TRANSPARENCY INTERNATIONAL EU

UNDER THE SURFACE

Looking into payments by oil, gas and mining companies to governments

ANNEX I: METHODOLOGY

Transparency International EU (TI EU) is part of the global anti-corruption movement, Transparency International, which includes over 100 chapters around the world. Since 2008, TI EU has functioned as a regional office of the global movement and closely works with the International Secretariat in Berlin, Germany.

Transparency International EU leads the movement's EU-focused advocacy, in close cooperation with national chapters worldwide, but particularly with the 24 chapters in EU member states. TI EU's mission is to prevent and address corruption and promote integrity, transparency and accountability in the EU institutions and in EU internal and external policies, programmes and legislation.

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RESOURCES for DEVELOPMENT CONSULTING

ANNEX I: METHODOLOGY

1. SCOPE OF THE RESEARCH

This report assesses project-level Payments to Governments by oil, gas and mining companies in four different countries of operation.

Company	Country of operation	Project
Tullow Oil	Equatorial Guinea	Block G (Ceiba and Okume fields) – oil
Repsol	Bolivia	Margarita/Huacaya – gas
Vedanta	India	Rampura Agucha – zinc mine
Joint venture between ExxonMobil (as the operator), Statoil, BP and ENI	Angola	Block 15 – oil

The selected projects were analysed as independent case studies highlighting the value of revenue payment disclosures and illustrating some of the specific opportunities that now exist for external monitoring. The case studies were drafted with the objective of demonstrating the value of the data contained in the Payments to Government reports required by the EU Accounting Directive and of assessing to what extent the Directive facilitates transparency and accountability. As the data analysed for these case studies show, a number of significant weaknesses were found – both in the legislation itself and in the practice of implementing by companies. These weaknesses pose limitations to the achievement of the overall objective of enhancing public understanding of extractive companies' activities and payments of the adopted transparency and accountability measures.

Key steps of the research approach included:

a. Identification of the following criteria guiding subsequent project selection:

- Projects illustrating the contribution of the Accounting Directive to expanding transparency in some of the most opaque jurisdictions (non-EITI countries, such as Equatorial Guinea, where payment transparency depends solely on the EU legislation, and Angola).
- Projects providing transparency to companies domiciled outside the EU (such as ExxonMobil and Hindustan Zinc Limited).
- Projects in countries where extractive sector revenues hold great potential to contribute to wider development outcomes.
- Projects with availability of good quality project data.

b. Identification of projects included in the resourceprojects.org database, where companies were reporting under the Accounting Directive. Projects in the exploratory or development phase were excluded from the selection.

c. Preliminary review of 40 projects and research of available public domain project-level data necessary for revenue data analysis.

d. Selection of the four above-mentioned projects.

2. DATA SOURCES

The main sources used for the selection and the analysis of the four above-mentioned projects were:

- **ResourceProjects.org**: This site developed by the Natural Resource Governance Institute collects Payments to Governments reports from multiple sources and standardises the data to enhance accessibility.

- **Project-level reports published by the above-mentioned oil, gas and mining companies between 2013 and 2017**. Companies have published these reports either voluntarily or due to regulatory drivers, such as the EU Accounting Directive and the equivalent Norwegian legislation. Companies are required to publish the following data for payments above €100,000 on a country-by-country and project-by-project basis:
  - *production entitlements*
  - *taxes on the income, production or profits of companies*
  - *royalties*
  - *dividends*
  - *signature, discovery and production bonuses*
  - *licence fees, rental fees, entry fees and other payments for licences and/or concessions*
  - *payments for infrastructure improvements*

- Additional publicly available documents, such as project fiscal terms and operational data, including production volumes and commodity prices.

3. COMPANY REVIEW

During the course of this research, Transparency International EU contacted Repsol, Statoil, Tullow Oil and Vedanta providing them with the relevant analysis and case studies. This exchange aimed to give the companies an opportunity to check the information and analysis undertaken for this report as well as reply to TI EU's questions and requests for clarifications. All companies responded and engaged with TI EU's team. When judged useful and relevant, companies' responses were taken into account in the interpretation of the data and their explanations were added in the report.

4. METHODOLOGY FOR THE ANALYSIS OF MULTINATIONAL EXTRACTIVE PAYMENTS' CASE STUDIES

4.1 Tullow Oil in Equatorial Guinea

Production sharing analysis:

The production sharing analysis is based on the allocation of production in barrels of oil. This is possible because the government receives both their royalty and their profit oil allocations in kind: that is in oil rather than in cash. According to Tullow's Payment to Government Reports, the reported production entitlement (PE) includes in-kind payments of both royalty and profit oil.

The first step in our analysis, shown in Table 1, was to translate Tullow data on production volumes and production entitlements to the Block level.

TABLE 1: Converting Tullow Disclosures to Block Level for Ceiba Field

2016 (in barrels)	Ceiba Gross US$ 100%	Ceiba Tullow US$ (14.25%)
Oil production	5,907,368	841,800
Production entitlement (royalty and government profit oil)	767,495	109,368

The sequence of steps in the analysis is shown for the Ceiba field for 2016 in Table 2. We started with the total volume of oil produced in the Ceiba field (1). We estimate the royalty payment for production at below 30,000 barrels per day (11 per cent of gross production), as set out in the First Amendment to the Production Sharing Contract (PSC) (2). We calculate government share of profit oil to be US$117,684 (3), which is the difference between the field-level production entitlement of US$767,495 and the calculated royalty payment of US$649,811.

Production data disclosed by Tullow and Hess indicate that cumulative production from the Ceiba field through 2016 is around 170 million barrels. According to the terms of the PSC, this would result in 20 per cent of profit oil being allocated to the government and 80 per cent being allocated to the company. Total profit oil for the field is estimated at US$588,421 (4). Production sharing allocations are based on net production calculated as gross production less royalty and equalling US$5,257,558 (5). Cost oil is estimated as net production less total profit oil at US$4,669,137 (6).

TABLE 2: PSC Methodology for Ceiba Field

2016 (in barrels)	Ceiba Gross US$
Oil production	5,907,368 (1)
Royalty (11% of production)	649,811 (2)
Government profit oil	117,684 (3)
Total profit oil	588,421 (4)
Net production (gross production less royalty)	5,257,558 (5)
Cost oil (net production less total profit oil)	4,669,137 (6)

Our estimates of the allocations of the nearly 5.9 million barrels of Ceiba oil in 2016 to the government and the three oil companies (Hess, Tullow and GEPetrol) are shown in Table 3.

TABLE 3: Production sharing allocations: Ceiba field 2016 (all figures are in barrels of oil)

Companies	Production	Government
	5,907,368	
	Royalty	
	649,811	649,811
	Net production	
	5,257,558	
	Cost oil	
4,669,137	4,669,137	
	Profit oil	
	588,421	
	Government (20%)	
	117,684	117,684
	Companies (80%)	
470,737	470,737	
5,139,874	**TOTAL ENTITLEMENT**	**767,495**

Table 4 shows our estimate of the allocation of 2016 cost oil and profit oil across the three oil companies: Hess, Tullow and GEPetrol in barrels of oil.

TABLE 4: Estimated allocation of 2016 cost oil and profit oil

	Total	Hess 85%	Tullow 15%	GEPetrol
Cost oil	4,669,137	3,968,766	700,371	0
	Total	**Hess 80.75%**	**Tullow 14.25%**	**GEPetrol 5%**
Profit oil	470,737	380,120	67,080	23,537
TOTAL	**5,139,874**	**4,348,886**	**767,451**	**23,537**

Based on the methodology set out above, Table 5 provides our estimates of royalty and profit oil allocations to Equatorial Guinea for the Ceiba and Okume fields for the years 2013-2016.

TABLE 5: Estimates of royalty and profit oil allocations (barrels)

	Ceiba			
	2016	**2015**	**2014**	**2013**
Production	5,907,368	7,940,351	8,708,772	8,964,912
Royalty	649,811	873,439	957,965	986,140
Cost oil	4,669,137	6,193,684	4,470,456	5,821,754
Government profit oil	117,684	174,646	656,070	431,404
Company profit oil	470,737	698,582	2,624,281	1,725,614

	Okume			
	2016	**2015**	**2014**	**2013**
Production	12,071,579	15,112,281	16,392,982	15,880,702
Royalty	1,338,789	1,703,974	1,857,658	1,796,184
Cost oil	4,582,737	9,786,140	5,542,912	5,240,877
Government profit oil	1,230,011	724,433	1,798,482	1,768,728
Company profit oil	4,920,042	2,897,733	7,193,930	7,074,912

The results appear to show high levels of production allocated to costs. For the Ceiba field, in years 2015 and 2016, the volume of after-royalty production allocated to costs is more than 78 per cent. As the PSC includes a cost recovery limit of 70 per cent, we assume that something is missing in our analysis. Our review suggests that the discrepancy is not due to a misunderstanding of equity stakes in the project nor the allocation of profit oil. One possible explanation is that some costs (e.g. transport) are allowable deductions prior to the assessment of the royalty. If we factor a lower royalty payment into our calculations, we would end up with a higher estimate of government profit oil and a corresponding reduction in the percentage of post-royalty production allocated to costs. The precision of this analysis would be significantly improved if Tullow were to report royalty and profit oil payments separately.

Corporate tax analysis:

Analysing corporate tax payments is inherently more challenging than analysing allocations of oil within a production sharing system. First, corporate tax payments are made at the company level and are therefore consolidated across the two development areas. Second, there are differences between the rules for cost recovery within the production sharing system and the rules for allowable deductions in the calculation of taxable income.[1] Third, corporate tax is commonly reported under the rules of accrual accounting where the "cash payment of income taxes occurs in the year in which the tax has arisen or up to one year later".[2] Finally, corporate tax paid may involve either cash rebates received or tax reassessments.[3]

There are clear methodological limits to undertaking an analysis of corporate tax payments based on public domain information. To carry out the analysis of Tullow Oil's corporate tax payments, we have used the following data:

- The corporate tax rate that applies to Block G is 25 per cent of net profits. Net profits are calculated as revenues from the sale of oil at realised prices adjusted for tax purposes with eligible additions, such as accounting depreciation and allowable expenses, and eligible deductions, such as operating costs, capital allowances and carried forward losses.
- However, as we do not have access to this data, we attempt a rudimentary analysis using the value of Tullow profit oil as a proxy for Tullow taxable income. In order to convert oil volumes to revenues, we use oil price data for Equatorial Guinea provided by the IMF for the years 2013 through 2015.[4]
- For 2016, we estimate the oil price by combining the reported price for Brent crude less the average discount from previous years.

As with the production sharing system above, we illustrate the methodology for 2016, but as corporate tax is not field-specific we have used the data for both fields. We begin by converting the production sharing allocations into dollar values using an estimated Equatorial Guinea oil price (1). We then take the estimate of Ceiba company profit oil (2) and Okume company profit oil (3) and combine (4). The value of Tullow profit oil is calculated as the Tullow working interest share of the total company number and this is used as a proxy for taxable income (5). Our estimated corporate tax liability for the year is 25 per cent of the value of Tullow profit oil (6).

TABLE 6: Methodology for estimating Tullow corporate tax liability

$	2016
Oil price	$38.34 (1)
Company profit oil – Ceiba	$18,048,051 (2)
Company profit oil – Okume	$188,634,414 (3)
Company profit oil – Total	$206,682,465 (4)
Tullow profit oil	$29,452,251 (5)
Estimated corporate tax	$7,363,063 (6)

The summary of our estimates for the taxes owing for the Ceiba and Okume development area from 2013-2016 are set out in Table 7 as "Tullow Estimated Tax Liability". Tullow indicates that they report corporate tax payments in the year in which they were paid. The tax assessment is completed early in the year following the period during which the tax liability was incurred. This means that Tullow reports the payment of tax related to 2016 in 2017. In Table 7 we identify tax payment with the year in which the liability was incurred rather than the year in which it was reported. We also show the difference between our estimations and the tax liability associated with Tullow's reporting.

TABLE 7: Tullow estimated tax liability for Ceiba and Okume US$

$	2016	2015	2014	2013
Tullow estimated tax liability	7,363,063	6,021,581	32,354,072	31,445,931
Tullow reported tax liability*	21,647,000	8,891,655	37,380,751	43,659,000
Difference	-14,283,937	-2,870,074	-5,026,679	-12,213,069

* As explained above, tax liability for a year is taken from the reported payment for the following year.

Our estimates of Tullow's tax liabilities are consistently lower than Tullow's actual payments. The differences could be the result of the limitations of our methodology. It is also possible that tax payments made in a given year also include the payment of reassessments for previous years.[5]

4.2 Repsol in Bolivia

In order to better understand Repsol's 2016 report, calculations were made to estimate the gross revenues of Margarita/Huacaya and the share of royalties, taxes and fees paid to the government. The input data for these calculations are shown in Table 8.

TABLE 8: Input data for the estimation of royalties, taxes and fees for the Margarita/Huacaya field in 2016

Additional input data	
Natural gas prices ($/MMBTU)[6]	
Argentinian market	3.52
Brazilian market	3.12
Domestic market	1.07
Natural gas production share (%)[7]	
Argentinian market	80.8
Brazilian market	5.5
Domestic market	13.7
Natural gas weighted average price	2.86
Condensate Price ($/BBLS)	**27.11**
Production data	
Natural gas production (MMm3d)	18.18
Condensate production (BPD)	20,103
Gas calorific value (BTU/cf)	1,045
Currency conversions (2016)	
Dollar/Euro conversion 2016	1.11
Bolivian(bs)/Dollar conversion	6.96
Royalties, fees and others[8]	
Land use fee (bs/Hectare)	75.59
Total royalties (%)*	50.00
Area of Caipipendi Block (Hectares)	123.025
R-factor as of June 2016	1.3171
YPFB profit share (%)	1
Transportation costs	
Gas transport fee for domestic market ($/mcf)	0.41
Condensate transport fee – domestic market($/BBLS)	2.48

The steps of the calculations of the royalties, national production tax, fees and corporate tax are summarised in Table 9.

TABLE 9: Calculation steps the estimation of royalties, taxes and fees for Margarita/Huacaya

Taxes, royalties and fees calculations	
Royalties and production national tax	
Taxable base	Gross revenues of hydrocarbon sales
Steps	1. Calculation of gross revenues, which result from the product of the gas and condensate prices times the annual produced hydrocarbon volumes. The natural gas is a weighted average of the prices of the Brazilian, Argentinian and domestic market. 2. Calculation of royalties and the national hydrocarbon tax, multiplying the gross revenues by the percentages of each royalty and the national tax.
Corporate tax	
Taxable base	Profits made by Repsol in fields where they operate
Steps	1. Since operation and capital costs are not reported and they are key to determining the project's profits, we worked backward from the taxes reported by Shell assuming that most of its income comes from Margarita (the other projects they operate or have a participation in are either in the exploration phase or have marginal participation). This is not true for Repsol, which participates in various projects as an operator or stakeholder. 2. The corporate tax for Repsol would then equal what was reported by Shell under the "Taxes" classification. 3. The total corporate tax is then calculated considering the 37.5 per cent Repsol working interest.
National oil company (NOC) participation in profit gas	
Taxable base	Profit gas
Steps	1. After royalties and the national tax, the recoverable costs (operations and capital costs) are reimbursed to Repsol. The profit gas then results from the subtraction of the royalties, national tax and recoverable costs from gross revenues. In our case, we worked backwards from the total corporate tax. This amount would then correspond to 25 per cent of the total profits (25 per cent is the corporate tax rate), and we calculate the profit gas by a rule of three. 2. In order to obtain the split of the profits gas for the NOC, we checked the profit gas split tables given in the contract (Appendix B). These tables are price sensitive and the split varies according to the R-factor and the rate of production. 3. We multiplied the NOC split percentage by the profit gas.
Land-use fees	
Taxable base	Fees based on the area of the assigned block
Steps	1. Calculation of land-use by multiplying the land-use fee (in $/hectare) times the area assigned to Repsol for the Caipipendi block given in the contract. Both the values of land area and land use fees were updated with Repsol information, as the area is smaller now than in the contract.

The other national taxes (value added tax, remittance tax and transaction tax) are not included, as Repsol clarifies their exclusion in the description of the "Taxes" classification in the report. The results of the estimations of royalties, taxes and fees are summarised in Table 10.

TABLE 10: Estimate of results of royalties, taxes and fees for Margarita/Huacaya

Royalties, taxes and fees results for Margarita	
Royalties	€146,508,403.2
National production tax	€260,459,383.5
Corporate tax	€36,239,642.0
NOC Profit Gas Share	€1,459,585.7
Land-use fees	€1,203,560.8

The sum of the royalties, the hydrocarbon production tax and the NOC profit gas share account for about €408 million, which virtually matches what was reported by Repsol as "Production Entitlement". The difference of our calculations can be attributed to a difference in the currency exchange and/or to the assumption of the production allocation to the foreign and domestic markets.

4.3 Vedanta in India

Royalty payments analysis:

The analysis below focuses on Hindustan Zinc Limited's (HZL) royalty payments consolidated for all of its mines in India and specifically for its Rampura Agucha project.

The first two steps in our analysis were:

a. researching the fiscal terms that apply to the project
b. estimating the overall value of production, only possible with data on the volume of production as well as the relevant commodity prices.

The fiscal terms that govern the mining sector in India are set out in legislation and regulations.

Royalties in India's mining sector are assessed as a percentage of the market value of the commodity produced (*ad valorem*). The rates are set out in the MMDRA as revised in 2015.[9]

TABLE 11: Royalty rates

Royalty rates as related to Hindustan Zinc Limited	
Commodity	**Rates**
Zinc	a. 9.5% of London Metal Exchange Zinc metal price on ad valorem basis chargeable on contained zinc metal in ore produced. b. 10% of London Metal Exchange Zinc metal price on ad valorem basis chargeable on contained zinc metal in concentrate produced.
Lead	a. 8.5% of London Metal Exchange lead metal price chargeable on the contained lead metal in ore produced. b. 14.5% of London Metal Exchange lead metal price chargeable on the contained lead metal in the concentrate produced.
Silver	a. By-product: 7% of London Metal Exchange price chargeable on by-product silver metal actually produced. b. Primary Silver: 5% of London Metal Exchange silver metal price chargeable on the contained silver metal in ore produced

HZL provides detailed production statistics in their annual reports. Consolidated production from across their lead-zinc mines is provided in the table below.

TABLE 12: Combined production data for Hindustan Zinc Limited Mines

	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013
Mined zinc (tonnes)	755,964	744,271	774,330	769,897	764,671
Mined lead (tonnes)	151,020	144,653	112,752	109,821	105,529
Refined zinc (tonnes)	671,988	758,938	733,803	749,167	676,921
Refined lead (tonnes)	144,294	151,576	134,898	129,858	124,816
Refined silver (tonnes)	480	459	368	388	408

Source: http://www.hzlindia.com/key_financial_info.aspx

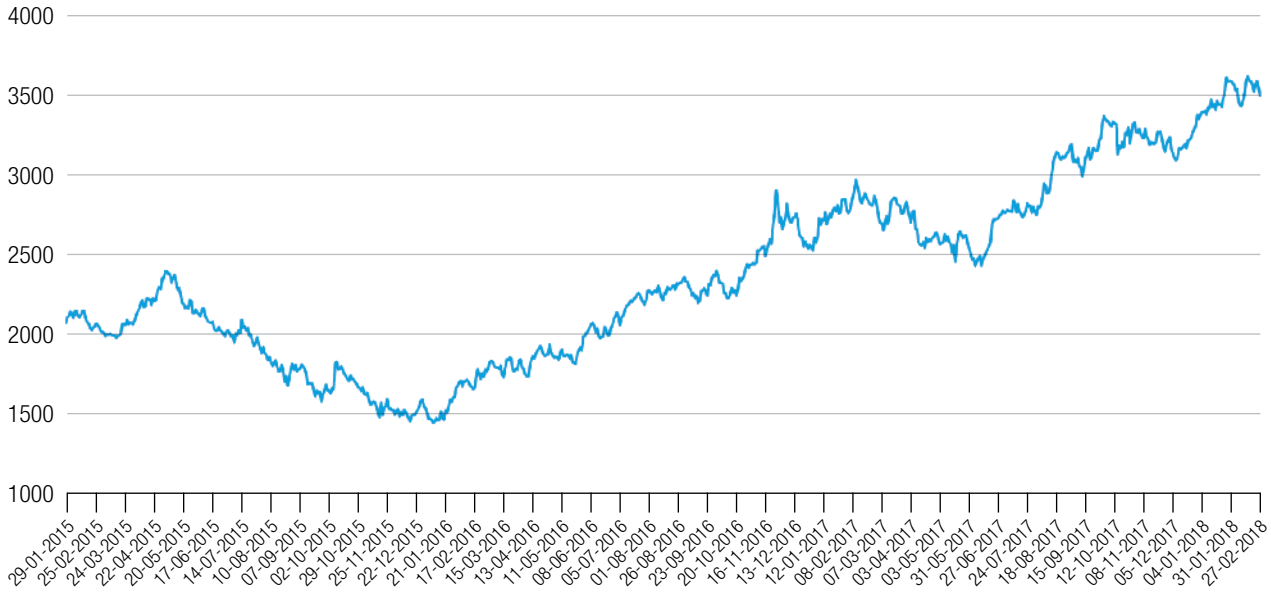
Production statistics for the Rampura Agucha for zinc and lead are provided in Table 13. The company does not provide data for silver production broken down by mine.

TABLE 13: Rampura Agucha Production Data[10]

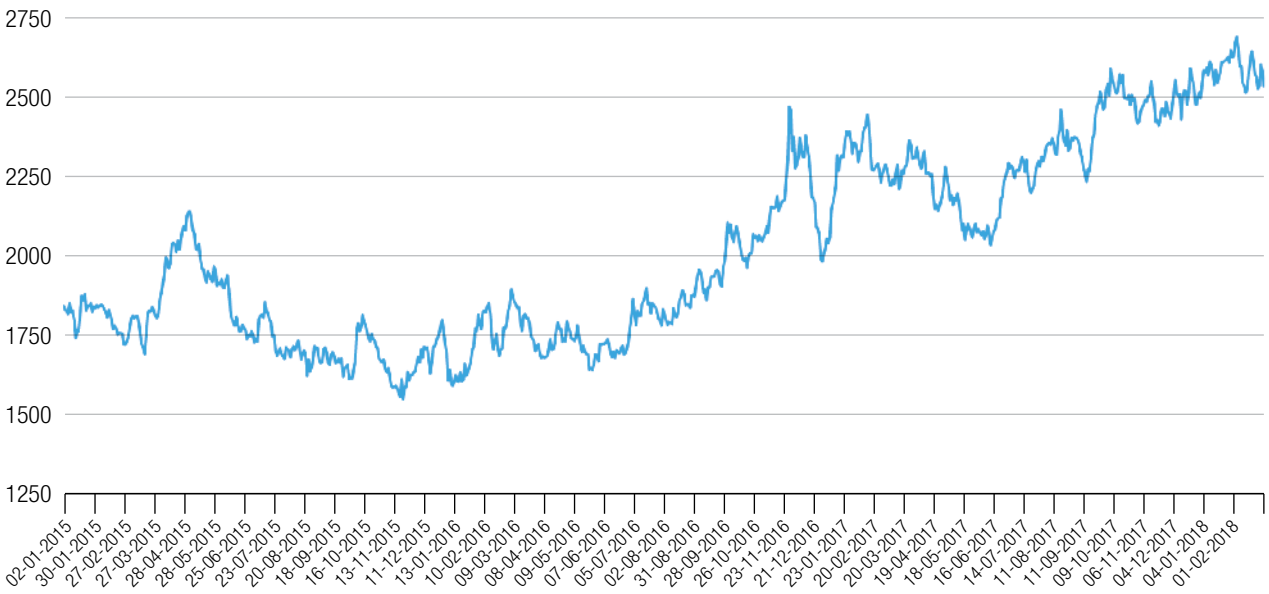
Zinc	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013
Ore mined ('000 MT)	4,696	4705	5,451	5804	6,149
Feed grade %	12.2	12	13	12.4	12.3
Mined metal ('000 MT)	483	510.1	640.8	652.7	677.3
Lead					
Feed grade %	1.7	1.9	1.7	1.7	1.8
Mined metal ('000 MT)	45	55.2	57.4	57	65.6

As indicated above, royalties are assessed based on prices as set out at the London Metal Exchange. HZL mines produce three commodities: zinc, lead and silver. In the midst of a general slump and slow recovery of commodity prices, zinc and lead have seen strong, sustained price increases in recent years. Our analysis is based on average annual prices which can be expected to reduce the accuracy of the analysis.

London Metal Exchange Zinc Prices 2015 - Present



London Metal Exchange Lead Prices 2015 – Present



The price of silver over the same period has fluctuated significantly but has not increased consistently.

London Bullion Market Silver Prices 2015 – Present

In the tables that follow, we seek to verify the royalty payments reported by Vedanta for all of the HZL mines and also for Rampura Agucha. Combining production volumes for the three minerals (zinc, lead and silver) with average annual commodity prices allows us to estimate mineral revenues. Applying the mineral-specific royalty rate results in an estimated royalty that we then compared with the royalty payments, as reported.

TABLE 14: HZL Mines consolidated

MINERAL PRODUCTION

Mined data (saleable tonnes)	2015/16	2016/17
Zinc	744,271	755,964
Lead	144,653	151,020
Silver	459	480

AVERAGE COMMODITY PRICES (IN US$)

Zinc – US$/ metric tonne	$1,840.75	$2,375.62
Lead – US$/metric tonne	$1,763.70	$1,984.16
Silver – US$/oz	$15.22	$17.75

PROJECT REVENUE

US$		
Zinc	1,370,020,492	1,795,879,937
Lead	255,124,149	299,647,813
Silver	224,649,403	273,901,716

ROYALTY RATES

Zinc	10%	10%
Lead	14%	14%
Silver	7.0%	7.0%

CALCULATED ROYALTY

Royalty (calculated)		
Zinc	137.00	179.59
Lead	36.99	43.45
Silver	15.73	19.17
Total	**189.72**	**242.21**

COMPARING CALCULATED V REPORTED ROYALTY PAYMENTS

Calculated royalty	189.72	242.21
Vedanta reported royalty	174.73	333.02
Difference	**-14.99**	**-90.81**

TABLE 15: Rampura Agucha

MINERAL PRODUCTION

Mined data (saleable tonnes)	2015/16	2016/17
Zinc	510,100	483,000
Lead	55,200	45,000
Silver	213.73*	223.51*

* Estimate based on reserve grades and contribution per cent by property.

AVERAGE COMMODITY PRICES

Zinc – US$/ metric tonne	$1,840.75	$2,375.62
Lead – US$/metric tonne	$1,763.70	$1,984.16
Silver – US$/oz	$15.22	$17.75

PROJECT REVENUE

US$		
Zinc	938,969,075	1,147,422,376
Lead	97,356,108	89,287,191
Silver	104,606,103	127,540,028

ROYALTY RATES

Zinc	10%	10%
Lead	14.5%	14.5%
Silver	7.0%	7.0%

CALCULATED ROYALTY

Royalty (calculated)		
Zinc	93.90	114.74
Lead	14.12	12.95
Silver	7.32	8.93
Total	**115.34**	**136.62**

COMPARING CALCULATED V REPORTED ROYALTY PAYMENTS

Calculated royalty	115.34	136.62
Vedanta reported royalty	112.45	194.36
Difference	**2.89**	**-57.74**

There are significant differences between our calculated royalty payments and those disclosed by Vedanta in the company's payments to governments reports.

We wrote to Vedanta in order to seek clarification about these discrepancies. Vedanta provided detailed explanations for the consolidated royalty payments made by the five mines for the year 2016/17, which have been included in the report.

4.4 Statoil, BP and ENI joint venture in Angola

Project-level data is available from several sources. Statoil discloses its share of overall production. For 2014 and 2015, Statoil also published its net entitlement (the company's share of both cost oil and profit oil). In contrast to most other oil-producing countries, the government also provides an unusual amount of project-level data:

- Sonangol, the national oil company, represents the government in the production sharing contracts, and in some Blocks also holds an equity stake. Sonangol publishes production and profit oil volumes for each producing Block.[11]
- Angola's Ministry of Finance also publishes Block-level information including: export volumes, the market price for oil, the value of government profit oil, and the value of combined oil company corporate tax payments.[12]

The published data is shown in Table 16 below.

TABLE 16: Available project-level data

PRODUCTION

Million barrels	2016	2015	2014
Statoil (Calculated for Block production)	115.6	114.5	119.4
Sonangol (Block Production)	115.4	114.5	119.5
Min Finance (Block exports)	114.0	113.8	119.9

OIL PRICE

$/bbl	2016	2015	2014
Statoil (Calculated from PtG Report – Block 15)	41.07	47.66	104.1
Exxon (Calcuated from PtG Report – Block 15)	42.80		
Ministry of Finance (Reported Market Price)	40.80	51.29	101.25
Brent (Not Adjusted for Block 15)	43.55	52.35	99.03

GOVERNMENT PROFIT OIL

Million barrels	2016	2015	2014
Exxon (report for Block)	43.9		
Statoil (increased to Block level)	43.5	52.5	105.0
Sonangol (reported for Block)	43.9	53.9	64.0
Ministry of Finance (calculated)[13]	42.8	50.5	68.3

CORPORATE TAX PAYMENTS[14]

$ Millions	2016	2015	2014
Statoil (Increased to Block level)	333.8	938.7	884.3
BP (Increased to Block level)	419.6	444.7	
Exxon (Increased to Block level)	406.5		
ENI (Increased to Block level)	348.0		
Ministry of Finance (Reported for Block)	351.0	432.3	1009.5

An analysis of government revenue from a production sharing contract follows a logical sequence. The first step is to deduct eligible costs (known as cost oil) from gross production. The production (known as profit oil) is then allocated between the government and the companies. Finally, corporate tax would be assessed on the respective joint venture partners.

Given data limitations, we have had to adopt a different approach as set out below:

1. We begin with gross production as reported by Statoil and by the government.

2. We use government profit oil as reported by Statoil and by the government.

3. We use company tax payments to calculate company profit oil (based on the assumption that the tax paid is 50% of company profit oil).

4. We combine company and government profit oil to determine total profit oil.

5. We calculate cost oil as the difference between gross production and total profit oil.

We provided two sets of analysis, one based on Statoil data "grossed-up" to the Block level. We provide a comparative analysis from government data (mostly Sonangol data supplemented where appropriate from Ministry of Finance). We limit our analysis to 2015 and 2016 as for 2014 there was a wide divergence between data provided by Statoil and data provided by the government. Government data reports around 65 million barrels of profit oil from the Block, while Statoil data (increased to the Block level) would be more than 105 million barrels (See Profit Oil Table above). Furthermore, Statoil tax payment data from 2015 seemed unusually high.[15] As the tax payment is an integral part of our methodology, for that one year, we made use of data provided by BP instead.

The table below shows the methodology as applied to the 2015 data.

TABLE 17: Analysis Methodology Applied to 2015 Data

MMMBO	Statoil Data	Government data
Gross production (1)	114.5	114.5
Cost oil (5)	43.3	43.8
Profit oil (4)	71.2	70.7
Profit oil to government (2)	52.5	53.9
Profit oil to IOCs (3)	18.7	16.9
Cost recovery %	38%	38%
Profit oil government share %	74%	76%

Based on the above-mentioned analysis, we generated estimated payments to government of both profit oil and corporate tax for each of the equity partners.

The analysis was twofold: the first is based on Statoil's data "grossed-up" to the Block level; and the second is a comparative analysis from government data (mostly Sonangol data supplemented where appropriate from Ministry of Finance data).

The analysis is limited to 2015 and 2016 using both company and government data, as for 2014 there was a wide divergence between data provided by Statoil and data provided by the government. Government data reports around 65 million barrels of profit oil from the block, while Statoil data (increased to the Block level) would be more than 105 million barrels (see Government Profit Oil table of year 2014 above). Furthermore, Statoil tax payment data from 2015 seemed unusually high.[16] As the tax payment is an integral part of our methodology, for that one year, we made use of data provided by BP instead.

TABLE 18: 2016 Estimated Payments to Government – Block 15

2016 (US$ millions)	Statoil	BP	ENI	EXXON	TOTAL
Company calculations					
Profit oil	238.2	476.6	357.4	714.8	1,787.0
Corporate tax (IRP)	44.5	89.0	66.8	133.5	333.8
TOTAL	**282.7**	**565.6**	**424.2**	**848.3**	**2,120.8**
Government calculations					
Profit oil	238.7	477.6	358.1	716.3	1,790.7
Corporate tax (IRP)	46.8	93.6	70.2	140.4	351.0
TOTAL	**285.5**	**571.2**	**428.3**	**856.7**	**2,141.6**

TABLE 19: 2015 Estimated Payments to Government – Block 15

2015 (US$ millions)	Statoil	BP	ENI	EXXON	TOTAL
Company calculations					
Profit oil	333.6	667.5	500.6	1001.1	2,502.8
Corporate tax (IRP)	59.3	118.6	88.9	177.9	444.7
TOTAL	**392.9**	**786.1**	**589.5**	**1,179.0**	**2,947.5**
Government calculations					
Profit oil	368.2	736.7	552.4	1,104.9	2,762.2
Corporate tax (IRP)	57.6	115.3	86.5	172.9	432.3
TOTAL	**425.8**	**852.0**	**638.9**	**1,277.8**	**3,194.5**

ENDNOTES

1 Decree-Law Nº 1/1986 dated 10 February 1986.

2 Tullow Oil, *Tullow Annual Report 2015*, p.171.

3 In 2017, Hess reported that, "An agreement has been reached between the Ministry of Mines and Hydrocarbons of Equatorial Guinea and Hess Corporation as well as its license partners on a $220 million settlement on tax issues related to the companies' interests in two producing oilfields, Ceiba and Okume."
See http://theinsidercarnews.com/2017/10/25/hess-corp-equatorial-guinea-agree-on-220m-tax-settlement/.

4 2015 = $47; 2014 = $92.5, and 2013 = $100.3

5 In 2017, for example, the Ministry of Mines, Industry and Energy of Equatorial Guinea issued a press release indicating that Block G partners had reached a $220-million-dollar settlement on back taxes owing from the Ceiba and Okume fields.
See Globe News Wire, *Hess Corporation Reaches Amicable Tax Settlement with Equatorial Guinea*, 23 October 2017: https://globenewswire.com/news-release/2017/10/23/1151759/0/en/Hess-Corporation-Reaches-Amicable-Tax-Settlement-With-Equatorial-Guinea.html.

6 Prices in millions of British Thermal Units (BTU) according to Ministry of Hydrocarbons of Bolivia, *Monthly report of natural gas prices*, 2017: http://sieeeh.hidrocarburos.gob.bo/precios/2018

7 Repsol, *The Caipipendi block in Bolivia, a successful case of integration*, 2014, p.20: https://www.repsol.energy/imagenes/global/en/1.The_Caipiendi_Project_in_Bolivia_a_successful_case_of_integration_tcm14-31581.pdf

8 YPFB, *Operation contract for the Caipipendi Block*, 2006:
http://resourcecontracts.org/contract/ocds-591adf-7590925822/view#/

9 *Mines and Minerals (Development and Regulation) Act* 1957, Schedule Two:
http://ibm.nic.in/writereaddata/files/04192017182242MMDR%20Act%202015.pdf

10 Data from HZL Annual Reports FY, 2013-FY 2017.

11 See Sonangol Annual Reports 2014 through 2016.

12 Monthly and Annual Data published by the Ministry of Finance: http://www.minfin.gov.ao/PortalMinfin/faces/petroleo?_adf.ctrl-state=1a9i73pksq_47&wcnav.model=%2Foracle%2Fwebcenter%2Fportalapp%2Fnavigations%2Feconomianacional-navigationModel&_afrLoop=684057017427235

13 Number of barrels calculated from reported payment and Block specific oil price.

14 Company reporting prorated to equity stake in order to show comparable data at the Block level.

15 Statoil has indicated that the higher 2015 payment is the result of a timing difference between 2014 and 2015.

16 In a conversation with TI EU, Statoil has indicated that the higher 2015 payment is the result of a timing difference between 2014 and 2015.

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