

E-Paper

A Critical Matter

German Investments in the Mining Sector

Roger Moody

Berlin, Dezember, 2014

Content

A Critical Matter – Introduction	4
Part One: The European Union’s raw materials policy	5
<i>Germany’s own approach to raw materials “criticality”</i>	6
<i>Cross-country collaboration</i>	6
<i>Defining true costs</i>	7
<i>China’s syndromes</i>	9
Part Two: What Germany is looking for – and where from	9
Part Three: Investment routes	11
Part Four: Mining-related finance in 2014 and beyond	13
Part Five: A wealth of speculation – and fraud	15
<i>Damaging derivatives</i>	16
<i>The role of Deutsche Bank</i>	17
Part Six: More dodgy deals	18
a) <i>ETFs and CIFs</i>	18
b) <i>Hedge funds – the German position</i>	19
c) <i>Private equity funds</i>	20
d) <i>Equities and bonds</i>	20
Part Seven: Varieties of jeopardy	21
<i>Defining criticality – a suspect exercise</i>	22
<i>Is any country “safe”?</i>	22
<i>Canada</i>	22
<i>South African strife</i>	23
<i>Russia and sanctions</i>	23
<i>The rest of the world</i>	24

Part Eight: The rules do not work.....	24
<i>International sign-ons.....</i>	<i>24</i>
<i>Indigenous Peoples and “supply risk”.....</i>	<i>26</i>
<i>State pension and sovereign wealth funds</i>	<i>27</i>
Part Nine: In the breach	28
<i>Some dubious mining projects backed by German financial institutions</i>	<i>28</i>
<i>KfW IPEX-Bank.....</i>	<i>28</i>
<i>KfW-DEG</i>	<i>29</i>
Part Ten: Germany’s Raw Materials Partnerships –	
Are they worth the paper they are written on?.....	32
<i>Supply of raw materials.....</i>	<i>32</i>
<i>Export business.....</i>	<i>32</i>
<i>Social conflicts</i>	<i>33</i>
<i>Kazakhstan</i>	<i>33</i>
<i>Mongolia.....</i>	<i>35</i>
Part Eleven: Promoting “sustainable” development? –	
The contradictory stances of GIZ, BMBF, BMZ, and BGR.....	37
<i>Cooperation in development</i>	<i>38</i>
<i>UN Millennium development goals.....</i>	<i>38</i>
Conclusion.....	40
Impressum	41

A Critical Matter * – Introduction

This paper is aimed at informing German civil society groups about the role of German financial institutions in supporting the acquisition of raw materials – primarily from overseas – and the social and environmental impacts of doing so.

It builds on information provided by the database and website “From Money to Metal” (http://moneytometal.org/index.php/From_Money_to_Metal), jointly hosted by the Heinrich Böll Foundation and Mines and Communities. The paper identifies German bank loans and debt financing for mining companies; the related issuance of corporate and convertible bonds; and the direct purchase of equity (stocks and shares) in mining outfits by German banks, brokerages, and others. It points out the risks taken – financially, environmentally, and socially.

Part One: The European Union's raw materials policy

In June 2010, the European Commission (EC) identified 40 raw materials of economic importance that posed “supply risks” for EU member states. Fourteen of these were considered critically important: antimony, beryllium, fluorspar, gallium, germanium, graphite, indium, cobalt, magnesium, niobium, platinum group metals, rare earth elements, tantalum, and tungsten.¹ In its latest list of such critical materials (May 2014), the EC hedges its conclusions with a major qualification, saying that “limitations and uncertainties with data [...] should be taken into consideration when discussing this list. It is worth recalling that all materials, even when not critical, are important for the European economy.”

This rather opaque statement may leave the average reader wondering whether there is any point in trying to arrive at a definition of “criticality”. Why not simply admit that current research is not conclusive? That a specific metal, said to be in short supply at one point in time, could be in adequate supply or oversupply at another point? And that there are no commonly accepted indices by which to judge whether such a movement has occurred? The EC report usefully updates information about the countries hosting certain metals and their current availability. Where it gravely fails is in providing virtually no insights into the social and political ramifications of trying to access them. Indeed, when setting out the second of two primary “assessment components”, used to assess criticality (the first being “economic importance”), the report stumbles spectacularly at the first fence. “Supply risk – Poor governance”, we are told, is when raw material production may be interrupted “eg through political unrest”.² Little more.

Yet, numerous other factors can prevent mining companies from getting to the deposits they are after, ranging from adverse environmental “events”, such as cyclones and storms, to a wholesale withdrawal of workers; not to mention community direct action aimed at halting a specific project. The EC study does refer fleetingly to so-called resource nationalism as contributing “to a reduction in supply from the World’s most important suppliers, increasing risk across supply chains”. However, no attempt is made to quantify such risks, nor offer any strategies for limiting them.

¹ See European Commission, “Report on Critical Materials for the EU: Report of the Ad Hoc Working Group on Defining Critical Raw Materials”, May 2014, p. 3

² European Commission, “Report on Critical Materials”, p. 21

Germany's own approach to raw materials "criticality"

In March 2013, the German Federal Ministry for Economic Affairs and Energy (Bundesministeriums für Wirtschaft und Energie, BMWi) prioritised the same 14 metals that the EC had three years before in its own "Program to foster exploration to improve the supply for Germany and the EU with critical non-energy mineral commodities".³

At around the same time, the EC expanded its earlier list to include borates, coking coal, magnesite, silicon, and phosphates, while dividing rare earth elements into two categories: "heavy" and "light".⁴ For its part, the German Mineral Resources Agency (Deutsche Rohstoffagentur, DERA) has published 21 *Rohstoffinformationen* papers to date, seeking to address various issues around mineral supplies.

Well-researched though some of these papers are, as of October 2014 only seven of them comprise in-depth studies, five of which relate to metals mentioned in BMWi's own programme – antimony, copper, tin, tungsten, and zircon. Very short briefing papers have also been published by the German Federal Institute for Geosciences and Natural Resources (Bundesanstalt für Geowissenschaften und Rohstoffe, BGR) on copper, tin, zircon, antimony, rare earths, chromite, and aluminium/bauxite.

Cross-country collaboration

DERA joined with various AHKs (German Chambers of Commerce) around the world and German Trade and Investment (gtai) to identify four countries with which it has cooperated for some time: Canada, Chile, Russia, and South Africa. Two lengthy studies on potential German engagement in South Africa's and Australia's minerals sectors were published in 2013; another on Peru was published in July 2014.

The German government has also concluded three mineral and mining cooperation agreements with the governments of Mongolia (October 2011), Kazakhstan (February 2012), and Peru (July 2014). A similar agreement between the German Ministry of Economy and the Ministry of Mining in Chile was signed in January 2013. In return for access to these countries' raw materials, the German government offers "technical assistance" aimed not only at improving their mining practices, but also at boosting their imports from German engineering firms and manufacturers. The extent to which such assistance involves the implementation of these agreements – and any which follow – will have verifiable negative consequences on many citizens in the partner countries.

³ See online: http://www.deutsche-rohstoffagentur.de/DERA/DE/Downloads/pdac_2014_bgr_steinbach.pdf?__blob=publicationFile

⁴ European Commission, "Report on Critical Materials"

The proliferation – and to an extent, duplication – of “Rohstoffinformation” may seem somewhat bewildering. We may well ask: “Just what are many of these materials used for?” “Why are some deemed more ‘critical’ than others?” “As priorities shift for German manufacturers, won’t demand for some metals increase and be reduced for others?” And: “Surely many metals will be bought when market prices are low and then stockpiled. Will they ever actually be used?”

Unfortunately we do not get much help from DERA or BRG in answering these questions. Much of the data on which they rely is out of date (dating back to 2012), and some analyses are not particularly helpful. Take the 2013 DERA paper *Ursachen von Preispeaks, -einbrüchen und -trends bei mineralischen Rohstoffen*, purporting to be a detailed study of price trends for important metals. Its conclusions could have been scribbled down by a local shop-keeper on a spare sheet of paper: “Current price peaks are due to sharp increase on the demand side. Metal production is expanding too slowly. [...] Economic decisions like in 2008/2009 would lead to massive price increases. [...] Price trends are driven by global trends and changes in demand. Such shocks are mostly caused by new technologies and are not predictable. [...] However, prices will fall as growth in demand slows down.”

What DERA conspicuously fails to factor in to its calculations are several overriding influences on global metals prices and availability. There are the limitations faced by mining companies themselves as to where they may go and what they can dig up. These are not only due to economic restraints such as mounting costs of labour, site acquisition, technological inputs, and provision of infrastructure; political decisions also play an important part. For example, Germany’s relinquishment of nuclear energy will reduce imports of uranium by 3,800 tonnes a year⁵ – around 6 per cent of total world output.⁶ Additionally, DERA only superficially addresses the need to substitute one industrial metal for another and the vital contribution that vastly improved recycling and re-use of metals could make to metals availability. (The May 2014 study published by the EC at least makes an attempt at doing this).

Defining true costs

Twenty-five years ago, it was widely feared that a large proportion of available minerals would quickly be exhausted, at their then-rate of extraction. However, a small number of mineral economists took a counter-intuitive view, arguing that new extraction technologies have always been engineered and financed when prompted by sufficient demand. These would enable mining companies to get at previously inaccessible deposits, or ones hitherto discounted as being too costly or low-grade to mine.

⁵ See online: <http://world-nuclear.org/info/Country-Profiles/Countries-G-N/Germany>

⁶ See online: <http://www.world-nuclear.org/info/Nuclear-Fuel-Cycle/Uranium-Resources/Supply-of-Uranium/>

There has certainly been a lot of improvements in mining methods in the past two decades – and this is not taking into account the potential of gaining huge amounts of metals from the seabed or under Arctic ice. The deep-sea mining of polymetallic (manganese) crusts and nodules is part of BMWi's "National Master Plan for Maritime Technologies", while studies of the raw materials potential of the Arctic region are under way. Nonetheless, grades of many mined metals have fallen inexorably over the past half century, and are dropping further. Compared to a decade ago, significantly more investment is required to advance mining techniques, supply energy to mines, meet demands of workers, and build complementary infrastructure.

Until the 1990s, a large part of the global mining industry was controlled, and subsidised, by governments, which allocated substantial revenues to locating and exploiting domestic minerals. With a few exceptions (notably copper producer Codelco in Chile and some state-owned enterprises in China), this is no longer true. Privately-owned mining enterprises have usurped government's role. More recently, global commodities traders, such as Glencore, Trafigura, and Noble, have been taking over a substantial amount of what used to be the miners' sole preserve.

These trading firms now own and operate their own mines. They are the most important sea-borne deliverers of bulk commodities – coal, iron, manganese, nickel, and phosphates – and have become some of the primary determinants of the price that governments (including Germany's) have to pay for the metals and minerals they believe they need. It is little wonder that the *Mining Journal* in July 2014 judged that Glencore – the world's largest metals trader – was "moving into a kind of banking as the banks have ceased commodities trading. [...] Glencore and [other] traders get a fee for charging for the service, and they also get access to the commodities on which they can add another fee." ⁷

The mining industry is now experiencing a major challenge – one that has not been seen in decades – where constraints on funding are forcing companies to "cut their suits to fit the cloth". Currently, markets are awash in excess mined output, particularly iron ore and coal. Even if (or when) this works its way through the markets, there is no guarantee that the mining industry will be able to adjust its supply to meet demand in the manner it has done since the early 20th century.

As a whole, the market will not collapse – although many junior mining companies have already been brought down – but it is being forced to transform in ways that no one can anticipate.

⁷ Mining Journal, 25 July 2014

China's syndromes

Since it joined the World Trade Organization in 2001, China's supposed "thirst" for minerals has been the key incentive behind the huge amount of money being put into in global mining. However, Chinese demand for several important minerals and metals was already slowing in 2012, and it has dropped further during the last 12 months (notably, but not only, for coal and iron). This reduction was, in large part, triggered by growing citizen outrage over unacceptable ambient air pollution, or "smog".

It is unlikely that the country's overall demand for metals and materials will return to anything like the high levels reached between 2002 and 2012. Not only has the regime limited the amount of raw material imports; restrictions have also been imposed on exports of both raw and processed goods. What impact these policies will have on Germany's own projected raw materials requirements remains to be seen, but it is of considerable concern. This not only because it will affect the overall availability of mining finance. It may also severely restrict access to some of the metals that Germany and other countries are expecting China to provide. For example, China has by far the largest known reserves of rare earth minerals (considered "critical" to Germany by the KfW IPEX-Bank). It is adding to these by importing additional rare earth ores from Kazakhstan.

But what would happen should the Beijing leadership succeed in slowing down the country's hitherto headlong economic growth? If it cuts back on its dirty businesses – among which it classifies mining of rare earth elements – what will that mean for the rest of the world? ⁸

Surely the lesson for Germany is that the measures it has already taken to decrease reliance on primary metals extraction should be notched up dramatically by aiming much more research and funding towards increasing the levels of conservation, recycling, and re-use of minerals.

SUMMARY: Germany's raw materials acquisition programme relies on inadequate data and dubious assumptions, failing to account for recent dramatic changes affecting the global mining industry.

Part Two: What Germany is looking for – and where from

Germany's raw materials acquisition policy is still being rolled out. Important decisions have yet to be made as to which specific metals and materials are in short supply, how much will be needed, and from which countries they should be sourced. It goes without saying that there will be a thorough evaluation of the programme's economic costs, a point that is central to this ongoing deliberation. This cannot, and must not, be separate from an assessment of the social and environmental impacts on those living within the countries and regions where these minerals will be obtained.

⁸ European Commission, "Report on Critical Materials", p. 12

Political decisions taken beyond Germany's own border (indeed outside the European Community itself) will also have considerable influence over how the policy develops.

Mining always exerts harmful impacts on communities, their livelihoods, and the biosphere. This is also true of the "life cycles" of mined materials as they pass from the pit, through to processing and refinement, and end up as manufactured goods. Over-reliance on extractive industries can profoundly distort a state's other development objectives – the so-called resources curse.⁹ Of course, this is not the whole story. Up to 36 million workers worldwide depend on mining-related employment (although many jobs are subcontracted at minimal wage levels). Another six million survive from small-scale extraction.¹⁰ Additionally, a slowly-growing proportion of new global infrastructure – power plants, roads, railways, export ports – is now being built by mining companies that are committed to sharing this with other users, including farmers and local manufacturers.

However, mineral extraction is fundamentally dependent on the exploitation of finite resources, which cannot be replaced. When turned into finished products such as steel, cement, and aluminium, these resources add significantly to global greenhouse gas emissions. Coal burned to produce electricity is widely acknowledged as the single largest "climate culprit". These, and many other liabilities, must be fully accounted for when determining the nuts and bolts of Germany's raw materials acquisition programme.

While adopting traditional means to offer – and profit from – investments in mining, German banks and fund managers are no strangers to employing more dubious financial instruments and offering highly risky "products" to customers. There is significant German participation in the marketing of financial derivatives, the trading of metallic commodities, and the management of exchange-traded funds (ETFs) and commodity index funds (CIFs) (see below). In practice, all of these are misused as part of what has become widely known since 2008 as "the shadow banking system".

It is true that the German government, like many others, is currently engaged in drafting the Basel Three Accord, aimed at limiting the excesses and illegal activities of the banking sector. However, any rules emerging from these negotiations will be voluntary and are not expected to be fully framed until 2019.¹¹ Key players in the financial services sector are thus free to carry on using (and inventing) a bewildering array of "fixes", a significant number of which are distinctly "toxic" – not least when applied to mining-related deals.

SUMMARY: An evaluation of the economic expenses of Germany's raw materials programme cannot be viewed separately from the assessment of the social and environmental costs of extraction.

⁹ See Roger Moody, *Rocks & Hard Places: The Globalisation of Mining* (London: Zed Books, 2007), pp. 43–69

¹⁰ See online: www.ilo.org/wcmsp5/groups/public/...067582.pdf

¹¹ See online: http://en.wikipedia.org/wiki/Basel_III

Part Three: Investment routes

The facts are obvious: global mining companies depend on attracting customers who are ready to pay a price for their metals and materials that covers the costs of extraction, while leaving enough over to return a dividend to shareholders and facilitate the search for new deposits. Over the past 20 years, the mining industry has increasingly targeted “frontier” zones and “emerging economies”, such as Mongolia, the six Central Asian countries referred to colloquially as the “stans”, and East African countries. More recently, some of them have turned their eyes towards the mineral potential of the deep ocean floor as well as to potential deposits beneath the Arctic shelf.

Nonetheless, traditional mining regions – located in Australia, Canada, the United States, and Chile – are targets for the most significant allocations of current exploration expenditures. These regions also enjoy what the miners themselves consider to be the highest investment potential.¹² Such expenses are customarily met using the company’s general budget. But, especially when embarking on a major project, it will also have recourse to one or more of the following:

- raising loans (debt financing)
- a corporate bond issue
- issuing a tranche(s) of shares
- securing a hedging or revolving credit facility
- engaging in a commodity-for-loan transaction

In turn, fund managers may purchase (or increase) an equity stake (stocks and shares) in the company. In general, employee pension funds (including those operated by government sovereign wealth funds) are also obliged to spread their investments across different sectors and to include the “blue chip” mining companies – such as the Top Ten miners listed on the Financial Times 100 Index – in their portfolios. All major German commercial banks and some insurers purchase shares in mining companies: Allianz; Bayern LB; BlackRock Germany; Commerzbank; DekaBank; Deutsche Bank; DZ Bank, Munich Re; and state-owned KfW IPEX-Bank.

The growing number of so-called ethical funds may eschew investments in mining altogether, or in specific sectors such as coal and uranium. Nonetheless, some of the largest such funds are managed by high-street banks that have no scruples over such investments. The bigger banks and investors (including Deutsche Bank, Commerzbank, and Allianz) act as brokers for issuance of shares, as well as act on behalf of a company that wishes to launch a stock exchange flotation.

¹² See online: <http://www.ey.com/GL/en/Industries/Mining-Metals/Business-risks-in-mining...>

They may play a major part in preparing the prospectus for an initial public offering (IPO) of shares, which is intended to inform potential investors of the creditworthiness of the company and its financial liabilities, as well as environmental risks. (There have been no recent mining-related IPOs in Germany.)

Advised by their bankers, these companies select one or more stock exchanges on which to be listed – the most preferred one being in London, followed by those in Hong Kong, Toronto, Sydney, and New York. They may also place a secondary listing on one or more of these exchanges or select another. In this respect, the Frankfurt Stock Exchange is an important destination for a significant number of mining companies. This gives them access to both German and other European investors. In May 2014, there were 77 mining and metals companies that had their secondary listing in Frankfurt.

The German federal government's export credit agency, Euler Hermes AG, along with PriceWaterhouseCoopers AG, offers export credit guarantees and political risk insurance to domestic companies supplying equipment to miners operating overseas. Such coverage is designed to compensate for a range of losses or liabilities, such as state appropriation of a company's property and acts of war. In 2014, the German government calculated 175 billion euros in its budget for export support.

KfW IPEX-Bank enjoys a unique role in this financial "universe". In addition to providing project finance and medium- and long-term loans for investments in plant and machinery, it too offers export credit guarantees and political risk insurance-cover to companies. The bank is particularly concerned about what it terms the "endangerment" to the German economy posed by a lack of its own raw mineral resources. Three years ago, KfW IPEX-Bank began analysing these risks, "taking into consideration the increasing global demand through the use of future technologies".¹³

A study conducted by the Institute for Futures Studies and Technology Assessment (IZT) and adelphi, published on 10 October 2011, listed a total of 52 raw materials, which were assessed as to their future supply. Thirteen of these were classified as "critical" or "very critical". (Included among the latter were germanium, rhenium, and antimony; among the "critical" were indium, wolfram [tungsten], rare earths, gallium, palladium, silver, tin, niobium, chrome, and bismuth).

To date, KfW IPEX seems not to have made any specific financial commitment to identifying or extracting any of these metals, except silver. Nonetheless, from 2000, it has been supporting Serbia's energy sector through an official financial cooperation agreement on behalf of the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ) in order to promote "energy efficiency" and reduce CO2 emissions through "coal quality management" at the country's Kolubara open-pit mine.

¹³ See KfW IPEX-Bank Annual Report 2011

KfW IPEX-Bank has acted as the largest commercial lender (of US\$1 billion) to expand an iron ore project in Mauritania that involves the export of German technology and the import of iron ore for Germany's domestic steel industry. Along with Euler Hermes, it is supporting India's Bhushan Steel to the tune of 170 million euros, ostensibly to modernise plant machinery and "significantly reduce environmental impacts". In June 2012, the bank also financed the export of German machine technology to Fortescue of Australia – the country's fourth-largest iron ore miner – designed to boost output from its domestic open-pit mines until 2021.

Between 2011 and the present, KfW IPEX-Bank has provided finance and credit facilities to Pan Aust (exploring for copper and gold in Laos); Minera el Tesoro (operating a copper mine in Chile), Barrick Gold (operating a gold mine in the Dominican Republic); Minera Los Pelambres and Minera Esperanza (both copper-mining companies in Chile); and Rosemount Copper in the United States. It has also contributed to general financing by Glencore, the world's largest minerals and metals trading firm, and one of its leading mining conglomerates.¹⁴

Moreover, as of December 2013, it was responsible for US\$8.5 million in debt financing (insured by Euler Hermes) and another US\$8.5 million (backed by the World Bank's Multilateral Investment Guarantee Agency) for Saudi Arabia's Ma'aden Wa'aid Al Shamal phosphate mining company.

SUMMARY: All major German private banks and state institutions assist the mining industry through various practices that are long-established.

Part Four: Mining-related finance in 2014 and beyond

Mining is a highly cyclical business: requirements for specific raw materials rise and fall, in line with changes in macro-economic growth projections. When market demand is down and prices fall, consumers may well buy significantly more available materials than before, giving the illusion that a boom is just around the corner. But this does not mean those purchases will go directly into supporting manufactured production. In fact, millions of tonnes are stockpiled for future industrial use or held by banks and trading firms primarily concerned about profiting from the movement of stocks between warehouses, and speculating on the price changes that results (see below).

¹⁴ Opposition was recently mounted by several NGOs – including Banktrack and Urgewald – to bank support for the expansion of the Abbott Point coal and iron export terminal in Queensland, Australia, which they said was in danger of contaminating the Great Barrier Reef. In July 2014, KfW announced that it was not involved in financing the terminal; other banks – including Deutsche Bank, Royal Bank of Scotland, HSBC, and Barclays – also refused to invest in the project. See: Press Statement, KfW IPEX, 27 July 2014, online: www.banktrack.org/show/news/deutsche_bank...great_barrier_reef
<http://www.minesandcommunities.org/article.php?a=12690>

Even under less volatile market conditions than those that exist at present, it is problematic to calculate which raw materials are actually in short – or over – supply at any time. Mineral economists themselves cannot agree with each other, e.g. their projections of the likely behaviour of gold prices have varied wildly over the past two years. The problem is compounded by the risks involved in digging up these materials in the first place. It can take several years – often a decade or more – before a mine moves from the drawing board, gains all the legal permits, and ends up with a “bankable feasibility study”, without which it will not attract the support of a funder.

And that is in normal circumstances. If the availability of mining-related finance itself becomes severely constrained, numerous companies will be in trouble. Even if they land a potentially promising project, they will not be able to find a financial backer. Particularly affected will be smaller (junior) mining outfits that concentrate on exploration and customarily rely on venture capital sourced from privately-owned hedge funds and private equity funds. In the event of a prolonged credit squeeze (as from late 2008 onwards), no one will be spared, including bigger, multi-billion-dollar global mining companies.

This is exactly what has been happening since early 2014. The Toronto Stock Exchange hosts by far the world’s largest number of junior miners. In 2007, shortly before the 2008 global credit meltdown, these companies collectively completed more than 400 deals, securing \$4.3 billion. Last year, however, they raised barely a seventh of that amount (\$660 million) through only 61 financings, and the repercussions were felt not just “at the sharp end of the shovel”. As Canada’s *Financial Post* reported in May 2014: “Not surprisingly, the boutique investment banks that made so much money servicing these firms in the boom years are now chopping staff or closing down entirely.”¹⁵

It may appear confusing that the mining industry in 2013 actually attracted more global investment than it had the year before. Bloomberg estimated that “[r]aw-material industries boosted their borrowing by 17% [...] to US\$684.7 billion, after a 22 percent drop in 2012”, resorting to loans from more than one bank at a time and including project loans and trade-related finance.¹⁶ During the same year, Glencore scooped one of the largest syndicated loans ever offered within the region of Europe, the Middle East, and Africa in the shape of US\$17.3 billion in revolving credit (designed to improve liquidity), backed by no fewer than 80 global banks, including Commerzbank and Deutsche Bank.

This should not have lead us to believe that a mining revival was just around the corner. According to Bloomberg: “Traders, including Trafigura Beheer BV, have snapped up assets including oil terminals, ports, mines and refineries to counter shrinking margins in the trading business.”¹⁷ In other words, they secured even greater control over commodity markets and infrastructure because the acquisition costs had been firmly driven down.

¹⁵ Financial Post, 31 May 2014

¹⁶ Bloomberg, 23 April 2014

¹⁷ Bloomberg, 23 April 2014

The gauge of demand in Standard & Poor's Goldman Sachs Commodity Index for some 24 raw materials dropped by 2.2 per cent in 2013 – its first decline in five years. There were double-digit declines for nickel and aluminium “on signs that supplies were rising faster than demand”. Gold and silver posted the biggest losses since 1981, “as rallying equity markets and slow inflation eroded demand for the precious metals as a hedge”.¹⁸ The Bloomberg World Mining Index of 140 metal-mining companies also “plunged 26 percent last year [...] erod[ing] revenue at mines and smelters”, and the value of mining mergers and acquisitions slid by almost a third (31 per cent).¹⁹ As 2012 wound down, the number one global iron-ore producer, Vale, announced it would cut its investment in 2014 to the lowest since 2010. Rio Tinto (the world's second-largest diversified mining company) slashed more than US\$2 billion off running costs and divested US\$3.3 billion in assets, saying it would reduce its overall spending by half before 2015.

Inevitably this bearish scenario has had a knock-on effect on some of the world's biggest financial services providers, and four of them have decided to stop trading in a large number of extracted materials. JPMorgan Chase has already exited its metals commodity business. Bank of America announced in January 2014 that it would quit power and natural-gas markets in Europe. Barclays cut raw-materials jobs in January as part of a reduction in fixed income, currencies, and commodities, and it closed its own power-trading desks in the United States and Europe in February.²⁰ And, at the end of 2013, Deutsche Bank anticipated withdrawing from some of its own commodities (including metals) trading.

Nonetheless, Germany's premier investment bank does not intend to reduce its speculation in commodities altogether. Far from it (as we will shortly discover). Barclays, too, has said it will continue to trade precious metals, derivatives tied to the price of oil and US gas, as well as commodity indexes.²¹

SUMMARY: Assumptions that the mining sector is now recovering the momentum lost after the global credit collapse of 2008 are erroneous.

Part Five: A wealth of speculation – and fraud

Some financial products are transparent – the client is aware of the risks contingent with buying them, and those who offer them are penalised for any covert manipulations. In contrast, many others are underpinned by the “shadow banking system”, where transactions are conducted “off the books” and do not appear on a balance sheet. Once signed and sealed, they prove virtually impossible to cancel.

¹⁸ Reuters 6 December 2013

¹⁹ Bloomberg 23 April 2014

²⁰ Bloomberg 23 April 2014

²¹ Bloomberg 23 April 2014

We may sometimes forget that the vast amounts of cash that change hands in such deals are not conjured out of thin air, but come from the pockets of hundreds of millions of taxpayers across the world, much of it captured by governments. This implicit socio-economic contract was flagrantly violated by many commercial banks as well as public and private funds in the decade leading up to what the billionaire investor Warren Buffet has evocatively dubbed the “nuclear financial winter” of 2008.

Yet, few of these instruments have disappeared from the armoury available to mainstream financial institutions. They continue to offer a wide range of the self-same investment instruments and associated retail products that were in fashion before 2008. Indeed, some of them have gained increasing popularity during the past five years, notably CIFs and ETFs, for which Deutsche Bank is one of the world’s leading proponents and practitioners (see below).

Damaging derivatives

Acknowledged in the German government’s 2010 Raw Materials Strategy paper are the dangers of “massive excess speculation” in commodity futures trading, and the danger of what the paper calls “price development on the stock exchange [*sic*]” becoming “decoupled from the fundamentals of the respective raw materials market”. The consequence of this would be a diminishing of “real growth and employment”. To avert this, the paper demanded that “transparency” must be increased, particularly in terms of “financial transactions and physical stocks”.²²

That conclusion was echoed by Coalition, a London-based analytics company, which noted in February 2013 that “[r]egulators are concerned that lenders might control prices if they both own and trade raw materials, or suffer losses that would endanger the financial system”.²³

The warning has gone unheeded. In fact, the dangers of failing to rein in the most egregious types of derivatives trading is possibly becoming more pronounced. Derivative contracts are either traded on an exchange or privately in so-called over-the-counter transactions. They can also be swapped between contracting parties for cash. Such trades in practice may become so secretive and complex (as the contract is sold between a bewildering succession of parties) that they are better described as “under-the-counter” deals.

This is illustrated by ongoing failure on the part of the London Metal Exchange (LME) – the leading price determinant for trades in several vital non-ferrous metals – to prevent Goldman Sachs and JPMorgan Chase banks from fixing copper and other metals prices for their own profit (and to the detriment of consumers). The established principle behind such trading is that there should always be sufficient and transparently identified physical stocks of commodities – maintained in a warehouse or in transit – in order to back derivative transactions.

²² See online: <http://www.bmwi.de/English/Redaktion/Pdf/raw-materials-strategy,property=pdf,bereich=bmwi2012,sprache=en,rwb=true.pdf>; p. 19

²³ Bloomberg, 16 January 2014

For some of the major metals, these trades are executed on the LME. By shifting stocks in and out of such locations, firms have created an artificial dearth of supply and pocketed millions of dollars in fees for carrying out the deception.

A case in point is that of Glencore, recently accused of tightening its grip on the global zinc market by moving material to inaccessible locations, thus forcing industrial users to pay high prices for a metal that is actually in surplus. With a reported 60 per cent of the world's zinc trade under its control, Glencore allegedly used LME warehouses, although one of the key purposes of the exchange is to prevent them from being employed for the purpose.²⁴ The practice has not only created egregious market distortions. Scarce capital has been devoted, on a “false prospectus”, to opening mines that need not have been dug in the first place, creating a raft of environmental and social impacts that might have been avoided.

German banks are far from innocent of being implicated in such delinquencies. Thirty-one banks, brokerages, and private traders are listed as Associate Broker Clearing Members on the LME, including Deutsche Bank and Commerzbank. Additionally, 11 other banks (including UBS, HSBC, Citigroup, Standard Chartered, and Merrill Lynch) offer important LME trading-related services through their German branches and subsidiaries, primarily those based in Frankfurt.

The role of Deutsche Bank

Deutsche Bank has few misgivings about the necessity and effectiveness of offering these dubious services. It boasts that its Global Fund Derivatives team “provides the full range of hedge fund products and services”. At the end of last year, the bank was offering investment products “linked to more than 600 hedge funds and over 800 leading global fund of Hedge Funds, the largest product range in the market” [*sic*].²⁵

Despite announcing its withdrawal from some commodities trading last year (as already noted), Deutsche Bank has by no means withdrawn from participation in commodities speculation. Indeed, in July 2013, the bank said it would “now focus on [its] core competencies of financial derivatives and precious metals”, which would be “integrated into Deutsche Bank’s Fixed Income and Currencies platform to take advantage of existing synergies”.²⁶

Germany’s most powerful commercial bank has clearly not learnt lessons from the recent past. On the contrary, it has been charged with complicity in three recent criminal or quasi-criminal enterprises revolving around suspect derivatives transactions.

* In January 2014, Germany’s Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) said Deutsche Bank had misled it over a dodgy derivatives trade with an Italian counterpart, Monte dei Paschi di Siena. The bank then went on to conceal the nature of the deal while retroactively “adjusting” its false accounting.

²⁴ See Appendix 1, online: <http://www.moneytometal.org/index.php/Introduction>

²⁵ GTB News, 10 December 2013

²⁶ Deutsche Asset and Wealth Management, 5 July 2013

BaFin's banking regulator, Frauke Menke, told the bank: "I think it absolutely unacceptable that you apparently misinformed [...] BaFin and other authorities over a long period of time and falsely accounted for the [Monte dei Paschi] Transaction."

* In July 2013, Deutsche Bank was accused of colluding with Goldman Sachs and private hedge funder John Paulson in engineering a "scam" in the use of a collateralised debt obligation (a derivatives instrument) in 2010 – a transaction for which Goldman Sachs had already been heavily fined by the US Securities and Exchange Commission.²⁷

* In January 2013, Deutsche Bank was forced into making a US\$1.5 million settlement with the US Federal Energy Regulatory Commission following its alleged manipulation of power markets in California.²⁸

Part Six: More dodgy deals

a) ETFs and CIFS

All global investment banks use exchange-traded funds – German banks are by no means an exception. There are now hundreds of ETFs traded on virtually any stock market "index" in the world. Unlike mutual funds – which trade at prices fixed on stock exchanges, the LME, and the London Bullion Market at the end of the trading day – ETFs can be bought and sold electronically, literally within a micro-second throughout the working day. It is a business known as algorithmic or "high-frequency trading", and more appropriately as "black box" trading. Importantly, ETFs may also be sold "short" to profit from betting on a fall in share values. Commodity index funds are akin to ETFs and tailored for clients wishing to back specific physical commodities, including precious metals (gold, silver, and platinum) and base metals (notably aluminium and copper).

ETFs and CIFS are wide open to abuse by commodity traders and banks acting as brokers when they seek to manipulate prices for their own profit by intervening in the physical market and controlling significant amounts of an available commodity (as already mentioned). They do so by signing derivatives contracts ("futures") for delivery of a certain amounts of goods at an agreed date in the future. This is regardless of whether the goods will actually arrive, since most contracts can be bought, sold on, or exchange hands in the meantime, with fresh delivery dates agreed.

As Peter Hollands of Bloomsbury Mineral Economics put it in 2010: "[C]ommodity market analysts used to think in terms of a market balance, which they defined as production minus consumption, with resulting physical stock change and stock levels [...] the more the physical stock sitting on the market's back, the lower stooped the resulting price."

²⁷ Money Morning, 25 July 2013

²⁸ Die Welt, as reported by Reuters, 7 January 2014

However, “[b]rokers saw things a little differently: balancing took place in the futures market not the physical market. [...] Since 2004, over one million tonnes of [...] copper futures [contracts] have been bought and held by investors in CIFs. [...] [H]ow can this not have moved prices?”

In 2011, the JPMorgan investment bank launched an ETF based on the acquisition of huge amounts of copper, which one US law firm anticipated could lead to the “removal of all or substantially all of the [copper] stocks in all of the LME warehouses in the US”. Despite this, the US Securities and Exchange Commission in late 2012 approved this JP Morgan Chase ETF.²⁹ A year later, Citigroup noted that nearly US\$30 billion worth of investment had left the mining sector via commodity-linked ETFs and index swaps (where a portfolio of stocks or bonds are handed over from one investor to another for cash). Citigroup concluded that this “mark[ed] a dramatic downturn in direct equity investment in mining companies”.³⁰

The consequences to the mining industry, says *Investors Chronicle*, have been severe: “For the next year or two at least, mining companies will continue slashing exploration, curtailing development, and high-grading [skimming off the most valuable of] their deposits in response to low metal prices and high production costs.”

In July 2013, Deutsche Bank had appeared to be on the point of limiting its role in providing ETFs. Deutsche Asset & Wealth Management (a unit of the bank) promised to review its use of ETFs and exchange-traded commodity products to “bring [these] into line with current and future investor demand”. The bank claimed that this would “involve the de-listing and closure of certain ETFs and ETCs [exchange-traded commodities]”.

Not that the bank found anything wrong in the use of exchange-traded securities per se. Rather, it said that these closures were due to their “hav[ing] demonstrated small levels of demand...”. In fact, just six months later, the bank was boasting that its “flagship Power-Shares DB Commodity Index Trading Fund had US\$6 billion invested [...] making it one of the biggest in the market”.

b) Hedge funds – the German position

Virtually all leading commercial banks have units or subsidiaries that act as hedge funds, such as Deutsche Bank’s DWS Hedge, which invests in gold and precious metals. On 1 January 2014, BaFin introduced new German banking regulations to update the Basel III regulations (which, as already pointed out, are still under negotiation), ushering them in as “key parts of a huge regulatory package...[for] a sweeping and fundamental transformation of EU banking supervision law”. Part of this “package” referred specifically to the supervision of German hedge funds subject to the country’s Investment Code (*Kapitalanlagegesetzbuch*). BaFin ruled that “short selling may not be employed for funds of hedge funds. [...] Before investing, [these] funds have to obtain a minimum amount of information about the target funds. Thereafter they must monitor the investment strategies and risks of the target funds on an ongoing basis.”

²⁹ Mining Journal, 21–28 December 2014

³⁰ Mining Journal, 21–28 December 2014

This was welcome news. Short-selling involves investing in a stock in the expectation, or with the intention, that its price will fall. The field of mining is replete with examples of this behaviour. It not only risks the viability of relatively sound projects, but has sometimes been used to boost the fortunes of projects possessing little or no merit – simply to reap profits for the hedge funders themselves.

However, BaFin does not envisage imposing new rules on individual hedge funds – the type that have predominated in mining finance. On the contrary, BaFin endorses “any mechanism used by management companies to increase the investment level of an investment fund managed by it – either by borrowing, securities loans, leverage embedded in derivatives or any other means”. Thus, while claiming that Europe now leads the field in promulgating regulations to help avert another credit meltdown like in 2008, the German government is endorsing continued use of some of the very tools that underpinned and compounded that crisis.

c) Private equity funds

Private equity funds have much in common with hedge funds; their managers also look for opportunities to invest in enterprises when commodity prices are volatile and the cost of obtaining stakes in companies has fallen to a “riskable” level.

In March 2013, Ken Hoffman, head of metals and mining markets at Bloomberg Industries, calculated that the amounts of cash raised through private equity firms for the mining sector had more than tripled – from US\$960 million annually between 2000 and 2005, to US\$3.5 billion annually since 2010. Hoffman said that London bankers “expected private equity firms to raise US\$10-US\$15 billion for the resource sector in the next 12 months”. He added: “My assumption is that the first funds to do these mining deals will be highly successful because no-one is really looking [to invest in mining at the moment], so they can just walk in the door and pretty much cherry pick the deals that they want.”

This is not how it is worked out – on the contrary. As confidence in commodity markets has dramatically slumped, private equity funds put just over US\$1 billion into mining during the first nine months of 2014. In contrast, it was eight times this amount (US\$8.8 billion) in 2013.

d) Equities and bonds

“Equities” is simply another term for stocks and shares. An investor can acquire both voting and non-voting shares within a company. Using the former, they may assert a commanding position over the way a company operates and the choices it makes. “Activist” hedge funders or private equity managers have indeed done this with several mining companies and manoeuvred the appointment of their own directors to the board. More significantly, well-established outfits themselves may build up a majority stake in another mining enterprise, which can trigger a takeover bid or a merger.

However, while banks – including German ones – make widespread use of purchasing equity in mining firms, they generally do so only for “investment purposes” rather than to influence the way in which the company behaves or the projects to be targeted. If a company is not doing well, its share price will fall, and usually, so will the value of the dividends payable to holders of the shares. As we have recently seen, such a “run on the market” can become fatal for smaller mining companies

In contrast, a bond is essentially a debt security – on redemption, the issuer is obliged to repay the holder both the principal and interest on it. Although there are many types of bonds – with both fixed and variable interest rates – they are not necessarily safer to hold than stocks and shares. Indeed, the *Daily Telegraph* Investment Editor, Richard Evans, on 15 September 2013 observed that “bonds are now seen as overvalued by many professional and private investors alike, who are prepared to take the risks of investing in shares in return for their superior growth prospects and potentially rising income”. And on 7 January 2014, analysts at Societe Generale were urging investors to “sell Goldman Sachs and Deutsche Bank because a bear market in bonds will hurt trading revenue”.

SUMMARY: Part Five and Six: Assumptions that the mining sector is now recovering the momentum lost after the global credit collapse of 2008 are erroneous.

Part Seven: Varieties of jeopardy

“Go forth, find uranium, and save civilization!”

That is what a former chairman of Rio Tinto, now the world’s second-largest mining company, says he was instructed to do by Britain’s Atomic Energy Commission in the early 1950s.³¹ It is unlikely that a top corporate figure would be given such a bald mandate by any government today, however concerned it might be about the lack of a metal considered vital to its economic growth. Over the past 60 years, more subtle and seductive means have been developed to achieve the same objectives.

One of these strategies has been for developed countries to offer cooperation agreements to Southern states. They get technology, skills, and some finance in return for granting access to their minerals; the process is dressed up in green attire, labelled “sustainable development”. But does this simply confirm the adage that rich countries always get what they want, whereas poorer countries suffer grievously from the “resources curse”?³²

³¹ Quoted in *The Nation*, 18 October 1990. See also *Plunder: The Story of RTZ*, London and Christchurch New Zealand: Partizans and Cafca, 1991) p. 9

³² See: Heinrich Boell Foundation, “Resource Politics for a Fair Future”, online: http://www.boell.de/sites/default/files/resource-politics_for-a-fair_future.pdf (4 June 2014)

Defining criticality – a suspect exercise

Mineral acquisition priorities vary over time: the requirements of end-use manufacture change; one metal is gradually substituted for another (e.g. aluminium for steel used in vehicles); technological innovations in mining improve metals recovery; recycling and re-use plays a greater role in feeding the “mineral pot”. In these respects, Germany certainly has a lot to offer by example to the rest of the world.

Nonetheless, little of this is reflected in the country’s raw materials policy as it currently stands. “Supply risks” are predominantly centred on assessing minerals availability using a very narrow definition of affordability. And this myopic perspective ignores one of today’s most significant influences on metal market prices – the mounting costs of securing a “social licence” to mine.

Is any country “safe”?

In this context, there is hardly any place on earth that can be described as secure. This section focusses on a number of countries with which Germany has, or is seeking to develop, a “special” raw materials relationship, and outlines the potential hazards in store.

Canada

Successive German governments have long regarded Canada and Australia to be secure providers of minerals essential to Germany’s growth; in turn, Germany exports processed and manufactured products and services to these two countries.³³ Until now, there has been little reason to suppose this trade balance will significantly change. However, Canada’s Supreme Court recently ruled that native Canadian land rights had precedence over a mining claim, effectively halting the company’s operations. The verdict was widely hailed as potentially being applicable to other parts of the country, where Indigenous Peoples have been stepping up their fight against what they view as unacceptably destructive projects.³⁴

As the *Mining Journal* commented in August 2014: “These decisions serve to remind all those involved in natural resource development in Canada of the importance of aboriginal issues.”³⁵

³³ Australia is identified by DERA as “among the richest raw materials countries on earth with enormous stocks of metals, industrial minerals and coal”. In 2011, Germany imported 1.53 billion euros worth of such raw materials from Australia, including coking coal – which met 10 per cent of Germany’s needs that year – as well as copper, lead, and iron. However, Germany’s key role is as a supplier of mining machinery – 50 per cent of Australia’s requirements for which were provided by German companies that year. See: DERA, AHK, and Germany Trade and Invest, “Möglichkeiten deutscher Unternehmen für ein Engagement im australischen Rohstoffsektor” (June 2013)

³⁴ See online: <http://www.minesandcommunities.org/article.php?a=12695>

³⁵ Mining Journal, 15 August 2014

South African strife

South Africa was seen in a similar light, traditionally supplying Germany with a number of vital metals, including iron and chrome, and especially platinum group metals.³⁶ This may no longer be the case. *Business Monitor International* in March 2014 noted that the country's "share of global mined output is set to decline further as other mining jurisdictions experience faster rates of growth", while its gold and platinum sectors "face diminishing margins and industrial strife".

That is putting it mildly. In August 2012 police shot down nearly 40 striking workers at a London-listed Lonmin platinum mine, a massacre widely compared with that at Sharpeville during the dark days of apartheid rule.³⁷ In the first six months of 2014, a succession of bloody clashes between trade unionists and government, and between two mineworkers' unions themselves, virtually crippled their platinum output, and to a lesser extent that of gold.³⁸

Russia and sanctions

Russia has a 49 per cent share of global nickel exports; UC RUSAL is the world's leading producer of aluminium and a major source of platinum.³⁹ Russia also supplied 27 per cent of Germany's coal imports in 2013.⁴⁰ Following Russia's absorption of Crimea in March 2014, the EU's imposition of sanctions has thrown this well-established trade into some doubt. Recent analyses suggest that, until now, sanctions are not severely impinging upon European metals imports, or indeed having much effect at all. They certainly do not seem to have stemmed European investment in Russia's mining sector (see BOX below).

Any extension of sanctions, especially by the United States and Japan, will certainly impact upon Russian metal firms. But in the longer term, they may hurt the EU more than Russia itself, precisely because it can switch its output to markets in Asia, China, the Middle East, and Latin America.⁴¹ In that case, where will Germany make up the deficit?

³⁶ See: DERA, AHK, and Germany Trade and Invest, "Möglichkeiten deutscher Unternehmen für ein Engagement in südafrikanischen Rohstoffsektor" (February 2013), pp. 100–101

³⁷ See online: <http://www.minesandcommunities.org/article.php?a=12418>

³⁸ See online: <http://www.minesandcommunities.org/article.php?a=12683> HYPERLINK. In a March 2014 report on South Africa, Business Monitor International noted that: "The past decade of minimal growth in South Africa's mining sector is set to continue as the country's gold and platinum sectors face diminishing margins and industrial strife [...] South Africa's share of global mined output is set to decline further as other mining jurisdictions experience faster rates of growth."

³⁹ Mining Journal, 19 September 2014

⁴⁰ See: Matthias Ruchser, "Russia and the German Energiewende – Is there a connection?" German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), in The Current Column, 27 March 2014, See online: <http://www.die-gdi.de/en/the-current-column/article/russia-and-the-german-energiewende-is-there-a-connection-1/>

⁴¹ Metal Bulletin 21 July 2014; see also: Minex EuroAsia industry statement, 18 September 2014. Minex (a forum created for Russian and Central Asian mining investors) has predicted that sales to the EU in 2014 will amount to 55 per cent of revenue for Norilsk Nickel; 44 per cent for aluminium producer UC RUSAL; 15 per cent for Severstal; and 10 per cent each for Evraz, MMK, and NLMK, all four being steel companies. However, Morgan Stanley believes that, even if further sanctions were introduced, "Russian companies will be able to diversify their exports to other

The rest of the world

If such unforeseen events can substantially affect the availability of minerals in countries reckoned to be Germany's secure suppliers, then there is arguably a greater risk involved in its looking elsewhere, such as to Mongolia, Kazakhstan, and Peru. The growth of "resource nationalism" (or "resource sovereignty") may also rule out partnerships with Indonesia and some African states. Partly this is because Germany would doubtless want to avoid getting enmeshed in heated political debates within these states over how they might improve income by processing metals domestically, then selling the products at a better price overseas. This is the central component of what has been widely mislabelled as "resource nationalism". It is much more accurately described as reclaiming the values embedded in these resources that have long been robbed from their citizens to the tune of billions of dollars

Arguably, the Raw Materials Partnership cemented between Germany and Mongolia and, to a lesser extent, Peru, would not have materialised during an earlier period, when "pro-nationalist" mining policies held considerable sway in both countries. For now, this "elephant in the room" has been kept in a corner, but there is no guarantee it will not break out at a future date with a change in government in Mongolia or Peru. (In fact, in early November 2014, Mongolia's parliament voted to dismiss Prime Minister Norov Altankhuyag for "not addressing the country's drastically slowing economic growth, plunging foreign investment, and alleged corruption and cronyism".⁴²

SUMMARY: No country or region is now a secure source for many of the metals that the German government is seeking out to meet the country's needs; even its traditional allies are no longer safe.

Part Eight: The rules do not work

International sign-ons

Mining companies are among many firms signed up to one or more protocols aimed at ensuring they do not "behave badly" (putting it simply). All these are voluntary: if the rules are broken, the worst punishment suffered is that a multilateral development bank withholds project funding, or denies its political risk insurance (notably by the World Bank/ International Finance Corporation or the Multilateral Investment Guarantee Agency).

markets – and may even make more profit". Minex concurs: "In [an increased sanctions] scenario, Russian companies will change exports to different markets in Asia, China, the Middle East, or Latin America, which will cause an inevitable shortage of metal in the European Union and a spike in prices."

⁴² See: Eurasia Daily Monitor 11 (199) (7 November 2014)

Should an investor or a company violate other sets of restriction, the damage done will largely be to their reputations, rather than their pockets. Even so, only a handful of mining companies have been found in breach of guidelines set by the UN Global Compact, the UN Ruggie Principles, those of the Organisation for Economic Co-operation and Development, or the European Bank for Reconstruction and Development, to name a few.⁴³

The International Council on Mining and Metals has its own guidelines, broadly aimed at promoting “sustainable development” by companies and among trade associations.⁴⁴ A significant number of these associations have also drawn up rules for corporate operations in specific sectors, inter alia cement, aluminium, nickel, cobalt, and gold. But only two sets of minerals are covered by binding international trading restrictions: the Kimberly Process governing diamonds, and the US Dodd-Frank Act, applied to so-called conflict minerals in DR Congo and neighbouring states. Both sets of rules have been strongly criticised for their inadequacy and failed application.⁴⁵

It seems reasonable to conclude that mining companies and banks have “cherry picked” the protocols to which they are ready to commit, while ignoring those they find problematic. The UN Global Compact is observed by Deutsche Bank (one of its earliest adherents), Commerzbank, Allianz, Munich Re, and DZ Bank, just 5 of the 273 German businesses that have pledged to observe the precautionary principle and forge “sustainable supply chains”. No other German funders have done so.⁴⁶

International banks are also urged to sign up to the Equator Principles, which were recently updated, ostensibly to align with principles and safeguards of the World Bank/International Finance Corporation. Eighty banks have undertaken to adhere to these principles – a significant number, considering that between them they are estimated to provide over 70 per cent of international project finance debt in emerging markets. Yet, among German financial institutions, only DK Bank, DZ Bank, and KfW IPEX-Bank have accepted the Equator Principles. Deutsche Bank, Commerzbank, and Allianz are notable for their failure to have done so.

⁴³ In 2009, the United Kingdom’s OECD National Contact Point [NCP] received a complaint from Survival International alleging that the London-based mining company Vedanta Resources plc was violating OECD guidelines on the rights of Indigenous Peoples by trying to force through a bauxite mine in the Indian state of Orissa. The NCP upheld the complaint, see online: <http://online.wsj.com/articles/SB125541020612681931>. This possibly encouraged the Indian government to initiate its own village-based voting, which resoundingly condemned Vedanta’s plans and resulted in government cancellation of the proposed project. However, there is no evidence that any other Vedanta project in India was adversely affected by the OECD decision. A number of investors – including the Church of England and the Norwegian Global Pension Fund – disinvested from Vedanta in the succeeding years on a number of grounds, not necessarily related to NCP’s decision. None of these actions resulted in a decline in Vedanta’s market capitalisation on the London Stock Exchange.

⁴⁴ According to ICMM, its corporate members are responsible for the output of a significant proportion of global metal output: copper (52 per cent), platinum group metals (44 per cent), iron ore (42.5 per cent), gold (26.8 per cent) and nickel (28 per cent), see online: <http://www.icmm.com/members>

⁴⁵ For a critique of the Kimberly Process, see online: <http://www.minesandcommunities.org/article.php?a=12352>.

⁴⁶ For the UN Global Compact’s Ten Principles, see online: <https://www.unglobalcompact.org/AboutTheGC/heTenPrinciples/index.html>

Indigenous Peoples and “supply risk”

In 2009, this author estimated that between 50 and 80 per cent of all mineral resources, then targeted by mining companies, were on the lands of Indigenous Peoples; territorial expansion was particularly evident in the former Soviet Union, Mongolia, Latin America, and Asia.⁴⁷ On examining the industry’s exploration trajectory for the next decade, we find this trend confirmed, with the addition of Africa. Practically translated, it means that, apart from Southern-based governments asserting resource sovereignty, the resistance to mining by Indigenous Peoples and other community actors is the most important single factor in causing what the EC has quite inaccurately characterised as mineral “supply risk – poor governance”.

Chatham House, the London-based British Royal Institute of International Affairs, noted in 2013: “Community relations remain a particularly important challenge in emerging producer countries – such as Peru, Mozambique, Mongolia, South Sudan and Guinea where environmental protection frameworks are often weak, communities lack political voice and water rights and land tenure tend to be insecure.”

The institute judged that cost delays associated with community conflict were “substantial”, adding that “for a major mining project, the costs of every week of delayed production soar to an estimated \$20 million in net present value terms”.⁴⁸ In its 2014–2015 annual review, based on mining company executives’ perceptions of the primary risks faced by their own operations, Ernst & Young stated: “Maintaining a social license to operate is now their third biggest concern, up from fourth place in 2008. [...] There is a significant upwelling of anti-mining sentiment in several regions, including Latin America and Africa. Social license issues in Latin America intensified in 2012, with mining and metals operations increasingly perceived as having a negative impact on human rights, communities and the natural environment.”⁴⁹

Another review, in July 2014, indicated that only 39 per cent of banks have themselves adopted a policy expressly referring to Indigenous Peoples.⁵⁰ In this respect, the third Equator Principles revision of standards (effective from June 2013) still leaves much to be desired, although it is a considerable advance on its two earlier versions.⁵¹

⁴⁷ See: Roger Moody, “Presentation to International Conference on Indigenous Peoples and Extractive Industries”, Manila, Philippines, March 2009, cited in *Pitfalls & Pipelines: Indigenous Peoples and Extractive Industries*, Tebtebba et al. (Baguio, 2012)

⁴⁸ Chatham House, “Revisiting Approaches to Community Relations in Extractive Industries: Old Problems, New Avenues”, (London), 4 June 2013

⁴⁹ Ernst & Young, “Business Risks Facing Mining and Metals 2014-15”, p. 2.

⁵⁰ Doyle and Whitmore, *Indigenous Peoples and The Extractive Sector: Towards a Rights-Respecting Engagement*, Tebtebba et al. (Manila, the Philippines), September 2014.

⁵¹ The Equator Principles III states that: “There is no universally accepted definition of FPIC. Based on good faith negotiation between the client and affected indigenous communities, FPIC builds on and expands the process of Informed Consultation and Participation, ensures the meaningful participation of indigenous peoples in decision making, and focuses on achieving agreement. FPIC does not require unanimity, does not confer veto rights to individuals or sub-groups, and does not require the client to agree to aspects not under their control.” See online: http://www.equator-principles.com/resources/equator_principles_III.pdf

Oxfam America’s own research backgrounder on FPIC agrees that there is no “universally accepted definition” of the term, but goes on to say that “more broadly FPIC is emerging best prac-

Alone among regional government groupings, ECOWAS (The Economic Community of West African States) has created a regime for the mining industry that might be called “Indigenous People friendly”. Its Directive on the Harmonization of Guiding Principles and Policies in the Mining Sector specifically states: “Companies shall obtain free, prior, and informed consent of local communities before exploration begins and prior to each subsequent phase of mining and post mining operations.”⁵²

State pension and sovereign wealth funds

Many countries operate such funds, including Mongolia and Kazakhstan. Collectively they hold some US\$5.78 trillion.⁵³ Comparatively few have made significant investments in mining, but among these, China Investment Corp, Temasek (Singapore), and the Qatar Investment Fund stand out. In 2009, Temasek and China Investment Corp invested US\$1.5 billion in South Gobi and Iron Mining International Ltd’s Mongolian projects.⁵⁴ In 2010 Temasek bought US\$100 million of convertible debentures in the South African platinum miner, Platmin Ltd, to boost its mining projects in the Bushveld Complex of South Africa.⁵⁵ Qatar’s Investment Fund, as one of the biggest shareholders in Xstrata, was instrumental in effecting Glencore’s takeover of this major London-listed mining company in May 2013.

Virtually none of these powerful entities are committed to observing human rights and social and environmental criteria before making investments in mining. In fact, only two of them appear to have done so. In September 2012, New Zealand’s state Superannuation Fund disinvested from Freeport McMoran over human rights abuses against tribal peoples associated with its Grasberg mine in Papua.⁵⁶ And the world’s most-endowed sovereign wealth fund – Norway’s Government Pension Funds Global, advised by its independent Council on Ethics – has ejected several mining companies from its portfolio for violating its criteria for “sustainable economic, environmental and social development”. These include Vedanta (in 2007), Rio Tinto (in 2008), and Barrick Gold (in 2009). Apparently ignoring compelling arguments by the Council on Ethics as to why Rio Tinto and Barrick should be shunned, Germany’s KfW IPEX-Bank went on to provide financial support to both these companies (see below).

SUMMARY: Despite a raft of international protocols aimed at regulating mining companies’ behaviour, and those of the banks supporting them, virtually none work as they should, and a significant number of German banks have not even signed on to them.

tice for safeguarding the human rights of all [*sic*] communities affected by extractive industry projects”; see “Free, Prior, and Informed Consent in Africa”, Oxfam and Cepil, p. 6

⁵² Doyle and Whitmore, *Indigenous Peoples*

⁵³ See online: <http://www.minesandcommunities.org/article.php?a=11928>

⁵⁴ Mining Journal, 1 October 2010

⁵⁵ Mining Journal, 2 April 2010

⁵⁶ See online: <http://www.minesandcommunities.org/article.php?a=11928>

Part Nine: In the breach

Some dubious mining projects backed by German financial institutions

Last year, Germany's Ikv Pax Christi published a detailed report on "Companies and Financial Institutions Benefiting from Violations of Human Rights".⁵⁷ Eight German banks (Allianz, BlackRock Germany, Commerzbank, DekaBank, Deutsche Bank, DZ Bank, KfW, and Munich Re) were accused by Ikv Pax Christi of aiding numerous offending mining companies by buying shares and issuing bonds in them, or providing them with loans. Valuable as Ikv Pax Christi's research was, it mostly identified investment in "controversial companies" rather than individual projects. The following section attempts to fill this gap.

KfW IPEX-Bank

This bank has acted since 2011 as a commercial lender to several mining projects, as well as to Glencore, the world's largest minerals and metals trader (see Part One). In 200 it began financing a cooperation agreement on behalf of Germany's BMZ with Serbia to promote energy efficiency and reduce CO2 emissions through lignite "quality management" at the country's Kolubara mines.

Earlier this year, massive flooding hit Serbia, creating polluted lakes as by wastes spilled from the coal processing plant. At least 100,000 people were left without power and the authorities had to import costlier supplies of coal – hardly a mark of success for KfW IPEX's objectives.⁵⁸ KfW IPEX, backed by insurance from Euler Hermes, has also invested in a new 660MW lignite-burning plant in Greece, due to be built by 2020 and expected to cost 1.9 billion euros in total. Based on the initial funding plan, KfW IPEX would contribute 44 per cent of the project finance, amounting to around 610 million euros.⁵⁹

Among the hard rock mining companies for which KfW IPEX-Bank and KfW-DEG have been providing finance and credit facilities since 2011, at least three should have been disqualified from the outset, based on what was already known about their probable social and environmental impacts.

Barrick Gold's US\$4 billion Pueblo Viejo gold mine is located at an old unrehabilitated mine site. The company promised to clean it up before constructing a new mine. But as *The Economist* reported in September 2013: "[R]esidents [...] claim that the new mine is poisoning rivers, causing illnesses and the death of farm animals.

⁵⁷ "Facing Finance: Dirty Profits 2", see online:
http://www.facing-finance.org/files/2013/12/DIRTY_PROFITS_II.pdf

⁵⁸ CEE Bankwatch, 4 June 2014, quoting Zvezdan Kalmar in *The Balkanist*.

⁵⁹ National Geographic, 11 February 2014

They want the government to release the environmental-impact assessment for Pueblo Viejo, which it has so far refused to do.”⁶⁰

The country’s National Committee Against Megamining called on the government in 2013 to declare conditions in the mining zone a “state of emergency”.⁶¹

Rosemount Copper was mentioned in DERA’s 2013 Rohstoff copper paper as a possible key provider of the red metal to Germany. That year, KfW IPEX-Bank joined a syndicate of 12 international financial institutions in committing to fund all the project requirements.⁶²

An Arizona environmental group in July 2014 asserted that the mine “would inflict devastating impacts on southern Arizona’s environment and economy. [...] The U.S. Environmental Protection Agency [...] has already stated that the massive open-pit mine that would destroy more than 3,000 acres of Coronado National Forest, and result in ‘substantial and unacceptable impact’ to water supplies of ‘national importance’, while the proposed mitigation measures are ‘scientifically flawed’ and ‘grossly inadequate’.”⁶³

Currently, Rio Tinto is “waiting for Congress to act on a land exchange bill” it says is necessary for the two companies to proceed, since the area they want to use has been a protected area since 1955 and is also sacred to the Apache. A broad coalition of local activists, including the Apache Tribal Government, has so far blocked numerous attempts to pass this bill. In effect it would set a precedent for “bio offsetting”, since Rio Tinto has offered to exchange with the federal government 4,500 acres of environmentally-sensitive land in Arizona for access to the 3,000-acre mining site.⁶⁴

KFW-DEG

“Kenya is the country with the strongest economy and the largest, most advanced private sector within the East African Community. [...] Industries of special importance to DEG are the financial sector, the energy and agricultural sector, tourism and mining.”⁶⁵

So says DEG, KfW’s “development arm”, which, partnered with the Dutch development finance institution FMO and Proparco (of France), has provided a total of US\$70 million towards a mineral sands mine in eastern Kenya. The mine came on-stream in December 2013 and is the country’s most important mining development, producing rutile, ilmenite, and

⁶⁰ The Economist, 21 September 2014

⁶¹ 7 Dias, 19 September 2013

⁶² Rosemount Copper corporate announcement, 9 August 2013

⁶³ Save the Scenic Santa Ritas, 23 July 2014

⁶⁴ Cahal and Whitmore, p. 162, see online: <http://www.minesandcommunities.org/article.php?a=10088>; on “Monetizing Nature”, see online: <http://www.boell.de/en/2014/09/02/monetizing-nature-taking-precaution-slippery-slopes>; for a discussion of Rio Tinto’s proposals for the Rosemount Copper project, see online: <http://www.icmm.com/document/1246>; for more on biodiversity offsets, see online: <http://www.icmm.com/document/4934>; see also: Thomas Fatheuer, New Economy of Nature, A Critical Introduction (Heinrich Böll Stiftung, April 2014)

⁶⁵ See online: <https://www.deginvest.de/International-financing/DEG/Die-DEG/Unsere-Standorte/Ostafrika/>

zircon from large-scale dredging of coastal sands. KfW IPEX-Bank, along with Hermes, has also supplied the operating company with political and commercial insurance cover to the tune of US\$8.4 million, valid until 2015.

As far back as 2003, Kenya's National Council of NGOs had been issuing statements on the "unresolved issues" associated with the mine.⁶⁶ Over the succeeding 11 years, there have been several forced evictions of farmers in the area.⁶⁷ A coalition of local communities and human rights organisations, Coast Mining Rights Forum, claims that mining would eventually displace 5,000 Indigenous Digo and Kamba people, despite the 1999 Coordination Act having established that "indigenous tribes must be consulted and an environment impact assessment drafted before negotiations on the license". In 2010, the African Human Rights Commission made an "historic ruling" seeking to guarantee the rights of another indigenous group threatened by mining.⁶⁸

Deutsche Bank – Taking questionable risks

"Deadly coal" in Kalimantan

Bumi Resources is the world's leading exporter of steam coal, hued from its Kaltim Prima Coal (KPC) opencast mines in East Kalimantan (Indonesian Borneo). Not only has Deutsche Bank acted as an underwriter for Bumi Resources share floats, it is also one of the firm's creditors. Over more than a decade, the appalling impacts due to mining by Bumi Resources has provoked outrage from local communities and Indonesian NGOs. They have relentlessly exposed abuses of workers, egregious pollution of agricultural land and waterways, and forced removal of villagers.

An August 2014 report by Jatam (the Indonesian Mining Advocacy Network) and Greenpeace Indonesia declared: "People have been provided with no compensation from the government or the company. They now face increased flooding, have lost land and other resources, and are forced to buy water. In East Kalimantan, coal is not only a dirty form of energy that damages our climate, but it is also deadly, killing people and biodiversity."⁶⁹

Deutsche Bank regrets the day it decided to support Bumi Resources. Due to a series of notorious events – including company mismanagement, internal warfare between directors, and fraudulent dealings – the bank and its fellow funders are still waiting for repayment of a combined US\$542.5 million in credit facilities.⁷⁰

⁶⁶ See online: <http://www.minesandcommunities.org/article.php?a=1581>

⁶⁷ See online: <http://www.minesandcommunities.org/article.php?a=3951>

⁶⁸ See online: <http://www.minesandcommunities.org/article.php?a=9881>

⁶⁹ See online: <http://www.minesandcommunities.org/article.php?a=12742>

⁷⁰ Bloomberg, 12 June 2014, see online: <http://www.bloomberg.com/news/2014-06-12/bumi-warns-of-default-if-consent-not-won-for-bond-restructuring.html>

It is a sad and sobering fact that the banks that threw money at Bumi Resources when it listed on the London Stock Exchange in 2011 did not look beyond the rubric of the company's IPO and the lure of landing a major Indonesian firm in Britain's capital. Had they heeded numerous civil society allegations against Bumi Resources that began surfacing in 2003, they would have been spared such grief.

CoAL in Africa

In March 2011, London-listed Coal of Africa Limited (CoAL) secured a US\$50 million revolving thermal coal-export finance facility from Deutsche Bank.⁷¹ The company had fully repaid it by 30 June 2014. Deutsche Bank had significantly advanced CoAL's Makhado opencast mine, designed to produce 2.3 million tonnes of hard coking coal and 3.2 million tonnes of thermal coal a year. Since South Africa is not yet a source of hard coking coal, it uses up scarce foreign exchange to buy costly imports.⁷² So Deutsche Bank may claim that this investment in CoAL is helping South Africa to better square its negative balance of trade.

A local coalition of tribal communities and farmers thinks quite differently. For the past three years, it has vehemently criticised the project for its denial of their critical water rights.⁷³

Bolstering a Russian "bad actor"

In August 2014, Deutsche Bank led a syndicate of European banks in providing a US\$425 million, five-year pre-export credit facility to refinance Russian steel maker EVRAZ.⁷⁴ This was "convincing proof that sanctions against the mining and metals industry as a whole in Russia are ineffective", according to the Russian Minerals Forum.⁷⁵

Listed on the London Stock Exchange, EVRAZ has Russian oligarch Roman Abramovich as its biggest single shareholder. In 2007, the company was held responsible for "negligence", which led to the deaths of no fewer than 148 Russian iron ore mineworkers.⁷⁶ No action has been taken against the company or its directors as a result.

⁷¹ Mining Weekly, 24 March 2011

⁷² Mining Weekly, 30 September 2014

⁷³ Gaia Foundation critique of CoAL Makhado project, see online: http://www.gaiafoundation.org/sites/default/files/documents/MineNotWasteNot_december2011.pdf. These issues had still not been resolved by March 2014, see online: <http://www.bdlive.co.za/business/mining/2014/03/23/miners-vs-villagers--again>

⁷⁴ Sharecast, 13 August 2014

⁷⁵ Minex EuroAsia industry statement, 18 September 2014

⁷⁶ See online: http://moneytometal.org/index.php/Roman_Abramovich

Part Ten: Germany's Raw Materials Partnerships – Are they worth the paper they are written on?

In October 2010, the German government passed a “Raw Materials Strategy” (reported by german-foreign-policy.com⁷⁷) aimed at insuring German industry's long-term top position on the world market in global competition for raw materials, especially in relation to China. That strategy also calls for the conclusion of so-called Raw Materials Partnerships with important suppliers – contractual accords, because they may no longer be relied upon solely through business relations. These agreements have been reached with Mongolia and Kazakhstan. They explicitly call for “cooperation between companies of both countries for development, exploitation, processing and use of mineral resources”. Berlin has also concluded a treaty with Chile on cooperation in the exploitation of natural resources, which is also referred to as a Raw Materials Partnership, even though it is not quite as extensive.

Supply of raw materials

Last July, the Raw Materials Partnership accord, which is explicitly orientated to the terms of the wide-ranging accords with Kazakhstan and Mongolia, was reached with Peru. It stipulates that a “German-Peruvian government working group on the cooperation in raw materials, industrial and the technological sectors” will be created, with whose help “the supply of raw materials will be [ensured] for the German economy”. It further states that “through the cooperative efforts of enterprises and research institutions, potentials shall be developed for Germany's sustainable access to raw materials”. The German government also has ensured for itself the right to “support” Lima in any “improvements of legal regulations for the mining sector”.⁷⁸

Export business

Parallel to this partnership accord, Berlin seeks to also create export possibilities for German enterprises to Peru's mining sector and its associated branches. The mining boom has “since 2009, significantly” reinforced the country's need for machines, writes the newest gtai study on Peru. In 2013, the “sale of construction and mining equipment” alone has resulted in business in the triple-digit millions for German companies, which could “grow over the next few years at an average of 10 per cent”. In addition, the mining boom requires “the corresponding development of the infrastructure in transport, energy and water, to avoid being hampered by intermediate and long-term infrastructural bottlenecks”.

⁷⁷ Struggle for Natural Resources (II), see online: <http://www.german-foreign-policy.com/en/fulltext/57882>

⁷⁸ Deutsch-Peruanische Rohstoffpartnerschaft, see online: <http://www.bmwi.de>, 11 July 2014

This also “offers business opportunities for German enterprises”. The gtaï also senses “business opportunities” because mine operators, “in answer to demands from the population and the government”, must often “invest heavily in the infrastructure of the surrounding area”, which also opens the door for possible contracts for German firms.⁷⁹ German exports to Peru have risen to nearly a billion euros in 2013 – nothing spectacular when compared to other German exports, but still useful for being able to import Peru's raw materials, while narrowly avoiding deficits on the foreign trade balance sheet.

Social conflicts

Although German industry is praising the new Raw Materials Partnership, the Catholic relief organisation Misereor is voicing sharp criticism. “In Peru, human rights violations and social conflicts have skyrocketed” in recent years “with the large open-pit mines”, reports Misereor. “The harsh police crack down on peaceful protests against the mining projects” repeatedly leads to “deaths and injuries”. The mining also seriously damages the ecology.

The Raw Materials Partnership was signed right when the “Peruvian government was initiating a law package to water down the already deficient regulations on the resource sectors”. This has been sharply criticised by Misereor's Peruvian partner organisations, because it further lowers the “already inadequate environmental standards in the mining sector”. The Raw Materials Partnership is signalling to the Peruvian government that the expansion of the raw materials sector takes priority over the urgently needed regulations. Misereor warns: “[W]e fear an aggravation of social conflicts around the mining projects” – also thanks to Berlin's Raw Materials Partnership.⁸⁰

Kazakhstan

Due to its key role as a source of metals for the former USSR, Kazakhstan has inherited some of the worst pollution of any central Asian state, and one which continues to create egregious health risks for many citizens, especially children. They include exposure to heavy metals resulting, from its “reformed” uranium extraction methods⁸¹ and unacceptably high levels lead, cadmium, and arsenic poisoning from a recently closed-down, but un-rehabilitated smelter.⁸²

⁷⁹ Germany Trade and Invest, “Peru. Herausforderungen und Chancen für eine nachhaltige Entwicklung im Rohstoffsektor”, June 2014

⁸⁰ “MISEREOR kritisiert Rohstoffabkommen mit Peru”,
see online: <http://www.misereor.de>, 14 July 2014

⁸¹ See online: <http://www.minesandcommunities.org/article.php?a=12428>

⁸² “Kazakhstan: Poisoned Legacy: How Are British Mining Companies Impacting the Central Asian Nation's Worsening Environmental Track Record?”, People and Power – *Al Jazeera*, 19 February 2014, see online: <http://www.minesandcommunities.org/article.php?a=12567>

Neither the Kazakhstan regime nor the German government are oblivious to the problems of cleaning up the country's toxic legacy. In its official "mining industry blueprint", Kazakhstan says it "aims to drive greater recycling of mining waste, as the country has accumulated more than 20 billion tonnes of tailings and exploitable industrial waste, including waste from non-ferrous metals at 10.1 billion tonnes, and 8.7 billion tonnes of iron". However, less than two per cent of these wastes is currently being recycled.

Under the German-Kazakhstan Raw Materials Partnership, the Germany government says it aims to create "an investment handbook based on examination and assessment of the potential of raw materials in [Kazakh] slag heaps and slag heap material". The Karlsruhe firm Cronimet has also envisaged recycling tungsten wastes so long as it obtains a "potential project development investment partner" within the country.

As in Germany, Kazakhstan has eschewed using nuclear power and supports (albeit on a small scale) a solar energy programme co-sponsored by the Deutsche Energie Agentur, whereas Germany's Friendly Wind Technology Trade is helping to build wind turbines. This seems to be a pathetically small effort to meet a massive challenge.

Take rare earths – decidedly coveted by the German government in pursuit of fulfilling its own raw materials acquisition policy. Indeed the February 2012 strategic partnership "guarantees German companies the right to explore and exploit Kazakh rare earths and other raw materials in exchange for technological investments". Kazakhstan is currently producing rare earths from a number of copper, phosphate, and iron ore mines. As the world's largest uranium producer, state company Kazatprom also has the capacity to extract them from uranium ore "at a reasonable cost".

German companies might therefore end up supporting extraction of the prime nuclear mineral used to support an industry the German government has effectively repudiated. But the most troubling aspect of the German commitment to Kazakhstan is surely the formal alliance it has forged with the notoriously corrupt regime of Nursultan Äbishuly Nazarbayev, whose budget "openness" is described as "minimal" by Transparency International.⁸³

Accusations of the nexus between Nazarbayev and mining companies have surfaced on several occasions in recent years. In 2010, there were allegations that the Sovereign Wealth Fund corruptly invested in the country's two most powerful mining companies, Kazakhmys and ENRC – both then listed on the London Stock Exchange.⁸⁴

⁸³ Transparency International ranks Kazakhstan at number 144 of the 177 countries it survey, see online: <http://www.transparency.org/country#KAZ>

⁸⁴ The Guardian, 2 December 2010, see online: <http://www.theguardian.com/business/2010/dec/02/kazakhstan-regime-link-to-ftse-firms>

Three years later, the US human rights monitor Freedom House commented that “[s]everal powerful business groups loyal to Nazarbayev and Nur Otan [one of his allies] indirectly control the parliament, government ministries, and major media outlets. These groups include the copper giant Kazakhmys [and] Eurasian Natural Resources Corporation, or ENRC”.⁸⁵

ENRC was effectively ejected in 2013 from the London Stock Exchange, as the UK-based Serious Fraud Squad opened an investigation into alleged “fraud, bribery and corruption relating to activities in Kazakhstan and Africa”. In July of that year, the US Justice Department also joined the investigation, which has not yet been completed. Four months later, the three oligarchs who had entrenched themselves with ENRC in London went back to Kazakhstan and set up shop without any hindrance from the Kazakh government.

It is yet another example of a highly questionable decision made by Deutsche Bank: it led the IPO of shares in ENRC on the London Stock Exchange in 2007.⁸⁶

Mongolia

If a country is ranked solely on its mineral potential, Mongolia is one of the most attractive investment destinations anywhere. With a population of just under three million people (less than Berlin's), it hosts some of the world's largest deposits of copper, gold, and coal, and sizeable quantities of iron ore, molybdenum, and fluorspar.

But appearances can be deceptive. For several years, fierce political debate has raged over the extent to which control of these resources should be consigned to foreign companies, and respective control over them by the state. Thanks to the return of a Democratic Party government in 2013, parliament lifted a four-year ban on new mineral exploration and extended the validity of existing licences.⁸⁷

However, a large number of investment risks remain, and foreign investment (apart from China's) has considerably fallen off in the past year. Should the opposition Mongolian Peoples Party win the next presidential election (scheduled for 2017), then, as one analyst puts it, “you're likely to see an increased occurrence of resource nationalist policies”.⁸⁸

No single extractive project illustrates this Mongolian “dilemma” better than Oyu Tolgoi, slated to be one of the biggest copper and gold mines on planet earth. It encapsulates many of the issues centring on how a country gains economic benefits from mineral exploitation, without underselling its “natural capital” and risking the livelihoods of its citizens. Although the mine began delivering output from its open-pit operations in 2013, the crucial construction of an underground mine has been stalled for the past five years.

⁸⁵ See online: www.freedomhouse.org/report/nations-transit/2013/kazakhstan

⁸⁶ This information is taken from a copy of the prospectus on the mining company's website; see: 100 Reporters, 27 November 2013

⁸⁷ Mining Journal, 22 August 2014

⁸⁸ Mining Journal, 9 May 2014

Oyu Tolgoi's majority owner, Rio Tinto, continues to battle with the government (34 per cent owner) over how to fix investment frameworks, taxes, and compensation.

Already Rio Tinto is responsible for a cost overrun of US\$2 billion on the first phase of the mine, which the Mongolian government judges would severely defray its own profits from the venture. By 2 October 2014, the Mongolian government and Rio Tinto had not resolved these issues. Since 30 September 2014 was the expiration date for the project finance lender commitments, and the lenders had made no requests to extend their commitments,⁸⁹ this means that project finance promised in 2013 by KfW IPEX-Bank and Dutch development bank FMO, among other banks,⁹⁰ has yet again been postponed.⁹¹

There is a compelling argument that it should now be withdrawn. Mongolia's second-largest export sector is of products derived from animal herding by one of the largest nomadic populations on earth. Already having suffered from a series of harsh winters and increasing desertification, many of them regard mining as a final "death blow" to their livelihoods.

They say that the project's Investment Agreement was signed in October 2009 without a technical and economic feasibility study being accepted by the Mongolian government, as prescribed by law. When that study was produced, the project's then-owner, Ivanhoe Mines (Rio Tinto's predecessor) failed to demonstrate availability of, and access to, the water resources necessary for "production, infrastructure and social needs of the project".

The Oyu Tolgoi deposit lies in the Gobi Desert in close proximity to two "strictly protected area" zones, overlapping the "important bird area" and "critical natural habitats". "This fragile, arid ecosystem does not have enough water to carry this huge mine," says the Mongolian organisation Oyu Tolgoi Watch. This group has also heavily criticised Rio Tinto and its investors for failing to recognise local herders as people indigenous to the area. In July 2013, a group of them submitted an official complaint to the Project Complaints Mechanism of the European Bank for Reconstruction and Development. In April 2014 a further complaint was made relating to impacts of road-building associated with the project.⁹²

SUMMARY: Part Nine and Ten: Close scrutiny of specific mining projects backed by Deutsche Bank and KfW IPEX-Bank reveals serious violations of many social and environmental guidelines, including potential projects in the three countries with which Germany has concluded a Raw Materials Partnership – Peru, Mongolia, and Kazakhstan.

⁸⁹ Marketwire, 2 October 2014

⁹⁰ Reuters, 3 May 2013

⁹¹ See online: http://www.mining.com/more-delay-at-oyu-tolgoi-as-financing-deadline-lapses-52744/?utm_source=digest-en-mining-141005&utm_medium=email&utm_campaign=digest.

⁹² See online: <http://en.minewatch.mn/2014/05/project-complaint-mechanism-pcm-letter/>; see also: OT Watch, CEE Bankwatch Network, and London Mining Network, "Mongolian Herders Submit Complaint to European Public Bank", press release, 4 July 2013, see online: <http://www.minesandcommunities.org/article.php>

Part Eleven: Promoting “sustainable” development? – The contradictory stances of GIZ, BMBF, BMZ, and BGR

In April 2013, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) and its Research for Sustainable Development arm (Forschung für Nachhaltigkeit, FONA) linked “our [*sic*] ambitions in terms of climate change goals and to accelerate the transformation of our energy system” to the risks faced by the supply of individual mineral elements or groups of materials, such as platinum group metals, rare earth elements, and other high-technology metals.

BMBF pointed out that Germany’s National Sustainability Strategy plan seeks to “double the productivity of raw materials, compared to 1994 levels, by 2020” and to do so through the “breaking down of trade barriers [...] the development of technology, education and knowledge transfer through to development cooperation”.

The German government’s Efficiency Programme (ProgRess) identified 20 practical approaches to improving the usage of raw materials, including better extraction techniques, the use of biotic materials, and a range of technologies aimed at enhancing recycling and separation of metals at the processing stage.⁹³

Put this all together and it seems to be a makeshift mix of government development objectives, commercial priorities, and technical “fixes”. There are two particularly disconcerting recommendations aimed at implementing the Efficiency Programme, which calls for increased automation of the extraction process and the expansion of existing opencast operations to make them “ever deeper”. These measures, said BMBF, “should mean safer and more environmentally responsible quarrying and mining”.

Certainly there are mining operations where the use of robots to extract ore is essential in averting injury and ill-health to workers (such as robots used to extract highly radioactive uranium from underground mines in northern Saskatchewan, Canada). But automation in general – typified by driverless lorries used in Australian iron ore mines – is opposed by many mining trade unions, which consider it simply a way for companies to cut rising costs.⁹⁴

Considerably more alarming is the prospect of any expansion of opencast mining. Not only would this threaten existing employment, since far fewer jobs would become available. Inevitably it would also compound the negative impacts already being suffered by communities living next to these operations, in turn resulting in a significant loss of livelihoods and the resources (especially agricultural) on which hundreds of thousands of people depend.

⁹³ BMBF and FONA, “Raw Materials of Strategic Economic Importance for High-tech Made in Germany”, April 2013

⁹⁴ Mineweb, 1 April 2014

Cooperation in development

The Deutsche Gesellschaft Internationale Zusammenarbeit (GIZ) adopts a quite different approach to the notion of raw materials efficiency: “Resource governance in the extractive sector is [...] the banner under which GIZ works around the world to promote sustainable management in [the mining] sector. The underlying goal is to ensure transparency in the awarding of mining concessions, to use the income to benefit the entire population, and to minimise environmental damage.”⁹⁵

GIZ has instituted the Regional Resource Governance in the Extractive Sector in the Fragile States of West Africa programme, concentrating on Liberia and Sierra Leone. This aims at the reform of mining legislation so as to increase transparency, help stamp out corruption and promote “dialogue” between companies and surrounding communities – a strategy it claims “has already made it possible to prevent local and regional conflict”.

In Mongolia, GIZ works on behalf of BMZ in the “integrated mineral resource initiative (IMRI) to generate jobs and income for Mongolians”, as well as on a GIZ project “to bring the legal framework for the sustainable development of Mongolia’s extractive sector into line with global standards”. In Kyrgyzstan, Tajikistan, and Kazakhstan, GIZ also cooperates with BGR to “jump start” sustainable economic development, “partly by facilitating access to the extractive sector by German and other foreign investors”, which includes “training the labour force in line with market demands” and enhancing the capacity of state and agency services.

All this seems acceptable – so long as it leads to higher wages, improved safety for mineworkers, and above all, a much more equitable distribution of the income from mining. However, evidence that GIZ has “made it possible to prevent local and regional conflict” in West Africa is thin on the ground. If anything, such conflicts have deepened over the past year – as in Sierra Leone.⁹⁶

UN Millennium development goals

Back in 2009, BGR commissioned a report on how estimated revenues from Zambia, Namibia, Mozambique, and Ghana could contribute to the achievement of the 2000 Millennium Development Goals. It extended work previously done in this area by BGR and KfW IPEX in the DR Congo.⁹⁷

⁹⁵ See online: <https://www.giz.de/en/worldwide/15792.html>

⁹⁶ Human Rights Watch, “Whose Development: Human Rights Abuses in Sierra Leone’s Mining Boom”, 2014, see online: <http://www.hrw.org/reports/2014/02/19/whose-development-0>

⁹⁷ M. Sturmer and P. Buchholz, “Government Revenues from the Extractive Sector in Sub-Saharan Africa, A Potential for Funding of the United Nations Millennium Development Goals?”, BGR, June 2009

This study is mentioned here since (it is assumed) its precepts are considered important to the German government when making choices about raw materials acquisition from overseas. In fact, the data in this study is now four years old and there has been some strengthening of the mineral taxation regimes of Zambia.⁹⁸

Nonetheless, there does appear to be a fundamental conflict between BMBF’s view of what constitutes “sustainability” and the growing consensus of civil society in many resource-rich states as to how their resources should be exploited – or, indeed, whether they should be exploited at all. On economic grounds alone, there is a compelling argument that, at times of low market returns for metals – as it stands now in many instances – some minerals should be left in the ground to await, or compel, a rise in prices.

That does not seem to be the view underpinning Germany’s raw materials policy, which places a primary emphasis on acquisition at the cheapest market cost. The decision to buy copper from Zambia (say) instead of Chile; metallurgical coal from Mongolia as opposed to Mozambique; or to secure rare earth elements from Greenland rather than Kazakhstan cannot simply be based on projections of the technical expenses involved in digging up, transporting, and processing these goods. The social and ecological costs are likely to be far greater. How far have German government institutions gone in assessing those costs, on a country-by-country and mineral-by-mineral basis?

To date, nowhere nearly far enough.

SUMMARY: Germany’s objective to foster sustainable development and the Millennium Development Goals rests on questionable and conflicting theses promoted by government institutions and GIZ in the minerals sector.

⁹⁸

See online: <http://www.minesandcommunities.org/article.php?a=12135>; and Ghana, see online: <http://www.minesandcommunities.org/article.php?a=11957>

Conclusion

- Sustainable development does not seem to be an objective underpinning Germany's raw materials policy. It places a primary emphasis on acquisition of materials at the cheapest market cost, which is merely a dressed-up version of those colonialist-driven "resource rushes" that blighted so many territories throughout the 20th century.
- The decision to buy copper from Zambia (say) instead of Chile; metallurgical coal from Mongolia as opposed to Mozambique; or to secure rare earth elements from Greenland rather than Kazakhstan cannot simply be based on projections of the technical expenses involved in digging up, transporting, and processing these goods.
- The social and ecological costs will be far greater, with evidence of this emerging almost daily across the globe. German government institutions have gone nowhere near far enough in assessing those costs – on a country-by-country and mineral-by-mineral basis.
- But the antidote lies not so much in reforming these institutions (though that is certainly required).
- Rather, it demands a completely fresh, radical, and multi-dimensional perspective on the human and ecological consequences of extracting these materials. In this respect, the re-use and recycling of partially-spent metals should undoubtedly play a much greater role than at present.
- But what is essentially required – if we are to really "green" global economies – is a relinquishment of our dependence on certain materials that ipso facto undermine that endeavour.
- Such a project must start at the level of community conflict and the palpable violation of the right to sustainable livelihoods for millions of the world's poorest, who depend on the land, water, and other resources found on mineral-rich territory. In an attempt to stanch the worst abuses contingent on the use of certain minerals (such as "blood diamonds" and "conflict minerals" from parts of Africa), the mapping of mineral "supply chains" is a promising opening gambit in this direction.
- However, it goes nowhere near far enough. Many areas of the world will remain locked in other types of conflict. As we have seen in the course of this paper, current stratagems do little or nothing to force changes in how the majority of mining companies operate on the ground, or the willingness of bankers to stand behind them.

Impressum

Herausgeberin: Heinrich-Böll-Stiftung
Schumannstraße 8, 10117 Berlin, D
Redaktion: Michael Reckordt
Erscheinungsort: www.boell.de
Erscheinungsdatum: Dezember 2014

Das gesamte Dossier und die einzelnen Beiträge stehen unter einer Creative Commons Lizenz. (CC BY-NC-ND). Sie dürfen verbreitet, vervielfältigt oder öffentlich zugänglich gemacht werden unter folgenden Bedingungen:

- **Namensnennung** – Sie müssen den Namen des Autors/ der Autorin und des Rechteinhabers (Heinrich-Böll-Stiftung) sowie die URL des Werks (Direktlink) nennen.
- **Keine kommerzielle Nutzung** - Dieses Werk darf nicht für kommerzielle Zwecke verwendet werden.
- **Keine Bearbeitung** - Dieses Werk darf nicht bearbeitet, abgewandelt oder in anderer Weise verändert werden.

Abweichungen von diesen Bedingungen bedürfen der Genehmigung des Rechteinhabers: internetredaktion@boell.de
ausführlicher Lizenzvertrag unter: <http://creativecommons.org>