Government Revenues from Mining: A Case Study of Caledonia's Blanket Mine

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ABBREVIATIONS AND ACRONYMS

AIM	Alternative Investment Market: London Stock Exchange	GSM	Greenstone Management Services Limited
AISC	All in Sustaining Cost	nina Cost	
BETS	Blanket Employee Trust Services (Private) Limited	IMF	International Monetary Fund
		IFC	International Finance Corporation
BML	Blanket Mine (1983) (Private) Limited		London Interbank Offered Rate
DTA	Double Taxation Agreement	NIEEF	National Indigenisation and Economic
EITI	Extractive Industries Transparency Initiative		Empowerment Fund
FREMIRO	Fremiro Investments (Private) Limited	TSX	Toronto Stock Exchange
GCSOT	Gwanda Community Share Ownership Trust	ZMRTI	Zimbabwe Revenue Transparency Initiative

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ABOUT RESOURCES FOR DEVELOPMENT CONSULTING

Resources for Development Consulting is a policy research firm that seeks to assist citizens in resource-rich developing countries to secure a fair share of extractive sector wealth by analyzing contracts and broader fiscal regimes, and conducting integrated economic analyses in order to assess plausible government revenues.

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EXECUTIVE SUMMARY

Expectations that the mining sector would drive Zimbabwe's economic recovery have not been met. The amount of tax that mining companies have paid has been disappointing. Accounting for government revenues from mining requires project-level analysis, including production volumes and costs as well as commodity prices. This study seeks to demonstrate how public domain data can be integrated into a comprehensive economic analysis in order to understand why a company paid the tax it did in the past, and what amount of tax it might pay in the future.

The Government of Zimbabwe does not publish project-by-project revenue collection data. Detailed economic data can be found, however, in the reports that companies provide to their investors. The analysis focuses on one specific project: the Blanket gold mine operated by Caledonia near Gwanda. Gold is now Zimbabwe's leading mineral export and the Blanket mine accounts for nearly 14% of industrial production. The project was selected because of the volume of public domain economic data available. As a company listed on the Toronto Stock Exchange, Caledonia is required to disclose annual financial data and also detailed forecasts on future production.

The Blanket mine has been in operation for more than 100 years and is one of the few mines in the country to have produced more than 1 million ounces. The mine was the first in the country to complete the indigenisation process. Caledonia owns 49%, with the remaining 51% divided among: Gwanda Community Trust (10%); Blanket Employee Trust (10%); the NIEEF (16%) and Fremiro (15%).

As Zimbabwe has not kept pace with other African governments in disclosing mining contracts, the only public source of information on the tax terms that apply to the project come from Caledonia's filings to their investors. There are three main sources of government revenue from the Blanket mine: a 5% royalty on the value of gold sales, a 25% corporate income tax, and withholding taxes on payments to non-resident companies (5% on dividends and 15% on management fees).

The Blanket mine has generated more than \$50 million in government revenue since it reopened in 2009. Corporate income tax accounts for about half of that total. Government revenue declined significantly in 2015, even though production remained high, as all available income was devoted to mine expansion and no income or dividend withholding taxes were paid. Government revenues should increase in the coming years due to mine expansion, though they will be heavily dependent on the price of gold. Annual revenue can be expected to peak in the early 2020s at just under \$20 million at \$1,200/oz and more than \$30 million at \$1,600/oz.

Economic benefits to the four indigenous partners depend on the terms through which they secured their stake and future gold prices. The community trust acquired its 10% stake at no cost. By 2013 it had received a \$1 million donation and \$4 million in advanced dividends. It will not receive any further funds until it has repaid the advances including interest (+10%). If gold prices are high, the community trust could receive as much as \$3 million per year beginning in 2019; under low prices it could wait until at least 2022 to receive around \$2 million per year.

The other three indigenous partners purchased their respective stakes for a combined \$30.1 million through a vendor loan from Caledonia. The loans incur a high interest rate (+10%) and will be repaid through 80% of the partners' available dividends. The NIEEF (National Indigenisation and Economic Empowerment Fund) received a dividend advance of \$1.8 million and it was paid off by 2014. From this point forward, the three indigenous partners receive only 20% of their respective dividends until the loans are repaid. Due to the low price of gold and the high rate of interest, the loan balances currently exceed the original loan amounts. If the price of gold remains low, the loans will never be repaid and partners will receive only the 20% of their dividend allocation. Under a high gold price scenario, the loans could be repaid by 2021 allowing the partners to receive their full dividend payments in the years that follow.

Indigenisation comes at a cost to Caledonia. In the absence of indigenisation, the share of total project profit going to Caledonia would be expected to range from 57%-61%; with indigenisation it is expected to range from 42%-50%. If gold prices are low, the costs to Caledonia are modest. At high gold prices, however, indigenisation has significantly reduced the potential upside value to Caledonia and transferred that value to indigenous partners.

The analysis suggests that Zimbabwe is failing to secure significant potential revenues. The use of a UK subsidiary allows Caledonia to pay reduced dividend withholding taxes and could cost Zimbabwe between \$10 million and \$25 million over the life of the project. As Caledonia does not pay a withholding tax on interest payments, it appears that more than \$3.5 million in annual interest payments on the indigenisation loans leaves the country tax-free. Finally, the Blanket mine pays extremely high management fees (+7% of annual project revenue) to Caledonia's South African subsidiary, at the expense of greater tax payments to the government and greater dividend payments to indigenous partners.

The methods used in this analysis could have much wider application in the mineral sector in Zimbabwe. A comparison could be made of the fiscal terms that apply to the special mining leases and the appropriateness of potential changes to the future mining fiscal regime (e.g. capital depreciation and interest withholding taxes) could be tested. Project economic analysis should also be used as part of risk based audits in order to ensure that government revenues are not lost to aggressive tax planning.

Finally, the study highlights the continued revenue transparency shortcomings in Zimbabwe's mineral sector. This analysis was possible only because Caledonia is required to provide economic data to its investors. The government should publish revenue payments disaggregated by company and source. Mining contracts and project specific fiscal terms should be disclosed. Citizens of Zimbabwe have at least as much of a right as Caledonia's investors to know the terms under which their natural resources are being exploited.

INTRODUCTION

In the wake of Zimbabwe's period of economic instability, the mineral sector was touted as both a solution to Zimbabwe's debt crisis and a major driver of economic recovery.¹ The mining sector did experience significant expansion due to major increases in diamond and platinum production, combined with slower but steady growth in gold production. In the last two years, however, the sector has actually been shrinking, with only gold production continuing to grow.² Whatever the levels of actual production, it is clear that the sector has not lived up to expectations as a generator of government revenue. Even before the collapse of commodity prices in 2014, the government was alleging that mining companies were not paying enough in tax.³

There have been repeated calls for greater transparency in the payments that mining companies make to government. The importance of enhanced transparency was clearly recognized in the 2011 decision to create the Zimbabwe Revenue Transparency Initiative, a domestic version of the Extractive Industries Transparency Initiative (EITI). While momentum behind that initiative seems to have waned, the calls for greater transparency continue to grow for the sector as a whole⁴, and for specific resources including diamonds⁵ and platinum.⁶ There can be no doubt that revenue transparency is an essential component of good governance in the mining sector. But revenue transparency alone can only explain how much companies actually paid. It does not explain why the companies paid the amount that they did.

Project-Level Economic Analysis

In order to account for the sector's contribution to government revenue it is essential to understand mine economics at the level of the individual project. Government revenue from the mining sector, after all, is simply the sum of revenues from each individual project. Government revenues from a specific project, in turn, are determined by the specific fiscal (tax) instruments applied to project revenues determined by production volumes, project costs and commodity prices.

The call for greater transparency therefore needs to be accompanied by better use of the data that already exists in the public domain. A recent study entitled Mineral Revenue Disclosure and the Information Needs of Various Stakeholders concludes, "there is evidence that there has been very little analysis of the information that is publicly available." ⁷

One valuable way to integrate the disparate kinds of project level data is through "cash flow" modelling.⁸ The technique is at the heart of company investment decisions and is increasingly used by governments for fiscal systems design, contract negotiation, tax administration and medium-term budget planning.⁹ There is a growing movement towards "open modelling" designed to strengthen the capacity of research institutions, journalists and civil society organizations.¹⁰ It provides an effective technique in seeking answers to common revenue-related questions: why did companies pay what they did in the past, what might they pay in the future (depending on specific assumptions); and which fiscal (tax) instruments generate government revenues at which stages of the project lifecycle.

The challenge is to find a project with sufficient data in the public domain to allow for reliable project-level analysis. As the government does not publish project-by-project data, the only available source of information is the data that companies listed on stock exchanges provide to their investors. A review of the publicly listed companies operating in Zimbabwe identified one ideal candidate: the Blanket gold mine located near Gwanda and operated by the Caledonia Mining Corporation.

Caledonia's Blanket Mine

The Blanket mine is the 3rd largest gold producer in the country, accounting for about 14% of industrial production and about 9% of total gold production. It is also the first mine to have completed the indigenisation process with 51% ownership transferred to indigenous Zimbabweans, including both a community and employee trust, in 2012.

Most importantly for this study, the mine is operated by Caledonia, a company listed on the Toronto Stock Exchange (TSX). As a publicly listed company, Caledonia is required to routinely disclose key economic data to its investors. 13 Documents formally disclosed to investors through a stock exchange are particularly valuable because regulations require that companies truthfully report on issues that would be relevant to their share price. They are also a reliable source of information because once a document is filed, unlike on a company website, it can never be removed.

Companies listed on a Canadian stock exchange are a particularly useful source of information because they are required to file detailed Technical Reports (NI 43-101) that, depending on the stage of the project, include extensive economic analysis. ¹⁴ The reports are designed to ensure that misleading or fraudulent technical information is not published on stock exchanges overseen by the Canadian Securities Authority. They must be prepared by a "qualified person" to meet standards established by the Canadian Institute of Mining, Metallurgy, and Petroleum. Perhaps most importantly, in comparison with similar requirements in other jurisdictions including Australia, South Africa and the US, only Canada requires that the full technical reports be disclosed. ¹⁵ Technical reports for the Blanket mine were published in 2006, 2011, 2014 and 2015. ¹⁶

The Blanket mine is also a good candidate for careful project-level analysis because Caledonia Mining Corporation operates only one mine. In contrast, therefore, to large mining companies where annual financial statements provide only consolidated figures for all of their operations, Caledonia's statements relate almost exclusively to the Blanket mine and provide an additional data source. Annual project level data is available from the start of 2010 through to the end of 2015. Caledonia's reporting will be even more detailed beginning in May 2017 when Canadian regulations under the new Extractive Sector Transparency Measures Act will require the company to disclose all revenue payments to the Zimbabwean government.¹⁷

Structure of the Report

The report begins with a history of the Blanket mine, including past production, the transfer of ownership to Caledonia in 2006 and the indigenisation process completed in 2012. It then reviews the main sources of government revenue - royalty, corporate income tax and withholding taxes that apply to the Blanket mine. The next section accounts for revenue payments from the three sources identified above from 2010 to 2015. This is followed by a discussion on the input assumptions necessary to forecast potential government revenues from the project in the coming years. Projections of potential government revenue based on these assumptions are then generated and analysed. The section that follows assesses the indigenisation process including the sale of ownership rights, the terms of repayment for the vendor loans, and the implications for future revenue payments to indigenous partners. The report closes with conclusions as they relate to the Blanket mine specifically and to the wider economic analysis of the mineral sector

THE BLANKET MINE

The Blanket Mine is an underground gold mine located near Gwanda, 150 km south east of Bulawayo. It is part of the Sabiwa group of mines within the Gwanda Greenstone Belt. Artisanal gold production has been reported in the area since the 19th century. Industrial production began more than 100 years ago. The mine is one of the few in Zimbabwe to have produced more than one million ounces of gold. An overview of the production history is shown in Figure 1 below. 18

Gold Production

Industrial production began in the early 20th century following the acquisition of the mine by the Matabele Reefs and Estate Company. That company operated the mine from 1906 to 1911. They subsequently sold to Forbes Rhodesia Syndicate who operated the mine from 1912-1916. No records are available from 1917 through to 1941 and it is thought that production stopped due to instability related to the World Wars. Mining resumed in 1941, with F.D.A. Payne operating the site until 1964.

Falconbridge took over the mine in 1964 and ran it for nearly 30 years. Production volumes increased significantly during this period with more than 4 million tonnes of ore processed generating more than 500,000 ounces of gold. In 1993 the mine was sold to a Canadian company named Kinross Gold Corporation. Over the course of 12 years, Kinross processed 2.4 million tonnes of ore producing nearly 400,000 ounces of gold.

Caledonia Mining Corporation, also a Canadian company, purchased the Blanket mine from Kinross in 2006. Due to economic instability in the country, operations were suspended until mid-2009. In late 2010, Blanket Mine successfully completed an expansion project that increased annual production capacity from 24,000 ounces to around 40,000 ounces. In 2014, Caledonia embarked on a further expansion phase involving the sinking of a new central shaft at an estimated cost of \$50 million from 2015 through 2017. 19

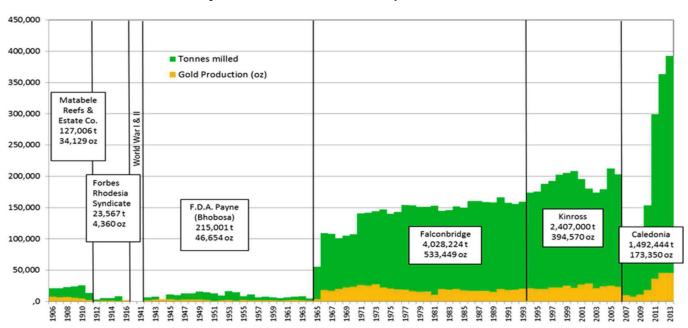


Figure 1: Blanket Mine Production History to December 2013

Mine Ownership

The Blanket Mine operates under Special Licence No. 5030 issued under the Mines and Minerals Act of 1961 (Chapter 21:05).²⁰ The legal owner of the mine is a Zimbabwean registered company named Blanket Mine (1983) (Private) Limited (BML).

Kinross Gold Corporation, a Canadian company listed on the Toronto Stock Exchange (TSX), put in place the basic corporate structure. BML is a wholly owned subsidiary of a Zimbabwean holding company that is in turn owned by a holding company in Barbados. ²¹ Upon acquisition of the mine in 2006, Caledonia added a second holding company in Barbados. The ultimate parent company at that time was the Caledonia Mining Corporation, incorporated in Canada and listed on both the TSX and the London Stock Exchange (AIM).

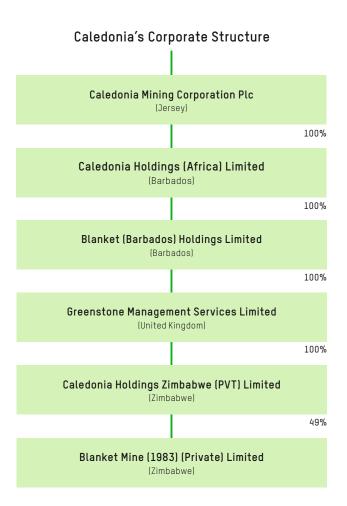
The 2007 Indigenisation and Economic Empowerment Act required that 51% of all commercial enterprises in Zimbabwe be owned by indigenous Zimbabweans. On 20 February 2012 Caledonia announced it had signed a confidential Memorandum of Understanding with the Minister of Youth, Development, Indigenisation and Empowerment.²²

Effective 5 September 2012, the ownership of Blanket Mine (1983) (Private) Limited was 49% Caledonia Mining Corporation, with the remaining 51% divided as follows:

- 10% to the Gwanda Community Share Ownership Trust (GCSOT);
- 10% to the Blanket Employee Trust Services (Private) Limited (BETS);
- 16% to the National Indigenisation and Economic Empowerment Fund (NIEEF); and,
- 15% to Fremiro Investments (Private) Limited (Fremiro).²³

In March 2012, Caledonia formed a new company in the United Kingdom named Greenstone Management Services Limited and commonly referred to as GSM (UK) in Caledonia documents. It seems likely that this subsidiary was created in order to reduce Zimbabwean withholding taxes on dividend payments by taking advantage of the Double Taxation Convention that exists with the UK.²⁴ GSM (UK) is a wholly owned subsidiary of Blanket (Barbados) Holdings Limited.²⁵

In early 2016, Caledonia re-domiciled (changed its country of incorporation) from Canada to Jersey, Channel Islands. The rationale for the change was to help investors avoid Canada's 25% withholding tax on dividend payments to non-residents. As such, it will have an impact on revenue payments to the Government of Canada, but not to the Government of Zimbabwe. The company, now known as Caledonia Mining Corporation Plc, continues to be listed on both the TSX and the AIM.²⁶



SOURCES OF GOVERNMENT REVENUE

Government revenue from a mining operation is determined by the fiscal (tax) terms that govern the project. Public domain information indicates that Zimbabwe's fiscal system for mining is based on a fairly traditional combination of a production-based royalty and corporate income tax. For the few larger projects operating under a "Special Mining Lease," there is also an additional profits tax. ²⁷

The specific fiscal terms governing each mine are contained in project-specific "mining agreements" or contracts.²⁸ Unfortunately, Zimbabwe's mining agreements are confidential documents and have not been publicly disclosed.29

While in many jurisdictions mining contracts have been confidential documents, there is a strong shift towards public disclosure.³⁰ Examples of countries in sub-Saharan Africa that have disclosed extractive sector contracts include Burkina Faso, Democratic Republic of Congo, Liberia, Mali, Mauritania, Mozambique, Republic of Congo and Sierra Leone.31 The EITI added contract disclosure to their list of recommended practices in 2013. 32 International organizations such as the International Monetary Fund (IMF) encourage contract transparency while the World Bank's International Finance Corporation (IFC) now makes contract disclosure a condition of their support.33

It is now widely accepted that confidentiality increases the risks of both corruption and revenue leakage. Even where all contract provisions are appropriate, confidentiality breeds suspicion of wrongdoing. Commercial sensitivity, often cited as a barrier to public disclosure of contracts, has proven not to be a significant issue. Zimbabwe would benefit from following international best practice and disclosing all mining contracts.34

There does not appear to be any public domain information from the Government of Zimbabwe on the fiscal terms that apply to the Blanket mine. Caledonia, however, has provided summaries of the applicable fiscal terms in documents provided to their investors.³⁵ Working from a company summary is obviously less reliable than working from the mining contract itself. However, as it would be a violation of Canadian regulations for Caledonia to provide inaccurate information to their investors, the terms can be used with a high degree of confidence.

Caledonia reports that there are three main instruments that generate government revenue from the Blanket mine:36

- Royalty: a percentage of the sale value of gold produced.
- Corporate Income Tax: a percentage of company net (after cost) income.
- · Withholding Taxes: a percentage of payments to nonresident companies.

Royalty

A royalty is a payment to government based on mineral production. It is commonly a percentage of the sale value of a mineral.³⁷ In the past, royalties were often seen as a payment for the sale of a "non-renewable resource." Increasingly, however, they are seen as a guaranteed source of government revenue for mines that are producing but not reporting profits.

There have been multiple changes to the royalty rates for industrial gold mining projects in Zimbabwe since the resumption of production at the Blanket mine in 2009 (See Table 1).

Table 1: Changes to Royalty Terms

2009	4% - royalty when Blanket production resumed
2011	4.5% - royalty rate increase on 1 January 2011
2012	7% - royalty rate increase on 1 January 2012
2014	Royalty payment no longer tax deductible
2014	5% - royalty rate reduction on 1 October 2014

Corporate Income Tax

The second source of government revenue from the mine is the corporate income tax that Blanket Mine (1983) pays on its profits. Unlike a royalty that is assessed on the sale value of production, corporate income tax is assessed on the company profits that remain after all eligible costs have been deducted. The specific terms are set out in the Income Tax Act (Chapter 23:06) including the Fifth Schedule (Section 15 (2) (f)). The tax rate is set at 25%. ³⁸

Zimbabwe's tax law provides for two provisions that could be viewed as generous. First, in contrast to many jurisdictions where capital costs are recovered over multiple years, Zimbabwean mines are allowed to expense the full amount in the year in which the costs were incurred. Second, again unlike many other jurisdictions, there is no limit on the time that past tax losses can be carried forward to be claimed against future mining income.39

Finally, there have been changes in the tax deductibility of royalty payments. In most jurisdictions, royalty payments are an allowable deduction in the calculation of taxable income. 40 The result of royalty deductibility is that the effective royalty rate declines once a mine becomes profitable and corporate income tax is paid. However, beginning in January 2014, Zimbabwe decided to disallow the deductibility of the royalty payment.

Withholding Taxes

The third main source of government revenue from the Blanket mine is withholding taxes on payments made to non-resident (foreign) companies. In the mining sector, large dividend and interest payments to non-resident companies are common. As there is no practical way for the government to tax these non-resident companies after the money has left the country, a withholding tax is commonly imposed allowing the government to impose a tax before the money leaves the country. Withholding taxes work in tandem with the income tax rate. Lower income tax jurisdictions may have higher withholding tax rates while higher income tax jurisdictions may have no withholding tax at all. In addition to generating government revenue, withholding taxes also discourage excessive payments to non-resident companies incorporated in tax havens.

According to Section 24 of the Income Tax Act, a withholding tax of 20% is charged on both dividends and interest fees, subject to any Double Taxation Agreements (DTA).

Caledonia reports that it pays no withholding tax on interest and only a 5% on dividend payments. The dividend withholding tax is reduced because the payments are made to Caledonia's subsidiary Greenstone Management Services Limited incorporated in the UK, a country with a double taxation treaty with Zimbabwe. 41 The practice of creating a subsidiary in a jurisdiction for the sole purpose of reducing withholding taxes is known as "treaty shopping" and in other jurisdictions the resulting tax benefits can be disallowed. 42 The company also pays a 15% withholding tax on management fees of \$390,000 per month that its subsidiary Greenstone Management Services, incorporated in South Africa, charges to Blanket mine.⁴³ These fees appear to be very high by industry standards, accounting for between 7.4% and 9.6% of overall project revenue in recent years.⁴⁴ Finally, as there is no withholding tax on interest, it appears that the interest on the facilitation loans discussed below (amounting to more than \$3.5 million per year) leaves Zimbabwe tax-free.

Table 2: Sources of Government Revenue

TAX INSTRUMENT	TAX BASE	TAX RATE
Royalty	Gold Sale Value	5%
Corporate Income Tax	Net Income (profit)	25%
With bolding Town	Foreign Dividends	5%
Withholding Taxes	Management Fees	15%

ACCOUNTING FOR PAST REVENUE PAYMENTS

Despite repeated calls for greater revenue transparency in Zimbabwe, and a commitment to implement the Zimbabwe Revenue Transparency Initiative (ZMRTI), the government does not disclose project-by-project revenue payments.⁴⁵ Once again, the only public domain information for the Blanket mine comes from the information that Caledonia provides to its investors. Complete annual data is publicly available from the start of 2010 through until the end of 2015.46

The starting point for analyzing revenue payments to government is overall project revenue – commonly referred to as "gross revenue." This amount is determined by the volume of gold produced multiplied by the price at which that gold was sold.

As noted above, the Blanket mine resumed production partway through 2009. Production ramped up during 2010 and 2011 and in the following years the mine has been producing more than 40,000 ounces of gold each year.

While the pattern of gold production at the Blanket mine reveals a fairly simple expansion phase leading to a plateau, the price at which that gold has been sold has fluctuated wildly. During the six years of production under examination, gold prices have been as low as \$1050/oz and as high as \$1896/oz (see Figure 2).

Gross Revenue

World market prices are not necessarily the same as the sale price for the production from a particular mine.⁴⁷ For some minerals the variation can be very large. For gold, however, modest transportation and refining costs mean that market prices and actual sale price tend to be very close.

For Blanket mine, from the resumption of production in 2009, gold was exported to Rand Refineries in South Africa with the company receiving 100% of the sale value. From the beginning of 2014, all Zimbabwean gold producers were required to sell to Fidelity Printers and Refiners Limited (a company wholly owned by the Reserve Bank of Zimbabwe) for 98.75% of the value of the gold.48

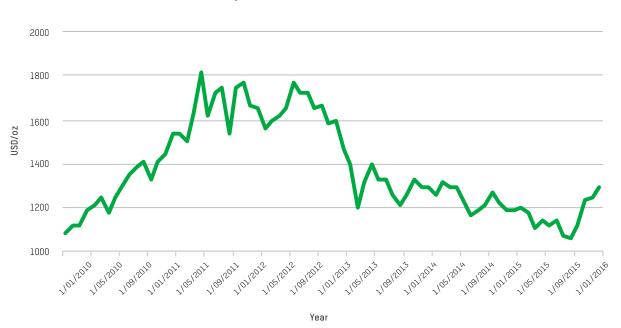


Figure 2: Market Gold Prices 2010-2015

Payments to Government

Table 4 shows consolidated data for production, average sale price and the resulting gross revenue for Blanket mine from 2010-2015 drawn from data reported by Caledonia to investors on the TSX.

Royalty payments reached a peak in 2012 but then declined because, although production remained relatively constant, the market price of gold fell significantly. This reduced the gross revenue on which the royalty was assessed.

High gold prices also resulted in 2012 being the year with the highest corporate income tax payments. No tax was paid in 2015 as the capital costs associated with the mine expansion were funded through project income. As capital cost can be claimed in full in the year in which they were spent, there was no net project income against which corporate income tax would be assessed. This period illustrates how mine expansion can result in both increased production and decreased government revenue, at least in the short term, while investment costs are recovered.

Withholding taxes came from three separate sources: management fees, dividends and facilitation loans. From 2010 through 2015, the majority of withholding taxes came from the 15% tax on the \$4.6 million in management fees that Greenstone Management Services (a Caledonia subsidiary in South Africa) charges to the Blanket Mine each year. 49

Withholding taxes on dividends paid to Caledonia were significant, particularly in 2011 and 2012. This was due in part to high gold prices. It also appears that Caledonia was paying the full 20% withholding tax on dividends in these early years. Withholding taxes were much reduced in 2013 and 2014 due to falling gold prices and to the reduction in the rate of the withholding tax to 5% because payments were made to a subsidiary in the UK. In 2013, a one-time withholding tax payment of \$1.5 million was levied when the facilitation loans were declared by Caledonia Holdings Zimbabwe as a "dividend in specie."50 In 2015, no dividends were paid as company directors decided that all cash flow wouble be dedicated to mine expansion.

As would be expected for a mature mine, corporate income tax is the largest single source of government revenue – over this six year period corporate tax generated nearly 50% of total revenue payments. The proportion would have been even higher in the absence of the mine expansion reducing corporate income tax payments in 2015.

Table 3: Production, Price and Revenue Data 2010-2015

	2010	2011	2012	2013	2014	2015
Gold Ounces Sold	17,598	35,504	45,181	45,047	42,927	42,943
Average Sale Price (USD)	\$1,273	\$1,591	\$1,666	\$1,402	\$1,245	\$1,139
Gross Revenue (\$MMs)	\$22.4	\$56.5	\$75.3	\$63.2	\$53.5	\$49.0

Table 4: Blanket Revenue Payments to Government (millions)

	2010	2011	2012	2013	2014	2015	TOTAL
Royalty	\$0.8	\$2.5	\$5.3	\$4.4	\$3.5	\$2.5	\$19
Corporate Income Tax	\$0.0	\$5.0	\$8.6	\$6.3	\$3.1	\$2.5	\$25.5
Withholding Tax	\$0.0	\$2.5	\$1.8	\$2.5	\$0.9	\$0.7	\$8.4
TOTAL	\$0.8	\$10.0	\$15.7	\$12.5	\$7.5	\$5.6	\$52.1

SCENARIO ANALYSIS & FORECAST REVENUES

Any effort to forecast potential revenue payments to government from future mining operations depend on a series of assumptions related to the potential volume of gold production and the costs of production, as well as the future sale price of gold.

Estimates for production volumes and project costs for the Blanket mine are drawn from a Technical Report, prepared under National Instrument 43-101, disclosed by Caledonia in 2015. These have been updated based on the most recent reserve and production estimates published by Caledonia.51

Production Profile

Projections of future gold production at Blanket mine are based on estimates of gold "resources" and "reserves." Resources refer to a concentration of minerals that has a reasonable prospect for economic extraction based on geological evidence. Reserves refer to the economically mineable portion of a resource demonstrated through an independent analysis known as a feasibility study.52

Figure 3 shows the production profiles used in the analysis below. Data for 2010-2015 is based on actual production as reported by Caledonia.

The Technical Report disclosed by Caledonia in July 2015 provides production profile forecasts for both the existing mine (base case) and for the mine following a proposed sinking of a second shaft (expansion). These projections have been revised downwards based on data disclosed by Caledonia in March 2016.53

Project Costs

All mining projects share a common set of project costs that correspond to the different phases of a mining project as show in Figure 4.54 Projects begin with costs associated with exploration – the search for economically viable mineral deposits. For operating mines, there are often modest ongoing exploration costs in the hope of future mine extensions or expansions. The bulk of capital costs normally come during the initial development phase, prior to initial production (e.g. buildings, mills, equipment, vehicles). For operating mines, capital costs are normally divided into "sustaining capital" referring to the investment needed to maintain current levels of production and "developmental capital" referring to the investment needed for mine expansion. Following the capital investment to develop the mine, operating costs constitute the majority of mine costs (e.g. salaries, fuel, water, grinding media, electricity, tires etc.) Finally, there are costs associated with mine closure and remediation.

As a mature mine, operating costs account for the majority of project costs at the Blanket mine. Gold mining companies commonly report project costs according to two metrics: cash costs per ounce and the "all in sustaining cost" (AISC) per ounce. Cash costs per ounce factor in basic mining, processing, transport and refining costs while AISC also includes sustaining capital cost, on-going exploration costs as well as general and administrative (headquarters) costs. Drawing on data contained in the Technical Report of July 2015, we assume a cash cost of \$702/oz and an AISC of \$745/ oz. Estimates have also been made for the developmental capital costs associated with both the "expansion" and the "upside" scenarios.

Figure 4: Phases in the Lifecycle of a Mining Project



Gold Sale Price

Gold price is the most important variable for projecting potential future government revenues. It is also the least predictable, as the price data for 2010 through 2015 in Figure 2 demonstrates. For the analysis below, revenue prospects have been examined at three different gold prices: \$1,200/oz, \$1,400/oz and \$1,600/oz.

Potential Government Revenue

The results from cash flow models are not meant to be predictions of actual government revenue. Rather, they provide estimates of potential government revenue under specific sets of assumptions related to production volumes, project costs and gold price.

The base case for our analysis includes the mine expansion that Blanket embarked upon in 2015. Gold production assumptions are set out in Figure 3.

Figure 3: Production Profiles — Past and Potential

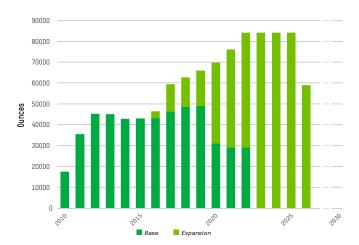
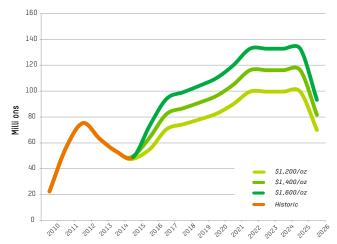


Figure 5: Total Project Revenue Forecast



As was the case when analysing past revenue payments, the starting point for any analysis of future government revenues is overall project revenues. Forecast project revenues at three different gold prices are shown in Figure 5.

Forecast government revenues from the three main sources - royalty, corporate income tax and withholding tax - are shown in Figure 6. The significant decline in government revenues due to the fall in gold prices, combined with the recovery of capital costs from the expansion phase is clearly evident. Future fluctuations in government revenue, in the absences of further mine expansion, will be determined largely by the sale price of gold.

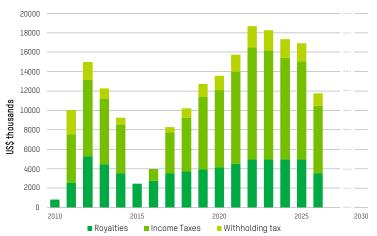
Figure 7 shows the relative contribution of the three fiscal instruments to forecasted government revenues. As was the case with the 2010-2015 period, the majority of government revenue is generated by corporate income tax.

The analysis above sets out both past and potential future revenue payments to the Government of Zimbabwe from three fiscal instruments: royalties, corporate income tax and the withholding tax on dividend payments to Caledonia.

Figure 6: Government Revenue Forecast



Figure 7: Potential Government Revenue by Source (\$1,200/oz)



INDIGENISATION

The 2007 Indigenisation and Economic Empowerment Act requires that 51% of all commercial enterprises in Zimbabwe be owned by indigenous Zimbabweans. The Minister of Youth Development, Indigenisation and Empowerment set out the terms for indigenisation in the mining sector in 2011.55

From September 2012, four indigenous partners have held 51% of the equity of Blanket Mine (1983) (Private) Limited (BML).56

- Gwanda Community Share Ownership Trust (10%) (GCSOT);
- Blanket Employee Trust Services (Private) Limited (10%) (BETS);
- National Indigenisation and Economic Empowerment Fund (16%) (NIEEF) and
- Fremiro Investments (Private) Limited (15%) (Fremiro).

The 10% stake for GCSOT was characterized by Caledonia as a "donation." The other three indigenous partners purchased their respective stakes for a total of \$30.1 million dollars through what is known as a "vendor loan" from Caledonia.57 Company documents suggest that the \$30.1 million figure was based on the market capitalization of Caledonia at the time of the indigenisation (51% = \$23 million) plus an option value (51% = \$14.6 million) prorated to the respective stakes of the three indigenous partners holding the remaining 41%.58

The indigenous partners did not fund any portion of the acquisition cost of their equity interest and this is reflected in the repayment terms. The loans incur a high interest rate of LIBOR plus 10% and are repaid through the allocation to Caledonia of 80% of the dividends owning to the indigenous partners.⁵⁹ Until the original loans are paid off, therefore, indigenous partners will receive only the 20% of their share of dividends paid by the Blanket mine.

Past Payments to Indigenous Partners

Caledonia provided early funds to both the GCSOT and the NIEEF. The GCSOT received a \$1 million donation in 2012. Advances on dividend payments were provided to the GCSOT in two instalments (\$4 million) and the NIEEF (\$1.8 million). In both cases they receive additional dividends only after these advances have been recovered by Caledonia. The GCSOT incurs interest charges on the advance at the same rate as the facilitation loans (LIBOR plus 10%). The advance to the NIEEF was interest free, and interest charges on their facilitation loan was suspended during 2013 and 2014 while the advance was being repaid.60

Indigenisation was completed in September 2012. Dividend payments were made to indigenous partners in 2013 and 2014. In 2015, however, no dividends were paid as funds were devoted to mine expansion. Table 5 shows the allocation of dividends before taking into account the repayment of either the facilitation loans or the advances. 61 In total, dividends allocated to indigenous partners were around \$7.6 million.

The amounts actually paid to indigenous partners, as calculated from Caledonia filings are shown in Table 6. The largest recipient is the GCSOT with more than \$5 million, including the \$1 million donation and \$4 million in advance dividends. The NIEEF also received substantial sums due to the \$1.8 million advance. BETS and Fremiro both received only the 20% of their remaining dividend payments after 80% was allocated to the repayment of their facilitation loans.

Table 5: Dividend Allocation to Indigenous Partners (000s)

	STAKE	2012	2013	2014	2015	TOTAL
GCT	10%	-	\$901	\$604	-	\$1,505
BETS	10%	-	\$901	\$604	-	\$1,505
NIEEF	16%	-	\$1,442	\$966	-	\$2,408
Fremiro	15%	-	\$1,352	\$906	-	\$2,258
TOTAL	51%	\$4800	\$4,596	\$3,080	-	\$7,676

Table 6: Payments to Indigenisation Partners (000s)

	STAKE	2012	2013	2014	2015	TOTAL
GCT	10%	\$3,000	\$2,000	-	-	\$5,000
BETS	10%	-	\$53	\$35	-	\$88
NIEEF	16%	\$1,800	-	\$285	-	\$2,085
Fremiro	15%	-	\$80	\$52	-	\$132
TOTAL	51%	\$4800	\$2,133	\$372	-	\$7,305

Future Payments to Indigenous Partners

Future dividend payments will depend on the volume of gold produced and the price at which it is sold. They will also depend on the timelines for the repayment of the dividend advances and the facilitation loans.

From the start of 2016, GCSOT must still repay more than \$3.2 million in advance dividends plus interest. As a result, additional revenues will not be received for several more years. Under a high gold price scenario (\$1,600/oz) revenues could amount to more than \$3 million per year beginning starting in 2019. Under a low price scenario (\$1,200/oz) revenues could still amount to more than \$2 million per year but would not start until 2022. A gold price of around \$1,125 is necessary simply to cover the accumulating interest charges.

NIEEF has already repaid the \$1.8 million in advance dividends. This means that the three indigenous partners that purchased their respective stakes (NIEEF, BETS and Fremiro) are in a similar position. Each will receive only 20% of their share of dividends until the loans are repaid. As mentioned above, no dividends were paid in 2015. In addition, Caledonia agreed to place a moratorium on interest on the loans until dividend payments resume from BML.⁶² The outstanding amount owing on the facilitation loans is shown in Table A. Low gold prices combined with high interest rates mean that, as of the start of 2016, the loan balances are larger than the original loans. As is the case with the GCSOT, gold price of around \$1,125 is necessary to cover the accumulating interest.

The price of gold will be the key factor in determining how soon the loans will be repaid and the indigenous partners can receive their full share of dividends. Under a high price scenario (\$1,600/oz) the loans could be repaid as early as 2021, while under a low price scenario (\$1,200/oz) the loans would not be repaid before mine production under the current expansion phase comes to an end.

Figure 8 and Figure 9 show revenue forecasts to indigenous partners under differing price scenarios. In both cases, the data through the end of 2015 are provided by Caledonia. Cash flow during the expansion phase is negative and this is assumed to be financed 100% through a shareholder loan from Caledonia without any contribution from the indigenous partners.

Table 7: Facilitation Loans

	BETS	NIEEF	FREMIRO
Initial Loans	\$7,339	\$11,742	\$11,008
Accrued Interest	\$1,850	\$488	\$2,775
Loan Balance	\$7,772	\$11,907	\$11,657

25,000 20,000 15,000 10,000 5,000 2015 2020 2025 2030 -5,000

Figure 8: Cash Flow Between Joint Venture Partners

Figure 9: Forecast Payments at \$1,600/oz

■ Fremiro ■ GCS0T

■ Caledonia

■ BETS

NIEEF

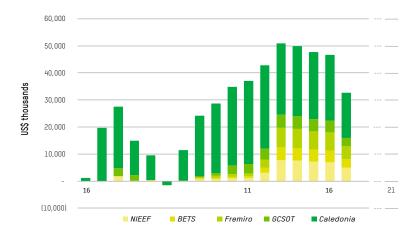
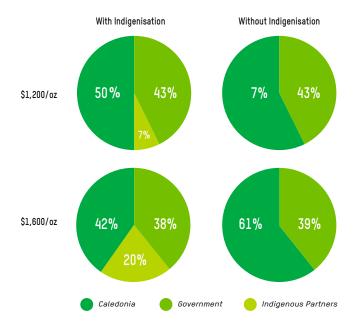


Figure 10: Comparing % Take



Impact on Caledonia

The economic benefits to indigenous partners come at a cost to Caledonia. After indigenisation, the company has three cash flow streams from the Blanket mine.63

- Management fees of \$390,000 per month paid to Greenstone Management Services (South Africa).
- Dividends (49%) paid by Blanket Mine to Caledonia Holdings Zimbabwe.
- Facilitation loan repayments paid by BETS, NIEEF and Fremiro.

The overall impact of the indigenisation process on Caledonia's bottom line depends on the gold price. At low prices the impact is modest while at high prices the impact is very significant. This can be seen by comparing the share of the profit (sometimes called the "take") going to Caledonia with and without indigenisation (See Figure 10).64

Assuming that indigenisation did not occur, the share of the profit going to the company over the lifecycle of the project would be 57% at \$1,200/oz and 61% at \$1,600/oz. Under this scenario, the bulk of the profit goes to the company and the company's share increases as the project becomes more profitable.

With indigenisation, the share of profit going to Caledonia drops to 50% at \$1,200/oz and drops much further to 42% at \$1,600/oz. Even with indigenisation, Caledonia still secures 50% of the divisible revenue at \$1,200/oz because the facilitation loans are never repaid and therefore the three indigenous partners receive only 20% of their respective dividends. At higher gold prices, however, the loans are paid off relatively quickly and the indigenous partners then receive the full benefit of dividends reducing the overall share going to Caledonia. Under a high price scenario, once the loans are repaid, Caledonia's share of the profit drops to 34%.

The indigenisation process therefore has significantly reduced the potential upside value to Caledonia and transferred that value to the indigenous partners.

CONCLUSIONS

This case study of the economics of the Blanket mine has sought to demonstrate how the full range of public domain data, particularly data provided by Caledonia to its investors, can be integrated into a comprehensive economic analysis in order to understand why the company paid the taxes it did in the past as well as what revenues might be expected in the future.

The Blanket mine has generated just over \$50 million in government revenue since reopening in 2009. As would be expected from a mature mine, roughly half of that amount has come from corporate income tax payments. Government revenues dropped significantly in 2015 as all project income was devoted to mine expansion. As there is no limit on the depreciation of capital investments, no corporate income tax was payable.

Government revenues are likely to be higher in future years as the mine expands production. All revenue forecasts depend on assumptions related to production volume and costs as well as the future price of gold. Based on the assumptions set out above, our analysis suggests that government revenues can be expected to peak in the early 2020s at just under \$20 million per year with gold prices at \$1,200/oz or more than \$30 million per year at \$1,600/oz.

The economic benefits flowing to indigenous partners also depend heavily on the future price of gold. The GCSOT received their 10% stake at no cost and also benefited from a \$1 million donation and a \$4 million in advance dividends. It will be several years, however, before those advances are repaid and funds once again flow to the community trust. The other indigenous partners were required to purchase their respective stakes. They did not provide any upfront payment to acquire their rights but rather purchased them through vendor loans. This is reflected in the repayment terms: a high interest rate (LIBOR +10%) and an allocation of 80% of future dividends until the loans are repaid. If gold prices are low, the loans will never be repaid and full dividend payments will never materialize. If gold prices are high, the loans will be repaid relatively quickly and a significant proportion of the upside benefits will have been transferred from Caledonia to the indigenous partners.

Further inquiry is warranted into the revenue implications of Caledonia's corporate structure. The creation of a UKsubsidiary for no reason other than to minimize dividend withholding taxes is a practice known as "treaty shopping" and in some cases the resulting tax benefits can be disallowed. 65 For the years 2013 and 2014 alone, it appears that Caledonia avoided about \$1.5 million in dividend withholding taxes by creating a new subsidiary in the UK. Over the lifecycle of the mine, the lost revenue would be more than \$11 million at \$1,200/oz and more than \$27 million at \$1,600/ oz. Furthermore, as Caledonia does not pay a withholding tax on interest payments, it appears that more than \$3.5 million in facilitation payment interest leaves Zimbabwe each year tax-free. The management fees that Blanket pays to Caledonia's subsidiary Greenstone Management Services (South Africa) are extremely high, amounting to well over 7% of gross project revenues. While there is a 15% withholding tax on these payments, the fees are a major drain on the profitability of the project. Finally, although less relevant to potential revenue loss in Zimbabwe, further analysis should be undertaken of the revenue impact of Caledonia's subsidiaries in tax havens in Barbados and, most recently, Jersev.66

This analysis also points to potential avenues of inquiry for the wider mineral sector in Zimbabwe. The development of a project-specific economic model creates the opportunity to test alternative fiscal terms. For example, it would be possible to assess current Blanket terms against the combination of a reduced corporate income tax combined with an additional profits tax as apply to the "special mining leases." It would also be possible to assess changes that could be considered as part of proposed new legislation on the mining fiscal regime such as a withholding tax on foreign interest payments or a limit on the depreciation of capital investments.

Project-specific economic models are an essential tool for effective tax administration and the implementation of risk-based audits. Concerns have been raised, for example, that the bulk of government revenue from the mineral sector comes from royalties. The implicit assumption is that companies are not paying the full amount of corporate

income tax that they owe. As this report has illustrated, determining the timelines and relative importance of the different fiscal instruments can only be done at the project level. For mature projects like the Blanket mine, corporate income tax should be the largest source of government revenue. For new mines, or for mines that have recently undergone substantial capital investment, it would be expected that little corporate income tax would be paid, particularly given that 100% of capital expenditures can be applied in the year in which they were incurred. Experience in neighbouring countries suggests that reporting positive net income can be deferred almost indefinitely through aggressive tax planning.67 Whether such techniques are being used in Zimbabwe can only be determined through comprehensive audits.

Finally, it is important to reflect on what this case study means for revenue transparency in Zimbabwe's mineral sector. This analysis was only possible because Caledonia is required, as a company publicly listed on the TSX in Canada, to provide investors with detailed economic reporting. This includes not only quarterly and annual reports and financial statements, but also the disclosure of mine forecasts through its Technical Reports (43-101). Furthermore, determining revenue payments to the Zimbabwe government was possible only because Caledonia operates only one mine. Had Caledonia been a larger company operating multiple mines it would have been difficult to disaggregate the Blanket-specific revenue payments.

As part of improved governance in the mining sector, the Government should publish revenue payments made by mining companies on an annual basis, disaggregated by the specific revenue source. The Government should also publish the project-specific fiscal terms that apply to all mining projects. This information is not commercially sensitive and contract disclosure in other jurisdictions has demonstrated that it increases trust between citizens, government and companies. Surely the citizens of Zimbabwe have as much of a right as Caledonia's investors to know the terms under which their natural resources are being exploited.

NOTES

- See for example: Tony Hawkins, The Mining Sector in Zimbabwe and its Potential Contribution to Recovery, UNDP, 2009; and Paul Jourdan (et al), Mining Sector Policy Study, USAID Strategic Research and Analysis Program,
- By export value, gold has overtaken PGM to become the highest value mineral produced in Zimbabwe. While other sectors have remained static or contracts, gold production has grown by 30% since 2014. It accounted for nearly 30% of total value of minerals produced in 2014, rising to around 40% in 2015. State Of The Mining Industry Survey Report 2015, Zimbabwe Chamber of Mines, 2015, p. 6.
- "Currently, whilst mining exports for 2011 are in excess of US\$2 billion, the contribution to the fiscus of the mining sector excluding diamonds will only be USS150 million [...] the disproportionate contribution of the [nondiamond] mining sector is unacceptable, more so given that the effective mining tax rate in Zimbabwe is a mere 8%." Minister of Finance, National Budget Statement, 2012.
- See Mineral Revenue Disclosure And The Information Needs Of Various Stakeholders: A Gap Analysis, USAID Strategic Economic Research and Analysis (SERA) Project, 2015; Innocent Madziva, Revenue Transparency And Accountability: Maximising The Contribution Of The Mining Sector To The Economy; and Sowing the Seeds of Advocacy Work on Transparency and Accountability in the Extractive Sector in Zimbabwe, ZELA, 2011.
- See Darlington F. Muyambwa, Gilbert Makore and Joyce Nyamukunda, Popularising Mineral Revenue Transparency And Accountability Initiatives In Zimbabwe's Rural Mining Communities, ZELA, 2014.
- See Gilbert Makore and Veronica Zano, Mining within Zimbabwe's Great Dyke: Extent, Impacts and Opportunities, ZELA, 2012.
- Mineral Revenue Disclosure And The Information Needs Of Various Stakeholders: A Gap Analysis, USAID Strategic Economic Research and Analysis (SERA) Project, 2015, p. 48.
- See, Don Hubert, "You don't know what you've got until its modeled," Open0il, 2015.
- Jack Calder, Administering Fiscal Regimes for the Extractive Industries: A Handbook. Washington, DC, 2015.
- See for example: Oil Revenue Prospects for Cambodia, Resources for 10 Development, 2015; Potential Government Revenues from Turkana Oil, Cordaid, 2016; Mapping Risks to Future Government Petroleum Revenues, Oxfam Kenya, 2016; Samuel Bekoe, David Mihalyi, An Analysis of Ghana's 2015 Oil Revenue Performance: Testing the Model, NRGI, 2015; Lenneke Kono-Tange, Cordaid and Johnny West, Towards transparency in Extractives in Chad – applying oil project modeling, 2015, PWYP, 2015; Bulyanhulu Gold Mine: Open Financial Model, OpenOil, July 2015.
- For a discussion of the four companies listed on the Zimbabwe Stock Exchange and the four companies listed on foreign stock exchanges see: Mineral Revenue Disclosure And The Information Needs Of Various Stakeholders: A Gap Analysis, USAID Strategic Economic Research and Analysis (SERA) Project, 2015, p. 24-25.
- See State Of The Mining Industry Survey Report 2015, Zimbabwe Chamber of 12 Mines, 2015.
- SEDAR (the System for Electronic Document Analysis and Retrieval) is the 13 repository for electronic filing of securities information as required by Canadian Securities Administrator.

- See CIM Standards on Mineral Resources and Reserves, Canadian Institute 14 of Mining, Metallurgy, and Petroleum, 2000, incorporated into National
- See Pat Stephenson and Peter Stoker, Comparison of 2012 JORC Code with 15 National Instrument 43-101, p. 11. The Zimbabwe Stock Exchange has no mining specific reporting requirements.
- See Technical Report Blanket Mine (43-101), Minxcon Consulting (Pty) 16 Limited, 2015.
- 17 The Extractive Sector Transparency Measures Act, December 16, 2014.
- See Technical Report Blanket Mine (43-101), Minxcon Consulting (Pty) Limited, 2015 p. 27.
- See Management's Discussion and Analysis, Fiscal Year 2015, 18 March 19 2016, p. 16.
- The Blanket Mine covers the claims of Jethro, Blanket Section, Feudal, AR, Sheet, Eroica and Lima, comprising a total area of approximately 2,540 ha.
- See Caledonia (Africa) Limited In re: Blanket Mine (1983) (Private) Limited and Competition and Tariff Commission (2006). Opinion of De Bourbon AP (SC) of 9 December 2006 as cited in Ignatious Nzero "Is there a gap in the definition of corporate mergers in Zimbabwe's Competition Act? Revisiting the Caledonia Holdings (Africa) Limited/ Blanket Mine (1983) (Private) Limited merger, Journal of Contemporary Roman-Dutch Law, 2015, p. 596-97.
- Some controversy surrounds the final negotiations. The NIEEB hired the consulting firm Brainworks without going to public tender to assist in the indigenisation negotiations for a reported 2% of the value of the deals. Although the Blanket mine negotiations were already well underway, Brainworks Capital assisted in the completion of the negotiations and then billed Caledonia \$250,000 for the work. Caledonia paid the bill, even though Brainworks contributions to the negotiations seem to have been very modest. For reports on hearings by the Parliamentary Portfolio Committee on Indigenisation in July 2015, see: Parly committee grills mining firms over payments to Brainworks, The Source, 23 July 2015.
- 23 See Indigenisation FAQ's, Caledonia Mining Corporation, 15 November 2012.
- 24 1982 Zimbabwe-UK Double Taxation Convention
- 25 Certificate of Incorporation, Greenstone Management Services Limited, 30 March 2012
- See Press Release, Completion of re-domicile of the Company into Jersey, 26 Caledonia Mining Corporation, 21 March 2016.
- See Mr. Madongorere, Taxation of Mining in Zimbabwe, Zimbabwe Revenue 27 Authority, 2013, and An Outline Of The Mining Taxation Regime In Zimbabwe, ZELA, 2012.
- For an accessible introduction to mining contracts see, Mining Contracts: How to Read and Understand Them, 2013. See also Shamiso Mtisi, Mining Contract Monitoring and Review: What to Look Out for in a Mining Contract,
- See Catherine Anderson, Creating a Legislative Framework to Govern Mining 29 in Zimbabwe, Revenue Watch, 2011, p. 13.
- See "Contract Transparency: Creating Conditions To Improve Contract 30 Quality" Natural Resource Governance Institute, 2015.
- 31 See resourcecontracts.org for a full repository of publicly available extractive sector contracts.

- See Contract Transparency in EITI Countries: A Review on how Countries 32 Report on Government's Contract Transparency Policy, EITI, 2015.
- See Guide on Resource Revenue Transparency, IMF, 2007, the proposed 33 updating as set out in Draft Fiscal Transparency Principles, IMF, 2014; and International Finance Corporation's Policy on Environmental and Social Sustainability, 2012, p. 11-112.
- See Gavin Hayman, EITI and the emerging global norm of contract 34 transparency, Open Contracting Partnership, 22 February 2016.
- See Technical Report Blanket Mine (43-101), Minxcon Consulting (Pty) 35 Limited, 2015.
- Exports are taxed at 0% for VAT so there are no VAT payments on either 36 imports or goods acquired locally. The mine is also exempt from customs duties. Other small payments to government including mining licences, registration fees, environmental fees and local authority levies have been excluded from this analysis.
- See, James Otto (et al), Mining Royalties: A Global Study of Their Impact on 37 Investors, Government, and Civil Society, World Bank, 2006.
- For mines operating under a "Special Mining Lease" the rate is 15% but they 38 also pay an additional profits tax.
- 39 The normal period of tax loss carry forward in Zimbabwe is six years.
- James Otto (et al), Mining Royalties: A Global Study of Their Impact on 40 Investors, Governments and Civil Society, World Bank, 2006, p. 32.
- 41 1982 Zimbabwe-UK Double Taxation Convention.
- See presentations at the IBFD 1st Africa Tax Symposium, 2015 including: 42 Annet W Oguttu, "A Critical Analysis Of What Africa's Response Should Be To The OECD BEPS Action Plan", p. 11; and Ridha Hamzaoui, Tax Planning in Africa and reactions from tax authorities.
- "A monthly management fee of US\$390,000 which is paid by Blanket and is received net of withholding tax of 15%." Management's Discussion and Analysis: Year End 2013, Caledonia Mining Corporation, 28 March 2014, p. 9.
- The specific percentages are 7.4% in 2013; 8.8% in 2014; and 9.6% in 2015. Concern about excessive management fees appears to be growing and the government is seeking to limit such fees to no more than 3%. See J. P. Mangudya, Monetary Policy Statement, January 2016 p. 68.
- See Mineral Revenue Disclosure And The Information Needs Of Various Stakeholders: A Gap Analysis, USAID Strategic Economic Research and Analysis (SERA) Project, 2015, p. 38.
- Technical Report Blanket Mine (43-101), Minxcon Consulting (Pty) Limited, 2015; and Management's Discussion and Analysis: Year End 2015, Caledonia Mining Corporation, 18 March 2016.
- Note that as the gold price show here is an annual average, gross revenue (taken from Caledonia financial statements) will differ from the product of sale volume multiplied by price
- Management's Discussion and Analysis: Year End 2015, Caledonia Mining Corporation, 18 March 2016, p. 11.
- "A monthly management fee of US\$390,000 which is paid by Blanket and is received net of withholding tax of 15%." Management's Discussion and Analysis: Year End 2013, Caledonia Mining Corporation, 28 March 2014, p. 9.

- Caledonia Financial Statements, 2nd Quarter 2013, 8 August 2013, p. 10. 50
- See Management's Discussion and Analysis: Year End 2015, Caledonia Mining 51 Corporation, 18 March 2016, p. 17-18.
- 52 A "preliminary feasibility study" is a comprehensive study of the viability of a mineral project that allows for a determination if all or part of the mineral resource may be classified as a mineral reserve. A "feasibility study" (also known as a bankable feasibility study) is a comprehensive study of a mineral deposit that can serve as the basis for the development of the deposit into a producing mine. See CIM Standards on Mineral Resources and Reserves, Canadian Institute of Mining, Metallurgy, and Petroleum, 2000, incorporated into National Instrument 43-101.
- See Management's Discussion and Analysis: Year End 2015, Caledonia Mining Corporation, 18 March 2016, p. 17-18.
- 54 Mining Contracts: How to Read and Understand Them, 2013, p. 34.
- Minimum Requirements for Indigenisation Implementation Plans Submitted 55 by Non-indigenous Businesses in the Mining Sector, General Notice 114,
- See Indigenisation FAQ's, Caledonia Mining Corporation, 15 November 2012. 56 The contracts with the four indigenous partners are available on SEDAR: See filings on 28 May 2014.
- "The value of the shares or other interests required to be disposed of to a designated entity referred to in paragraph (a), (b) (c) or (d) of the definition thereof in paragraph 1 shall be calculated on a basis of valuation agreed to between the Minister and the non-indigenous mining business concerned." GN 114, 2011 p. 2.
- See Unaudited Condensed Consolidated Financial Statements for the period ended September 30, 2012, Caledonia Mining Corporation, p. 21-24
- LIBOR is the London Interbank Offered Rate. See Unaudited Condensed 59 Consolidated Financial Statements for the period ended September 30, 2012, Caledonia Mining Corporation, p. 21-24.
- 60 See Unaudited Condensed Consolidated Financial Statements for the period ended September 30, 2012, Caledonia Mining Corporation, p. 24.
- Dividend payments for partners calculated from data provided in Annual 61 Financial Statement 2014, Caledonia Mining Corporation, p. 25.
- 62 Annual Financial Statement 2015, Caledonia Mining Corporation, p. 25-26.
- See Management's Discussion and Analysis, Fiscal Year 2013, 28 March 63 2014, p. 9.
- 64 Figures are undiscounted
- See presentations at the IBFD 1st Africa Tax Symposium, 2015 including: Annet W Oguttu, "A Critical Analysis Of What Africa's Response Should Be To The OECD BEPS Action Plan", p. 11; and Ridha Hamzaoui, Tax Planning in Africa and reactions from tax authorities.
- For a recent analysis of the use of tax havens by extractive sector companies, see The IFC and Tax Havens, Oxfam Briefing Note, 2016
- See examples from Tanzania see: Tanzania Minerals Audit Agency (TMAA) Annual Report, 2010, p. 37; and for Zambia, see: Pilot Audit Report - Mopani Copper Mines Plc, Grant Thorton, 2010;

