1. MANAGING STATE COMPANIES AND CONCESSIONS

The diversion of revenues and other losses associated with commercial malpractice are endemic across resource-rich countries. It is impossible to place a figure on the scale of the revenue losses, for good reason: the practices involved are illegal or in the grey area between legality and criminality. What is clear is that the sums involved are often very large in relation to national budgets. Weak national governance creates an enabling environment for graft. But the opaque practices of some foreign companies and the extensive use of offshore companies actively facilitate and support the illicit diversion of public wealth into private bank accounts.

Poorly managed state-owned companies are part of the problem in many countries. Through their control over concessions, involvement in production-sharing agreements, and role as a conduit for foreign investment, export earnings and domestic market activities, state-owned companies occupy a pivotal position in natural resource governance. Their management of revenues, the value that they place on the assets under their control, and the prices they receive for concessions, are not just commercial transactions. They also affect the revenues that governments receive – and hence governments' capacity to invest resource wealth in health, education and economic infrastructure.

All too often the operations of state companies are hidden behind opaque financial management systems, with limited legislative oversight, restricted auditing procedures and, in the worst cases, a comprehensive disregard for transparency and accountability. The terms of production-sharing agreements, reporting on "signature bonuses" for contracts, and concession trading are seldom disclosed. With this lack of transparency comes another endemic concern: the potential for political leaders and public officials to benefit from secret deals made with foreign investors.

One of the starkest examples comes from Angola. In 2011 the IMF identified "financing residuals", essentially missing money, in the accounts of Sonangol, the state energy company, amounting to US$31.4 billion over the period 2007–2010.[93] Most of the deficit was explained through retrospective accounting. In March 2012, however, US$4.2 billion was still unaccounted for.[94] To put this figure in context, it exceeded the 2012 national budget and was double the estimated annual expenditure required for Angola to put in place a basic infrastructure platform covering roads, ports, power and water and sanitation.[95] The interaction between the Angolan state oil company and intermediaries raises wider concern. Much of the oil exported from Angola to China passes through a syndicate called the China International Fund: the terms on which oil is purchased from the state oil company and sold to China are not made public.[96]

Weak governance of some state-owned petroleum and mining companies fuels revenue losses through a range of channels. In some cases, corruption, inefficiency and lack of capacity all contribute. Verifying the claims and counter-claims made in individual cases is beyond the scope of this report, but the credible allegations made by financial authorities, the IMF, the World Bank and international transparency campaigners in several countries indicate the scale of the losses involved:

- **Nigeria:** Numerous examples of shortcomings in the revenue administration of the Nigerian National Petroleum Corporation have been identified. In a recent report, one parliamentary task force concluded that around US$6.8 billion had been lost between 2010 and 2012 as a result of corruption and mismanagement involving transfers of fuel subsidies.[97] Another investigative body, the Petroleum Revenue Special Task Force, identified losses of US$29 billion resulting from a natural gas pricing, along with missing payments connected to concessions and production-sharing arrangements.[98]
- **Equatorial Guinea:** The state oil company, GEPetrol, is one of the most opaque energy companies. Ongoing legal challenges in France, Spain and the United States, as well as a complaint before the African Commission on Human and Peoples' Rights, allege misuse of Equatorial Guinea's oil funds, including transfers to overseas bank accounts.[99]

Lost revenues in the Democratic Republic of the Congo

No country better illustrates the high costs associated with opaque concession trading than the Democratic Republic of the Congo (DRC). Privatization of the DRC's minerals sector has been plagued by a culture of secrecy, informal deals and allegations of corruption.

The government has responded to concerns over the manner in which mining concessions have been sold off. Towards the end of 2010, it agreed to publish all mining and oil contracts.[100] In 2011, it signed a decree requiring that contracts for any cession, sale or rental of the state's natural resources be made public within 60 days of their execution.[101] However, in 2012, the IMF stopped a loan programme after the government failed to publish full details of a mining deal involving the sale by the state-owned mining company, Gécamines, of a stake in a major copper concession. The recipient was a company registered in the British Virgin Islands.[102] Following the IMF's decision to halt three tranches of loans totalling about US$225 million, the AfDB announced that it was withholding a planned US$87 million in budget support.[103] The World Bank had briefly suspended loans in 2010 because of related concerns over concession arrangements.[104]

With some of the world's richest mineral resources, the DRC appears to be losing out because state companies are systematically undervaluing assets. Concessions have been sold on terms that appear to generate large profits for foreign investors, most of them registered in offshore centres, with commensurate losses for public finance.

In preparing this report we examined in some detail several concession deals in the DRC. In each case, we looked at the terms of sales by Gécamines and other state companies. Our research did not consider allegations of corruption in specific cases, or on the part of individuals. We focused instead on the potential undervaluation of mineral assets by comparing the price received by Gécamines for concession sales with commercial market valuations of the concession. For the commercial valuation we used either the price received by the concession holder in an onward sale, or an independent market valuation of the worth of the assets.

In the interests of comparability, we restricted our analysis to the recent past (2010–2012) and to deals for which robust data are available. We narrowed our sample down to five deals (see Annex 1). In each case the trading arrangement involved a state company and one or more offshore companies, most of which were registered in the British Virgin Islands and connected to one of the largest private investors in the DRC, the Fleurette Group.

The results of our exercise raise fundamental questions about the practices surrounding the DRC's mineral resource governance:

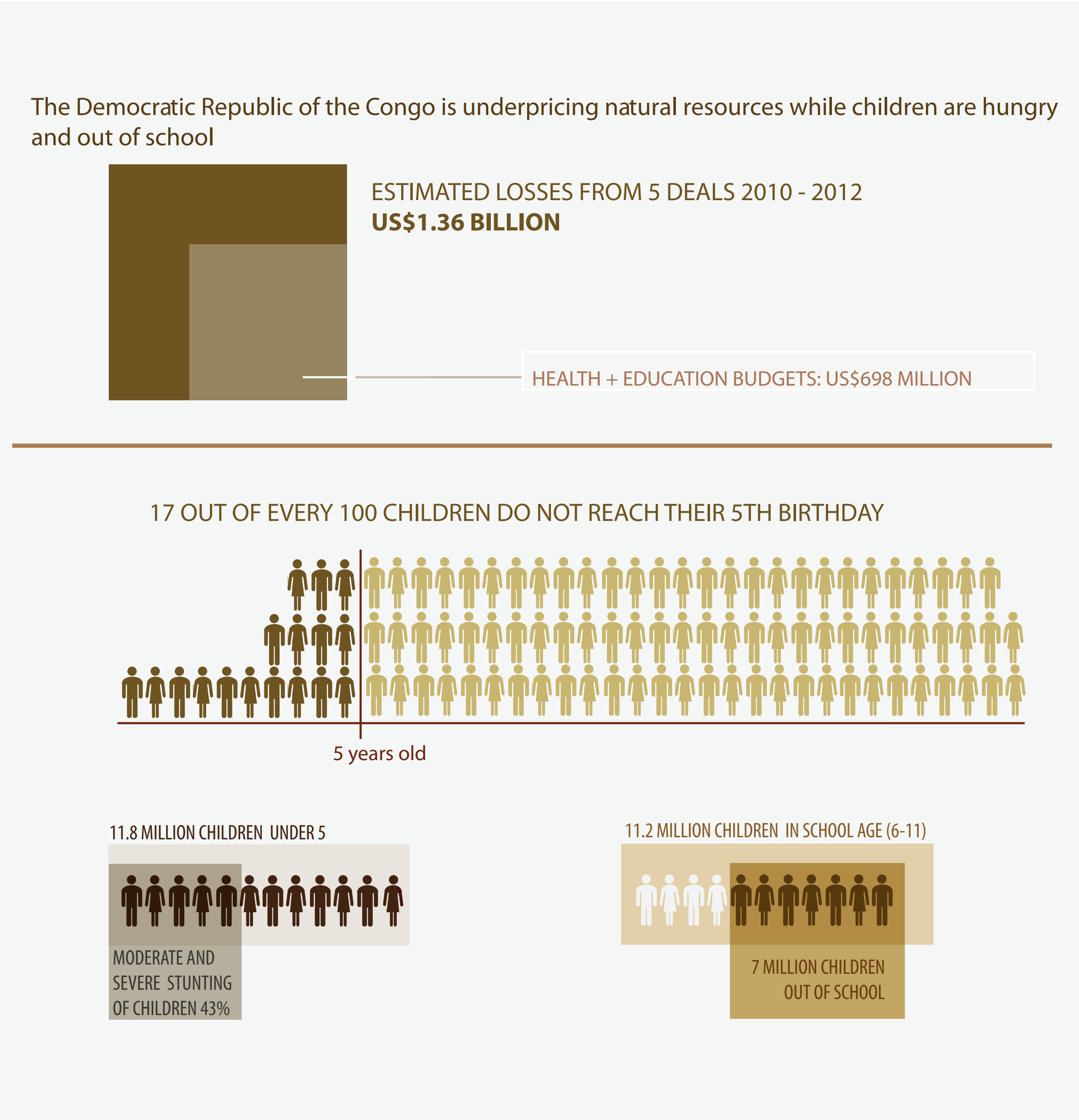
- Between 2010 and 2012, the DRC lost at least US$1.36 billion in revenues from the underpricing of mining assets that were sold to offshore companies.
- Total losses from the five deals reviewed were equivalent to almost double the combined annual budget for health and education in 2012.[105] This is in a country that ranks lowest on the UN's Human Development Index, with some of the world's worst malnutrition, its sixth highest child mortality rate, and over 7 million children out of school (Figure 20).
- Each citizen of the DRC lost the equivalent of US$21 from the underpricing of concession assets –7 per cent of average income. The DRC has a population of 67 million.
- Across the five deals, assets were sold on average at one-sixth of their estimated commercial market value. Assets valued in total at US$1.63 billion were sold to offshore companies for US$275 million. The beneficial ownership structure of the companies concerned is unknown.
- Offshore companies were able to secure very high profits from the onward sale of concession rights. The average rate of return across the five deals examined was 512 per cent, rising to 980 per cent in one deal.

It should be emphasized that our exercise captures what is likely to be a small share of the overall losses caused by underpricing. We cover only a small subset of deals for the period 2010-2012. Moreover, the pattern of selling mining assets to offshore shell companies has been a consistent theme in the privatization of state assets over more than a decade. We do not infer from our analysis any illegality on the part of political leaders, public officials or the companies involved in purchasing and selling the concessions. However, the potential scale of the overall losses merits further investigation in order to clarify the circumstances surrounding the transactions, and to determine whether or not the assets in question were knowingly undervalued. Our findings are consistent with earlier investigations. One legislative committee estimated that in 2008 the government lost as much as US$450 million through a mix of poor management, corruption and flawed taxation policies.[106]

Senior figures in the DRC government recognize the gravity of the problem posed by opaque concession trading. As the prime minister put it in 2012: "We must avoid situations where mining contracts are not published … where sales of mining assets are undervalued and the government is not informed of what state mining companies are doing."[107] Our survey underlines the importance of this objective.

Unravelling the deals involved in concession trading in the DRC is enormously difficult. The complex structures of interlocking offshore companies, commercial

Figure 20: DEMOCRATIC REPUBLIC OF THE CONGO LOSSES IN CONCESSION TRADING VERSUS BUDGETS FOR HEALTH AND EDUCATION



Source: IRIN (2011), DRC: Millions miss out on basic education. UNDP (2012), The Nutrition Challenge in Sub-Saharan Africa. UNESCO (2012), Global Monitoring Report. World Bank (2013), World Development Indicators

secrecy on the part of major mining companies, and limited reporting by state companies and government agencies to the DRC's legislators, creates what amounts to a secret world – a world in which vast fortunes appear to be accumulated at the expense of the DRC's people. However, the issues at stake are so fundamental to the challenge of harnessing resource wealth for human development that we look behind the curtain to reconstruct the circumstances surrounding four of the five deals covered in our analysis (Box 9).

BOX 9: Concession dealing in the Democratic Republic of the Congo – some unanswered questions

The concession sale that prompted the IMF's decision to halt loans to the DRC was not an isolated event. It followed a series of complex deals involving the state-owned mining company, Gécamines, offshore companies and major transnational corporations, including Glencore and the Eurasian Natural Resources Corporation (ENRC). Both Glencore and ENRC are listed on the London Stock Exchange. The two companies strenuously deny charges of impropriety and both have adopted policy guidelines on corruption, bribery and due diligence. Between early 2010 and the end of 2012, the DRC sold off stakes in a least seven[108] prized mining projects to offshore companies. Four deals are summarized below – fuller details are provided in Annex 1. The sales were highly opaque and secretive, with details usually emerging only months later.[109] The ultimate beneficiaries of the offshore companies involved in the deals are unknown.

- **The Société Minière de Kabolela et de Kipese (SMKK):** SMKK owns a copper and cobalt deposit in Katanga province. In 2009, Gécamines and Eurasian Natural Resources Corporation (ENRC) each owned 50 per cent of SMKK under a joint venture agreement. The agreement gave ENRC the right to first refusal on any future sale of Gécamines' stake.[110] ENRC waived that right, instead purchasing in December 2009 an "option to buy" the shares from Emerald Star – an offshore company registered in the British Virgin Islands. The purchase price for this option was US$25 million.[111] At the time, Emerald Star was not a registered owner of shares in SMKK. It was not until February 2010 that Gécamines actually agreed to sell its shares in SMKK to Emerald Star. The shares were purchased for US$15 million, according to documents published by the Ministry of Mines.[112] Four months later, ENRC exercised its "option to buy" and paid Emerald Star US$50 million for the shares in SMKK (in addition to the initial US$25 million).[113] *The total payment to Emerald Star amounted to US$75 million for shares it purchased at a price of US$15 million – a 400 per cent profit over a four-month period, with a commensurate implied loss of public revenues.*[114]
- **The Kolwezi project:** In January 2010, Gécamines revoked a contract with the mining company First Quantum for a joint venture in the Kolwezi copper project.[115] It subsequently awarded 70 per cent control of the Kolwezi licence to the Highwind Group – a collection of four offshore companies registered in the British Virgin Islands. The contract stipulated that Highwind would pay US$60 million for the assets as a signature bonus.[116] ENRC secured a stake in the project when it bought 50.5 per cent of Camrose, the parent company of the Highwind Group, for US$175 million.[117] It purchased the remainder of Camrose (which was also registered in the British Virgin Islands) for US$550 million in a deal approved by shareholders on 24 December 2012.[118] Taking into consideration other assets wrapped up in the Camrose purchase, ENRC effectively paid $685.75 million for Kolwezi and associated concessions, which were originally purchased by the Highwind Group and its affiliates for $63.5 million – a return of just under 1,000 per cent for the offshore companies concerned (Annex 2).
- **The Mutanda mine:** Mutanda is one of the DRC's main copper and cobalt mines, producing 87,000 tonnes of copper and 8,500 tonnes of cobalt in 2012.[119] It operates as a joint venture between a Panama-registered company called SAMREF Congo SPRL, which controls 80 per cent, and Gécamines. Glencore acquired a stake in SAMREF in 2007.[120] In March 2011, SAMREF (then half-owned by Glencore) waived its right of first refusal on the purchase of Gécamines' separate 20 per cent stake in the Mutanda project.[121] Instead, Gécamines sold this stake to a British Virgin Islands-listed company, Rowny Assets, for US$120 million. *The average of five commercial valuations at the time of the sale put the value of a 20 per cent share in Mutanda at US$634 million, implying a 428 per cent profit for Rowny Assets – revenue that could have benefited the Congolese state instead.*
- **The Kansuki mine:** In 2010 the Kansuki mining concession was 75 per cent owned by a company called Kansuki Investments SPRL and 25 per cent owned by Gécamines.[122] Kansuki Investments was owned by the Bermuda-registered Kansuki Holdings – itself belonging half to Glencore and half to a Gibraltar-registered holding company called Fleurette. [123] In March 2011, Kansuki Investments waived its right of first refusal on Gécamines' 25 per cent stake, allowing Gécamines to sell its shares to the British Virgin Islands-registered Biko Invest Corp,[124] which is owned in turn by the Fleurette Group.[125] The Fleurette Group has not disclosed the full list of beneficial owners of its subsidiaries in the DRC. *The sale price for the Gécamines shares was US$17 million. Taking an average of two independent valuations, one by Deutsche Bank and the other by Liberum Capital, the asset value was US$133 million, suggesting an undervaluation of 682 per cent* (Annex 2).

ANNEX 1

Estimated losses to the Democratic Republic of the Congo on five concession deals between 2010 and 2012

Over the past decade, the Democratic Republic of the Congo (DRC) has privatized a wide range of assets previously held by state-owned companies. Estimating the profit or loss on the sale of mineral concessions and licences is inherently difficult. Information on the potential market value of the resources is often lacking because of commercial secrecy and inadequate geological information. The complex "bundling" of assets presents another layer of difficulty.

In investigating concession sales, we adopted strict criteria to determine which deals to analyse. Selection was made contingent on timing (only deals agreed after 2010 were included), and the availability of either an onward sale price for the concession (to indicate the gap between the payment received by the government and the payment subsequently received by the concession holder) or the availability of independent market valuations. Applying these criteria, we identified five major concession deals between 2010 and 2012.

Under these deals, the DRC sold copper and cobalt assets to offshore companies linked to an offshore-registered holding company called Fleurette. No details are available of the beneficial ownership structure of the companies concerned. Glencore and the Eurasian Natural Resources Corporation (ENRC) subsequently purchased assets acquired by offshore concession holders – both are FTSE100 companies listed on the London Stock Exchange. Our assessment focuses solely on the economics of the concession sales. It does not consider the legality or the legitimacy of the deals in question. Where assets secured by offshore companies were resold at a publicly declared price, the profit secured is calculated as the difference between the onward sale price and the price paid by the same company to secure the initial concession. In two of the five cases – Kansuki and Mutanda – there was no onward sale. In the absence of this benchmark, we use evidence from independent commercial market valuations. Specifically, we estimate the imputed loss as the average of commercial valuations of the asset minus the price at which the offshore firm bought the asset.

It should be emphasized that the total losses estimated for the five deals is almost certainly an underestimate of the real level of losses. Several major deals have not been taken into account, either due to a lack of data or because the original sale of the concession to offshore companies occurred before 2010. Other post-2010 deals involving concessions in oil and gold have not been included because data was considered inadequate. These include the allocation in May 2010 of exploration licences for two blocks in Lake Albert (northeastern DRC) sold to offshore companies registered in the British Virgin Islands. Our calculations do not include losses associated with tax and royalty payments foregone as a result of the seizure and transfer of assets from established mining companies. These losses may be of a considerable order of magnitude.

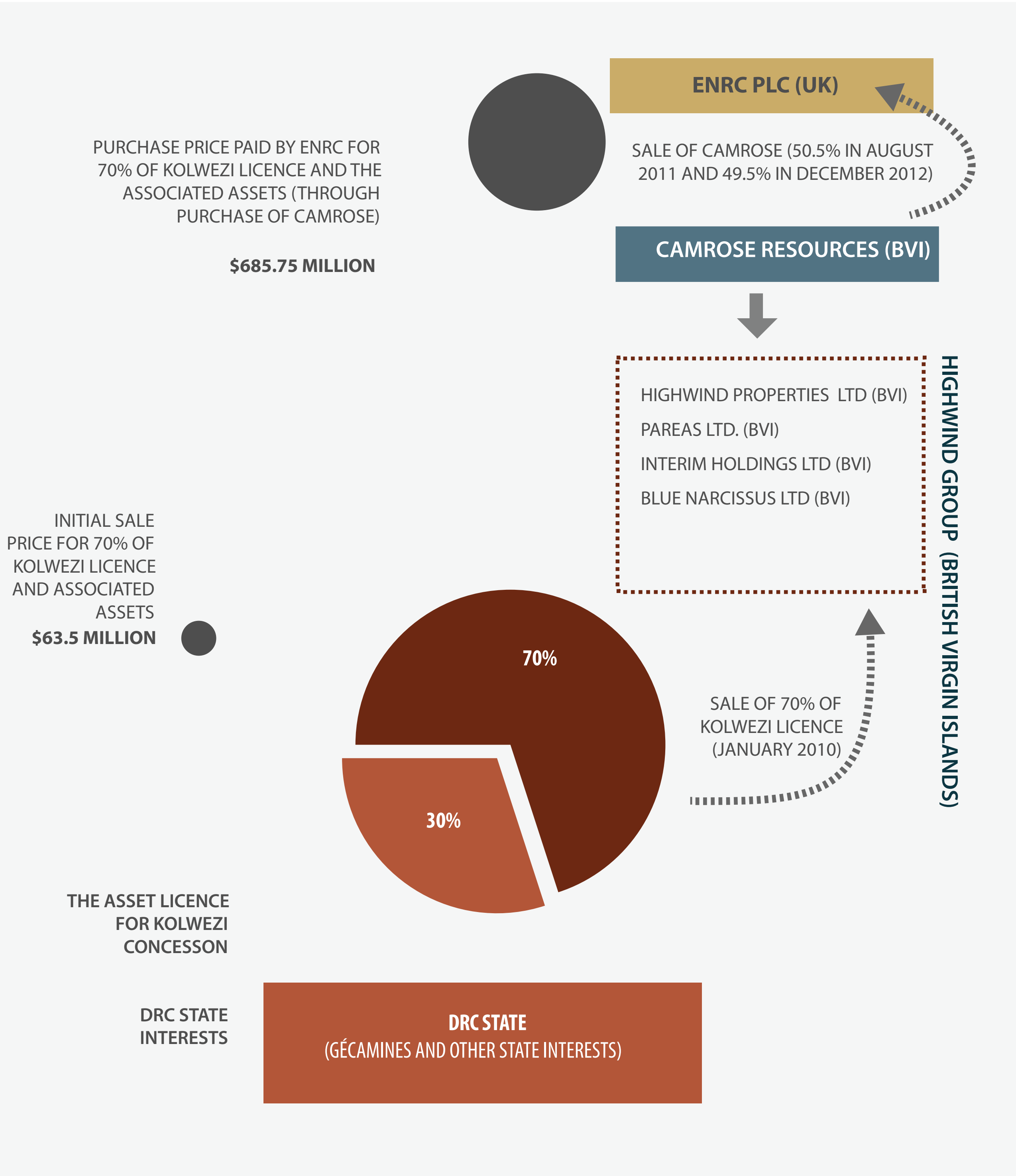
Despite these omissions, our assessment points to considerable losses to the state and state mining entities. Taking the five deals together, we estimate the losses from the five deals at US$1.36 billion. Assets were sold on average at one sixth of their commercial market value. Expressed differently, offshore trading companies were able to secure a return of US$1.63 billion on assets purchased for US$275.5 million – an average margin of 512 per cent.

Table A: FIVE MAJOR CONCESSION DEALS IN THE DEMOCRATIC REPUBLIC OF THE CONGO (2010-2012)

THE CONCESSION DEALS AND ASSETS TRADED	BACKGROUND	PRICE PAID TO THE STATE/ STATE MINING COMPANIES (US$)	DATE OF ONWARD SALE	PRICE PAID BY FINAL BUYER, OR ESTIMATED COMMERCIAL VALUE (US$)	ESTIMATED LOSS TO THE DRC/ STATE MINING COMPANIES (US$)
Sale of 70% of Kolwezi and the entirety of Comide (copper mines) by the state mining company Gécamines[1] Comide: The first 80% of Comide (later adjusted to 75%) was sold between 2002 and 2006.[2] Available evidence suggests that a signature bonus of $3.5 million was paid.[3] The remaining 25% was transferred to the British Virgin Islands-registered company Straker in June 2011 at no cost to Straker.[4]	**Kolwezi: Gécamines** sold the Kolwezi mining licence to the **Highwind Group** (comprising four companies registered in the British Virgin Islands) in January 2010[5] in exchange for a $60 million signature bonus.[6] The bonus was paid for by **ENRC** under an August 2010 deal.[7]	**$63.5 million** ($60 million for the Kolwezi signature bonus and $3.5 million as the signature bonus for Comide)	Staged in two phases: 20 August 2010 and 23 December 2012.	**$685.75 million** ENRC bought Camrose – the parent company of the Highwind Group – and Straker. The total cash paid comprises the 70% share of the Kolwezi licence and 100% of the Comide licence.[8] (ENRC also provided a $400 million loan and a $155 million loan guarantee.)[9]	**$622.25 million**
Sale of Gécamines' 50% share of SMKK to **Emerald Star** Emerald Star is a company registered in the *British Virgin Islands*[10]	**SMKK:** Gécamines share was sold on 1 February 2010	**$15 million**[11]	June 2010 from Emerald Star to ENRC[12]	**$75 million**[13]	**$60 million**
Sale of the entirety of the Sodifor joint venture (comprising the Frontier and Lonshi copper mines), by the state mining company Sodimico. The sale was followed by an acquisition and resale of the Frontier licence by the DRC government *First 70 per cent of Sodifor sold to* ***Fortune Ahead Ltd*** *(registered in Hong Kong). Remaining 30 per cent sold to* ***Sandro Resources Ltd and Garetto Holdings Ltd*** *(both registered in the British Virgin Islands)*	Sodifor: Sodimico sold the first 70% of Sodifor on 20 June 2010 for $30 million. Remaining 30% sold on 28 March 2011 for an additional $30 million.[14]	**$60 million** Total paid by the offshore companies for Sodifor ($30 million for the first 70%, and $30 million in the second 30%) in 2010-11. In 2012 the Frontier mining licence alone was sold back to the government for $80 million.[15]	After buying back the Frontier licence from Sodifor, the government then sold it on to ENRC in a deal announced 31 July 2012.	**$103 million (Frontier and Lonshi combined)**[16] The state lost at least $20 million through the sale of Sodifor to offshore companies.[17] An extra $23 million imputed loss for Lonshi is included, derived from average commercial valuations.[18]	**$43 million**
Sale of Gécamines' 25% residual stake in Kansuki to Biko Invest Corp (registered in the British Virgin Islands)	28 March 2011[19]	**$17 million**[20]	Not sold on	**$133 million** Based on average of commercial valuations.[21]	**$116 million**
Gécamines' residual 20% stake in Mutanda to Rowny Assets Ltd (registered in the British Virgin Islands)	28 March 2011[22]	**$120 million**[23]	Not sold on	**$633.6 million** Based on average of commercial valuations:[24]	**$513.6 million**
TOTAL		**$275.5 million**		**$1.63 billion**	**$1.355 billion**

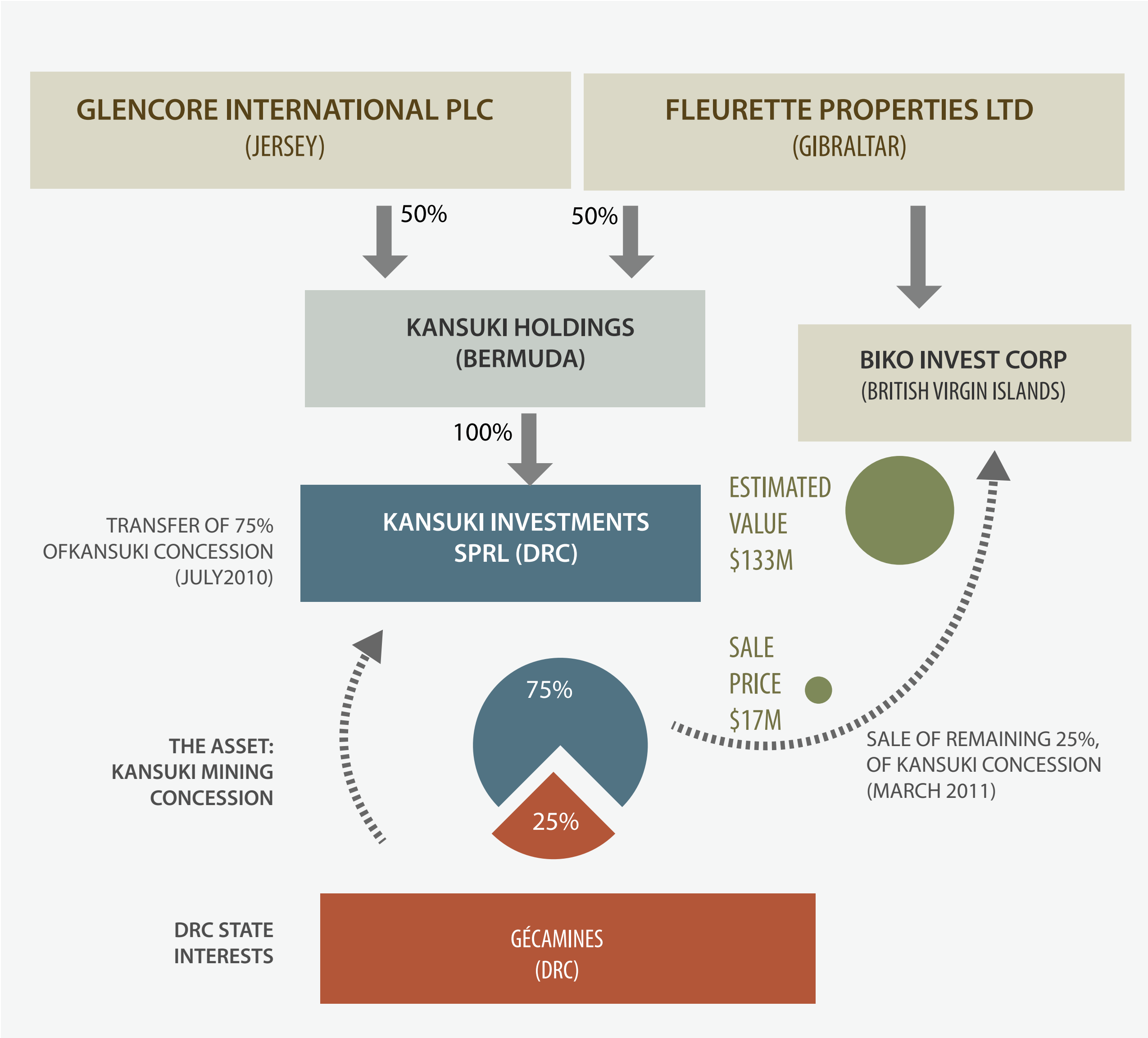
ANNEX 2

KOLWEZI PROJECT



Source: Company documentation cited in Annex 1

KANSUKI PROJECT



Source: Company documentation cited in Annex 1

1. It should be noted that, as part of this deal, ENRC also obtained from Camrose 63.7% of the Toronto-listed Africo Resources Limited, which owned "a 75% interest in the exploitation licence for the Kalukundi property in the Kolwezi District of Katanga Province" (ENRC press release "Acquisition of 50.5% of the Shares of Camrose Resources Limited," 20 August 2010, available at http://www.enrc.com/sites/enrc.g3dbuild.com/files/presentations/CamroseAnn2.pdf, last accessed 22 March 2013.). However, the Africo deal has been excluded from these calculations, given that Camrose had previously purchased the asset for $100 million from a private party, rather than the state or any state-owned enterprise. It is also worth noting that the $100 million that Camrose paid for its Africo stake was funded with a loan from a separate company, and that this loan was then repaid from an additional $400 million loan that was part of the 20 August 2010 deal – thus the original owners of Camrose ended up incurring no costs in their purchase of Africo.
2. Chapter 11 of Volume 2 of the November 2007 Rapport des travaux document emanating from the Commission de revisitation des contrats miniers states that under the original joint venture contract for Comide from February 2002, the DRC government had 39%, Gécamines had 20% and a company called the Congo Investment Corporation (or Cico) held the remaining 41% (Commission de Revisitation des contrats miniers, Republique Democratique du Congo Ministere des Mines, Rapport des travaux, Vol. 2, Partenariats Conclus Par La Gécamines, 106-107, Nov. 2007, available at http://www.congomines.org/wp-content/uploads/2011/10/CommissionRevisitation-2007-TOME2-Gecamines.pdf, last accessed 21 March 2013). In the following years – it is not entirely clear when – the DRC government disappeared from the joint venture and Cico was replaced by the company Simplex, a company associated with Mr Gertler (Id. at 108). Simplex's share in the company was then reduced from 80% to 75%. A representative of Mr Dan Gertler has said that Simplex obtained the 80% stake in Comide in 2006. An explanation of Simplex's involvement in the Comide concession by Mr Gertler's representatives can be found on the Global Witness website: see "Additional responses by Dan Gertler to Global Witness", May 2012 (http://www.globalwitness.org/sites/default/files/library/Additional%20responses%20by%20Dan%20Gertler%20to%20Global%20Witness.pdf, last accessed 22 March 2013).
3. An official document from the DRC's renegotiation committee, published on the Carter Center website and dated 15 December 2008, states that a signature bonus of $3.5 million was to be paid for Comide (http://www.congomines.org/wp-content/uploads/2011/10/PV-Dec-2008-COMIDE.pdf, last accessed 21 March 2013) . The summary states: "Documents reprenant les principales modifications du contrat Congolaise des Mines et de Developpement (COMIDE) suite à la revisitation et renégociation des contrats miniers. Ces documents visaient à préparer les éventuels avenants au contrat et ne constituent donc pas l'accord final entre les partenaires. L'avenant de la renégociation, conclu le 13.01.2009, n'est pas disponible." [Translation: Documents that state the main modifications to the Comide contract following the revisitation and renegotiations of mining contracts. These documents aimed to prepare eventual amendments to the contract and thus do not constitute the final agreement between the partners. The amendment resulting from the renegotiation, concluded 13/1/09, is not available.] In November 2012 the DRC mining and finance ministries published a statement outlining the history of the Comide concession but this gave no figures for the original sales price of the 75/80% of Comide; see http://www.congomines.org/wp-content/uploads/2012/12/G3-Comide-2012-Clarification-Vente-dactif-Gecamines.pdf, last accessed 22 March 2013). The sale of Comide has generated a great amount of controversy. The IMF ended a three-year loan programme with the final three tranches unpaid in December 2012, citing the DRC authorities' failure to publish contract details relating to the subsequent sale of Gécamines' 25% remaining stake in Comide as the reason for cutting off the loan.
4. The news of the cession of Gécamines' remaining 25% stake in Comide was reported by Bloomberg news agency in a piece of 28 May 2012: "Congo May Have Violated IMF Deal With Mining Asset Sale" (http://www.bloomberg.com/news/2012-05-28/congo-may-have-violated-imf-deal-with-mining-asset-sale.html, last accessed 22 March 2013). The minutes of the Comide board meeting of 29 June 2011, where the decision was taken to cede the 25% stake in the company to Straker, can be found on the Carter Center's Congo Mines website at http://www.congomines.org/wp-content/uploads/2012/12/G3-Comide-2011-PV-Cession-Actifs-Gecamines-a-Straker.pdf, last accessed 22 March 2013). The November 2012 mining and finance ministry statement, cited above, says in its point 16: "La cession des parts de Gécamines dans COMIDE Sprl n'a aucune implication financière." (The ceding of Gécamines' shares in Comide has no financial implication.). Gécamines reiterated in a 13 March 2013 statement that Straker made no payment for its 25% stake in Comide, saying "Les parts sociales auxquelles Gécamines a renoncé ont été cédées sans aucune contrepartie financière, à Straker International Corporation" [Translation: The shares which Gécamines renounced were ceded for no financial cost to Straker International Corporation] (http://www.gecamines.cd/news_13_03_13.php, last accessed 22 March 2013).
5. According to a court judgment in the British Virgin Islands (BVIHC (COM) 2010/0125, page 3) the Highwind Group signed its contract on the "same day" as Gécamines cancelled First Quantum's licence over Kolwezi. The date is given as 7 January 2010. The contract between Gécamines and the Highwind Group, dated January 2010, is available at http://mines-rdc.cd/fr/documents/contrat_gcm_highwind.pdf (last accessed 22 March 2013).
6. The $60 million signature bonus ("Pas de Porte") is documented on page 21 of Highwind contract with Gécamines, available at http://mines-rdc.cd/fr/documents/contrat_gcm_highwind.pdf (last accessed 22 March 2013).
7. A 14 June 2010 preliminary agreement between ENRC and Camrose states that ENRC's promised $400 million loan to Camrose included $60 million to "satisfy the pas de porte payment [signature bonus] obligations of the Highwind Group". The leaked preliminary agreement is entitled "Letter of intent regarding the sale of shares in Camrose Resources Ltd". The breakdown of the $400 million loan is given on page 5, where it is further stated that $20 million of the loan is for payment of the capitalisation of the Metalkol joint venture (originally formed by the Highwind Group and Gécamines in January 2010). Thus all of the Highwind Group's acquisition costs were paid for by ENRC months after the transaction.
8. ENRC pledged $175 million cash (excluding loans) in a deal on 20 August 2010 and a further $550 million cash in a deal approved by shareholders on 23 December 2012, giving a total of $725 million. The value of the Africo shares (US$39.25 million, on the basis of Toronto Stock Exchange data from the day of the deal) has been excluded from our calculations, giving the total of $685.75 million. It is worth noting that the average of commercial valuations for 70% of Kolwezi is $1.53 billion, while there is no known commercial valuation of Comide.

9. See ENRC press release"Acquisition of 50.5% of the Shares of Camrose Resources Limited," 20 August 2010, available at http://www.enrc.com/sites/enrc.g3dbuild.com/files/presentations/CamroseAnn2.pdf, last accessed 22 March 2013. Note that a portion of the $400 million loan was intended to repay an earlier $100 million loan Camrose had received from a third party for its earlier acquisition of Africo Resources.
10. See contract (contrat de cession des parts) between Gécamines and Emerald Star of 1 February 2010, published on the Ministry of Mines website (http://mines-rdc.cd/fr/documents/contrat_cession_parts_gcm_smkk_fev_2010.pdf, last accessed 22 March 2013). The sale price of $15 million is specified in article 4.1.
11. Id.
12. ENRC's 2010 preliminary results, available at http://www.enrc.com/system/files/press/23-03-11%20Announcement%20of%202010%20Preliminary%20Results.pdf, last accessed 22 March 2013.
13. Id.
14. The contract covering the first 70% can be found on the DRC Ministry of Mines website at http://mines-rdc.cd/fr/documents/Contrat_convention_sodifor.pdf. The contract covering the sale price for the remaining 30% can also be found on the ministry's website, at http://mines-rdc.cd/fr/documents/accord_prix_achat_sodimico_sandro_garetto.pdf.
15. DRC Ministry of Budget document seen by Global Witness, listing payments by the state in 2012, month-by-month. Under transferts et autres interventions, Sodifor is specifically named as receiving 74.688 billion Congolese francs, which is equivalent to $80 million. The payment appears to be reflected in a Banque Centrale du Congo report for the week of 7 December 2012: Condensé hebodomidaire d'informations statistiques, no. 49/2012. Page 25 lists a payment for August 2012 labelled as autres (http://www.bcc.cd/downloads/pub/condinfostat/cond_n_49_7dec2012.pdf, last accessed 22 March 2013).
16. This US$103 million is a sum of the price paid by the DRC for buying back the Frontier licence plus the extra $23 million that the offshore companies could theoretically receive for selling on Lonshi (see footnote below for more detail).
17. Note that the $60 million received by Sodimico in 2010-2011 included more than just the Frontier licence. For the purposes of this minimum loss analysis, we have not sought to disaggregate the $60 million paid to Sodimico across the Frontier licence and other assets. Instead, we attribute the $60 million price solely to the Frontier licence and consider the $20 million loss as having been made in relation to that asset alone. Accordingly, we assume that nothing was paid for the Lonshi mine and other licences. Had the $60 million been disaggregated in these calculations, the estimated loss for Frontier may have ended up being higher but the estimated for Lonshi would have been lower, thus yielding the same result.
18. Lonshi was worth 22.5% of the value of Frontier, based on the averages of commercial valuations from 2010. According to a 17 August 2011 Bloomberg piece, Oriel Securities in September 2010 valued Frontier at $1.4 billion and Lonshi at $250 million (Congolese State Miner Sells Stake in Former First Quantum Mines, http://www.bloomberg.com/news/2011-08-17/congolese-state-miner-sodimico-sells-stake-in-former-first-quantum-mines.html). A July 2010 report by Numis valued 100 % of Lonshi at $392 million and 95 % of Frontier at $1.568 billion (which would put 100 % at $1.65 billion). However, the Frontier valuations also include a factory. A technical report by First Quantum, filed with Canadian regulations on 21 December 2006, puts the cost of the factory at $115.8 million. Subtracting this factory cost estimate from the Frontier valuations yields a rough adjusted valuation for the Frontier mine of approximately $1.284 billion under the Oriel valuation and $1.535 billion under the Numis valuation. Accordingly these adjusted valuations yield a ratio of the value of the Lonshi mine to the value of the Frontier mine of about 19.5% based on the Oriel estimates and 25.5% based on the Numis estimates. The average of these two ratios is approximately 22.5%. We have applied this ratio to the actual sale price of the Frontier mine to derive an implicit "theoretical" sale price of the Lonshi mine. On the basis of the 2012 ENRC purchase price for the Frontier licence (which permits use and exploitation of the Frontier mine) of $101.5 million, the 22.5% ratio implies a theoretical sale price of Lonshi at $22.842 million. Since we have already subtracted the $60 million received by Sodimico for the sale of Sodifor in our accounting of the value lost for Frontier (see the previous footnote), our methodology requires us to assume that there is no payment received by the state or state-owned enterprises for transferring the Lonshi asset to offshore companies (to avoid double-counting). Accordingly, the theoretical sale price of $22.842 million is also the theoretical loss to the DRC in its disposition of the Lonshi asset (rounded above to $23 million).
19. See contract for the sale of 25% of Kansuki by Gécamines to Biko Invest Corp of 28 March 2011, published on the DRC's Ministry of Mines website: http://mines-rdc.cd/fr/documents/contrat_cession_parts_sociales_biko.pdf (last accessed 1 March 2013).
20. See contract for Kansuki, referred to above.
21. A Deutsche Bank valuation published 6 June 2011 put a 37.5 per stake held by the Swiss commodities firm Glencore in Kansuki at $313 million – extrapolating from this would give a value of $209 million for a 25% stake (the report can be viewed at http://www.scribd.com/doc/57254342/Db-Glencore-Initiation, last accessed 1 March 2013). Later that month, Liberum Capital valued Glencore's stake in Kansuki at $86 million, which would put a 25% share at $57.25 million ("Glencore: unapologetically unique", 29 June 2011). The average of the two extrapolated valutions for the 25% stake is $133.125 million. It should be noted that a January 2013 Bank of America Merrill Lynch report a much higher valuation for Kansuki was given, putting Glencore's 37.5% stake at $692 million, from which one could extrapolate that a 25% stake would be worth $461 million (report entitled "European Metals & Mining – Glencore/Xstrata: merger update, and detailed pro-forma estimates").
22. See contract on the DRC's Ministry of Mines website: http://mines-rdc.cd/fr/documents/contrat_cession_parts_sociales_rowny.pdf, last accessed 1 March 2013.
23. See contract for Mutanda on the DRC's Ministry of Mines website, referenced above.
24. Based on a 6 June 2011 report from Deutsche Bank (http://www.scribd.com/doc/57254342/Db-Glencore-Initiation, last accessed 9 April 2013) and a 29 June 2011 report from Liberum Capital ("Glencore: unapologetically unique"), Glencore's 40% stake at the time would be worth $1.251 billion and $1.93 billion, respectively, meaning that Gécamines'

20% stake would be worth $625.5 million or $965 million. Additionally, the 20% stake in Mutanda would be worth: $353 million on the basis of a Nomura Equity Research briefing of May 2011 (Figure 34, page 22, valuing 40% of Mutanda at $706 million); approximately $375 million on the basis of a graph published in a December 2011 research note by BMO Capital Markets; and $849 million on the basis of figures presented in the 4 May 2011 Golder Associates "Minerals Expert's Report: Mutanda" included in Glencore's May 2011 IPO prospectus, once royalties are taken into account. (Regarding the Golder Associates valuation, the report notes on page 7 that "[t]he valuation was done at a discount rate of 10%, base date 1 January 2011. The net present value (NPV) of Mutanda is USD 3 089 million. The net present value (NPV) of Glencore's investment in Mutanda is USD 1 318 million.") Glencore International PLC, "Prospectus", May 2011. It should be noted that in September 2011 Gécamines responded to queries from the IMF with a public letter, saying: "Gécamines Sarl a évalué ses parts sociales dans MUMI Sprl à 137 millions de dollars américains, bien au-delà de la valorisation qu'en a faite BNP Paribas, en avril 2010, soit 108 millions de dollars américains, dans une approche « basée sur un escompte des flux de trésorerie »." (Translation: "Gécamines Sarl valued its shares in MUMI SPRL [Mutanda Mining] at $137 million, far more than the valuation BNP Paribas did in April 2010 of $108 million in an approach based on a discounted cash flow.") (http://www.congomines.org/wp-content/uploads/2011/11/GCM-2011-ResponseFMIVenteMumi.pdf) The letter gives the impression that Mutanda alone was sold for $137 million – whereas in fact this sales tag was for Kansuki and Mutanda combined. Regarding the reference to a BNP valuation of $108 million for Mutanda (see Michael J. Kavanagh and Franz Wild, "Gécamines of Congo Defends Sale of Stake in Glencore Mines", Bloomberg 13 October 2011). We have difficulty accepting the BNP Paribas valuation that Gécamines cites as credible, given that: neither Gécamines nor any other party has published the valuation nor even any details relating to it; and that it differs so widely from the other five valuations obtained by Global Witness, some of which were received in printed form, along with details of the calculations. In an e-mail of 16 May 2012, BNP Paribas wrote: "BNP Paribas was mandated on September 2, 2009 by Gécamines to review certain assets of the company. A report was delivered on April 2, 2010. We want to underline that our review was not a 'Fairness Opinion'. It was also not done in the context of an asset sale negotiation. After the report was delivered, BNP Paribas did not perform any further work on that matter for Gécamines. We understand from public sources that Gécamines sold some of its assets 18 months later, around the end of 2011, under a different chairmanship. BNP Paribas was not involved in any of these asset sales. Our methodology, which included forecasts for the period and data provided by the company at the time (i.e. dating prior to Q1 2010), was the methodology in use in the profession. We are very sorry but BNP Paribas is linked by confidentiality clauses with its client, that's why we can not provide you with further information." The January 2013 Bank of America Merrill Lynch report referenced above – and not included in our calculation of average values, as it was published nearly two years after the sale to Rowny – gave a valuation of $2.876 billion for 60% of Mutanda, which would put a 20% stake at $959 million. This recent valuation reinforces the impression that the BNP Paribas valuation Gécamines cites was far too low. Overall, the average of commercial valuations for Mutanda is calculated as follows, relying on the Deutsche Bank, Liberum, Nomura Equity, BMO Capital Markets, and Glencore/Golder Associates valuations only: (625.5 + 965 + 353 + 375 + 849)/5 = 633.6.