

Global economic developments hit Timor-Leste hard

By La'o Hamutuk, 13 March 2020 (Updated 14 and 31 March, 1 May, 1 July, 1 Sept. see pages 5-6)

Since 2015, Timor-Leste's state revenues have depended on income earned from investing the money saved in the Petroleum Fund, rather than on royalties and taxes from extracting and exporting oil and gas.

In this investment-dependent condition, La'o Hamutuk decided to look into how global economic and financial market changes will affect the financial capacity and stability of Timor-Leste's government operations. Although we cannot influence these events, we need to understand them.

This article is a preliminary analysis of how recent changes – from 12 February to 12 March 2020 – are impacting our Petroleum Fund (PF).

Falling equity prices

Equity (stock) markets in the U.S. and other countries dropped about 26% during the last 30 days. The PF owned about \$6.6 billion in equities at the end of 2019.¹ Therefore, we have lost about \$1.7 billion in the market value of our stocks. However, the market is very volatile, and we do not need to sell our stocks right now. If the market bounces back (as it did in 2019), we will lose less money, but if it continues to fall (as it did in 2008), we could lose a lot more.



Timor-Leste's Petroleum Fund was the only one in the world which didn't lose money during the 2008 global economic crisis, because we were not invested in stocks. (Norway lost about \$90 billion.) In 2010, when the Petroleum Fund Law was being revised to allow more of the Fund to be used to buy stocks, La'o Hamutuk asked "How will Timor-Leste's Government respond to opposition and public concern when the principal of the Petroleum Fund loses value due to market forces outside their control, or because of a poor decision by an external manager? How can we make sure that we don't buy when prices are high and sell when they are low?"²

Even if we don't sell the stocks, the balance in the PF is used to calculate the Estimated Sustainable Income (ESI) guideline for how much can be withdrawn sustainably from the Petroleum Fund. A fall of \$1.7 billion

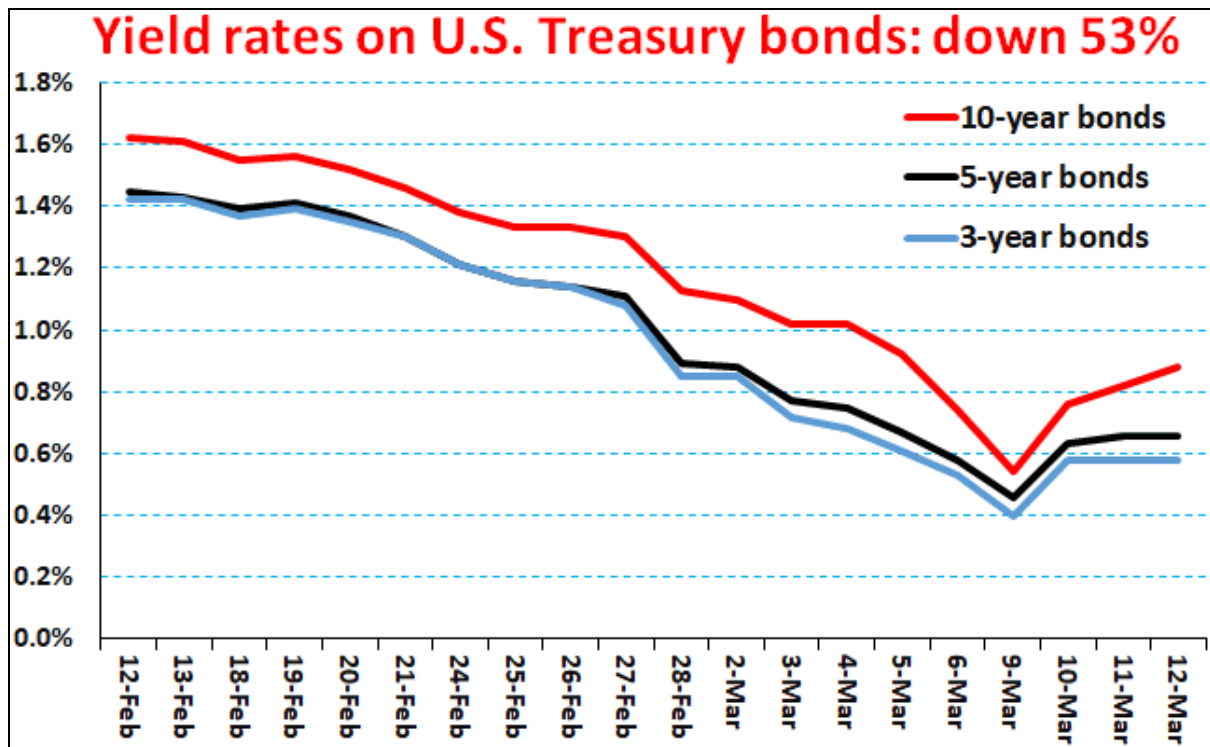
¹ https://www.bancocentral.tl/uploads/documentos/documento_1580715961_1722.pdf

² www.laohamutuk.org/Oil/PetFund/revision/LHSubRevPFLaw5Nov2010En.pdf or www.laohamutuk.org/Oil/PetFund/revision/LHSubRevPFLaw5Nov2010Te.pdf

in the Fund’s balance reduces ESI by \$51 million – about twice as much as the State spends on agriculture every year.

Falling interest rates

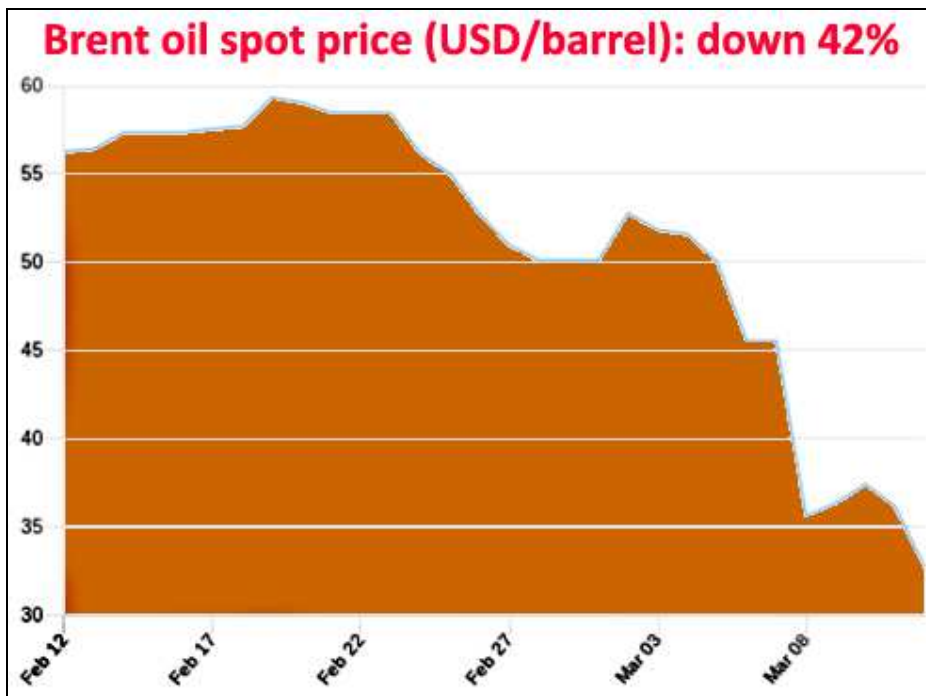
Most of the Petroleum Fund is invested in government bonds, including \$7.9 billion (as of the end of 2019) in those issued by the United States Treasury, and \$1.6 billion in other countries. Yield rates of medium-term U.S. bonds have dropped to less than half of their previous levels. Last year, the Petroleum Fund received \$420 million in interest and dividends,³ and this could drop to \$200 million if rates stay where they are. If they fall further, Timor-Leste will receive even less in interest and dividends.



Falling oil prices

Although oil and gas exports are no longer Timor-Leste’s main source of income (and may end entirely in about three years), the Fund still receives some revenue from them. Last year, the Ministry of Finance projected that oil and gas revenues in 2020 would be \$595 million, based on an expected Brent oil price of \$62 per barrel. However, on 13 March the price was \$33. If prices stabilize at around \$35, petroleum revenues in 2020 will be less than half of what the Ministry projected, and the ESI would drop by about \$12 million. If they fall further, the impact will be even more severe.

³ \$259 million of this was interest from bonds, and the rest was dividends from stocks. Both will be affected by changing interest rates (and dividends by reductions in corporate profits); the impacts will probably be similar.



Low oil prices will restrict petroleum development across the globe, including in Timor-Leste. If they stay low, projects will be less profitable for companies, and Bayu-Undan could stop production even earlier than 2022, as is currently planned. (This happened with Kitan in 2015.)

Companies and investors will reassess the economics of every future project – including on-shore exploration, Buffalo, Chuditch, Greater Sunrise and Tasi Mane – possibly leading to delays or cancellations. The bidding round that ANPM is currently conducting may attract less interest, because companies hesitate to embark on or invest in new projects when they are uncertain that they will make money.

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Timor-Leste Second Licensing Round Roadshow

📅 Friday 13th March 2020
📍 River View Room 4, Level 2, Perth Convention and Exhibition Centre

🕒 10.00 am - 12.30 pm
📄 Free

The Timor-Leste Licensing Round Roadshow will showcase upcoming petroleum opportunities available in Timor-Leste. Recently the Timor-Leste government released 18 new blocks which consists of 7 onshore blocks and 11 offshore blocks for public tender. The details on tender and application processes as well as further presentations on petroleum, geological and hydrocarbon potentials will be discussed at the roadshow.

This event is free to attend and will follow on from the Timor-Leste Breakfast on Friday 13th March at 10.00am.

You can register your interest for the licensing round when you register for AOG here: <https://aogexpo.com.au/register/>

REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE
SECOND LICENSING ROUND 2019/2020

Conclusion

If the prices and interest rates discussed above don't get any worse (or better) during the rest of this year, by the end of 2020 Timor-Leste's Petroleum Fund's investments will have a net loss of about \$1.5 billion, more than two billion lower than the \$640 million gain the Ministry of Finance estimated in the proposed 2020 budget. In addition, oil and gas royalties and taxes will be \$300 million less than the Government 'prudently' projected. The losses could continue in future years.

Last year, La'o Hamutuk projected that the Petroleum Fund could be empty by 2028, even if it is not used to pay capital costs of the Tasi Mane project. If current global trends persist, this will happen several years sooner.

The outgoing VIII Government intends to withdraw \$250 million from the Petroleum Fund because the machinery of the state cannot continue to function without it. Since January (as in 2018), slower state spending has weakened Timor-Leste's entire economy, making poor people even poorer. This reduced economic activity underscores how much our population depends on the state spending money from the Petroleum Fund – and how weak the rest of our economy is.

The recent threats to the Fund's medium-term survival are not new, and could become even worse due to climate change and the reduced balance in the Fund. They remind us that Timor-Leste urgently needs to diversify its economy away from petroleum and investments. It is long past time to invest in our children's health and education so that our productive, sustainable and equitable economy – agriculture, light industry and eco-tourism – can enable our people to survive and thrive. That is the only way to achieve the Petroleum Fund's promise to benefit future generations.

Update, 14 March

The above article was written on 13 March 2020, based on prices and yield rates at the close of business on Thursday 12 March. The following day, all three indices used in these calculations improved, and the drop in expected 2020 Petroleum Fund revenues if nothing changes is now \$1.8 billion, a smaller loss than the \$2.3 billion we calculated the day before. These numbers will change every day, and could get better or worse. The data is available at:

- S&P 500 Stock Market Index (2.71 on 13 March): <https://www.marketwatch.com/investing/index/spx/charts>
 - U.S. Treasury Bond Yields (0.74% on 13 March): <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield>
 - Brent oil price (\$34.69 on 13 March): <https://www.exchangerates.org.uk/commodities/live-oil-prices/BRT-USD.html>
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Update 31 March

The end of the month was the end of the quarter, the worst for the U.S. stock market since 2008. As the graph at right shows, the situation for the Petroleum Fund got much worse around 23 March, but recovered slightly by the end of the month, to about the same level as when the article above was originally written. If things stay unchanged for the rest of 2020, the Fund's balance at the end of the year will be about \$1.9 billion less than was expected at the beginning of the year. (The original article used 12 February as a reference; from that starting point the lost income is about \$2.1 billion.)

The monthly BCTL report for February showed a drop in the Fund's balance of \$344 million during that month. Although the March report is not yet available, La'o Hamutuk estimates that it will show a further drop of more than \$500 million.

Although the stock market has recovered slightly from its lowest point, it is still very volatile and could fall further, as the Covid-19 pandemic will continue for months.

For Timor-Leste, the continuing fall of the oil price is a more lasting worry, and many experts expect it to drop well below \$20/barrel. Bayu-Undan's remaining revenue in 2021-2023 will be much less than the \$260 million that had been projected. For the longer term, other petroleum projects on the drawing board -- including Buffalo, onshore, Chuditch and Greater Sunrise -- may not be profitable enough to justify their capital investment, and may not happen

at all; many similar projects around the world are being cancelled. In addition, many countries are extending or delaying their bidding rounds for new oil and gas exploration, although ANPM still hopes to get bids before October.

The Petroleum Fund balance is falling fast -- from negative investment returns and from extraordinary withdrawals to cope with the pandemic -- and it may never be replenished. How will Timor-Leste finance its government after things return to "normal"?

Update 1 May

During April, the U.S. stock market had its strongest month in 33 years, recovering about 60% of its losses between mid-February and the third week of March.

Oil prices and interest rates on U.S. bonds fell only slightly during April. If things stay as they were on April 30 for the rest of 2020, the Fund's balance at the end of the year will be about \$1.25 billion less than was expected at the beginning of the year.

The Petroleum Fund Balance at the end of March was \$17.03 billion, a drop of \$476 million during the month, and \$663 million lower than at the beginning of 2020. No money was withdrawn in March. Although the balance went up to \$17.60 billion in April, gains will be limited by a \$250 million withdrawal to finance the Covid-19 Special Fund and regular government operations.

Here's how the components of the calculations in this blog did during the first four months of 2020. Although the stock market has recovered from its lowest point, it is still very volatile and could fall further, as the Covid-19 pandemic will continue for months.

For Timor-Leste, the continuing erratic drop in the oil price is a more lasting worry, and many experts expect that it could stay at or below \$20/barrel for months or years. Bayu-Undan's remaining revenue in 2021-2023 will be much less than the \$260 million that had been projected. For the longer term, petroleum projects on the drawing board -- including Buffalo, onshore, Chuditch and Greater Sunrise -- may not be profitable enough to justify their capital investment and may not happen at all; similar projects around the world are being cancelled. The Petroleum Fund's \$650 million loan so that TimorGAP could buy participation in Greater Sunrise, which is still counted in its balance, may never be repaid.

In addition, many countries are extending or delaying their bidding rounds for new oil and gas exploration, although ANPM still hopes to get bids before October.

The Petroleum Fund balance will fall far in 2020 -- from negative investment returns and from extraordinary withdrawals to cope with the pandemic -- and there may not be any more petroleum revenues to replenish it. How will Timor-Leste finance its government after things return to "normal"?

Update 2 July

During May and June, the U.S. stock market continued to improve, in spite of major problems in the U.S. and global economies. However, the end-of-2020 PF balance will still be about \$780 million lower than was projected at the end of 2019.

Oil prices also recovered a little, although they are still 37% lower than they were at the start of 2020. In April and May, Timor-Leste received an average of \$27 million per month in oil revenues, less than half of the \$63 million per month received during 2019.

Interest rates on U.S. Treasury Bonds dropped slightly during May and June.

Update 1 September

The U.S. stock market rose to historic highs, ignoring major problems in the U.S. and global economies. Oil prices and bond yields remained much lower than at the start of the year.

La'o Hamutuk estimates that the PF balance at the end of 2020 will be about \$60 million higher than was projected a year ago. Stock prices added \$550m, but low interest rates subtracted about \$330 million and oil revenues will be about \$160m lower than projected due to continued low prices.

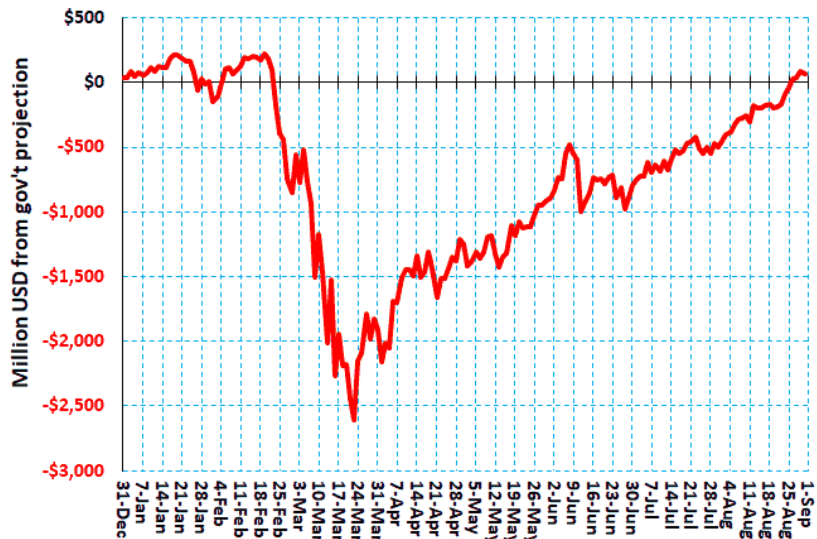
At the end of July, the balance in the Petroleum Fund was \$18.4 billion, the highest in history.

This is misleading, as only \$250 million was withdrawn from the Fund in the first seven months of 2020, and at least \$700 million more will be withdrawn in the remaining five months.

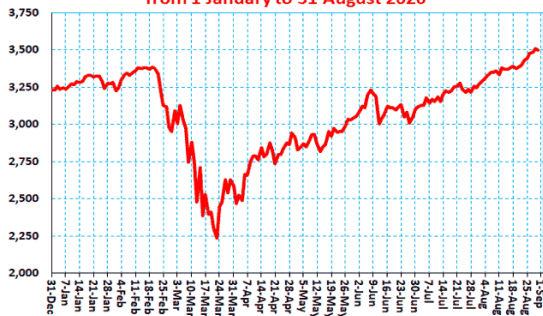
Oil and gas revenue in the second quarter of 2020 totaled only \$66 million, down from \$181m in the first quarter and an average of \$189m/quarter during 2019. Even if the ANPM approves the request from new Bayu-Undan operator Santos to drill three additional wells to suck the last drops out of the field, revenue will not return to pre-Covid levels (which were far below the \$760m/quarter that Timor-Leste got in 2013).

The global economic impacts of the pandemic are far from over, and analysts worry that the stock market rebound may not continue. Oil prices could remain low for many years, casting doubt on future projects.

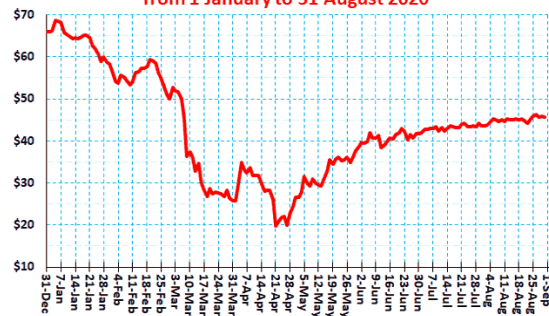
Change in projected Petroleum Fund balance at the end of 2020, if things stay the same as of each date



U.S. Stock Market (S&P 500): up 8% from 1 January to 31 August 2020



Brent oil spot price (USD/barrel): down 31% from 1 January to 31 August 2020



Yield rates on U.S. Treasury bonds: down 78% from 1 January to 31 August 2020

