrate that fiscal policy reflects both short-term cyclical and medium-term sustainability goals. It will also help properly assess a country's underlying fiscal position, which is sometimes masked by headline fiscal balances. Stronger fiscal frameworks will avoid fiscal pro-cyclicality by saving windfall revenue during an "up" cycle and vice versa. The use of a fiscal anchor to smooth spending over the cycle would also go hand in hand with strengthening the medium-term orientation of fiscal policy, replacing the year-by-year formulation based on volatile and uncertain revenue.

20. The design of fiscal frameworks by using anchors that help manage revenue volatility and ensure debt sustainability in small states should be kept simple. Moreover a fiscal rule framework should set a target on both fiscal anchor and an operational target. While the former is the final objective to preserve fiscal sustainability, the latter is an intermediate target under the direct control of the governments with a close link to the debt dynamics. As the final objective of the framework is to preserve fiscal sustainability, a natural anchor for expectations is the debt ratio, which creates an upper limit to repeated (cumulative) fiscal slippages. In addition to the anchor, the framework should also include an operational target, which would be under the direct control of governments, while also having a close link to debt dynamics.

21. As reported in IMF 2014f, the choice of the operational target is more difficult and controversial. Public debt cannot play this role, as factors other than policy decisions affect public

debt changes, including below-the-line operations and valuation effects. Available options include a revenue rule, an expenditure rule, a nominal balance, a structural balance target—in level or in first difference—or a combination of them". De facto, capacity constraints and, importantly, structural changes in the economy imply that meaningful cyclically-adjusted balances are difficult to calculate. In this context not only the output gap is difficult to estimate, but it is erratic in nature. This is because it depends less on the dynamics of the domestic economies and more on external and unpredictable developments (e.g., trends in activity in trade partners, terms of trade and commodity prices, including the recent drop in oil prices) given the undiversified export bases. The underlying fiscal balance could be designed using a *normal* level of revenue (i.e., backward-looking averages) or for commodity exporters by removing the direct and indirect effect of commodity revenue.[4]

22. Fiscal anchors are not a panacea if not accompanied by a more broadly-based fiscal reform strategy. Political economy considerations suggest that moving away from a budget balance rule without strengthening fiscal institutions could create a fiscal deficit bias. While a country will find it easy to run a deficit during downturns, building fiscal buffers during upturns by saving revenue windfalls could be difficult owing to political pressures to spend in the face of large development and infrastructure needs. Reforms of fiscal frameworks need to be supported by appropriate fiscal institutions, including those that facilitate the formulation of long-term revenue forecasts, the implementation of quality public investment projects, and the sound management of rainy-day funds.

D. Policy Reform Options

23. Small states need to strengthen their fiscal frameworks to sustain economic growth. This requires achieving the appropriate balance between building fiscal buffers for rainy days and providing space for investment in infrastructure and human capital. Strengthening the fiscal framework is important for growth because it will:

- allow enhanced resilience by minimizing fiscal risks, which are particularly high in microstates, and arise from volatile revenue and budget-spending rigidities;
- create fiscal space for growth-enhancing and poverty-reducing investment, including infrastructure spending;
- build fiscal buffers to enhance macroeconomic management and use counter-cyclical spending during more difficult times; and
- allow nonrenewable resource revenue in resource-rich small states to be used wisely and ensure long-term fiscal sustainability.

[4] The indirect component of resource revenue is estimated by running a regression of the nonresource revenue on the resource revenue. This provides an estimation of the co-movements of the two components of revenues. The indirect effect of resource revenue is estimated by projecting the nonresource revenue based on the resource revenue.

24. But strengthening fiscal frameworks is particularly challenging in small states. This is because of their budget rigidities, extreme revenue volatility, spending procyclicality, and limited capacity.

25. Tackling these challenges thus requires a comprehensive macro and fiscal reform strategy, including spending and revenue reforms. This strategy should include several pillars:

- **Preserving strong fiscal fundamentals**. Over the cycle, deficits should be kept low, on average, to avoid accumulating rising debt burdens. As discussed in ¶9, low deficits and moderate debt burdens are correlated with stronger GDP growth.
- **Minimizing fiscal rigidity and lowering recurrent spending to create fiscal space for capital spending**. Typical sources of rigidities are high spending on public wages, large entitlement programs for civil servants, and revenues earmarked for large capital projects. Reforms of the wage bill, public servants' benefits, and revenue administration should thus be included in the fiscal package. Countries should also seek to deliver public goods and services at the lowest possible recurrent cost, avoiding the use of public resources to support loss-making, inefficient public sector enterprises. To this end, exploring opportunities to outsource service delivery to the private sector, where possible, is warranted. This will create scope to finance growth-enhancing capital spending (see charts in ¶9).
- **Improving the spending mix toward investment in human and physical capital.** This will require spending reforms in the form of spending reviews and medium-term expenditure frameworks. Their goal should be to reallocate resources toward priority spending, especially infrastructure investment, including to climate-proof infrastructure, and strengthen health and education sectors. It will also improve the business environment and attract private investors from abroad.
- **Adopting budget and investment practices that can foster high returns on capital investments**. Since resources for capital spending will remain tight, countries need to adopt investment practices that maximize value-for-money. This will involve efforts to effectively identify, prioritize, and implement public investment projects. At the same time, strengthening the medium-term orientation of fiscal policy by adopting a multi-year budget framework can help clarify which projects should be financed, and over what timeframe. Developing a multiyear budget framework should also help, from a political economy point of view, deal with spending pressures arising from large development needs. The multiyear budget framework could help build consensus on the appropriate sequencing of development projects and better calibrate the pace of development spending--taking into account capacity constraints, which is a pressing issue in small states.
- **Identifying resources to help weather revenue volatility**. These could take the form of contingency funds within the budget, sovereign wealth funds for resource-rich economies, and/or insurance policies. Contingency funds can also be used to manage shocks. Natural disaster funds or general budget contingency reserves can be used to save resources to deal with natural disasters. From a public financial management perspective, access to these funds and reporting on

their use should be clearly defined and budget allocations, transparent. Solomon Islands' National Transport Fund is a case in point.

- **Using fiscal anchors to help smooth spending and isolate the budget from revenue volatility**. Where resources can be identified (see above), the budget should allow for spending to be smoothed in the face of revenue shocks. In commodity-resource-rich countries, targeting the non-commodity fiscal balance and using sovereign wealth funds to enhance the management of natural resources will also ensure the long-term sustainable use of exhaustible resources. Rather than focusing on the current fiscal deficit, the budget should provide for spending in line with underlying revenues. The caveat is that countries will need to distinguish between temporary and more sustained revenue shocks. In the latter case, there may be no alternative to adjusting spending, and the focus should be on the pace of adjustment and on achieving a balanced adjustment between recurrent and capital spending.
- **Strengthening domestic revenue mobilization to support the rebuilding of policy buffers.** Mobilizing revenues by bolstering administration capacity and reforming the domestic tax system is also needed y to increase fiscal space to meet critical development spending needs while improving the business environment. In practice these reforms need to be tailored according to country circumstances. For example, realistically, enforcing customs compliance in very large and scattered territories such as many Pacific islands is extremely challenging and costly. There is a need to focus on large taxpayers who account for 70-80 percent of revenue by creating a special unit to deal with them in the tax administration office while using a simplified tax system and simplified compliance rules for medium-sized and small taxpayers. Developing a proper mix of income and consumption taxation (VAT and sales tax) would raise additional revenues.[5] Lower oil prices also offer an opportunity to reform energy subsidies and taxes in both oil exporters and importers. In small states oil importers, the saving from the removal of energy subsidies should be used to strengthen fiscal buffers or to increase public infrastructure if conditions allow.
- **Enhancing regional cooperation on nontax revenue to increase revenue mobilization.** In the small states of the Pacific in order to compensate for geographical isolation and dispersion and create a more attractive business environment for foreign investors, regional economic, institutional, and technological networks need to be strengthened. Key sectors are fisheries and information and communication technology. Improvement of fishing sector productivity could stem from the adoption of regional agreements and cooperative sub-regional measures to strengthen the bargaining power of license-issuing countries. The Nauru agreement, a regional agreement on fisheries among eight Pacific island countries (Kiribati, the Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Solomon Islands, and Tuvalu), represents a success story of how regional cooperation could mobilize more revenues (see IMF, 2014e).

26. These fiscal reforms need to be accompanied by measures to strengthen fiscal institutions and fiscal governance. The reform measures should aim at improving transparency (by enhancing budget planning, internal auditing on the use of public funds, monitoring, reporting, and

[5] Kiribati has experienced a significant improvement in tax collection with the introduction of a withholding tax at the source in March 2009. It also introduced the VAT in 2014.

evaluation systems to improve accountability), cash management, and project management capacity. Developing institutional frameworks will help better identify, quantify, monitor, and mitigate fiscal risks. Finally, fiscal frameworks should be integrated with a debt management strategy to manage cash flows effectively and reduce sovereign financing risks. In this regard, a successful case is Solomon Islands that introduced in May 2012 a strategy to strengthen debt management and debt sustainability, superseding the Honiara Club Agreement that prevented the country from contracting external borrowing.

27. The IMF has been assisting small states through capacity development in strenghtening fiscal frameworks. This involved both the work of regional technical assistance centers (RTACs) by providing technical assistance and training as well as headquarters. In this respect, the work by the Fiscal Affairs Department (FAD) could be further leveraged to reduce the pro-cyclicality of fiscal policy (e.g., appropriate design of fiscal rules), create fiscal space (e.g., energy subsidies reforms, and revenue enhancing measures), and strengthen revenue and public financial management systems.

Box 1. Pacific Islands: Quantifying the Opportunity Cost of Building Fiscal Buffers

Policymakers in small developing states face a key fiscal policy choice: building fiscal buffers to enhance resilience to shocks—including natural disasters—or funding development spending. When a government expands fiscal space by accumulating public savings instead of financing spending for development needs, it forgoes the rate of return on the associated public investment. The opportunity cost of building fiscal buffers can be used to assess the optimal mix between building fiscal space and capital spending.

Staff estimated the social return of public investment assuming that it equals the marginal productivity of capital. Following Caselli (2007), IMF staff calibrated a Cobb-Douglas production function for a group of Pacific Island economies using data on output and investment from the Penn World Table and WEO data for the period 1970–2010.

The results suggest that several Pacific Islands enjoy a high rate of return to capital. Thus, they would benefit from capital spending, which is consistent with these countries' large infrastructure needs (proxied by the Human Development Index). The social return to capital in the Pacific Islands is also in line with the return in low-income countries.

Staff also estimated two measures of fiscal space: one based on the IMF/WBG debt sustainability analysis (i.e., a fiscal liquidity indicator is derived by measuring the average gap over the medium term between the debt-service-to-revenue ratio of public and publicly guaranteed debt and an indicative threshold after which the debt becomes unsustainable), and a second one calculated as the difference between the actual debt, relative to GDP, and an estimated sustainable debt (á la Ostry) implied by the each country's historical record of fiscal adjustment.

The charts shed light on the Pacific Islands' room for fiscal maneuver. A plot of the estimated cost of building buffers against the Human Development Index (HDI)—a proxy for infrastructure needs—suggests that some Pacific Islands stand to gain the most from increasing the share of their budget devoted to capital spending. When plotting the three different measures of fiscal space against the HDI, despite their being different, the measures provide similar ordering in terms of countries across methologies regarding the size of the fiscal space or the opprtunity costs of building buffers.

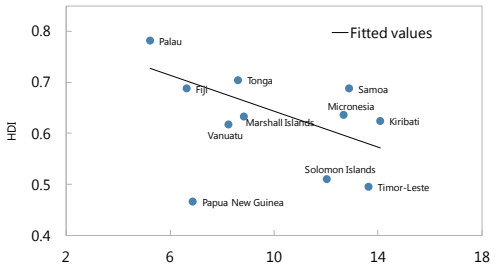
Pacific Small States: Opportunity Cost of Building Fiscal Buffers

Country	Social Return of Capital[1/]	Average Interest Rate on Public Debt	Social Return of Capital Net of Interest Rate Payments
	(a)	(b)	(c)=(a)–(b)
Fiji	13.1	7.2	5.9
Kiribati	14.8	3.2	11.6
Marshall Islands	10.0	1.4	8.6
Micronesia	13.0	2.7	10.2
Palau	6.2	3.0	3.2
Samoa	13.9	3.7	10.2
Solomon Islands	13.9	1.5	12.4
Tonga	10.3	2.2	8.1
Vanuatu	11.0	3.6	7.4
PICs	12.2	3.1	9.1
Memorandum:			
LICs	14.2	...	...

1/ The share of capital in income was assumed at 0.3 and the depreciation was assumed at 0.07.

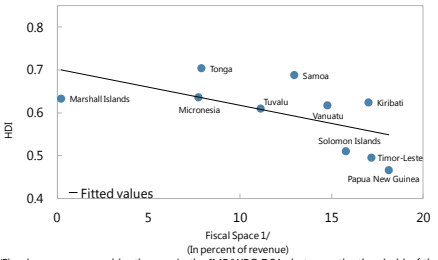
Source: IMF staff estimates.

Pacific Islands: Opportunity Cost of Building Fiscal Buffers and Human Development Index



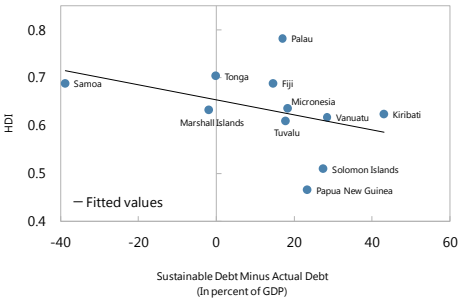
Source: IMF staff estimates.

Pacific Islands: Fiscal Space and Human Development Index



1/Fiscal space measured by the gap in the IMF/WBG DSAs between the threshold of the public and publicly guaranteed debt external debt service-revenue ratio and the forecasted baseline path of the same ratio.
Source: IMF staff estimates.

Pacific Islands: Fiscal Distress and Human Development Index



Source: IMF staff estimates.

Box 2. From Best Practice to Best Fit: Lessons from Small States

Small states face extra challenges relative to other comparators in strenghtening fiscal framworks and achieving the right mix of public spending due to political economy consideration, capacity constraints, vulnerability to shocks, and data issues. However, many of them have achieved progress in handling the challenges described in this chapter. Some examples are reported below:

- **Mauritius**: The new PFM Act, which is yet to be adopted, look to alleviate some of the budget execution difficulties that have led to create the special funds. In addition, the new government has announced the intention to eliminate the special funds and incorporate the related operations fully in the budget. Regarding the fiscal rule, the authorities have adopted a rather liberal approach on its application whereby the (in principle legally binding) debt target could be pushed out if it becomes difficult to achieve.
- **Jamaica:**[1] Its rule-based fiscal framework has two distinct, but complementary, components:
  Macro-fiscal or quantitative: The overall fiscal balance path is calibrated over a trailing three-year window to achieve a debt ceiling of 60 percent of GDP at the end of March 2026. The path is based on projections of, for example, real GDP growth, inflation, and the interest rate. This component will kick in only after the IMF Extended Fund Facility Arrangement, but the fiscal targets under the program are aimed at achieving the same policy goal and can be seen as a *de facto* fiscal rule. An exceptionally large adverse shock could require a temporary deviation from the debt reduction path, and for this purpose an escape clause was built into the fiscal rule. The escape clause is limited to natural disasters, a severe economic contraction, banking or financial crises, and a state of emergency; it may only be activated if the estimated fiscal impact of such shocks exceeds 1½ percent of GDP.
  Institutional: 1) Strengthened budgetary procedures-Budgetary procedures have been strengthened, and in 2015 the budget will be presented to parliament before the start of the fiscal year for the first time in many years; 2) Exclusion criteria-The fiscal rule covers the public sector at large, except for the Bank of Jamaica and public entities deemed commercial; 3) Bolstering capacity at the Office of the Auditor General (OAG)-The Auditor General is responsible for monitoring compliance with the fiscal rule; thus, the office must be appropriately staffed to fulfill its expanded mandate; and 4) Sanctions regimes for infringement of the rule-The authorities have initiated dialogue with the IMF's Legal Department on the design of an enforcement mechanism.
- **Seychelles**: The country is the top performer in Africa for health, nutrition and population outcomes, and health indicators compare favorably with some OECD countries, reflecting longstanding government commitment to providing universal free basic healthcare and access to education, while health spending accounts for only around 3½ percent of GDP.
- **Solomon Islands**: The new PFM Act passed in December 2013 and the accompanying PFM roadmap (2014-17) provide a coherent platform to anchor fiscal reforms, in particular by improving the quality of spending and enhancing budget planning.
- **Swaziland**: During the 2014 Article IV consultation, the authorities agreed with anchoring the fiscal policy with a medium-term international reserve target of 5–7 months of imports, while exploring the options of a fiscal rule or a stabilization fund to help address the high volatility of fiscal revenues.
- **Timor-Leste:** The estimated sustainable income (ESI) rule (Annex 1) has worked well to minimize the effects of revenue volatility. It has also allowed Timor-Leste's Petroleum Fund to grow to be equivalent to three times GDP.

[1] Prepared by WHD.

Appendix I. Econometric Analysis

1. Determinants of real per capita GDP growth (Table 1). To assess the effects of fiscal policy on per capita output, we use dynamic panel regressions where real per capita GDP growth (i.e., the dependent variable) is regressed on a fiscal balance indicator, on the share of government capital spending over total public spending, and on the ratio of public debt as in Baldacci and others (2004). The model controls for external conditions by including an indicator of trade openness. The signs and the significance of the coefficients of the model suggest that for a given amount of public spending, expanding the share of capital investment helps boost per capita growth while expanding the deficit does not. The impact of capital spending on growth is stronger in Asia and Pacific small states than in other small states, consistent with their larger development needs. The model also suggests that there is a non-linear relationship between debt and growth in line with previous results (IMF, 2012a): while low levels of debt are good for growth, high levels are not.

Table 1. Determinants of Real Per Capita GDP Growth[1]

	APD small states	AFR small states	WHD small states	Small states	Emerging and developing [2]
Overall fiscal balance to GDP	0.201***	0.170*	0.185	0.164***	-0.0167
Ratio capital-total gov. expenditure	0.111***	0.122**	0.0753**	0.0820***	0.0305**
Debt to GDP (lagged)	0.250***	0.001	0.00520	0.00507	0.00276
Lag (debt-to-GDP ratio)^2	-0.002***	-0.0001	-0.0001	-0.0001	-0.0001*
Trade openness	0.0411***	0.0241**	0.00936	0.0199***	0.0418***
World GDP growth, in percent	0.561***	0.350	0.836***	0.633***	0.691***
Constant	-13.15***	-4.671*	-3.198*	-4.371***	-3.626***
Observations	212	88	213	532	1,437
Number of countries	13	6	12	33	104

[1] Panel regressions, 1990-2013 using the generalized method of moments (GMM) to correct for endogenity by instrumenting with lagged explanatory variables. Asterisks indicate p-values: *** p<0.01, ** p<0.05, * p<0.1

[2] Excludes small states.

2. Determinants of real revenue (Table 2). Separate dynamic panel regressions were run for different groups (small states, Pacific Island small states, LICs, emerging markets, resource-rich small states, and non-resource-rich small states) to identify the variables that explain real revenue. The dependent variable (real revenue) is regressed on GDP (and its lag), weighted terms of trade (and its lag), a variable on natural disasters, lagged real revenues and fishing license fees. Revenue shows strong procyclicality, especially in small states that are net commodity importers. And revenue procylicality is a source of revenue volatility. Coefficients on real GDP growth variables higher than 1 suggest revenue pro-cyclicality (i.e., revenue is growing faster than GDP during upturns and slower than GDP during downturns). For small states, the sum of the coefficients on real GDP growth (current period and one-period-lagged)—a proxy for cyclical components of revenues—is equal to 1.7. After controlling for GDP, revenue depends on terms-of-trade shocks, especially in resource-rich

small states. Natural disasters also heighten revenue volatility. Staff analysis suggests that a natural disaster that affects 1 percent of the population causes a drop in real revenue of 0.2 percentage point.

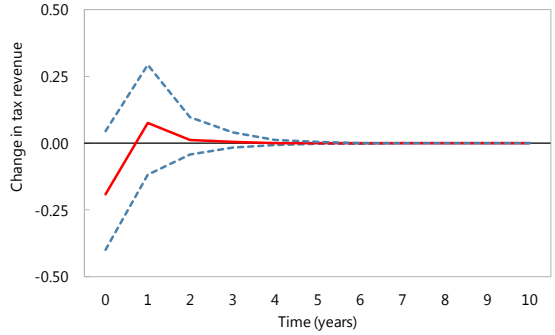
Table 2. Determinants of Real Revenue[1]
(Year-on-year percent change)

	Small states	Pacific island small states [2]	Low-income countries	Emerging markets	Resource-rich small states	Non-resource-rich small states
Real GDP growth	1.093***	1.672***	1.622***	1.41***	0.933***	1.249***
Real GDP growth (lagged)	0.607*	0.568	0.236	-0.124	0.512	0.556*
Weighted terms of trade growth	0.390**	0.659**	0.468***	0.821**	1.401**	0.120**
Weighted terms of trade growth (lagged)	0.227	0.352	0.130	-0.180	0.260	0.136
Intensity of natural disasters (lagged)	-0.248**	-0.429***	0.039	-0.189	-0.294	-0.239**
Real revenue growth (lagged)	-0.410	-0.375	-0.181	0.024	-0.237	-0.545
Fishing license fees		0.206***				
Constant	0.009	-1.667	-1.223	-0.895	2.498	-0.684
Observations	591	92	730	745	100	466
Number of countries	33	6	49	49	6	27

1/ Panel regressions, 1990-2013 using the generalized method of moments (GMM) to correct for endogenity by instrumenting with lagged explanatory variables. Combined coefficients higher than 1 on real GDP growth and lagged GDP growth imply revenue procyclicality. Asterisks indicate p-values:
*** p<0.01, ** p<0.05, * p<0.1.
2/ Includes countries dependent on fishing license fees.

3. Impact of natural disasters on tax revenue (Appendix I, Figure 1). Staff analysis using a panel VAR suggests that a natural disaster that affects 1 percent of the population in the small states of the Pacific leads to a contraction in tax revenue of 0.2 percentage point of GDP in the year of the disaster, followed by a revenue rebound the next year (Cabezon and others, 2015). The model focuses on the impact of natural disasters on real GDP and fiscal variables. The specification includes the following variables: natural disaster intensity, real GDP growth, change in total government expenditure as a percent of GDP, change in tax revenue as a percent of GDP, and change in the overall fiscal balance as a percent of GDP. The variable on natural disaster intensity is measured by the number of fatalities and others hurt by the disaster as a share of total population, in line with Fomby and others (2013).

Appendix I. Figure 1. Pacific Island Small States: Response of Tax Revenue to Natural Disasters
(In percentage points of GDP)



4. Degree of spending procyclicality (Table 3). This model assesses the degree of spending procyclicality (i.e., capital spending increasing during good times and declining during recessions). The change in real government spending is regressed on changes in real growth. The elasticity of

real current government spending is lower than 1, suggesting that current spending is not procyclical. The elasticity of capital is much larger than 1, suggesting fiscal procyclicality.

Table 3. Degree of Spending Procyclicality[1]

	Real current government expenditure (Year-on-year percent change)						Real capital government expenditure (Year-on-year percent change)					
	Small states	AFR small states	APD small states	WHD small states	Low-Income Countries	Emerging Markets	Small states	AFR small states	APD small states	WHD small states	Low-Income Countries	Emerging Markets
Real GDP Growth	0.523***	0.756	0.623**	0.223	0.633***	0.413***	2.346***	2.560	2.058**	2.412**	2.634***	1.476***
Constant	1.522**	0.683	0.922	2.528**	1.751	1.949**	-5.323**	-6.682	-6.921*	-3.474	-6.342	-2.120
Observations	679	126	264	253	830	1872	679	126	264	253	830	1872
Number of countries	33	6	13	12	44	101	33	6	13	12	44	101

[1] Panel regressions, 1990-2013.

Asterisks indicate p-values: *** p<0.01, ** p<0.05, * p<0.1

Spending is procyclical if the coefficient on real GDP growth is higher than 1.

Annex I. Fiscal Anchors in Small Developing States

Region	Country	Fiscal Anchor	Comment	Statutory Base	Stability Fund/Trust Fund
AFR	Cabo Verde	Net domestic borrowing limit at 3 percent of GDP. Short-term debt limit at 60 percent of GDP. Soft benchmark of domestic debt-to-GDP ratio at 25 percent.	The domestic borrowing limit is a rule in the budgetary law. The short-term debt limit is not binding; all external debt is long term, and domestic debt is generally about 25 percent of GDP. However, the current government has submitted a new budgetary law that proposes abrogating both rules.	Statutory	No fund
AFR	Comoros		Parliament approves overall expenditure ceiling and revenue targets, but these can be amended ex post.		No fund
AFR	Mauritius	Public debt-to-GDP ratio below 50 percent	Reach debt target by 2018.	Statutory	No fund
AFR	São Tomé and Príncipe	Domestic primary balance	Domestic tax and non-tax revenues minus current spending and domestically financed capital expenditure.	Political commitment	National Oil Account, where oil prospection bonuses are deposited allowing the government to use only up to 20 percent annually of the previous year's balance.
AFR	Seychelles	Debt target (debt-to-GDP ratio)	Target is to reduce the debt-to-GDP ratio below 50 percent by 2018.	Political commitment	No fund.
AFR	Swaziland	Domestic debt ceiling of 25 percent of GDP Public debt ceiling of 35 percent of GDP	The domestic debt ceiling is stipulated in a 1994 act, while the public debt ceiling will be part of debt regulations under the upcoming PFM bill.	Statutory	No fund (The authorities intend to carefully explore a fiscal rule or a stabilization fund with enhancing efforts to strengthen PFM or complete the groundwork).
APD	Bhutan	Expenditure ceiling	Meeting current expenditures and 15 percent of capital expenditure out of domestic revenues	Political commitment	No fund
APD	Fiji	Debt target of 45 percent of GDP in the medium term.	Indicative target announced but not followed.		No fund
APD	Kiribati	Expenditure ceiling	Expenditure ceiling set annually by the parliament in the annual budget act (Appropriation Act).		Revenue Equalization Reserve Fund (RERF): Established in 1956 and capitalized using phosphate mining proceeds before phosphate deposits were exhausted in 1979. Withdrawals from the RERF are for budget purposes only and are at discretion, provided they are consistent with the annual budget act.

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Region	Country	Fiscal Anchor	Comment	Statutory Base	Stability Fund/Trust Fund
APD	Maldives	Debt and deficit limits	Debt and deficit limits are established under a Fiscal Responsibility Law, but tare currently not met. Future amendments to the Law are likely, given fiscal slippage.	Statutory	No Fund
APD	Marshall Islands	NA	NA	International treaty	Compact Trust Fund: Set in 2004, funded by U.S. grants and Taiwan Province of China. Starting in 2024, income from revenue can be transferred to the government up to the average grant assistance in 2023. Disbursement from 2024.
APD	Micronesia	NA	NA	International treaty	Compact Trust Fund: Set in 2004 to contribute to long-term budgetary self-reliance. Funded by U.S. annual grants until 2023 and contributions from the government. Drawdown from 2024.
APD	Palau	Law states that the current government. Balance should not observe a deficit.	-	International treaty	Compact Trust Fund: Since 1994 to replace grants income. The government can withdraw US$5 million a year until 2013 and then increase gradually from US$5.25 million to US$13 million in 2023. From 2024 it can withdraw US$15 million a year. The money should be used for education, health, justice, and public safety.
APD	Samoa	Net public debt at less than 50 percent of GDP. Fiscal deficit at not more than 3½ percent of GDP.	The government aims to reduce public debt to 50 percent of GDP by 2019/20 and the fiscal deficit to 2 percent of GDP over the medium term.	Political commitment	No fund
APD	Solomon Islands	Budget balance rule.		Political commitment	Contingency fund
APD	Timor-Leste	Estimate Sustainable Income: 3 percent of total petroleum wealth (Petroleum Fund balance plus net present value of future revenues), with override.	Excess withdrawals (with parliamentary approval) have been used on a temporary basis to finance development projects.	Statutory (Petroleum Fund Law, 2005)	Petroleum Fund: Set up in 2005 with IMF advice to smooth oil revenue. It is funded with all oil revenue. Withdrawals are according to the ESI.
APD	Tonga	No specific fiscal anchor, but adopted three-year budget framework described in the budget statement since 2012.	-	Statutory (Public Finance Management Act 2002).	Tonga Trust Fund: Set in 1988 to reserve funds for exceptional circumstances and for future major development projects. However, assets were almost depleted to about US$3 million in 2002 owing to the absence of transparency and accountability of its management and operation.

Annex I. Fiscal Anchors in Small Developing States

Region	Country	Fiscal Anchor	Comment	Statutory Base	Stability Fund/Trust Fund
APD	Tuvalu	NA	NA	NA	Tuvalu Trust Fund: Set in 1987 to provide additional funding for budget support. Market value in excess of the maintained value, which is indexed to the Australian CPI, is transferred to the Consolidated Investment Fund (CIF) where finance ministry can withdraw at its discretion.
APD	Vanuatu	General government debt below 40 percent of GDP. Ex ante balanced budget.	The balanced budget refers to the government's operations excluding donors.		No fund
EUR	Montenegro	Debt and deficit limits	Maastricht criteria: General Government gross debt less than 60 percent of GDP; General Government overall deficit less than 3 percent of GDP, but enforcement mechanism is weak.	Statutory (Legislation, the fiscal rule was approved in 2014.)	No fund
WHD	Antigua and Barbuda	Debt target[1]		Political commitment	No fund
WHD	The Bahamas	Fiscal balance target/debt target	Target to reduce government debt to 58.5 percent of GDP by FY 2016/17.	Political commitment	No fund
WHD	Barbados	Central government balance target	Target to achieve the central government deficit of 6.6 percent of GDP in FY 2014/15 (excludes balance of public enterprises, which have incurred growing deficits and continue to pose large fiscal risks).	Political commitment	No fund
WHD	Belize	Fiscal balance target, debt target	Belize has adopted an indicative target of 60-65 percent of GDP. It maintains an annual primary balance target of 1 percent of GDP. Reversed in 2012/13 from a previously announced target of 2 percent of GDP.	Political commitment. No specific measures to achieve debt target.	No fund
WHD	Dominica	Debt target[1]	Dominica has its own target of a primary surplus of 2.4 percent of GDP, to be achieved over the cycle.	Political commitment	No fund
WHD	Grenada	Debt target[1], expenditure rule (proposed)	Under an ECF arrangement, approved in June 2014, fiscal adjustment is anchored by a primary surplus of 3.5 percent of GDP, to be achieved by 2016. Soon-to-be-approved Fiscal Responsibility legislation proposes an expenditure rule to limit growth of real central government expenditures to 2 percent a year.	The debt target is supported by political commitment. The proposed expenditure rule will be backed by legislation.	No fund
WHD	Guyana	Debt target	Debt-to-GDP ratio less than 40 percent in NPV terms. Target is embedded in the medium-term framework of the authorities.	Political commitment	No fund

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Region	Country	Fiscal Anchor	Comment	Statutory Base	Stability Fund/Trust Fund
WHD	St. Kitts and Nevis	Debt target[1]	With stronger growth and ample revenues, it would appear that this target will be achieved more quickly, and the staff plans to propose that zero primary balance become the new fiscal anchor.	Political commitment	Sugar Industry Diversification Foundation: Set in 2006 as an independent foundation, funded by Citizenship-By-Investment Program. Its mandate was expanded in 2011 to support the government's efforts to diversify the economy and maintain economic stability.
WHD	St. Lucia	Debt target[1]		Political commitment	No fund
WHD	St. Vincent and the Grenadines	Debt target[1]		Political commitment	No fund
WHD	Suriname	Debt rule	Public debt ceiling of 60 percent of GDP of which domestic debt ceiling of 25 percent and external debt ceiling of 35 percent.	Statutory	No fund
WHD	Trinidad and Tobago	Fiscal balance target	Improve overall fiscal balance by a minimum 1 percent of GDP annually starting FY2013/14 to achieve a balanced budget by 2016/17. However, specific policies to achieve the target were not specified.	Political commitment	Heritage and Stabilization Fund (HSF): Established in 2007 by legislation to save and invest energy revenue in excess of budgetary projections. The saving (withdrawal) rule is triggered when actual energy revenue exceeds (falls below) budgeted energy revenue by at least 10 percent. There is also a minimum balance rule (capital floor), requiring that no withdrawal should reduce the HSF's balance below US$1 billion at inception but it was raised to US$4billion in 2014.

1/ An ECCU target requires reducing the public debt-to-GDP ratio to 60 percent by 2020.

Sources: Country authorities and IMF teams.

EXTERNAL DEVALUATIONS: ARE SMALL STATES DIFFERENT?[1]

This chapter discusses the effectiveness of exchange rate devaluations in small states, which are typically more open and less diversified than larger peers. Several analytical approaches used in the paper find that the effects of devaluation on growth and external balances are not significantly different between small and large states, although the transmission channels are different. Devaluation in small states is more likely to affect demand through expenditure compression, rather than expenditure-switching channels. In particular, in small states consumption tends to fall more sharply than in larger states due to adverse income effects, thereby reducing import demand; however, investment improves strongly. Policy conclusions point to the importance of social safety nets in small states, the need for complementary wage and anti-inflation policies, investment-boosting reforms, and attention to potential adverse balance sheet effects.

A. Introduction

1. The role of exchange rates in small states has come under increased debate with the weakening of their economic performance, especially after the 2008–09 global downturn. Many small states have lagged behind their peers during the past decade (IMF 2013a), in part reflecting long-standing competitiveness challenges. The recent downturn has imposed an additional cost on output given the prevalence of inflexible exchange rate arrangements and recent appreciation of the U.S. dollar (Box 1). Attempts to shore up the economies with the only tool available in many countries – fiscal policies – has quickly exhausted the policy space in small states at a time when the economies remain weak and not well placed for a strong growth recovery. This has turned the focus of many policy debates back to the exchange rate as a tool to address long-standing internal imbalances (high unemployment) and external imbalances (large current account deficits and external indebtedness).

2. Small countries, however, have repeatedly voiced reservations about the efficacy of the exchange rate as a policy tool, as they see the contractionary effects of devaluations much more likely to dominate in their case. The argument is that—because small states import a large share of their consumption basket—nominal devaluations of domestic currency would lead to larger price increases which would erode the real gains in the exchange rate, failing to sufficiently improve the competitive position of a country. At the same time, the social and balance sheet costs of higher prices and the perceived loss of a strong price and macro-stability anchor is seen as too high relative to the expected gains in competitiveness. As a result, many small states have opted for internal devaluations as an adjustment tool, albeit not less painful (notably Barbados in 1991, Latvia in 2009).

[1] Prepared by Sebastian Acevedo, Aliona Cebotari, Kevin Greenidge and Geoffrey Keim (WHD), based on a forthcoming working paper.

3. This paper aims to take a systematic look at the potential impact of large exchange rate devaluations in small states. The objective is to explore whether devaluations have systematically different effects in small states compared to large ones, in other words whether small states are less likely to have expansionary devaluations. The theoretical and empirical literature on the overall effects of currency depreciation is extensive, and suggests that the effect of depreciation can be indeterminate (Annex I). The early literature generally highlighted the positive effects of a real exchange rate depreciation for growth and current account balances through the expenditure-switching channel.[2] The subsequent literature highlighted a myriad of less favorable effects of depreciations on both demand and supply. These include contractionary effects on income and wealth through (i) valuation effects on a trade deficit; (ii) lower price elasticities of imports and exports, which could reduce net exports in the short run (J-curve response) or even long-run (if the Marshall-Lerner condition is not met); (iii) redistribution of profits from labor to capital, with the latter's higher propensity to save depressing demand; (iv) a fall in real wages following the post-devaluation spike in inflation, which reduces income and consumption; (v) a higher cost of imported inputs for firms, which puts pressure on their earnings and ability to invest; (vi) an increase in the burden of servicing net foreign currency debt following devaluations, which could dampen investment, consumption and growth.

4. While a number of papers discuss exchange rate issues in small states, we are not aware of papers that assess the effects of external devaluations in small states and whether these are indeed different relative to large states. This paper aims to fill this gap. We study the macroeconomic effects of external devaluations in small and larger states using three methodologies: simulations with a DSGE model; event studies of country experiences with large (over 20 percent) devaluations; and econometric analysis. These methodologies are briefly described in Annex II, while in the remainder of the paper we focus on the results and policy implications.

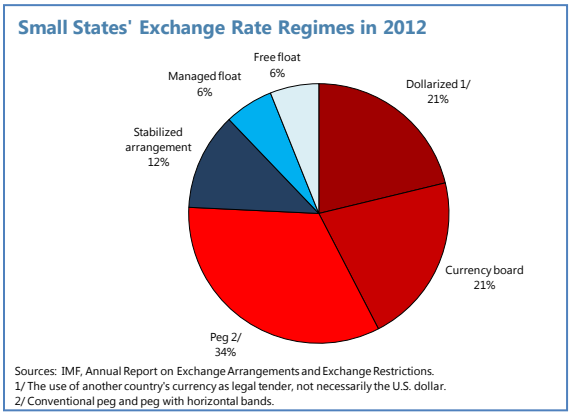
5. We find that the effects of a devaluation on growth are similar for both small and larger economies: on average, an initial slowdown in growth is followed by a pickup over the medium-term. The distribution of outcomes is also similar, with about half of the devaluations followed by a contraction and about half by an expansion in output. However, the channels through which devaluation affects macroeconomic outcomes differ between small and large states. Devaluation in small states is more likely to affect demand by compressing expenditure, rather than through expenditure-switching channels. In particular, consumption may be relatively harder hit in small states due to adverse income and distribution effects, combined with limited scope for import substitution or a rapid scaling up of exports due to size-related constraints. Likewise, the investment response, while ultimately strongly positive in all countries, takes longer to manifest itself in small states. The improvement in the external current account may be initially stronger in small states, but in large part it is also due to import compression. Ultimately, whether the devaluation is

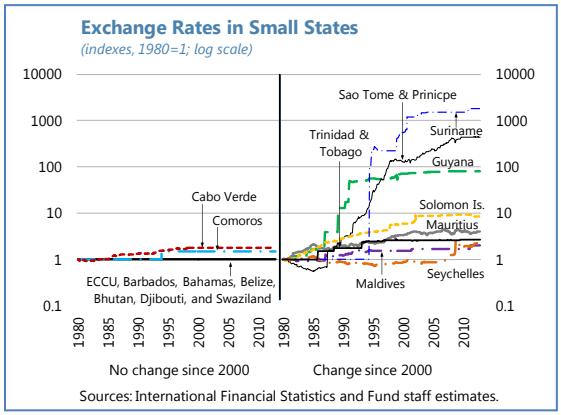
[2] Under this channel, an increase in the relative price of tradables following depreciations (i) increases the profitability of exported tradables, encouraging a shift in economic resources towards the more productive export sector; and (ii) lowers imports due to a switch in consumption towards now cheaper domestically produced substitutes, in both cases increasing net exports and growth.

contractionary or expansionary overall does *not* appear to be related to country size but to other factors at play. Thus, devaluations can result in stronger growth in small states and improve the external position, especially if supportive policies are in place.

Box 1. Exchange Rate Regimes in Small States

Three-quarters of small developing countries maintain fixed exchange rate regimes. About 20 percent of the small states use the most rigid arrangement, dollarization, in which another country's currency serves as legal tender, and exchange rate changes are impossible. In the currency board regime, adopted by another 20 percent of these countries, a domestic currency exists, but is covered by foreign reserves sufficient to always allow the monetary authority to exchange the local currency for the anchor currency at a fixed parity. In this case, devaluation is possible, but only as the result of a policy decision. Finally, almost 35 percent of small states have pegs, where a domestic currency exists and policies are directed towards the preservation of a fixed exchange rate. Under pegged regimes, devaluations are uncommon, but possible, due either to policy decisions or insufficient reserves to defend the peg through foreign exchange market intervention. For many of the 26 small states adopting currency board arrangements and pegged exchange rates, exchange rate changes have been uncommon: 14 of them have experienced flat exchange rates for more than a decade.



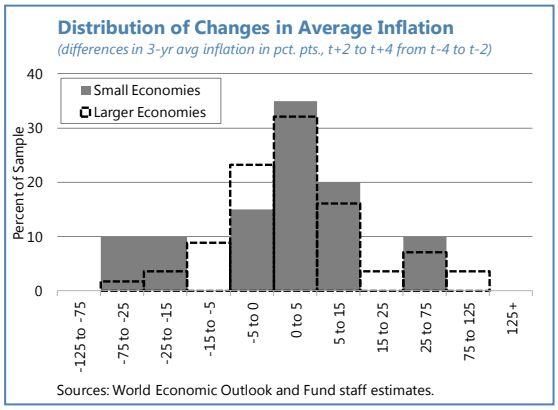


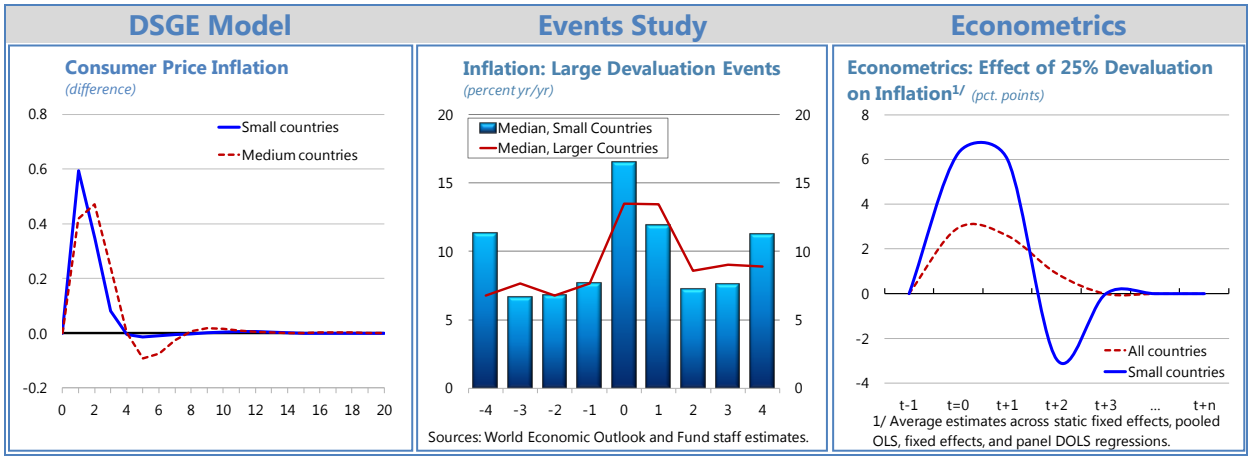
B. Results

In this section, we summarize the results of our studies and discuss what they predict about the likely effect of a nominal devaluation on macroeconomic outcomes. The main finding is that large devaluations do not appear to lead to different growth outcomes in small and larger states, and can boost investment and exports, but the negative effects of expenditure compression could be particularly apparent in small states.

Inflation

6. Following large depreciations, the short term pass-through of an exchange rate depreciation to inflation appears to be faster and stronger in small states, reflecting the higher import content of production and consumption. During past events of large devaluations, for example, inflation surged from a median of about 7½ percent in the year before devaluation in both small and larger countries to 16½ percent in small economies and 13½ percent in the larger economies. However, we found that inflation also fell faster in small states. The differences in outcomes, however, are not statistically significant after the first year, as can also be seen in the distribution of inflation changes post-devaluation.

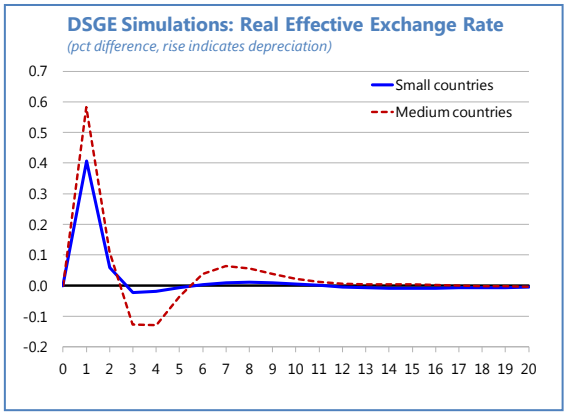


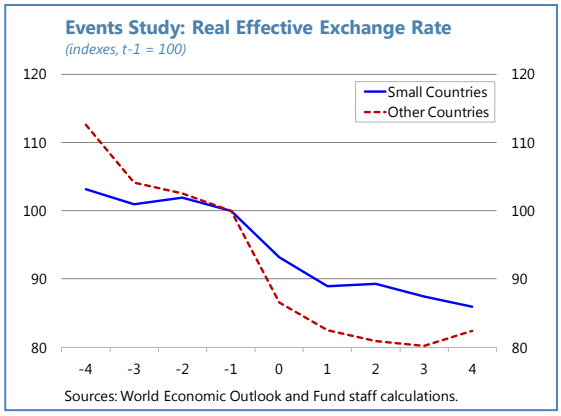


Real Depreciation

7. As a result of the response in inflation, the real depreciation might be smaller in small states for a given size nominal depreciation. Despite the marginally higher nominal depreciation, the REER was about 14 percent below pre-devaluation levels in small states and 18 percent lower in larger countries after four years post-devaluation.

8. Given the importance of containing inflation to generate real depreciation gains, we used a probit regression to look at the factors that increase the probability of inflation being





brought fast under control.[3] The results suggest the importance of tight incomes policies and preventing further rounds of depreciation, which could have a more persistent effect on inflation. The coefficient estimates on both wage growth and depreciation in the post-devaluation period are significant and negative in sign, implying that public sector wage increases or loose monetary policies tend to limit the probability that a country will bring inflation under control following a devaluation. The estimate on the small countries dummy was not significant, implying that they do not face an inherent disadvantage in achieving price stability in the years following a devaluation, even if the initial effects tend to be larger.

Growth

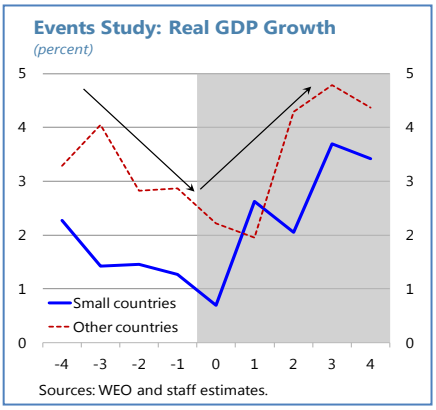
9. The empirical evidence suggests that average growth outcomes following devaluations are similar in small and larger states, with an immediate slowdown followed by a pickup over the medium-term. The distribution of outcomes is also similar, and reveals a large range of outcomes, with about half of the devaluations followed by a contraction and half by an expansion in output. The results for the model simulations are somewhat different than the empirical averages but consistent with a significant range of outcomes, and highlight the possibly more contractionary effects of devaluations in small states.

Empirical studies

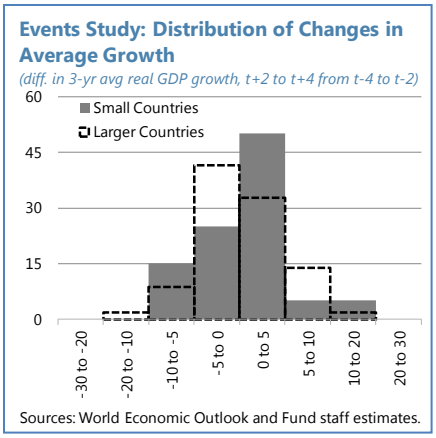
10. The evidence from our empirical studies suggests that on average: (i) large depreciations may dampen growth in the short term, but boost it over the medium term, with no long-run effects; and that (ii) the results for small and large economies are similar in the two empirical studies. As we will see below, however, the transmission channels and the composition of growth between small and large states would, in fact, differ significantly.

[3] In this instance, "success" in controlling inflation refers to cases in which the average inflation rate 2–4 years after the devaluation was lower than the average inflation rate 2-4 years before the devaluation. The variables hypothesized to affect success were a dummy for small countries, changes in average world food and fuel prices, changes in U.S. inflation, changes in nominal exchange rates, the growth of real government wage expenditures and the real M2 money supply.

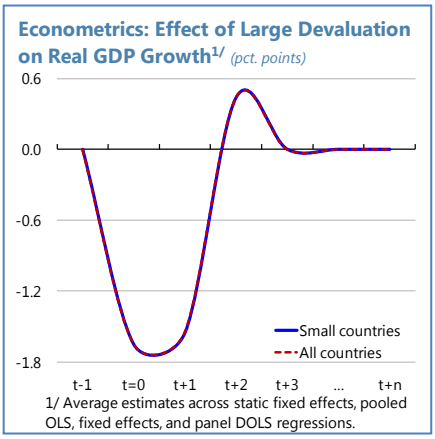
- In the event study, growth declines immediately following devaluations both in small and large states, exacerbating the weakening trend prior to the devaluation. Growth picks up notably over the medium-term, with the pickup somewhat stronger in small states (1.3 percentage points, compared to 1.1 in larger economies, between years 2–4 prior and post devaluation), although not in a statistically significant way.



- The distribution of outcomes is also broadly similar among the small and large states (histogram). Within the entire sample, about half the events—51 percent—experienced some degree of growth pickup, even if small. In the case of small states, a slight majority (13 cases, or 62 percent) experienced a pickup, while for the larger countries just under a majority (27 cases, or 47 percent). In some cases, small states experienced growth in one devaluation episode (e.g. Jamaica 1983, Fiji 1987, Trinidad and Tobago 1993) but not in others (Jamaica 1991, Trinidad and Tobago in 1985, Fiji 1998), suggesting that underlying country economic institutions and structures are less important than the policy or overall economic context. A non-negligible amount of devaluation events — 14 percent of the small state events and 11 percent of large state events—are followed by significant slowdown in growth.



- The similar behavior of small and large states following devaluations is robust to further econometric analysis that controls for other factors. Here, large nominal devaluations have immediate negative effect on real growth. The effects turn positive starting in the second year, and die out overtime and as such we find no significant long-run growth effects. The interaction term between devaluation and small countries dummy is not significant at any lag, suggesting the growth effects of large devaluations are not significantly different for small countries relative to the average effect for all countries in the sample. While the cumulative effect of the devaluation alone may be on average negative (chart), this does not mean there is a permanent loss in output. The empirical evidence suggests that other factors (supportive policies, external environment or credit conditions) offset this effect and allow a strong pick-up in growth post-devaluations.

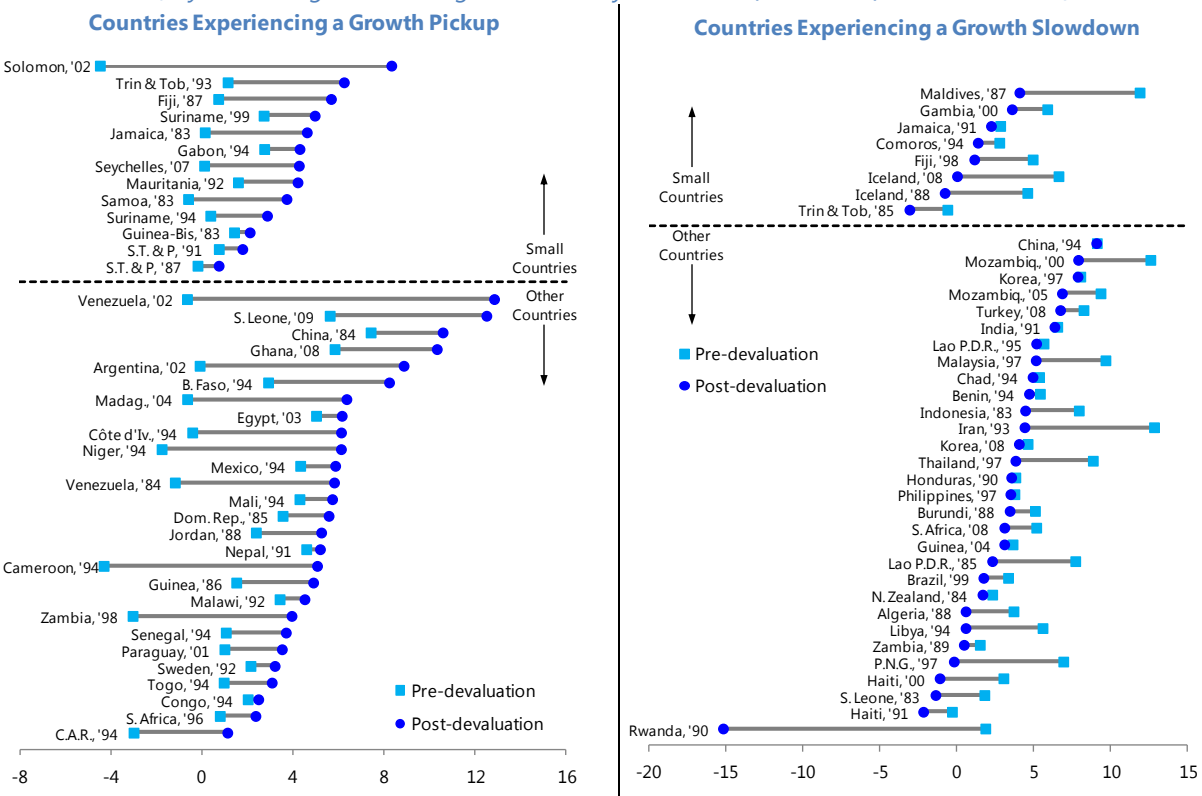


11. What factors determine positive growth outcomes or increase the probability of growth pickups post-devaluation? Strong external demand and robust domestic credit growth

post-devaluation (and by extension a financial sector that is in a position to support such growth) show a strong positive relationship with growth. From a separate probit regression, factors that affected the probability of an expansionary devaluation included growth in trading partner countries, private credit growth, and a pick-up in investment, suggesting that policies that boost confidence and promote investment can help lock in the potential gains; there was no evidence that small countries have inherently lower odds of experiencing an upturn in growth.[4]

Figure 1. Event Study: Growth Outcomes in Large Devaluation Episodes

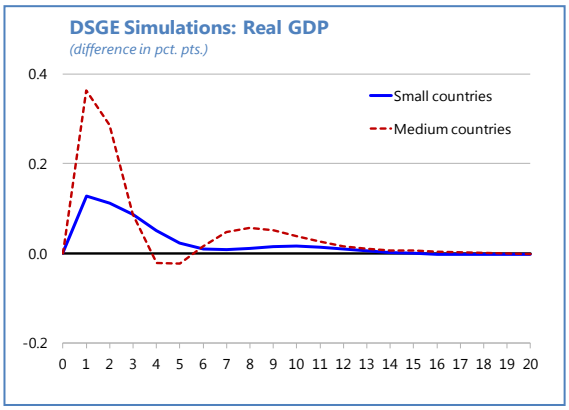
(3-year average real GDP growth rates, years 2-4 before and after devaluations)

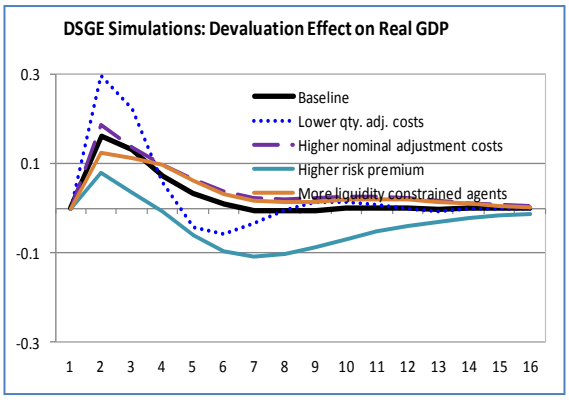


Model simulations

[4] We define a growth pickup when the average three-year growth rate from years 2-4 following the devaluation exceeds the average growth rate in years 2-4 before the devaluation. The independent variables include country-specific factors such as a binary variable denoting small countries, the change in gross capital formation as a share of GDP, average real GDP growth of trading partners, and private credit growth. Alternate specifications included the government wage bill (in percent of GDP), other government expenditures (in percent of GDP), and the change in the real effective exchange rate as explanatory variables, although they were not statistically significant.

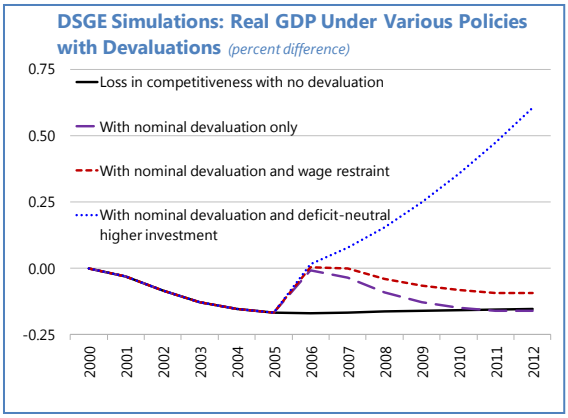
12. In the DSGE simulations, real output expands in both small and large states under our calibration parameters, but the expansion is more muted in small states and fades in the long term. While the first two effects are somewhat different than the average outcomes in empirical studies, they are not inconsistent with a significant spectrum of the devaluation outcomes. In reality, the response to a devaluation will depend on a large number of factors, such as the degree of balance sheet dollarization, the response of fiscal and monetary policies, the exchange rate regime, and confidence effects.





13. As an illustration of these possibilities, we performed a number of supplementary simulations on the small economy model only to show that different economic structures or different policies can be associated with different outcomes, with the right policies helping to lock in the shorter-run gains from devaluation over more extended horizons. For example:

- In small states with large foreign exchange liabilities, the loss in net worth associated with a devaluation would have strong dampening effects on financial wealth, investment and consumption, and would therefore have a more contractionary effect on the economy, even in the longer run (scenario with the higher risk premium).
- A larger share of hand-to-mouth (liquidity constrained) consumers—for instance in countries with lower financial inclusion—would be associated with less expansionary outcomes as a result of the contraction in consumption experienced by these consumers following the post-devaluation fall in real incomes (discussed below).
- In the case of a loss in competitiveness, the gains in output afforded by the devaluation over the medium-term could be used to jumpstart growth, while buying time for other policies to be put in place to sustain it. In the baseline simulation in the embedded chart, output declines as a result of a loss in competitiveness from an increase in real wages, which leads to lower employment,



investment, consumption and exports.[5] This loss can be offset for 5–6 years by the output gains from a devaluation, which may not persist over the long-term. However, this medium-term timeframe could buy sufficient time for other policies to yield results under a stronger economic environment, including structural reforms to boost competition in the labor markets, switch government spending from consumption to infrastructure, with the increased investment providing a strong long-run effect on output, external balances and wealth.[6]

In model simulations, devaluations are less expansionary in small states as a result of a more subdued response of domestic demand, especially consumption, and the inability to scale up exports as fast as in larger states – all features borne out in our empirical findings that are discussed below.

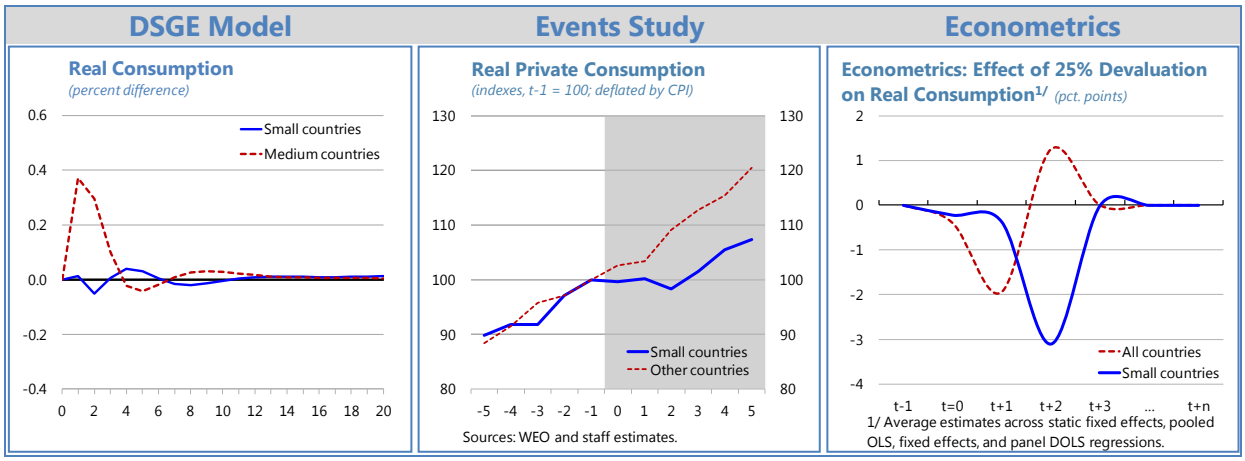
Consumption

14. The effect of the devaluation on consumption revealed the biggest difference between outcomes in small and large states. While in larger states consumption grows robustly with a pickup in disposable income, in smaller states consumption is weak or even falls immediately following the devaluation and remains flat into the medium term.[7] These results suggest that the expenditure compression (income) effect may be quite strong in small states, and may dominate the expenditure switching effects. The results seem to support the focus of much of the literature on the contractionary income and distributional effects of a devaluation, in particular a potential fall in consumption due to a decline and reallocation of disposable income from households with a higher marginal propensity to consume towards owners of capital, with the attendant increase in investment (see below).

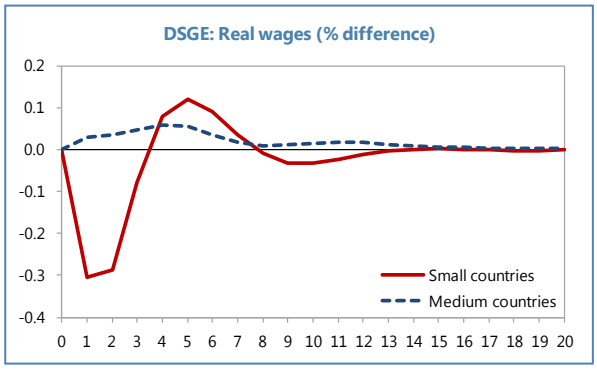
[5] The simulations in this bullet include: (i) a loss in competitiveness from a ½ percentage point increase in the wage markup, which increase real wages (baseline scenario); (ii) a wage restraint simulation, which reverses 0.2 percentage points of the rise in the wage markup in the fifth year along with the devaluation shock; and (iii) replacing ½ percent of GDP of government consumption expenditures with an equal amount of higher infrastructure spending.

[6] In reality, the gains from devaluation could be larger than simulations in the chart suggest (given that we can only simulate a small devaluation of 1 percent) and the gain from the structural reforms could be much slower to manifest themselves, lending further importance to the timeframe bought by the devaluation for jumpstarting growth.

[7] In the event studies, real government consumption also does not provide much impetus to growth in small countries post-devaluation. It decreases on average by a cumulative 5.6 percent between the year before devaluation and the second year after devaluation.



15. Model simulations provide some insight into the channels through which consumption may be particularly hard hit in smaller states. The contractionary effect comes from the decline in real wages in small states, which reduces the consumption of the liquidity constrained households in the short-term given their inability to borrow to smooth consumption until wages recover. In turn, the decline in real wages in small states results from the stronger erosion of real wages more than offsetting the increase in nominal wages due to higher labor demand by firms. This is because in smaller states, firms face higher labor adjustment costs and post-devaluation increases in the demand for labor are more muted as a result, with overall labor income falling in the short-term and its increase is more muted over the medium and long-term.

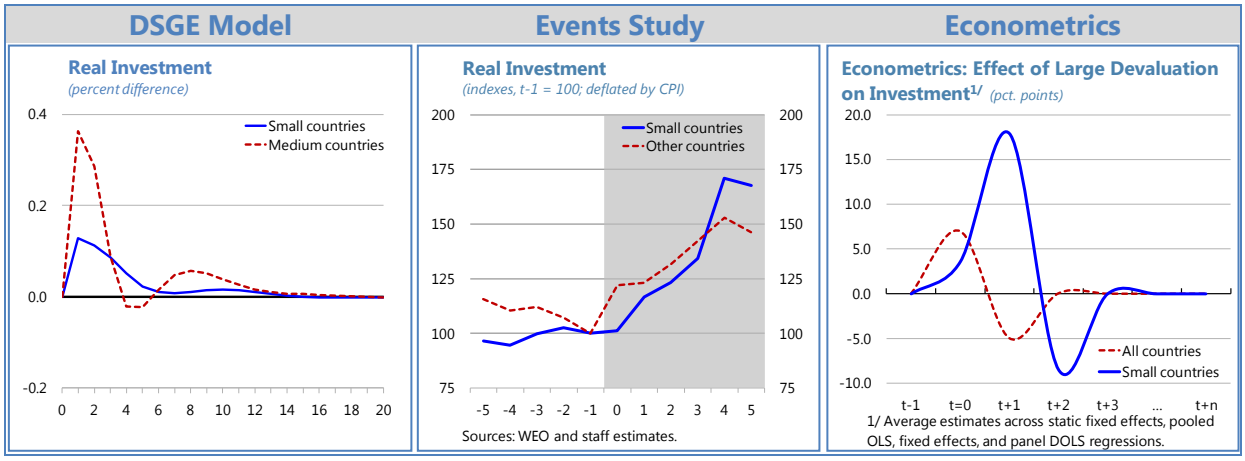


Investment

16. Investment growth is strong on average in both groups of countries. However, it takes longer to manifest itself in small states: a less buoyant short-term response of investment in small states is consistent across the three studies. Average investment growth in small states tends to be low immediately following the devaluation, potentially reflecting either real adjustment rigidities or uncertainty generated by large changes of otherwise predominantly fixed parities.[8] By contrast, investment in the larger countries begins to grow immediately, after several years of decline. However, over the medium run, investment growth in small states is very strong, averaging almost 10 percent in the three post-devaluation years.

[8] In the model, for example, higher costs in adjusting input quantities lead to a smaller increase in imports of capital and intermediate goods by firms.

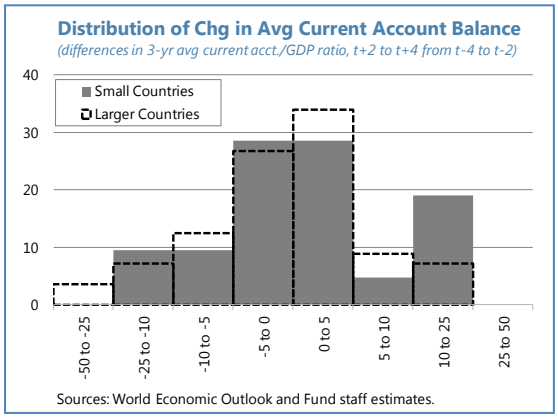
17. Individual country experiences vary, but the strong increase in investment growth occurs in more than half of the small country sample. Among the small states, investment activity is frequently boosted by a pickup in foreign direct investment, higher official development assistance flows, and public sector infrastructure projects, each highlighting the importance of both favorable external conditions and strong policies to positive outcomes.

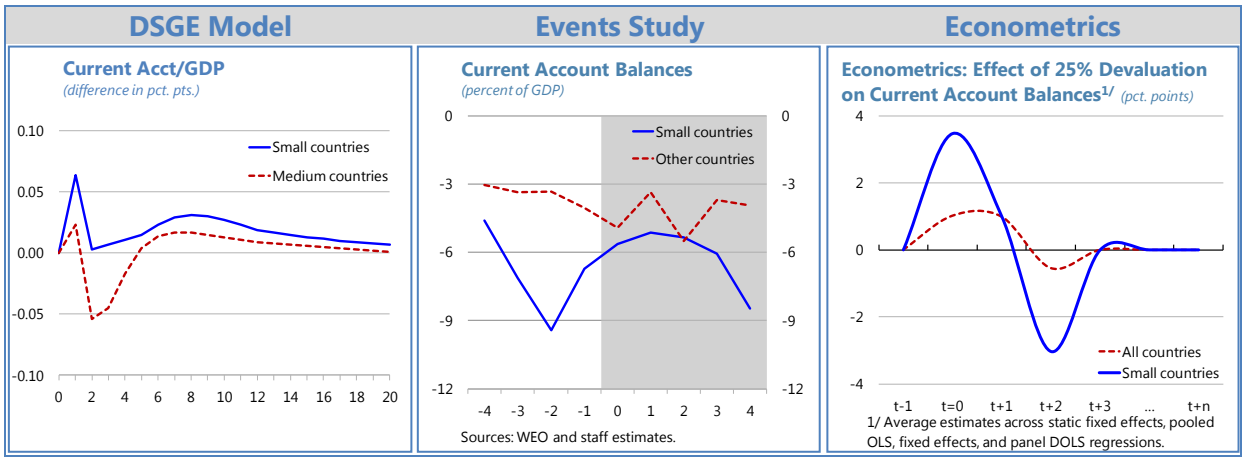


External balances

18. Results suggest that the improvements in the current account in small states could be as strong, if not stronger, than in large states. The impetus for the improvement, however, comes mainly from a contraction or smaller growth in imports in the case of small states, while in the larger countries it primarily reflects export growth.

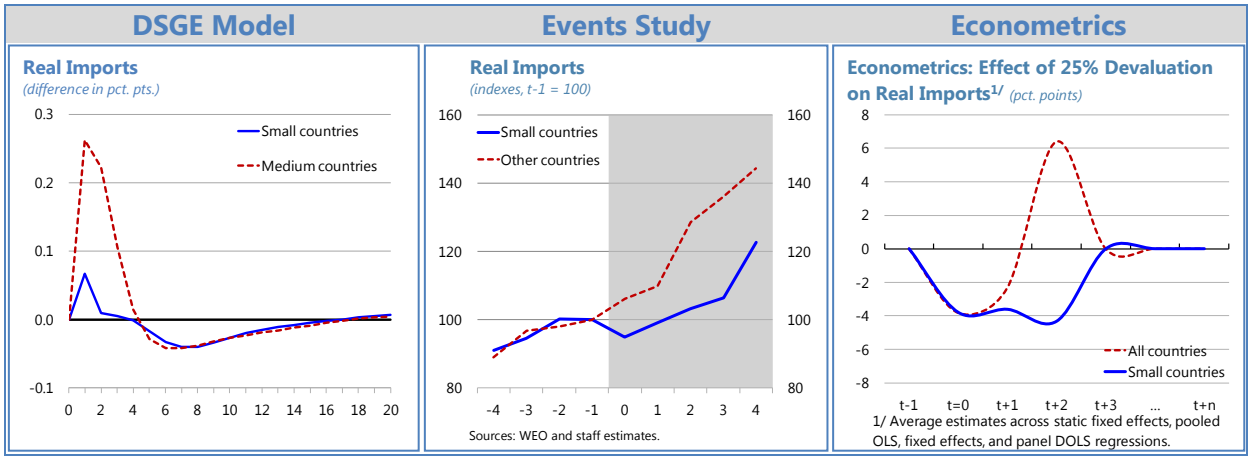
19. The evidence on the impact of the devaluation on the current accounts is mixed, as in most of the literature. The current account (measured as a share of GDP) improves in about half of the cases in both small and larger states, and the improvement seems stronger in smaller states. On average, current account deficits in small countries improved by about 4 percentage points of GDP two years after the devaluation, relative to two years before, but the improvement started to reverse after the second post-devaluation year. The econometric analysis broadly corroborates this finding, with exchange rate changes in small states estimated to result in a stronger immediate improvement in the current account, and followed by negative impacts two years later. While larger countries also experienced an immediate improvement followed by a medium-term deterioration, these movements were of smaller magnitude.





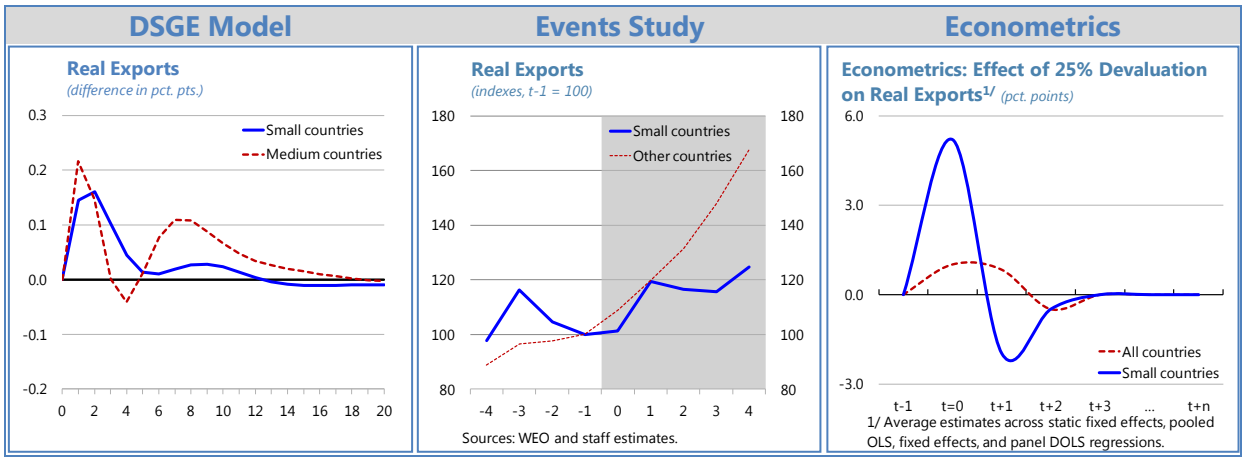
Imports

20. Import compression is generally more acute in the aftermath of the devaluations in small states, reflecting the more contractionary effects on consumption discussed above. In model simulations, imports increase modestly on impact reflecting the projected pickup in investment, but again the effect is significantly smaller for small states given the drag from the fall in the import of consumption goods in these states.



Exports

21. The pickup in exports, while strong in both small and larger states immediately after devaluations, flattens out earlier in small states than in larger ones. While the evidence suggests a strong immediate pickup in exports in small states, this appears to reflect the existence of capacity slack that could be utilized following devaluation. However, this effect is not sustained over the medium run, potentially reflecting the inability to scale up labor and other inputs due to small size and lack of skills. We did not find evidence that the effect of the devaluation lasts into the longer term, as the equilibrium level of exports is not significantly different from prior to the large devaluation.



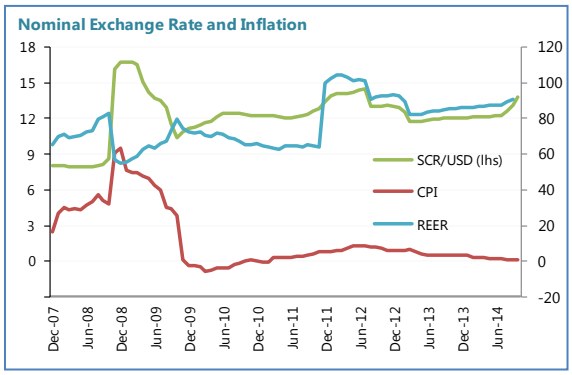
Box 2. Two Cases of Devaluations in Small States

Two large devaluation events—Seychelles 2008 and Fiji 2009—can illustrate the range of possible outcomes.

The Seychelles[1]

Prior to 2008, Seychelles fixed its exchange rate to the US dollar, buttressed by comprehensive exchange rate restrictions and surrender requirements. However, starting in the 1990s the peg came under increasing pressure, with rationing of scarce foreign exchange and an active parallel market, as expansionary fiscal and monetary policies became increasingly unsustainable. A series of step devaluations failed to restore stability. By 2007, the fiscal deficit had reached 8 percent of GDP, public debt 131 percent of GDP (two thirds of it foreign), reserves had fallen to two weeks of imports, and the parallel market rate was 55 percent above the official rate. In October 2008, strains intensified as Seychelles failed to make a payment on its external commercial debt.

At this point, the Seychellois authorities decided to abandon the peg for a managed float, as part of a comprehensive Fund-supported reform program. In late 2008, Seychelles became the smallest country with a floating exchange rate. There was some overshooting at first, but the currency began to appreciate by mid- 2009 (text figure). Inflation spiked at the end of 2008 and fell quickly thereafter, even with a brief bout of deflation by late 2009 as the currency strengthened. The initial depreciation facilitated a necessary consolidation in the current account deficit, predominantly driven by imports falling 11 percent as real incomes dropped.



At the same time, Seychelles liberalized the foreign exchange market, lifting all restrictions on transactions. Monetary policy relied on a monetary anchor, buttressed by tight fiscal policy aiming to reduce public and external debt over time. Interventions in the foreign exchange market were to be limited to cases of excessive exchange rate volatility, or to meet reserve accumulation goals.

[1] Prepared by Pietro Dallari and Joseph Thornton (AFR).

Box 2. Two Cases of Devaluations in Small States (concluded)

Seychelles has continued to maintain the managed float since 2009. The authorities have rebuilt gross reserves to nearly four months of import coverage, largely through opportunistic purchases of foreign exchange, and have twice managed foreign exchange pressures while maintaining overall macroeconomic stability. As external pressures weakened the current account balance and administered prices rose in the second half of 2011, currency depreciation and inflation developed, with some mutual reinforcement. An initial monetary tightening did not have its full desired impact, due to a weak transmission mechanism. By mid-2012, expectations appeared to have become unanchored, with increasing exchange rate volatility. At that point, the central bank intervened directly in the market through two unsterilized sales of foreign exchange, which helped support an appreciation of the currency and reduce inflationary pressures. After a subsequent 12-month period of stability in the nominal exchange rate, strong wage and credit growth coupled with weak export earnings again began to put pressure on the Rupee in mid-2014. This time, tight monetary policies, supported by fiscal restraint, were sufficient to stabilize the market following a nominal effective depreciation, and no direct interventions in the market were necessary.

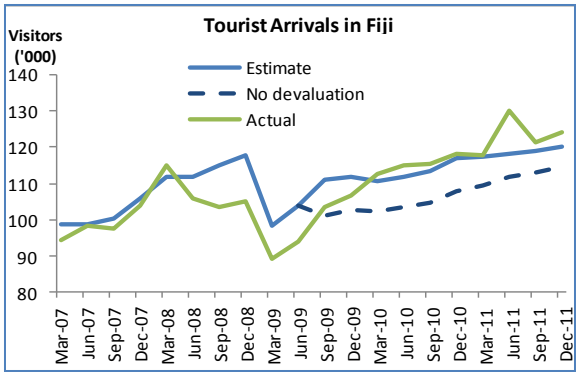
Lessons learned

Although an extremely small and open economy, Seychelles' experience suggests that exchange rate flexibility can play a supportive role in maintaining macroeconomic stability. In a highly open economy, both external and internal shocks can translate rapidly into significant weakening of the external position: the events of 2014, for example, demonstrated that large wage hikes, rapid credit growth and weak exports can spill over quickly into sizable external imbalances. Nominal depreciation provided a relatively quick mechanism to help to manage pressures, reduce absorption, and restore external equilibrium, with a carefully managed contraction of money supply. Under a fixed exchange rate, the necessary relative price adjustments could have required structural changes in goods and labor markets, with a contraction in money supply determined by circumstances.

Seychelles' experience also points to unavoidable challenges in successfully implementing a managed float in a small, open economy. The strong fiscal and monetary policies since the adoption of the managed float have been essential to its success. From 2009–14, primary fiscal surpluses have averaged 7 percent of GDP. The strong fiscal anchor and the disciplined reserve accumulation helped to support the balance of payments and strengthen confidence, an essential ingredient for a successful managed float in a small, open economy. In particular, the foreign exchange market is very shallow; expectations are not strongly anchored and can easily become unhinged, leading to volatility. Moreover, in a tourism dependent economy, the short-run response of export revenues to depreciation is relatively muted, and more of the short-term adjustment falls on imports.

Fiji[2]

Fiji experienced especially volatile economic conditions in 2009, due to the global financial crisis and severe flooding. These shocks reduced growth, compounding negative effects from earlier political developments. Loss of foreign reserves prompted a 20 percent external devaluation, which reversed the sharp reserve decline and led to a pickup in remittances and an improvement in the trade balance. The contribution of the devaluation to the recovery through tourism was evaluated by Rauqeuqe, Gottschalk and Yang (2013), who estimated that the devaluation added 7 percent on average to tourist arrivals up to the end of 2011 (chart).



[2] Prepared by Dan Nyberg and Leni Hunter (APD).

C. Conclusion and Policy Implications

22. The paper investigates the macroeconomic effect of large external devaluations, with a view to assessing whether devaluations can be a useful policy tool for small states. We find that whether a devaluation is contractionary or expansionary overall does *not* appear to be related to country size but to other factors at play. Devaluations can successfully boost growth in small states and improve the external position, as it did in slightly more than half of the devaluation cases in small states. Whether or not a devaluation is successful depends, instead, largely on the extent to which it is supported by strong conditions and policies, including a favorable external environment, a healthy financial system that can support credit growth, tight incomes policies to control inflation and a successful scale-up of investment.

23. While the growth impact of devaluation was not found to differ discernibly between large and small states, there was however a significant difference in the channels through which devaluation affects macroeconomic outcomes. In small states, consumption and imports tended to be lower (more expenditure compression than expenditure-switching), with some offset from a stronger investment response. More specifically:

- Consumption may be relatively harder hit in small states due to adverse income and distribution effects, combined with limited scope for import substitution or a rapid scaling up of the export sector due to size-related constraints.
- The investment response can counteract the slack from weak consumption; and while it takes longer to manifest itself in small states, the medium and long-term response of investment is stronger.
- The improvement in the external current account may be initially stronger in small states, but in large part it is also due to a pronounced import compression.

24. If an external devaluation is pursued, our studies suggest that the following policy considerations should be kept in mind to increase the probability that it results in positive outcomes:

- Tight incomes policies after the devaluation—such as tight monetary and government wage policies—are crucial for containing inflation and preventing the cost-push inflation from taking hold more permanently. If wages and inflation are not brought under control quickly, the competitiveness gains from the nominal adjustment will be eroded and little adjustment in the real exchange rate will be achieved. While tight wage policies are certainly important in the public sector as the largest employer in many small states, economy-wide consensus on the need for wage restraint is also desirable.

- To avoid expenditure compression exacerbating poverty in the most vulnerable households, small countries should be particularly alert to these adverse effects and be ready to address them through appropriately targeted and efficient social safety nets.

- With the pickup in investment providing the strongest boost to growth in expansionary devaluations, structural reforms to remove bottlenecks and stimulate post-devaluation investment are important. These reforms could also help address some of the factors underlying weak competitiveness in labor markets or policy-induced costs more generally.

- A favorable external environment is important in supporting growth following devaluations. To the degree that the devaluations could be undertaken when external demand is strong, exports and foreign direct investment would have a better chance at staging a strong response following the relative price change, hence supporting a better growth outcome.

- The devaluation and supporting policies should be credible enough to stem market perceptions of any further devaluation or policy adjustments. If the new parity or policies supporting it are not credible, the expectations of further devaluations or an increase in the sovereign risk premium would push domestic interest rates higher, imposing large costs in terms of investment, output contraction and financial instability. The conditions that may be required for credibility are that the devaluation is large enough to meaningfully address the overvaluation and that the fiscal position is sustainable.

- Balance sheet effects could have a strongly contractionary effect if debts (public or private) are significantly dollarized. They could lead to a wave of bankruptcies, induce significant bank distress and an economic slowdown, and compromise the sustainability of the fiscal position. Consequently, the potential for these effects and the policy space to deal with their aftermath warrant policymakers' attention prior to any decision to undertake an external devaluation. It should be noted, however, that alternative adjustment tools, such as internal devaluations, could have equally detrimental balance sheet effects when the accompanying deflation increases the debt-servicing burden if economies are heavily indebted.

Annex I. Literature Overview and Methodological Notes

Literature Overview

The theoretical literature on the effects of currency depreciations is extensive, and suggests that the overall effect can be indeterminate. The early literature generally noted positive effects for growth and current account balances anticipated by the Mundell-Fleming framework. These include expenditure-switching channels, in which the higher relative price of tradables following depreciations (i) encourages expansion of the export tradable sector by increasing its profitability; and (ii) discourages imports as consumption switches towards now cheaper domestically produced substitutes. However, other papers (Annex Table 1) have highlighted a myriad of contractionary effects such as:

- **Negative income and distribution effects**.
    a) *Valuation effects*. When devaluation occurs along with a trade deficit, the valuation effect on the initial quantities of imports and exports will reduce national income (in local currency).
    b) *Low import and export price elasticities*. If short-term price elasticities of imports and exports are low, then devaluation could reduce net exports, worsening both external balances and growth on impact (the J-curve effect).[1] Even in the long run, the net effect on the trade balance would depend on the long-run elasticities of real imports and exports to the real effective exchange rate: if the sum of the absolute values of these elasticities exceeds unity, then depreciations would improve trade balances (the Marshall-Learner condition).
    c) *Distribution effects*. As the profitability of the export sector increases, income is redistributed from labor towards owners of exporting firms. As the latter likely have a lower propensity to consume, overall consumption and income in the economy would decline.
    d) *Income effects at consumer and firm level*. For consumers, a fall in real wages following the post-devaluation inflation spike would reduce income and consumption, especially if they are liquidity-constrained. For firms, higher imported input costs would compress earnings and investment, especially if import and export quantities adjust sluggishly to the price increase.
    e) *Increase in tax burden*. Devaluation would raise ad valorem taxes on international trade in local currency. If overall price levels rise less than import prices, real tax burdens will increase.
- **Negative wealth/balance sheet effects**. The burden of servicing net foreign currency debt by households, firms, or sovereigns would increase automatically following depreciation, and risk premia could also rise, harming profitability and investment, as well as credit quality and financial stability.

Given the vast array of potential positive and negative effects, the overall outcome is indeterminate and depends on the structure of the economy and the decision-making parameters of its agents. Lizondo and Montiel (1989) provide an extensive discussion and Larraine and Sachs (1986) have a comprehensive overview of the earlier literature.

[1] In the case of imports, low elasticities could stem from inability to reduce the purchased quantities immediately following the relative price increase (if locked in by contracts) or even in the longer term (if small scale hinders availability of domestic substitutes). In the case of exports, they may also fail to respond strongly to an increase in the relative price of tradables if faced with limited diversification or growth opportunities due to scale or availability of skills.

Annex Table 1. Potential Channels of Contractionary Effects Identified in the Literature

	Lizondo and Montiel 1989	Tovar 2005	Krugman 1999	Mishkin 1999	Edwards 1989	Gylfson and Risager 1984	Gylfson and Schmid 1983	Krugman and Taylor 1978	Cooper 1971	Diaz-Alejandro 1963	Hershman 1949
Low elasticities									X		X
Initial trade deficit								X			
Taxes on international trade	X							X			
Distribution to agents with low MPCs	X							X	X	X	
Negative income effects	X				X		X				
Wealth and balance sheet effects	X	X	X	X	X	X	X				
Financial instability/risk premium		X	X	X							

The empirical evidence on the short-term effects of the devaluations is equally inconclusive. In the context of event studies in developing countries, Cooper (1971) found devaluations to be generally contractionary over 1953-66, while Krueger (1978) found recessions in just 3 of 22 events. In a study of 195 currency crises over 1970-98, Gupta, Mishra and Sahay (2003) found 60 percent of events to have been contractionary. In econometric studies, a variety of estimation techniques have been used (e.g. Edwards (1986), Kamin and Klau (1997)) to typically find short-term contractionary effects that are subsequently reversed, with no long run impact. Magendzo (2002) adopted a matching estimators approach to avoid selection bias, finding the negative upfront effect vanished.

Methodological notes[2]

The DSGE model

Model. We use the three-country version (devaluation country, U.S., and rest of the world) of the IMF's Global Integrated Fiscal and Monetary (GIMF) model, described in detail in Kumhof and others (2010).

Calibration. To distinguish the small countries from larger ones, we calibrate the small country based on staff estimates for a group of small states. Parameters are chosen to model a more open economy, with a higher dependence on imports, smaller nominal rigidities (lower price adjustment costs reflecting a high degree of openness), higher real rigidities (higher quantity adjustment costs in line with narrow production bases, lack of domestically produced substitutes, and limited availability of skills), and high external habit persistence. The larger economy is calibrated based on estimates for Peru, to mimic an average Latin American country. Small and larger countries are modeled as having a peg to the U.S. dollar to facilitate comparisons.

Simulated shock. We simulate the effects of a onetime 1 percent nominal devaluation with respect to the U.S. dollar, combined with a 0.1 percentage points increase in the sovereign risk of both small and medium countries. The size of the shock is small to allow the model to converge to a new steady state, but is sufficient to determine the relative responses of small vs. large states. The increase in sovereign risk is meant to compensate for the absence of foreign currency debt in the model and the associated deterioration in the sovereign's balance sheet following a devaluation.

[2] See Acevedo and others, forthcoming, for full details.

Annex Table 2. GIMF: Key Macro Variables and Parameters

Parameters	Small	Medium	RW	US
Macro Variables				
Annual inflation rate	2.5	3.1	2.0	2.5
Habit persistance in consumption	0.8	0.4	0.4	0.4
Government consumption to GDP ratio	15.3	13.9	17.5	15.0
Government investment to GDP ratio	6.5	5.0	2.0	2.5
Government tax revenue to GDP ratio	20.7	15.9	29.0	28.3
Government debt to GDP ratio	92.8	21.6	60.0	75.0
Investment to GDP ratio	22.0	19.6	19.0	17.2
Consumption tax to GDP ratio	15.8	6.5	10.0	4.6
Capital tax to GDP ratio	2.0	6.0	3.3	3.2
Labor tax to GDP ratio	2.8	1.7	20.5	17.6
Nominal Rigidities				
Real Wage (PHI_P_U)	40	40	47	40
Consumption Price (PHI_P_C)	4	10	47	40
Investment Price (PHI_P_I)	4	10	47	40
Nontradables Price (PHI_P_N)	4	10	47	40
Tradables Price (PHI_P_T)	4	10	47	40
final goods (PHI_P_DM)	4	10	30	40
intermediate goods (PHI_P_TM)	4	10	30	40
Real Adjustment Costs				
Labor Demand (PHI_U)	4	1	1	1
OLG Consumption (PHI_C_OLG)	2	2	2	2
Consumption (PHI_C_LIQ)	1	1	1	1
Investment (PHI_I)	1	1	1	1
Imports of				
consumption goods (PHI_FC)	4	1	1	1
investment goods (PHI_FI)	4	1	1	1
tradable goods (PHI_FT)	4	1	1	1
Inflation Expectations				
Weight on Inflation that is:				
lead (1-UPSILON1-UPSILON2)	1	1	1	1
lagged (UPSILON1)	0	0	0	0
steady state (UPSILON2)	0	0	0	0
Capacity Utilization (Curvature)				
Nontradables (SIGACC_N)	15	15	15	15
Tradables (SIGACC_T)	15	15	15	15
Dividend Redistribution Factor				
Entrepreneurs' Income (NWBUILD)	0.5	0.5	0.5	0.5
Policy Rules				
Monetary: Weight on the				
lagged interest rate (DELTAI)	1	1	0.3	0.3
inflation gap				
core (DELTAPIE)	0	0	1.2	1
weight on inflation:				
contemporaneous (PIEWT0)	0	0	0.25	0.25
1 Periods Ahead (PIEWT1)	1	1	0.75	0.75
nom. exchange rate target(DELTAE)	100000	100000	0	0
NEER (DELTANEER)	0	0	0	0
Fiscal: weight on excess				
output gap (DAMP_GDPGAP)	0.25	0.25	0.37	0.34

Note: US identifies the United States, RW identifies the Rest of the World.

Events Study

To identify the large devaluation events, we applied criteria similar to Milesi-Feretti and Razin (1998) to identify 78 exchange rate depreciations from 1983 (including 21 in small states) that were large, discrete, and one-off.[3] In particular: (i) the bilateral exchange rate had to fall by at least 20 percent (December/December); (ii) the previous year's depreciation rate could not exceed 12 percent; (iii) the rate of depreciation rose 10 percentage points from the previous year; and (iv) an event that met these criteria

[3] Small states in the events study are countries with populations less than 2.5 million people.

did not occur in the last three years. We added a few additional restrictions to the sample to exclude events that were also not relevant:

- The nominal effective exchange rate two years after the devaluation had to remain below the levels observed in the two years prior to devaluation to help eliminate temporary large commodity-price induced fluctuations in exchange rates.
- We also exclude cases where countries with pegs to currencies other than the U.S. dollar experienced a devaluation against the U.S. dollar, but not against the peg currency, by dropping events where NEER depreciation, measured from one year before to one year after the devaluation, was less than 10 percent and excluding the Common Monetary Area countries.
- Events that coincided with armed conflicts as identified by the *Correlates of War* dataset have been excluded to avoid distortions from security events that affect output and exchange rates.
- Transition counties were excluded reflecting their high inflation and major structural changes.[4]

Annex Table 3. Devaluation Events

Devaluation Episodes in Events Study

Country	Year	Country	Year	Country	Year
Small countries:					
Samoa	1983	China	1984	Cote d'Ivoire	1994
Guinea-Bissau	1983	Lao PDR	1985	Mexico	1994
Jamaica	1983	Dominican Republic	1985	China	1994
Trinidad and Tobago	1985	Guinea	1986	Lao PDR	1995
Sao Tome and Principe	1987	Jordan	1988	South Africa	1996
Maldives	1987	Burundi	1988	Papua New Guinea	1997
Fiji	1987	Algeria	1988	Malaysia	1997
Iceland	1988	Zambia	1989	Korea	1997
Sao Tome and Principe	1991	Honduras	1990	Thailand	1997
Jamaica	1991	Rwanda	1990	Philippines	1997
Mauritania	1992	Haiti	1991	Zambia	1998
Trinidad and Tobago	1993	Nepal	1991	Brazil	1999
Suriname	1994	India	1991	Haiti	2000
Comoros	1994	Sweden	1992	Mozambique	2000
Gabon	1994	Malawi	1992	Paraguay	2001
Fiji	1998	Iran	1993	Venezuela	2002
Suriname	1999	Congo	1994	Argentina	2002
Gambia	2000	Central African Republic	1994	Egypt	2003
Solomon Islands	2002	Togo	1994	Guinea	2004
Seychelles	2007	Libya	1994	Madagascar	2004
Iceland	2008	Benin	1994	Mozambique	2005
		Chad	1994	Ghana	2008
Other countries:		Senegal	1994	Korea	2008
Sierra Leone	1983	Mali	1994	South Africa	2008
Indonesia	1983	Niger	1994	Turkey	2008
New Zealand	1984	Burkina Faso	1994	Sierra Leone	2009
Venezuela	1984	Cameroon	1994		

[4] Other excluded events were Equatorial Guinea, 1994, following the discovery of large oil deposits and the Democratic Republic of the Congo, 1998; Jamaica's 1991 devaluation was set upon exchange rate regime unification.

Econometric Analysis

Data used to perform the analysis were largely sourced from *World Economic Outlook*, the related *Global Economic Environment*, or the *International Financial Statistics*. The sample covered 1980-2013 and excluded the United States and observations occurring with armed conflicts. In some cases real national accounts aggregates were limited and nominal data were deflated by the CPI. Banking and sovereign default events are those of Laven and Valencia (2008), and devaluation events mirror the events study.

Equations were estimated for the major macroeconomic variables shown in the columns of Annex Table 4 using four different estimation strategies: static fixed effects, pooled OLS with cointegration, fixed effects with cointegration and an unrestricted error correction model/dynamic OLS. A general-to-specific approach was used for each estimation technique, and the rows of Annex Table 4 show the explanatory variables of both the general and specific models, of which up to two lags were used.

Annex Table 4. Explanatory Variables Used in Econometric Analysis

Dependent variable:	Real GDP		Private cons-umption 1/		Investment 1/		Real exports		Real imports		Current account balance/GDP		CPI inflation	
G=General model; R=Reduced model	G	R	G	R	G	R	G	R	G	R	G	R	G	R
Measured in changes of log levels: 2/														
Trading partners' real GDP	X	X					X	X						
Lagged own real GDP	X	X	X	X										
Trading partners real GDP/own real GDP											X	X		
Private credit 1/	X	X			X	X					X	X		
Official dev. dssistance									X	X	X	X		
Output gap													X	X
Private consumption					X	X			X	X				
Private investment									X	X	X	X		
Real exports					X	X								
Nominal exchange rate			X	X			X	X	X	X	X	X	X	X
Nom. exch. rate x small country							X	X			X	X	X	X
Price differential							X	X	X	X				
Government expenditures	X	X												
Broad money supply growth													X	X
U.S. CPI inflation													X	X
Indicator variables:														
Devaluation	X	X	X	X	X	X			X	X				
Devaluation x small state	X	X	X	X	X	X			X	X				
Banking crisis 2/	X	X	X	X	X	X	X	X	X	X	X	X		
Sovereign default 2/	X	X	X	X	X	X	X	X	X	X	X			
Public debt > 60% GDP	X	X			X	X								
Small state											X	X		

1/ Deflated by CPI.

2/ An "X" in the reduced model equation implies that the variable withstood the model reduction process in at least one technique. In equations estimated by pooled OLS with cointegration, fixed effects with cointegration, and dynamic least squares, lagged dependent variables and log levels of certain variables were included. Dynamic OLS regressions included error correction terms.

FINANCIAL INCLUSION IN SMALL STATES[1]

Compared to the rest of the world, many small states suffer from lower financial inclusion due to their size and lower institutional development. However, upper-middle and high income countries (UMHs) in small states—predominantly countries with more financial depth due to offshore financial centers—outperform their peers across the world. On the other hand, lower-middle and low income (LMLs) countries—predominantly fragile states—underperform their peers. Small states tend to have less competition in the banking sector, which usually contributes to lower financial inclusion. Small states with more financial depth also exhibit a higher degree of banking competition and greater financial inclusion, compared both to other small states and to their peers worldwide. Other distinctive characteristics of small states —such as challenging initial conditions, smallness, or weak institutions—often further constrain access to financial services. At a minimum, public policies should aim to address market and policy failures contributing to low financial inclusion. Policies to offset obstacles to greater financial inclusion should include promotion of competition, development of financial infrastructure and institutions, and steady progress in improving supervisory and monitoring capacity, to help ensure inclusion does not come at the expense of stability. In some cases, selective relaxation of regulation has proven helpful in promoting innovation and contestability in the provision of financial services. While the presence of an offshore financial center has aided financial inclusion in certain higher income small states, better governance remains a prerequisite.

A. Introduction

1. Better access to financial services is an important channel to foster inclusive growth, and can enhance resilience to shocks (Levine, 2005; Demirgüç-Kunt *et al.*, 2008). Financial inclusion is defined as the extent to which households and firms can directly use financial services (such as saving, credit, insurance, and payment systems). While approximately 89 percent of adults in advanced economies have bank accounts, access to financial services remains limited in developing countries (Demirgüç-Kunt and Klapper, 2012). The lack of adequate financing contributes to slow economic growth and persistent income inequality: poor people are not able to realize small business opportunities, they cannot invest in education, and they are forced to pawn assets to face unplanned needs.

2. Making the financial system more inclusive is especially challenging for small states, but could be particularly beneficial. Most small states are very open economies, hence highly exposed to spillovers coming from larger economies. If supported by sound governance policies, enhanced access to finance could alleviate some of the vulnerabilities inherent to small states by increasing resilience to external shocks, bolstering domestic growth, and promoting income equality (Galor and Zeira, 1993; Banerjee and Newman, 1993; and Aghion and Bolton, 1997). While this paper does not examine the implications of financial inclusion for the stability of the financial

[1] Prepared by Albert Touna-Mama and Pietro Dallari under the supervision of Marshall Mills and Valeria Fichera and with statistical support from Naly Carvalho and Graham Campbell (all AFR).

system, this is an important concern that must be considered and integrated into policies.[2] A review of the channels through which financial inclusion can operate in a beneficial way can be found in Burgess and Pande (2005), Dupas and Robinson (2011), Brune *et al.* (2011), and Prasad (2010). However, being remote, widely dispersed, lightly populated, or exposed to natural disasters are potential barriers to financial development and inclusion that characterize small states to various degrees.

3. The financial sector in small states is predominantly bank-based and characterized by high concentration, which can be detrimental to financial access. The limited market size in most small states has caused high concentration of the banking sector. This is not necessarily an issue, especially when the market is highly contestable, but it is of concern when it hinders competition among market players and favors monopolistic practices (IMF, 2013a). Lack of competition for the provision of financial services in small states can hamper financial inclusion by limiting the supply of credit and outreach efforts by banks. The level of competition also depends on the financial infrastructure available in the country. The analysis in this chapter uses measures of banks' market power to investigate the link between bank competition and the level of financial inclusion**.**

4. This chapter provides an assessment on the level of financial inclusion in small states and its relationship with barriers to market access. The latter are evaluated in conjunction with other determinants of financial inclusion, with particular attention to the structure of the financial sector itself. The sample of countries is organized by income level and country size following the taxonomy used in "Macroeconomic Issues in Small States and Implications for Fund Engagement." (IMF, 2013b): countries are therefore categorized in upper-middle and high income (UMH) versus lower-middle and low income (LML), and in small (S) versus micro states (M). Comoros is the only LIC among small states. We also use groupings from the opening chapter.

5. Data availability and quality are preeminent limitations when working on small states. The study relies mostly on three data sources with different coverage: i) the Fund's Financial Access Survey (FAS) which covers all 33 small states except Tuvalu. It provides supply-side data on access by households and SMEs. FAS collects data from country financial regulators, primarily central banks as such commercial banks data are of the highest quality compared to financial institutions that are not under the purview of the financial regulator; ii) the World Bank's Global Financial Inclusion Database (Global Findex) which provides insights into the demand-side of financial services based on surveys of nationally representative sample. Only six small state economies participated in the Global Findex; and iii) Bankscope which provides detailed consolidated and unconsolidated balance sheet and income statement of public and private banks throughout the world. However, data on only a handful of banks in small states are available.

[2] Examples of financial inclusion weakening financial stability often entail boosting credit in the economy beyond a sustainable and socially desirable level, thereby increasing the exposure of the country to economic volatility. However, under the oversight of public entities committed to enhancing the legal and regulatory framework, financial inclusion can lead to a diversification of borrowers and deposit sources that can be beneficial for the entire economy.

6. This chapter is organized as follows. First, it characterizes the use and access to financial services in small states. It then looks at the impact of competition in the banking sector on financial inclusion. Subsequently, other barriers to inclusion are presented. Finally, it presents some conclusions and policy lessons.

B. Access to and Use of Financial Services

7. Bolstering financial inclusion requires improved access and use of financial services. Conceptually, there is a distinction between access to and use of financial services. Access refers to the supply of financial services of reasonable quality at an affordable price.[3] The use of financial services implies that the demand for such services exists, and it occurs in equilibrium when the actual consumption of financial services takes place. The two are, however, difficult to disentangle as the equilibrium outcome is endogenously determined. On the one hand, availability is a necessary but not a sufficient condition for the widespread use of financial services. On the other hand, financial institutions will provide financial services only if market demand is sufficiently robust.

8. The use of formal financial services in small states tends to be greater in upper-middle-income countries, and lower in lower-middle-income countries, relative to larger countries at comparable income levels. While account penetration is known to be increasing with income levels, this tendency is amplified in small states. Based on the Global Findex, the use of accounts at formal institutions in Comoros and Djibouti, both LMLs, is below the world average for low income countries; while account penetration in Mauritius, Montenegro, and Trinidad and Tobago (all UMH) is above the world average for middle income countries (Figure 1, left panel). Roughly similar trends exist for saving activities, except for Montenegro and Comoros (Figure 1, right panel). Understandably, large penetration numbers can hide different realities regarding effective usage of financial services. For example, in some countries public servants are required to open bank accounts to collect wages and prevent payroll frauds, but employees queue at banks to withdraw their entire salary on the pay day.

9. In particular, small states with more financial depth owing to offshore financial centers also show a higher level of financial inclusion than their peers. Based on the number of deposit accounts in commercial banks per 1,000 adults, UMHs small states—many of which are offshore financial centers (OFCs)—outperform their peers across the world. Conversely, LML small states—predominantly fragile states—underperform their peers (Figure 2, top panels). It is to be noted that the FAS collects data on *resident* nonfinancial corporations and households. The divide between LMLs and UMHs is confirmed when looking at the number of loan accounts per 1,000 adults (Figure 2, bottom panels). Most of the UMHs have comparatively higher financial depth because they provide financial services to nonresidents on a scale that is incommensurate with the size and the financing of their domestic economy. With the presence of an OFC, the marginal cost of serving the on-shore population—especially when the infrastructure are already in place—is presumably relatively low. In fact, in some OFCs banks cover both on-shore and offshore

[3] The quality and price components are assessed against a standard benchmark, see Claessens (2006).

activities (e.g.: Segment A and Segment B activities in Mauritius). To some extent by tapping into a larger global business, banks are able to generate economies of scale that otherwise high transaction costs will be difficult to reduce on small volumes a home.

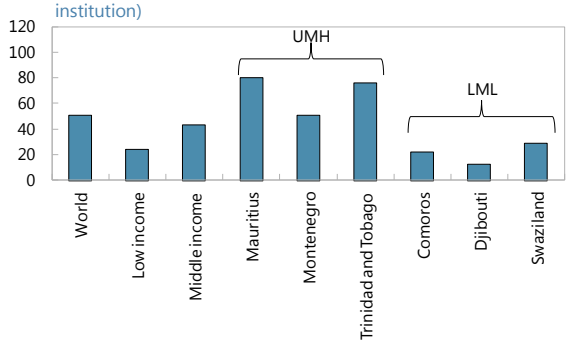
10. For countries with data, the Global Findex and the FAS database provide roughly similar measurement of financial inclusion. FAS and Global Findex are by design complements, and not substitutes. While FAS provides a supply-side perspective, Global Findex measures demand-side. When looking solely at deposit accounts in commercial banks, the number of accounts in Comoros and Djibouti is also below the world average for low income countries; while account penetration in Mauritius, Montenegro, and Trinidad and Tobago (all UMH) is above the world average for middle income countries (Figure 1, right panel). It is to be noted that the comparison is not perfect as we only report deposit accounts in commercial banks rather than in any formal institution. This matters for countries like Comoros where MFIs are as dominant as commercial banks. However, it is shown that the rate of matching between the two databases tends to be higher for countries with less-developed financial systems like LMLs (Ardic *et al.*, 2013).

11. Physical access to financial services is challenging in most small states, with the exception of offshore centers. Since individuals tend to value the services offered by banks more if their disposable income is higher, banks are more likely to build a thorough physical network and supply more services in countries with higher per capita income levels. As a result, UMCs boast a much more expansive network of ATMs and bank branches (Figure 3, left panel). This higher level of physical accessibility is likely explained by the fact that many UMHs are offshore financial centers, where, as expected, easily accessible banks and financial services are well developed (Figure 3, right panel). On the other hand, LMLs appear largely underbanked according to these measures of physical access. In this regard, the success of innovative mobile payment systems, which do not rely upon a brick-and-mortar banks' network and other significant physical infrastructures, is becoming crucial in the efforts to increase access to financial services in LMLs.

12. In recent years, mobile banking has made inroads into several small states, including as a way to circumvent physical barriers to financial access. The emergence of a branchless banking model has been, partly, in response to the excessive costs of providing and accessing financial services. While the relatively limited number of ordinary bank branches has been complemented by mobile banking trucks and solar-powered ATMs in remote areas, the operational costs for commercial banks continue to be very high. Hence, physical access to financial services remains prohibitively expensive and beyond the reach of a large part of the population. Because of these structural constraints, commercial banks have been developing a strong mobile banking presence in small states in the Pacific. This is particularly true in remote, widely dispersed, and lightly populated countries, like Solomon Islands. Recently, mobile banking subscriptions have experienced double digit annual growth in Solomon Islands, overtaking other more long-standing markets such as Tonga (Figure 4, right panel). Reliable mobile banking does require minimum physical infrastructure, such as cell phone towers, that may be lacking in some small states. Moreover, as the mobile banking continues to expand, there are potential systemic risks that could arise from further rapid growth and that need to be monitored carefully.

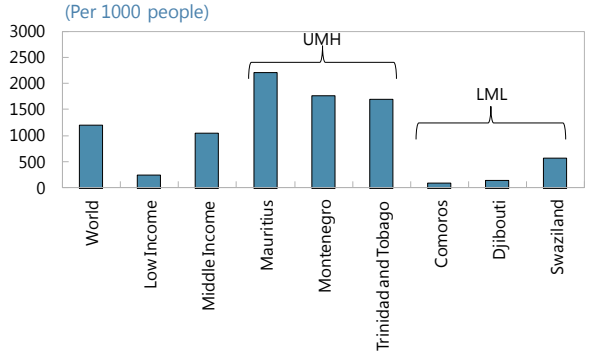
Figure 1. Individual/Household Use of Financial Services

Account Penetration
(Percent of adults with an account at a financial institution)



Source: Global Findex

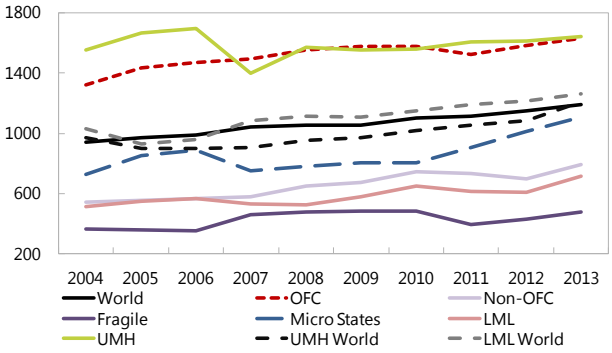
Deposit Accounts at Commercial Banks
(Per 1000 people)



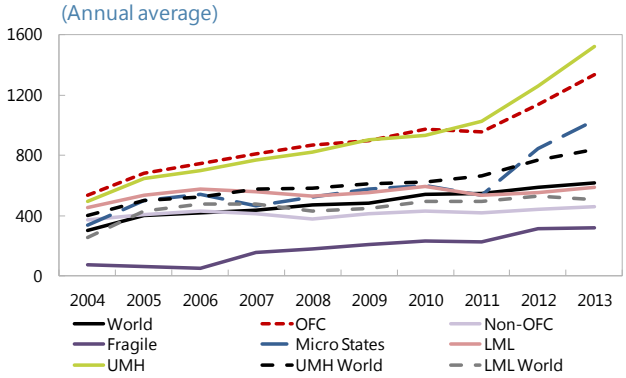
Source: FAS.

Figure 2. Households Use of Financial Services

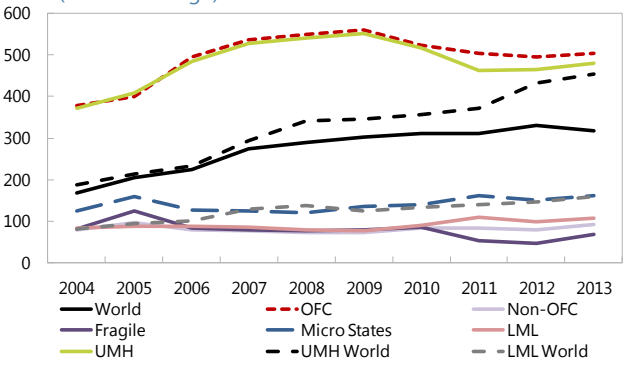
Number of deposit accounts per 1,000 adults by status
(Annual average)



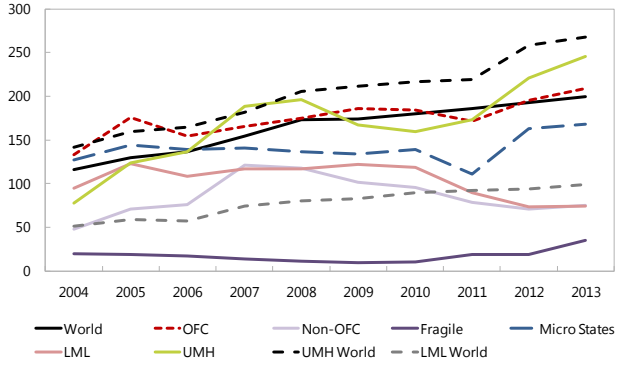
Number of depositors per 1,000 adults by status
(Annual average)



Loan accounts per 1,000 adults by status
(Annual average)



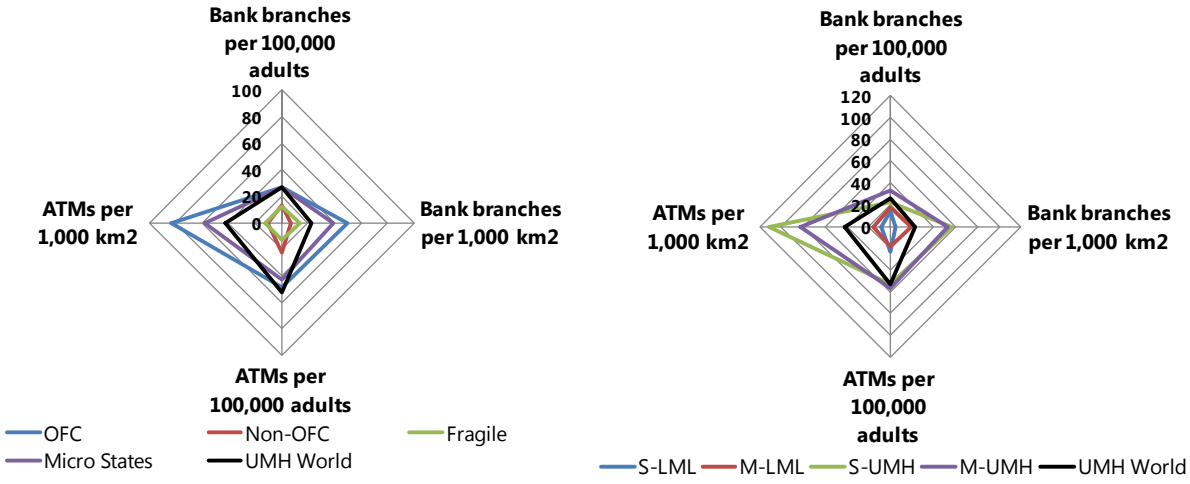
Borrowers at commercial banks per 1,000 adults by status
(Annual average)



Source: FAS.

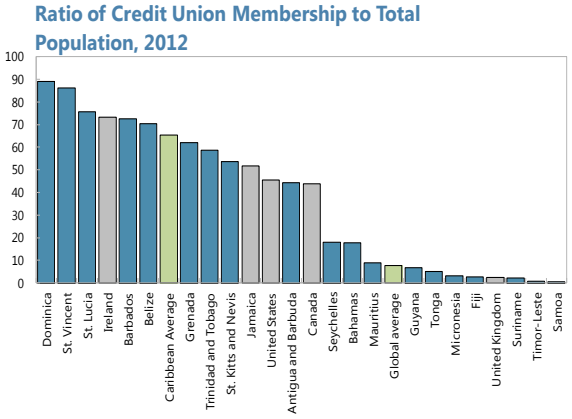
Note: The Financial Access Survey has data for all small states but Tuvalu, albeit with missing observations for some variables.

Figure 3. Physical Access to Financial Services, 2013

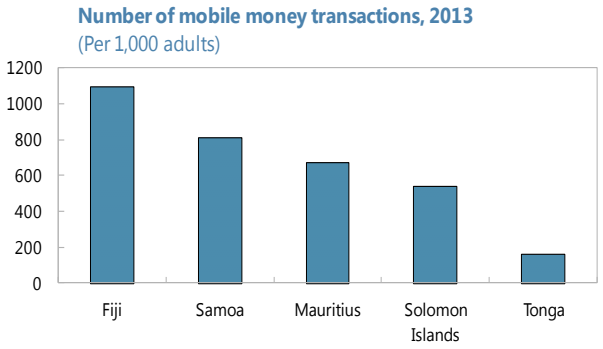


Source: FAS.

Figure 4. Households Use of Nonbank Financial Institutions



Source: World Council of Credit Unions Report, 2012.



Source: FAS.
Note: Six small states in FAS have data for mobile transactions. Comoros report zero for all mobile money transactions

13. Nonbank financial institutions also play an important role in financial inclusion in some small states. Eleven of the top 15 countries worldwide with the highest penetration of credit unions are from the Caribbean (measured as the ratio of membership to total population), and on average this ratio in the Caribbean is about 8 times the world average (Figure 4, left panel). Credit unions have grown rapidly since the mid 1990s helped by flexible regulations. Subsequently, many have adopted professional management and diversified their services to compete effectively with commercial banks. Sometimes they provide financial services in tandem with producer and sales cooperatives. They benefited from preferential treatment including no reserve or capital requirements, as well as personal income tax exemptions for annual saving in

credit unions. Today, many credit unions in the Caribbean are comparable to commercial banks with respect to asset size and the range of services they offer to their members. In some circumstances, a well-regulated credit union system can serve as a more flexible point of access to the formal financial system than banks.

14. Informal finance schemes can also serve as a second-best alternative and even a stepping stone to financial inclusion in certain circumstances. The literature argues that informality and relationship lending prosper where there is a lack of institutions and the technologies needed for credit appraisal and monitoring. Although data on informal finance in small states are limited, anecdotal evidence suggests that several countries in our sample have fairly large penetration rates of informal financial schemes. In Comoros, for instance, community-based saving is widespread, and some schemes have graduated to become microfinance institutions (MFIs) that are almost as important as commercial banks (Sanduk and Meck networks). The central role of nonbank financial institutions may call for an expansion of macroprudential oversight to these institutions.

15. Small firms in upper-middle-income countries are more credit constrained than large ones, while in lower-middle-income countries all firms are equally constrained.[4] On average, almost half of the firms surveyed make use of bank loans to finance their working capital, and about one quarter declares to be credit constrained. There is substantial evidence that small firms around the world are more credit constrained than larger ones. Small sized firms among small state UMHs are not different in that, on average, they are more credit constrained than larger ones (Figure 5, top left panel). Firms operating in small state LMLs instead face similar financing constraints irrespective of their size. Larger firms have a comparative advantage in accessing bank credit to finance their working capital, regardless of the country size and level of income, except in M-UMHs (Figure 5, bottom left panel). Similarly, exporters usually face lower financing constraints compared with non-exporters as banks act as intermediaries through which they receive export proceeds, though the evidence on the proportions of firms using banks to finance the working capital is inconclusive (Figure 5, right panels). These patterns are unchanged when considering country groupings (Figure 6). This evidence suggests that policies facilitating broad credit access can foster financial inclusion, either directly through increased demand, or indirectly, via stronger growth.

16. Some factors that are generally correlated with low financial inclusion seem to affect small states to a greater extent. As seen above, lower income small states have lower financial inclusion than their peers, while higher middle income small states with offshore financial centers have higher financial inclusion than their peers. As the following analysis shows, the contestability of the market and the degree of competition among banks can be undermined by the very

[4] We distinguish firms by different characteristics using the World Bank's Enterprise Surveys (WBES). The WBES provides firms' responses to questions such as whether credit represents a constraint to their operations, or if they use bank credit to finance working capital or fixed assets. The country averages are given by year and by type of firms. Firms are distinguished by sector of involvement—exports/non-exports—and by size—small, medium, and large. A firm is classified as exporter if exports account for more than 10 percent of its sales. The classification by size is based on the number of employees: small, medium, and large firms have 5 to 19 employees, 20 to 99 employees, and 100 employees or more, respectively.

limited market size, resulting in market imperfections that restrict the supply of financial services and of financial inclusion.

C. The Banking Sector and Financial Inclusion

17. Weak competition and high concentration tends to be associated with small size and lower income, with negative consequences for financial inclusion. The degree of competition prevailing in the banking sector can be assessed using the Panzar-Rosse H-statistic, based on bank-level data from 2009 to 2013.[5,6] Within small states, poorer countries score lower in the H-index, indicating that the level of competition in the banking sector is more muted (Figure 7, top left panel). Low levels of economic activity and diversification, the fragile institutional framework, and capacity constraints related to small size represent significant barriers to the entry of new players and the enhancement of competitive practices in LMLs. Commodity exporters and countries with a tourism market are typically less exposed to such constraints and perform well in terms of the degree of competition in the banking sector. Unsurprisingly, the level of bank competition in small states with OFCs is higher compared to non-OFCs. This outcome is partly a reflection of the high number of middle income countries listed as OFCs, but it is also consistent with banks in OFCs operating in a more competitive market for global business and overcoming diseconomies of scale.

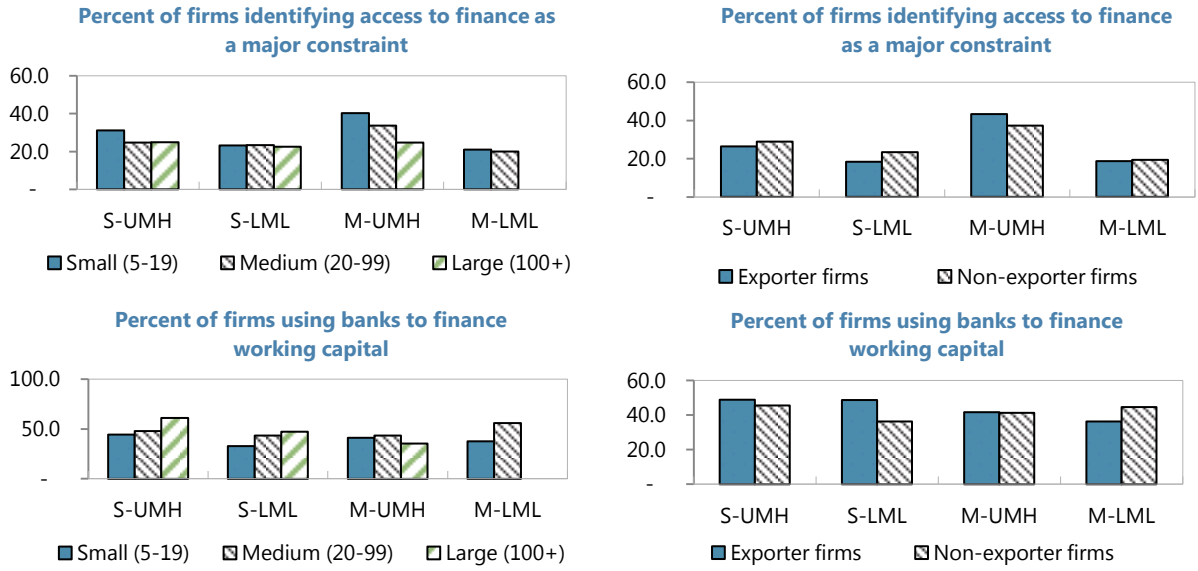
18. The effects of size and the implications for financial inclusion are also evident looking at concentration in the banking sector, rather than just the level of competition.[7] Shallow financial markets in principle usually imply that few banks would control a large fraction of the market. The data on bank concentration is more widely available and their analysis confirms that small size leads to high concentration and low inclusion in small states—where the share of assets controlled by the three largest banks is on average 90 percent. The data also show that concentration is higher in low income countries, and in countries that do not qualify as financial centers (Figure 7, top right panel). While concentration *per se* is not necessarily harmful if the market is contestable, physical and institutional barriers to the entry of new players can be particularly acute in small states. Consequently, higher concentration appears to be associated with lower deposit and loan accounts, and to higher fraction of firms that declare to be financially constrained. Hence, the share of bank assets held by the first three banks is a good proxy for bank competition.

[5] See Appendix I for details on the estimation of the empirical model. The sample choice strikes a balance between the need to insulate from the 2007/08 global financial crisis and the need for a sample that is representative of recent trends.

[6] Banks accounting data are retrieved from the Bankscope database, which collects micro-level banking information for different countries. The available data for small states allowed to construct a measure of the H-statistic for The Bahamas, Barbados, Belize, Cabo Verde, Djibouti, Maldives, Mauritius, The Republic of Montenegro, Seychelles, St. Kitts and Nevis, Swaziland, and Trinidad and Tobago.

[7] Following Bhattacharya (2003), concentration in the banking sector is measured as the ratio of assets of the three biggest banks to the banking system's total assets.

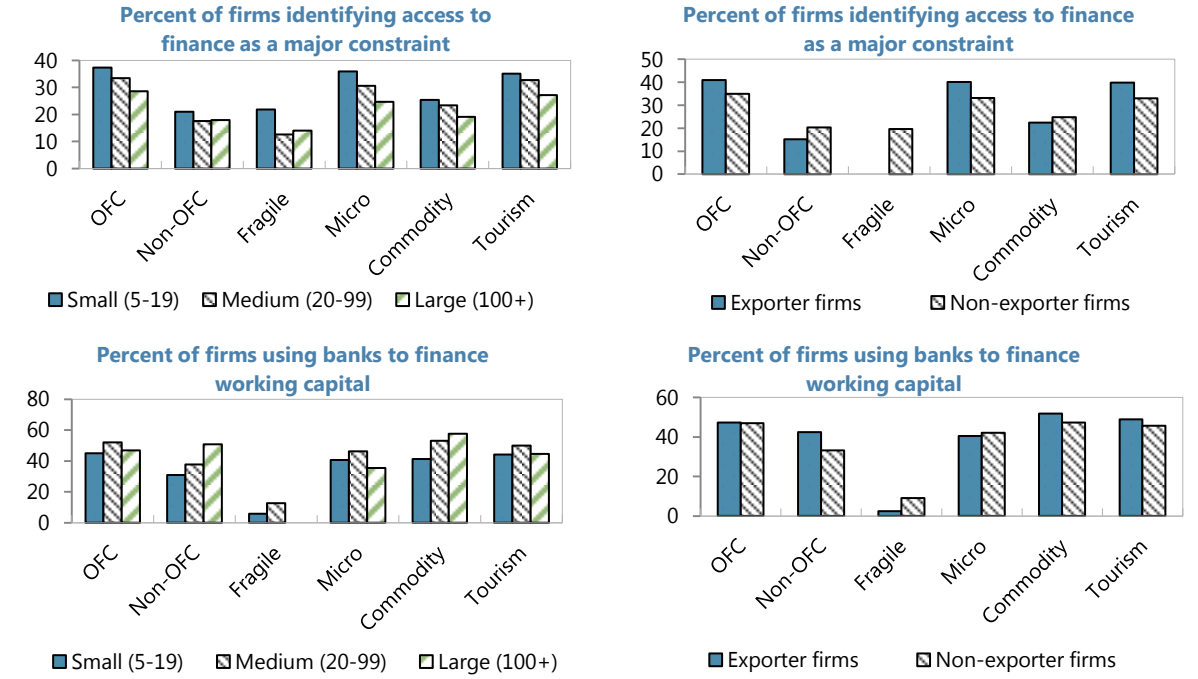
Figure 5. Firms Access to Financial Services by Income Level



Source: WBES.

Note: Number of employees in parentheses.

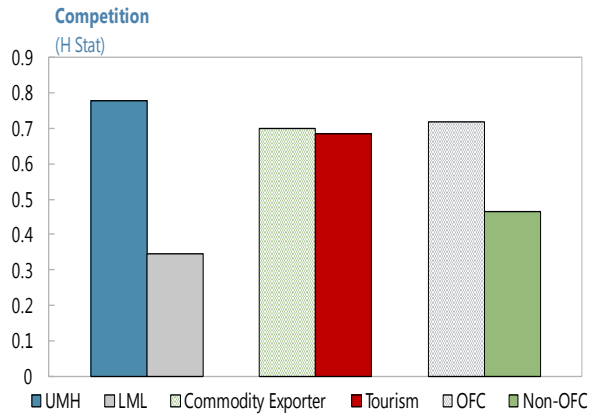
Figure 6. Firms Access to Financial Services by Country Grouping

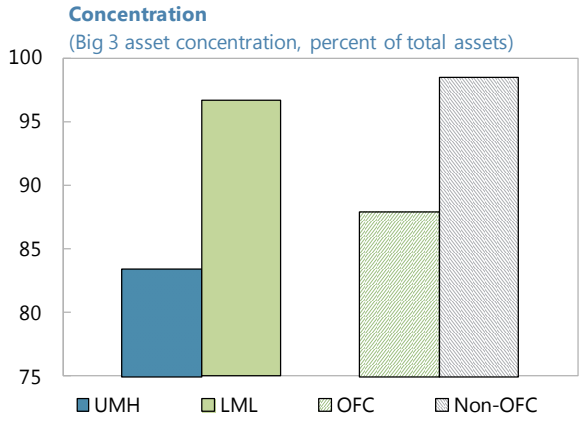


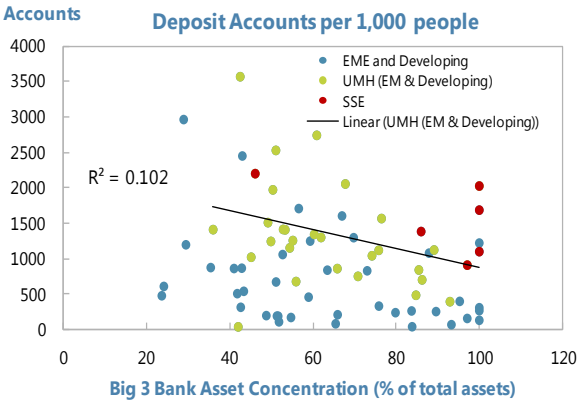
Source: WBES.

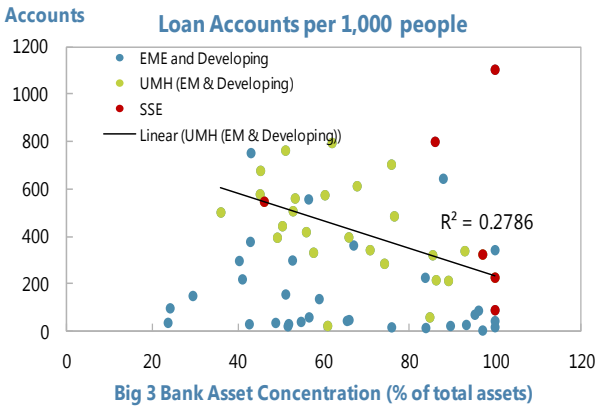
Note: Number of employees in parentheses.

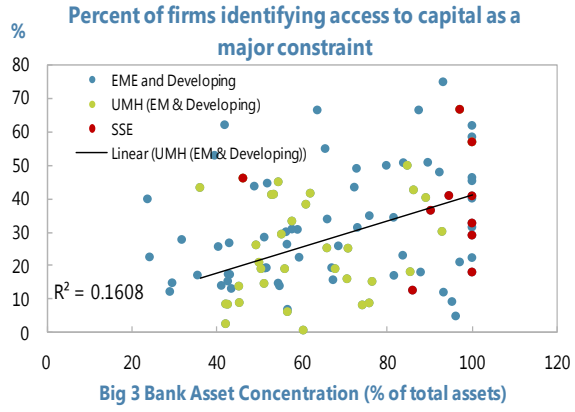
Figure 7. Bank Competition, Concentration and Financial Access

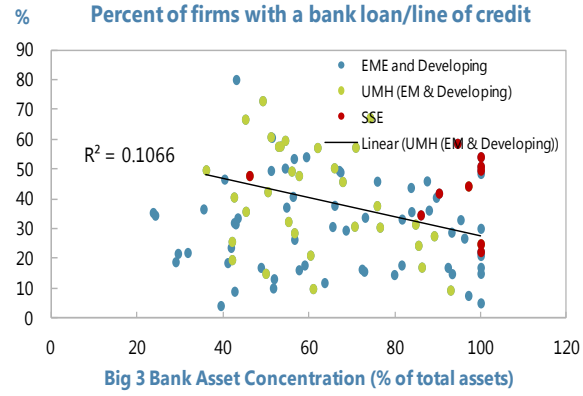












Source: Bankscope, FinStat and author's calculations.

19. The evidence shows that more bank competition and lower concentration are positively associated with more financial inclusion. More bank deposits are opened and more loans are conceded in economies where concentration is lower (Figure 7, center panels). Based on available data, the opposite relation holds for the level of competition in the banking sector. Also, in UMHs, the share of firms identifying access to capital as a major constraint declines for decreasing banking concentration, while an increasing proportion of firms seeks banks to obtain credit (Figure 7, bottom panels). A view in the economic literature—commonly referred to as the

information hypothesis—asserts that in the presence of information asymmetries and agency costs, competition among banks may reduce market access by making it more difficult for individual banks to internalize the returns from their operations (Petersen and Rajan 1995; Love and Martinez, 2012). This view is not supported by our evidence, which instead favors the market power hypothesis, i.e. competition in the banking sector increases the availability of credit even in markets that may not be fully transparent. On the other hand, heavy competition can lead to over-banking or even a race to the bottom, especially in the credit market, risks that should merit monitoring.

D. Other Barriers to Financial Access

20. Beyond banking characteristics such as competition, other factors can limit financial access. First, it can originate from low demand for financial services resulting, for instance, from financial illiteracy or because these services may be accessible through family and friends. Second, low access can also follow from low supply of services, due to regulatory distortions or because of entry barriers that lead financial institutions not to exploit fully outreach opportunities. Third, structural deficiencies—such as small market size, poor infrastructures, or weak institutional environment—can increase the costs and risks for financial institutions to provide services and limit outreach possibilities. At the other extreme, excess supply can also be a problem when it threatens financial stability (Beck and de la Torre, 2007).

21. Income is a key driver of the demand for financial services at the household level. In small states, the main self-reported reason by individuals for not using financial services appears to be the lack of money (Figure 8, left panel). Banking services become unappealing as the costs of opening and using a bank account are not compensated by the interest earned on deposits, nor by the transaction services offered by banks. Eventually, even basic products such as the simplest bank account are perceived as too expensive and demanding in terms of the required documentation, especially for populations in subsistence production, which can be large in some small states.

22. Lack of collateral or information are also important barriers to financial inclusion in some small states, highlighting the need to reform the institutional financial infrastructure. Banks typically accept only land and buildings as forms of collateral, despite firms holding a variety of tangible and intangible assets such as machinery and inventories, accounts receivable from clients, intellectual property rights and warehouse receipts. In Pacific small states, where land is communally owned and cannot therefore be used as collateral, the impediments to access to finance are even stronger. In these situations, reforming the set of laws that determine which assets can be used as collateral can unlock so called "dead capital" and improve the terms under which loans are conceded.[8] The absence of credit bureaus and collateral registries can also hamper access to credit as lenders have difficulties in collecting the relevant information to assess

[8] Beyond the immediate financial benefits, reforming collateral laws is considered to have a beneficial impact also on the judicial system more generally, strengthen microfinance institutions and foster capital markets development (see Fleisig et al 2006).

the creditworthiness of the clients. In this respect, the creation of a unified archive for security filing and a registry for collateral pledges would enhance clarity on which assets are available for pledges and the priority order of different claims.

23. Some distinctive characteristics of small states have the potential to constrain supply of financial services and limit outreach possibilities of banks, thus resulting in low financial access. These include:

- *Initial conditions*: small usable land surface, geographical remoteness and dispersion, and low population density are compelling barriers that create high transactions costs and limit the outreach of financial systems. Small states with lower population density have smaller deposit account penetration (Figure 8, bottom left panel), and physical accessibility to financial services is typically limited in countries dispersed over multiple islands, as is the case for several LMLs in the Pacific. Regional integration can potentially help in this regard, with a group of countries pooling resources to overcome diseconomies of scale and reduce transaction costs. In practice, achieving effective regional integration requires building regional infrastructure and institutions and has involved considerable concerted efforts to yield results.

- *Macroeconomic volatility*: growth volatility, large swings in the current accounts, weak fiscal anchoring, and the exposure to natural disasters test the effective design and supply of financial services at affordable prices. The large deposit/loan interest rate spreads characterizing most small states are one of the channel by which macroeconomic volatility negatively affects financial inclusion (Figure 8, bottom right panel, Box 1).

- *Weak institutions*: regulatory distortions, entry barriers, poor oversight, political instability and corruption raise the costs and risks for banks to provide financial services, limit their outreach possibilities and create obstacles to fully exploit the market potential.

24. Financial products and business models that are tailored to small states' specific challenges, such as dispersion, could improve inclusiveness. For instance, banks in the Pacific are replacing full-service branches with upgraded ATMs, often in the local post office or grocery store. This works particularly well on outer islands, where branch costs are very high. Such operations offer more than mobile phones, especially for communities that typically use cash for most financial transactions. Another example is how the dominant Australian banks in the Pacific reduce costs by centralizing many activities, including credit assessment. In general, product designs that address market failures, meet consumer needs, and overcome behavioral problems can promote a wider use of financial services (World Bank, 2014).

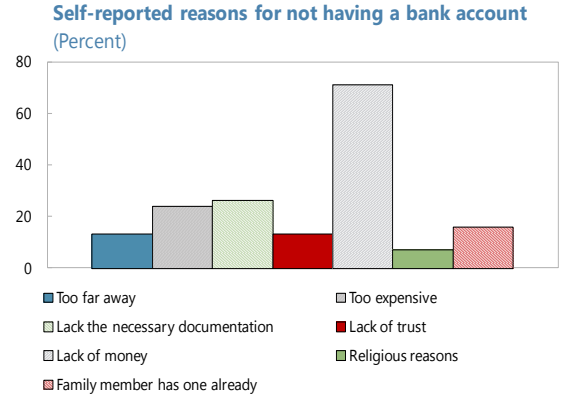
25. The econometric analysis suggests that smallness and geographical dispersion hold back financial access in small states.[9] Physical characteristics of small states, such as size and population density, have a negative impact on financial access measured as the number of

[9] See Appendix II for details of the regression specification and robustness exercises.

deposits accounts per 1000 adults (Table 2). While the relationship between population and financial access is negative in emerging and developing economies, it turns positive in the small states group. In other words, financial access in small states would benefit from a larger population size, as that would help to overcome some of the diseconomies of scale that make the provision of financial services less efficient and more costly. Similarly, the regression coefficient associated to population density (measured as the number of people per square km) takes a negative sign in small states, contrary to what is observed in emerging markets in general. This reflects the fact that higher density reduces the need for a diffused network of physical infrastructure, with negative consequences on financial access for those parts of the population living in more remote territories, or over a dispersed surface, as is often the case in small states.[10]

26. Instead, lower concentration and better institutions help to improve financial inclusion. The coefficient associated to concentration is consistently negative across the various regression specifications, while the quality of institutions —captured by the regulatory environment, government effectiveness and the time to resolve insolvency—is positively associated with financial access. However, as the small state dummy remains negative and significant after controlling for the institutional characteristics, the level of concentration in the banking sector, and the macroeconomic fundamentals, it looks like small states suffer a disadvantage with respect to financial inclusion in comparison to other emerging markets. As it emerged also in the previous analysis, the average result hides a difference between low income small states, which indeed perform comparatively worse, and upper-middle income small states which instead are better off. However, some small states (e.g., ECCU) might be overbanked, with potentially negative consequences for profitability and stability.

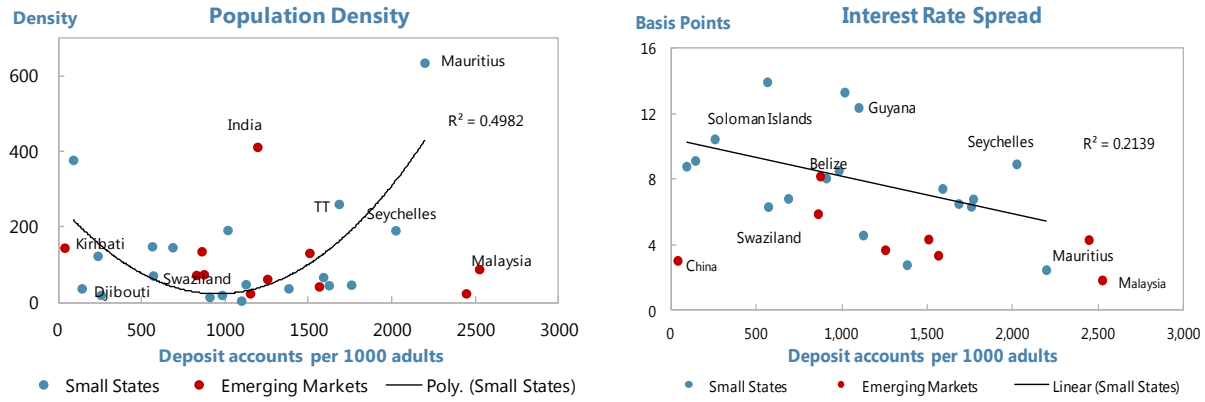
Figure 8. Other Barriers to Financial Access



Source: World Bank's Global Financial Inclusion.

[10] Other studies focused on African countries and using broader measures of financial development find that countries with sparser population have shallower banking sectors (see Allen at al 2014, and Detragiache et al 2005).

Figure 8. Other Barriers to Financial Access (concluded)



Source: Bankscope and authors' calculations.

Table 1. Determinants of Financial Access

	(1)	(2)
	Deposit Accounts Per 1,000 Adults	Deposit Accounts Per 1,000 Adults
Concentration	-0.15***	-0.19***
OFC	0.78***	-0.12**
SSE	1.20***	-9.78***
SSE x LML	-0.66	-0.59***
SSE x UMH	-0.48	3.19***
Real GDP Per Capita		0.0***
Inflation		-0.00**
Population		-0.14***
SSE x Population		0.81***
People Per Sq Km		0.0004***
SSE x People Per Sq Km		-0.009***
Days To Insolvency		-0.12***
GDI Government Effectiveness		0.13**
GDI Regulatory Environment		0.84***
Observations	475	440

Standardized beta coefficients: * p < 0.1, ** p < 0.05, *** p < 0.01.

Box 1. Determinants of Interest Rate Spreads in Pacific Island Countries

Spreads between lending and deposit rates in Pacific island countries (PICs) is approaching 10 percent on average—higher than in most comparators (Figure 1). While the small scale, geographic dispersion, and vulnerability to shocks are common factors that increase the cost and risk of credit in PICs, there is considerable variability in interest rate spreads both across countries and over time (Figure 2), which facilitates the analysis of their determinants.

Fig. 1. Average Interest Rate Spreads

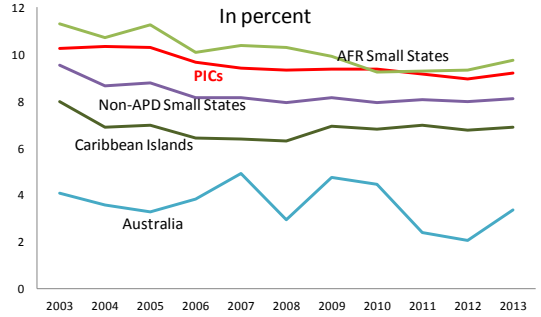
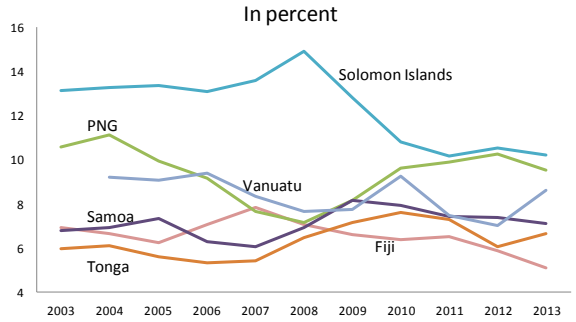


Fig. 2. Interest Rate Spreads in Selected PICs



The **following factors are robust, statistically significant determinants of interest rate spreads**:[1]

- *Economic size* (the country's GDP), suggesting that the higher level of sophistication, greater opportunities for diversification, and economies of scale available in larger, higher-income countries reduce spreads;
- *Inflation*, which erodes the real value of interest margins, prompting the banks to raise the spreads. Higher inflation is also often an indicator of broader economic uncertainty, for which the banks seek compensation. While the quantitative impact of inflation on spreads is found to be small, the notable decline in inflation in the region in the last few years may explain the broad reduction in spreads observed during that period;
- *The quality of bank balance sheets*, as indicated by loan loss provisions or non-performing loans, with lower spreads in stronger banking systems;
- *Banking sector concentration*, with greater competition reducing spreads.

The last result suggests that, while the elevated spreads in the PICs partly reflect the cost and risk of doing business in these countries, the oligopolistic nature of the banking systems also plays a role.[2] The effect is nonlinear, with an entry of a new bank (and corresponding redistribution of market shares) having a major effect on spreads in countries hosting very few banks, but only a marginal impact where competition is already strong.

Data also indicate that the quality of public institutions (in particular, the strength of contract enforcement) also affects spreads. In that regard, while systematic evidence is not readily available because of measurement issues, there are reasons to believe that communal ownership of land and frequent government changes contribute to the high spreads in the PICs. The prevalent land tenure pattern limits collateral availability, while high government turnover increases political and economic uncertainty.

These results of the quantitative analysis are in line with economic theory. They suggest that the following measures could help reduce interest rate spreads:

- Strengthening bank balance sheets via more aggressive debt collection, writing off nonperforming assets, elimination of connected and directed lending, and better regulation and supervision;
- Increasing competition in the banking system by leveling the playing field and eliminating barriers to entry where they exist;[3]
- Improving economic institutions, particularly ensuring clear property rights (including land tenure), appropriate collateral regimes, compilation of credit history, and strong contract enforcement.

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[1] The results are based on fixed effects panel regressions for 2003-2013. Because of data availability, the sample is limited to the six states shown in Figure 2. Lagged values of independent variables are used to address the issue of reverse causality.

[2] The point is also supported by high bank profitability in the region.

[3] There are obvious natural limits to the number of banks that a small economy can sustain. The results suggests, however, that at the current levels of concentration, the degree of competition could be increased, and a relatively small dilution of market power (via the entry of an additional bank or a more uniform distribution of market shares among existing banks) would have a noticeable impact on spreads.

Source: Based on the analysis in Jamaludin, Klyuev and Serechetapongse (forthcoming IMF Working Paper).

E. Conclusions and Policy Recommendations

27. The challenge for small states is to identify policy measures that can offset obstacles to greater financial inclusion while preserving stability. This section draws conclusions and proposes policy lessons from a set of country experiences with financial inclusion. It is to be recalled that these conclusions are subject to data limitation of small states. Although considerable heterogeneity exists across small states, they seem to face specific barriers to promote sufficient and affordable supply of financial services that are easily accessible for a large share of the population. This is particularly true for lower income small states that do not have an offshore financial center. The main constraints to financial inclusion specific to small states include small market size, vulnerability to exogenous shocks (spillovers, natural disasters), low institutional capacity owing to small size, remoteness, and dispersion. While greater inclusion is desirable, its implications for financial stability must also be carefully addressed and managed. As such, policies to offset obstacles to greater financial inclusion should be accompanied by steady progress in improving supervisory and monitoring capacity.

28. At a minimum, public policies should aim to address market and policy failures; weak bank competition is a common problem. Generally, governments should strive to ensure an adequate regulatory framework and financial infrastructure, particularly strengthening informational and contractual frameworks (e.g., building or upgrading of credit registries, collateral, risk insurance) and provide supporting market infrastructure that can foster financial inclusion. At the same time, policies that seek too aggressively to broaden financial access can have ramifications for consumer indebtedness, requiring a commensurate strengthening of consumer protection. Weak bank competition has also led to low financial inclusion; competition can benefit from measures to combat anti-competitive behavior—such as banning penalties for closing accounts—and encourage new entrants—such as facilitating licensing. While promoting competition and contestability, regulators should also guard against excessive competition lowering profitability and raising risks to financial soundness. More fundamentally, strong economic governance should promote competition, inclusion, and stability.

29. In some cases, selective relaxation of regulation has promoted innovation and contestability in the provision of financial services in small states, but it should be carefully limited in scope and activity. For instance in the Caribbean, credit unions have grown rapidly since the mid-1990s helped by "flexible regulations". In the process, credit unions outgrew the supervisor's capacity to overlook their activities. It illustrates how flexible regulation can be a "double-edged sword" policy option as it may threaten financial stability. In a different context, flexible regulation has also been crucial for the growth of mobile banking technology like M-Pesa in Kenya (IMF, 2013a). In the case of many small states, immutable physical barriers make technological innovation all the more important to reduce transactions costs. While regulatory flexibility has stimulated access in some cases, it needs to be accompanied by a widening of the regulatory and supervisory perimeter to minimize regulatory arbitrage and financial system risks. Moreover, flexibility needs to be limited to narrowly focused institutions that can be regulated in different ways based on the specific risks they pose.

30. While the presence of an offshore financial center appears to have aided financial inclusion in certain upper-middle-income small states, this finding does not argue in favor of small states establishing new OFCs due to the associated governance challenges. It is apparent from the data that deep financial sectors in small states with OFCs have helped them to overcome their size disadvantage. However, countries that have been able to attract foreign capital have also scored well across several indices of governance quality such as government effectiveness, rule of law, political stability, voice and accountability, and control of corruption (Dharmapala and Hines, 2009). Ensuring the financial stability and integrity of an OFC has proven challenging even for high capacity regulatory systems in some advanced countries, as they can attract large, volatile and often illicit flows from highly sophisticated actors. Small states with existing OFCs are well advised to exercise great care in regulating and expanding these centers. Establishing new OFCs should not be considered as a means to promote financial inclusion for small states, since the risks are likely to outweigh the potential benefits, especially for lower capacity small states.

31. A number of additional specific lessons can be drawn from the experiences examined in this paper.

- **Direct government interventions are more likely to be helpful when they minimize distortions, rely on private institutions for implementation and are not politicized**. In general, public interventions—such as directed credit, debt relief, and lending through state-owned banks—tend to be politicized and less successful, particularly in weak institutional environments (World Bank, 2014). Countries that have adopted a more activist approach through the private sector with some degree of success have included Mauritius and more recently Seychelles (Box 2).
- **Policies should also address obstacles to financial inclusion stemming from the demand-side of the market**. Weak financial literacy may be a binding constraint to financial inclusion. While this is harder to identify than supply-side constraints, it may play a role in some higher income small states like Mauritius and Seychelles.
- **Promoting regional integration can help overcome obstacles related to small size and limited administrative capacity**. The practical challenges of pursuing this direction should not be underestimated, however.

32. The Fund can and should play a role in supporting initiatives to enhance financial inclusion. When financial inclusion initiatives are well designed, they can promote inclusive growth and bolster resilience, objectives that the Fund supports under its mandates for surveillance and lending programs. Examples of Fund initiatives to support financial inclusion in small states include:

- *Program*: structural benchmark related to financial inclusion in Solomon Islands ECF-supported arrangement;
- *Capacity building*: CARTAC work on credit unions in the Caribbean;
- *Data initiative*: data collection through Financial Access Survey.

Continuing to share lessons on promoting financial inclusion across small states will further reinforce the Fund's support for these initiatives.

Box 2. Promoting Financial Access by SMEs: The Cases of Mauritius and Seychelles

Small and medium enterprises (SMEs) in Mauritius produce about 37 percent of the GDP-i.e. approximately USD4 billion worth of output- and employ about 250,000 workers, giving an exceptional contribution to the economy. Furthermore, the SMEs sector is where the culture of entrepreneurship has its roots, grows and disseminate into the broader economy. In order to address the prohibitively high costs of credit faced by SMEs, which were stifling the drive of entrepreneurs and threatening their survival, in December 2011 the government approved a bill aimed at improving the access to finance for SMEs.

The bill envisaged that banks would extend credit facilities to SMEs for a total of Rs3 billion (about USD100 million) over the three following years , and fixed the lending rate at 3 percentage points above the prevailing Key Repo Rate (which at the time averaged 8.5 percent per annum and is the Central Bank's policy rate). The scheme covered both existing and new credit lines opened to finance either investment or working capital in SMEs. In addition, the government bill also abolished the inscription fee to be levied on registered loans and removed registration duty on loans not exceeding 1 million rupees.

Coordination between the government and Central Bank was key to the success of the scheme. The Central Bank provided the framework through which finance was extended on favorable terms through 4 participating commercial banks (out of 10 operating in the country and which merely concentrate on international business), and closely monitored the implementation stage. From December 2011 to February 2014, 2,300 applications were received, with an approval rate of about 94.5 percent; credit lines for nearly Rs3.0 billion were disbursed and the amount outstanding under this facility stood at Rs1.3 billion.

The main features of the scheme were the following: (i) new overdrafts and bank loans as well as renewal of existing facilities were made at the rate of 8.5 percent; (ii) all processing costs and related charges were waived; (iii) the Equity Fund provided a guarantee instrument to offer risk cover amounting to 35 percent of every loan and overdraft; and (iv) banks were allowed to claim the deduction from tax in respect of SME bad debts without the need to have recourse to the courts. While the scheme increased access to financial services, it is not yet possible to reach a definitive assessment of the benefits and costs, including the impact of regulatory flexibility and distortions (particularly fixing the interest rate).

Seychelles also put in place a program to facilitate lending to SMEs, whereby private banks would lend using their own funds and the government would subsidize the charged interest rate. The scheme targets businesses with an annual turnover below SR5 million, and has a cap at SR3 million: for the first SR1 million, clients pay a 5 percent interest rate and the government covers the difference from the commercial rate applied by the bank; on the remaining SR2 million, the client pays a 7 percent interest rate instead. Overall, the program has been successful in increasing lending: since its introduction in July 2013, a total of 168 loans have been approved during the first year, for a total amount of SR134 million.

Source: Based on Box 5.1 from IMF (forthcoming).

Appendix I. Empirical Specification of the Panzar-Rosse Model

The H-statistic measures by how much total bank revenues change for a change in its factor input prices, i.e. labor, capital and financing. Assuming that a bank pricing strategy is a function of the competitive behavior of market participants, the H-statistics provides a measure of a bank market power. Under a monopoly market structure, an increase in input prices translates into higher marginal costs, lower equilibrium output and a fall in total revenues. In perfectly competitive markets instead, a given increase in factor input prices induces a proportional change in revenues without influencing equilibrium output. The H-statistic can thus be used as a proxy for the overall level of competition prevailing in the market. Higher values of the statistics are associated with more competitive banking systems, and negative values signal either a monopoly or a perfectly colluding oligopoly market structure. Relatively high level of assets and deposits concentration in the banking systems of small states creates significant barriers to entry thus hindering competition.

Compared to alternative measures of competition, the H-statistic has the advantage to attempt to infer the degree of competition from the observed behavior of banks. However, it also comes with limitations. It is based on accounting data that banks voluntarily decide to disclose, which implies that the H-statistic is based upon a sample of banks operating in a country but it is not representative of the entire population. And it does not capture a series of factors pertaining to the regulatory environment – such as entry into the market, licensing procedures and capital requirements – that affect the contestability of the market.

The elasticity of revenues to changes in input prices is estimated in a panel regression model using bank-level data from 2009 to 2013. Several specifications have been proposed in the burgeoning literature devoted to the Panzar-Rosse methodology. The one adopted here can be written as:

$$Ln(P_{it}) = \beta_1 \quad \ln(W_{1,it}) + \beta_2 \ln(W_{2,it}) + \beta_3 \ln(W_{3,it}) + \gamma_1 \ln(Y_{1,it}) + \gamma_2 \ln(Y_{2,it}) + \gamma_3 \ln(Y_{3,it}) + \epsilon_{it}$$

where $W_{k,it}$ for *k=1,2,3* identifies the cost of labor, funds and fixed capital calculated as the ratios of personnel expenses to total assets, interest expenses to total deposits, and operating expenses to total assets respectively. The subscript i identifies each bank in the sample, while the subscript t indexes time. The regression specification also features bank-level controls aimed at capturing bank-specific characteristics. Specifically, $Y_{1,it}$ is defined as the ratio of equity to total assets and its purpose is to control for the possibility that banks with lower capital face higher financing costs; $Y_{2,it}$, the ratio of net loans to total assets, is used as a proxy for the bank's credit exposure; $Y_{3,it}$ is total bank assets and it is intended to control for size effects. The dependent variable, P_{it}, is the ratio of total revenues – calculated as the sum of interest and non-interest income – to total assets. The bank-level data comprises banks' accounting data submitted in 2013 and covering the previous five years. The panel is unbalanced since not all banks in the dataset provide the same data over the entire sample period. The model is estimated using bank specific fixed effect regressions. This approach is preferred to estimation by generalized least squares as the latter appears very sensitive to details in the regression specification, most likely as a consequence of the limited number of available observations. The H-statistic is defined as the sum of the coefficients β_1, β_2 and β_3.

Appendix II. Panel Regression Specification and Estimation

A regression specification is used to assess the relative importance of alternative factors in determining financial access in small states. Given the limited data availability, the preferred approach has been to run a panel regression including all emerging market countries according to the WEO definition, and using dummy and interaction variables for small states when necessary. Emerging markets appear an obvious comparator for small developing states considered in this exercise. The estimation covers the period from 2008 to 2013, using annual data for each country included in the dataset. The panel regression is performed by means of a generalized least squared (GLS) approach with heteroskedastic error term.[1] The list of explanatory variables includes concentration in the banking sector, a dummy for off-shore financial centers, small states (further decomposed by level of income), controls for initial conditions and several variables measuring the quality of institutions. To control for differences in income levels across countries the real per capita GDP is included, while (log) total population and population density are intended to account for the country's size and geographical dispersion respectively. Inflation is included to capture differences in the conduct of monetary and exchange rate policies. We selected several among the Worldwide Governance Indicators (WGI) constructed by the World Bank to assess the country's institutional soundness.[2]

The number of deposit accounts per 1000 adults is the preferred measure of financial access and is used as the dependent variable. As a robustness exercise, the same specification is estimated using the number of bank branches per 1000 adults and a measure of credit to the private sector as the dependent variables.[3] While these variables admittedly capture different aspects of financial inclusion, we believe the results contribute to reinforcing some key conclusions derived in the main text. To start with, the coefficient associated to concentration in the banking sector is consistently negative and statistically significant across the different specifications. Besides, the level of income and the measures of institutional quality are also consistently positive and statistically significant throughout the various regressions.[4] The small states dummy has a positive sign, and the underlying dichotomy between lower-middle and low income countries versus upper-middle and high income countries holds true across specifications. Overall, we interpret these results as reinforcing the fact that small states with low levels of income perform comparatively worse in terms of financial access, while the opposite is true for upper-middle and high income, and that physical factors represent a constraint. Efforts aimed at improving the institutional environment, economic growth and the business climate in the banking sector can jointly help to improve the performance on financial inclusion.

[1] The fixed effect regression model is not a viable alternative due to the presence of time invariant dummies. On the assumptions on the distribution of the error term, correlation across panels cannot be implemented as the panel is unbalanced.
[2] For a detailed description and for information on the methodology followed to construct each indicator, see http://info.worldbank.org/governance/wgi/index.aspx#home.
[3] All dependent variables enter the regression equation in log.
[4] The only exceptions are the sign of the coefficients associated to population in Model 2. This is consistent with the dependent variable that is being used here, as larger population size can imply a lower number of banks branches per person.

Table 1. Determinants of Financial Access: Robustness Regressions

	(1)	(2)	(3)	(4)
	Bank branches per 1000 adults	Bank branches per 1000 adults	Private sector credit	Private sector credit
Assets share	-0.012***	-0.011***	-0.011***	-0.007***
OFC	0.79***	0.18***	0.78***	0.11***
SSE	0.76***	6.87***	0.47***	2.03***
SSE*LML	-0.73*	-0.05	-1.34***	-1.16***
SSE*UMH	-0.15	0.18**	-0.23	0.25**
GDP per capita		0.00001***		0.0
Inflation		-0.003		0.002
Population		-0.09***		0.04***
SSE*Population		-0.47***		-0.11***
Density		0.0		0.0003***
SSE*Density		-0.001***		-0.0011***
Insolvency		-0.04***		-0.05***
GDI Government Effectiveness		-0.05		0.51***
GDI Regulatory Environment		0.85***		0.074***
Observations	725	680	686	660

ISSUES FOR DISCUSSION

Directors may wish to discuss the following issues:

- **Fiscal management**. Do Directors agree that small developing states that benefit from lower oil prices should use this windfall to strengthen fiscal and debt positions? Do Directors further agree that adequate fiscal space for capital spending can also be created by streamlining and prioritizing other recurrent spending, public financial management reforms including multi-year budgeting, and adoption of fiscal anchors?
- **Exchange rate devaluation**. Do Directors agree that small states, like larger peers, should consider exchange rate devaluation as part of their policy tool kit, particularly when improved competitiveness is needed to support stronger growth performance? Do Directors agree with staff's findings in regard to policies that can enhance the prospects for a successful devaluation?
- **Financial inclusion**. Do Directors agree that improvements in financial inclusion are important for access to credit and growth in many small developing countries? Do directors agree that financial inclusion can be promoted through i) greater competition in the banking sector; ii) selective relaxation of regulation to foster innovation; and iii) direct government intervention.
- **Next steps**. How do Directors assess the content and design of this review of macroeconomic developments and selected issues in small developing states? What lessons can be drawn for the Fund's future work program on small states?

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STATISTICAL APPENDIX[1]

Table 1. Real GDP Growth

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	3.4	0.1	0.3	0.7	1.7	2.1	2.3
Emerging Markets and Developing Countries	5.5	4.1	4.9	4.3	3.6	3.7	4.8
Emerging Markets[1/]	5.9	3.3	5.0	3.3	2.5	2.8	3.9
Low Income Developing Countries[1/]	4.9	5.1	4.8	5.5	5.0	4.9	6.0
Small States	4.2	1.4	1.8	1.9	2.9	2.9	3.3
Small States							
Regional Groups							
Caribbean	3.7	0.0	1.5	1.9	2.0	2.3	2.5
Asia Pacific	5.0	1.8	1.5	0.7	1.8	4.0	2.7
Africa	3.7	3.1	3.5	3.7	3.2	3.8	4.2
Europe	4.5	-0.6	-2.5	3.3	2.0	4.6	3.3
Analytical Groups							
Micro States	2.7	0.4	1.8	1.4	2.1	2.6	2.4
Small States in fragile state	5.5	1.3	0.8	-0.2	0.2	3.6	1.8
Commodity exporters	8.3	2.9	2.1	1.4	1.3	4.6	3.3
Tourism based	3.7	0.5	1.7	1.9	2.3	2.8	2.8
Offshore Financial Center	4.0	0.5	1.8	1.8	2.0	2.6	2.6
Income Groups							
High income	3.8	-1.7	1.1	1.6	2.2	2.0	2.0
Upper middle income	3.4	1.4	1.8	2.4	2.6	2.8	2.9
Lower middle income	5.6	2.5	2.0	1.2	1.9	4.5	3.5
Low income	2.0	2.3	3.0	3.5	3.3	3.5	4.0
Small States in fragile state	**5.5**	**1.3**	**0.8**	**-0.2**	**0.2**	**3.6**	**1.8**
Comoros	2.0	2.3	3.0	3.5	3.3	3.5	4.0
Kiribati	1.6	0.6	3.4	2.4	3.8	2.9	1.5
Marshall Islands	2.3	2.3	4.7	3.0	0.5	1.7	2.2
Micronesia, Fed. States of	0.3	1.5	0.1	-4.0	0.1	0.3	1.0
Solomon Islands	2.2	4.9	4.7	3.0	1.5	3.3	3.0
Timor-Leste, Democratic Republic of	4.3	11.2	7.8	5.4	6.6	6.8	6.9
Tuvalu	2.2	0.4	0.2	1.3	2.2	2.5	2.5
Commodity exporters	**8.3**	**2.9**	**2.1**	**1.4**	**1.3**	**4.6**	**3.3**
Belize	5.5	2.2	3.3	1.5	3.4	2.0	3.0
Bhutan	8.4	7.9	6.5	5.0	6.4	7.6	8.2
Guyana	1.7	4.5	4.8	5.2	3.8	3.8	4.4
Solomon Islands	2.2	4.9	4.7	3.0	1.5	3.3	3.0
Suriname	4.7	4.3	4.8	4.1	2.9	2.7	3.8
Timor-Leste, Democratic Republic of	4.3	11.2	7.8	5.4	6.6	6.8	6.9
Trinidad and Tobago	7.7	-0.8	1.4	1.7	1.1	1.2	1.5
Tourism-based	**3.7**	**0.5**	**1.7**	**1.9**	**2.3**	**2.8**	**2.8**
Antigua and Barbuda	4.3	-4.4	3.6	1.8	2.4	1.9	2.3
Bahamas, The	1.6	-0.1	1.0	0.7	1.3	2.3	2.8
Barbados	1.7	-0.8	0.0	0.0	-0.3	0.8	1.4
Belize	5.5	2.2	3.3	1.5	3.4	2.0	3.0
Cabo Verde	6.9	1.3	1.2	0.5	1.0	3.0	4.0
Dominica	3.5	-0.4	-1.4	-0.9	1.1	2.4	2.9
Fiji	1.6	1.5	1.8	4.6	4.1	3.3	3.0
Grenada	3.6	-1.9	-1.2	2.4	1.5	1.5	2.0
Maldives	8.3	2.8	1.3	4.7	5.0	5.0	3.9
Mauritius	4.4	3.6	3.2	3.2	3.2	3.5	3.5
Palau	1.3	0.8	5.5	-0.2	8.0	2.2	2.7
Samoa	4.4	-0.3	1.2	-1.1	1.9	2.8	1.4
Seychelles	2.3	4.7	6.0	6.6	2.9	3.5	3.8
St. Kitts and Nevis	3.8	-2.6	-0.9	3.8	7.0	3.5	3.0
St. Lucia	1.9	0.6	0.6	-0.5	-1.1	1.8	1.4
St. Vincent and the Grenadines	3.7	-0.8	1.1	2.4	1.1	2.1	3.1
Vanuatu	3.4	2.0	1.8	2.0	2.9	-4.0	5.0
Micro States	**2.7**	**0.4**	**1.8**	**1.4**	**2.1**	**2.6**	**2.4**
Antigua and Barbuda	4.3	-4.4	3.6	1.8	2.4	1.9	2.3
Dominica	3.5	-0.4	-1.4	-0.9	1.1	2.4	2.9
Grenada	3.6	-1.9	-1.2	2.4	1.5	1.5	2.0
Kiribati	1.6	0.6	3.4	2.4	3.8	2.9	1.5
Marshall Islands	2.3	2.3	4.7	3.0	0.5	1.7	2.2
Micronesia, Fed. States of	0.3	1.5	0.1	-4.0	0.1	0.3	1.0
Palau	1.3	0.8	5.5	-0.2	8.0	2.2	2.7
Samoa	4.4	-0.3	1.2	-1.1	1.9	2.8	1.4
São Tomé and Príncipe	4.6	4.4	4.5	4.0	4.5	5.0	5.2
Seychelles	2.3	4.7	6.0	6.6	2.9	3.5	3.8
St. Kitts and Nevis	3.8	-2.6	-0.9	3.8	7.0	3.5	3.0
St. Lucia	1.9	0.6	0.6	-0.5	-1.1	1.8	1.4
St. Vincent and the Grenadines	3.7	-0.8	1.1	2.4	1.1	2.1	3.1
Tonga	0.9	1.5	-1.1	-0.3	2.3	2.7	2.4
Tuvalu	2.2	0.4	0.2	1.3	2.2	2.5	2.5
Others							
Djibouti	3.4	4.5	4.8	5.0	6.0	6.5	7.0
Montenegro	5.0	-0.6	-2.5	3.3	2.0	4.6	3.3
Swaziland	2.4	1.1	1.9	2.8	1.7	1.9	1.8

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

[1] Simple country average is reported for all country groups.

Table 2. Real GDP per Capita Growth

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	2.7	-0.3	0.0	0.3	1.2	1.6	1.8
Emerging Markets and Developing Countries	3.5	2.4	3.1	2.5	1.9	2.0	3.1
Emerging Markets[1/]	4.3	2.0	3.7	2.0	1.3	1.5	2.7
Low Income Developing Countries[1/]	2.6	2.8	2.3	3.1	2.7	2.6	3.7
Small States	3.1	0.2	0.6	0.7	1.2	1.8	1.9
Small States							
Regional Groups							
Caribbean	2.6	-0.8	0.7	1.1	1.2	1.5	1.7
Asia Pacific	3.7	0.7	0.4	-0.5	0.4	2.6	1.4
Africa	2.3	1.3	1.5	1.9	1.4	2.1	2.5
Europe	4.4	-0.8	-2.7	3.1	1.8	4.4	3.1
Analytical Groups							
Micro States	1.9	-0.3	1.1	0.6	1.2	1.7	1.5
Small States in fragile state	3.9	-0.3	-0.8	-1.8	-1.4	1.9	0.2
Commodity exporters	6.4	1.4	0.6	-0.2	-0.2	3.0	1.8
Tourism based	2.6	-0.3	0.7	0.9	1.3	1.8	1.8
Offshore Financial Center	2.9	-0.3	0.9	0.8	1.0	1.6	1.6
Income Groups							
High income	2.5	-2.6	0.1	0.6	1.2	1.0	1.0
Upper middle income	2.7	0.9	1.2	1.7	1.9	2.0	2.2
Lower middle income	4.1	0.7	0.1	-0.5	0.3	2.8	1.9
Low income	-0.5	-0.7	0.0	0.5	0.3	0.5	0.9
Small States in fragile state	**3.9**	**-0.3**	**-0.8**	**-1.8**	**-1.4**	**1.9**	**0.2**
Comoros	-0.5	-0.7	0.0	0.5	0.3	0.5	0.9
Kiribati	-0.3	-1.2	1.8	0.8	2.2	1.4	0.1
Marshall Islands	1.9	1.9	4.3	2.6	-1.1	0.1	0.6
Micronesia, Fed. States of	0.6	1.6	-0.1	-3.9	0.2	0.4	1.0
Solomon Islands	-0.3	2.7	2.4	0.7	-0.8	1.1	0.8
Timor-Leste, Democratic Republic of	28.8	-5.3	-13.2	-13.4	-13.0	6.8	-4.0
Tuvalu	1.0	-0.9	-1.1	0.2	1.8	2.1	2.1
Commodity exporters	**6.4**	**1.4**	**0.6**	**-0.2**	**-0.2**	**3.0**	**1.8**
Belize	2.3	0.8	0.7	-1.1	1.4	0.0	1.0
Bhutan	5.6	6.1	4.7	3.3	4.6	5.8	6.4
Guyana	1.9	3.5	3.9	4.8	3.8	3.5	4.1
Solomon Islands	-0.3	2.7	2.4	0.7	-0.8	1.1	0.8
Suriname	3.3	3.1	4.5	3.0	1.9	1.7	2.9
Timor-Leste, Democratic Republic of	28.8	-5.3	-13.2	-13.4	-13.0	6.8	-4.0
Trinidad and Tobago	7.3	-1.2	1.0	1.2	0.6	0.7	1.0
Tourism-based	**2.6**	**-0.3**	**0.7**	**0.9**	**1.3**	**1.8**	**1.8**
Antigua and Barbuda	3.0	-5.4	2.5	0.7	1.3	0.8	1.2
Bahamas, The	0.2	-1.2	-0.1	-0.4	0.2	1.2	1.7
Barbados	1.4	-1.0	-0.2	-0.2	-0.5	0.6	1.2
Belize	2.3	0.8	0.7	-1.1	1.4	0.0	1.0
Cabo Verde	5.6	0.3	-1.9	-0.7	-0.2	1.8	2.7
Dominica	3.6	-0.3	-1.4	-0.9	1.1	2.4	2.9
Fiji	1.1	0.6	1.0	3.9	3.6	2.7	2.5
Grenada	3.4	-2.2	-1.5	2.1	1.2	1.2	1.7
Maldives	6.5	1.1	-0.3	2.9	3.3	3.2	2.2
Mauritius	3.7	3.3	2.9	3.0	3.2	3.5	3.5
Palau	1.2	2.7	7.5	0.2	6.9	1.2	1.7
Samoa	3.7	-1.1	0.4	-1.8	1.1	2.0	0.6
Seychelles	1.5	3.3	4.8	5.4	1.8	2.4	2.6
St. Kitts and Nevis	1.2	-4.5	-2.8	1.8	4.9	1.4	1.0
St. Lucia	1.2	0.0	0.0	-1.1	-1.7	1.2	0.8
St. Vincent and the Grenadines	3.4	-0.9	1.0	2.3	1.0	2.0	3.0
Vanuatu	1.1	-0.3	-0.5	-0.3	0.6	-6.2	2.6
Micro States	**1.9**	**-0.3**	**1.1**	**0.6**	**1.2**	**1.7**	**1.5**
Antigua and Barbuda	3.0	-5.4	2.5	0.7	1.3	0.8	1.2
Dominica	3.6	-0.3	-1.4	-0.9	1.1	2.4	2.9
Grenada	3.4	-2.2	-1.5	2.1	1.2	1.2	1.7
Kiribati	-0.3	-1.2	1.8	0.8	2.2	1.4	0.1
Marshall Islands	1.9	1.9	4.3	2.6	-1.1	0.1	0.6
Micronesia, Fed. States of	0.6	1.6	-0.1	-3.9	0.2	0.4	1.0
Palau	1.2	2.7	7.5	0.2	6.9	1.2	1.7
Samoa	3.7	-1.1	0.4	-1.8	1.1	2.0	0.6
São Tomé and Príncipe	2.2	1.6	1.8	1.4	1.9	2.5	2.7
Seychelles	1.5	3.3	4.8	5.4	1.8	2.4	2.6
St. Kitts and Nevis	1.2	-4.5	-2.8	1.8	4.9	1.4	1.0
St. Lucia	1.2	0.0	0.0	-1.1	-1.7	1.2	0.8
St. Vincent and the Grenadines	3.4	-0.9	1.0	2.3	1.0	2.0	3.0
Tonga	0.6	1.5	-1.4	-0.7	2.1	2.4	2.2
Tuvalu	1.0	-0.9	-1.1	0.2	1.8	2.1	2.1
Others							
Djibouti	0.5	1.6	2.0	2.1	3.1	3.6	4.1
Montenegro	4.9	-0.8	-2.7	3.1	1.8	4.4	3.1
Swaziland	2.8	-0.1	0.7	1.6	0.5	0.6	0.6

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 3. Consumer Price Index, Annual Percentage Change

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	2.7	2.1	2.4	1.4	0.9	0.6	1.4
Emerging Markets and Developing Countries	9.8	6.6	7.1	5.8	5.6	6.2	5.7
Emerging Markets[1/]	8.8	5.7	5.9	5.2	5.3	6.0	5.8
Low Income Developing Countries[1/]	11.1	7.8	8.5	6.5	6.1	6.5	5.6
Small States	5.6	4.4	4.6	2.6	2.2	2.0	2.5
Small States							
Regional Groups							
Caribbean	5.0	3.4	3.3	1.3	1.5	1.5	2.0
Asia Pacific	4.5	4.5	5.0	3.1	2.3	1.9	2.5
Africa	6.4	6.4	6.1	3.9	3.3	3.3	3.5
Europe	18.5	2.7	3.6	2.2	-0.6	1.2	1.4
Analytical Groups							
Micro States	4.6	3.9	3.7	1.7	1.4	1.4	1.9
Small States in fragile state	4.7	3.8	4.5	3.0	2.4	1.9	2.2
Commodity exporters	8.0	5.7	6.4	4.8	4.0	3.2	3.5
Tourism based	3.4	3.7	3.8	1.6	1.0	1.3	2.0
Offshore Financial Center	3.5	3.8	4.1	1.7	1.4	1.5	2.1
Income Groups							
High income	3.6	4.3	4.1	1.8	2.3	3.0	2.2
Upper middle income	6.5	3.7	3.9	2.0	1.5	1.1	2.1
Lower middle income	5.6	5.5	5.5	3.8	2.8	2.9	3.2
Low income	4.3	4.2	5.9	1.6	2.8	2.5	2.5
Small States in fragile state	**4.7**	**3.8**	**4.5**	**3.0**	**2.4**	**1.9**	**2.2**
Comoros	4.3	4.2	5.9	1.6	2.8	2.5	2.5
Kiribati	2.9	1.1	-3.0	-1.5	2.1	1.4	0.3
Marshall Islands	5.6	3.0	4.3	1.9	1.1	-0.6	1.0
Micronesia, Fed. States of	2.6	5.5	6.3	2.1	0.7	-1.0	1.9
Solomon Islands	9.4	5.4	5.9	5.4	5.1	3.8	3.4
Timor-Leste, Democratic Republic of	5.1	7.3	10.9	9.5	2.5	1.8	3.3
Tuvalu	4.0	-0.1	1.4	2.0	3.3	3.1	3.0
Commodity exporters	**8.0**	**5.7**	**6.4**	**4.8**	**4.0**	**3.2**	**3.5**
Belize	2.9	0.7	1.2	0.5	0.9	0.5	1.9
Bhutan	4.3	7.7	10.1	8.7	7.7	6.3	6.1
Guyana	6.5	3.5	2.4	2.2	1.0	1.2	2.6
Solomon Islands	9.4	5.4	5.9	5.4	5.1	3.8	3.4
Suriname	20.8	7.3	5.0	1.9	3.4	1.9	2.6
Timor-Leste, Democratic Republic of	5.1	7.3	10.9	9.5	2.5	1.8	3.3
Trinidad and Tobago	6.2	8.1	9.3	5.2	7.0	7.3	5.7
Tourism-based	**3.4**	**3.7**	**3.8**	**1.6**	**1.0**	**1.3**	**2.0**
Antigua and Barbuda	2.1	2.4	3.4	1.1	1.1	1.2	1.3
Bahamas, The	2.3	2.1	2.0	0.4	1.2	2.3	1.6
Barbados	3.6	5.9	4.5	1.8	1.9	1.3	1.4
Belize	2.9	0.7	1.2	0.5	0.9	0.5	1.9
Cabo Verde	2.1	2.5	2.5	1.5	-0.2	1.5	2.5
Dominica	2.3	1.3	1.4	0.0	0.7	-0.8	1.1
Fiji	3.4	4.5	3.4	2.9	0.5	1.5	3.0
Grenada	3.2	2.1	2.4	0.0	-0.9	-1.5	1.8
Maldives	3.2	8.2	10.9	4.0	2.5	0.3	2.1
Mauritius	6.3	4.0	3.9	3.5	3.0	1.7	3.0
Palau	3.2	3.5	5.4	2.8	4.0	1.8	2.0
Samoa	4.8	5.9	6.2	-0.2	-1.2	3.0	2.2
Seychelles	5.2	9.8	7.1	4.3	1.4	4.0	3.2
St. Kitts and Nevis	3.6	2.8	1.4	0.7	1.0	2.0	2.0
St. Lucia	3.1	2.5	4.2	1.5	2.5	2.4	2.4
St. Vincent and the Grenadines	3.1	1.7	2.6	0.8	0.2	0.2	0.9
Vanuatu	2.6	2.5	1.4	1.3	1.0	2.0	2.2
Micro States	**4.6**	**3.9**	**3.7**	**1.7**	**1.4**	**1.4**	**1.9**
Antigua and Barbuda	2.1	2.4	3.4	1.1	1.1	1.2	1.3
Dominica	2.3	1.3	1.4	0.0	0.7	-0.8	1.1
Grenada	3.2	2.1	2.4	0.0	-0.9	-1.5	1.8
Kiribati	2.9	1.1	-3.0	-1.5	2.1	1.4	0.3
Marshall Islands	5.6	3.0	4.3	1.9	1.1	-0.6	1.0
Micronesia, Fed. States of	2.6	5.5	6.3	2.1	0.7	-1.0	1.9
Palau	3.2	3.5	5.4	2.8	4.0	1.8	2.0
Samoa	4.8	5.9	6.2	-0.2	-1.2	3.0	2.2
São Tomé and Príncipe	16.0	13.8	10.6	8.1	7.0	5.6	4.6
Seychelles	5.2	9.8	7.1	4.3	1.4	4.0	3.2
St. Kitts and Nevis	3.6	2.8	1.4	0.7	1.0	2.0	2.0
St. Lucia	3.1	2.5	4.2	1.5	2.5	2.4	2.4
St. Vincent and the Grenadines	3.1	1.7	2.6	0.8	0.2	0.2	0.9
Tonga	8.5	3.5	2.0	1.5	1.3	0.8	1.5
Tuvalu	4.0	-0.1	1.4	2.0	3.3	3.1	3.0
Others							
Djibouti	3.7	3.6	3.7	2.4	2.9	3.0	3.5
Montenegro	18.5	2.7	3.6	2.2	-0.6	1.2	1.4
Swaziland	7.1	6.8	8.9	5.6	5.8	4.6	5.4

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 4. General Government Overall Fiscal Balance, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	-0.5	-3.9	-2.7	-2.3	-1.8	-1.6	-1.1
Emerging Markets and Developing Countries	-0.4	-2.1	-1.5	-2.5	-3.3	-5.1	-3.9
Emerging Markets[1/]	0.6	-1.6	-0.6	-1.6	-3.0	-5.8	-4.2
Low Income Developing Countries[1/]	-1.7	-2.6	-2.7	-3.6	-3.6	-4.2	-3.5
Small States	-2.4	-2.2	-0.8	1.2	-0.3	-3.7	-2.8
Small States							
Regional Groups							
Caribbean	-3.8	-3.9	-3.5	-3.9	-3.4	-4.6	-3.3
Asia Pacific	-2.3	0.2	2.8	6.6	4.2	-1.9	-3.4
Africa	-0.2	-3.5	-2.1	0.3	-5.1	-5.5	-4.7
Europe	-0.3	-5.3	-5.9	-3.3	-0.9	-5.3	-7.4
Analytical Groups							
Micro States	-3.3	-4.2	-2.2	1.7	2.0	-2.8	-2.7
Small States in fragile state	-2.1	4.2	8.4	17.3	11.3	0.3	-2.7
Commodity exporters	-0.2	5.2	6.3	6.5	1.1	-1.7	-1.7
Tourism based	-4.2	-4.0	-3.5	-3.5	-3.2	-4.4	-3.4
Offshore Financial Center	-3.5	-3.7	-3.3	-3.3	-3.2	-4.2	-3.5
Income Groups							
High income	-4.2	-4.3	-2.1	-2.7	-1.6	-4.7	-2.5
Upper middle income	-3.4	-3.4	-2.2	-1.2	-1.1	-2.8	-2.7
Lower middle income	-0.3	-0.4	1.1	4.3	0.4	-3.8	-4.7
Low income	-2.4	3.1	3.3	17.8	-0.3	-1.2	-2.2
Small States in fragile state	**-2.1**	**4.2**	**8.4**	**17.3**	**11.3**	**0.3**	**-2.7**
Comoros	-2.4	3.1	3.3	17.8	-0.3	-1.2	-2.2
Kiribati	-12.6	-13.7	-8.6	9.3	17.1	-15.2	-7.3
Marshall Islands	1.4	1.6	-0.7	0.7	1.2	2.4	2.3
Micronesia, Fed. States of	-3.4	0.6	0.8	2.8	12.5	2.8	4.2
Solomon Islands	0.4	5.2	3.8	4.4	1.9	-2.1	-1.6
Timor-Leste, Democratic Republic of	12.5	42.1	51.0	59.9	25.3	9.7	7.4
Tuvalu	-19.3	-9.3	9.3	26.3	23.8	-0.4	-2.2
Commodity exporters	**-0.2**	**5.2**	**6.3**	**6.5**	**1.1**	**-1.7**	**-1.7**
Belize	-5.8	-1.1	-0.5	-1.7	-2.6	-2.5	-2.4
Bhutan	-4.0	-0.6	-1.3	-4.0	-3.8	-2.4	-1.6
Guyana	-5.1	-3.6	-4.8	-4.3	-5.2	-4.6	-3.9
Solomon Islands	0.4	5.2	3.8	4.4	1.9	-2.1	-1.6
Suriname	-1.4	-2.2	-4.0	-6.9	-5.0	-5.7	-4.8
Timor-Leste, Democratic Republic of	12.5	42.1	51.0	59.9	25.3	9.7	7.4
Trinidad and Tobago	2.3	-3.3	-0.3	-2.0	-4.0	-3.8	-4.7
Tourism-based	**-4.2**	**-4.0**	**-3.5**	**-3.5**	**-3.2**	**-4.4**	**-3.4**
Antigua and Barbuda	-12.7	-5.8	-1.2	-4.2	-2.9	-10.5	1.5
Bahamas, The	-1.8	-4.8	-5.6	-6.6	-4.2	-3.8	-2.8
Barbados	-2.1	-6.5	-8.4	-12.9	-9.0	-7.2	-7.0
Belize	-5.8	-1.1	-0.5	-1.7	-2.6	-2.5	-2.4
Cabo Verde	-4.1	-8.7	-10.3	-9.0	-8.3	-7.8	-6.6
Dominica	-1.4	-3.3	-5.2	-2.7	-3.4	-3.5	-3.8
Fiji	-3.6	-2.2	-1.1	-0.5	-2.0	-3.7	-2.1
Grenada	-4.9	-5.0	-5.9	-7.3	-6.4	-3.0	-1.2
Maldives	-4.9	-12.5	-7.9	-8.2	-10.6	-7.3	-6.4
Mauritius	-4.5	-3.0	-1.8	-3.5	-3.4	-3.4	-3.3
Palau	-5.3	0.1	0.9	1.2	1.2	1.7	0.9
Samoa	-0.7	-5.5	-7.1	-3.8	-5.3	-3.3	-2.0
Seychelles	-4.5	2.8	2.7	0.3	3.3	1.2	2.7
St. Kitts and Nevis	-7.1	-0.9	4.9	12.3	10.3	1.4	0.4
St. Lucia	-3.5	-5.9	-9.2	-5.9	-6.2	-7.1	-7.5
St. Vincent and the Grenadines	-2.4	-4.0	-2.1	-6.3	-4.8	-5.1	-3.7
Vanuatu	-1.2	-1.8	-1.6	-0.2	0.9	-5.6	-6.1
Micro States	**-3.3**	**-4.2**	**-2.2**	**1.7**	**2.0**	**-2.8**	**-2.7**
Antigua and Barbuda	-12.7	-5.8	-1.2	-4.2	-2.9	-10.5	1.5
Dominica	-1.4	-3.3	-5.2	-2.7	-3.4	-3.5	-3.8
Grenada	-4.9	-5.0	-5.9	-7.3	-6.4	-3.0	-1.2
Kiribati	-12.6	-13.7	-8.6	9.3	17.1	-15.2	-7.3
Marshall Islands	1.4	1.6	-0.7	0.7	1.2	2.4	2.3
Micronesia, Fed. States of	-3.4	0.6	0.8	2.8	12.5	2.8	4.2
Palau	-5.3	0.1	0.9	1.2	1.2	1.7	0.9
Samoa	-0.7	-5.5	-7.1	-3.8	-5.3	-3.3	-2.0
São Tomé and Príncipe	15.4	-12.9	-10.9	1.9	-5.8	-8.4	-4.0
Seychelles	-4.5	2.8	2.7	0.3	3.3	1.2	2.7
St. Kitts and Nevis	-7.1	-0.9	4.9	12.3	10.3	1.4	0.4
St. Lucia	-3.5	-5.9	-9.2	-5.9	-6.2	-7.1	-7.5
St. Vincent and the Grenadines	-2.4	-4.0	-2.1	-6.3	-4.8	-5.1	-3.7
Tonga	3.5	-1.1	-1.4	0.0	0.3	-1.0	-1.1
Tuvalu	-19.3	-9.3	9.3	26.3	23.8	-0.4	-2.2
Others							
Djibouti	-1.6	-2.9	-2.6	-5.4	-12.0	-13.1	-12.5
Montenegro	-0.4	-5.3	-5.9	-3.3	-0.9	-5.3	-7.4
Swaziland	-0.3	-3.2	5.3	0.7	-2.0	-3.2	-3.7

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 5. Current Account Balance, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	0.1	1.3	1.7	2.8	2.8	2.9	2.6
Emerging Markets and Developing Countries	-1.1	-3.3	-3.9	-3.9	-4.2	-5.9	-5.2
Emerging Markets[1/]	1.5	0.4	0.8	0.3	-0.9	-4.0	-2.8
Low Income Developing Countries[1/]	-4.4	-8.0	-9.8	-9.1	-8.3	-8.3	-8.1
Small States	-10.1	-10.6	-8.7	-8.9	-9.1	-11.6	-11.7
Small States							
Regional Groups							
Caribbean	-11.2	-11.0	-11.3	-12.2	-12.8	-10.6	-10.9
Asia Pacific	-8.9	-6.9	-2.8	-3.8	-3.3	-10.2	-11.0
Africa	-9.3	-15.1	-13.9	-11.6	-13.7	-12.8	-11.9
Europe	-16.8	-21.8	-18.7	-14.6	-15.1	-20.2	-23.6
Analytical Groups							
Micro States	-15.6	-16.1	-13.2	-11.9	-11.2	-14.6	-14.7
Small States in fragile state	-7.1	-6.9	2.0	1.0	1.1	-12.5	-13.4
Commodity exporters	-1.6	2.5	3.7	0.5	-3.5	-6.2	-7.5
Tourism based	-13.3	-13.0	-12.2	-11.9	-12.2	-10.2	-10.5
Offshore Financial Center	-11.5	-12.2	-11.7	-10.5	-11.8	-9.0	-9.4
Income Groups							
High income	-6.9	-8.5	-9.6	-8.3	-9.2	-6.7	-6.8
Upper middle income	-13.2	-12.3	-9.6	-11.0	-11.1	-13.0	-12.8
Lower middle income	-8.0	-8.7	-6.7	-5.9	-7.5	-11.5	-13.1
Low income	-7.1	-17.0	-14.7	-14.6	-10.6	-14.1	-13.7
Small States in fragile state	**-7.1**	**-6.9**	**2.0**	**1.0**	**1.1**	**-12.5**	**-13.4**
Comoros	-7.1	-17.0	-14.7	-14.6	-10.6	-14.1	-13.7
Kiribati	-17.1	-23.6	-24.5	-21.8	4.1	-24.3	-26.5
Marshall Islands	-6.6	-13.9	-8.7	-13.4	-20.9	-1.3	-3.8
Micronesia, Fed. States of	-11.9	-16.1	-12.6	-10.1	2.5	-0.7	-0.8
Solomon Islands	-5.0	-15.6	1.5	-4.5	-8.5	-8.4	-12.6
Timor-Leste, Democratic Republic of	10.8	41.9	47.8	44.8	26.1	11.2	10.9
Tuvalu	-13.4	-4.1	25.3	26.4	27.0	-39.0	-24.5
Commodity exporters	**-1.6**	**2.5**	**3.7**	**0.5**	**-3.5**	**-6.2**	**-7.5**
Belize	-13.6	-2.4	-1.2	-4.4	-5.7	-4.5	-6.1
Bhutan	-11.0	-13.4	-17.6	-22.1	-21.9	-26.3	-24.6
Guyana	-7.9	-10.8	-11.6	-13.3	-15.9	-16.4	-21.9
Solomon Islands	-5.0	-15.6	1.5	-4.5	-8.5	-8.4	-12.6
Suriname	-1.1	6.7	3.4	-3.9	-7.3	-7.8	-6.9
Timor-Leste, Democratic Republic of	10.8	41.9	47.8	44.8	26.1	11.2	10.9
Trinidad and Tobago	16.7	10.9	3.4	6.7	8.3	5.2	4.4
Tourism-based	**-13.3**	**-13.0**	**-12.2**	**-11.9**	**-12.2**	**-10.2**	**-10.5**
Antigua and Barbuda	-16.4	-13.4	-14.6	-14.6	-14.5	-10.7	-12.4
Bahamas, The	-8.6	-13.4	-18.3	-17.7	-21.6	-12.4	-8.2
Barbados	-6.5	-8.7	-9.3	-9.3	-9.1	-5.1	-5.9
Belize	-13.6	-2.4	-1.2	-4.4	-5.7	-4.5	-6.1
Cabo Verde	-9.7	-13.7	-11.4	-4.0	-9.1	-9.6	-10.6
Dominica	-17.7	-17.4	-17.7	-13.1	-13.0	-13.1	-19.4
Fiji	-9.2	-3.9	-1.8	-20.7	-8.8	-8.0	-8.2
Grenada	-23.2	-21.3	-19.2	-27.0	-23.6	-17.4	-16.1
Maldives	-13.3	-11.8	-10.6	-6.5	-8.4	-4.6	-5.9
Mauritius	-2.1	-9.7	-7.3	-9.9	-7.2	-6.3	-6.2
Palau	-22.2	-5.3	-5.0	-6.5	-10.3	-5.4	-8.4
Samoa	-7.0	-5.8	-7.8	0.4	-3.7	-6.8	-5.5
Seychelles	-14.7	-24.6	-25.8	-15.2	-22.5	-19.3	-18.1
St. Kitts and Nevis	-19.3	-18.1	-9.8	-6.7	-10.7	-16.2	-16.8
St. Lucia	-19.0	-15.0	-13.5	-12.8	-12.4	-13.4	-13.9
St. Vincent and the Grenadines	-17.7	-29.2	-27.5	-31.3	-29.4	-27.6	-25.4
Vanuatu	-6.0	-7.0	-6.5	-3.3	-1.3	-14.4	-13.4
Micro States	**-15.6**	**-16.1**	**-13.2**	**-11.9**	**-11.2**	**-14.6**	**-14.7**
Antigua and Barbuda	-16.4	-13.4	-14.6	-14.6	-14.5	-10.7	-12.4
Dominica	-17.7	-17.4	-17.7	-13.1	-13.0	-13.1	-19.4
Grenada	-23.2	-21.3	-19.2	-27.0	-23.6	-17.4	-16.1
Kiribati	-17.1	-23.6	-24.5	-21.8	4.1	-24.3	-26.5
Marshall Islands	-6.6	-13.9	-8.7	-13.4	-20.9	-1.3	-3.8
Micronesia, Fed. States of	-11.9	-16.1	-12.6	-10.1	2.5	-0.7	-0.8
Palau	-22.2	-5.3	-5.0	-6.5	-10.3	-5.4	-8.4
Samoa	-7.0	-5.8	-7.8	0.4	-3.7	-6.8	-5.5
São Tomé and Príncipe	-25.6	-22.9	-21.3	-16.8	-20.8	-12.4	-12.0
Seychelles	-14.7	-24.6	-25.8	-15.2	-22.5	-19.3	-18.1
St. Kitts and Nevis	-19.3	-18.1	-9.8	-6.7	-10.7	-16.2	-16.8
St. Lucia	-19.0	-15.0	-13.5	-12.8	-12.4	-13.4	-13.9
St. Vincent and the Grenadines	-17.7	-29.2	-27.5	-31.3	-29.4	-27.6	-25.4
Tonga	-3.8	-11.0	-15.6	-12.6	-8.9	-6.8	-5.8
Tuvalu	-13.4	-4.1	25.3	26.4	27.0	-39.0	-24.5
Others							
Djibouti	-6.6	-10.7	-20.3	-23.3	-27.4	-28.7	-23.2
Montenegro	-25.2	-21.8	-18.7	-14.6	-15.1	-20.2	-23.6
Swaziland	-1.4	-6.8	3.8	6.3	0.9	0.4	-1.4

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 6. Public Debt, in percent of FY GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	51.7	66.9	72.3	74.8	75.7	75.5	75.0
Emerging Markets and Developing Countries	64.0	39.1	38.4	39.9	41.6	43.5	43.3
Emerging Markets[1/]	45.2	37.5	38.6	40.0	41.5	43.7	43.7
Low Income Developing Countries[1/]	88.9	41.4	38.2	39.8	41.8	43.1	42.8
Small States	68.0	57.2	57.8	57.2	59.2	61.2	62.4
Small States							
Regional Groups							
Caribbean	71.0	71.3	73.3	73.7	74.6	76.5	78.5
Asia Pacific	39.8	39.1	37.2	39.3	43.9	45.5	47.2
Africa	99.0	57.9	58.3	52.0	55.5	58.7	60.1
Europe	32.1	44.8	54.0	58.2	58.5	60.7	64.5
Analytical Groups							
Micro States	89.7	69.0	67.9	65.0	65.2	65.3	63.8
Small States in fragile state	41.9	33.0	27.9	23.8	26.0	24.8	23.8
Commodity exporters	65.9	48.5	48.3	50.8	55.8	58.8	64.9
Tourism based	71.7	72.6	74.1	74.5	76.0	78.3	80.1
Offshore Financial Center	69.6	69.0	70.5	70.9	72.5	74.9	76.9
Income Groups							
High income	71.2	78.7	79.9	78.0	75.9	77.3	76.6
Upper middle income	64.7	60.3	60.7	62.0	64.7	65.2	66.5
Lower middle income	69.7	43.2	44.5	44.6	49.3	53.1	55.9
Low income	74.8	48.1	42.5	18.1	20.0	19.8	19.2
Small States in fragile state	**41.9**	**33.0**	**27.9**	**23.8**	**26.0**	**24.8**	**23.8**
Comoros	74.8	48.1	42.5	18.1	20.0	19.8	19.2
Kiribati	11.8	9.0	7.4	8.1	8.0	8.9	11.6
Marshall Islands	44.1	35.3	30.1	31.9	30.5	28.8	25.7
Micronesia, Fed. States of	25.5	28.5	26.8	27.6	26.5	25.4	24.2
Solomon Islands	53.2	25.5	17.6	15.7	13.4	13.6	14.2
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	50.4	51.8	43.0	41.1	56.9	48.6	41.2
Commodity exporters	**65.9**	**48.5**	**48.3**	**50.8**	**55.8**	**58.8**	**64.9**
Belize	90.0	80.3	75.0	75.3	76.3	75.7	95.6
Bhutan	68.3	67.2	72.2	89.2	107.5	115.9	122.5
Guyana	106.1	64.4	62.5	57.3	65.8	70.6	71.1
Solomon Islands	53.2	25.5	17.6	15.7	13.4	13.6	14.2
Suriname [2/]	31.2	19.2	22.2	30.7	34.1	38.3	41.8
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	42.9	34.6	40.3	37.4	37.6	39.5	43.7
Tourism-based	**71.7**	**72.6**	**74.1**	**74.5**	**76.0**	**78.3**	**80.1**
Antigua and Barbuda	106.0	93.2	87.1	94.3	98.7	106.9	102.4
Bahamas, The	27.6	43.7	48.4	56.4	60.4	61.6	61.4
Barbados	47.6	73.5	84.6	95.9	100.4	102.5	103.9
Belize	90.0	80.3	75.0	75.3	76.3	75.7	95.6
Cabo Verde	76.2	76.8	91.0	99.5	112.2	121.1	123.2
Dominica	81.0	66.3	69.8	73.9	76.6	78.5	80.1
Fiji	49.1	54.9	53.3	51.4	49.5	49.1	48.5
Grenada	77.4	99.0	104.5	108.0	107.2	107.1	102.7
Maldives	39.1	58.7	62.8	66.7	74.8	78.6	80.7
Mauritius	49.9	51.9	51.5	53.8	52.8	53.6	54.1
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	41.2	45.0	52.0	53.6	55.0	55.1	55.1
Seychelles	161.4	89.1	77.1	64.1	64.6	63.7	58.9
St. Kitts and Nevis	131.9	148.1	137.3	104.7	81.0	74.5	68.3
St. Lucia	53.9	65.5	73.7	79.0	83.9	88.0	92.5
St. Vincent and the Grenadines	59.6	67.3	72.3	73.4	75.1	77.1	78.8
Vanuatu	29.9	20.4	21.2	20.4	18.5	24.5	29.0
Micro States	**89.7**	**69.0**	**67.9**	**65.0**	**65.2**	**65.3**	**63.8**
Antigua and Barbuda	106.0	93.2	87.1	94.3	98.7	106.9	102.4
Dominica	81.0	66.3	69.8	73.9	76.6	78.5	80.1
Grenada	77.4	99.0	104.5	108.0	107.2	107.1	102.7
Kiribati	11.8	9.0	7.4	8.1	8.0	8.9	11.6
Marshall Islands	44.1	35.3	30.1	31.9	30.5	28.8	25.7
Micronesia, Fed. States of	25.5	28.5	26.8	27.6	26.5	25.4	24.2
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	41.2	45.0	52.0	53.6	55.0	55.1	55.1
São Tomé and Príncipe	307.0	73.3	78.3	71.4	68.2	72.9	74.0
Seychelles	161.4	89.1	77.1	64.1	64.6	63.7	58.9
St. Kitts and Nevis	131.9	148.1	137.3	104.7	81.0	74.5	68.3
St. Lucia	53.9	65.5	73.7	79.0	83.9	88.0	92.5
St. Vincent and the Grenadines	59.6	67.3	72.3	73.4	75.1	77.1	78.8
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	50.4	51.8	43.0	41.1	56.9	48.6	41.2
Others							
Djibouti	60.7	49.2	43.3	42.3	44.6	57.5	62.8
Montenegro	41.3	44.8	54.0	58.2	58.5	60.7	64.5
Swaziland	18.9	15.4	17.4	17.8	16.2	18.1	20.9

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste and Suriname (2013-16).
1/ Excluding Small States

Table 7. Import of Goods and Services, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	52.0	57.8	61.4	60.6	59.5	58.4	59.2
Emerging Markets and Developing Countries	42.0	44.8	46.7	45.6	45.2	44.5	44.1
Emerging Markets[1/]	41.1	42.2	43.7	43.2	43.4	43.8	43.3
Low Income Developing Countries[1/]	43.2	48.1	50.4	48.5	47.4	45.3	45.1
Small States	62.9	64.6	65.1	65.0	66.0	64.4	64.1
Small States							
Regional Groups							
Caribbean	55.1	54.7	56.2	55.6	54.9	50.1	50.0
Asia Pacific	68.9	72.4	71.9	74.2	75.0	75.9	75.0
Africa	64.6	66.9	67.4	63.8	68.5	64.0	62.9
Europe	47.1	65.6	68.8	62.1	61.0	66.0	68.3
Analytical Groups							
Micro States	69.7	71.4	70.3	70.5	73.8	71.1	69.7
Small States in fragile state	73.7	79.4	77.4	80.1	81.5	85.9	83.5
Commodity exporters	53.8	55.8	56.9	55.6	54.3	51.7	52.6
Tourism based	60.6	61.8	62.4	62.3	62.0	58.2	58.3
Offshore Financial Center	61.1	62.7	62.9	62.0	62.8	57.9	58.3
Income Groups							
High income	51.2	49.9	51.3	50.2	50.3	44.4	44.6
Upper middle income	68.2	70.7	70.9	72.2	73.0	72.3	71.3
Lower middle income	63.6	64.1	64.5	63.3	63.9	62.6	62.7
Low income	35.9	50.5	53.9	57.2	50.9	53.4	52.0
Small States in fragile state	**73.7**	**79.4**	**77.4**	**80.1**	**81.5**	**85.9**	**83.5**
Comoros	35.9	50.5	53.9	57.2	50.9	53.4	52.0
Kiribati	98.5	93.3	102.7	98.5	100.7	94.5	92.8
Marshall Islands	94.8	103.1	97.1	102.0	110.1	85.7	87.5
Micronesia, Fed. States of	75.4	82.5	80.8	82.2	82.1	77.9	77.9
Solomon Islands	41.8	67.4	62.0	67.7	59.9	58.3	58.5
Timor-Leste, Democratic Republic of	54.7	32.7	31.2	26.6	30.2	35.3	38.6
Tuvalu	119.7	126.3	114.4	126.3	137.7	193.4	172.5
Commodity exporters	**53.8**	**55.8**	**56.9**	**55.6**	**54.3**	**51.7**	**52.6**
Belize	65.9	60.9	63.8	66.7	61.9	57.7	57.7
Bhutan	54.7	63.5	60.9	60.5	62.1	63.3	64.9
Guyana	72.3	81.8	86.9	78.8	82.0	74.8	77.3
Solomon Islands	41.8	67.4	62.0	67.7	59.9	58.3	58.5
Suriname	46.8	46.5	53.6	53.9	52.0	46.4	45.0
Timor-Leste, Democratic Republic of	54.7	32.7	31.2	26.6	30.2	35.3	38.6
Trinidad and Tobago	40.3	37.9	39.7	35.2	32.0	29.0	29.6
Tourism-based	**60.6**	**61.8**	**62.4**	**62.3**	**62.0**	**58.2**	**58.3**
Antigua and Barbuda	66.5	58.3	58.3	60.0	58.3	55.0	57.2
Bahamas, The	46.5	52.2	59.9	56.9	57.8	48.3	46.5
Barbados	49.7	49.4	50.4	49.9	49.0	44.5	44.8
Belize	65.9	60.9	63.8	66.7	61.9	57.7	57.7
Cabo Verde	63.8	67.7	66.7	61.0	64.3	66.7	67.9
Dominica	51.1	51.8	48.5	47.2	47.3	47.0	53.4
Fiji	65.8	64.2	66.3	80.0	65.6	60.7	60.7
Grenada	55.2	49.1	49.5	56.1	53.6	47.5	45.6
Maldives	68.0	81.3	84.9	87.3	92.9	87.2	88.4
Mauritius	60.9	63.0	66.0	65.7	63.3	64.3	65.1
Palau	76.2	71.1	76.1	74.9	80.6	71.1	71.4
Samoa	49.2	50.8	51.6	50.2	51.7	50.1	48.3
Seychelles	92.5	110.2	104.8	89.7	98.3	88.1	86.8
St. Kitts and Nevis	53.4	52.1	49.7	49.9	53.0	48.2	47.6
St. Lucia	60.7	59.6	57.4	54.9	54.8	55.4	56.6
St. Vincent and the Grenadines	52.8	57.0	57.9	59.4	56.3	53.7	51.9
Vanuatu	52.7	53.2	51.1	51.0	46.5	52.9	55.1
Micro States	**69.7**	**71.4**	**70.3**	**70.5**	**73.8**	**71.1**	**69.7**
Antigua and Barbuda	66.5	58.3	58.3	60.0	58.3	55.0	57.2
Dominica	51.1	51.8	48.5	47.2	47.3	47.0	53.4
Grenada	55.2	49.1	49.5	56.1	53.6	47.5	45.6
Kiribati	98.5	93.3	102.7	98.5	100.7	94.5	92.8
Marshall Islands	94.8	103.1	97.1	102.0	110.1	85.7	87.5
Micronesia, Fed. States of	75.4	82.5	80.8	82.2	82.1	77.9	77.9
Palau	76.2	71.1	76.1	74.9	80.6	71.1	71.4
Samoa	49.2	50.8	51.6	50.2	51.7	50.1	48.3
São Tomé and Príncipe	62.6	54.9	52.5	47.3	62.9	52.2	57.4
Seychelles	92.5	110.2	104.8	89.7	98.3	88.1	86.8
St. Kitts and Nevis	53.4	52.1	49.7	49.9	53.0	48.2	47.6
St. Lucia	60.7	59.6	57.4	54.9	54.8	55.4	56.6
St. Vincent and the Grenadines	52.8	57.0	57.9	59.4	56.3	53.7	51.9
Tonga	49.9	52.1	56.0	58.5	60.3	60.2	59.0
Tuvalu	119.7	126.3	114.4	126.3	137.7	193.4	172.5
Others							
Djibouti	55.2	53.8	61.8	62.7	72.8	74.7	67.7
Montenegro	70.6	65.6	68.8	62.1	61.0	66.0	68.3
Swaziland	87.3	68.1	66.0	63.1	66.9	61.6	60.2

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 8. Export of Goods and Services, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	54.3	61.7	65.7	65.8	64.9	64.1	64.7
Emerging Markets and Developing Countries	36.5	37.3	39.0	38.3	37.4	35.2	36.0
Emerging Markets[1/]	41.8	42.5	44.8	43.7	42.5	39.5	40.2
Low Income Developing Countries[1/]	29.8	30.9	31.9	31.7	31.3	30.0	30.8
Small States	39.6	41.5	43.7	42.8	42.7	41.0	41.0
Small States							
Regional Groups							
Caribbean	45.4	43.9	45.5	43.8	42.9	40.2	40.1
Asia Pacific	31.0	38.9	43.0	42.4	42.5	42.1	41.7
Africa	46.0	42.3	42.1	41.6	44.0	43.0	42.8
Europe	26.7	39.7	44.1	41.8	40.5	40.3	40.6
Analytical Groups							
Micro States	33.2	35.3	37.8	37.4	38.4	37.2	37.2
Small States in fragile state	17.7	25.6	31.3	29.8	29.1	29.1	28.9
Commodity exporters	42.5	45.9	48.2	44.2	41.7	37.9	36.8
Tourism based	46.9	48.5	50.1	50.1	50.1	49.0	49.1
Offshore Financial Center	45.9	47.6	49.2	49.0	49.0	47.4	47.6
Income Groups							
High income	46.9	44.5	45.6	44.9	44.2	40.5	40.8
Upper middle income	43.6	48.6	52.4	51.1	51.0	49.9	49.8
Lower middle income	33.7	33.5	34.6	33.7	34.5	32.4	32.3
Low income	15.5	15.3	14.9	14.9	14.5	14.5	14.4
Small States in fragile state	**17.7**	**25.6**	**31.3**	**29.8**	**29.1**	**29.1**	**28.9**
Comoros	15.5	15.3	14.9	14.9	14.5	14.5	14.4
Kiribati	14.2	11.5	9.7	9.7	9.6	9.7	10.0
Marshall Islands	22.2	32.4	40.4	37.3	37.1	32.4	33.5
Micronesia, Fed. States of	19.0	24.9	29.4	28.1	28.7	27.8	28.0
Solomon Islands	32.5	51.7	60.4	54.1	49.0	45.1	42.3
Timor-Leste, Democratic Republic of	8.3	2.0	1.8	1.3	1.6	2.2	2.8
Tuvalu	11.8	41.3	62.8	62.9	63.5	70.7	69.8
Commodity exporters	**42.5**	**45.9**	**48.2**	**44.2**	**41.7**	**37.9**	**36.8**
Belize	56.3	60.4	65.3	65.1	60.4	56.8	55.7
Bhutan	36.0	41.2	34.9	35.8	35.9	36.4	35.3
Guyana	55.6	53.8	58.5	51.7	51.7	45.1	42.6
Solomon Islands	32.5	51.7	60.4	54.1	49.0	45.1	42.3
Suriname	47.4	54.4	59.5	51.1	44.5	38.2	37.7
Timor-Leste, Democratic Republic of	8.3	2.0	1.8	1.3	1.6	2.2	2.8
Trinidad and Tobago	61.8	57.9	56.7	50.5	47.5	39.5	39.8
Tourism-based	**46.9**	**48.5**	**50.1**	**50.1**	**50.1**	**49.0**	**49.1**
Antigua and Barbuda	53.3	46.4	45.4	45.8	44.5	45.0	45.5
Bahamas, The	39.5	41.6	44.7	43.1	41.3	41.1	43.7
Barbados	44.5	45.1	45.3	45.5	44.8	44.8	44.7
Belize	56.3	60.4	65.3	65.1	60.4	56.8	55.7
Cabo Verde	33.8	39.5	44.5	46.2	46.2	48.2	49.3
Dominica	35.8	33.4	31.1	33.9	34.0	34.2	34.3
Fiji	53.2	57.8	62.7	56.2	56.0	52.0	52.0
Grenada	31.7	29.1	30.7	29.9	31.8	32.5	32.5
Maldives	63.6	91.3	95.5	105.0	110.1	109.4	108.6
Mauritius	56.8	50.6	52.9	52.6	53.0	55.2	55.8
Palau	49.7	59.2	65.7	63.1	64.7	60.2	58.6
Samoa	27.9	28.7	27.6	30.6	30.3	28.8	28.5
Seychelles	82.1	89.4	82.2	78.1	77.6	73.1	72.5
St. Kitts and Nevis	35.6	31.4	36.1	40.0	39.5	30.1	29.3
St. Lucia	46.4	46.3	46.1	43.6	44.2	44.1	45.0
St. Vincent and the Grenadines	36.5	27.5	27.5	26.2	25.8	25.9	26.6
Vanuatu	46.4	47.1	48.2	46.9	43.5	35.1	41.4
Micro States	**33.2**	**35.3**	**37.8**	**37.4**	**38.4**	**37.2**	**37.2**
Antigua and Barbuda	53.3	46.4	45.4	45.8	44.5	45.0	45.5
Dominica	35.8	33.4	31.1	33.9	34.0	34.2	34.3
Grenada	31.7	29.1	30.7	29.9	31.8	32.5	32.5
Kiribati	14.2	11.5	9.7	9.7	9.6	9.7	10.0
Marshall Islands	22.2	32.4	40.4	37.3	37.1	32.4	33.5
Micronesia, Fed. States of	19.0	24.9	29.4	28.1	28.7	27.8	28.0
Palau	49.7	59.2	65.7	63.1	64.7	60.2	58.6
Samoa	27.9	28.7	27.6	30.6	30.3	28.8	28.5
São Tomé and Príncipe	15.9	11.4	12.7	11.0	22.9	21.0	20.2
Seychelles	82.1	89.4	82.2	78.1	77.6	73.1	72.5
St. Kitts and Nevis	35.6	31.4	36.1	40.0	39.5	30.1	29.3
St. Lucia	46.4	46.3	46.1	43.6	44.2	44.1	45.0
St. Vincent and the Grenadines	36.5	27.5	27.5	26.2	25.8	25.9	26.6
Tonga	15.6	16.4	19.9	21.2	21.8	22.8	23.7
Tuvalu	11.8	41.3	62.8	62.9	63.5	70.7	69.8
Others							
Djibouti	38.2	35.8	33.8	33.4	37.1	36.8	35.4
Montenegro	40.0	39.7	44.1	41.8	40.5	40.3	40.6
Swaziland	77.8	53.9	53.5	55.1	57.2	52.6	52.2

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 9. General Government Revenue Excluding Grants, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	38.4	37.8	38.3	38.8	39.0	38.8	38.7
Emerging Markets and Developing Countries	24.1	25.4	26.4	26.0	25.7	24.3	24.7
Emerging Markets[1/]	29.1	30.1	31.1	30.6	29.8	27.7	28.1
Low Income Developing Countries[1/]	17.5	19.3	20.4	20.4	20.6	20.1	20.5
Small States	25.5	28.0	29.0	30.8	30.4	28.5	28.4
Small States							
Regional Groups							
Caribbean	23.6	25.5	25.9	25.8	26.3	25.3	25.3
Asia Pacific	26.6	31.4	33.3	38.0	36.8	33.1	31.6
Africa	25.1	24.0	24.9	24.6	23.9	23.7	23.6
Europe	31.9	40.3	39.7	41.2	42.7	41.9	41.8
Analytical Groups							
Micro States	26.9	27.2	27.7	31.7	32.8	29.8	28.4
Small States in fragile state	26.3	35.5	39.3	47.1	44.1	37.9	35.6
Commodity exporters	24.6	34.1	35.9	36.3	31.8	29.2	29.7
Tourism based	23.7	24.6	25.1	25.5	26.2	25.6	25.4
Offshore Financial Center	23.9	24.7	25.1	25.5	26.1	25.5	25.4
Income Groups							
High income	24.9	27.1	28.2	28.0	28.1	26.0	26.3
Upper middle income	25.7	27.0	27.3	29.4	29.2	29.3	29.1
Lower middle income	26.5	30.6	32.4	35.0	34.5	29.9	28.4
Low income	14.0	15.9	19.3	15.5	14.6	15.2	15.8
Small States in fragile state	**26.3**	**35.5**	**39.3**	**47.1**	**44.1**	**37.9**	**35.6**
Comoros	14.0	15.9	19.3	15.5	14.6	15.2	15.8
Kiribati	48.9	43.3	50.3	65.6	85.3	53.9	54.7
Marshall Islands	21.4	19.9	19.3	21.3	23.0	23.6	23.4
Micronesia, Fed. States of	20.8	21.7	22.9	26.8	37.4	30.9	30.9
Solomon Islands	19.0	31.5	33.5	35.7	33.2	31.5	31.4
Timor-Leste, Democratic Republic of	19.6	61.6	73.4	81.7	54.4	44.1	47.1
Tuvalu	55.3	54.7	56.6	82.9	69.6	70.9	67.0
Commodity exporters	**24.6**	**34.1**	**35.9**	**36.3**	**31.8**	**29.2**	**29.7**
Belize	23.1	26.3	25.7	26.7	27.0	26.8	26.6
Bhutan	35.1	37.5	35.2	28.9	27.2	22.8	25.5
Guyana	23.2	25.1	24.4	24.4	26.7	27.6	25.8
Solomon Islands	19.0	31.5	33.5	35.7	33.2	31.5	31.4
Suriname	21.2	23.7	25.9	24.5	22.5	20.4	21.0
Timor-Leste, Democratic Republic of	19.6	61.6	73.4	81.7	54.4	44.1	47.1
Trinidad and Tobago	30.6	33.1	33.5	33.2	31.0	29.8	30.2
Tourism-based	**23.7**	**24.6**	**25.1**	**25.5**	**26.2**	**25.6**	**25.4**
Antigua and Barbuda	19.0	19.8	19.8	18.7	19.8	20.8	21.5
Bahamas, The	14.7	17.3	17.9	16.3	17.0	18.4	18.8
Barbados	34.3	34.7	36.3	32.7	33.8	33.7	34.5
Belize	23.1	26.3	25.7	26.7	27.0	26.8	26.6
Cabo Verde	22.0	21.9	21.6	21.8	21.1	22.1	22.9
Dominica	24.0	26.3	26.8	26.6	26.4	26.2	26.0
Fiji	25.4	26.6	28.0	28.2	28.6	28.1	27.8
Grenada	20.2	20.0	19.7	19.7	21.2	21.3	22.2
Maldives	24.3	22.3	25.0	27.7	31.4	34.4	35.2
Mauritius	19.1	21.0	20.8	21.0	20.5	20.6	20.7
Palau	18.4	19.4	20.9	21.1	22.7	23.5	24.3
Samoa	21.9	23.2	22.6	24.2	25.7	25.6	25.6
Seychelles	38.6	34.2	34.2	31.9	32.0	31.7	31.6
St. Kitts and Nevis	25.6	30.5	32.8	38.9	39.0	28.4	27.3
St. Lucia	23.0	23.4	23.0	23.9	23.4	23.0	22.8
St. Vincent and the Grenadines	23.8	25.5	25.0	24.2	25.5	24.9	25.4
Vanuatu	18.2	18.5	18.8	19.2	19.4	19.3	18.6
Micro States	**26.9**	**27.2**	**27.7**	**31.7**	**32.8**	**29.8**	**28.4**
Antigua and Barbuda	19.0	19.8	19.8	18.7	19.8	20.8	21.5
Dominica	24.0	26.3	26.8	26.6	26.4	26.2	26.0
Grenada	20.2	20.0	19.7	19.7	21.2	21.3	22.2
Kiribati	48.9	43.3	50.3	65.6	85.3	53.9	54.7
Marshall Islands	21.4	19.9	19.3	21.3	23.0	23.6	23.4
Micronesia, Fed. States of	20.8	21.7	22.9	26.8	37.4	30.9	30.9
Palau	18.4	19.4	20.9	21.1	22.7	23.5	24.3
Samoa	21.9	23.2	22.6	24.2	25.7	25.6	25.6
São Tomé and Príncipe	23.8	17.2	16.3	20.6	15.6	16.5	17.0
Seychelles	38.6	34.2	34.2	31.9	32.0	31.7	31.6
St. Kitts and Nevis	25.6	30.5	32.8	38.9	39.0	28.4	27.3
St. Lucia	23.0	23.4	23.0	23.9	23.4	23.0	22.8
St. Vincent and the Grenadines	23.8	25.5	25.0	24.2	25.5	24.9	25.4
Tonga	24.4	21.0	18.9	20.3	21.1	21.7	21.3
Tuvalu	55.3	54.7	56.6	82.9	69.6	70.9	67.0
Others							
Djibouti	27.6	28.3	26.1	27.8	28.8	27.6	24.8
Montenegro	41.0	40.3	39.7	41.2	42.7	41.9	41.8
Swaziland	30.3	29.3	35.9	34.4	34.4	32.1	29.0

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 10. General Government Expenditure, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	39.2	42.2	41.5	41.5	41.3	40.8	40.2
Emerging Markets and Developing Countries	26.2	29.2	29.6	30.0	30.6	31.0	30.1
Emerging Markets[1/]	29.0	32.1	32.0	32.5	33.2	34.0	32.7
Low Income Developing Countries[1/]	22.6	25.5	26.5	26.9	27.5	27.4	26.9
Small States	35.0	38.2	37.3	37.2	39.4	39.9	38.0
Small States							
Regional Groups							
Caribbean	29.1	31.3	30.6	31.2	31.3	31.2	29.9
Asia Pacific	41.4	46.4	45.1	45.1	48.9	48.4	47.7
Africa	32.8	33.6	33.2	31.8	34.0	34.3	33.4
Europe	32.6	45.8	45.9	44.8	43.9	47.5	49.4
Analytical Groups							
Micro States	43.2	44.8	43.2	42.6	45.8	45.1	43.1
Small States in fragile state	49.2	55.8	54.8	55.3	59.2	59.8	59.2
Commodity exporters	27.3	33.4	33.0	33.0	33.2	33.3	33.6
Tourism based	30.6	31.9	31.2	31.5	32.3	32.4	31.1
Offshore Financial Center	32.4	33.7	32.7	33.0	34.1	34.1	33.0
Income Groups							
High income	29.6	32.2	31.2	32.2	30.6	31.5	29.5
Upper middle income	35.5	37.9	36.3	37.0	38.5	39.0	38.4
Lower middle income	37.9	42.2	42.2	40.5	43.6	43.0	42.1
Low income	21.5	23.2	25.3	25.2	23.8	25.4	26.6
Small States in fragile state	**49.2**	**55.8**	**54.8**	**55.3**	**59.2**	**59.8**	**59.2**
Comoros	21.5	23.2	25.3	25.2	23.8	25.4	26.6
Kiribati	90.5	84.3	92.9	96.6	132.1	127.5	96.8
Marshall Islands	62.8	57.2	52.2	53.1	54.9	61.3	62.8
Micronesia, Fed. States of	63.0	65.7	65.3	59.6	56.1	59.0	56.6
Solomon Islands	30.2	52.9	50.6	49.9	44.2	48.3	46.0
Timor-Leste, Democratic Republic of	7.1	19.5	22.4	21.8	29.1	34.4	39.7
Tuvalu	90.5	87.8	75.0	81.1	96.7	94.2	90.0
Commodity exporters	**27.3**	**33.4**	**33.0**	**33.0**	**33.2**	**33.3**	**33.6**
Belize	30.3	28.3	26.9	30.6	30.5	30.1	29.8
Bhutan	39.1	38.0	36.5	32.9	31.0	25.1	27.1
Guyana	32.7	31.1	31.1	29.9	33.8	33.4	30.9
Solomon Islands	30.2	52.9	50.6	49.9	44.2	48.3	46.0
Suriname	22.4	27.5	29.9	31.5	27.5	26.1	25.8
Timor-Leste, Democratic Republic of	7.1	19.5	22.4	21.8	29.1	34.4	39.7
Trinidad and Tobago	28.3	36.4	33.8	35.5	35.1	33.7	35.0
Tourism-based	**30.6**	**31.9**	**31.2**	**31.5**	**32.3**	**32.4**	**31.1**
Antigua and Barbuda	32.8	26.2	21.0	22.9	23.1	31.7	20.0
Bahamas, The	16.5	22.0	23.5	22.8	21.2	22.1	21.6
Barbados	36.4	41.5	45.4	45.6	43.2	41.4	41.8
Belize	30.3	28.3	26.9	30.6	30.5	30.1	29.8
Cabo Verde	32.0	34.9	34.6	33.2	32.7	32.8	31.4
Dominica	31.3	35.8	34.5	32.4	33.1	32.9	33.0
Fiji	29.0	28.8	29.1	28.7	30.5	31.8	29.8
Grenada	29.3	27.9	26.7	28.4	31.4	28.0	25.7
Maldives	31.7	36.0	33.8	36.1	42.9	42.4	42.2
Mauritius	23.9	24.8	23.3	24.9	24.0	24.4	24.4
Palau	44.5	41.4	40.8	37.0	36.2	39.3	41.4
Samoa	29.4	36.6	37.3	37.6	43.8	38.6	32.2
Seychelles	43.8	34.4	36.1	35.6	31.9	32.8	30.6
St. Kitts and Nevis	34.1	34.7	31.4	33.7	32.8	30.9	30.0
St. Lucia	27.3	31.5	34.0	31.3	31.6	32.1	32.3
St. Vincent and the Grenadines	27.3	32.2	28.7	31.8	32.8	31.9	31.0
Vanuatu	21.7	25.4	23.4	21.5	22.6	27.4	27.8
Micro States	**43.2**	**44.8**	**43.2**	**42.6**	**45.8**	**45.1**	**43.1**
Antigua and Barbuda	32.8	26.2	21.0	22.9	23.1	31.7	20.0
Dominica	31.3	35.8	34.5	32.4	33.1	32.9	33.0
Grenada	29.3	27.9	26.7	28.4	31.4	28.0	25.7
Kiribati	90.5	84.3	92.9	96.6	132.1	127.5	96.8
Marshall Islands	62.8	57.2	52.2	53.1	54.9	61.3	62.8
Micronesia, Fed. States of	63.0	65.7	65.3	59.6	56.1	59.0	56.6
Palau	44.5	41.4	40.8	37.0	36.2	39.3	41.4
Samoa	29.4	36.6	37.3	37.6	43.8	38.6	32.2
São Tomé and Príncipe	41.4	47.2	44.9	31.6	31.7	33.5	36.3
Seychelles	43.8	34.4	36.1	35.6	31.9	32.8	30.6
St. Kitts and Nevis	34.1	34.7	31.4	33.7	32.8	30.9	30.0
St. Lucia	27.3	31.5	34.0	31.3	31.6	32.1	32.3
St. Vincent and the Grenadines	27.3	32.2	28.7	31.8	32.8	31.9	31.0
Tonga	22.6	29.7	27.9	28.1	30.1	30.3	27.8
Tuvalu	90.5	87.8	75.0	81.1	96.7	94.2	90.0
Others							
Djibouti	35.7	37.8	37.2	37.7	47.5	49.7	46.0
Montenegro	42.0	45.8	45.9	44.8	43.9	47.5	49.4
Swaziland	31.5	32.8	30.7	34.2	38.3	35.8	33.4

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 11. General Government Grants, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	0.4	0.6	0.6	0.6	0.7	0.6	0.6
Emerging Markets and Developing Countries	2.0	2.0	1.9	1.6	1.9	1.8	1.7
Emerging Markets[1/]	0.6	0.4	0.3	0.4	0.6	0.5	0.5
Low Income Developing Countries[1/]	3.6	3.6	3.5	3.0	3.3	3.2	2.9
Small States	8.2	9.1	8.5	8.6	9.6	8.5	7.5
Small States							
Regional Groups							
Caribbean	1.7	1.9	1.2	1.5	1.6	1.4	1.2
Asia Pacific	18.7	21.9	21.1	19.9	23.5	19.4	18.3
Africa	7.5	6.1	6.2	7.4	5.0	5.2	5.2
Europe	0.4	0.3	0.3	0.3	0.3	0.2	0.2
Analytical Groups							
Micro States	14.1	14.4	14.1	13.5	16.0	13.4	12.8
Small States in fragile state	25.0	28.6	27.9	29.8	30.8	25.9	24.4
Commodity exporters	3.6	6.3	4.7	4.5	3.5	3.3	3.0
Tourism based	3.2	3.7	3.0	2.9	3.2	2.7	2.5
Offshore Financial Center	5.3	5.6	4.5	4.5	5.1	4.6	4.4
Income Groups							
High income	0.5	0.9	0.8	1.5	1.0	0.8	0.7
Upper middle income	6.9	8.1	7.3	6.9	8.9	7.4	7.1
Lower middle income	14.9	14.9	14.7	13.1	12.7	12.4	11.9
Low income	5.1	10.3	9.2	27.5	8.9	9.0	8.7
Small States in fragile state	**25.0**	**28.6**	**27.9**	**29.8**	**30.8**	**25.9**	**24.4**
Comoros	5.1	10.3	9.2	27.5	8.9	9.0	8.7
Kiribati	29.0	27.3	33.9	40.3	64.0	58.4	34.8
Marshall Islands	42.9	38.9	32.1	32.5	33.1	40.1	41.7
Micronesia, Fed. States of	38.8	44.6	43.1	35.5	31.2	31.0	29.9
Solomon Islands	11.5	26.6	21.0	18.6	12.9	14.7	13.0
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	19.9	23.8	27.8	24.6	50.9	23.0	20.7
Commodity exporters	**3.6**	**6.3**	**4.7**	**4.5**	**3.5**	**3.3**	**3.0**
Belize	1.3	0.8	0.7	2.2	0.9	0.8	0.8
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guyana	4.4	2.5	2.0	1.2	1.9	1.1	1.1
Solomon Islands	11.5	26.6	21.0	18.6	12.9	14.7	13.0
Suriname	0.6	1.5	0.0	0.0	0.0	0.0	0.0
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	0.0	0.1	0.0	0.3	0.1	0.0	0.0
Tourism-based	**3.2**	**3.7**	**3.0**	**2.9**	**3.2**	**2.7**	**2.5**
Antigua and Barbuda	1.1	0.6	0.0	0.0	0.4	0.4	0.0
Bahamas, The	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Barbados	0.0	0.3	0.7	0.1	0.5	0.5	0.3
Belize	1.3	0.8	0.7	2.2	0.9	0.8	0.8
Cabo Verde	5.9	4.3	2.8	2.5	3.3	2.9	2.0
Dominica	5.9	6.3	2.6	3.1	3.3	3.2	3.2
Fiji	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Grenada	4.1	2.9	1.1	1.4	3.9	3.7	2.3
Maldives	2.6	1.3	0.9	0.3	0.9	0.7	0.6
Mauritius	0.3	0.9	0.7	0.4	0.1	0.5	0.5
Palau	20.7	22.1	20.8	17.1	14.7	17.5	18.0
Samoa	6.7	7.0	7.5	9.7	12.8	9.7	4.5
Seychelles	0.7	3.0	4.5	4.1	3.2	2.4	1.7
St. Kitts and Nevis	1.4	3.3	3.5	7.0	4.0	3.8	3.1
St. Lucia	0.8	2.2	1.8	1.5	2.0	2.0	2.0
St. Vincent and the Grenadines	1.1	2.7	1.7	1.4	2.5	1.9	1.9
Vanuatu	2.2	5.2	3.0	2.2	4.1	2.5	3.1
Micro States	**14.1**	**14.4**	**14.1**	**13.5**	**16.0**	**13.4**	**12.8**
Antigua and Barbuda	1.1	0.6	0.0	0.0	0.4	0.4	0.0
Dominica	5.9	6.3	2.6	3.1	3.3	3.2	3.2
Grenada	4.1	2.9	1.1	1.4	3.9	3.7	2.3
Kiribati	29.0	27.3	33.9	40.3	64.0	58.4	34.8
Marshall Islands	42.9	38.9	32.1	32.5	33.1	40.1	41.7
Micronesia, Fed. States of	38.8	44.6	43.1	35.5	31.2	31.0	29.9
Palau	20.7	22.1	20.8	17.1	14.7	17.5	18.0
Samoa	6.7	7.0	7.5	9.7	12.8	9.7	4.5
São Tomé and Príncipe	33.0	17.1	17.7	12.9	10.3	8.6	15.2
Seychelles	0.7	3.0	4.5	4.1	3.2	2.4	1.7
St. Kitts and Nevis	1.4	3.3	3.5	7.0	4.0	3.8	3.1
St. Lucia	0.8	2.2	1.8	1.5	2.0	2.0	2.0
St. Vincent and the Grenadines	1.1	2.7	1.7	1.4	2.5	1.9	1.9
Tonga	1.7	7.6	7.6	7.8	9.2	7.5	5.4
Tuvalu	19.9	23.8	27.8	24.6	50.9	23.0	20.7
Others							
Djibouti	6.5	6.6	8.6	4.4	6.7	9.1	8.7
Montenegro	0.5	0.3	0.3	0.3	0.3	0.2	0.2
Swaziland	0.8	0.2	0.1	0.5	1.9	0.6	0.6

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 12. Current Expenditure, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	38.8	42.2	41.7	41.9	41.6	41.2	40.7
Emerging Markets and Developing Countries	20.9	22.7	23.1	23.4	23.9	24.1	23.4
Emerging Markets[1/]	24.5	26.5	26.9	27.3	28.1	28.6	27.6
Low Income Developing Countries[1/]	15.9	17.5	18.0	18.2	18.3	18.1	17.7
Small States	27.2	29.4	28.8	29.4	29.9	29.7	28.8
Small States							
Regional Groups							
Caribbean	22.8	25.4	25.5	25.5	25.0	25.3	24.3
Asia Pacific	37.8	42.3	40.0	42.8	47.0	46.3	45.2
Africa	24.6	22.8	22.5	22.6	23.3	22.9	22.6
Europe	32.0	46.2	46.0	44.8	38.6	37.3	38.2
Analytical Groups							
Micro States	31.9	33.2	31.7	32.6	34.1	34.2	32.6
Small States in fragile state	46.0	49.4	46.5	47.9	52.4	51.7	50.4
Commodity exporters	23.1	25.9	25.7	26.5	26.7	26.2	26.3
Tourism based	23.4	24.7	24.5	24.9	25.2	25.5	24.5
Offshore Financial Center	25.4	27.0	26.5	27.0	27.5	27.7	26.9
Income Groups							
High income	25.0	28.8	27.9	27.9	26.5	27.4	25.3
Upper middle income	28.7	32.5	31.6	32.8	33.8	33.2	32.7
Lower middle income	27.5	25.9	25.6	26.1	26.9	26.3	26.1
Low income	16.1	17.5	18.6	15.4	15.7	15.3	15.2
Small States in fragile state	**46.0**	**49.4**	**46.5**	**47.9**	**52.4**	**51.7**	**50.4**
Comoros	16.1	17.5	18.6	15.4	15.7	15.3	15.2
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	51.9	49.1	48.2	49.3	51.6	49.9	49.0
Micronesia, Fed. States of	53.7	46.1	44.2	45.9	46.0	45.5	45.5
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	91.6	85.0	75.0	81.0	96.5	94.1	89.8
Commodity exporters	**23.1**	**25.9**	**25.7**	**26.5**	**26.7**	**26.2**	**26.3**
Belize	22.1	24.0	22.5	23.6	24.9	24.8	24.9
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guyana	22.9	21.0	21.4	21.7	22.9	22.9	22.7
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Suriname	20.4	22.4	25.3	26.1	19.7	21.1	20.9
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	27.3	37.0	33.7	34.6	34.7	33.5	34.5
Tourism-based	**23.4**	**24.7**	**24.5**	**24.9**	**25.2**	**25.5**	**24.5**
Antigua and Barbuda	28.5	23.0	20.4	21.5	21.5	30.3	18.6
Bahamas, The	16.2	22.0	23.1	22.6	20.9	21.5	21.2
Barbados	25.9	32.2	34.8	33.9	31.4	29.5	29.9
Belize	22.1	24.0	22.5	23.6	24.9	24.8	24.9
Cabo Verde	21.3	21.4	22.8	23.1	25.2	24.9	25.3
Dominica	23.7	23.1	24.4	23.7	24.8	24.4	24.4
Fiji	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Grenada	17.9	21.0	21.7	21.2	21.3	20.1	19.7
Maldives	23.4	27.9	26.5	31.7	36.5	36.0	35.8
Mauritius	20.6	22.1	20.5	21.8	21.5	21.8	21.7
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Seychelles	39.3	27.4	26.2	27.0	26.7	26.7	25.4
St. Kitts and Nevis	26.9	29.7	27.7	26.9	26.3	24.3	22.9
St. Lucia	20.1	22.5	24.5	24.0	23.6	24.1	24.3
St. Vincent and the Grenadines	21.7	27.8	26.1	25.6	25.7	25.4	25.5
Vanuatu	19.1	21.6	21.8	20.6	21.7	23.1	21.5
Micro States	**31.9**	**33.2**	**31.7**	**32.6**	**34.1**	**34.2**	**32.6**
Antigua and Barbuda	28.5	23.0	20.4	21.5	21.5	30.3	18.6
Dominica	23.7	23.1	24.4	23.7	24.8	24.4	24.4
Grenada	17.9	21.0	21.7	21.2	21.3	20.1	19.7
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	51.9	49.1	48.2	49.3	51.6	49.9	49.0
Micronesia, Fed. States of	53.7	46.1	44.2	45.9	46.0	45.5	45.5
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
São Tomé and Príncipe	21.3	18.9	17.7	18.9	18.8	17.2	16.9
Seychelles	39.3	27.4	26.2	27.0	26.7	26.7	25.4
St. Kitts and Nevis	26.9	29.7	27.7	26.9	26.3	24.3	22.9
St. Lucia	20.1	22.5	24.5	24.0	23.6	24.1	24.3
St. Vincent and the Grenadines	21.7	27.8	26.1	25.6	25.7	25.4	25.5
Tonga	20.8	24.6	24.6	26.0	27.3	26.4	25.0
Tuvalu	91.6	85.0	75.0	81.0	96.5	94.1	89.8
Others							
Djibouti	28.3	24.3	24.2	24.0	23.7	23.2	21.0
Montenegro	41.2	46.2	45.9	44.9	38.6	37.3	38.2
Swaziland	24.8	27.7	27.2	28.3	30.1	29.0	28.3

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 13. Capital Expenditure, in percent of GDP

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	2.1	2.1	1.9	1.7	1.7	1.7	1.6
Emerging Markets and Developing Countries	5.6	6.6	6.5	6.7	6.8	7.1	6.9
Emerging Markets[1/]	5.0	6.0	5.5	5.7	5.5	6.0	5.6
Low Income Developing Countries[1/]	6.4	7.5	7.9	8.0	8.4	8.6	8.6
Small States	7.1	8.1	7.5	6.6	7.5	8.2	7.9
Small States							
Regional Groups							
Caribbean	7.6	7.1	6.1	7.0	7.5	7.1	6.7
Asia Pacific	5.1	7.8	6.7	4.2	4.4	4.4	4.7
Africa	8.4	10.9	10.8	9.2	10.8	11.5	10.8
Europe	0.6	-0.3	-0.1	-0.1	5.3	10.2	11.2
Analytical Groups							
Micro States	7.8	9.4	8.5	6.6	7.4	7.0	6.6
Small States in fragile state	6.7	9.3	9.3	7.9	6.2	6.0	6.5
Commodity exporters	7.0	6.7	6.3	6.7	6.9	6.8	5.9
Tourism based	7.1	6.9	6.2	6.3	6.4	6.4	6.2
Offshore Financial Center	7.1	6.9	6.2	6.3	6.4	6.4	6.2
Income Groups							
High income	7.4	5.8	4.9	6.7	6.4	6.3	6.6
Upper middle income	5.6	5.7	5.0	4.9	5.7	5.9	5.6
Lower middle income	9.7	13.5	12.7	9.4	11.8	12.0	11.3
Low income	5.4	5.7	6.8	9.8	8.0	10.1	11.4
Small States in fragile state	**6.7**	**9.3**	**9.3**	**7.9**	**6.2**	**6.0**	**6.5**
Comoros	5.4	5.7	6.8	9.8	8.0	10.1	11.4
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia, Fed. States of	9.3	19.6	21.1	13.7	10.1	13.6	11.2
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	1.9	2.8	0.0	0.2	0.2	0.2	0.2
Commodity exporters	**7.0**	**6.7**	**6.3**	**6.7**	**6.9**	**6.8**	**5.9**
Belize	8.6	4.6	4.7	7.3	5.9	5.7	5.3
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guyana	9.8	10.2	9.7	8.2	10.9	10.5	8.2
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Suriname	2.6	5.4	4.6	4.5	6.5	5.0	4.9
Timor-Leste, Democratic Republic of	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tourism-based	**7.1**	**6.9**	**6.2**	**6.3**	**6.4**	**6.4**	**6.2**
Antigua and Barbuda	4.3	3.2	0.6	1.3	1.7	1.4	1.4
Bahamas, The	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Barbados	10.9	9.1	10.5	11.9	12.0	12.2	12.3
Belize	8.6	4.6	4.7	7.3	5.9	5.7	5.3
Cabo Verde	10.7	13.4	11.8	10.1	7.5	7.8	6.1
Dominica	8.4	12.9	10.2	9.0	8.5	9.2	9.1
Fiji	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Grenada	11.4	6.9	5.0	7.1	10.1	7.9	6.0
Maldives	8.3	8.2	7.3	4.4	6.4	6.4	6.4
Mauritius	3.3	2.7	2.8	3.0	2.5	2.5	2.4
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Seychelles	4.5	6.9	9.8	8.6	5.2	6.1	5.3
St. Kitts and Nevis	7.2	5.0	3.7	6.8	6.5	6.6	7.1
St. Lucia	7.5	9.2	9.8	7.4	8.3	8.2	8.2
St. Vincent and the Grenadines	5.6	4.4	2.6	6.1	7.1	6.5	5.5
Vanuatu	2.5	3.9	1.6	0.9	0.9	4.4	6.3
Micro States	**7.8**	**9.4**	**8.5**	**6.6**	**7.4**	**7.0**	**6.6**
Antigua and Barbuda	4.3	3.2	0.6	1.3	1.7	1.4	1.4
Dominica	8.4	12.9	10.2	9.0	8.5	9.2	9.1
Grenada	11.4	6.9	5.0	7.1	10.1	7.9	6.0
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia, Fed. States of	9.3	19.6	21.1	13.7	10.1	13.6	11.2
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
São Tomé and Príncipe	22.5	28.3	27.3	12.7	12.9	16.3	19.4
Seychelles	4.5	6.9	9.8	8.6	5.2	6.1	5.3
St. Kitts and Nevis	7.2	5.0	3.7	6.8	6.5	6.6	7.1
St. Lucia	7.5	9.2	9.8	7.4	8.3	8.2	8.2
St. Vincent and the Grenadines	5.6	4.4	2.6	6.1	7.1	6.5	5.5
Tonga	1.0	4.5	3.6	1.4	2.4	3.2	2.3
Tuvalu	1.9	2.8	0.0	0.2	0.2	0.2	0.2
Others							
Djibouti	7.4	13.5	13.0	13.7	23.8	26.5	25.0
Montenegro	0.8	-0.3	-0.1	-0.1	5.3	10.2	11.2
Swaziland	7.5	5.7	4.3	6.6	9.2	7.3	5.6

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States

Table 14. Reserve Assets, in months of imports

	2000-2008	2009-2012	2012	2013	2014	2015	2016
World							
Advanced Economies	3.3	3.8	4.0	4.0	4.3	4.1	4.0
Emerging Markets and Developing Countries	4.3	5.9	5.9	6.1	6.2	5.7	5.5
Emerging Markets[1/]	5.4	7.7	7.7	8.1	8.3	7.5	7.1
Low Income Developing Countries[1/]	2.8	3.6	3.7	3.6	3.7	3.5	3.5
Small States	3.2	3.9	4.2	4.3	4.6	4.5	4.5
Small States							
Regional Groups							
Caribbean	3.1	4.3	4.5	4.6	5.2	5.3	5.2
Asia Pacific	3.4	3.8	4.4	4.3	4.6	4.9	4.9
Africa	3.5	3.8	4.0	4.5	4.9	4.7	4.8
Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Analytical Groups							
Micro States	2.6	3.3	3.6	3.7	4.2	4.1	4.0
Small States in fragile state	3.6	3.9	4.7	4.6	4.8	5.2	5.4
Commodity exporters	4.7	6.1	6.9	6.8	7.3	7.8	8.1
Tourism based	2.6	3.4	3.6	3.7	4.3	4.3	4.3
Offshore Financial Center	2.7	3.7	3.8	4.0	4.7	4.7	4.6
Income Groups							
High income	3.7	5.5	5.7	5.8	6.9	6.8	6.6
Upper middle income	2.2	3.0	3.2	3.4	3.7	3.8	3.7
Lower middle income	3.9	4.2	4.7	4.8	5.0	5.3	5.4
Low income	7.4	6.1	6.1	5.5	5.7	4.7	4.7
Small States in fragile state	**3.6**	**3.9**	**4.7**	**4.6**	**4.8**	**5.2**	**5.4**
Comoros	7.4	6.1	6.1	5.5	5.7	4.7	4.7
Kiribati	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marshall Islands	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Micronesia, Fed. States of	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Solomon Islands	3.7	6.1	8.4	9.1	8.5	8.5	8.0
Timor-Leste, Democratic Republic of	2.6	4.0	8.0	6.1	7.5	10.6	13.1
Tuvalu	5.0	6.9	7.1	7.8	8.0	8.5	8.2
Commodity exporters	**4.7**	**6.1**	**6.9**	**6.8**	**7.3**	**7.8**	**8.1**
Belize	1.8	3.1	3.3	4.7	5.8	5.9	5.7
Bhutan	11.6	8.4	8.1	8.5	7.9	7.1	5.9
Guyana	3.4	4.2	4.4	3.8	3.7	3.3	3.5
Solomon Islands	3.7	6.1	8.4	9.1	8.5	8.5	8.0
Suriname	2.6	4.4	4.5	3.4	2.9	3.2	3.2
Timor-Leste, Democratic Republic of	2.6	4.0	8.0	6.1	7.5	10.6	13.1
Trinidad and Tobago	7.5	12.4	11.5	13.0	16.0	15.4	15.0
Tourism-based	**2.6**	**3.4**	**3.6**	**3.7**	**4.3**	**4.3**	**4.3**
Antigua and Barbuda	2.0	2.4	2.7	3.4	5.1	4.8	4.7
Bahamas, The	1.6	2.3	2.0	1.8	2.1	2.1	2.1
Barbados	4.2	4.4	4.6	3.7	3.8	3.7	3.6
Belize	1.8	3.1	3.3	4.7	5.8	5.9	5.7
Cabo Verde	2.5	3.8	4.1	4.5	4.8	4.3	4.2
Dominica	2.8	3.5	4.5	4.1	4.8	4.1	4.1
Fiji	2.9	3.6	3.4	3.3	3.6	3.3	3.1
Grenada	3.0	3.1	2.6	3.5	4.4	4.4	4.0
Maldives	2.4	1.8	1.6	1.7	2.8	3.5	3.9
Mauritius	4.1	4.5	4.7	5.0	5.4	5.7	5.7
Palau	0.0	0.3	0.3	0.3	0.3	0.2	0.2
Samoa	3.7	4.5	4.7	3.9	4.9	5.5	5.2
Seychelles	0.9	2.6	2.9	3.7	4.6	4.3	4.3
St. Kitts and Nevis	2.9	6.1	7.8	7.8	8.9	8.0	6.8
St. Lucia	2.5	2.9	3.5	2.8	2.6	2.5	2.4
St. Vincent and the Grenadines	2.7	2.9	3.1	3.9	3.8	4.0	4.2
Vanuatu	3.6	5.1	5.3	5.7	5.6	3.8	3.9
Micro States	**2.6**	**3.3**	**3.6**	**3.7**	**4.2**	**4.1**	**4.0**
Antigua and Barbuda	2.0	2.4	2.7	3.4	5.1	4.8	4.7
Dominica	2.8	3.5	4.5	4.1	4.8	4.1	4.1
Grenada	3.0	3.1	2.6	3.5	4.4	4.4	4.0
Kiribati	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marshall Islands	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Micronesia, Fed. States of	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Palau	0.0	0.3	0.3	0.3	0.3	0.2	0.2
Samoa	3.7	4.5	4.7	3.9	4.9	5.5	5.2
São Tomé and Príncipe	4.5	4.7	3.6	3.6	4.1	3.6	3.7
Seychelles	0.9	2.6	2.9	3.7	4.6	4.3	4.3
St. Kitts and Nevis	2.9	6.1	7.8	7.8	8.9	8.0	6.8
St. Lucia	2.5	2.9	3.5	2.8	2.6	2.5	2.4
St. Vincent and the Grenadines	2.7	2.9	3.1	3.9	3.8	4.0	4.2
Tonga	2.5	5.3	6.5	6.3	6.4	6.6	6.7
Tuvalu	5.0	6.9	7.1	7.8	8.0	8.5	8.2
Others							
Djibouti	2.9	1.7	3.1	4.3	4.3	3.8	4.3
Montenegro	0.5	2.2	2.0	2.5	0.0	0.0	0.0
Swaziland	2.4	3.1	3.3	3.7	3.7	3.8	3.6

Source: Spring 2015 World Economic Outlook, January 2015 Article IV Staff Report for Montenegro , and IMF staff estimates for Timor-Leste.
1/ Excluding Small States