Timor-Leste: 2021 economic survey

Webinar at Australian National University
by Charles Scheiner

10 February 2021

Topics

1. Current economic situation
2. State expenditures and revenues
3. The Petroleum Fund
4. Future oil and gas possibilities
5. Alternatives
Non-oil, non-state GDP per capita is stagnant.
Productive sectors have not grown since independence.

Sectoral contributions to 'non-oil' GDP per capita
Current prices, 2015 dollars, per person

What do 820,000 Timorese people aged 15-64 do for work?

Data compiled by LH from several sources.
The graph shows legal goods trade only. Three-fourths of donor spending and at least half of state spending leaves the country.

Dili is very different from the rest.

<table>
<thead>
<tr>
<th>Residence/region</th>
<th>Poverty</th>
<th>Weights quintile</th>
<th>Number of persons</th>
<th>Gini coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1.5</td>
<td>3.4</td>
<td>8.8</td>
<td>30.0</td>
</tr>
<tr>
<td>Rural</td>
<td>26.9</td>
<td>26.2</td>
<td>24.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Allocation</td>
<td>16.6</td>
<td>33.3</td>
<td>27.2</td>
<td>17.1</td>
</tr>
<tr>
<td>Anano</td>
<td>10.7</td>
<td>27.1</td>
<td>20.8</td>
<td>13.5</td>
</tr>
<tr>
<td>Baucau</td>
<td>20.0</td>
<td>22.4</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td>Bobonaro</td>
<td>15.8</td>
<td>22.0</td>
<td>29.8</td>
<td>23.5</td>
</tr>
<tr>
<td>Covda</td>
<td>24.4</td>
<td>18.0</td>
<td>24.6</td>
<td>20.8</td>
</tr>
<tr>
<td>Total</td>
<td>20.5</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
</tr>
</tbody>
</table>

60% of Dili’s population are among the wealthiest 20% of Timorese, while only 7% are below the poverty line.

More than half of the families outside Dili live in poverty.
Budgeted & executed spending

The money doesn’t match the promises.
Petroleum Fund cash flow, 2005-2020

$23.1 bn received in oil and gas revenues
+$ 8.4 bn investment returns ($4.8 bn of this is unrealized)
-$12.5 bn withdrawn to pay for 85% of all state expenditures
$19.0 bn balance (including $0.7 bn loaned to TimorGAP)

Petroleum Dependency (nominal USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Petroleum GDP</th>
<th>Non-oil GDP</th>
<th>Productive (agric. &amp; manuf.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$4,234 (75%)</td>
<td>$1,396 (25%)</td>
<td>$308</td>
</tr>
<tr>
<td>2014</td>
<td>$2,591 (64%)</td>
<td>$1,447 (36%)</td>
<td>$317</td>
</tr>
<tr>
<td>2015</td>
<td>$1,496 (48%)</td>
<td>$1,594 (52%)</td>
<td>$300</td>
</tr>
<tr>
<td>2016</td>
<td>$820 (33%)</td>
<td>$1,651 (67%)</td>
<td>$299</td>
</tr>
<tr>
<td>2017</td>
<td>$895 (36%)</td>
<td>$1,599 (64%)</td>
<td>$297</td>
</tr>
<tr>
<td>2018</td>
<td>n.a.</td>
<td>$1,560</td>
<td>$304</td>
</tr>
<tr>
<td>2019</td>
<td>n.a.</td>
<td>$1,674</td>
<td>$317</td>
</tr>
</tbody>
</table>

- State revenues in 2019: $3,056 million
  $2,101 million from investing the Petroleum Fund (including $1,707m unrealized)
  $756 million from oil and gas revenues
  $199 million from non-petroleum sources

- Executed 2019 State Budget: $1,242 million ($1,482m appropriated)
  $969 million transferred from the Petroleum Fund
  $199 million from non-petroleum (domestic) revenues
  $50 million from loans which will have to be repaid

- State activities, paid for with oil money, are nearly half of the 'non-oil' economy because some of this money circulates in the local economy.

- Petroleum and investment 'income' goes to the state, not to the people.

Only South Sudan, Libya (and Equatorial Guinea?) are more dependent on oil and gas exports than Timor-Leste was before 2014.
Oil and gas income has been falling since 2012.
Production is dropping, and will not go back up even if prices do. The price will be irrelevant when there is nothing left to sell.

Timor-Leste’s neighbors have much more petroleum than it does.

<table>
<thead>
<tr>
<th></th>
<th>Timor-Leste (70% Sunrise)</th>
<th>TL without Sunrise</th>
<th>Australia (16,400 without Sunrise)</th>
<th>Brunei</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proved oil and gas reserves at end of 2019 (million barrels equiv.)</td>
<td>540</td>
<td>32</td>
<td>16,400 (16,200 without Sunrise)</td>
<td>2,500</td>
</tr>
<tr>
<td>Reserves per person (barrels)</td>
<td>420</td>
<td>25</td>
<td>650 (640 without Sunrise)</td>
<td>5,700</td>
</tr>
</tbody>
</table>
Bayu-Undan and Kitan are the only proven fields, and they are almost depleted.
Sunrise and Buffalo are in development.
There may be no others which are commercially viable.

### Current and future projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Operator (partners)</th>
<th>Oil &amp; gas reserve (mmBOE)</th>
<th>Possible future revenues (million USD)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayu-Undan current wells</td>
<td>Santos 46% (SK E&amp;S, Inpex, Eni, JERA/Tokyo Gas)</td>
<td>20</td>
<td>$209</td>
<td>Produced 800 mmBOE since 2004, will end in 2022.</td>
</tr>
<tr>
<td>Bayu-Undan infill wells</td>
<td>Santos 46% (SK E&amp;S, Inpex, Eni, JERA/Tokyo Gas)</td>
<td>20</td>
<td>$0</td>
<td>Three more production wells will be drilled in mid-2021 and may extend production 1-2 years.</td>
</tr>
<tr>
<td>Greater Sunrise</td>
<td>Woodside 33% (TimorGAP 57%, Osaka Gas)</td>
<td>1,080</td>
<td>?</td>
<td>Discovered in 1974. Seeking financing to proceed with development. High capital costs. TL will get 70% of state revenues.</td>
</tr>
<tr>
<td>Buffalo</td>
<td>Carnarvon 50% (Advance Energy)</td>
<td>31</td>
<td>$465</td>
<td>Produced 20 mmBOE in 1999-2005 for BHP and Australia. First new well planned for late 2021.</td>
</tr>
<tr>
<td>Offshore (Covalima &amp; Manufahi)</td>
<td>Timor Resources 50% (TimorGAP)</td>
<td>40</td>
<td>$600</td>
<td>First test wells planned for July 2021.</td>
</tr>
<tr>
<td>Chuditch</td>
<td>SundaGas 75% (TimorGAP)</td>
<td>588(?)</td>
<td>?</td>
<td>Shell drilled a test well in 1998 but did not continue. New owners will decide by the end of 2022 whether to drill another.</td>
</tr>
<tr>
<td>Three other contract areas</td>
<td>TimorGAP and Eni</td>
<td>?</td>
<td>unlikely</td>
<td>Not enough work has been done to estimate possible reserves. No wells planned.</td>
</tr>
</tbody>
</table>
The Greater Sunrise stalemate

- The project was stalled because Timor-Leste and the companies do not agree on how it should be developed.
- Woodside and its partners believed that an undersea gas pipeline to the Darwin LNG plant used for Bayu-Undan would be more profitable.
- Timor-Leste wants a pipeline from Sunrise to Beaçu, to get more jobs and revenues, and to anchor the Tasi Mane project.
- Under contracts and treaties, the companies propose the development plan, but both governments need to approve it.
- Because of Australian spying, TL forced Australia to negotiate a boundary treaty, but the 2019 agreement did not settle where the pipeline will go.
- Timor-Leste bought 57% of Sunrise from ConocoPhillips and Shell to control the decision.
- The impacts of Covid-19 have caused companies everywhere to delay or cancel projects. In mid-2020, Woodside devalued Sunrise to zero.
- New leaders in TL’s petroleum sector are re-evaluating the project.

Tasi Mane petroleum infrastructure project

- In 2010, TL began to plan a South Coast Petroleum Corridor.
- During 2011-2019, TL expended more than $500 million on it.
- In 2019, TL bought 57% ownership of Greater Sunrise for $650m … and will now have to pay 57% of offshore development costs.
- Total capital costs could exceed $20 billion.
- No investors have shown interest.
Invest in human resources: education, health, and nutrition. These are prerequisites for everything else.

Build infrastructure that people need: rural roads and water supply, local schools and clinics, decentralized renewable electricity.

Don’t forget people outside the formal economy.

Strengthen sectors which build on Timor-Leste’s strengths: agriculture, community-based tourism, small industries making products for domestic use.

Adopt policies based on evidence and objective analysis, not on fantasies, politics or dreams.
Thank you.

Get more information at
La’o Hamutuk’s website
www.laohamutuk.org
La’o Hamutuk’s blog
laohamutuk.blogspot.com

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The following slides are not
being presented during my talk,
but they could be useful during
the discussion.
More money goes out than comes in.

<table>
<thead>
<tr>
<th>2019 trade:</th>
<th>services</th>
<th>non-oil goods</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports</td>
<td>$448m</td>
<td>$592m</td>
<td>$1,040m</td>
</tr>
<tr>
<td>Exports</td>
<td>$91m</td>
<td>$26m (79% coffee)</td>
<td>$117m</td>
</tr>
<tr>
<td>Deficit</td>
<td>-$357m</td>
<td>-$566m</td>
<td>-$923m</td>
</tr>
</tbody>
</table>

Timor-Leste’s External Balance of Payments

State Budgets 2002-2021

State Revenues and Expenditures (including autonomous agencies)

We’ve moved from oil dependence to relying on our declining savings.

Balance in Timor-Leste's Petroleum Fund

Petroleum Fund investments have gradually diversified.
Timor-Leste 2021 Economic Survey

Where the Petroleum Fund gets its money

Timor-Leste is in debt.

- Laws in 2009 opened the door to foreign loans.
- Since 2012, TL has signed contracts to borrow $475 million:
  - $272 million from the Asian Development Bank (ADB) for roads
  - $134 million from the World Bank for roads
  - $69 million from Japan (JICA) for roads
- From these contracts, $223 million has been disbursed so far.
- Future borrowing is unclear, although Sunrise and the Tasi Mane Project may require borrowing billions of dollars.
- The 2021 Budget authorizes $420 million in new loan contracts.
- By 2023, Timor-Leste will be paying $27 million each year in debt service, which will rise to $56 million/year if $420m in new contracts are signed and money is disbursed.

*Not including a $50 million loan from China that was invalidated by the Audit Court.
Since 1910, oil companies have drilled 95 exploration wells in Timor-Leste’s land and sea. They found eight commercially viable reserves. Kitan is the only one discovered in the last 20 years.

The Strategic Development Plan

- Issued in 2011, hopes to make Timor-Leste an Upper Middle Income Country by 2030.
- A vision and dream, not a realistic plan.
- Focuses on physical infrastructure, not sustainable or human development.
- Will require spending far beyond TL’s means.
- Promised reviews are not yet being done.