

## Investing for the Future: Timor-Leste's Petroleum Fund

Darmawan Triwibowo and Nelson A. Seixas Miranda

### SUMMARY

Challenge	Ensuring stable revenues for the current and future generation (Precept 7 of the National Resource Charter). <sup>1</sup>
Country and period of focus	Timor-Leste, 2002-2013
Challenge in country	Newly independent nation with temporal large resource revenue windfall and limited institutional capacity to spend.
Core decisions	Setting up a petroleum fund
Implications of decisions	The fund's objectives are to prudently manage petroleum resources "for the benefit of both current and future generations, in a fair and equitable manner, and gives prominence to transparency in its management". <sup>2</sup>
Policy decisions, implementation and governance	The Timor-Leste Petroleum Fund was set up in 2005 with unanimous support by the national parliament.  Challenges relate to the distribution of revenues and investment strategy.  Creation of an investment advisory board, strong parliamentary oversight and transparency provisions.
Did it work?	The Petroleum Fund led to large savings, but there were shortfalls in implementing withdrawal rules and poor investment decisions.
Quantified gains	Accumulated US \$15.7 billion in assets by 2014. Ten times the GDP of the country.
Lessons learned	<ul style="list-style-type: none"> <li>• A natural resource fund can be a useful instrument when anticipating very large resource revenue inflows.</li> <li>• Strong oversight from both parliament and civil society is crucial.</li> <li>• The fund is not a panacea; spending efficiency and diversification challenges also need to be addressed.</li> </ul>

### ABOUT THE SERIES

This is one of a series of case studies that illustrates the principles of the Natural Resource Charter. The charter is a tool used by governments and societies seeking to better harness the opportunities created by extractive resources.

1 Natural Resource Charter <http://www.resourcegovernance.org/approach/natural-resource-charter>  
 2 Democratic Republic of Timor-Leste, "Petroleum Fund Law", (Law No. 9, 2005) <https://www.mof.gov.tl/wp-content/uploads/2011/09/Petroleum-Fund-Law-English.pdf>.

## THE CHALLENGE

Timor-Leste is one of the world's most natural resource-dependent countries. Oil wealth funded much of the country's reconstruction after its struggle for independence from Indonesia in 2002. Since then the Petroleum Fund was established to preserve the country's oil wealth for future generations (Precept 7 of the Natural Resource Charter). In addition to promoting equity, the government is also challenged with sheltering the budget from variations in oil prices.

## THE RESPONSE

When Timor-Leste emerged as a sovereign nation in 2002, it was among the world's poorest countries.<sup>3</sup> The challenges facing the new country were considerable but the country's substantial oil and gas deposits in the Timor Sea were potentially beneficial if properly managed. Timor-Leste received its first petroleum revenue payment in 2000 from the Elang/Kakatua/Kakatua North oil field.<sup>4</sup> At that time, under an arrangement by the United Nations Transitional Administration in Timor-Leste, royalties were deposited in to a Central Bank account. Taxes earned from petroleum exploitation were not saved, but spent via the budget process along with domestic revenue. This was an interim arrangement with no detailed plans for how petroleum revenue should be invested or when and how it should be spent.<sup>5</sup>

However, it became clear that Timor-Leste was on the threshold of more substantial revenues from oil and gas in 2004 when it became an oil exporter and following independence, the government recognized that a more rigorous approach to managing its resources was needed.

The government sought the opinion of the World Bank, the International Monetary Fund (IMF), and the Asian Development Bank on how best to manage their petroleum revenue.<sup>6</sup> In 2003 an IMF report recommended the establishment of a petroleum fund, based on Norway's model. Recognizing the national importance of creating such an institution, in 2004, the government launched a six-month public consultation and after several revisions, the Petroleum Fund Law was established by law in 2005.<sup>7</sup>

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## GOVERNANCE OF THE PETROLEUM FUND

The Petroleum Law gives the objectives of the Petroleum Fund (PF) as prudently managing petroleum resources “for the benefit of both current and future generations, in a fair and equitable manner, and gives prominence to transparency in its management”.<sup>8</sup> The purpose of the fund is to guarantee that the expected oil revenues over the next 20-30 years are spent wisely and in the interest of the economic development of the country. This builds on Precept 7 of the Natural Resource Charter. To ensure intergenerational equity, the fund builds on the perpetual income concept, i.e., in the longer run the real value of petroleum wealth (after taking inflation into account) should be kept constant over time. In practice

3 Mats Lundahl and Fredrik Sjöholm, “The Oil Resources of Timor-Leste: Curse or Blessing?” *Journal Pacific Review - PAC REV* (vol. 21, no. 1, 2006) pp. 67-86.

4 Jennifer Drysdale, *Sustainable Development or Resource Cursed? An Exploration of Timor-Leste's Institutional Choices* (PhD Thesis Australian National University Digital Collections, 2010.) Chapter 4.

5 Drysdale (2010).

6 Drysdale (2010).

7 Drysdale (2010).

8 Alistair McKechnie, *Managing natural resource revenues: The Timor-Leste Petroleum Fund* (London: ODI, 2013).

this means that the government only spends the interest accrued and expected on the petroleum wealth.<sup>9</sup> Another objective of the PF is to shelter the budget from unstable commodity prices and associated swings in government spending.<sup>10</sup>

The Petroleum Law sets out transparent governance arrangements which give operational responsibility for the fund to the Banking and Payments Authority (Central Bank), with the government, represented by the minister of finance, assuming overall authority for the Fund.<sup>11</sup> The government sets overall policies, including investment policy, for the PF and oversees the performance of the central bank which reports to the minister of finance on PF matters. The PF receives petroleum revenues in a central bank account, and the central bank manages revenues with the help of external investment managers who invest these resources abroad.

The PF Investment Advisory Board advises the government on benchmarks and risks for investment strategies, instructions to the central bank and the performance of the external investment managers. Parliament has the right to request to see the advice of the Investment Advisory Board, and minutes of its meetings are available to the public on the central bank's website.

The PF Advisory Council advises parliament on the performance and operation of the Fund, appropriations from the fund, and whether these appropriations are being used effectively for the benefit of current and future generations.<sup>12</sup> Membership of this council comprises former government and parliamentary leaders and senior officials *ex officio*, appointees of parliament, as well as membership reserved for representatives of civil society, the private sector and religious organizations. There are requirements in law for regular reporting and auditing.

## OUTCOMES

The Timor-Leste PF is well functioning according to international benchmarks of governance and effectiveness of sovereign wealth funds. These assessments are based on the Generally Accepted Principles and Practices (GAPP) for sovereign wealth funds — otherwise known as the Santiago Principles — that include investment operations, ethical principles and reporting transparency. For example, the Peterson Institute for International Economics ranked the Timor-Leste PF sixth out of 44 sovereign wealth funds, many of which were in industrialized countries which score highly on international scales of governance.<sup>13</sup> In comparison with other sovereign wealth fund (SWF) schemes, the Petroleum Fund ranked well on structure, accountability and transparency, and gained a respected overall score of 80 in the Truman 2008 SWF scoreboard.<sup>14</sup> Moreover, it was among the top five performing funds in the 2013 Resource Governance Index, developed by the Natural Resource Governance Institute, due to its ability to provide comprehensive and timely reports on its transactions and assets, follow legally mandated deposit and expenditure rules, perform audits, and is subject to legislative oversight.<sup>15</sup>

9 Mats Lundahl and Fredrik Sjöholm "The Oil Resources of Timor-Leste: Curse or Blessing?" *Journal Pacific Review - PAC REV* (Vol. 21, no. 1, 2006) pp. 67-86.

10 International Monetary Fund, *Timor-Leste's Petroleum Fund: Achievements and Challenges* (Washington DC: International Monetary Fund, 2009).

11 McKechnie (2013).

12 McKechnie (2013); IMF (2009).

13 McKechnie (2013).

14 Stela Tsani et al, "Governance, transparency and accountability in Sovereign Wealth Funds: remarks on the assessment, rankings and benchmarks to date", in Revenue Watch Institute, Public Finance Monitoring Center, and Khazar University (eds). *Sovereign Wealth Funds: New challenges for the Caspian countries* (Baku: Revenue Watch Institute, 2011).

15 <http://www.resourcegovernance.org/rgi/nrf>

The fund also performs relatively well among existing SWF in the global market. For example, from inception to December 2008, the fund earned an average annual rate of return of 5.6 percent.<sup>16</sup> This was a strong performance considering the global financial crisis of that period.<sup>17</sup>

The investment policy outlined in the PF was modified successfully to adjust to the shocks in international financial markets in 2008.<sup>18</sup> The PF weathered these shocks and overall the total assets of the Fund have increased every year since it was established in 2005 with US \$370 million in the account.<sup>19</sup> The assets of the fund amounted to US \$11.8 billion by December 2012, equivalent to some US \$10,700 for every person in Timor-Leste, or around 11 years of non-oil average income.<sup>20</sup> The balance reached US \$14.6 billion in September 2013 and was projected to reach US \$15.7 billion at the end of the first quarter of 2014.<sup>21</sup> The accumulation of oil revenues in the Petroleum Fund has helped the government smooth spending over the longer term. By keeping enormous capital inflows from overwhelming the economy, it has curbed wasteful public spending and has also helped to mitigate adverse macroeconomic responses.<sup>22</sup>

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## SHORTCOMINGS

Fiscal rules — multi-year numerical constraints on government finances — are a key mechanism to govern fund behavior. Whether a natural resource fund meets its objective(s) depends almost wholly on the suitability, clarity and enforcement of its fiscal rules.<sup>23</sup> Aside from setting up commitment mechanism that binds successive governments to a long-term vision of public finances, the rules define the conditions under which deposits and withdrawals are made, which can stabilize government spending or generate savings.<sup>24</sup>

The PF's rules were centered on the estimated sustainable income (ESI) which serves as a safeguard to keep the saving sustainable. The ESI is calculated as 3 percent of the PF balance added to the net present value of expected future revenues from oil and gas.<sup>25</sup> The ESI is calculated each year in the budget document sent to

16 International Monetary Fund, *Timor-Leste's Petroleum Fund: Achievements and Challenges* (Washington DC: International Monetary Fund, 2009).

17 McKechnie (2013); IMF (2009).

18 The Petroleum Fund Law notes that the range of qualifying instruments should be reviewed after the first five years, having regard to the size of the fund and the level of institutional capacity. In early 2007 the Investment Advisory Board recommended entering into contract negotiations with non-commercial external managers as a first step toward broadening the investment universe. Moreover, in the 2008 budget, the government announced its intention to explore possibilities for diversification and to start the process of revising the list of qualifying instruments in the Petroleum Fund Law.

19 Ministry of Finance DRTL, *Timor-Leste Petroleum Fund: A report on the management of Petroleum Fund for the year 2012* (Dili: Ministry of Finance DRTL, 2013).

20 Central Bank DRTL in McKechnie (2013).

21 Central Bank DRTL, Petroleum Fund of Timor-Leste. Quarterly Report Volume IX, Issue XXVII, 30 September. (Dili: Central Bank DRTL, 2013).

22 Natural Resource Governance Institute, *Natural Resource Fund Governance: The Essentials*. (New York: Natural Resource Governance Institute and Columbia Center for Sustainable Investment, 2014).

23 Natural Resource Governance Institute (2014).

24 Charles Scheiner, *Can the Petroleum Fund Exorcise the Resource Curse from Timor-Leste?* (Dili: La'o Hamutuk, 2014).

25 In practice, the calculation is more complicated than it might appear. It begins by calculating the combined (a) present and (b) estimated future value of the Petroleum Fund. This value is then discounted by an amount ('i') which is set as 'the estimated nominal yield on a US Government security'. From this combined value an assumed 'average real rate of return' ('r') of 3% is imputed. Therefore, it depends on uncertain forecasts for oil prices and volumes, is highly sensitive to the discount factor, and there is no assurance that fund investments will earn a 3 percent real rate of return. If all assumptions entering into the calculations prove correct then ESI will remain constant in real terms from one year to the next. However, if actual values differ, as invariably happens, then ESI will fluctuate from year to year. This volatility is likely to gradually diminish as financial assets grow relative to remaining future petroleum revenue.

parliament and is intended to advise parliamentarians on the appropriate level of transfers from the PF.<sup>26</sup> The government can propose a withdrawal higher than the ESI but must provide parliament with a “detailed explanation of why it is in the long-term interests” of the country to do this for it to be approved.<sup>27</sup>

The ESI is non-binding. The excess transfer is possible when the government and parliament reach agreement, and records show that parliament has always approved such proposals. During 2008-2012, the level of withdrawal exceeded the ESI every year, and again in 2014.<sup>28</sup> This phenomenon was predictable since it is politically tempting for both a government and legislature to approve transfers above the absorptive capacity of the country because munificence and expenditure may generate public support that could bring short-term political gain.<sup>29</sup>

There are additional factors that make the existing fiscal rule ineffective. For example, there are arguments that the excess of withdrawal is unavoidable due to its own design. Furthermore, the fund, including its fiscal rule, was designed using the Norwegian petroleum sovereign wealth fund as a model. Despite the general validity of this model, the Norwegian rate of withdrawal from the fund has been criticised as inappropriate for a low-income country.<sup>30</sup> While withdrawals around 3 percent of petroleum wealth may be appropriate for a mature economy such as Norway, where marginal public-sector projects may have low rates of return<sup>31</sup>, it is most likely too low a threshold for a low-income country with large investment needs.<sup>32</sup> The appropriate ideal level of ESI, based on this argument, should be higher than 3 percent but it is likely to fall over time, as the Timorese become richer and returns on new public investment project decrease.<sup>33</sup>

On the other hand, the uncertainty surrounding the ESI calculation can make excess withdrawal a rational choice.<sup>34</sup> The ESI numbers are uncertain because they depend on future international oil prices and the level of petroleum production in Timor-Leste. For example, the ESI of US \$665 million in 2012 was 9.4 percent lower than the ESI of US \$734 million in 2011, mainly because of lower production forecasts, changes in costs of production, and changes to petroleum price projections.<sup>35</sup> Long-term oil prices are particularly difficult to forecast and most forecasts in retrospect have turned out to have had large errors. The development of new oil fields in Timor-Leste suggests a similar unpredictable nature.

The World Bank and International Monetary Fund have cautioned against transferring money to the budget above ESI limits.<sup>36</sup> They argue that the government is unable to spend the revenue already available under the ESI formula due to limited absorptive capacity, and the unspent money may lead to inflation, waste, and open the opportunity of corruption while jeopardizing the future balance of the Fund. The continuous excess in PF withdrawal contradicts the current spending capacity of the government and undermines budget credibility. Figures

26 McKechnie (2013).

27 Tim Anderson, *The Petroleum Fund and Development Strategy in Timor-Leste - A Report for Timor-Leste's Petroleum Fund Consultative Council*, (Dili, 2010).

28 Schreiner (2014).

29 McKechnie (2013).

30 McKechnie (2013).

31 Paul Collier, Frederik van der Ploeg, and Anthony J. Venables, *Managing resource revenues in developing economies*. (OxCarre Research Paper 15, 18 May 2009).

32 McKechnie (2013).

33 McKechnie (2013).

34 McKechnie (2013).

35 McKechnie (2013).

36 McKechnie (2013).

from the World Bank show that overall budget execution deteriorated in 2013<sup>37</sup>. In absolute terms, nominal spending fell for the first time, with only US \$1.076 billion spent compared with US \$1.198 billion in 2012. Despite a smaller 2013 budget, only 65 percent was executed, compared with 66 percent in 2012. The World Bank argues that most of the underperformance is explained by thin administrative capacity.

## KEY LESSONS

The operation of the Timor-Leste PF has demonstrated that natural resource funds are a viable option for countries which do not start from a strong institutional base, to manage their natural resource revenues transparently, for the benefit of both current and future generations.<sup>38</sup> The institution, however, is not perfect and is in need of improvement.

On the technical aspect, improving budget execution and strengthening management of public finances must become a higher priority for the government of Timor-Leste. While the government may consider a more appropriate level of ESI, there is also a more urgent need to tie the budget allocation to the ability of ministries to execute their budget efficiently and to achieve effective outcomes. Achieving this will also require rigorous evaluation of expenditures and institutional arrangements which ensure that only projects with high expected returns are selected.<sup>39</sup>

On the political aspect, a key requirement is a strong parliament.<sup>40</sup> Parliament as the legislative body is able not only to ensure the necessary long-term supervision over the spending of PF assets but also to restrain the appetite of the government by putting up a legislative screen against the unrestrained spending. However, in the absence of such parliamentary control, civil society organizations and the media must play a more active role in promoting transparency and accountability. In Timor-Leste, civil society organizations (CSOs) are integral parts of the PF's management through involvement in the Independent Consultative Council. However, their level of influence is limited. Hence, strengthening the role of the council will help civil society improve their oversight and control. On the other hand, weak control from civil society also highlights the need to improve the country's enabling conditions to ensure effective check and balances.

Despite the required improvements, it is important to keep in mind that the Petroleum Fund will not solve all the challenges associated with oil and gas wealth. The country's dependency on revenue from oil and gas extraction could pose a danger to the development process. Oil and gas comprised 78 percent of Timor-Leste's GDP and provided more than 96 percent of state revenues in 2013 making it one of the most petroleum dependent countries in the world.<sup>41</sup> This dependency is not due to its vast oil and gas reserves or high production rates, but because the non-petroleum economy, which scarcely existed when independence was restored in 2002, is still very small. The productive parts of the economy — agriculture and manufacturing — are only 4 percent of total GDP and are slow to grow. After adjusting for global inflation and population, these sectors increased an average of 4.9 percent per year between 2007 and 2012.<sup>42</sup>

37 World Bank, *East Asia and Pacific Economic Update* (Washington DC: World Bank, April, 2014).

38 McKechnie (2013).

39 McKechnie (2013).

40 Ingilab Ahmadov, et al 'Sovereign Wealth Funds as the emerging players in the global financial arena: characteristics, risks and governance' in RWI, Public Finance Monitoring Center, and Khazar University (eds). *Sovereign Wealth Funds: New challenges for the Caspian countries*. (Baku: Revenue Watch Institute, 2011).

41 DRTL in Schreiner (2014); International Monetary Fund (2013).

42 Schreiner (2014).

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With current proven reserves, Timor-Leste does not have enough oil and gas to sustain the country for very long. Oil revenues peaked in 2012, and the country has already received more than two-thirds of the expected income from its only two producing oil and gas fields. If the non-oil economy does not develop significantly before the last well runs dry in less than 10 years from now, the current high economic “growth” rates would revert to negative figures. This would mean recession, cuts to public finance, and serious reductions in government services and programs that may cause more people to join those currently living under the poverty line.<sup>43</sup>

*Oil revenues peaked in 2012, and Timor-Leste has already received more than two-thirds of the expected income from its only two producing oil and gas fields.*

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43 Anderson (2010).

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