Papua New Guinea Economic & Budget Briefing

The challenge of turning the last days of the boom into lasting improvements in living standards

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The World Bank in Papua New Guinea

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Ekonomics Society of PNG, Port Moresby
1. PNG has enjoyed a transformational decade
   - But the driving forces are approaching exhaustion…
   - and PNG’s human development needs—and business opportunities—remain enormous

2. The government is looking to broaden and extend this boom
   - But these efforts bring risks, as PNG’s own history shows
   - …and the resource-intensive type of growth PNG is experiencing brings special challenges

3. So the focus needs to be on doing things smarter:
   - Improving the effectiveness of spending
   - Making the business climate more supportive of Papua New Guinean businesses
PNG’s transformational decade
PNG’s transformational decade

Where we were 10 years ago...

Sliding incomes, low & volatile growth
(annual growth and GDP per capita, 100 in 1975)

A deteriorating fiscal position
(percent of GDP)

Sources: Treasury, IMF, World Bank staff calculations
PNG’s transformational decade

*Where we were 10 years ago…*

**Stagnant employment**
(formal employment, indexed 100 in to 1992)

**….and fast-rising prices**
(year-on-year growth)

*Sources:* NSO, BPNG., World Bank staff calculations
PNG’s transformational decade

Where we were 10 years ago...

...after all, in 2002, commodity-reliant economies were doomed to incomes falling forever

Sources: World Bank DEC
The World Bank Group
in Papua New Guinea

PNG's transformational decade... and then something changed.
PNG has enjoyed a series of positive external shocks.
PNG’s transformational decade

...and the rest is history...stronger and ‘better quality’ growth

Stronger and less volatile output growth
...driven by the non-resource sectors

...driving a surge in formal employment opportunities

Sources: PNG Treasury, BPNG, World Bank staff calculations
PNG’s transformational decade
…and far healthier government finances

Improved public finances
(budget balance and public debt, percent of GDP not including contingent and off-balance-sheet liabilities, currently near 20% of GDP)

…and slower price growth
(year-on-year inflation)

Sources: PNG Treasury, IMF, NSO, World Bank staff calculations
After some very pessimistic forecasts for 2012...surprises have been on the upside.
The last days of this boom

*Growth in the region slowed in 2012 – although by less than expected*

- Growth has slowed globally
  - But our region remains relatively resilient
  - And the slowdown was less-than expected

The World Bank Group in Papua New Guinea

PNG’s transformational decade
PNG’s enjoyed a series of positive external shocks

The last days of the boom
…but this has lowered PNG’s export prices, amplified by the stronger Kina
…and weaker international commodity prices
(PNG’s export prices, in PGK terms)

► …are dragging incomes and spending power…

Sources: BPNG and World Bank
The incomes of cash crop farmers are particularly sensitive to movements in prices, as farmers cut production when prices fall.

- Especially copra and coffee farmers, and especially more recently

(year-on-year change in prices and sales)

Sources: BPNG and World Bank
Together, these factors suggest markedly slower growth over the coming years especially excluding the impact of PNG-LNG on the headline GDP statistics.

Sources: Treasury and World Bank staff calculations.
### The World Bank Group in Papua New Guinea

The last days of the boom
PNG's expected slowdown contrasts with acceleration expected elsewhere

<table>
<thead>
<tr>
<th>percent change from a year earlier</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2012</th>
<th>2013</th>
</tr>
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<tbody>
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<td>9.3</td>
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<td>-0.4</td>
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<td>5.5</td>
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<td>-0.5</td>
<td>-0.8</td>
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<td>12.2</td>
<td>-5.4</td>
<td>4.4</td>
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<td>Myanmar</td>
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<td>5.5</td>
<td>6.3</td>
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</tr>
<tr>
<td>Papua New Guinea</td>
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<td>7.5</td>
<td>1.0</td>
<td>-1.0</td>
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<td>Solomon Islands</td>
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<td>4.0</td>
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<td>-0.7</td>
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<td>10.6</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Developing East Asia excl. China</td>
<td>7.0</td>
<td>4.4</td>
<td>5.6</td>
<td>5.7</td>
<td>5.8</td>
<td>0.4</td>
<td>0.1</td>
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</tbody>
</table>

**Assumptions about the external environment:**
- World: 4.3, 2.7, 2.3, 2.4, 3.1, -0.3, -0.6
- High-income countries: 3.3, 1.6, 1.3, 1.3, 2.0, -0.2, -0.6
- Developing countries: 7.5, 5.9, 5.1, 5.5, 5.8, -0.4, -0.2

*Source: World Bank data and staff estimates.*
Broadening and extending the boom
The World Bank Group in Papua New Guinea

Government spending to broaden and extend the boom

Source: Budget documents, AusAID staff calculations

Marked shift from recent years' fiscal stance

<table>
<thead>
<tr>
<th>Year</th>
<th>Kina (100million's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
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<tr>
<td>2010</td>
<td></td>
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<tr>
<td>2011</td>
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<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
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</tbody>
</table>

Source: Budget documents, AusAID staff calculations
Government spending to broaden and extend the boom

Source: Budget documents, AusAID Staff calculations

2012 Budget Documents
IMF Recommendation
Total GoPNG

23% real growth
9% real growth
Domestic Financing Requirement

**Needs:** Deficit 7.2% of GDP (K2,548.9) – net external borrowings (K475.9) + Investing Financing for LNG (K305) = 6.7% of GDP (K2,378)

**Availability:** Financial Depository Corporations Liquid Assets* + Currency and Deposits with the Central Banks = K8,203

**Note:** Bank Loans to the Private Sector K7,896
External Reserves = 15.6 months on non-mining import cover
Public sector debt (2012) 26% of GDP

**By comparison, in 2002:**

Needs: Deficit 3.7% of GDP, domestic market borrowing K265.1
Available: Liquid Assets of K384 million

**Note:** Bank Loans to the private sector K1380
External reserves = 6.2 months non-mining import cover
Public sector debt = 69% of GDP

Source: BPNG and AusAID staff calculations
Government spending to broaden and extend the boom
…and can generate macroeconomic pressures if no return to sustainable budgets

Focus in PNG generally been on quality of spending. But 2013 Budget starts to reverse improvements in public finances

(public debt and its drivers, percent of GDP not including contingent and off-balance-sheet liabilities, currently approx 15-20% of GDP)

…and balanced budget by 2017 requires unwinding new spending in real per capita terms, which may be difficult,

…so macroeconomic risks returning to the horizon

Sources: PNG Treasury, IMF, World Bank staff calculations and projections
The World Bank Group in Papua New Guinea

Government spending to broaden and extend the boom

Source: Budget documents and AusAID staff calculations

Growing allocations to the development enablers

Education

Health

Transport Infrastructure

Law & Justice

Source: Budget documents and AusAID staff calculations
Features of the 2013 budget

1. Most of the additional funding for education is a transfer to households

- The tuition fee subsidy appears to be an effective means to support households
  - Particularly valuable for the poorest and with least access to cash
  - ~20% of HIES respondents cited lack of funds for fees as the reason for dropping out of school
  - But funding for education is not keeping up with rising enrollments

(actual and budgeted allocation to the Education Department and Provincial governments, and Treasury 207, 2012 Kina m)

* Deflated with CPI

Sources: Treasury, NSO, and World Bank staff calculations
Features of the 2013 budget

...but this places even more pressure on the quality of education

► As the tuition fee subsidy induces higher enrollment, and student numbers grow, pressure will grow on the quality of education

► Some action in the 2013 budget – eg, funds 3100 new teachers and restores funding to examinations

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>Rural</th>
<th>Urban</th>
<th>Metro</th>
<th>Southern</th>
<th>Highlands</th>
<th>Momase</th>
<th>Islands</th>
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<td>15.4</td>
<td>13.9</td>
<td>11.7</td>
<td>25.6</td>
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<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.6</td>
<td>0.6</td>
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<td>19.6</td>
<td>22.4</td>
<td>25.0</td>
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<tr>
<td>No interest</td>
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<td>12.4</td>
<td>7.9</td>
<td>7.7</td>
<td>9.0</td>
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<td>11.0</td>
<td>14.4</td>
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<td>Family did not allow</td>
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<td>3.4</td>
<td>2.8</td>
<td>2.7</td>
<td>4.2</td>
<td>3.4</td>
<td>3.2</td>
<td>2.7</td>
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<td>Did not pass exam</td>
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<td>23.8</td>
<td>21.0</td>
<td>19.3</td>
<td>30.4</td>
<td>23.0</td>
<td>20.8</td>
<td>22.0</td>
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<td>School too far</td>
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<td>2.4</td>
<td>0.7</td>
<td>0.6</td>
<td>2.0</td>
<td>2.1</td>
<td>2.9</td>
<td>1.8</td>
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<tr>
<td>School not functional</td>
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<td>1.5</td>
<td>0.4</td>
<td>0.5</td>
<td>1.8</td>
<td>2.1</td>
<td>1.0</td>
<td>0.5</td>
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<td>Work</td>
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<td>5.5</td>
<td>11.5</td>
<td>10.8</td>
<td>5.1</td>
<td>3.9</td>
<td>6.3</td>
<td>11.3</td>
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<td>Disability</td>
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<td>0.2</td>
<td>0.3</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
<td>0.4</td>
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<td>Displaced</td>
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<td>0.4</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
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<tr>
<td>Safety, harassment</td>
<td>1.6</td>
<td>1.8</td>
<td>0.8</td>
<td>0.4</td>
<td>0.3</td>
<td>4.1</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Others</td>
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<td>12.2</td>
<td>7.9</td>
<td>6.7</td>
<td>11.0</td>
<td>10.7</td>
<td>16.9</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Source: 2009-2010 PNG HIES Summary Tables
Features of the 2013 budget

...but this places even more pressure on the quality of education...

And PNG’s educational outcomes are well short of comparator countries

(youth literacy rates)

Sources: World Development Indicators and World Bank staff calculations
Features of the 2013 budget

2. Surge of cash to the most devolved levels of government

- 87% increase in transfers to local and district governments, to K 1.5 billion
  - Transferring capital project spending from national authorities to local agencies
  - Equal allocation to each district
Features of the 2013 budget
...addressing weaknesses in the current system?

Current spending mechanisms clearly have weaknesses

Spending the budget over the course of the year:

Recurrent

Development

Quarterly spending (PGK m; LHS)
% of full-year spending spent in quarter (%; RHS)

Sources: PNG Treasury, BPNG, World Bank staff calculations
But little evidence that more devolved implementation works better, on average

Assessment of how well a country’s policies and institutions transform resources into sustainable economic development, across four dimensions

(higher scores indicate better performance)

...addressing weaknesses in the current system?

...and monitoring spending is generally poorer (AG reports on Provincial Gov’t)

Various initiatives in the 2013 Budget to start addressing these issues:

- Better costing of projects, including publishing 5-year forward estimates of spending and revenues
- **Expanding the chart of accounts** (by which spending is classified) through Provincial to District authorities
- Shift to funding well-formed national, provincial and district plans rather than public investment plans (PIP).
- New guidelines for the use of DSIP funds
- Integrate the development and recurrent budgets into a single national budget from 2014
- Invest in rolling out the new Integrated Financial Information System across national departments and to subnational governments
- Increase transparency around spending through decentralizing the responsibility of spending.
- Develop subordinate legislation, policies and processes around the PNG Sovereign Wealth Fund (PNG SWF).
The deeper challenges of resource-heavy growth
The deeper challenges of resource-heavy growth

Why deliver quality services when incentives are weak?


- This is a primer of the risks with concentrated, extractive-sector driven growth (*NOT* where PNG is today…)
- Economies dominated by a few extractive economic sectors tend to have more extractive political institutions
- These rarely encourage innovation to be rewarded, and growth to become sustained and broadly-based
- The incentives for policy makers to provide quality public services are weak
  - Few citizens pay taxes, and so weaker incentive to demand public services
  - A small elite can do better under an extractive status quo than the more inclusive alternative
- While PNG’s recent boom is notable for the breadth of growth across sectors, much has been linked to a few, narrow investments, or the reforms of the early 2000s
  - Risks are likely to be greater when sectors become more capital- or low-skill-labor intensive – these are less inclusive
Average 2005-2009 Mining and Quarrying\(^1\) as percentage of GDP in countries with a share higher than 1%

Percent of Total GDP

Source: WDI

1/ Includes Oil and Gas but excludes Oil and Gas Manufacturing
The deeper challenges of resource-heavy growth

What's the cross-country evidence?


Total Natural Resources Rents
Average 2005-2009

Percent of GDP
The quality of all the different dimensions of governance is negatively correlated with the importance of natural resources.

Control of Corruption

Regulatory Quality

Source: WGI World Bank, WTO WDI, Wealth of Nations
The quality of all the different dimensions of governance is negatively correlated with natural resources.

The deeper challenges of resource-heavy growth.

What's the cross-country evidence?

Source: WGI World Bank, WTO WDI, Wealth of Nations
PNG’s policy and institutional strength rating improved to just above the ‘weak’ threshold in the mid-late 2000s, but has since stagnated.

Most recent gains have been in policies for ‘social inclusion & equity’, following earlier gains in Economic Management and in Structural Policies.

Turning the boom into sustained improvements in living standards by doing things smarter
Great scope to raise living standards by changing how things are done

**Strategic regulatory reforms can be the best support for PNG businesses**

While PNG ranks relatively well on a few indicators, in most areas regulation is holding PNG businesses back

<table>
<thead>
<tr>
<th>(ranking of PNG, out of 185 countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a business</td>
</tr>
<tr>
<td>91</td>
</tr>
</tbody>
</table>

► Small and medium enterprises are the largest source of employment and incomes across the world

► Closing markets to competition and providing subsidies is not a long-term solution to encouraging locally owned businesses in PNG.

   ► Rather than working to reduce competition, policy makers’ efforts would more effectively bring sustained improvements in living standards by working to improve owned businesses ability to compete.

► The kinds of reform that will reduce costs for PNG businesses and increase their competitiveness are not expensive, and they are not difficult.

   ► Some key reforms are already underway

► Business-enabling reforms provide an environment that will increase the impact of the government’s wider reforms, and help PNG-owned businesses to can make the most of the spin-off opportunities presented by large investment projects

*Note:* Describes conditions for businesses in the capital city of each country.

*Source:* 2013 *Doing Business* Survey
Great scope to raise living standards by changing how things are done

*Eg, services lag generally in East Asia/Pacific, but even more so in PNG*

(Services as a share of GDP, and per capita income)

*Source: World Development Indicators*
Great scope to raise living standards by changing how things are done

Source: Fraser Institute 2010-2011 Mining Survey

How much of a deterrent for investment is the degree of uncertainty regarding the administration, interpretation and enforcement of regulations?

(Percent of respondents)

Worst Investment Climate

Best Investment Climate

Ranks 31 out of 79 investment’s destinations

PNG already seems to design and implement regulations well in the mining sector

Source: Fraser Institute 2010-2011 Mining Survey
How much of a deterrent for investment is the degree of regulatory duplication and inconsistencies? (Percent of respondents)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venezuela</td>
<td>100%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>98%</td>
</tr>
<tr>
<td>California</td>
<td>98%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>98%</td>
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<tr>
<td>California</td>
<td>98%</td>
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<tr>
<td>Brazil</td>
<td>98%</td>
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<tr>
<td>Germany</td>
<td>98%</td>
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<tr>
<td>Israel</td>
<td>98%</td>
</tr>
<tr>
<td>Namibia</td>
<td>98%</td>
</tr>
<tr>
<td>Panama</td>
<td>98%</td>
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<tr>
<td>South Korea</td>
<td>98%</td>
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<tr>
<td>Taiwan</td>
<td>98%</td>
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<tr>
<td>Venezuela</td>
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<tr>
<td>Bolivia</td>
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<tr>
<td>Brazil</td>
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<td>Germany</td>
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<td>Israel</td>
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<td>Namibia</td>
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<td>Panama</td>
<td>98%</td>
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<tr>
<td>South Korea</td>
<td>98%</td>
</tr>
<tr>
<td>Taiwan</td>
<td>98%</td>
</tr>
</tbody>
</table>

Source: Fraser Institute 2010-2011 Mining Survey
How much of a deterrent for investment is the tax regime?  
(Percent of respondents)

Source: Fraser Institute 2010-2011 Mining Survey
1. PNG has enjoyed a transformational decade – but the drivers are coming to an end

2. The government is looking to extend this boom and spread the benefits more widely
   - But the delivery mechanisms are imperfect…
   - and attention must be paid to overall fiscal sustainability if PNG is to avoid the experience of the 1990s

3. The resource-focused nature of PNG’s growth adds to the challenges
   - Dutch disease is already evident, hurting cash crop production & rural incomes
   - …and large resource sectors make it harder to build institutions for sustainable, inclusive growth

4. So the focus needs to be on nurturing the drivers of the next boom:
   - Maintaining PNG’s investment climate for resource projects, while keeping balance in the fiscal regime to support long-term revenues
   - Making the business climate more supportive of Papua New Guinean businesses, especially those outside the resource sector
     - Can help businesses more than protecting established players & reducing competition
     - Good regulatory reforms make the government’s other reforms and the economy’s other opportunities more effective
     - PNG has shown it can do this in some key areas
The analytical outlook

Are we entering a sweet-spot for data analysis in PNG?

PNG has traditionally had a reputation of limited data availability → less analysis

► This may be changing, with important, rich data sets now available
  ► 2009-2010 PNG Household Income and Expenditure Survey (HIES)
  ► A rich dataset of living standards, economic activity, and social indicators of households across PNG
  ► NEFC work to better track subnational spending, costs, etc
  ► Census data?
  ► Various other surveys under-way or being completed

► Macroeconomic data remains highly problematic, although BPNG and Treasury are working to improve their surveys

► We should make the most of these datasets now, while the data are still (relatively) fresh, and policy makers are looking for different ways to do things
  ► A new source of light on our priority analytical questions
    ► Informing program design
    ► Providing a baseline to assess the effectiveness of our activities
Linking to the global story

Turning the last days of the boom into lasting improvements in living standards

Doing Business, 2013

East Asia & Pacific Economic Update

PNG Economic Briefing

www.doingbusiness.org

www.worldbank.org/eapupdate

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Papua New Guinea Economic & Budget Briefing

The challenge of turning the last days of the boom into lasting improvements in living standards

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