Macroeconomic Issues of Small states: Are the Asia and Pacific Small States Different from Other Small States?

Peter Allum and Patrizia Tumbarello
ANU, November 19, 2013
Coverage of presentation

1. Small states in the IMF (basic facts)
2. Challenges and risks of the Pacific Islands
3. Policy messages for the Pacific Islands
4. Broader ingredients for growth and resilience in small states
Small states in the IMF

- 42 IMF member small states (population < 1.5 million)
- 33 developing small states (excluding advanced economies, high-income fuel exporters)
- Of which, 15 micros states (popn. < 200,000)
Small states in the IMF

• Three main groupings of small states:
  – Caribbean (12 total, 6 micro)
  – Pacific islands (13 total, 7 micro)
  – Other (8 total, 2 micro) 1/

1/ Africa, Middle East, Europe.
Small states in the IMF

- Timeline of focus on small states
  - 1994: UN “Barbados Programme of Action”
  - 2000: World Bank-Commonwealth Secretariat joint study
  - 2013: IMF review of macro issues in small states.
  - 1993 and 2001: Regional TA centers opened in Pacific and Caribbean, respectively.
Small states in the IMF

**IMF engagement**

- Financing
- Policy advice
- Technical assistance and training
- Global forum
Challenges and main messages on the PICs

(Fiscal) risks and challenges in the PICs
• Volatility, spending rigidities → pro-cyclical policy
• Development needs, low productivity of govern. spending
• Rising public debt

Policy: How to Address Macro – Fiscal Stability
• MT fiscal framework and fiscal anchors for PICs
• Trade off between building buffers and spending
• Improving spending mix
• Preserving fiscal space
Asia and Pacific small states are remote, scattered, and scarcely populated...

Population versus GDP-Weighted Distance\(^1\)

(\(^{\text{In kilometers}}\))

\[
\begin{array}{c}
\text{GDP-weighted distance} \\
\text{(1 thousand)} \\
\text{(1 million)} \\
\text{(1 billion)}
\end{array}
\]

\[
\begin{array}{c}
\text{World} \\
\text{PICs} \\
\text{Small Caribbean islands}
\end{array}
\]


1/ Distance to all countries weighted by GDP.

Small States—Asia and Pacific Region: Population

(\(^{\text{In millions}}\))

\[
\begin{array}{c}
\text{Population}
\end{array}
\]

Small states average: 0.42

PICs average: 0.23

Sources: IMF, WEO; and World Bank, WDI.
Financial depth in APD small states is generally below other small states and impedes growth.
The business environment is weak

Small States—Asia and Pacific Region: Real per Capita GDP Growth and Business Climate, 2000-10

Sources: World Bank, Doing Business 2013; and IMF staff estimates.

1/ A lower number indicates a more friendly business climate.

Small States—Asia and Pacific Region: Ease of Doing Business Index 1/

Sources: World Bank, Doing Business 2014; and IMF staff estimates.

1/ A lower number indicates a more friendly business climate.
Managing Shocks, Vulnerability, and Volatility
They are exposed to shocks (natural disasters, climate change, terms of trade, political)...

**Average Impact of Natural Disasters**

(In percent of GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>APD small states</th>
<th>WHD small states</th>
<th>AFR small states</th>
<th>Non-small states</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Lucia</td>
<td>9.2</td>
<td>7.7</td>
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<td>Grenada</td>
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<tr>
<td>Tonga &amp; Nevis</td>
<td>5.8</td>
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<td>4.0</td>
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<td>Maldives</td>
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<td>3.7</td>
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<td>Mongolia</td>
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<td>Micronesia</td>
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<td>1.4</td>
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<td>1.3</td>
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<td>Dominica</td>
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<td>Guyana</td>
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<td>0.8</td>
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<tr>
<td>Burkina Faso</td>
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<td>1.6</td>
<td>0.7</td>
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<td>Belize</td>
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<td>1.4</td>
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<td>Palau</td>
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<td>0.5</td>
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<td>Madagascar</td>
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<td>1.2</td>
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<tr>
<td>Jamaica</td>
<td>1.9</td>
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<td>1.1</td>
<td>0.3</td>
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<td>El Salvador</td>
<td>1.8</td>
<td>1.3</td>
<td>1.0</td>
<td>0.2</td>
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<td>Bahamas</td>
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<td>0.9</td>
<td>0.1</td>
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<td>Zimbabwe</td>
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<td>1.1</td>
<td>0.8</td>
<td>0.0</td>
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<td>Bolivia</td>
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<td>1.0</td>
<td>0.7</td>
<td>0.0</td>
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<tr>
<td>Samoan</td>
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<td>0.9</td>
<td>0.6</td>
<td>0.0</td>
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<tr>
<td>Mauritius</td>
<td>1.3</td>
<td>0.8</td>
<td>0.5</td>
<td>0.0</td>
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<tr>
<td>Nepal</td>
<td>1.2</td>
<td>0.7</td>
<td>0.4</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Other small states average = 4.0
APD small states average = 3.3

**Small States: Frequencies of Shocks**

(Low-income countries = 100)

<table>
<thead>
<tr>
<th>Category</th>
<th>Small states</th>
<th>PICs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terms of trade shocks</td>
<td>110</td>
<td>70</td>
</tr>
<tr>
<td>Natural disasters</td>
<td>140</td>
<td>100</td>
</tr>
<tr>
<td>Political shocks</td>
<td>80</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources: UN, Natural Disaster Database; Polity IV Project; and IMF staff calculations.
1/ Based on events during 1970-2007.
2/ Low-income countries only.
3/ Change in the terms of trade larger than 10 percent.
4/ Defined as a deterioration by 3 points or more in the political stability index (Polity index) from Marshall and Jaggers (2009), complemented with country information.

1/ Excludes the cost of climate change.
... and heavily reliant on aid to finance their structural trade deficits

**Small States—Asia and Pacific Region: External Grants**
(In percent of GDP)

Sources: IMF, WEO; and IMF staff calculations.

**Small States—Asia and Pacific Region: Trade Balance of Goods and Services**
(In percent of GDP, 2005-11 average)

Sources: IMF, WEO; and IMF staff calculations.
Their fiscal deficits are the largest among all groups

Fiscal Balance Excluding Grants
(In percent of GDP)

Noncommodity Fiscal Balance
(In percent of GDP)

Source: IMF staff estimates
The volatility of the fiscal balance represents a key policy challenge.

**Overall Fiscal Balance**
(In percent of GDP; 1990-2012)

**Fiscal Balance excl. Grants**
(In percent of GDP; 1990-2012)

Note: The boxes represent the 50 of the observations between the 25th and 75th percentile. —— represents the median.
Sources: IMF, WEO; IMF, APD-LISC; and IMF staff estimates.
Per capita GDP growth has been more volatile relative to other small states...

Volatility of Real per Capita GDP Growth
(Standard Deviation; 1990-2012)

Small States—Asia and Pacific Region: Volatility of Real per Capita GDP Growth and Governance, 1990-2010

Sources: World Bank, WDI, IMF, WEO; and IMF staff calculations.

— in the boxes represent the median. The boxes represent 50 percent of the observations. The bottom of the box represents the 25th percentile and the top the 75th percentile.

Sources: World Bank, Worldwide Governance Indicators; and IMF staff calculations.

1/ Small values represent a low level of government effectiveness.
Large volatility of revenues and remittances

Volatility of Revenue (excl. Grants)
(In percent of GDP)

Volatility of Remittances
(In percent of GDP)

1/ Includes Timor-Leste.
Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.
Volatility of grants

Volatility of Grants
(In percent of GDP)

Revenue and Grants
(In percent of GDP; 1990-2012)

1/ Includes Timor-Leste.
Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.

Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.
Spending Rigidities: High Current Spending

Current Government Expenditure
(In percent of GDP; 2012)

Cost of Government

Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.

Sources: World Bank, WDI; IMF, WEO; and IMF staff calculations.
Capital spending is also volatile

Capital Expenditure
(In percent of total government expenditure)

Volatility of Capital Expenditure
(In percent of GDP)

Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.

1/ Includes Timor-Leste.
Sources: IMF, WEO; IMF, APD-LISC; and IMF, staff estimates.
Microstates have higher volatility

Volatility of Total Government Expenditure
(In percent of GDP)

Source: IMF staff estimates
Procyclical bias

Pacific Island Countries: Procyclical Bias in Fiscal Policy, 2005-12

Source: IMF staff calculations, based on IMF, WEO.
1/ Indicates quadrants.
Procyclical bias

Real Primary Government Expenditure\(^1\/\)
(Average percent change year-to-year; 1990-2012)

Sources: IMF staff estimates.
1/ Procyclical bias is measured by the difference between bar within the group.
Public debt still on check, but raising for some PICs

Public Debt
(In percent of GDP)

Public Debt
(In percent of GDP; 2008-2012)

Sources: IMF, WEO; IMF, APD-LISC; and IMF staff estimates.
Mix of expenditure and fiscal buffers matter for growth

Real GDP per Capita Growth
(In percent; 1990-2012)

Source: IMF staff estimates
Computing Fiscal Space

Pacific Island Country: Debt Sustainability Analysis
(Debt service-to-revenue; in percent)

\[
\text{Fiscal space} = \text{Threshold} - \frac{(P_{13}+P_{14}+P_{15}+P_{16}+P_{17})}{5}
\]
Computing Fiscal Distress

Determination of Sustainable Debt

- **Current primary balance** (in percent of GDP)
- **Interest payments** (in percent of GDP)
- **Interest rate - output growth**
- **Sustainable debt (steady state debt)**
- **Debt limit (nonstochastic)**
- **Debt/GDP**
### Opportunity Cost of Fiscal Buffers

<table>
<thead>
<tr>
<th>Country</th>
<th>Social Return of Capital (a)</th>
<th>Average Interest Rate on Public Debt (b)</th>
<th>Social Return of Capital Net of Interest Rate Payments (c) = (a) – (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>13.1</td>
<td>7.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Kiribati</td>
<td>14.8</td>
<td>3.2</td>
<td>11.6</td>
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<td>10.0</td>
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<td>13.0</td>
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<td>10.2</td>
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<td>Palau</td>
<td>6.2</td>
<td>3.0</td>
<td>3.2</td>
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<tr>
<td>Papua New Guinea</td>
<td>12.8</td>
<td>4.1</td>
<td>8.7</td>
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<td>Samoa</td>
<td>13.9</td>
<td>3.7</td>
<td>10.2</td>
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<td>13.9</td>
<td>1.5</td>
<td>12.4</td>
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<td>Timor-Leste</td>
<td>15.6</td>
<td>2.1</td>
<td>13.6</td>
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<td>Tonga</td>
<td>10.3</td>
<td>2.2</td>
<td>8.1</td>
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<td>Vanuatu</td>
<td>11.0</td>
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<td>7.4</td>
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<td>PICs</td>
<td>12.2</td>
<td>3.1</td>
<td>9.1</td>
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<tr>
<td>Memorandum:</td>
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<tr>
<td>Advanced</td>
<td>10.6</td>
<td>...</td>
<td>...</td>
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<tr>
<td>Emerging</td>
<td>11.9</td>
<td>...</td>
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</tr>
<tr>
<td>LICs</td>
<td>14.2</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

Note: Share of capital in income was assumed at 0.3 and the depreciation was assumed at 0.07. An alternative computation using estimations of shares of capital income by country groups, provides similar conclusions although (it results in higher returns for the PICs, emerging economies and LICs and lower returns for the advanced economies).
Fiscal Space and Development

Fiscal Space and HDI

Fiscal Distress and HDI

Opportunity Cost of Fiscal Buffers and HDI
Expenditure allocation is large but outcomes need to improve.

**Public Expenditure in Education and Secondary Enrollment**

**Life Expectancy and Public Health Expenditure**

Source: IMF staff estimates
Fiscal Space should be used wisely. Events Analysis: public spending episodes

Small States: Public Expenditure Expansion Episodes

Emerging and Developing Countries: Public Expenditure Expansion Episodes

- 35% Expansions led by capital expenditure
- 65% Expansions led by noncapital expenditure (misuse of fiscal space)

- 24% Expansions led by capital expenditure
- 76% Expansions led by noncapital expenditure (misuse of fiscal space)

Source: IMF staff estimates
Small States: Different mix of spending matters for growth and debt

Small States: Real GDP per capita During Public Expenditure Expansion\(^1\)/ (Year-to-year percent change)

Small States: Public Debt During Public Expenditure Expansion\(^1\)/ (In percent of GDP)

Source: IMF staff estimates

1/ Includes only public expenditure episodes that resulted in higher deficits.
2/ Three year average after the episode.
Understanding Growth Performance
As a result, PICs have been stuck so far on a low-growth path
Econometrics: Growth determinants
(Tumbarello, Cabezon, and Wu, 2013)

Openness +
Education +
Initial income level -
Remoteness (shipping index) -
Debt -
Growth volatility -
Fixed cost of government -
Implications

- Lower education
- Lower trade openness
- Lower initial income
- Higher GDP volatility
- Higher debt
- Greater remoteness /lower connectivity

help explain PICs underperformance
Policy Message

• Strengthen fiscal frameworks (buffers for rainy days)
• Strengthen domestic revenue mobilization
• Improve the composition of public spending (health, infrastructure, education) to crowd in the private sector
• Strengthen institutions and improve governance
• Pursue sound structural policies to attract FDI
• Seek regional solutions to common problems
Broader Ingredients for Growth and Resilience in Small States
Building resilience in small states

• Prof. Lino Briguglio sees resilience as coming from:
  – Macroeconomic stability
  – Market efficiency
  – Good governance
  – Social development
Macroeconomic stability

• Small states subject to shocks; need for conservative borrowing over longer-term
• Many Caribbean countries have seen excessive borrowing—driven by fiscal deficits, SOE borrowing, off-balance sheet spending
• 5 of world’s 13 most-indebted states in Caribbean
• Undermines investor confidence and growth
Macroeconomic stability

- Seychelles moved quickly to restore macro-stability
- Successful tourism-based growth since 1976 independence
- In 2008, BOP and debt crisis due to expansionary policies, structural impediments, and pegged exchange rate
- Program supported by IMF focused on fiscal adjustment, debt restructuring, exchange rate correction
- Stability restored and beginning of recovery within a year
Market efficiency

• Markets “underdeveloped” in small states
• Governments can over-reach in seeking to replace the market
• Contrast:
  – **Caribbean**: Widespread tax exemptions; public transportation (buses, airlines), minimum deposit interest rates.
  – **Singapore**: Fostered FDI through low tax rates; determined pursuit of business-friendly policies and practices.
Good governance

• Some merits to being small (high social capital)

• But:
  – Risks of cronyism (large fish in small ponds)
  – Need to be open to foreign economic operations
Good governance

• Contrast Haiti and Dominican Republic. Same island, same resources, same population. Per capita incomes of $1,300 and $10,000, respectively.

• Or Djibouti:
  – Population 850,000
  – Weak rule of law; biased and delayed court decisions; pressure to settle for Djiboutians
  – 14th percentile for govt effectiveness
  – Per capita income <$3,000
Good governance

Vs. St Kitts and Nevis

– Population 60 thousand;
– Promotes domestic and foreign investment in transparent, even-handed manner. Good legal protection of FDI. Courts and police efficient and unbiased
– 76th percentile for govt effectiveness
– Per capita income of $16,000
Social development

**Singapore**

- **1965**: Universal primary education.
- **Early 1970s**: Universal lower secondary education.
- **1980s**: Focus on quality not quantity.
- **1995 onwards**: Global leader in math and sciences.
- **Future goals**: Promoting innovative students.
Social development

Comoros

• 1975: independence

• Political instability and weak budget management; under-investment in education

• Still in bottom 25% of global literacy

• Obstacle to moving beyond subsistence economic activity
Lessons for resilience and growth

- Importance of country development strategy: Singapore, Mauritius, St Kitts, etc;

- Flexibility to move from one developmental phase to the next:
  - **Mauritius**: Sugar > textiles > tourism and services
  - **Singapore**: Textiles and electronic assembly > precision engineering and semi-conductors > business and financial services