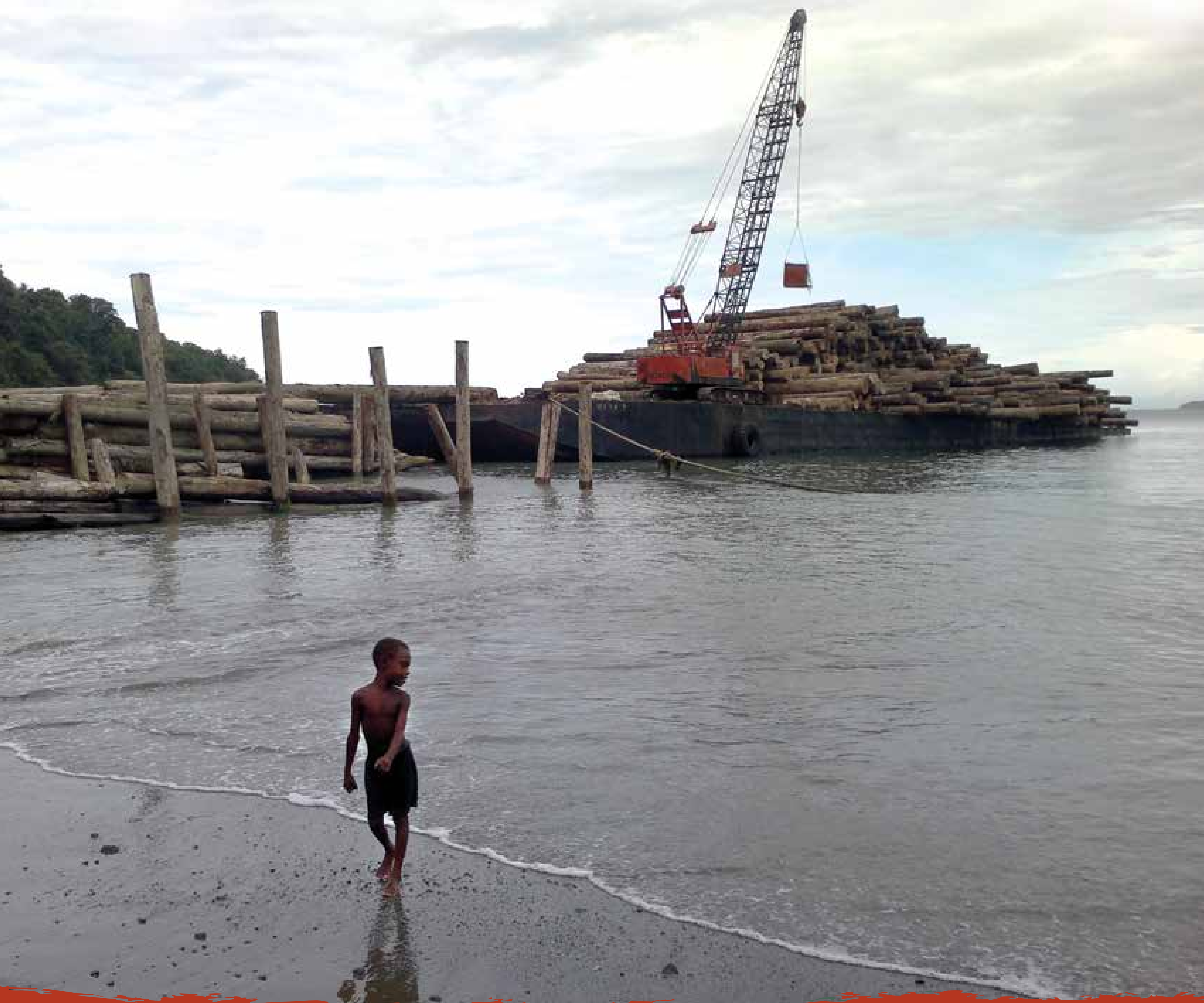
THE GREAT TIMBER HEIST

CONTINUED

TAX EVASION AND ILLEGAL LOGGING IN PAPUA NEW GUINEA



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For more information:

The Oakland Institute
PO Box 18978
Oakland, CA 94619 USA
www.oaklandinstitute.org
info@oaklandinstitute.org

Executive Summary

In 2016, the Oakland Institute published *The Great Timber Heist: The logging industry in Papua New Guinea*,[1] exposing widespread tax evasion in the country's forestry sector. While the industry and its proponents claim that logging contributes greatly to the economic development of the country,[2] the report alleged that tax evasion and financial misreporting in the sector had led to a loss in tax revenue exceeding US$100 million per year for the country.[3]

In November 2016, the government acted on these concerns by introducing a progressive tax rate on exported logs, with the intent of increasing tax revenue from logging operations.[4] One year later, the Papua New Guinea Forest Industries Association (PNGFIA), which represents logging companies in the country, warned that the tax increase, combined with a falling demand for tropical timber, had brought the forest industry to "the brink of disaster" and resulted in 'vanishing' tax revenue for the country.[5]

By comparing export data from before and after the tax reform was implemented in 2017, this report clearly refutes the industry's claims. While there was a ten percent decline in volumes exported in 2017 as compared to 2016, the amount of revenue paid in duties by the logging companies increased by five percent. Contrary to the claims of the logging industry, the tax rate increase has generated additional fiscal revenue while contributing to the drop in the volumes exported.[6]

However, the tax reform does not appear to be enough of a deterrent to significantly affect logging operations in the country. PNG has doubled its exports of tropical timber over the past ten years and remains today the world's largest exporter.[7] After the decline in 2017, volumes exported returned to their upward trend at the end of the year and in the first three months of 2018.[8] The logging industry, therefore, appears to be far from the "disaster" alleged by its spokesperson.

This new report also reveals that the pattern of possible financial misreporting and tax evasion by logging companies – exposed by the Institute's earlier report – appears to have drastically worsened in recent years. The financial records of 16 subsidiaries of PNG's largest log exporter, the Rimbunan Hijau (RH) Group, show that these companies declare little to no profit.[9] Actually, the more they harvest and export timber, the more money they declare in losses.[10] While their exports have gone up over the past six years, so have their financial losses, leading to the accumulation of a record amount of tax credit, which is likely to prevent payment of any income tax in the years to come.[11]

The increase in log exports by PNG in recent years is largely the result of illegally-granted Special Agriculture and Business Leases (SABLs),[12] which have added 5.5 million hectares of land to the ten million hectares already under active logging concession.[13] Despite the promise made by the O'Neill government in June 2014 that all illegal deals would be canceled,[14] to date no decisive action has been taken to stop illegal logging or return land to traditional owners. The tax increase introduced in 2016 may be a step in the right direction in order to address the issue of tax evasion and increase the economic benefit from logging operations; however, it was not enough to significantly curb the illegal logging operations, which continue to expand.

Rimbunan Hijau subsidiary Saban's logging site in Sebutuia, Milne Bay © Paul Hilton / Greenpeace

Introduction

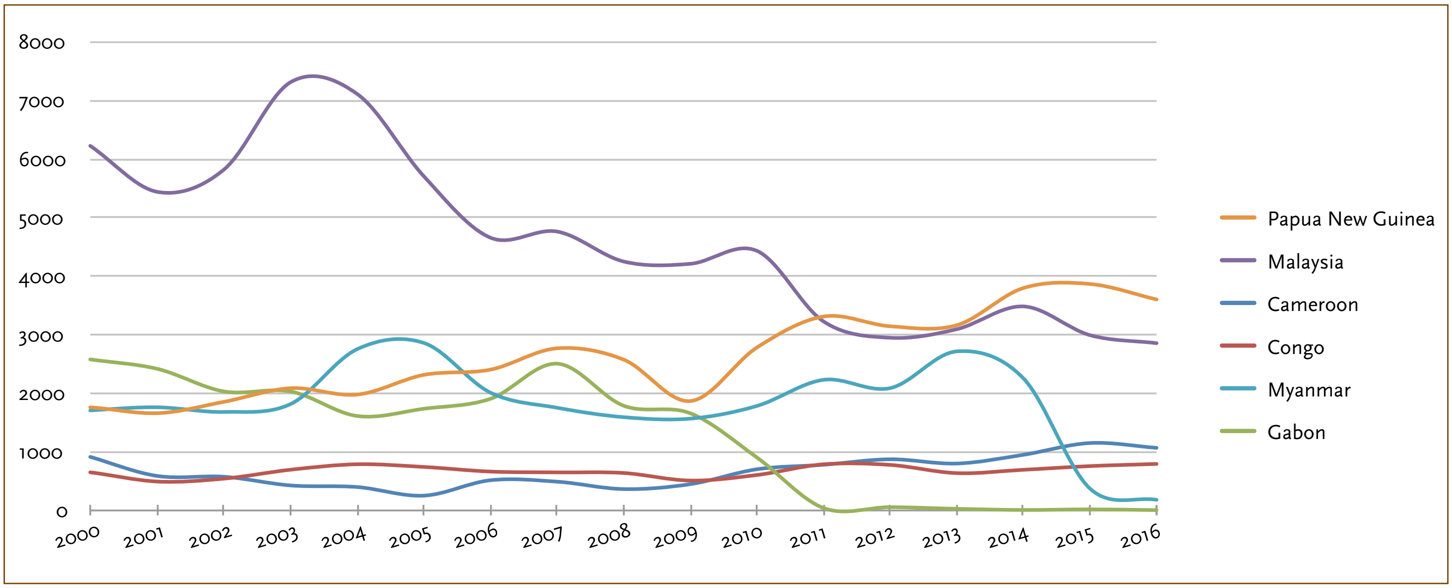
In 2016, the Oakland Institute published *The Great Timber Heist: The logging industry in Papua New Guinea*,[15] based on an in-depth investigation of the financial records of the logging industry from 2000 to 2011. While the industry and its proponents claim that logging contributes greatly to the economy of the country,[16] this analysis of Papua New Guinea's logging industry and the largest log exporter, the Malaysian-based Rimbunan Hijau (RH) Group, alleged that widespread tax evasion and financial misreporting in the sector have resulted in a loss of tax revenue exceeding US$100 million per year.

These findings led to widespread public outrage with calls for the government to take action. In November 2016, the government introduced a progressive tax rate on exported logs. According to Bob Tate, executive officer of the PNG Forest Industries Association (PNGFIA), which represents logging companies in the country, this tax increase, combined with a falling demand for tropical timber, has brought the forest industry to "the brink of disaster" and resulted in revenue losses for the government.[17]

This report assesses if this is a fair description of the situation of the logging industry in PNG. Based on an expanded analysis of the most recent export data of the logging industry, export taxes, as well as the financial records of 16 RH subsidiaries until 2016, the report provides an assessment of the financial situation of the industry in PNG. The first section provides an updated analysis of the tropical timber exports from PNG. The second section analyzes the financial records of the selected subsidiaries, with an additional five years of data spanning between 2011 and 2016. The third section discusses the potential for tax evasion in the PNG logging sector. Finally, the report analyzes the effect of the 2016 tax reform on log exports and tax revenues.

The mouth of the Bairaman river, East New Britain province © Paul Hilton / Greenpeace

Figure 1: Exports of Tropical Round Wood Logs by Largest Six Exporters, 2000-2016 (1,000 m3)[18]



Illegal Logging Maintains PNG as the World's Largest Exporter of Tropical Timber

PNG has doubled its export of tropical timber over the past ten years and brought to international markets three to four million cubic meters of timber every single year since 2010 (see Figure 1 above).

This massive increase has occurred in a context where other major exporters have drastically decreased their exports. Surpassed by PNG as the largest exporter of tropical timber in 2011, Malaysia's exports have continued to decline steadily. Gabon and Myanmar, which exported comparable volumes of tropical timber as PNG at around two million cubic meters per year in the 2000s have sharply cut down their exports since then.[19]

The increase in log exports by PNG in recent years is largely the result of the illegal granting and coming into operation of 5.5 million hectares of logging concessions through the Special Agriculture and Business Leases (SABLs) land lease scheme. Intended to support agricultural investments, the SABL scheme has increased the land under logging concessions to 15.5 million hectares – a third of PNG's total landmass – and a much bigger share of accessible and usable land.[20] Reports from the PNG government's own Commission of Inquiry have documented how these trades occurred without the free, prior, and informed consent of local communities and involved numerous violations of laws and procedures.[21]

Despite the promise made by the O'Neill government in June 2014 that all illegal deals would be canceled[22] to date no decisive action has been taken to stop illegal logging or return land to its rightful owners.

The flawed land deals violate people's customary land rights. Logging and palm oil plantations also deplete and destroy forest resources that are vital for a population that remains largely rural and reliant on the resources provided by their environment and the rivers and forests that surround them.

Beyond this adverse impact, the forest industry appears to contribute only marginally to the country's economy. Despite PNG being a major timber exporter, the forestry sector contributes a mere three percent to PNG's total export earnings[23] Furthermore, despite years of pledges[24] by the government to stop the export of raw logs and ensure that wood is processed in the country in order to create jobs and add value to the products, close to 100 percent of exported wood is unprocessed raw logs.[25]

The logging industry and its proponents argue that they contribute to the development of the country through the tax revenue the government receives on log exports.[26] In 2015, *The Great Timber Heist*, however, alleged that widespread tax evasion and financial misreporting in the sector has led to a loss exceeding US$100 million per year in tax revenue – a loss that massively outweighs the export taxes that logging companies pay.

Thriving on Failure: RH Group Increases Log Exports Despite Massive Losses

The Great Timber Heist analyzed the financial records of 16 RH subsidiaries, which together account for over a quarter of PNG's total log exports.[27] It revealed that most of them had been operating at a considerable loss for over a decade: between 2000 and 2011, these companies cumulatively accrued profits of K45 million (US$15.8 million) compared to startling K345 million (US$120.6 million) in losses.[28] Data for the period 2012-2016 reveals that this trend has not only continued but increased rapidly since 2011. During these five years, the 16 companies declared only K7.9 million (US$2.8 million) in additional profits, compared to more than K447 million (US$156 million) in additional losses, as seen in Figure 2 below.

Figure 2: Cumulative Operating Profits and Losses of 16 selected RH Subsidiaries (2000-2016) (US$ Million)[29]

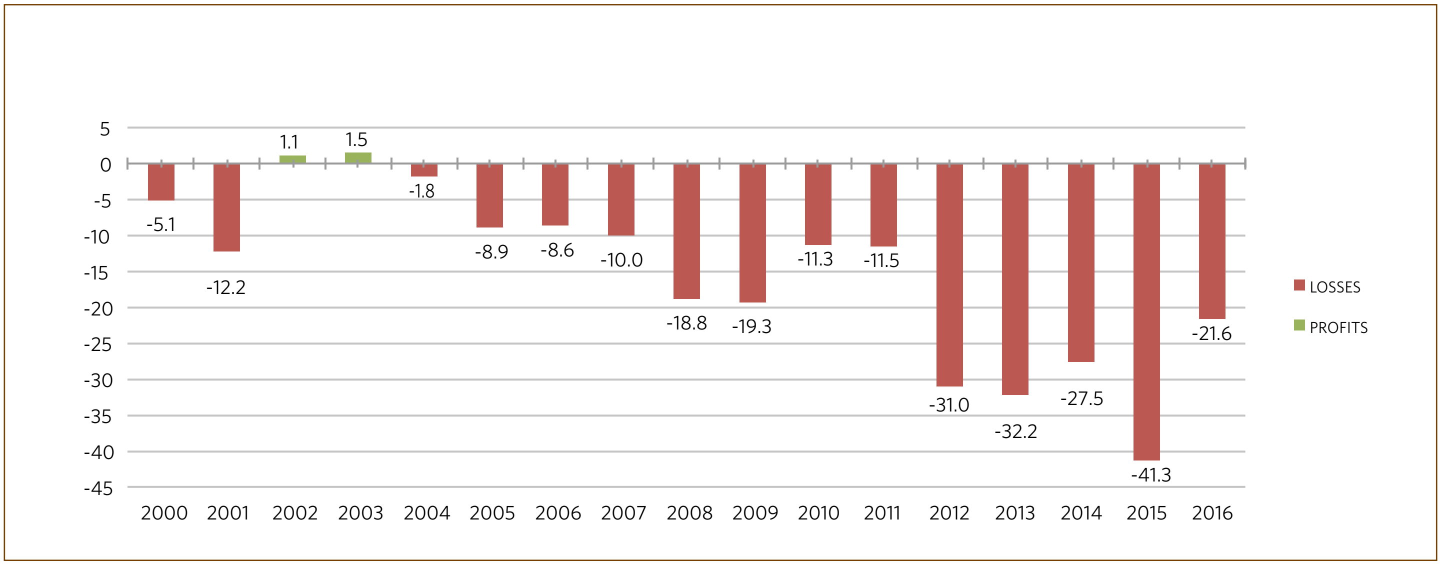
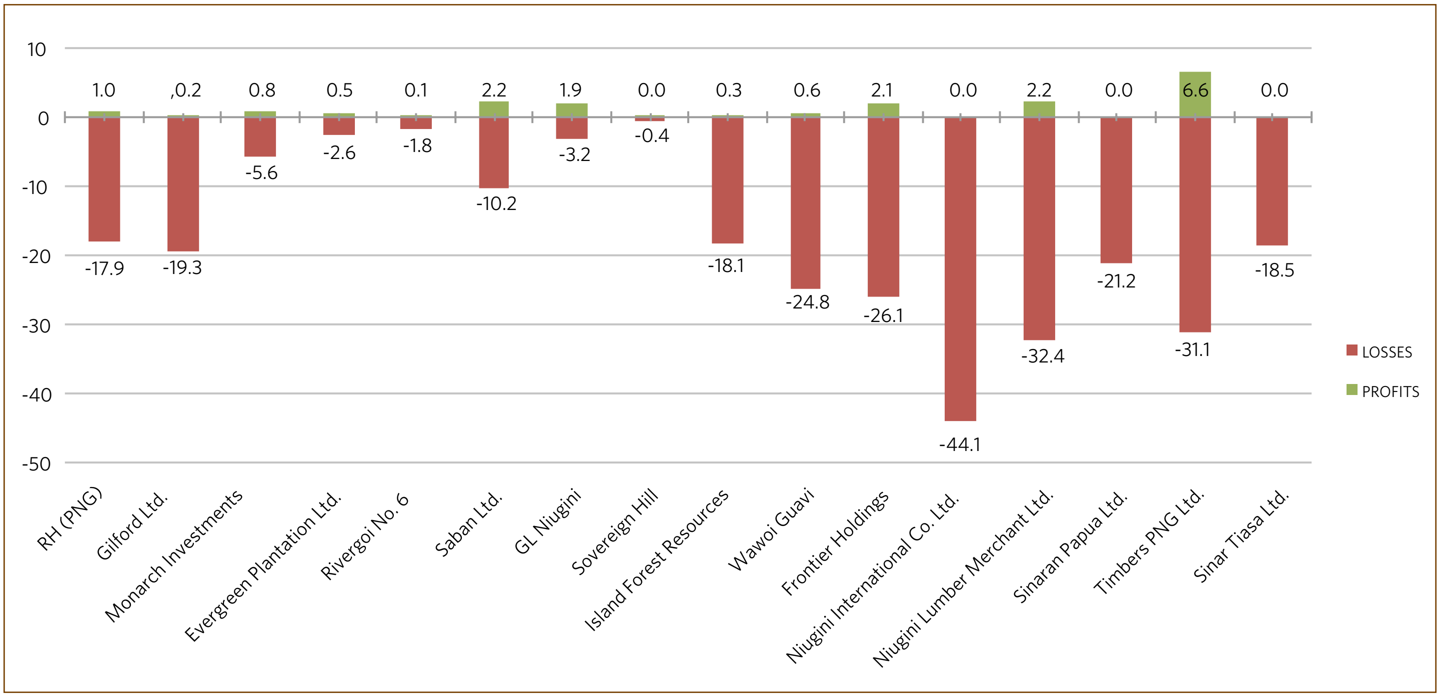


Figure 3: Profits and Losses of 16 Selected RH Subsidiaries (2000-2016) (US$ Million)[30]



Rimbunan Hijau Head Office in Port Moresby © The Oakland Institute

Since 2000, all together, the 16 companies have declared losses of K776 million (US$277 million) from their operations, compared to a profit of K53 million (US$18.5 million).[31] These companies therefore declare losing 15 dollars for each dollar of profit they make.

Between 2000 and 2016, the 16 RH subsidiaries have collectively declared 173 years of losses compared to only 43 years of profitability. Several subsidiaries have declared little or no profits for the entirety of their operations, as seen below in Figure 4. Niugini International Co. Ltd., for example, has declared zero profits and K126 million (US$44 million) in losses over the past 17 years, while more recently established operations such as Gilford Ltd, Sinar Tiasa, and Sinaran Papua have each declared more than K50 million (US$18 million) in losses.[32]

Figure 4: Number of Years of Declared Profit or Loss of 16 Selected RH Subsidiaries (2000-2016)[33]

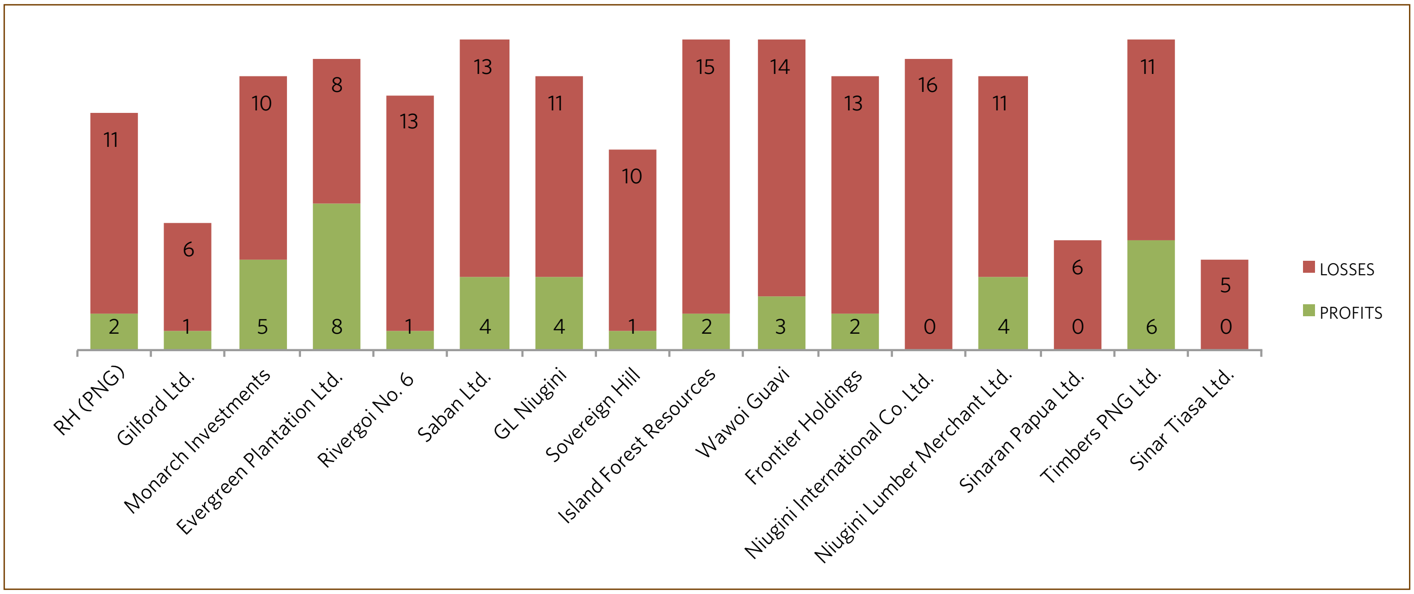


Figure 5: Volume Exported and Financial Losses of 16 Selected RH Subsidiaries[34]

It is hard to comprehend how these companies continue to operate despite such significant financial losses. The most recent data reveals an even more puzzling pattern: as shown in Figure 5, the more these companies harvest and export timber, the more money they lose.

The contradictions of this financial outlook raise questions about the accuracy of RH Group's financial reporting and concerns that firms might be engaging in misreporting tactics to understate their profits, which impacts whether they pay income tax.

Because these companies have worked at an overwhelming loss over the past 17 years, most of them have never paid any income tax and instead, have accumulated a vast pool of "Future Income Tax Benefit" (FITB), which can be used to pay income taxes in future profitable years (see Box 1). The total FITB incurred by subsidiaries under consideration totaled US$32.6 million in 2011 and nearly doubled to US$58.8 million in 2016, after five years of record losses, as seen in Figure 6.

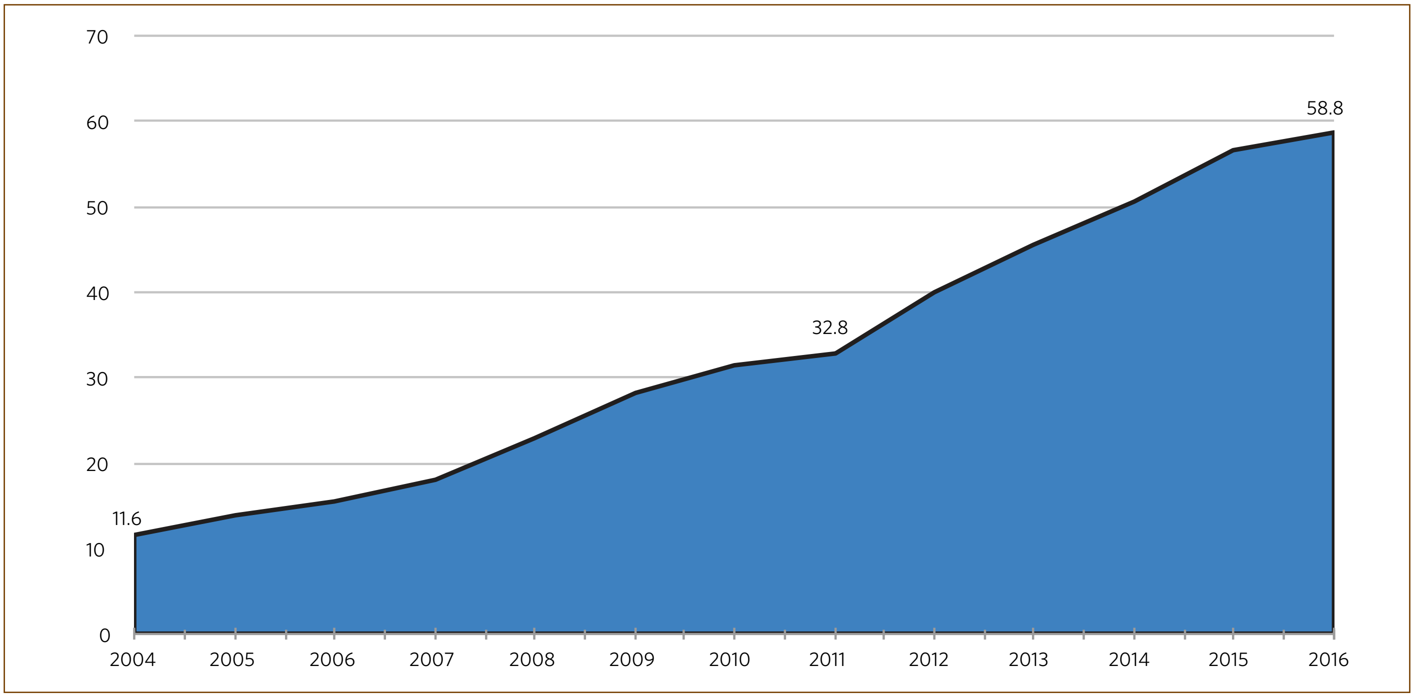
Because the FITB can be rolled forward and used to offset income taxes in profitable years, it is likely that these companies will never pay *any* income tax.

Box 1: Future Income Tax Benefit (FITB)

Under PNG tax law, when a company incurs a negative operating income, it does not have to pay the 30 percent income tax on its profits and is able to carry forward the loss for 20 years.[35] The ability to carry a tax loss forward allows the company to accumulate tax credits from the government and apply these future income tax benefit (FITB) credits from prior years to reduce the amount of taxable income in following years.[36]

For example, if a company has an operating loss of K150,000 in year one, it is entitled to K45,000 (K150,000 x 30 percent) in FITB credits to apply toward future payable taxes. If it makes a profit of K200,000 in year two, it would be able to subtract K45,000 from its K60,000 income tax due and pay only K15,000 of income tax for year two. Since the company can carry tax loss forward for 20 years, it is able to apply this reduction anytime between when the loss was incurred and 20 years out.

Figure 6: Cumulative Tax Credit (FITB) for 16 Selected RH Subsidiaries (US$ Million)[37]



No Profits for the Forest Industry Despite Record Exports

The above findings concerning RH subsidiaries reflect a larger pattern within the rest of PNG's logging industry. Whereas the annual revenues of the PNG forest industry have been oscillating between US$200 – US$300 million in recent years, profits for the whole sector appear to be surprisingly very low – generally around US$8 – US$9 million per year.[38]

Such low profits and continuous losses reported by many companies over the years raise the significant possibility that logging firms might be engaging in financial misreporting tactics to avoid paying income tax and reduce the amount of log export taxes and levies (applied on the value of exports regardless of profits or losses incurred). There are two ways this could be accomplished: through the undervaluation of the price of logs that are sold and exported and through the overvaluation of operational expenses in exchanges between subsidiaries of the same groups.

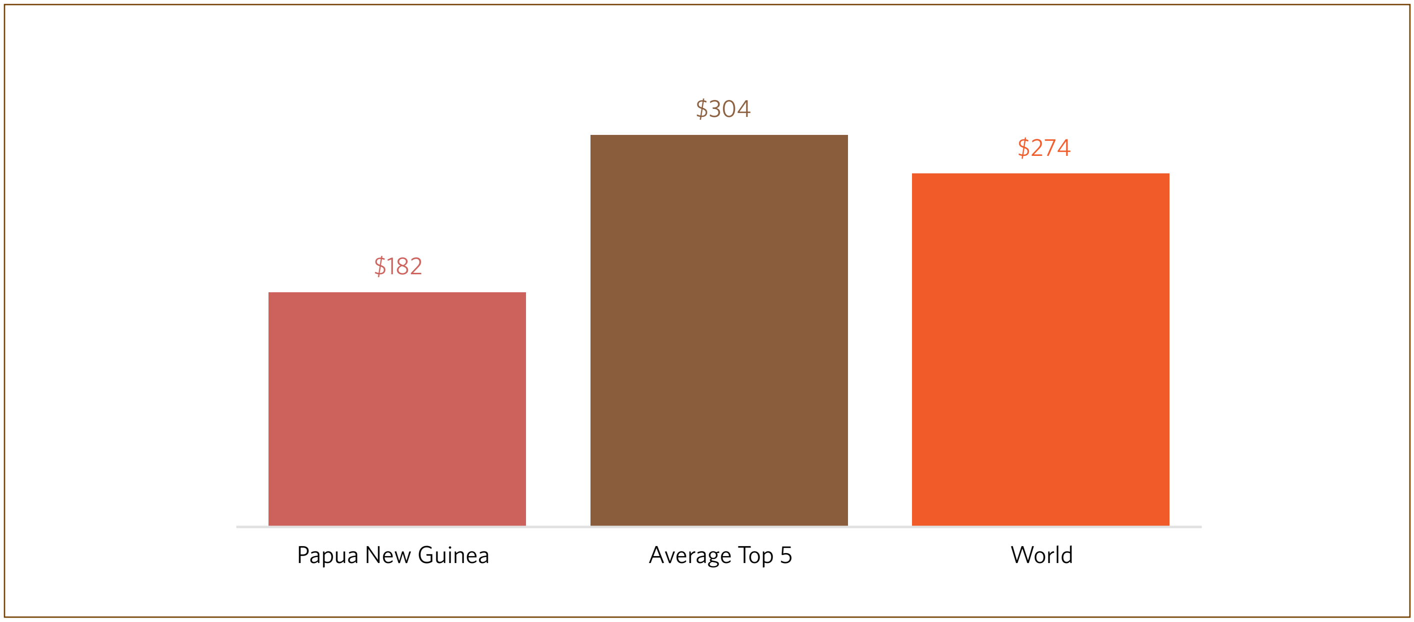
Undervaluing the price of logs that are sold and exported is called transfer pricing and typically occurs when a buyer officially pays a lower price than the real cost of the goods under an arrangement with the seller. Some financial data is accessible through SGS, a private inspection and verification company hired by the PNG government to monitor log exports and report on volumes and prices on a monthly basis. However, it is difficult to verify the accuracy of the prices or what happens to the logs once they are exported from the country because international markets lack verification and tracing mechanisms.

There are, however, strong reasons to believe that logging firms in PNG are engaging in these practices. As previously reported in *The Great Timber Heist*, export prices for tropical timber declared for PNG are significantly lower than that of the average world price and the average price of the other large exporters.[39]

The most recent data confirms that a substantial gap remains between PNG's export prices, the prices of the other five largest exporters, and the average world price. Data from 2000 to 2016 reveals that PNG's export prices are on average US$92 less than world prices and US$122 less than the average top five exporters (see Figure 7).

In addition to underpricing tactics, transfer pricing can also artificially reduce profits. Companies belonging to the same group are able to charge each other an artificially high price for goods, equipment, and services, thereby increasing the sister company's operational expenses.[41] The charges

Figure 7: Average Price for Log Exports (2000-2016): Comparison between PNG, the Other Five Main Exporters of Tropical Timber, and the Rest of the World (US$/m3)[40]



Logging pond in West Pomio © Paul Hilton / Greenpeace

A ship waiting to load logs in Turubu Bay, East Sepik © the Oakland Institute

can be high enough that the company's expenses end up greater than its revenue, allowing the company to declare an operational loss for the year. By declaring losses every year based on inflated operational costs, it is possible for companies to evade corporate income tax when in fact the group as a whole is making a profit.

Whether this practice is being used by PNG's logging industry and by RH is difficult to ascertain given the opacity of the system and the lack of effective public information and control. However, logging companies, including RH, have set up and operate a complex web of companies and subsidiaries, with the majority held by firms registered in tax havens, including the British Virgin Islands (BVI), Singapore, and Hong Kong.[42]

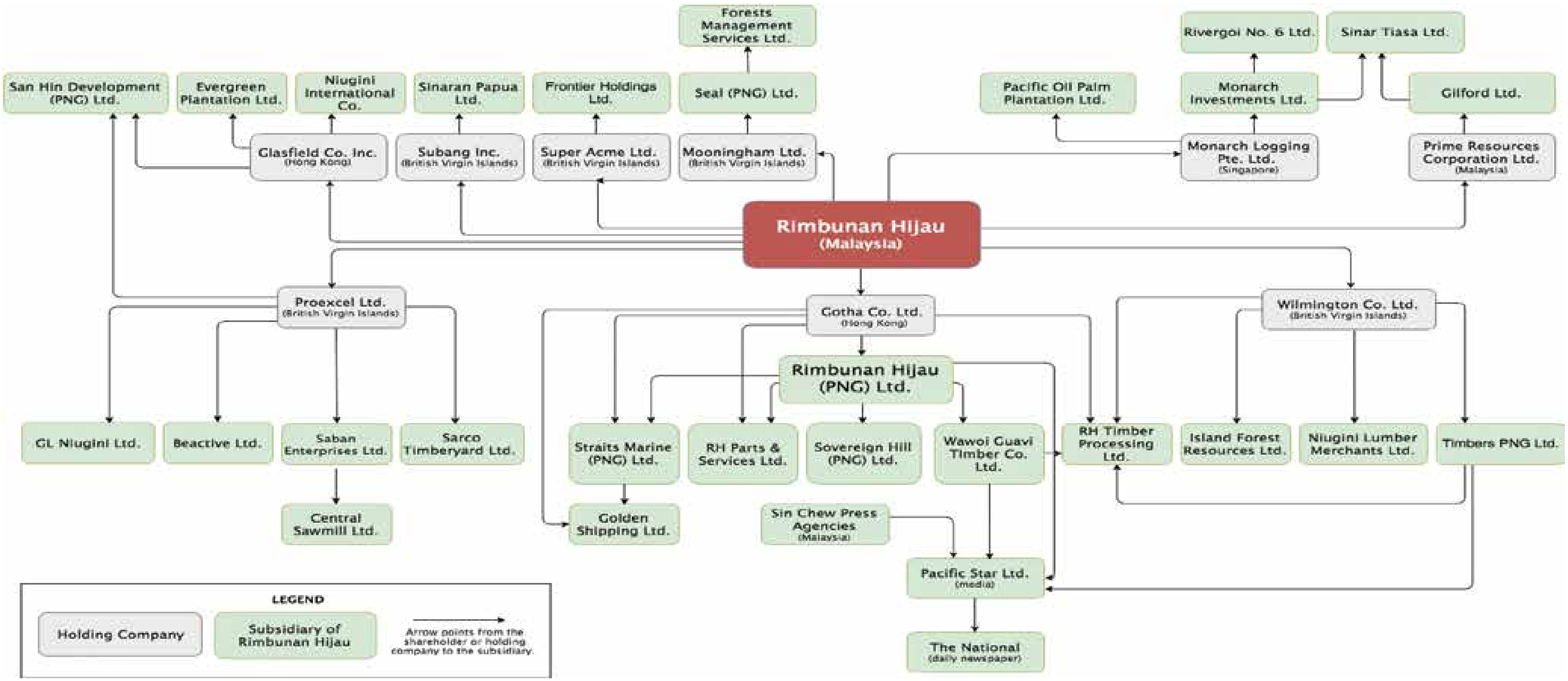
Of the 60 or so companies in PNG identified as being owned or controlled by the Tiong family, which owns the RH Group, over 30 companies engage in logging and agribusiness in operations ranging from timber processing and distribution to the repair of heavy machinery and oil palm production (see Figure 8).[43] All but two of these subsidiaries have the same registered address, at 479 Kennedy Road in the capital Port Moresby, and list either or both James Sze Yuan Lau (managing director of RH (PNG) Ltd and son in law of Tiong Hiew King, the founder of RH) or Ivan Su Chiu Lu (executive director of RH (PNG) Ltd) as their directors.[44] A significant amount of RH subsidiaries' operational expenses are spent on activities, goods, and services offered by their sister companies, leading to a situation in which transfer pricing could easily occur.[45]

In addition, their financial records indicate that all 16 subsidiaries examined engage in a significant transfer of funds through "Advances to Related Companies" and "Long Term Loans" between sister firms and parent companies.[46] Both of these systems of transferring funds are "unsecured with no provision for interest or repayment" and companies are not required to document the reasons for those fund transfers in their tax filings. The amount of money being transferred on a yearly basis often dwarfs the operating profits or expenses declared by the subsidiaries who are participating in them. For example, in 2016, Niugini International Lumber Merchants received US$35 million in loans from sister companies, the majority of which consisted of a US$29 million transfer from Sinar Tiasa. Having declared no profits and US$53 million in losses during its five years of operation, Sinar Tiasa is also the beneficiary of tens of millions of dollars of fund transfers from other RH subsidiaries.[47]

Although the logging industry is able to avoid paying corporate income taxes in PNG, it does pay a number of other taxes, levies, and duties. Between 2012 and 2017, the forestry industry paid on average K248 million (US$87 million) in annual export duties and levies for its log exports,[48] constituting the main source of forestry revenue for the government. If transfer pricing is taking place through an undervaluation of log exports, the export duties are therefore underestimated as well, which would result in a significant loss in public revenue.

For example, a US$50 undervaluation of log export prices per cubic meter, a conservative assumption given the US$150 average price difference between PNG and world prices over the last five years, would result in a loss of K145 million (US$51 million) in public revenue for 2016 alone from lost export duties. The full US$150 difference in prices would result in a loss of K444 million (US$155 million) for this same year, illustrating the dramatic impact underpricing may have on government revenue from the forest industry.

Figure 8: Mapping Rimbunan Hijau's Subsidiary Companies that are Directly or Indirectly Involved in Logging Operations[49]



The Impact of the 2017 Tax Reform

The release of *The Great Timber Heist*'s findings in 2016 led to calls for the relevant government authorities to take action. Despite initial denials and criticism of the report by the Minister of Forests[50] in November 2016, the government acted on the findings by substantially increasing the log export tax in its 2017 budget through the introduction of a progressive tax system.[51]

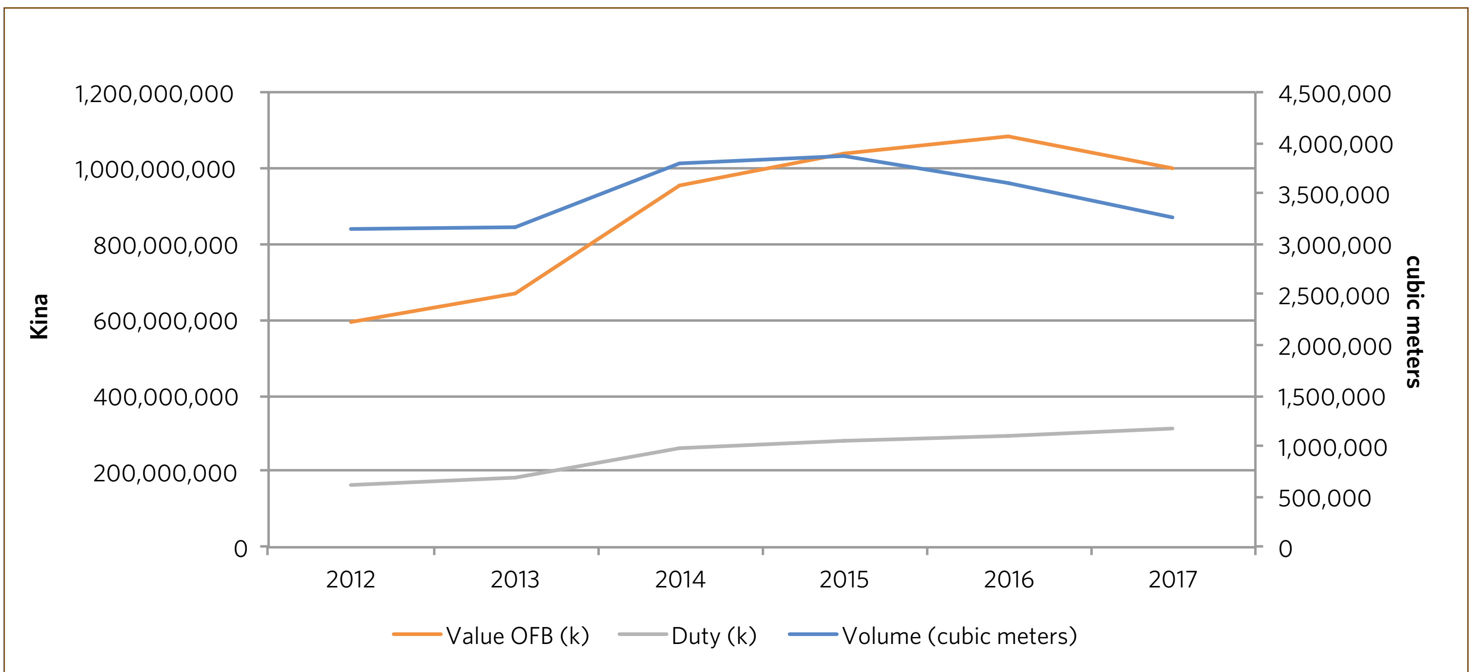
The progressive tax system consists of applying different tax rates to different timber species (grouped by value range), with rate increasing with the value of timber. The new system resulted in a four percent increase in the average tax rate paid by exporters on the value of exported timber, from 27 percent to 31 percent in 2017.[52]

Critics of the measure, including the Minister of Forests Douglas Tomuriesa and the logging industry, however, have harshly criticized the tax increase, lamenting that it will gravely undermine the interests of logging companies and lead to a loss in revenue for PNG.[53] Minister Tomuriesa warned that the new tax change could lead to "operators abandoning most forestry concessions, timber-harvesting rates collapsing and ultimately the Government receiving less export tax revenue."[54] Bob Tate of the Papua New Guinea Forest Industries Association (PNGFIA) echoed these claims, arguing that the tax increase, combined with a falling demand for tropical timber "will force a number of logging companies out of business, bringing the industry in PNG to its knees."[55] According to Tate's statement in November 2017, the impact of this policy is already being felt: "This year, raising the tax rate resulted in the Government collecting K32 million less in tax revenue than last year. Further tax increases may result in revenues – and landowner royalties – falling to zero, and to thousands more jobs disappearing."[56]

The comparison of export data from before and after the tax reform implemented in 2017 paints a different picture. As can be seen in Figure 9, while the sector has seen a ten percent decline in volumes exported (an eight percent drop in the value of exports) in 2017, there is a six percent jump in duties paid from K293 million (US$103 million) in 2016 to K310 million (US$109 million) in 2017. The tax rate increase has thus generated an additional K17 million (US$6 million) in revenue simultaneous to a significant drop in the volumes exported (from 3.6 million cubic meters in 2016 to 3.3 million cubic meters in 2017).[58] However, exports picked up steeply in the last months of 2017 – doubling from 200,000 to 400,000 cubic meters per month between September and December,[59] suggesting that the industry is not on "the brink of disaster" as claimed by its spokesperson.

This analysis suggests a modest but favorable outcome of the tax reform and that the increased duty is generating more revenue from logging operations, while slowing down the rapid exploitation of PNG's forests.

Figure 9: Volume and Value of the Exported Timber Compared to Duty Collected (Kina), Freight on Board (FOB)[57]



Conclusion

The Great Timber Heist raised important questions about the extent of tax evasion and financial misreporting by the logging industry and challenged claims that their operations generate tax revenue critical for PNG's economic growth and development. The initial analysis of 16 selected RH subsidiaries' financial documents suggested firms had benefited from an environment of impunity and opacity and avoided paying corporate income taxes.

This report's updated and expanded analysis reveals that while they were increasing their export volumes, RH subsidiaries have declared increasing losses and doubled their accrued tax credits in five years alone. The findings also suggest that the tax increase introduced in 2016 is a step in the right direction in order to increase the benefits from logging operations for the national economy while slowing down the rate of deforestation.

However, the tax reform is not enough of a deterrent to significantly affect logging operations in the country. The country has doubled its exports of tropical timber over the past ten years and remains the world's largest exporter.[60] After the decline of 2017, volumes exported returned to their upward trend at the end of the year and in the first three months of 2018.[61] The logging industry in PNG appears to be far from the "disaster" scenario painted by its proponents.

Logging near Wewak, East Sepik © The Oakland Institute

Endnotes

1 Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea.* The Oakland Institute, 2015. https://www.oaklandinstitute.org/great-timber-heist-logging-industry-papua-new-guinea (accessed March 20, 2018).

2 ITS Global. *Uncivil Society: A review of activist NGOs in PNG.* April 2013. http://www.fiapng.com/PDF_files/PNG%20NGO%20REPORT.pdf (accessed May 14, 2018).

3 Conversion rates were determined based on an approximate annual average of exchange rates between USD and Papua New Guinean Kina (PGK) from 2000 to 2011, based on historical rate data from US Forex and OANDA. For consistency in models this conversion rate was maintained in our report update for data betwewen 2012 and 2016.

4 "PNG Log Export Tax." *Timberbiz,* November 16, 2016. https://www.timberbiz.com.au/png-log-export-tax/ (accessed May 1, 2018).

5 "Forestry Sector Under Threat." *The National*, November 22, 2017. https://www.thenational.com.pg/forestry-sector-threat/ (accessed March 21, 2018).

6 *Ibid*.

7 According to data from the Société Générale de Surveillance (SGS), the company that inspects shipments and produces monthly Log Export Monitoring Reports to the Papua New Guinea Forest Authority and from the database maintained by the International Tropical Timber Organization. http://www.itto.int/annual_review_output/ (accessed May 2, 2018).

8 SGS. *Log Export Monitoring Monthly Report for March 2018 to the Papua New Guinea Forest Authority*. 2018.

9 For the purpose of this report, the Oakland Institute research team studied the records of 16 Rimbunan Hijau subsidiaries for the period 2000-2016. The Financial Records of RH Subsidiaries are made public by the Papua New Guinea Investment Promotion Authority. https://www.ipa.gov.pg (accessed August 2, 2018).

10 *Ibid.*

11 *Ibid.*

12 See Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea. Op. Cit.*

13 Papua New Guinea Investment Promotion Authority. *Forestry*. http://www.ipa.gov.pg/agriculture/forestry (accessed March 21, 2018).

14 "Papua New Guinea Must Act Now to Cancel SABL Land Leases and Return Land to Local Communities." The Oakland Institute, June 30, 2014. http://www.oaklandinstitute.org/papua-new-guinea-must-act-now-cancel-sabl-landleases (accessed July 1, 2018).

15 Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea, Op. Cit.*

16 ITS Global. *Uncivil Society: A review of activist NGOs in PNG. Op. Cit.*

17 "Forestry Sector Under Threat." *The National. Op. Cit.*

18 International Tropical Timber Organization. http://www.itto.int (accessed May 2, 2018).

19 International Tropical Timber Organization. *Tropical Timber Market Report.* Volume 21, Number 21, November 15, 2017. https://www.itto.int/files/user/mis/MIS_1-15_Nov_2017.pdf (accessed April 10, 2018).

20 Papua New Guinea Investment Promotion Authority. *Forestry*. *Op. Cit.*

21 Department of Prime Minister & NEC. "COI SABL." http://www.coi.gov.pg/sabl.html (accessed April 30, 2018).

22 "Papua New Guinea Must Act Now to Cancel SABL Land Leases and Return Land to Local Communities." *Op. Cit.*

23 Polye, D. P. *2013 National Budget.* Ministry of the Treasury. http://www.treasury.gov.pg/html/national_budget/files/2013/budget_documents/Volume1/Vol1.pdf (accessed July 1, 2018), p. 139.

24 For instance, the government's *Medium Term Development Plan (MTDP) 2011-2015* includes the stated policy goal of reducing the share of round logs and increasing the importance of in-country processing. *PNG Medium Term Development Plan 2011-2015, Building the Foundations for Prosperity*. Department of National Planning and Monitoring, 2010.

25 International Tropical Timber Organization. *Biennial Review and Assessment of the World Timber Situation 2013-2014*. http://www.itto.int/annual_review/ (accessed May 2, 2018).

26 See ITS Global. *Uncivil Society: A review of activist NGOs in PNG*, *Op. Cit.*; ITS Global. *Whatever it takes: Greenpeace's anti-forestry campaign in Papua New Guinea*, *Report for Rimbunan Hijau (PNG) Group*. July, 2006. http://www.forestryanddevelopment.com/documents/pdf/fd-G_peaceReport-final.pdf (accessed August 2, 2018); ITS Global. *Masalai i Tokaut and Rimbunan Hijau Watch: A political and deceptive campaign against Rimbunan Hijau, Report for Rimbunan Hijau (PNG) Group*. July, 2006. http://forestryanddevelopment.com/site/wp-content/uploads/fd-WebsiteReport-final.pdf (accessed August 2, 2018).

27 Average calculated from the SGS Log Export Monitoring Monthly Reports to the Papua New Guinea Forest Authority between 2005 and 2016.

28 Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea, Op. Cit.*

29 *Financial Records of Subsidiaries of Rimbunan Hijau 2000-2016*. Investment Promotion Authority. *Op. Cit.*

30 *Ibid.*

31 *Ibid.*

32 *Ibid.*

33 *Ibid.*

34 *Financial Records of Subsidiaries of Rimbunan Hijau,* Investment Promotion Authority. *Op. Cit.; SGS Log Export Monitoring Monthly Report to the Papua New Guinea Forest Authority,* 2005-2016.

35 Devos, K. *The Corporate Tax Regime in Papua New Guinea*. National Research Institute, 2014. http://taxreview.gov.pg/wp-content/uploads/2014/09/nri.tax_.symposium_corporate.tax_.paper_.pdf (accessed May 16, 2018)

36 "Tax Loss Carryforward." *Investing Answers*. http://www.investinganswers.com/financial-dictionary/tax-center/tax-loss-carryforward-4151 (accessed May 14, 2018).

37 *Financial Records of Subsidiaries of Rimbunan Hijau*. Investment Promotion Authority. 2004-2016. *Op. Cit.*

38 All calculations and figures in this section are based on data from the Investment Promotion Authority, the Internal Revenue Commission, and SGS *Log Export Monitoring Monthly Reports to the Papua New Guinea Forest Authority*.

39 Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea, Op. Cit.*

40 The five main exporters of tropical timber from 2000-2011, not including PNG, were Cameroon, DR Congo, Malaysia, Myanmar and Gabon. In order to maintain consistency in comparing the five main exporters, Gabon was surpassed in total export volume by Mozambique in 2011, while Myanmar was surpassed by Nigeria in 2015 and 2016, and these countries US$/m3 values are used in establishing averages for the time period 2000-2016.

41 For a comprehensive analysis of transfer pricing practices see Review of the Forest Revenue System in Papua New Guinea, Final Report of the Forest Revenue Review Team. Commissioned by the Government of Papua New Guinea. Forest Revenue Team, 2002. http://www.forest-trends.org/documents/files/doc_1368.pdf (accessed September 5, 2015).

42 Mousseau, F. *The Great Timber Heist: The logging industry in Papua New Guinea, Op. Cit.*

43 *Ibid.*

44 *Ibid.*

45 *Ibid.*

46 *Financial Records of Subsidiaries of Rimbunan Hijau*. Investment Promotion Authority. *Op. Cit.*

47 *Ibid.*

48 SGS. *Log Export Monitoring Monthly Report to the Papua New Guinea Forest Authority*. 2012-2017.

49 This chart was established by the Oakland Institute's researchers based on a variety of sources, including companies' documents, financial records and tax filings.

50 "PNGFA Response to Oakland Report" *NBC News*, March 6, 2016. https://www.youtube.com/watch?v=R-gGiLJW2JM (accessed May 16, 2018).

51 "PNG Log Export Tax." *Timberbiz, Op. Cit.*

52 SGS. *Log Export Monitoring Monthly Reports to the Papua New Guinea Forest Authority*, 2016-2017.

53 "PNG Log Export Tax." *Timberbiz, Op. Cit.*

54 Kero, G. "Tax Hike Slated." *The National,* January 27, 2017. http://www.thenational.com.pg/tax-hike-slated/ (accessed May 8, 2018).

55 "PNG Log Export Tax." *Timberbiz, Op. Cit.*

56 "Forestry Sector Under Threat." *The National. Op. Cit.*

57 SGS. *Log Export Monitoring Monthly Reports to the Papua New Guinea Forest Authority*, 2012-2017.

58 SGS. *Log Export Monitoring Monthly Reports to the Papua New Guinea Forest Authority*, 2017.

59 *Ibid*.

60 Data from SGS *Log Export Monitoring Monthly Report to the Papua New Guinea Forest Authority* and International Tropical Timber Organization. http://www.itto.int (accessed May 2, 2018).

61 SGS. *Log Export Monitoring Monthly Report for March 2018 to the Papua New Guinea Forest Authority*. 2018.

The Oakland Institute PO Box 18978 Oakland, CA 94619 USA www.oaklandinstitute.org