



into africa

HOW THE RESOURCE BOOM IS MAKING
SUB-SAHARAN AFRICA MORE IMPORTANT
TO AUSTRALIA

Roger Donnelly • Benjamin Ford

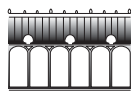
Lowy Institute Paper 24

Into Africa

HOW THE RESOURCE BOOM IS MAKING
SUB-SAHARAN AFRICA MORE IMPORTANT
TO AUSTRALIA

Roger Donnelly • Benjamin Ford

First published for
Lowy Institute for International Policy 2008



LONGUEVILLE
MEDIA

PO Box 102 Double Bay New South Wales 1360 Australia
www.longmedia.com.au
info@longmedia.com.au
Tel. (+ 61 2) 9362 8441

Lowy Institute for International Policy © 2008
ABN 40 102 792 174

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (including but not limited to electronic, mechanical, photocopying, or recording), without the prior written permission of the copyright owner.

Africa map, courtesy, CIA The World Factbook

Cover design by Holy Cow! Design & Advertising
Typeset by Longueville Media in Esprit Book 10/13

National Library of Australia
Cataloguing-in-Publication data
Author: Donnelly, Roger.

Title: Into Africa : how the resource boom is making Sub-Saharan Africa more important to Australia / Roger Donnelly and Benjamin Ford

Edition: 1st ed.

ISBN: 9781921004346 (pbk.)

Series: Lowy Institute paper ; 24

Notes: Bibliography.

Subjects: Primary commodities. Africa, Sub-Saharan--Economic conditions--21st century. Australia--Foreign relations--Africa, Sub-Saharan. Africa, Sub-Saharan--Foreign relations--Australia.

Other Authors/Contributors: Ford, Benjamin.

Dewey Number: 330.0967

Printed and bound in Australia using fibre supplied from plantation or sustainably managed forests. Inks used in this book are vegetable based (soy or linseed oil).

Roger Donnelly is chief economist at the Australian export credit agency, EFIC — the Export Finance & Insurance Corporation. Before EFIC, he worked among other places in the Australian Treasury and the Office of National Assessments and as an economic and business consultant. He is a member of the OECD group of country risk experts and a graduate of the University of Adelaide.

Benjamin Ford is senior economist at EFIC. Before EFIC, he was an economist in the Australian Treasury's macroeconomic group. He is a graduate of the University of Western Australia and has postgraduate degrees in applied economics from Curtin University and in international and development economics from the Australian National University.



Executive summary

A resource boom has been underway in Sub-Saharan Africa (SSA) since 2003.

The boom is driven by four factors — improved African investment climates, strong international commodity demand and soaring commodity prices, a global savings glut, and a ‘New Great Game’ of rivalry for resources played by state-owned and state-directed resource companies backed by the exchequers and diplomatic clout of their governments.

Australian resource companies and companies that service the resource sector figure prominently in that boom — thanks to their competitive advantages. From very little at the turn of the decade, actual and prospective investment by Australian companies in the SSA resource sector has climbed to US\$20 billion — close to the A\$26 billion stock of direct investment that the Australian Bureau of Statistics estimates Australian resident mining companies held throughout the world in 2006 (though overseas affiliates would have held further overseas investments).

With each passing month, moreover, the number grows bigger. BHP Billiton alone plans to invest US\$4.7 billion in coming years. Australian companies are now the third-largest spenders on exploration in Africa after South African and Canadian ones. The big Australian mining engineering companies now make a substantial fraction of their sales from African projects and have lined up work on at least a further A\$4 billion worth of projects.

Just as many stories about the world economy nowadays have China or ‘Chindia’ as protagonists, so does the story of the SSA resource boom. Both China and India feature prominently on both the demand and supply side of the resource boom — pushing demand and prices up, and then going into SSA to try to supply their own, and other countries’, demands. Though China, as a latecomer to SSA resource investment, isn’t yet one of the biggest investors, its lending and investment ‘pipeline’ suggests it could well leap to the forefront in coming years.

So far, the global credit squeeze and sharemarket correction have had only a marginal impact on financing of SSA resource projects. Many of the longer-term structural drivers of SSA resource investment — brisk international commodity demand, ample capital, and non-commercial activity by state-owned and state-directed companies — look durable. Therefore the investment does, too.

But it could well fizzle out if the subcontinent doesn’t hold on to and build upon the peace, democracy and economic improvements it has achieved this decade. Since it seems almost as liable to slip back as to move forward, one shouldn’t take continuing investment and development for granted.

For all the conflict resolution, democratisation and economic improvement that has taken place in SSA this decade, it remains an inhospitable place to do business. ‘Political risk events’ have already blindsided several companies, including Woodside in Mauritania and Anvil Mining in the Democratic Republic of the Congo (DRC).

Political risk isn’t exactly foreign to Australian resource companies. After all, they were in some inhospitable spots even before the current push into SSA got underway. Even so, there are likely to be some risks to which they will need to adjust. The New Great Game is one. Some governments are striving to achieve energy and resource security by acquiring African resources without too much regard to cost. In the competition for concessions and contracts, they are offering soft loans, aid and infrastructure. Companies without such advantages will find themselves competing on unequal terms.

Other risks common in, if not peculiar to, SSA are political violence, attendant human rights abuses, corruption and creeping expropriation.

These can lead to direct costs, such as damaged assets, lost production and criminal penalties for bribery and corruption. Or indirect costs (via ‘reputational risk’), such as media and NGO criticism and share divestments by ‘ethical’ investors. Either way, shareholder value can be destroyed.

Protecting one’s assets and reputation from these risks while still making money is difficult. Companies are managing the risks in three ways — through corporate social responsibility (CSR) policies, political risk assessment and political risk insurance (PRI).

Most companies have some form of CSR policy. They can adopt external codes and benchmarks. Four important ones are the Equator Principles used by banks (ANZ, National Australia Bank and Westpac among them), the Extractive Industries Transparency Initiative, the OECD Guidelines for Multinational Enterprises (and associated Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones), and the International Council on Mining & Metals’ Sustainable Development Principles. Some companies devise their own principles. Some mix both.

PRI tends to be used by the banks providing debt and hedge facilities to resource projects. Equity investors frequently self-insure, confident that they can manage the risk and are being well rewarded for it. Their shareholders don’t mind, because they can hedge individual company risks by blending shares into a diversified portfolio.

Ultimately, the best defence a company can mount against political risk is to ensure a fair sharing of benefits between the company, the local community and the national government. It should come as no surprise to companies if one-sided contracts are challenged and renegotiated.

There may be a case for recalibrating Australian public policies at the margin because of the push by Australian companies into the SSA resource sector. The three big areas of foreign, trade and aid policy may need to be reviewed, as well as the leverage and influence that Canberra can exercise through international organisations such as the IMF, World Bank, UN, OECD, WTO and Berne Union (the international association that counts amongst its members most official export credit agencies). Five initiatives suggest themselves for review.

- Providing political and diplomatic support to companies suffering unfair treatment or competition, perhaps partly through some additional diplomatic posts
- Negotiating with African governments bilateral investment treaties that contain protections for Australian investors and dispute settlement mechanisms
- Supplying bilateral aid to targeted SSA countries to win goodwill that would support Australian commercial interests
- Urging and helping SSA governments to improve their investment climates and to treat all investors in a non-discriminatory manner
- Urging and helping governments engaged in strategic competition for resources to sign on to and honour international agreements, such as those in the OECD, WTO and Berne Union, limiting the subsidisation of exports and investment.

Contents

Executive summary	vii
Boxes, tables, figures, maps	xiii
Acknowledgments	xv
Acronyms	xvi
Preface	xix
Chapter 1: Drivers of the boom	1
Improved African ‘fundamentals’	
‘Stronger for longer’ commodity prices	
Global savings glut	
New Great Game	
How the drivers interact	
Chapter 2: Dimensions of the boom	39
‘Boom’ no exaggeration	
Mining recovers	
‘Southern’ investors becoming more important	
Summary	
Chapter 3: Dimensions of Australian involvement	51
Outdated official data	
More recent evidence	
Diverse mix of interests	
Summary	

Boxes, tables, figures, map

Chapter 4: Implications for companies and public policy	67
Is the push sustainable?	
Implications for Australian companies	
Managing risk	
Implications for public policy	
Conclusions	
Appendix 1	
Sub-Saharan Africa's resource potential	103
Appendix 2	
Benchmarking Sub-Saharan Africa's investment climates	111
Notes	123
Bibliography	137

Boxes

- Box 1: World Bank country performance ratings
- Box 2: The Resource Curse — or how wealth can make you poor
- Box 3: Additional, mistaken criticisms of state-directed investment

Tables

- 1.1 Improvements in peace and stability
- 1.2 Sub-Saharan African HIPC beneficiaries
- 1.3 Sub-Saharan African sovereign credit ratings
- 1.4 Country performance ratings
- 2.1 Africa's top ten FDI recipients
- 2.2 African non-ferrous mineral exploration budgets
- 3.1 Five most frequently mentioned target countries and resources
- 3.2 Dimensions of Australia's involvement in Sub-Saharan Africa's natural resource sector

Figures

- 1.1 Sub-Saharan Africa — growth and inflation
- 1.2 Sub-Saharan Africa — external debt burden
- 1.3 Sub-Saharan Africa — external debt service burden
- 1.4 Commodity non-fuel price index
- 1.5 Metals price index
- 1.6 Fuel and crude oil price index
- 2.1 African FDI inflows

Acknowledgments

- 2.2 United States FDI stocks in Africa's extractive sector
- 3.1 Australia's stock of outward FDI in mining
- 3.2 Australian investment in Africa and South Africa
- 3.3 Existing and prospective Australian resource investment in Africa

Map Africa

We thank these people for their suggestions and other help.

Susan Dageven and Richard Simmons from AusAID; Angela McGrath from the Australian Treasury; Holly Lindsay from BHP Billiton; our colleagues John Davies, Peter Field, Chang Foo and Jan Fuchter from EFIC; Richard Andrews, Angela Carey, Grant Dooley, Heath McMichael, Kevin Thompson and Rowena Thompson from the Department of Foreign Affairs and Trade; Tricia Wilhelm from Export Development Canada; Jim Terrie, a freelance risk consultant; Henri Boshoff and Doussou David Zounmenou from the Institute for Strategic Studies; William Bulmer from the International Finance Corporation; Richard Murray from the IMF; Mark Thirlwell from the Lowy Institute; Steve Allen and Jamie Wright from RFC Corporate Finance; Jan Duvenage and Yvonne Mhango from Standard Bank; Syd Parkhouse from Riversdale Mining; Michael Ahrens and Doris Bäsler from Transparency International; and Jim Hagan from the World Bank.

The views expressed in this paper are ours, and shouldn't be attributed to anyone else, including our employer, EFIC.

Acronyms

AFRICOM	US Africa Command	IPO	Initial public offering
AIM	Alternative Investment Market, London	IPPA	Investment promotion and protection agreement
ANCP	Australian National Contact Point	KNOC	Korean National Oil Corporation
ASX	Australian Stock Exchange	MDRI	Multilateral Debt Relief Initiative
BIT	Bilateral investment treaty	MEG	Metals Economics Group
boe/d	Barrels of oil equivalent a day	MIGA	Multilateral Investment Guarantee Agency
BRIC	Brazil-Russia-India-China	NEPAD	New Partnership for Africa's Development
CNPC	China National Petroleum Corporation	NOC	National oil company
CSR	Corporate social responsibility	ONGC	(Indian) Oil and Natural Gas Company
CVRD	Companhia Vale do Rio Doce	OPIC	Overseas Private Investment Corporation
DRC	Democratic Republic of the Congo	PEPFAR	President's Emergency Plan for AIDS Relief
ECA	Export credit agency	PRI	Political risk insurance
EPC	Engineering, procurement and construction	SADC	Southern African Development Community
EPCM	Engineering, procurement and contract management	SSA	Sub-Saharan Africa
EITI	Extractive Industries Transparency Initiative	TI	Transparency International
FDI	Foreign direct investment	TSX	Toronto Stock Exchange
FNI	Lendu Nationalist and Integrationist Front	UNCTAD	United Nations Conference on Trade and Development
FTA	Free trade agreement		
HDI	Human development index		
HIPC	Heavily Indebted Poor Countries (Initiative)		
ICMM	International Council on Mining & Metals		
IEA	International Energy Agency		
IOC	International oil company		

Preface

At the turn of the decade, trade and investment ties between Australia and Africa were negligible. South Africa was Australia's No. 1 export market and investment destination in SSA, yet still ranked only 21 among merchandise trade partners and made up only 0.14% of total Australian overseas investment in 2001-02. A host of factors inhibited ties, including non-complementary economies and distance, both geographic and cultural. In Africa, the inhibitors included poor purchasing power and infrastructure, tariff barriers, investment restrictions and political risk.

Yet in the past five years, investment by Australian resource companies in SSA has been growing in leaps and bounds. Actual and prospective investment by Australian companies in the SSA resource sector has climbed to US\$20 billion. And it seems a lot more could bubble up.

A recent illustration of how SSA now matters a lot for even the biggest Australian companies is the takeover bid by BHP Billiton for Rio Tinto. In its attempts to ward off this bid, Rio noted that the market had insufficiently valued its Simandou iron ore deposit in Guinea. According to Rio, if the deposit were valued correctly, the company's market capitalisation would exceed the value of BHP Billiton's takeover offer. This 'globally significant iron ore province', costing an estimated US\$6 billion to develop, is 'comparable in many respects to the Pilbara 40 years ago, which explains our excitement as we draw closer to the development phase,' Rio's iron ore boss said.

Yet in June 2008, the Guinean government saw fit to ‘withdraw’ and ‘reconsider’ Rio’s Simandou concession, possibly with a view to extracting more favourable terms.¹ That an iron ore deposit in a remote corner of Guinea – a country most Australians would have difficulty finding on the map – could so influence the prospects for a takeover that would represent a major consolidation in the international mining industry was certainly a situation no one would have predicted five years ago.

Alongside direct investors, Australian engineering and service companies have been busy clinching contracts. Many of these already make serious money from Africa, in one case as much as 42% of sales revenue.²

Australian resource investment in SSA used to be focused on South Africa and Mozambique. But recently companies have fanned out north and west. They can now be found in numerous countries including: Angola, Burkina Faso, the DRC, Equatorial Guinea, Ghana, Guinea, Kenya, Mali, Mauritania, Nigeria, Senegal, Sierra Leone and Zambia.

What accounts for the recent upsurge in investment and activity? Obviously the international resource boom is one driver. But this factor alone can’t explain the rush. After all, previous commodity booms passed Africa by.

So what are the drivers of the African resource boom? The dimensions of the boom — the stocks and flows of investment, the commodities and countries involved? How do Australian companies feature? Is the investment and production sustainable? What implications does the push by Australia companies into the subcontinent have for the companies themselves? And for Australian public policy?

Structure of the paper

The purpose of this paper is to answer these questions.

- Chapter 1 examines the main drivers of Africa’s natural resource boom.

- Chapter 2 outlines the dimensions of the boom — the money going into oil and gas and hard-rock minerals, exploration versus development, the geographic distribution, and so forth.
- Chapter 3 reviews the dimensions of Australian involvement in the boom — oil/gas versus hard-rock minerals, exploration versus development, investment versus services, juniors versus majors, sources of capital, geographic spread etc.
- Chapter 4 analyses the sustainability of the investment and production. Are they durable? Or a flash in the pan? It then ponders the corporate and public policy implications of this activity.

Chapter 1

Drivers of the boom

There are four trends driving the current resources boom in SSA — improved African ‘fundamentals’, ‘stronger for longer’ international commodity prices, a global savings glut, and a ‘New Great Game’ of strategic competition on the subcontinent between state-backed companies. The first is providing more congenial local conditions for investors; the second, rewarding prices at which to sell production; the third, cheap, plentiful and ‘fearless’ capital with which to bankroll projects; and the fourth, an additional impetus besides profit for investment.

Improved African ‘fundamentals’

As one observer recently noted:

For decades after independence, countries in sub-Saharan Africa suffered from civil strife and ‘stop-go’ economic policies that led to macroeconomic instability and high inflation. Roads, railways, ports, and electricity systems fell into disrepair. Nor was the external environment always co-operative: countries were exposed to drought,

and commodity prices fluctuated. Countries that were rich in natural resources such as oil, gold, copper, and diamonds were often subject to the ‘resource curse’ that left large numbers of their people worse off. External donors, while supporting the continent, did not always finance projects that would have adequate economic returns or that responded to local development needs. In country after country, debt mounted until it became unsustainable. On top of all that, Africa was besieged by malaria and HIV/AIDS, which had devastating economic as well as human effects.

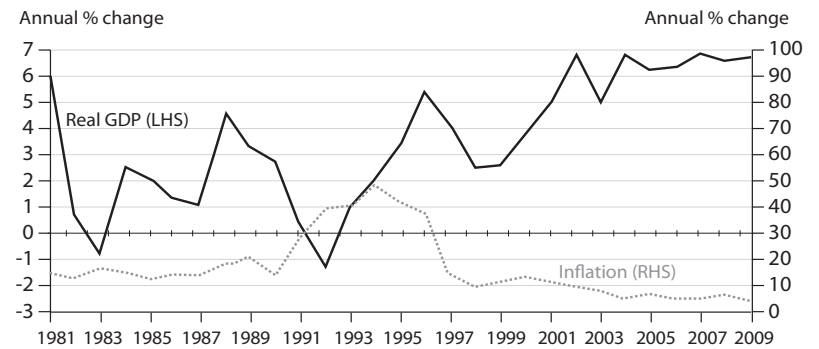
Yet things seem to be changing for the better throughout the subcontinent. In most African countries, leaders are now selected through democratic elections. The decision-making process is becoming more participatory and involving greater segments of civil society. The number of countries in crisis has declined, although conflict persists in some countries and regions. The pursuit of strong macroeconomic policies and economic reforms is bearing fruit: economies are growing faster and more steadily than before, and inflation is falling. Record levels of reserves in both oil-producing and oil-importing countries act as a cushion against external shocks, such as the recent increase in oil prices. Countries pursuing economic reforms have benefited from unprecedented amounts of debt relief from a wide variety of sources. In addition, the international community has promised a significant scaling up of aid resources in the years to come, offering African countries a fresh chance to free up resources and invest in human and fixed capital to promote sustainable growth.

These changes have not gone unnoticed abroad. Foreign investors are showing increased interest in the African continent, both in the domestic debt markets and in direct investment in the extraction of natural resources.³

Macroeconomic stabilisation

GDP growth in SSA has been clearly higher on average, and inflation lower, this decade than in the 1980s and 1990s, although by worldwide standards inflation is still high, and it remains to be seen whether growth will be sustained in the face of setbacks to world economic growth and commodity prices (Figure 1.1). Interestingly, the IMF, in its January 2008 World Economic Outlook update, forecasts growth for Africa of 7.0% in 2008, compared with 6.0% in 2007. For all other regions, it forecasts lower growth in 2008. In the Fund’s view, only Africa will be able to defy the world economic slowdown now underway.⁴

Figure 1.1
Sub-Saharan Africa – growth and inflation



Source: IMF World Economic Database. 2008 and 2009 are forecasts.

Fewer bullets, more ballots

Undoubtedly helping countries achieve greater macroeconomic stability has been a trend towards conflict resolution and democratisation.

The most important milestone on the road to peace has been the ending of civil war in Zaire, later to become the Democratic Republic of the Congo (DRC). According to the International Rescue Committee, this war and its aftermath has killed 5.4 million people, mostly from disease and starvation, making it the deadliest conflict since World War II. While inter-communal violence continues to happen in the DRC,

its scale is much reduced following the signing of a peace agreement between the government and rebel forces in 2002.⁵

Other notable developments include the ending of the civil wars in Mozambique (1992), Sierra Leone (2001), Angola (2002), Liberia (2003), Ivory Coast (2004) and Sudan (2005), and progress towards ending civil war in Uganda (2006).

Islamic political activism also seems to have decreased in West Africa following a brief upsurge in 2000-02. This seems to be the case even in semi-Islamised political systems like Nigeria's and Mauritania's, although the Algeria-based Al-Qaida in the Islamic Maghreb movement does continue to stage terrorist attacks, including against foreigners.⁶

Alongside this lack of activism is a high level of popularity for America: a poll by the Pew Research Center released in June 2007 found that 61 % of Nigerians polled, and 69 % of Senegalese, had a favourable view of America.⁷

More peaceful though it may now be, Africa remains the most blood-soaked continent. Worse, it seems almost as liable to slip back into conflict as to move forward to greater security. Insurrections or wars continue to plague Nigeria, Chad, the Central African Republic, Sudan and Somalia. Just recently, there have been three setbacks.

- **Nigeria.** After talks between the government and militants in the Niger Delta broke down in December 2007, fighting has escalated significantly in Africa's largest oil province. (Actually, such have been the production shortfalls caused by the fighting that in April, according to OPEC, Angola overtook Nigeria as SSA's No. 1 oil producer.)
- **Chad.** A renewed outbreak of fighting between rebels and the Chadian government occurred in January. A measure of calm has returned following a French intervention, but the underlying causes of the instability remain.
- **Kenya.** Meanwhile, in Kenya, inter-ethnic violence set off by the contested election in December 2007 represents a big setback to

the trend of improving security: Kenya is East Africa's largest economy and SSA's fourth largest. Recent disruptions to the port of Mombasa have had regional repercussions, because Mombasa is the chief point of transit for exports and imports of the landlocked countries in Kenya's hinterland — Uganda, Burundi, eastern DRC, northern Tanzania and southern Sudan.

Despite these reversals, however, the current level of bloodshed on the subcontinent is well down on a decade ago.

Political and civil liberties are also spreading throughout the subcontinent, if fitfully. According to Freedom House, a monitor of freedom and democracy around the world, Africa up to 2005 had seen 'several years of steady and, in a few cases, impressive gains for democracy'. While in 2006 and 2007 it experienced more setbacks than gains, in a longer term perspective, the situation is now much improved. In 1973, three-quarters of SSA states were 'Not Free' and only two out of the then 39 countries were 'Free', according to Freedom House. In 2007, by contrast, 11 countries were 'Free', 23 % of the total; compared with 23 countries (48 %) 'Partly Free' and 14 countries (29 %) 'Not Free'.⁸

The peace and democracy dividend shows up in World Bank rankings of SSA countries for political stability and violence (Table 1.1)⁹. The numbers indicate a country's worldwide percentile ranking — the lower the score, the worse the situation. The tables show countries that have either risen or fallen at least 10 percentile rankings over 1996-2006. True, they show that almost as many countries have gone backwards — 12 — as have gone forward — 13. But of the sliding countries, only Ivory Coast, Mali and Zimbabwe are large (in GDP or population). In contrast, 10 of the rising countries are either among the top 10 SSA countries for GDP or among the top 20 for population, or both — Angola, Burkina Faso, Cameroon, Ghana, Guinea, Madagascar, Malawi, Mozambique, South Africa and Zambia. Even more importantly, virtually every one of the improvers is a resource-rich country of interest to mining and petroleum companies. In the future, some other large and resource-rich countries offer promise of improvement, even if they haven't yet delivered — the DRC is a prime example.

Table 1.1: Improvements in peace and stability

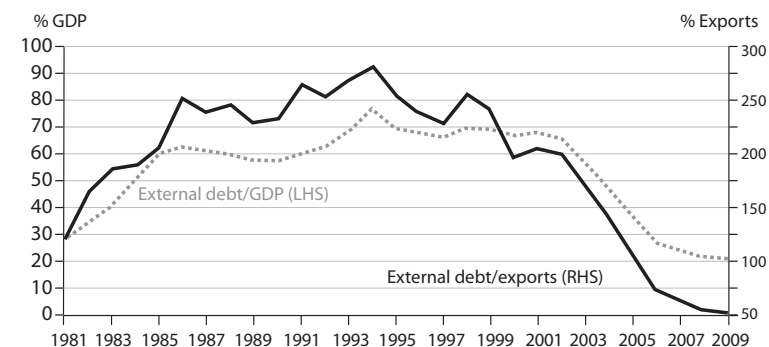
Countries becoming more stable/less violent			Countries becoming less stable/more violent		
	Percentile rankings			Percentile rankings	
Country	1996	2006	Country	1996	2006
Algeria	1.9	19.2	Benin	82.2	59.1
Angola	3.4	28.8	Central African Rep	37.5	7.2
Botswana	70.7	93.3	Chad	22.1	5.8
Cameroon	11.5	38.5	Comoros	82.2	41.8
Gabon	32.7	48.6	Djibouti	51.0	39.4
Ghana	38.5	54.8	Eritrea	53.4	20.7
Libya	6.7	55.3	Ivory Coast	39.4	2.9
Mozambique	19.2	64.4	Lesotho	62.0	51.9
Namibia	60.1	75.5	Mali	64.4	45.2
Rwanda	4.8	27.4	Mauritania	62	35.6
Sierra Leone	2.9	31.3	São Tomé & Príncipe	82.2	63.9
South Africa	13.5	44.2	Zimbabwe	25.5	13.9
Zambia	28.8	56.7			

Source: Authors' calculations based on World Bank governance indicators

Debt reduction

Thanks to debt relief and better economic management, external debt burdens are also down across much of the subcontinent (see Figures 1.2 and 1.3).

Figure 1.2
Sub-Saharan Africa – external debt burden



Source: IMF World Economic Database. 2008 and 2009 are forecasts.

Figure 1.3
Sub-Saharan Africa – external debt service burden



Source: IMF World Economic Database. 2008 and 2009 are forecasts.

To date, 25 African countries have secured debt reduction packages under the so-called IMF/World Bank HIPC Initiative (HIPC = Highly Indebted Poor Country) (Table 1.2). This gives them interim relief on debt service falling due to official bilateral creditors, and eventually, if they ‘behave well’, a large write-down of their debt stocks. On average,

HIPC beneficiaries have seen their debt service payments decline by about 2% of GDP between 1999 and 2005.

Moreover, of the 25 HIPC beneficiaries, 18 have benefited from additional debt write-offs from multilateral institutions under the so-called Multilateral Debt Relief Initiative (MDRI).

Table 1.2: Sub-Saharan African HIPC beneficiaries at end-2007

Recipients of full, irrevocable HIPC debt relief ¹		
Benin	Malawi	Senegal
Burkina Faso	Mali	Sierr Leone
Cameroon	Mauritania	Tanzania
Ethiopia	Mozambique	Uganda
The Gambia	Niger	Zambia
Ghana	Rwanda	
Madagascar	São Tomé & Príncipe	
Recipients of interim HIPC relief		
Burundi	Congo, Republic of	Guinea-Bissau
Chad	DRC	
Central African Republic	Guinea	
Potential HIPC beneficiaries		
Comoros	Liberia	Togo
Eritrea	Somalia	
Ivory Coast	Sudan	
¹ These countries are also beneficiaries of the Multilateral Debt Relief Initiative (MDRI)		

Source: IMF HIPC and MDRI

Surprisingly perhaps, given the poor governance and high levels of corruption dogging many countries, money freed up from debt service by the HIPC and MDRI Initiatives has by and large found its way into health, education and other social services – not into Swiss bank accounts or increased military spending. According to the IMF, before the HIPC Initiative, eligible countries were, on average, spending slightly more on debt service than on health and education. But now they are, on average, spending more than five times the amount of debt service payments.¹⁰

Maiden credit ratings

The reduction in debt and improvement in macroeconomic policy discipline has enabled a clutch of countries to gain maiden sovereign credit ratings. With financial support from the US State Department, ratings agency Fitch began to rate the subcontinent in 2002, and the UN Development Program has been doing something similar with Standard & Poor’s since 2003.¹¹ Twenty countries in the subcontinent now have ratings (Table 1.3).

Only four countries — Botswana, Mauritius, Namibia and South Africa — have the coveted investment-grade rating, making them ‘safe for widows and orphans’ to invest in. The rest have speculative grade ratings, meaning that if they were to issue international bonds, they would be viewed as ‘junk’, suitable only for sophisticated, risk-hungry investors.

Most rated countries don’t, at this stage, intend to use their ratings to tap international capital markets. Their plan instead is to provide a set of signposts to direct investors and their financiers about the quality of their business and investment climate, and hopefully, win upgrades over time.

Interestingly, however, two countries did successfully issue large Eurobonds in 2007 — and after the onset of the global credit squeeze. Gabon issued a US\$1 billion bond in December, and Ghana, a US\$750 million bond in September. Gabon’s bond was reportedly two and a half times oversubscribed; Ghana’s four times.¹²

Table 1.3: Sub-Saharan African sovereign credit ratings

Long-term foreign currency ratings			
	Standard & Poor's	Fitch	Moody's
Benin	B	B	-
Botswana	A	-	A2
Burkina Faso	B	-	-
Cameroon	B	B	-
Cape Verde	-	B+	-
Gabon	-	BB-	-
Gambia	-	-	-
Ghana	B+	B+	-
Kenya	B	-	-
Lesotho	-	BB-	-
Madagascar	B	-	-
Malawi	-	-	-
Mali	B	B-	-
Mauritius	-	-	Baa2
Mozambique	B+	B	-
Namibia	-	BBB-	-
Nigeria	BB-	BB-	-
Senegal	B+	-	-
South Africa	BBB+	BBB+	Baa1
Uganda	-	B	-

Source: Standard & Poor's, Fitch and Moody's. At 16 May 2008

Better institutional quality

Another set of benchmarks worth noting are those measuring 'institutional quality'. Scholars and investors alike have long recognised that not just macroeconomic stability and external creditworthiness, but the quality of a country's institutions more broadly, matter for its attractiveness as an investment destination.

In this context, the World Bank's IDA Resource Allocation Index (RAI) and associated Country Performance Rating (CPR) are of particular interest.¹³ RAIs and CPRs are used by IDA (the World Bank's soft loan window, the International Development Association) to allocate funds among borrowing members. They have been calculated in one form or another since the late 1970s, but until 2006 had been kept confidential. However, their release in June 2006 attracted attention because they represent a particularly painstaking and comprehensive approach to measuring institutional quality (see Box 1).

While the subcontinent has only three countries in the top 10 of rated countries, in contrast to nine in the bottom 10, its average score, 2.6, is only a touch off the overall average, 2.85 (Table 1.4). The World Bank hasn't published the scores it gave before June 2006, but it is clear that the performance gap would have been much larger a decade before.

Box 1: World Bank Country Performance Ratings

The current rating system uses 16 indicators in four clusters — economic management, structural policies, social inclusion and public sector institutions. Each variable is rated on a scale from one (low) to six (high). The figures are then averaged for each cluster and then averaged again to give an overall RAI for a country. The RAI is then adjusted to take into account the performance of the country's IDA project portfolio and its governance.

These adjustments then yield the CPR.

Table 1.4: Country performance ratings: Sub-Saharan Africa plus comparators

Country	CPR	Country	CPR
Cape Verde	4.56	Papua New Guinea	2.37
Ghana	4.52	São Tomé & Príncipe	2.35
Tanzania	4.36	Nigeria	2.35
India	4.07	Djibouti	2.32
Senegal	3.79	Gambia	2.31
Vietnam	3.78	Sierra Leone	2.24
Maldives	3.68	Laos	2.14
Mali	3.65	Cambodia	2.12
Uganda	3.58	Burundi	2.10
Burkina Faso	3.55	Congo (Rep)	1.97
Rwanda	3.55	Guinea	1.89
Sri Lanka	3.54	Solomon Islands	1.88
Madagascar	3.41	Guinea-Bissau	1.78
Lesotho	3.38	Eritrea	1.76
Kenya	3.37	Angola	1.54
Benin	3.27	Chad	1.53
Indonesia	3.18	DRC	1.48
Malawi	3.17	Ivory Coast	1.48
Ethiopia	3.12	Sudan	1.35
Zambia	2.90	Comoros	1.34
Mozambique	2.85	Togo	1.24
Niger	2.83	Central African Republic	1.20
Cameroon	2.6	Zimbabwe	0.71
Mauritania	2.51		

Source: World Bank.

The message in the CPRs? Much the same as the message in the other indicators discussed above: SSA still doesn't measure up well against international standards that matter to investors, but it has improved a lot. And in conjunction with other, external drivers of investment, this improvement is attracting significant amounts of capital to the mineral and petroleum sector.

Lower barriers to foreign investment

Last but not least, the subcontinent's greater openness to foreign investment needs mention. In 1990 most African countries restricted or banned investment by foreign resource companies. But by 1997 almost all had developed new mining codes to encourage exploration and development.

Moreover, they were liberalising their foreign investment policies just as other resource-rich countries — for instance, Venezuela, Bolivia, Ecuador, Mongolia — were adopting confrontational forms of resource nationalism, sometimes even nationalisation. It is true that some SSA countries are seeking to gain a greater share of the windfall revenues from the international commodity boom. But by and large the tenor of their approach is to get a fair deal, not to nationalise or impose a very large state ownership stake without paying a market price for it. This goes to make them all the more inviting in the worldwide competition for exploration and development dollars.

Better African fundamentals critical

There have been many commodity booms since SSA countries achieved independence from the colonial powers in the 1950s and 1960s. Yet none served to increase resource investment or production. To the contrary, the subcontinent's share of world mining and petroleum production fell over the entire period to 2000. The investment climate was just too inhospitable to prompt any appreciable supply response. During the current boom, however, investment has been soaring, which holds out the promise that SSA will at long last start to increase its share of world resource production. This is only possible because the investment climate has improved and foreign investment barriers have come down.

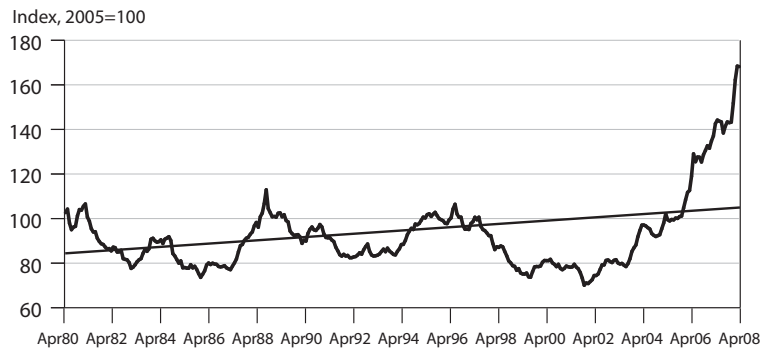
‘Stronger for longer’ commodity prices

One important external driver of the investment boom has been surging international commodity prices. Between the start of 2002 and end-April 2008

- non-fuel commodities in the broad rose 134% in US dollar terms
- metals 269%
- fuels 437% (more than seven-fold since the start of 1999).

See Figures 1.4-1.6.

Figure 1.4
Commodity non-fuel price index



Source: IMF Commodity Statistics.

Two factors seem to account for the price rises — brisk demand and low interest rates. The first gets more attention, but the second also matters.

Demand has been growing briskly, because the period since 2002 has seen the world economy grow at its fastest since the 1960s. In addition, the growth is becoming increasingly concentrated in ‘Chindia’ and other developing countries, where the commodity intensity of GDP is high and growing, thanks to urbanisation, industrialisation and expanding per capita income. For instance, 2007 was the first year in which the so-called

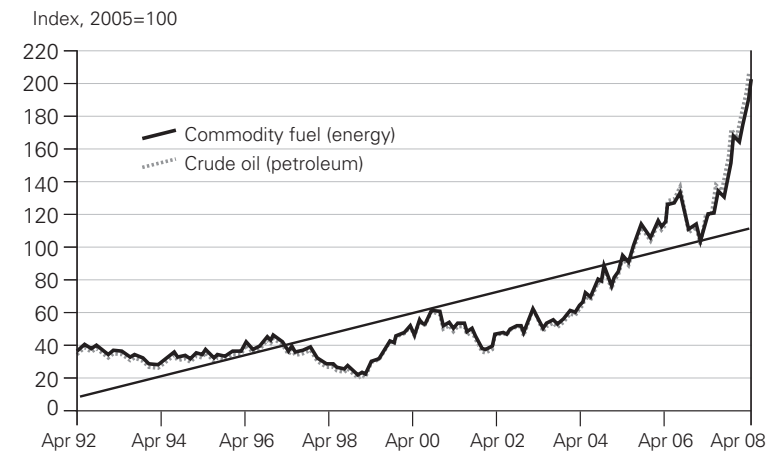
Figure 1.5
Metals price Index



Source: IMF Commodity Statistics.

Note: includes copper, aluminium, iron ore, tin, nickel, zinc, lead and uranium.

Figure 1.6
Fuel and crude oil price index



Source: IMF Commodity Statistics.

BRICs (Brazil, Russia, India and China) contributed more than 50% to world economic growth (in purchasing power parity terms); it was also the year in which China became the world's No. 1 growth engine, contributing 34% to world growth.¹⁴ Thanks to their rapid growth, developing countries now account for almost 50% of worldwide demand for metals.¹⁵ And this number will almost certainly go up even more.

One statistic to ponder is this.

Today, metals consumption per head in developing countries — whose population in aggregate is more than five times as large as the total of the developed countries — is often one quarter or less that of the rich countries.¹⁶

The implication is plain: as poor, but populous economies race to catch up to rich country levels of per capita income and materials consumption, they will continue to expand their demand for minerals and energy rapidly.

What role have low interest rates played in rallying prices? For reasons that will be explained in the next section, real — inflation-adjusted — rates are down to levels again not seen since the 1960s. Low interest rates boost commodity demand by making it cheaper to carry inventory. They also curtail supply, by giving miners an incentive, at the margin, to leave resources in the ground rather than dig them up, as revenue generated today cannot be put to work to earn high interest. So all else equal, lower interest rates mean higher demand and lower supply than otherwise, and therefore higher prices.

Will the high prices last? The consensus outlook is for only a modest decline into the medium term. This forecast is based on the view that Chindia will make a sustained difference to global commodity demand — plus new supply will come onto the market only gradually and at increasing cost. As the Australian Treasury Secretary Ken Henry has noted:

Provided resources production is not subject to long-run increasing returns to scale (declining long-run average costs of production), prices should remain above historical

average levels for as long as demand remains above where it would have been on the basis of trend growth. That is not to say that there will not be volatility sufficient to produce temporary falls in commodity prices. And nor does it imply that commodity prices will stay up at present levels: we should expect prices to fall somewhat as new supply capacity is brought on stream. But, absent a substantial and sustained negative shock to global demand, we should not expect to see average commodity prices fall all the way back to turn of the century levels.¹⁷

To sum up: prices will probably soften, but not revert to their historic trend, or to turn-of-century levels. It is this firm outlook, not just current strong prices, that is persuading companies to commit capital to projects with long gestation and payback periods on the subcontinent.

Global savings glut

Strong international commodity prices have been one international market force driving investment into the African resource sector; but there is another important one as well — an ample supply of savings compared with investment. This is another extraordinary feature of the current world economy beyond the turbocharged growth of emerging economies and strong commodity prices.

Relative to previous decades, desired saving during this one has been high, and desired investment low. Among the reasons have been:

- Fiscal discipline across a broad span of countries
- A 10 percentage point increase in China's national savings rate over the past decade, reflecting across-the-board increases in government, enterprise and household saving¹⁸
- Oil producers saving much of the big income windfalls they have gained from price rises

- Cuts to worldwide private investment following the excesses of the 1990s' dot com boom
- Cuts to East Asian private and public investment in the wake of the excesses uncovered by the 1997-98 financial crisis.¹⁹

The net result has been a situation of large volumes of investable funds chasing comparatively few assets. In the process, returns on safe assets have been driven to rock-bottom levels. And with the returns on offer for safe assets so low, investors have gone on a 'hunt for yield' among riskier assets ('up the risk curve'), which has pushed risk premiums down 'along the curve', and enabled risky projects to clinch financing that would otherwise have gone begging — including in the SSA mining and petroleum sectors. Examples include

- **Lumwana copper mine, Zambia, 2006.** A syndicate of international financiers backed by official export credit agencies (ECAs) is lending US\$584 million to this project, set to become Africa's largest open pit copper mine. The Australian- and Canadian-listed mining company, Equinox Minerals, is developing the mine. Australian companies Ausenco and Bateman Engineering have been awarded a US\$400 million-plus engineering, procurement and construction (EPC) contract for the project.²⁰
- **Chinguetti oilfield, Mauritania, 2005.** ANZ Investment Bank arranged a US\$100 million seven-year reserve-based financing for Hardman Resources, an independent Australian oil exploration firm, to fund its share of the US\$500 million development cost of the offshore Chinguetti field. It used a reserve-based lending structure, in which funding is determined by the producer's proven reserves and the cash flow that those reserves are projected to earn, rather than existing sales. The transaction was Mauritania's first internationally syndicated financing.²¹

- **NLNGPlus stage of the Nigeria LNG project, 2002.** At the time, this was the largest capital project ever to be undertaken in Africa. Project sponsors raised around US\$1 billion in non-recourse financing using ECA backing and the cash flow of previous LNG trains as security.

Global credit squeeze impact moderate

Will the global credit squeeze that surfaced last August, and associated pullback from risk-taking in financial markets, curtail the supply of capital to the SSA resource sector, bringing the boom to an end?

The cost of both debt and equity capital has certainly gone up for SSA resource projects, and the availability down. But there doesn't seem to be any wholesale flight from risk-taking on the subcontinent.

The overall tightening of credit is so far more of a 'squeeze' than a 'crunch'. The mark-to-market losses on mortgage-backed securities that prompted the squeeze are so far around US\$193 billion among major international banks, according to the IMF.²² (An alternative tally by Bank of America comes to US\$300 billion.²³) In addition, the banks have had to wear a higher cost of funding as risk has been re-priced upwards. The losses plus higher funding costs have made the banks less willing and able to extend risky credit. This doesn't mean, however, that they are calling in loans and shrinking their balance sheets. They have gone out and raised additional capital of US\$105 billion (of which US\$41 billion has come from sovereign wealth funds in the Gulf, Singapore and China).²⁴ (The corresponding number from Bank of America for total capital raised is US\$260 billion.) And they are still expanding credit, if at a slower pace than before, and at higher interest rates.

Moreover, they aren't curtailing their lending uniformly. Mining and petroleum loans have been relatively unaffected. This lending is remote from, and not susceptible to, the problems besetting mortgage-backed securities. For one thing, it is generally kept 'on-balance sheet', rather than securitised and sold on. And therefore its risk hasn't been sliced and diced into the incomprehensible packets that the US sub-prime mortgages were. Resource financiers also didn't show the same degree of recklessness as did the sub-prime mortgage originators.

Project financing tends to be a more disciplined practice, involving careful risk assessment.

True, banks are now showing a higher degree of risk aversion, according to bankers working in the area. They are unwilling to commit as much to syndicated loans as before. In fact, they are moving away from syndicated lending — where an arranging bank pre-commits to lending a certain sum, and only afterwards seeks to sell down its commitment to other banks. Instead, they now do 'club lending' — where each bank delays its commitment till a syndicate has been formed. And they are demanding higher risk margins. Nevertheless, they do continue to refinance maturing debt facilities that are performing and to extend finance to profitable new projects.

As recently as May, project sponsors were reporting commercial bank interest in taking part in club lending packages for projects even in risky countries such as Guinea and the DRC. Private political risk insurers also report reasonable capacity — including a preparedness in some cases to take on risk of 10 years and longer in amounts exceeding US\$50 million a project. Funding gaps have certainly opened up in some projects, especially the larger ones, but multilateral bodies such as the Multilateral Investment Guarantee Agency (MIGA) and the European Investment Bank plus ECAs are willing and able to fill many of these gaps.²⁵

Other strategies that companies are reportedly using to finance projects are:

- getting offtake parties such as smelters to extend mezzanine finance
- altering mine plans and development schedules to fit in with the now-reduced volume of finance available
- drawing upon cash raised while the debt and equity markets were still bullish
- engaging in mergers and acquisitions to get hold of strong cash flows and cash hoards in other companies.

All in all, says one banker, 'This is still regarded as a very strong sector ... There are still a lot of opportunities to be seized'.²⁶

Might such optimism be premature? After all, new losses and funding problems are being announced daily and the full extent of the securitised lending problem is yet to be fully revealed. Obviously, if the losses snowball enough, credit could be severely curtailed. This would act as a severe drag or brake on many sectors worldwide, not just the SSA resource sector.

But the world financial system is still a long way from such a crunch point. In April the IMF warned that potential credit losses at financial service firms worldwide could mount to US\$945 billion,²⁷ lowering the aggregate capital adequacy ratio of American banks by 2½ percentage points and that of European banks by 1½ percentage points. In that event, the Fund guesstimated that banks could curtail credit growth to a little over 4% a year, compared with the nearly 9% sustained on average in the United States in the post-war period.²⁸ This would represent quite a severe squeeze, but still not a crunch.

Besides, just as there are factors that could tighten the squeeze, there are also factors likely to ease it over time. Among these are official interest rate cuts and liquidity provision by central banks and the prospect of writebacks on some mortgage-backed securities that were excessively written down in the initial hysteria over sub-prime mortgage defaults.

One long run structural factor likely to sustain capital flows into the SSA resource sector is the large and continuing flow of surplus savings from economies in the Gulf and East Asia onto world capital markets, often channelled by ECAs and sovereign wealth funds. ECAs like China's Eximbank and Sinosure are already lending large sums to SSA resource projects and preparing to lend even more (a subject discussed in more detail later in this chapter). And attracted by the prospect of high yield and portfolio diversification, sovereign wealth funds are likely to follow.

Might the supply of equity capital dry up to a greater extent than the debt supply? Again, this doesn't look likely at this stage. World share markets fell almost 30% on average from their peak in the fourth quarter of last year to their low in January, as investors sought to withdraw capital (although the markets have since retraced about half that fall). There have also been in recent months reports of sharemarket listings

being cancelled and new equity raisings declining. Because exploration companies rely almost exclusively on equity capital, this withdrawal and withholding of capital could be a serious problem. Even for development projects, debt won't be forthcoming if equity isn't. Still, the anecdotal evidence suggests again that profitable companies and projects are still finding it possible to tap the equity markets, with more equity raisings being reported than cancellations.²⁹

To sum up: some resource projects will be delayed, and burdened with higher debt servicing costs, and some marginal projects will be cancelled, due to the global credit squeeze and associated increase in risk aversion. But the crisis hasn't caused any wholesale funding withdrawal, and nor is such a withdrawal likely in future. Sound projects catering to the burgeoning international demand for resources are likely to continue getting funding.

New Great Game

So far this chapter has discussed one *domestic* driver of the African resources boom — improved African 'fundamentals'. It has also discussed two external *economic drivers* — high commodity prices and a global savings glut. But there is a final factor, and it is more a *geopolitical* one. It has been called the 'New Great Game'.³⁰ Why New Great Game? Because it resembles the so-called Great Game played in the 19th century by Britain and Russia as they competed for influence in the Middle East and Central Asia.

Countries such as China, India, the Gulf sheikhdoms, Korea, Brazil, Malaysia, Russia, and to a lesser extent, Japan are now making state-supported investments in the African resource sector through both state and private companies. For China, India, Korea and Japan this is mainly an effort to secure raw materials and energy for their factories, utilities and infrastructure projects — a so-called quest for 'equity oil' or 'customer equity' as part of a 'resource security' strategy.³¹ For the Gulf, too, the motivations include securing raw materials, as well as diversifying investment portfolios. For Brazil, Malaysia and Russia, other motives are at work. Brazilian companies report a wish to escape

the high cost of doing business at home. Malaysian state-owned energy company Petronas and some Russian resource companies wish to internationalise their operations as their domestic reserves diminish.

In addition, the US, through a variety of diplomatic, aid and military initiatives, is attempting to bring political and economic stability to the subcontinent broadly, and in particular to the Gulf of Guinea, with a view to developing an alternative source of oil to the Gulf. A similar stabilising influence is provided by France through its military presence in Francophone Africa.

These initiatives are together giving added impetus to the investment boom.

China

Beijing has long had a strategic interest in SSA. Back in the Maoist days, this interest was overwhelmingly ideological — to export revolution. Later the Chinese government began to engage Taiwan in diplomatic competition on the subcontinent. In the mid-1990s, it instigated a hunt for natural resources to sustain China's rapid economic growth. In line with this latest switch, it has been making major commitments of aid and investment to Africa, especially to petroleum- and mineral-rich states such as Angola, Nigeria, the DRC and Sudan.

Among the largest of its aid recipients so far have been Angola, Sudan, Tanzania, Kenya and Uganda. Overall, the World Bank estimates that China has lent Angola US\$9.8 billion; the Angolan Finance Ministry said in October 2007 that its credit from the China International Fund alone was US\$2.9 billion.³²

One of the first big resource projects that China undertook was an investment in Sudan's oil industry. In 1996, the China National Petroleum Corporation (CNPC) bought a 40% stake in the Greater Nile Petroleum Corporation. CNPC transformed Greater Nile into Sudan's leading exporter — with China its No. 1 customer.

Beijing is now providing financial backing for hundreds of Chinese companies exporting to and investing in Africa — companies such as China National Offshore Oil Corporation, CNPC and Sinopec (petroleum), Jiangsu International (construction), and Huawei (telecoms).

A key organisation backing Chinese resource investment is China Eximbank, the world's third-largest ECA. It has reportedly provided US\$15 billion over the last few years to both Chinese suppliers to Africa and their African buyers. Many of its loans seem to be backed by mineral or petroleum exports. All are reportedly 'soft' ones with concessional terms. For 'state-encouraged key overseas investment projects', including natural resource projects, China Eximbank provides an interest rate discount of at least two percentage points.³³

Not only does China Eximbank provide soft loans to resource projects directly; it also supports 'oil-for-infrastructure' deals and 'commodity-for-infrastructure' deals more broadly. Until recently, the most prominent example was a US\$2 billion low-interest loan to Angola in 2004. This is financing refurbishment by Chinese companies of the Benguela railway. During the days of Portuguese rule this line hauled ore from the mines of Zambia and the then-Zaire, but it was sabotaged during the 1975-2002 civil war, and fell into disuse.

In November 2006, the Chinese government hosted more than 35 African heads of state for the China-Africa Forum, and in May 2007 hosted the annual meeting of the African Development Bank. At the 2007 meeting, the Chinese government said it would extend a US\$20 billion package of trade and infrastructure loans to Africa over the following three years.

The first installment of that package was made in October 2007 — a US\$5 billion concessional loan to the DRC. US\$3 billion of that loan is reportedly earmarked to upgrade road and rail links between the DRC's mines and ports inside and outside the country. A further US\$2 billion is to rehabilitate existing mining infrastructure and establish Sino-Congolese mining joint ventures.

In April 2008 the DRC government announced that the loan package would be lifted to US\$9¼ billion. The DRC would pledge copper and cobalt to China in return for roads, railways and other infrastructure — which now reportedly includes hundreds of clinics, hospitals and schools plus two hydroelectric dams. Likening the loans to the Marshall Plan that helped reconstruct Europe after World War II, DRC President Joseph Kabila said that they would help integrate and unify his country.³⁴

Potentially overshadowing all of Beijing's previous investments is an offer it made Nigeria in April 2008: US\$40 billion-50 billion of export credit guarantees from Sinosure, a sister export credit agency of China Eximbank. The money will reportedly help fund projects over the next three years. Investments mentioned include railways, power stations, oil refineries and petrochemical plants. In return, China could reportedly gain access to oil blocks. Even if the deal isn't realised on the scale and in the timeframe announced, it could still represent China's biggest foray into Africa.³⁵

A point this paper makes later on is that the Chinese push into Africa hasn't always been smooth: there have been fits and starts. State-owned companies have competed against one another; they have ignored Beijing's instructions; and as latecomers to the subcontinent, they have often had to make do with poor concessions that earlier western investors rejected.

Nevertheless, the jumbo loans and guarantees to the DRC and Nigeria seem to mark a quantitative and qualitative leap forward in China's ambitions. In essence, they represent an attempt to vertically integrate China's resource-hungry factories with DRC mines and Nigerian oil and gas fields in a kind of M&A operation between China Inc and Africa Ltd. If they succeed, they will catapult China into the No. 1 place among foreign resource investors in SSA.

Thanks to China's roaring demand for African commodities combined with its generous supply of credit and investment, Sino-African two-way trade has soared — from US\$4 billion in 1996 to more than US\$50 billion by 2006. And if Chinese President Hu Jintao is to be believed the trade could double to US\$100 billion over 2006-09.³⁶

India

Indian business links with SSA are deep and go back a long way. There are large Indian communities in eastern and southern Africa that descend from indentured Indian workers brought to Africa by British colonial governments in the 19th century. These communities have traditionally been active in wholesale and retail trade and in small to mid-sized manufacturing, especially textiles. More recently, Indian multinationals such as ArcelorMittal, Tata and Vedanta, as well as

smaller pharmaceutical and IT companies, have also been investing.

After a long downhill slide, government-to-government relations are improving. In the 1950s and 1960s, Indian Prime Minister Jawarlahal Nehru supported African independence struggles, especially in Kenya. The Indian government also collaborated with African countries in the Non-Aligned Movement, set up to challenge the US and the Soviet Union. But relations deteriorated in the 1970s, after Kenya and Uganda sought to expel their Indian communities and West African countries raised trade barriers against Indian textile exports.³⁷

‘Trade’ and ‘the flag’ followed each other downwards so that by 1991 Indo-African trade was worth less than US\$1 billion a year. But since then, commerce and diplomacy have begun to recover — in 2007 the two-way trade alone had climbed back to US\$25 billion.

The renewed diplomatic effort by Delhi comes partly from fear of losing influence, particularly to China. But it is also motivated by a quest for energy and resource security — Delhi wants to see Indian oil imports decrease from their current level of 70% of national oil consumption, for instance; and if it can’t extract more oil at home, then it at least wants to produce ‘equity oil’ abroad. Reflecting these two priorities, Delhi is earmarking most of its African aid to the Indian Ocean region, where its defence and security interests lie; and to resource-rich countries such as Nigeria, Sudan, Guinea, Angola (and in North Africa, Algeria) where it is increasingly ‘trading’ aid for resource concessions.

The private sector has led the Indian business push into Africa, particularly into the non-resource sector. Even in the resource sector there are some large private Indian investments. Most prominent is the plan by ArcelorMittal, the world’s largest steel maker, to create an iron ore supply hub in West Africa to feed its steel mills in Europe. It has plans to mine 12 million tonnes of ore a year in Mauritania; to invest US\$2.2 billion in a mine in Senegal; and to raise its investment to US\$1½ billion from US\$1 billion in Liberia. Another large investment is a Vedanta Resources copper mine in Zambia.

In the resource sector, Indian state and joint state/private initiatives are also important. Instances of such investments are:

- the Indian Oil & Natural Gas Company (ONGC) investing in Sudan, Nigeria and Madagascar
- ONGC teaming up in 1996 with Mittal Investment Sarl, the investment holding arm of Mittal, to make a US\$6 billion bid to acquire oil leases and develop infrastructure in Nigeria.

In the background, Delhi is complementing the investment push by its private and state companies with a variety of aid and credit initiatives.

- The Export-Import Bank of India reported in 2006 that it had extended 33 lines of credit with a total value of US\$1 billion to banks in 34 African countries.³⁸
- At an India-Africa Summit in April 2008 Delhi announced a US\$500 million aid package and duty-free access to India for 34 African states.
- The government has used the IMF HIPC Initiative to write off outstanding loans to Africa.
- It has pledged new lines of credit worth US\$500 million each to two other initiatives — the New Partnership for Africa’s Development (NEPAD) and Team 9. NEPAD is an ‘African-owned peer review process’ under which national governments submit their governance to review by fellow African countries. Team 9 is an initiative between India and a group of nine Francophone African countries.³⁹

Like China, India has experienced mixed results from ‘resource diplomacy’ and ‘strategic competition’. Chinese companies have reportedly out-competed their Indian counterparts for several energy concessions. For instance, a bid by ONGC in 2004 to gain access to Angolan energy resources was thwarted when Beijing offered a US\$2 billion loan to Luanda. ONGC has also lost out to competition from its

Korean counterpart (see section below).

As a latecomer to the New Great Game, India lags well behind China, but its resource diplomacy is now adding significantly to the commercial efforts of India's private resource companies.

Gulf

The Gulf has always had strong commercial ties with North Africa, but in recent times it has also been establishing links with SSA. The chief reason is a need to find investment outlets for its massive surplus savings — savings that have soared to around US\$250 billion a year thanks to the oil boom. It has found that many African investments are meeting its selection criteria — they boost risk-adjusted returns by diversifying away from traditional investment destinations like the US and by tapping fast-growing markets. In addition, they allow Gulf firms to put to work their expertise in areas such as petroleum engineering and to supply raw materials to the Gulf's flourishing heavy industry (aluminium, steel, building materials, etc).

Between 2002 and 2006, Gulf governments and private sector firms invested an estimated US\$22 billion outside the United States, Europe and Asia (of a total estimated investment of US\$542 billion). Africa is likely to have received a considerable share of these investments. The significance of these sums can be seen when they are compared with total foreign direct investment (FDI) into SSA of only US\$12 billion in 2006, according to UNCTAD.⁴⁰

In the energy sector, the investments have included purchase of Ghanaian power plants by Abu Dhabi's TAQA and purchase of West African offshore assets by UAE-based Dana Gas through its newly acquired Centurion Energy subsidiary.

In the mining sector, Qatar Steel is investing US\$375 million in a Mauritanian iron ore project initiated by Australia's Sphere Investments in order to supply Gulf and other steel producers with ore from 2010. An Abu Dhabi sovereign wealth fund, Mubadala, and the Dubai government's Dubai Aluminium (Dubal) are investing in the US\$4.8 billion Sangarédi bauxite mine and alumina refinery in Guinea. This is a joint venture with BHP Billiton and the Canadian-listed but US-controlled Global Alumina.

Korea

As a major industrial economy almost wholly dependent on imports of energy and raw materials, Korea has recently become acutely aware of its vulnerability to international price and supply shocks. In the hope of reducing this vulnerability, Seoul has started to encourage private and state-owned firms to form consortiums and partnerships to invest in overseas energy and mineral projects.

The risk appetite of 'Korea Inc' appears to be large. Korean companies don't overlook the chance to invest in low-risk jurisdictions. The country's largest foreign coal investment so far, for instance, is the purchase earlier this year of a 10% interest in the Moolarben mine in New South Wales: this will enable the giant state power company KEPCO to buy coal at cost. But nor do Korean companies pass up the chance to venture further afield. A Korean consortium is developing four oil fields in Iraq's Kurdistan region at a cost of US\$10 billion. State-run Korea Gas Corporation has signed a US\$1.8 billion gas-chemical joint-venture agreement in Uzbekistan. In 2007, South Korean firms invested US\$2½ billion in foreign energy projects, up 79% on 2006. And that figure could well double again this year.⁴¹

The search for offshore resources has a strong African element. On a visit to Africa in 2006, President Roh Moo-hyun said Korea would triple aid to the continent by 2008. Roh held meetings with heads of state from Benin, Ghana, the Republic of Congo, Nigeria and Tanzania. His successor, Lee Myung-bak, plans to strengthen those efforts, and has set a goal of raising Korea's 'self-sufficiency ratios' for six key materials, including uranium.

At the project level, a consortium led by state-run Korean National Oil Corporation (KNOC) won the right in 2006 to develop oilfields in Nigerian waters in the Gulf of Guinea, against competition from India's ONGC. As part of the deal, the consortium agreed to invest heavily in energy facilities, including power stations. KNOC is also buying 11% of M'Boundi, an onshore Republic of Congo oilfield, for US\$435 million.

Brazil

In recent years, Brazil has become a significant emerging market FDI source, so much so that in 2006 its outward FDI, of US\$28 billion,

exceeded inward FDI of US\$27 billion. Most of Brazil's FDI targets developed economies — the proportion was 75 % in 2005.⁴² Even so, Brazilian firms are keen to compete for African mining and petroleum deposits and the infrastructure projects being spawned by the resource boom, especially in Lusophone Africa.

Brazil's No. 1 multinational, the state-owned oil company Petrobras, has plans to invest more than US\$112 billion over 2008-12, 13 % abroad, with West Africa one of its target areas. Meanwhile, Vale (previously named CVRD), the world's second-largest mining company by market capitalisation, has said it will invest US\$59 billion abroad over the next five years; it has already started to sink US\$2 billion into a coal mine and power station in Mozambique.

In contrast with the past when Brazilian governments were often hostile to outward FDI, the current government is backing its companies with funding through the National Development Bank, BNDES. The Angolan oil and infrastructure boom is one focus: President Luiz Inacio Lula da Silva said in October 2007 that his government would boost its existing US\$1.3 billion line of credit to Angola by US\$1 billion to help Brazilian companies win contracts in the petroleum and infrastructure sectors.⁴³

Malaysia

Malaysian state oil company Petronas — the world's largest emerging market transnational company by international assets⁴⁴ and the owner of the world's largest LNG tanker fleet — is actively seeking to diversify its operations overseas in the face of dwindling domestic oil reserves estimated to last less than 15 years at current production levels.

It has operations in 33 countries. In Africa it is in: Benin, Cameroon, Chad, Equatorial Guinea, Ethiopia, Mauritania, Mozambique, South Africa and Sudan. Its largest African investment is its Engen subsidiary, which controls a refinery in South Africa and more than 1300 petrol stations across Africa. It also has a stake in the controversial Chad-Cameroon oil pipeline. Among its upstream production interests are a 30 % stake in the Greater Nile Petroleum Operating Company, which produces 90 % of Sudan's oil output, and a stake in an oilfield in Chad.⁴⁵

The Malaysian government has frequently used Petronas since its establishment in 1974 as an instrument of industry policy, and as a result Petronas is accustomed to subordinating commercial objectives to political ones. For instance, it was used to bail out the troubled Bank Bumiputra during the 1997-98 Asian financial crisis and to build Malaysia's new administrative capital, Putrajaya. During the 1997-98 crisis and a 1980s debt crisis it increased oil production to support the government's financial position.⁴⁶ The company has strong state backing for its push overseas, including into Africa.

Russia

Both the Kremlin and Russian state and private companies have striven in recent years to improve business ties with Africa, which since the fall of the Iron Curtain have dwindled rapidly. On the political side, the government has written off more than US\$14 billion of African debt and given trade preferences to 50 African states. On the commercial side, companies are making a variety of investments. The industries include gold, aluminium, diamonds, oil and mining engineering; the countries: South Africa, Guinea, Nigeria, Sierra Leone, the DRC and Angola.

The majority state-owned Gazprom — the world's largest gas company — is in talks with the governments of Nigeria and Equatorial Guinea (as well as Algeria, Egypt and Libya) over investments in their gas industries.⁴⁷ With Lagos, the discussions reportedly centre on a US\$1billion-2½ billion investment — a move the *Financial Times* believes will 'send shivers through western governments already concerned about a shortage of global gas supplies'.⁴⁸

In the banking arena, state-owned Vneshtorgbank has opened a variety of offices and joint ventures to support Russian resource and industrial companies in Africa.

Japan

Japan began to practice resource diplomacy in Africa after the 1970s oil shocks. Those shocks exposed its vulnerability to shortages of oil and other strategic minerals. In a bid to secure supplies, it opened

its aid cheque-book in resource-rich states like Nigeria, at one stage becoming Africa's largest donor. The preeminence didn't last long, however. In 1990 the Japanese asset price bubble burst loudly. Among the knock-on effects were a stagnating economy, shrinking aid budget and dwindling influence in Africa. Japanese companies began to find themselves out-muscled by China and other countries in the scramble for resources.

Tokyo now reportedly wants to strengthen its presence again. Before the Tokyo International Conference on African Development in May 2008, attended by 45 African countries, Prime Minister Yasuo Fukuda announced Japan would double its annual aid to Africa to US\$1.8 billion by 2012; open embassies in Botswana, Mali and Malawi; and relax its ban on lending to nations that have benefited from debt relief. While these initiatives are still an order of magnitude less than what Beijing appears to be doing, the government is reportedly hopeful that they will help Japanese companies win a larger share of infrastructure contracts. According to the director general for African affairs in the foreign ministry, the government is also considering ways of 'limiting private sector risk' for Japanese investors. In making this point he noted the success of Mitsubishi's aluminium smelting business in Mozambique, a joint venture with BHP Billiton.⁴⁹

How significant is state-directed investment?

Despite the ostensibly big intrusion of the state into African resource investment, scholars disagree about how much this has prompted uncommercial investment — and correspondingly 'tilted the playing field' against resource companies from more market-oriented economies also vying for resource concessions.

We take the view that these phenomena are significant ones now, and could grow in importance. Nevertheless, there are sceptics. One is Erica Downs of the Brookings Institution⁵⁰, who argues that Chinese national oil companies (NOCs) aren't 'locking out' Western oil companies from Africa. They dominate only Sudan's oil industry. Most of their African assets 'are of a size and quality of little interest to international oil companies (IOCs). In fact, many of these assets were relinquished by

the IOCs.' Besides, while the NOCs 'have deep pockets, they lack the technologies necessary to compete for some of Africa's most desirable blocks, like those located in the deep waters of the Gulf of Guinea.'

What's more, the NOCs aren't pawns in a highly-coordinated 'China Inc' game being played by Beijing. Actually, liberalisation and decentralisation of China's energy sector has resulted in a low level of coordination between Beijing and the NOCs. The NOCs often wield more power and influence than their supposed masters in the bureaucracy. They often treat one another as rivals, lowering the rate of return for the winner of a concession. And they pay scant regard to Beijing's wider political and diplomatic strategies.

Finally, the NOCs don't compete *that* unfairly with Western oil companies for acreage in Africa. They do receive state financial support, but they suffer from offsetting handicaps — chiefly because they are latecomers to the international oil business. In addition, oil-for-infrastructure deals have not won China's NOCs many attractive assets. Noteworthy in this regard is Nigeria where an agreement by Beijing to invest US\$2 billion in an oil refinery in exchange for the right of first refusal on four oil blocks came to nothing — the blocks showed little promise.

Another sceptic is Mikkal Herberg of the National Bureau of Asian Research,⁵¹ who observes that Asian NOCs 'are behaving autonomously and investing in the same manner as commercially driven IOCs'. They 'do not currently present a major competitive threat to the IOCs, who [sic] remain at the top of the industry's 'food chain' because of their technological and managerial expertise'.

In other words, both scholars make the case that state-owned and -directed companies often show profit-motivated and competitive behavior and are quite autonomous from their political masters.

Still, they themselves acknowledge that these companies are also susceptible to government direction and non-commercial motives. Downs notes: 'Beijing has certainly encouraged China's NOCs to expand internationally, provided them with varying levels of diplomatic and financial support, and occasionally intervened in the companies' foreign investment decision-making'.⁵²

Besides, pointing out that the NOCs are profit-oriented is irrelevant, if their profitability is underwritten by credit and other subsidies from the government. As Downs admits: ‘Beijing’s financial largesse does provide China’s NOCs with a competitive advantage over oil companies that do not receive similar support from their governments ... Beijing’s deep pockets have, for example, helped Sinopec acquire some assets in Angola.’⁵³

And in the future? There are indications that the New Great Game will intensify, even if it isn’t much of an issue now. Concerned that Chinese companies had been undermining foreign policy objectives, Chinese Vice President Zeng Qinghong urged them in 2005 to coordinate their strategies and consult Beijing more.⁵⁴ Already, Downs notes, ‘Head-to-head competition between China’s NOCs has diminished in recent years ... probably due to both the companies’ diverging foreign investment strategies and the attempts of the National Development and Reform Commission to ensure that only one company pursues any invitation extended to multiple Chinese firms to negotiate bilaterally for a particular asset.’⁵⁵ Herberg adds: ‘The issue of fair competition may arise ... due to growing alliances and tied aid between consumer and producer NOCs ...’⁵⁶ Finally, as already noted, the amounts of subsidised credit being extended by Beijing in commodity-for-infrastructure deals seem to be growing in leaps and bounds.

It could well be that in the long run, to again cite Herberg, ‘Asia’s NOCs will be pressured — by IOCs, host economies, world oil prices, and profit motives — to shift toward a market-oriented pattern of growth and investment.’⁵⁷ But the operative phrase here is ‘in the long run’. The losses incurred in non-commercial investment will mount. It may be seen that ‘national pursuit of equity oil supplies does not necessarily serve long-term energy security interests.’⁵⁸ So the corporatist and mercantilist policies will be ditched and the profit motive come to prevail.

However, for the time being, it does seem valid to use the term New Great Game to denote a phenomenon that is both boosting investment in the SSA resource sector and starting to challenge international resource companies.

US

Like the other governments whose Africa policies are discussed above, Washington seems to have ‘woken up’ to Africa only recently. During the 2000 presidential campaign, George Bush stated that Africa was of no strategic significance to the US.⁵⁹ After he took office in 2001, however, the Administration quickly realised that energy security and counter-terrorism were going to be key priorities, and that Africa matters a lot for both. Accordingly, it has moved to nearly triple African aid, extend significant debt relief, support UN peace-keeping missions, sponsor meetings among Gulf of Guinea states to develop regional plans to protect their petroleum industries, and give responsibility for US military involvement in Africa to a separate Africa Command (‘AFRICOM’) to be eventually based on the continent.

According to one estimate, the US government will invest more than \$10 billion a year in the Gulf of Guinea over the next 10 years. It will spread this sum across oil activities; oceanic research in the deep-sea waters of Equatorial Guinea and Angola; restoration and preservation of forests in Gabon, Equatorial Guinea, the Republic of Congo, DRC, Cameroon and the Central African Republic; training for African peace-keeping forces; and ‘discrete political interventions’.⁶⁰

Importantly, in his 2006 State of the Union Address, the President said he intended ‘to replace more than 75 % of our oil imports from the Middle East by 2025’. The government explicitly sees this replacement coming from the Gulf of Guinea: it has stated that if Nigeria and Angola keep on track to double oil production over the coming decade, the US could increase the proportion of its oil imports coming from Africa to 25 % from its present 15 %. It has been calculated that the deepwater oilfields in the Gulf of Guinea could supply more than a third of the increase in world oil production to 2010.

While only some of the Administration’s policies are directly supporting resource investment in Africa, most are doing so indirectly. This is happening in two ways.

- **Garnering goodwill.** Broadly speaking, Africans have welcomed Bush Administration initiatives like its proposed US\$5 billion

increase in annual aid through the establishment of a Millennium Challenge Account (MCA) and a \$15 billion initiative to fight AIDS named PEPFAR — the President's Emergency Plan for AIDS Relief; PEPFAR has given more than one million Africans infected with HIV anti-viral treatment. The Administration has also increased access for African exports to the US through its African Growth and Opportunity Act and a proposed free trade agreement (FTA) with the member states of the Southern African Customs Union — Namibia, South Africa, Lesotho, Botswana, and Swaziland. Thanks to initiatives like these, George W Bush has 'done more (for Africa) than any other president so far', says celebrity anti-poverty campaigner Bob Geldof.⁶¹ Africans seem to agree. As noted earlier in this chapter, opinion polling finds a positive view of America in nearly all African countries surveyed, even in countries with large Muslim populations. Such goodwill erodes support for terrorism directed at American interests, and Western interests more broadly. All else equal, it is also likely to reduce other political risks facing foreign investors, such as sabotage and labour unrest.

- **Market and security assurances.** The Administration's policies have reduced uncertainty for companies contemplating sinking large amounts of capital into often deep-water drilling for oil and gas in the Gulf of Guinea. True, the strong outlook for oil prices is itself a good reason to invest. But it helps that the US has said that it will actively seek to buy Gulf of Guinea oil in preference to Middle East supply, and through AFRICOM and military/intelligence cooperation with African governments, will seek to increase security for the petroleum sector.

France

During the colonial period and its aftermath, France did take advantage of its special relationship with Francophone Africa to gain resource concessions there. But in more recent years its dominance of the resource sector has come under challenge from both Anglo-Saxon and Asian companies.

French company Total is the largest oil refining and product distribution company in Africa. And French companies still dominate production in the mature oilfields of Gabon, the Republic of Congo and Cameroon, as well as having smaller interests in Angola and Nigeria. But in the new fields of Chad, the Ivory Coast and Mauritania, other foreign investors are stealing a march.

French mining companies also appear to have been outmanoeuvred in the rush for gold, bauxite and other minerals in West Africa. Canadian companies appear to be doing particularly well in Francophone Africa thanks to their combined linguistic and mining skills. Other prominent investors in 'la Francophonie' are the United States, Russia and China, as well as Australia.⁶²

Although French policies aren't putting any strong tailwinds behind French investment in the SSA resource sector, they are, like America's policies, keeping conflicts in check and promoting political stability, which in a roundabout way promotes the development of the resource sector.

The most important stabiliser is military presence. France is the only former colonial power with troops permanently garrisoned in Africa. It has permanent bases in Djibouti, Gabon and Senegal, as well as on the Indian Ocean island of Reunion. Its troops also support three other former colonies — Chad, the Ivory Coast and the Central African Republic. In addition, the French Navy and Marines have permanent deployments off East and West Africa. Finally, French troops and police serve with multilateral peace support operations in Chad/Central African Republic and on the Ivory Coast. On many occasions, these troops have been used to quell insurgencies or combat foreign invasions. In April 2008, they were deployed from Djibouti to free hostages taken by Somali pirates from a yacht.

While critics of France's Africa policy have claimed that it perversely promotes instability and conflict by supporting autocratic loyalist regimes over democratic contenders, the fact remains that the troop presence and other levers that France controls have on many occasions headed off or ended armed conflict.

How the drivers interact

Investors allocate capital to projects according to their risk-adjusted returns. Those with the highest returns get funded first. Companies will endeavour to fund all those projects whose risk-adjusted returns exceed their cost of capital. Before the four drivers noted above made their influence felt, most African resource projects were uneconomic — their prospective rate of return was less than the cost of capital to develop them, including the risk premium investors demanded to compensate for the ‘extra excitement’ of sinking dollars into Africa. But now prospective rates of return have risen thanks to higher commodity prices and improved economic and political stability. Meanwhile, the cost of capital, including the premium demanded for political risk, has fallen thanks to the global savings glut. Finally, because of the New Great Game, some projects are getting funded despite being commercially unprofitable.

So a boom is on. And after decades of neglect and decline, SSA appears to be on the path to reclaiming its place as a major world supplier of minerals and energy.

Chapter 2

Dimensions of the boom

What are the dimensions of the boom described in the previous chapter. The stocks and flows of FDI? Into which minerals and countries? From which countries?

The data confirm that an African FDI boom is definitely underway, if from a low base; that the lion’s share of investment is going to oil and gas and therefore North Africa, which has the largest hydrocarbon reserves; even so, significant sums are also going into the Gulf of Guinea (oil and gas again) and into minerals in SSA more broadly. What’s more, the investment ‘pipeline’ suggests that the exploration and development upswing still has a way to go.

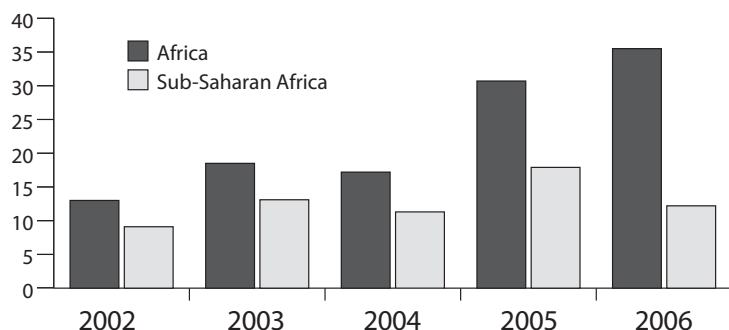
FDI from developed economies dominates the *stock* of existing petroleum and mining investment in SSA. But that shouldn’t blind one to significant recent increases in investment inflows from China in particular, and other emerging markets. As a result, recent investment *inflows* are now less dominated by developed countries.

‘Boom’ no exaggeration

According to UNCTAD’s World Investment Report 2007, FDI inflows to Africa doubled over 2004-06; and in 2006, jumped 20% from the year before to an historical high of US\$35½ billion. True, around two-thirds of

this has gone to petroleum-rich North African countries. But that has still left, depending on the year, around a third to a half for SSA (Figure 2.1).

Figure 2.1
African FDI inflows
US\$ billion



Source: UNCTAD; authors' calculations.

Oil and gas predominant

According to UNCTAD⁶³, investment in the extractive sector accounted for the majority of Africa's FDI inflows in 2006, as it did in previous years.

Within the extractive sector, most investment went into oil and gas, although some was mining-related. Africa's three leading oil producers — Nigeria, Sudan and Algeria — accounted for 30% of inflows.⁶⁴ In contrast, Ghana, an increasingly important mining destination, accounted for only around 1% of total inflows (Table 2.1).

In its 2006 World Energy Outlook, the International Energy Agency (IEA) forecasts that Africa as a whole will account for around 13% (roughly US\$40 billion) of worldwide investment spending on sanctioned and planned oil and gas projects over the period 2006-10.⁶⁵ Around two-thirds of this spending will be for development of large projects in recently discovered fields in Nigeria. Although Angola wasn't a prominent FDI recipient in 2006, the scale of the planned investment there suggests this will change over coming years.⁶⁶

Table 2.1: Africa's top ten FDI recipients

	Amount (\$USm)	Share (% African total)
Egypt	10,043	28
Nigeria	5,445	15
Sudan	3,541	10
Tunisia	3,312	9
Morocco	2,898	8
Algeria	1,795	5
Libya	1,734	5
Equatorial Guinea	1,656	5
Chad	700	2
Ghana	435	1
Africa (% global FDI)	30,672	3.3

Source: UNCTAD (2007a). Data are for 2006.

New projects prominent

FDI inflows in 2006 were skewed towards new projects rather than existing ones. In 2006, 442 new FDI projects were recorded, almost on par with the 459 recorded in 2005. (2005 was itself a record year – greenfield FDI projects jumped by around 60% in that year.) Again, there is a heavy weighting towards countries in petroleum-rich North Africa, although Nigeria and Angola also secured a significant number of new projects. In addition, several projects are in mineral-rich SSA countries such as South Africa, Ghana and Zambia.⁶⁷

Mining recovers

While oil and gas predominate, the mining sector is also attracting increasing investment, especially in exploration. According to the Metals Economics Group (MEG), a consultancy tracking non-ferrous

exploration spending by mining companies, the current mineral exploration cycle has seen rising interest in regions with high political risk, including Africa and Latin America.⁶⁸

Worldwide, companies' non-ferrous mineral exploration budgets have grown strongly since the 12-year low reached in 2002, peaking at more than US\$10½ billion in 2007. Although Africa's percentage share of these budgets has hovered around the mid-teens since 2002, the region has received substantial annual increases in budget allocations since 2003 (Table 2.2). Some of this increase reflects higher exploration costs, which have been rising faster than broad inflation. But anecdotal evidence suggests that 'real' — inflation-adjusted — activity has also increased markedly.

Table 2.2: African non-ferrous mineral exploration budgets

	Share (% worldwide budgets)	Allocation (Nominal US\$, millions)	Change on previous year (%)
2001	14	277	-6
2002	15	257	-7
2003	17	374	46
2004	16	272	53
2005	17	833	46
2006	16	1,141	37
2007	16	1,680	47

Source: Metals Economics Group; US Geological Survey; Geosciences Australia

New frontiers

A notable feature of planned African exploration spending over the last few years has been the growing interest in countries such as the DRC, Angola, Ghana, Mali and Zambia.⁶⁹ Before the current boom, these countries were exploration Cinderellas. Now they have well and truly joined the worldwide exploration ball.

The picture painted by MEG and others is reinforced by mining company announcements. A 2006 investor presentation by BHP Billiton forecast that almost 50% of the company's worldwide minerals exploration budget would be directed towards Africa in the 2007 financial year, which implies total African spending of well over US\$205 million based on the company's total mineral exploration spending of US\$410 million in the year to 30 June 2007.⁷⁰

At the 2007 Indaba conference in Cape Town, a leading African mining conference, company presentations identified countries of interest and sketched out exploration and development plans. Rio Tinto said that Africa accounts for around 4% of its operating assets and that the company is active in six African countries outside South Africa (versus four in 2004).⁷¹ Moreover, the company revealed that it is chasing new opportunities or assessing entry into a further 14 countries and plans to spend at least US\$15 million on 'greenfield' African exploration in 2007, targeting copper, iron ore, industrial minerals and diamonds. Exploration data for the first half of 2007 suggest that the company spent almost twice this amount on African exploration.⁷² At Indaba 2008, Rio Tinto reported active exploration programs in 11 countries, with a further 10 under consideration.⁷³

Indaba 2007 presentations from a selection of mid-tier and junior companies, including Barrick, Petra Diamonds, Africo and Mano River Resources, discussed a broad span of both existing and prospective projects in a range of African countries, from South Africa to Sierra Leone. In addition to its US\$1 billion stake in three current mines in Tanzania, Barrick is also pursuing three development projects — in gold, nickel and platinum. Africo is developing a high-grade copper-cobalt project in the DRC and plans to start mining in 2008 at an estimated total capital cost of US\$200 million.⁷⁴

On a larger scale, India's Arcelor Mittal has committed to invest more than US\$3 billion in iron ore projects in Mauritania, Senegal and Liberia — probably much more than US\$3 billion. The investment will go into mines and associated railways and ports.⁷⁵

BHP Billiton is also considering big investments in African projects: it is a joint venture partner in the proposed US\$3 billion Sangarédi alumina

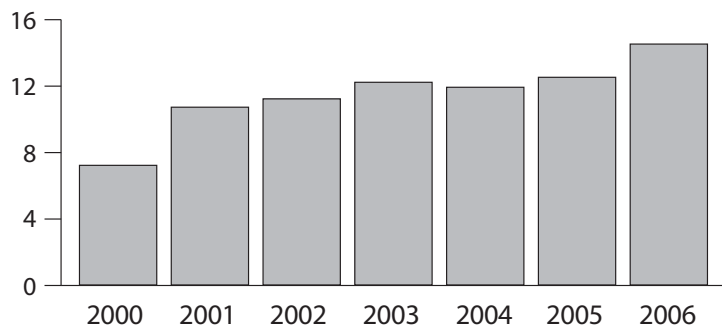
refinery in Guinea,⁷⁶ and is assessing the feasibility of developing a US\$3 billion aluminum smelter in the DRC. BHP Billiton’s contribution to the investment in these two projects is estimated at US\$4.7 billion.

Another large project currently under consideration is Rio Tinto’s Simandou iron ore mine in Guinea. Estimated capital cost: US\$6 billion.⁷⁷ This project hit the headlines in June 2008 after the government threatened to ‘withdraw’ and ‘reconsider’ Rio’s concession.⁷⁸

‘Southern’ investors becoming more important

The main FDI players in SSA’s extractive sector are private sector companies from developed countries, mainly the United States, Canada, the UK and Australia, as well as companies from South Africa. While state-owned companies control the majority of oil and gas reserves, most petroleum FDI comes from multinational oil companies. In mining, the private sector dominates both reserves and FDI, and there is a far greater representation of mid-tier and junior mining companies than in oil and gas.⁷⁹ Contrary to what the media headlines might suggest, Chinese companies aren’t the biggest investors — yet — though they could become so if some of their big announced plans come to fruition.

Figure 2.2
United States FDI stocks in Africa’s extractive sector¹
US\$ billion



Source: Bureau of Economic Analysis (US). ¹Historical cost basis.

US

Detailed data on outward FDI stocks by country and industry are available only for the United States. These show that the *stock* of US outward investment in Africa’s extractive sector (mining, oil and gas) doubled to just over US\$14 billion over 2000-06 (Figure 2.2).

According to the Bureau of Economic Analysis, Equatorial Guinea, Egypt and Chad recorded the largest increases in US FDI stocks in 2005 (latest available detailed country data), mainly due to a rise in reinvested earnings of affiliates in oil and gas extraction.⁸⁰ US outward investment in Africa’s extractive sector represents at least 50% of total US African investment. In no other region does mining account for such a high percentage of US FDI.⁸¹

Canada

Africa is also an important destination for Canadian mining companies. According to Natural Resources Canada, the Canadian resources ministry, Canadian-based mining companies doubled their African exploration budgets to C\$195 million in 2005, which represented 22% of total planned exploration spending by all companies on the continent. NRC notes that mining companies of all sizes listed on Canadian stock exchanges held interests in more than 660 African mineral properties at the end of 2005, a rise of 70 from 2004.⁸²

Australia

While the data are sparse, it is plain that Australian-listed mining companies are also active in Africa, starting with the two largest Australian-listed resource companies — BHP Billiton and Rio Tinto. According to their latest annual reports, around 8% of BHP’s and around 3% of Rio’s operating assets are African.⁸³ The next chapter examines Australian investment in more detail.

South Africa

South African companies are a major source of investment in Africa, especially for resource-rich countries in Southern Africa. Although recent detailed data are wanting,⁸⁴ South African companies are

probably the largest investors in Lesotho and Mozambique⁸⁵ and major investors in many other African countries.⁸⁶ The industry composition of South Africa's outward investment is diverse, spanning telecoms, banking, basic materials and mining.

In mining, South African companies are prominent investors in most countries of the Southern African Development Community (SADC) – which groups Angola, Botswana, DRC, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe, as well as South Africa. They have also invested further afield, with AngloGold and Goldfields, for instance, being significant investors in Ghana, Guinea, Mali, Namibia and Tanzania.⁸⁷

'South-South' investment

As the previous chapter notes, state and private companies from emerging markets are starting to challenge the dominance of developed-country enterprises in the African extractive sector. Companies from the so-called BRIC economies — Brazil, Russia, India and China — now feature prominently in Africa, as do Gulf countries, and to a lesser extent, Korea and Malaysia. Although some of this investment is commercially-driven and without direct state support, it often takes place against a backdrop of preferential credit arrangements or broader offers of infrastructure, or both. In addition, credit market distortions sometimes mean that state-owned companies (including those in which the state holds a minority stake) face lower hurdle rates of return and are therefore willing to undertake projects that private companies may not see as profitable, but which provide state-owned companies with a greater return than they might otherwise be able to earn domestically.⁸⁸

The paragraphs below profile five investors from the 'South' — China, India, Malaysia, Brazil and Russia.

China

China is a relative latecomer to SSA resource investment, having only started about 15 years ago. This means that the value of its resource investment is today much lower than that of other countries that

began much earlier. Even so, it is increasing its spending rapidly, and looks set to catch up, and quite possibly overtake, the major investors in coming years.

At US\$1.6 billion, its stock of outward FDI in Africa is just shy of India's US\$2 billion and Malaysia's US\$1.9 billion.⁸⁹ But it is dwarfed by investment from more traditional sources, such as the UK and the United States — the UK's total African FDI stocks were US\$30 billion in 2003; America's, US\$25½ billion in 2006.⁹⁰

In the oil sector, Chinese companies are still relatively small players. Aside from a few projects in Sudan, Nigeria and Angola, most Chinese oil assets in Africa are inferior in size and quality to those held by IOCs or African NOCs. The estimated commercial value of Chinese companies' African assets is 'just 8 % of the combined commercial value of the IOCs in African oil and 3 % of all companies invested in African oil.'⁹¹ Chinese oil companies are also relatively small producers, pumping out an estimated 267,000 barrels of oil equivalent a day (boe/d) in 2006 versus 780,000 boe/d by ExxonMobil and 4.1 million boe/d by Algeria's Sonatrach.⁹²

As for China's FDI outflows, these rose by more than 400 % over 2003-05. Around 700 Chinese enterprises were reportedly active in Africa in 2007, up from 585 in 2002.⁹³

Although small compared to the more established players, China's stake in SSA's extractive sector looks set to increase markedly in coming years. Chinese firms have announced major new investments in oil exploration and production in countries such as Nigeria, Sudan, Angola and Gabon. As mentioned in Chapter 1, China is thought to have invested at least US\$4 billion⁹⁴ in oil production and related infrastructure in Sudan alone. There has also been much recent activity on the minerals side, including copper projects in Zambia and copper and cobalt ones in the DRC.⁹⁵

Spearheading its new large-scale and more strategic approach are two recent jumbo loan offers from Beijing discussed in Chapter 1 — US\$9¼ billion to the DRC and up to US\$50 billion to Nigeria. The scale and terms of these credits suggest that Beijing is determined to stand behind its companies and orchestrate their activities.

India and Malaysia

Indian and Malaysian enterprises have historically been the continent's leading Asian investors, accounting for the majority of FDI inflows and stocks over the last decade as well as being the dominant force in cross-border mergers and acquisitions in Africa over 1987-2005.⁹⁶

They have traditionally invested in services and manufacturing, but have recently begun to expand into extractive industries. In 2003 and 2004, India's ONGC invested around US\$900 million to acquire Greater Nile Petroleum and two oil exploration blocks in Sudan.⁹⁷ And as mentioned in Chapter 1, India's Arcelor Mittal has grabbed headlines with its plans to spend well in excess of US\$3 billion on iron ore and steel projects in Mauritania, Senegal and Liberia.⁹⁸

Brazil

Brazilian resource companies are also noteworthy. National oil company Petrobras is producing oil in Angola and exploring through West Africa, mainly Nigeria, as part of its planned expansion. In mining, Vale (previously CVRD) has recently bought into a coal project in Mozambique.

Russia

Like China, Russia is a latecomer to the subcontinent now trying to catch up.

- In 2007, Norilsk Nickel, the world's largest nickel and palladium producer, bought Lion Ore, a gold miner with operations in Botswana and South Africa.
- Leading aluminium company Rusal has become a major investor in Guinea and has bought a controlling stake in Nigeria's Alcon aluminium smelting company.
- Industrial holding company Renova is signing agreements to build a variety of plant and infrastructure for resource projects in South Africa.

- Leading diamond producer ALROSA has plans to develop diamond deposits in Guinea, Sierra Leone, South Africa and the DRC.
- In partnership with state oil company Zarubezhneft, ALROSA has signed a memorandum of understanding with the Angolan state oil company Sonangol.

As noted in Chapter 1, Gazprom also has some multi-billion gas deals under discussion in Nigeria.

Summary

The dominant players in the SSA resource boom are companies from developed countries, mainly the US, Canada and the UK, although there is also strong representation from Australian and South African resource companies. Multinational oil companies dominate petroleum investment, while mid-tier and junior companies are better represented in hard-rock mining, especially exploration.

Despite media headlines suggesting otherwise, Chinese and Indian companies have — until recently at any rate — played a relatively small part in the boom. But that is changing fast. China is scaling up and diversifying both its investment in SSA and its resource diplomacy. Likewise India, if from a lower base. Other investors to watch are the Gulf sheikhdoms, Korea, Brazil, Malaysia and Russia.

Chapter 3

Dimensions of Australian involvement

A glance through the local and international business press gives the distinct impression that Australian mining and resource companies are ramping up considerably their involvement across Africa. Numerous references to Australians in Africa sprinkle the pages of the *Financial Times* and *Australian Financial Review*. A recent article on junior Australian iron ore companies in the 'The Fin' noted that 'Africa is also proving to be a happy hunting ground for Australian companies looking beyond their homeland'.⁹⁹

However, the activity highlighted in media reports hasn't yet percolated into official investment data, making it difficult to quantify Australian companies' involvement. Australian data by country and industry are a couple of years old and may be only a partial record of investment stocks and flows. For their part, African FDI statistics tend to be patchy and outdated and hardly make up for Australian data deficiencies. Worse still, much investment simply escapes the attention of statistical agencies in both Australia and Africa.¹⁰⁰

Other sources are required to bridge the gap between the expected investment reported in the media and completed investment reported in official investment data. Drawing on a range of sources, this chapter augments official investment data with estimates of subsequent

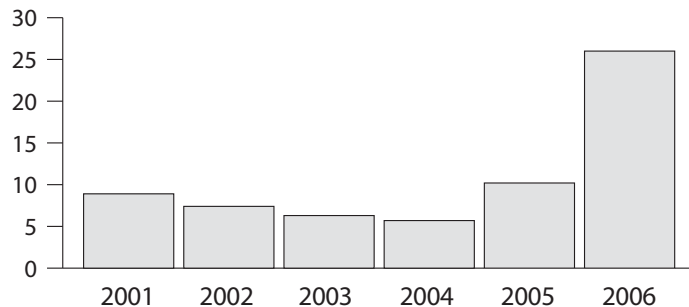
completed investment and investment plans for the future.

Our updated estimates suggest an upsurge in the number of Australian resource and service companies chasing opportunities in Africa. What's more, many of these companies have successfully raised capital from local and international investors to finance their announced plans.

Outdated official data

After declining for four years in a row, the stock of direct investment abroad by Australian miners staged a recovery in 2005, almost doubling to \$10.5 billion. In 2006, offshore mining investment more than doubled again to \$26 billion (Figure 3.1)

Figure 3.1
Australia's stock of outward FDI in mining
A\$ billion



Source: ABS Cat No. 5352.0

Australian investment in Africa

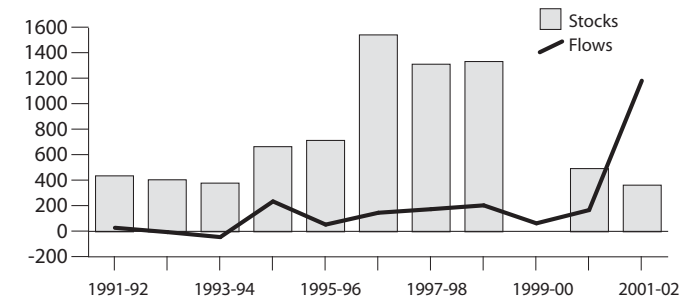
Official data show that Australian investment in Africa has historically been relatively small, particularly compared to destinations such as the US, UK and New Zealand.

Still, outward FDI stocks in South Africa have been rising and are now around 14 times higher than their level in the early 1990s. Australian investment stocks in the rest of Africa have at times been substantial, peaking in 1997 at A\$1.55 billion (Figure 3.2), but the

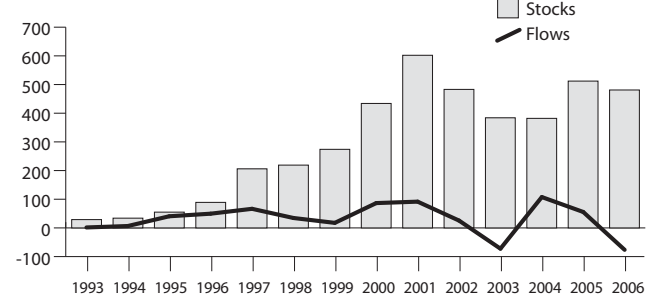
more recent experience of rising Australian investment in Africa is not yet reflected in the official data published by the Australian Bureau of Statistics.¹⁰¹ The strong FDI flows over recent times, including a sharp rise in 2001-02, strongly suggest that Australia's FDI stock in Africa is much higher than the published values.

Figure 3.2
Australian investment in Africa and South Africa¹
A\$ million

Africa excl. South Africa, 1992-2002²
A\$ million



South Africa, 1993-2006³
A\$ million



Source: ABS

¹ Combined total of direct, portfolio and financial derivative categories.

² No data published beyond 2001/02. No stocks data published for 1999-00.

³ From 2001, data published on a calendar year basis. Not directly comparable with previous data published on a financial year basis.

More recent evidence

More up-to-date, if partial, evidence shows that numerous Australian mining and petroleum companies are active in Africa and involved in a wide range of ventures at all stages — exploration, construction and production.

Companies in the hundreds

Several analysts and commentators have tried to identify the number of Australian resource and engineering companies operating in the SSA resource sector, with mixed success. One thing most analysts and commentators agree on is that the number of Australian resource and resource service companies operating in Africa is well into the hundreds. According to an estimate in the *Africa Research Bulletin*, around 330 Australian companies, from small equipment suppliers to multinationals, are involved in mining in southern Africa alone.¹⁰² The most popular countries are reported to be South Africa, Namibia, Botswana and Mozambique.

Other sources suggest similar numbers. According to 2006 annual report data collated by the consultancy Aspect Huntley, around 80 companies of all sizes in the energy and materials industry categories listed on the Australian Stock Exchange (ASX) have interests in Africa — either as explorer or producer.¹⁰³

ASX data may understate the total number of Australian mining companies active in Africa. In the last two years, listings by Australian mining companies on London's Alternative Investment Market (AIM), especially by juniors, have surged, a trend largely motivated by the depth of the City of London's financial markets and their long history of backing African mineral projects, especially speculative exploration ones. A wide range of private companies are also active in Africa's natural resources sector, including small drilling companies and mining consultancies.

If mining service companies, such as engineering, geological and technical consultants, maintenance providers and construction firms, are added in, the number of Australian-based companies active in Africa would increase considerably. Notable examples include:

- Internet Engineering — contracts with Anvil Mining in the DRC.
- Worley Parsons' Nigerian operating entity, DeltaAfrik — five-year US\$220m contract to provide engineering, procurement and contract management (EPCM) services to Mobil Producing Nigeria.
- GRD Minproc
 - US\$54 million EPCM contract with a subsidiary of Resolute Mining to redevelop the Syama gold mine in Mali.
 - Contract to project manage construction of Paladin Resources' US\$125 million Langer Heinrich uranium mine in Namibia.
 - EPCM contract with Freeport-McMoRan for the US\$650 million Tenke Fungurume copper/cobalt project in the DRC.
- Ausenco
 - Appointment as preferred contractor for Anvil Mining's US\$238 million Kinsevere Stage II Copper Project in the DRC.
 - Designing and building the copper concentrator at Equinox's Lumwana copper mine in Zambia.
- Lycopodium
 - EPCM contract to design and build Barrick Gold's US\$400 million Buzwagi gold mine in Tanzania.
 - Feasibility studies and EPCM services for two Newmont-controlled gold mines in Ghana.

In addition to these large and prominent companies, numerous smaller companies are active. For example, Byrncut Mining, a contract miner, has undertaken work in Tanzania and has secured a contract to build and operate AIM Resources' underground zinc mine in Burkina Faso.

Australian-based companies have also been active in Africa's petroleum sector. Until recently, Woodside was the largest Australian-based petroleum investor in SSA through its 47% joint venture stake in Mauritania's Chinguetti field. But the company recently sold its interest in the field to Malaysia's Petronas. Woodside still has an exploration foothold in Kenya, Liberia and Sierra Leone, all prospective oil-producing countries, as well as in Algeria and Libya.¹⁰⁴

Small and mid-sized Australian-based companies remain active: Roc Oil is exploring and producing in Angola and exploring in Equatorial Guinea and Mauritania. In North Africa, Oil Search is in Libya.

'Investment' in the billions

Estimating the value of Australian resource company involvement in African projects is more difficult than counting companies.

Some companies, such as BHP Billiton through the 2001 merger of BHP with Billiton, have a substantial investment in Southern Africa; this investment now totals just over US\$4 billion, or around 8% of total operating assets, according to BHP Billiton's most recent annual report.¹⁰⁵ Rio Tinto has African mining assets worth almost US\$2.1 billion, or around 3% of operating assets.¹⁰⁶ Although Woodside has divested its joint venture interests in Mauritania, its initial US\$550 million investment in the offshore Chinguetti oilfield in 2004 was Mauritania's largest single greenfield FDI project that year.¹⁰⁷

Other companies have only just started to explore prospective deposits or assess the financial viability of known reserves and have spent comparatively small amounts. For example, in Namibia, Deep Yellow has struck a US\$20 million deal to acquire three uranium exploration permits covering about 2,600 square kilometres. Several junior uranium explorers are active in Guinea, Tanzania, Zimbabwe, Mozambique and Zambia.

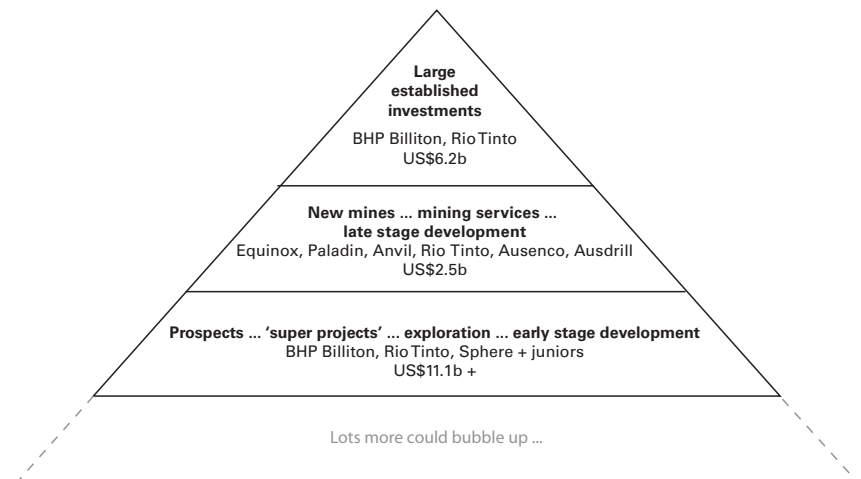
One Australian company between these two categories is Riversdale Mining in Mozambique. It has sold a 35% stake in its coal deposit to India's Tata conglomerate for A\$100 million and is seeking to raise A\$235 million of fresh equity capital to develop the project.¹⁰⁸

A back-of-the-envelope estimate by the Department of Foreign Affairs and Trade in February 2007 using a mix of confidential and

publicly available information about existing and prospective projects suggested that investments by Australian resource companies in Africa could be worth up to US\$15 billion.¹⁰⁹

Using more recent, publicly available data, we estimate that actual and prospective investment by Australian resource (and engineering) companies in Africa could be worth close to US\$20 billion. This estimate includes: operating assets of well-established Australian resource producers in Africa; capital outlays on new mines and development projects; African sales revenues of engineering companies; and projected capital costs (as reported in the financial press) associated with four large prospective projects by BHP Billiton, Rio Tinto and Sphere Investments (Figure 3.3). True, this estimate is a mix of sunk and planned spending (plus contract revenue) over various timeframes. But it strongly suggests that Africa is an important region for Australian resource companies.

Figure 3.3
Existing and prospective Australian resource investment in Africa



Capital raising worldwide

As already noted, Australian companies have raised large sums for their African ventures from local and international investors on the

ASX, the Toronto Stock Exchange (TSX) and AIM. The majority of the world's public mining and energy companies are listed on these three exchanges.

According to HLB Mann Judd, an accounting firm, companies in the energy and materials sectors¹¹⁰ accounted for three-quarters of small-cap IPOs on the ASX in 2006, raising around A\$610 million.¹¹¹ While most of this sum was raised by small exploration companies with an Australian focus, around A\$32 million was raised by companies to explore and develop in Africa.

In 2006, TSX-listed mining companies raised just over US\$10 billion, or around 38 % of the worldwide sum of capital raised by listed mining companies.¹¹² The TSX (including the small-cap TSX-Venture Exchange) has the largest concentration of listed mining companies in the world. Mining companies account for almost 60 % of the TSX's total listings.

Several Australian-based companies have listed on the TSX to raise capital for African ventures: Moto Goldmines, which raised C\$42 million at its 2005 listing; Equinox, which raised C\$145 million in a concurrent Canadian and Australian share offering before its 2005 TSX listing to develop the world's largest open-cut copper mine in Zambia; and Anvil Mining, which raised C\$7 million at its 2004 TSX debut.¹¹³

Nine Australian-based resource companies listed on the AIM in 2006, raising a total £427 million (through IPOs and private placements). Their raisings accounted for just over two-fifths of the £1 billion in new capital raised by AIM resource companies.¹¹⁴ Although most of these companies were focused on domestic or non-African international projects, almost £43.7 million was raised by Sylvania Resources, a company with gold interests in southern Africa.¹¹⁵ Other Australian-based resource companies to have listed on the AIM in recent years include First Quantum Minerals, which raised £46 million at its 2001 AIM debut.¹¹⁶

Big exploration spenders

Finally, Australian companies are an important source of African exploration spending. According to Natural Resources Canada, the Canadian resources ministry, Australian companies budgeted to spend

around US\$159 million on African exploration in 2006, making them the third biggest spenders behind South African and Canadian companies.¹¹⁷

Diverse mix of interests

Exploration bias

Australian firms are heavily involved in mineral exploration — much highly speculative or at a very early stage — and development. Fewer companies are running mines.

Aspect Huntley data suggest that almost two-thirds of ASX-listed companies in the energy and materials industries are focused on exploration. The rest appear to be either actively producing or moving towards production.¹¹⁸ Australian companies focused on exploration in Africa include:

- Bannerman Resources, exploring for uranium in Namibia and Botswana
- Paramount Resources, exploring for diamonds in Ghana and South Africa
- Azumah Resources, exploring for gold in Ghana
- Roc Oil, exploring for oil in Angola and Equatorial Guinea (as well as holding an interest in Mauritania's Chinguetti oilfield)
- Sundance Resources, proving up an iron ore resource in Cameroon
- Sphere Investments, part of an iron ore joint venture in Mauritania
- Adamus Resources, proving up a gold project in Ghana
- Gryphon Minerals, exploring for gold in Burkina Faso
- Discovery Metals, proving up a copper project in Botswana
- Zambezi Resources, exploring for copper and gold in Zambia
- Tiger Resources, exploring for copper and cobalt in the DRC
- Moto Gold Mines, exploring for and proving up gold deposits in the DRC
- Riversdale Mining, exploring for and proving up coal deposits in Mozambique.

Large companies dominate production

While exploration is mainly undertaken by juniors, production is largely the preserve of mid-sized and larger companies. Examples of mid-sized and large Australian-based companies producing or with interests in productive operations in SSA include:

- Rio Tinto, with majority interests in mines producing diamonds (Zimbabwe), uranium (Namibia), copper (South Africa) and titanium dioxide (South Africa). Rio is also developing an iron ore mine in Guinea and a titanium dioxide project in Madagascar
- BHP Billiton, with coal, manganese, mineral sands and aluminum interests in southern Africa and petroleum interests in Algeria
- Paladin Resource’s Langer Heinrich uranium mine in Namibia, which began production in March 2007
- Equinox’s Lumwana copper mine in Zambia.

Smaller companies producing are: Anvil Mining, producing copper and silver in the DRC since 2002; and Resolute Mining, producing gold in Tanzania since 1998.

In addition, a clutch of smaller Australian-based mining companies are at an advanced stage of development or working towards full production. These include:

- Mineral Deposits, planning to start production in 2009 from its US\$163 million mineral sands project in Senegal
- Albidon, close to completing a US\$92 million nickel mine in Zambia.

Increasing geographic and resource spread

Another feature of Australia’s recent involvement in the African extractive sector is growing geographical diversification. While South Africa continues to loom large in plans and budgets, there is also strong interest in other African countries, particularly dangerous and difficult ones.

A search of stories on Factiva, an online news archive, suggests that Australian companies are active in a wide range of countries, including South Africa, Guinea, DRC, Tanzania, Botswana and Zambia, and to a lesser extent in Namibia, Ghana, Mali, Niger and Mauritania. Australian companies are chasing a wide span of resource targets, ranging through gold, base metals, diamonds, uranium and petroleum (Table 3.1).

Table 3.1: Five most frequently mentioned target countries and resources

Countries	Mentions (% total)
South Africa	14
Congo-Kinshasa	10
Tanzania	10
Botswana	8
Zambia	8
Target resource	Mentions (% total)
Gold	20
Uranium	18
Diamonds	12
Petroleum	12
Copper	10

Source: Factiva

Summary

Australian-based mining and petroleum companies, along with companies that service these companies, have a substantial and growing commercial presence in Africa. A back-of-the-envelope estimate puts total existing and prospective Australian investment in African resource projects in the vicinity of US\$20 billion. Table 3.2 breaks down this estimate.

- **Large established investments.** According to their 2007 annual reports, BHP Billiton and Rio Tinto have a stake of around US\$6.2 billion in African operating assets. Mid-tier and smaller resource companies, such as Anvil Mining and Resolute Mining, also have substantial investments in African projects.
- **Exploration.** Much Australian activity centres on exploration, some of it highly speculative. While the majors are ramping up their exploration spending in Africa, junior companies are probably in the vanguard. Supported by buoyant equity raisings made before the January worldwide sharemarket correction, junior companies are pushing into a wide range of African countries. Next to South African and Canadian companies, Australian companies are Africa's third largest source of exploration spending.
- **Construction.** Australian companies have been building significant new mines, such as Equinox's US\$765 million Lumwana copper mine. Other mines under construction that will start producing in the next couple of years include Albidon's Munali nickel mine in Zambia and Anvil's Kinsevere (Stage 2) copper mine in the DRC.
- **Mining service companies.** Australia's push into SSA's natural resource sector also involves numerous mining service companies of various sizes, from integrated engineering and

project management companies through to single-operator geological consultancies. The larger mining service companies have secured contracts to work on African resource projects worth at least US\$4 billion. These companies now make big money from African projects. As an example, service company Ausdrill made 42% of its sales revenue in 2007 from Africa.

The range of target resources and countries is broad. Australian companies are fanning out from Southern Africa, the favoured investment destination in the past, to pursue opportunities in countries as diverse as Guinea, the DRC, Ghana, Burkina Faso and Mali.

Australia's stake in the African extractive sector could grow significantly if four large prospective projects involving BHP Billiton, Rio Tinto and Sphere investments eventuate. BHP Billiton has a one-third interest in Global Alumina's proposed US\$4.8 billion Sangarédi alumina refinery in Guinea. The company also has plans to investigate the viability of a potential US\$3 billion aluminium smelter in the DRC. Rio Tinto's Simandou iron ore project in Guinea has an estimated capital cost of US\$6 billion.¹¹⁹ As noted earlier, its future is clouded at present, because the Guinean government in June 2008 decided to 'withdraw' and 'reconsider' Rio's concession. Nevertheless, most observers believe this is just a gambit by the government to gain a greater slice of project revenues, rather than a move to expropriate. Finally, Sphere Investments' 25.05% stake in the Guelb el Aouj Iron Ore Project in Mauritania, with an estimated capital cost of US\$1.9 billion, could see Australia's SSA investment stake rise by a further US\$475 million.

What are the big messages from all these numbers? First, SSA is becoming a place that matters increasingly to Australian resource companies. Second, the dependence is two-way: Australian resource companies now matter for the development of the subcontinent's resource sector as well — especially for its minerals.

Table 3.2: Dimensions of Australia’s involvement in Sub-Saharan Africa’s natural resources sector

Total investment: More than US\$20 billion of existing and prospective projects¹		
Large established investments	Exploration	Capital raisings (2006)
Australian companies already have large stakes in Africa	Australian companies have increased African exploration budgets and spending	Juniors have raised equity capital through IPOs and private placements
<p><u>Large</u> BHP Billiton, South Africa, Algeria US\$4b Rio Tinto, South Africa, Zimbabwe, Namibia, US\$2.1b <u>Mid-tier/small</u> Anvil Mining, DRC, US\$228 m Resolute Mining, Tanzania, A\$81m</p>	<p><u>Survey (MEG)</u> African non-ferrous exploration budgets of Australian companies were US\$160m in 2006, making Australian companies the third largest source of African exploration spending behind South Africa and Canada</p>	<p><u>ASX</u> 6 listings, A\$32m <u>TSX</u> No Africa-focused listings in 2006, but some large capital raisings in previous years <u>AIM</u> 1 new listing, £44m</p>
Prospective ‘super’ projects		
<p><u>BHP Billiton</u> Alumina refinery in partnership with Global Alumina, Guinea, US\$4.8b (1/3 joint venture stake); Aluminium smelter, DRC, US\$3b <u>Rio Tinto</u> Iron ore mine and infrastructure, Guinea, US\$6b <u>Sphere Investments</u> Iron ore project, Mauritania, US\$475m</p>		

Total investment (cont.)		
Construction or development	Mining services	Countries
Significant new mines and others under construction	Large and small mining service companies are active in Africa	Companies are branching out from Southern Africa
<p><u>Equinox Minerals</u> Lumwana copper mine, Zambia, US\$765m <u>Paladin Resources</u> Langer Heinrich uranium mine, Namibia, US\$125m <u>Rio Tinto</u> Mineral sands, Madagascar, US\$585m <u>Albidon</u> Munali nickel mine, Zambia, US\$92m <u>Anvil Mining</u> Kinsevere (stage 2) copper mine, Congo-Kinshasa, US\$238m <u>AIM Resources</u> Underground zinc mine in Burkina Faso, US\$73m</p>	<p><u>Worley Parsons</u> Nigeria, US\$220m EPCM contract <u>GRD Minproc</u> African sales revenues of A\$84.2m in 2007 Secured work on African projects with a total capital cost of around A\$2.5b <u>Ausdrill</u> African projects generated A\$156m in revenues in 2007 <u>Ausenco</u> African projects generated A\$197m in sales in 2007. Secured work on African projects with a total capital cost of US\$620m for period 2006-2008 & in running to work on projects worth US\$720m</p>	<p><u>Traditional favourites</u> South Africa Botswana Namibia <u>Branching out</u> DRC Mali Burkina Faso Ghana Guinea Kenya Mauritania Equatorial Guinea Mozambique Senegal Sierra Leone Nigeria Zambia</p>

Sources: Austrade; ASX; TSX; AIM; Natural Resources Canada; company websites, presentations and annual reports, Factiva.

¹ A combination of sunk and planned expenditures, project announcements, revenues over various timeframes

Note: Assets, capital raisings, capital values and revenues have been rounded to the nearest whole number or one decimal place.

Chapter 4

Implications for companies and public policy

This chapter discusses implications of the push by Australian companies into the SSA resource sector — for the companies themselves and for Australian public policy.

First, however, it looks at an important prior issue: is the push sustainable? The answer we offer is a qualified yes.

Is the push sustainable?

Three of the four drivers of the current boom look sustainable into the medium and long term: high commodity prices, a global savings glut and the New Great Game. There could be a spanner in the works, however: backsliding by African countries themselves — into stagflation, economic nationalism, coups, war and other investment repellents. As noted in Chapter 1, a trend toward better domestic fundamentals is perceptible. But it is only a modest and fitful one, and several countries are defying it. If instability and violence again become the norm, the boom could easily collapse.

High commodity prices

There might be some froth and bubble in current commodity prices that the current world economic slowdown will blow off. But as Chapter 1 discussed, the omens are good that prices won't return to either their turn-of-century levels or long-term trend. The reasons are twofold: 'Chindia' and rising marginal costs. The continuing integration into the world economy of China and India — economies with a combined population of almost 2½ billion, or 38% of the world total — is causing demand for minerals and energy to expand at a faster rate than at any time before. Meanwhile, resource suppliers are facing 'continuing challenges in terms of higher energy costs, potentially higher exploration costs, declining ore grades, and increasing environmental and social constraints, including water issues'.¹²⁰ This combination of burgeoning demand and inelastic supply is a classic recipe for high and rising prices.

Certainly, the perception that prices will stay 'stronger for longer' is a common one among resource companies. A typical view was expressed in January by Owen Hegarty, managing director and CEO of the ASX-listed international mining company Oxiana Resources. He said that he had not seen any slowing of Asian demand for his company's copper, gold and zinc. 'The fundamentals remain very strong.'¹²¹

Global savings glut

There is more doubt about the sustainability of the global savings glut.

One of its causes is the 'investment drought' that arose in Asia after the onset of the 1997-98 financial crisis. Over-investment in the lead-up to the crisis had been rife, and a key way economies got back onto their feet in the aftermath was to curtail investment. As a result, the investment share of GDP in Indonesia, South Korea, Malaysia, the Philippines, Taiwan and Thailand fell by 10 percentage points on average. One consequence of this investment retrenchment was the generation of large saving surpluses that entered world capital markets and pressed down real interest rates. Now, however, after several years of fast growth, most East Asian economies are running into capacity constraints — both in public infrastructure and private industry. If they don't ease those constraints through investment, GDP growth

rates will fall. The politicians, officials and industrialists who make the investment decisions have woken up to this fact: it's time to move on from crisis management to tackle long-term growth issues. So they are embarking on big plans to expand capacity.

A joint Asian Development Bank, Japan Bank for International Cooperation and World Bank study estimated in 2005 that East Asia alone needs US\$1 trillion of infrastructure over the next five years.¹²² More recently, India has estimated that it will need to spend US\$320 billion over the next five years. Indonesia says US\$70 billion. Malaysia has plans for several trade zones, notably the US\$51 billion Northern Corridor Economic Region and the US\$13½ billion Iskandar Development Region in Johor. The Philippines wants to spend US\$37 billion over the next three years, while Vietnam plans to tap international capital markets to finance projects.¹²³ The Thai government recently announced that it plans to spend US\$50 billion-56 billion on infrastructure projects over 2008-11.¹²⁴

These are large sums, but they are likely to erode the global savings glut only gradually, rather than eliminate it suddenly. This is because two other substantial economies have large and persistent savings surpluses (as measured by their external current account surpluses). China's is about US\$375 billion and the Gulf economies' (more precisely Gulf Cooperation Council) US\$250 billion. Each surplus looks as if it will persist into the medium term at least. China is the one East Asian economy that has a capacity glut rather than deficiency, and the authorities there are restraining investment. Academic analysis suggests that Chinese savings and investment will both decline mildly in the coming two decades, but the savings surplus is unlikely to turn into a deficit soon.¹²⁵ In the Gulf, strenuous efforts are underway to increase both consumption and investment spending, but they are being outstripped by the volume of petrodollar earnings gushing in.

So it is unlikely that rising investment in the surplus-savings countries of East Asia and the Gulf will crowd out to any great extent prospective African resource investment for some years to come.

And the global credit squeeze-cum-sharemarket correction? The provisional conclusion reached in Chapter 1 is that this will cause only

a marginal withdrawal of capital from the African resource sector. After all, the long-term structural drivers of the sector remain intact, and the resource finance market is quite removed from the problems of the structured finance markets. This view was shared at two recent keynote conferences on African mining — the Mines & Money conference in London in November 2007 and the Indaba Conference in Cape Town in February 2008.

New Great Game

The forces underlying the New Great Game seem if anything to be strengthening — the drive to secure supplies of raw materials for home industries, to find new supplies to replace dwindling home supplies, and to diversify asset portfolios.

The former IMF economic counsellor Raghuram Rajan worries that much of the so-called strategic investment to secure raw materials for home industries could be irrational — either ineffective or inefficient. His argument is this. It is legitimate for a country to seek to protect itself from commodity price increases or supply disruptions. But don't do so by putting money into insecure and unprofitable mines in unstable countries where they are prone to expropriation and sabotage. Instead, buy shares in international resource companies and use derivatives such as oil futures to hedge your risk if you're worried about exposure to commodity price increases. And establish strategic stockpiles of materials and encourage efficient resource use if you're worried about a 'Mad Max' world of war, trade collapse and autarky. These are much better means to your ends.

One could go on to argue that insofar as such investment is irrational, its perpetrators will eventually see the error of their ways, and stop. But this is far from assured in the short term. The Chinese, for instance, seem to be embarking on a grand strategy for the wholesale exploitation of African minerals and petroleum, using billions of dollars of China Eximbank and Sinosure loans to build transport networks that will facilitate the export of resources from mines and oil and gas fields in which they have also invested. Nit-picking cost-benefit analyses of individual projects are unlikely to deter them, at least until they experience some major loss, financial or otherwise.

Incidentally, Rajan makes it plain that he has no quarrel with commercial, profit-motivated investment by state-owned or -directed companies that makes good business sense 'untainted by specious claims of enhancing national security'.¹²⁶ Such investment does exist. For instance, while a large share of Gulf investment in Africa is done by state-owned enterprises, this investment seems to be driven by a largely commercial agenda, with strategic or mercantilist interests taking a back seat.¹²⁷

The growing importance of so-called South-South capital flows between developing countries — investment, lending and even foreign aid — is another important support for the New Great Game. (Such flows stand in contrast to the traditional 'North-South' flows from developed to developing countries.) From negligible levels just a decade ago, the proportion of FDI received by developing countries from other developing countries is now around 40%.¹²⁸ Since state-owned and state-directed companies channel a large proportion of South-South flows, it seems inevitable that political, strategic and mercantilist motives will exert a continuing, if not growing, influence on investment in the subcontinent's resource sector.

African fundamentals

It is hard to say how durable recent improvements in the SSA investment climate will be.

On average, violence is down, and political and economic stability are up, considerably when comparing now with the 1970s, 1980s or even 1990s. Yet as Chapter 1 has discussed, one can't be confident that the improvements are entrenched. Certainly, governments seem to have decisively ditched the old policies of nationalisation, collectivisation and import-substituting industrialisation that so impoverished them in the immediate post-colonial period. But this still leaves a lot of scope for fiscal and monetary mismanagement, half-baked or arbitrary intervention in business, and so-called resource nationalism — attempts by governments to garner a greater share of resource rents from the commodity boom by modifying tax and royalty rates and production-sharing and equity agreements.

Similarly, on the security front, one can reasonably expect renewed outbreaks of violence — the Horn of Africa, the Great Lakes region and the border region between Sudan, Chad and the Central African Republic in particular remain areas of insecurity.

On balance?

The *external* drivers of the subcontinent's resource boom look durable. But the all-important *local* conditions could yet deteriorate, after showing some promising improvement this decade. This could stop the boom in its tracks. After all, previous international commodity booms passed the subcontinent by, because it lacked the necessary domestic pre-conditions for investment.

Implications for Australian companies

What are the implications for Australian resource companies of their push into Africa?

The obvious one is that they will take on increased risk — and unfamiliar risk at that. This won't necessarily be the case at the industry level — investors will still be able to pick a portfolio of companies with different risk profiles to diversify away risk. It might even be that increasing African exposure offers broad diversification benefits.

Still, individual companies will need to give thought to how they manage the 'surface risks' — as mining and petroleum people like to call them — because there is no escaping the fact that SSA is a hazardous place.

Throughout the post-colonial period, resource companies operating in Africa have suffered financial loss arising from various political risks, including nationalisation, licence cancellation, unfair tax and regulatory changes, currency inconvertibility and political violence.

Although there haven't been any cases of naked asset-grabs without compensation, nationalisation of the Zambian and Zairean copper industries and Nigerian oil industry in the 1970s did cause losses for foreign investors, as did other nationalisations in Gabon, Guinea, Mauritania and Niger.

Political violence has also sometimes been a problem. In 1999, diamond mines in the DRC, some of them foreign-owned, were seized by officials of the former dictator Mobutu Sese Seko. Rebel forces attacked a rutile mine and processing facility in Sierra Leone in 1995 owned by America's Nord Resources Corporation. Hostages were taken and production suspended for months. The US government's foreign investment support agency OPIC paid an almost US\$16 million political risk insurance claim to Nord as a result of the attack.¹²⁹

Problems for resource companies continue down to the present. For all the improvement in African investment climates, companies, including Australian ones, still regularly fall victim to political instability and violence, criticism for being bad corporate citizens, and 'creeping' expropriation.

Although SSA governments aren't yet proving to be as confrontational as Venezuela, Bolivia and Ecuador, they are engaging in acts of resource nationalism.

They are also among the most corrupt in the world, so another challenge is how to do business while avoiding complicity in corruption and adhering to various anti-corruption laws in one's own and other countries.

Finally, strategic competition for resources from state-owned and state-directed companies — what we have called the New Great Game — is throwing up a separate set of challenges.

Political instability and violence

Whereas mines and oilfields are often immune from domestic macroeconomic instability, they are far more susceptible to political instability and violence. Because they import most of their inputs, besides labour, and often export all their output, they can often react to local booms and slumps with a shrug. Riots, coups, strikes and the like are a different matter.¹³⁰ By its very nature, a mine is site-specific, the antithesis of a footloose industry. If conflict breaks out, the company can roll out a contingency plan involving production shutdowns, plant mothballing, staff evacuations and the like. But no matter how painstaking it has been, it will still be vulnerable to casualties and damage.

Several recent incidents illustrate this point.

- **Nigeria.** Armed militants have recently stepped up their attacks on oil export facilities and pipelines in the oil-rich Niger Delta, shutting in¹³¹ up to a quarter of Nigeria's total oil production. For instance, Shell shut in about 500,000 barrels a day of production, or half its total daily Nigerian output from its fields in the Western Delta, after rebels attacked several production and export facilities in early 2006. Companies also have to put up with 'bunkering' of an estimated 100,000 barrels a day — the stealing by criminal gangs of oil for sale on the spot market.¹³² Since January 2006, the rebels have also taken hundreds of foreign oil workers hostage.
- **Mauritania.** A 2005 coup in Mauritania triggered an immediate slide in the share prices of the three Australian companies in the consortium operating the offshore Chinguetti oilfield at the time — Woodside, Hardman Resources and Roc Oil.
- **Guinea.** A general strike in February 2007, limiting bauxite production and exports, raised concerns of a 'global supply shock' and flow-on effect to downstream alumina and aluminium industries — Guinea is the world's largest bauxite exporter. During seven weeks of strife more than 115 people were reportedly killed. At the height of the troubles, world alumina prices jumped 5% and the big foreign investors — BHP Billiton and Rio Tinto — evacuated staff.
- **Ethiopia.** In April 2007, 74 workers (nine Chinese, 65 Ethiopians) from China's Zhongyan Petroleum Exploration Bureau were killed during an attack by armed men on an oilfield in Ethiopia's eastern Somali province. Zhongyan had been carrying out seismic surveying for Petronas and Sinopec.

Public criticism

Resource companies in SSA have to deal not only with the reality of difficult local conditions, but the perceptions of NGOs, shareholder activists and investigative journalists. These often harbour the pre-conceived notion that companies are out to profiteer with little concern for the local community

and broader country. (Some no doubt are, but the majority doesn't seem to be.) Companies are also often blamed for the 'Resource Curse' that afflicts resource-rich developing countries (see Box 2, pp 77-8).

The challenges are especially acute in countries with a record of human rights abuses or corruption. In these, companies are liable to be accused of propping up illegitimate, repressive regimes through their tax and royalty payments. An especially sensitive issue is when government security forces protecting company assets subjugate local citizens such as activists and artisanal miners. (Artisanal miners are individuals or small groups eking out a penny-pinching existence from small-scale mining with little or no mechanisation, sometimes illegally.) If not managed carefully, these issues can undermine the value of a company, either as investors sell its shares, or because companies feel obliged to turn down otherwise lucrative investments. According to a survey in 2002 by the specialist risk consultancy Control Risks, 20% of resource companies claimed to have put off an otherwise attractive investment because of human rights concerns.¹³³

- **Shell/Nigeria.** The best-known instance of loss from 'reputational risk' is the hostile campaign Shell faced in 1995 when the Nigerian government executed Ken Saro-Wiwa and eight other prominent environmental and social activists who had been campaigning against the oil industry. A public outcry against Shell ensued for allegedly providing support, including transport and weapons, to the Nigerian authorities to put down dissent in Ogoniland — the Niger Delta region where Saro-Wiwa campaigned. Relatives of Saro-Wiwa sued Shell in America under the Alien Tort Claims Act.¹³⁴ This law allows US courts to hear any civil action by an alien for a tort committed in violation of international law or a US treaty obligation. Shell's Nigerian trouble came shortly after it received separate criticism for wanting to dispose of its Brent Spar offshore oil storage facility in Atlantic waters. The two experiences prompted Shell to incorporate CSR principles into its General Business Principles, the guidelines all Shell companies and contractors are expected to follow.

- **Barrick Gold/Tanzania.** In a 2007 report, CorpWatch, an NGO monitoring the mining industry, claimed that more than 50 miners were murdered at Barrick Gold's Bulyanhulu property in Tanzania in 1996, three years before the company acquired the project. Barrick, a Canadian company, is the world's leading gold producer. CorpWatch said that the company had 'done nothing to bring the perpetrators to justice or compensate the victims' families'. A 2002 report by the Compliance Advisor/Ombudsman of the World Bank concluded that no evidence to support the initial allegation existed.¹³⁵
- **Anvil Mining/DRC.** In 2006, a mob of artisanal miners lashed out at facilities of the Kulu-Kolwezi mine in Katanga province owned by the dual ASX/Toronto-listed Anvil Mining. They set fire to a guest house, killing one Anvil employee and one security guard. The trigger: an artisanal miner found drowned at the minesite. Anvil security guards, who had repeatedly chased off trespassing artisanal miners from the site, were blamed for the killing. NGOs frequently cite this incident as an example of the tensions that can build between artisanal and corporate miners.¹³⁶
- **AngloGold Ashanti/DRC.** NGO Human Rights Watch has accused South Africa's AngloGold Ashanti of providing logistical and financial support to a militia group, the Lendu Nationalist and Integrationist Front (FNI), in 2005. FNI, one of four rebel groups in the Ituri province in the north-eastern DRC, has been linked to numerous atrocities, including murder of civilians. The company admits that staff at its Mongbwalu exploration camp, under fear of attack, paid armed FNI rebels a one-off sum of US\$8,000 from petty cash, but rejects allegations that the company established a collaboration or partnership with the rebel group.¹³⁷
- **Anvil Mining/DRC.** NGOs accuse Anvil Mining of complicity in human rights violations by Congolese troops near Anvil's

Dikulushi copper-silver mine in Katanga province in 2004.¹³⁸ On two occasions, government troops using trucks and aircraft commandeered from Anvil fought a renegade militia group. In the process they killed a number of civilians, who had helped the militia, and looted property. Anvil says it had no choice but to comply with the government's request for transport — a senior staff member was reportedly struck with a rifle butt after initially refusing the army's request. The Australian Broadcasting Corporation's Four Corners current affairs program aired a TV story on 6 June 2005 critical of Anvil's role.

Box 2:

*The Resource Curse ... Or How Wealth Can Make You Poor*¹³⁹

The term Resource Curse refers to the paradox that countries rich in minerals and hydrocarbons (and sometimes soft commodities like timber) often have lower economic growth rates and per capita incomes than less well-endowed countries. Worse, natural resources are often associated, indeed seen to trigger and prolong, civil wars. Resource-rich developed countries have shown themselves able to ward off the Curse — Australia, Canada and Norway. But not so developing countries, with a few exceptions — Botswana, Chile, Malaysia and South Africa.

Why? One view says the very process of resource extraction is to blame. This can lead to the extreme conclusion that countries are better off leaving resources in the ground.

A more moderate and reasonable view says the problem lies in the host countries' management of resource earnings. Mismanagement leads to stagnation, boom/slump, conflict. Wise management: strong growth and stability.

If mismanaged, large windfall revenues can severely distort the economy and corrupt the political system. By triggering wage inflation and real exchange rate appreciation they can squeeze non-resource industries, particularly those exposed

to international competition — leading countries to catch the so-called Dutch disease, as Holland did in the 1970s after it developed its giant Groningen gas field.

Windfalls can also encourage rent-seeking, corruption and spendthrift fiscal habits. Often governments myopically increase spending as commodity prices and revenues rise, and decrease spending when prices and revenue fall, amplifying unnecessarily the economy's business cycle.

Flowing as they normally do from just a handful of projects, the revenues are easily captured by an elite minority in government. The resulting income and wealth inequalities can be a source of tension and conflict.

In the extreme, resource revenues can provoke armed conflict. They can provide authoritarian governments with the means to repress their citizens. They can finance pre-existing conflicts. They can encourage separatist movements — especially where central governments siphon off revenues into national coffers, leaving little in the resource-rich province but resentment, as has happened in the DRC's Katanga province and Nigeria's Niger Delta.

Close to 50 armed conflicts underway in 2001 had a strong link to natural resource exploitation.¹⁴⁰ Seventeen civil wars took place over 1990-2002 linked to natural resources. Seven were in Africa — Angola (oil, diamonds), the Cabinda enclave of Angola (oil), the Republic of Congo (oil), the DRC (copper, coltan, diamonds, gold, cobalt), Liberia (timber, diamonds, iron, palm oil, cocoa, coffee, marijuana, rubber, gold), Sierra Leone (diamonds) and Sudan (oil).¹⁴¹

It is possible for a country to immunise itself against the Resource Curse by managing its earnings wisely — saving or 'sterilising' them when the economy is booming; spending them mainly when the economy is slumping; spending them fairly; investing a considerable fraction for the day when the resource is exhausted; and shining a light of public scrutiny upon how the moneys are used.

Creeping expropriation

While 1950s-style outright expropriations are now out of fashion around the world, including in Africa, that doesn't preclude governments shifting the legal and regulatory goalposts facing projects in ways that reduce shareholder value.

- **DRC.** In 2007, the Toronto-listed, but Perth-based Moto Goldmines had its licence to develop a lucrative gold deposit in north-eastern DRC revoked amid allegations, which it disputes, that it didn't fulfil its work obligations under the licence.
- **Gabon/Ghana.** Even in countries considered to have comparatively good governance such as Gabon and Ghana, foreign investors have reported numerous disputes with governments over what they claim is expropriation or discriminatory treatment.

Resource nationalism

Most resource companies would concede that host country governments and citizens have a right to share the revenue bonanzas the current international commodity boom is creating, whether through taxation or equity participation, or both. So there is little in-principle opposition to moves by governments to shift the terms of resource projects in the host country's favour as prices have rallied. Disquiet does arise, however, where governments are perceived to be killing the goose that lays the golden eggs; for instance, by increasing taxes to rates that a low-cost producer can bear, but not an average or marginal producer.

- **Nigeria.** In January 2008, the Nigerian government said it would seek to renegotiate contracts covering production from offshore oilfields. The review, starting in late 2007, is part of the Yar'Adua government's wide-ranging reforms of the energy sector. The large international oil companies in Nigeria — Shell, Chevron, ExxonMobil and Total — operate offshore facilities under production-sharing agreements, most of which were signed

during the 1990s when oil prices were much lower than now. The government estimates the renegotiations will take around three months, but most commentators think longer given the number of companies.¹⁴²

- **DRC.** Around 60 mining agreements negotiated during the country's civil war are currently subject to a government review. A draft report leaked in early November 2007 suggested that 38 contracts would be amended, and 23 cancelled entirely. This immediately hit the share price of the companies identified, including two Australian companies, Anvil Mining and Tiger Resources. Comments by the DRC's vice-minister of mines at the recent Indaba mining conference have raised fears that the government will seek to renegotiate all mining agreements with a view to increasing its share of mineral revenues and profits.¹⁴³
- **Zambia.** In January 2008, the government announced significant revisions to its mining taxation policy, which will eliminate special 'development agreements' with mining companies struck when copper prices were at record lows. These agreements previously provided tax concessions and codified fiscal terms. The new regime will reportedly see the introduction of a windfall tax and a variable profit tax. It comes on top of a previously announced increase in mining royalties from 0.6% to 3%, a lift in company tax from 25% to 30%, and re-introduction of a 15% withholding tax on dividends. Major mining companies in Zambia and the Chamber of Mines have rejected the new tax regime, arguing that the DAs are still binding. They say the changes will increase the effective rate of taxation from 31.7% to 47%, which may be enough to undermine the financial viability of some projects.
- **Guinea.** In April 2007, the Guinean government set up a special committee to find ways to increase financial returns from foreign investors. In an address on state television four days

after the cabinet decision to establish the review, the government announced it would withdraw a production-sharing contract from US oil company Hyperdynamics and renegotiate a contract with Compagnie de Bauxite de Kindia (CBK), a local bauxite company run by Russian aluminium giant RUSAL.¹⁴⁴ Again, in June 2008, Rio Tinto said that it had received a letter from the Guinean president's office querying the validity of a decree issuing a mining concession over the Simandou iron ore deposit, estimated to cost US\$6 billion to develop.¹⁴⁵ One journalist speculated: 'The possibility of the Government asking for more favourable terms, as Mongolia has done with Rio's Oyo Tolgoi copper joint venture, cannot be discounted.'¹⁴⁶

- **Tanzania.** In May 2006, the government began to update its mining legislation and review existing mining contracts in order to maximise returns from the mining industry. The update and review had been expected since at least June 2005, when Tanzania's IMF-approved Poverty Reduction Strategy recommended 'updating mining policy and legislation'. In May 2007, the government announced that it had reached agreement with gold mining companies to scrap some tax incentives. It said that it had completed negotiating new contracts with Barrick Gold and with Australia's Resolute Mining, owner of the Golden Pride mine. It noted that all mining companies will now need to pay corporate tax, a 3% royalty fee, withholding taxes, stamp duty, annual rent, and application and preparation fees.¹⁴⁷
- **Mauritania.** The new government that seized power in a 2005 coup disputed amendments to four oil production sharing contracts that Woodside had agreed with the previous government. The new government reportedly thought that the amendments tilted the benefits in Woodside's favour by lowering the government's profit share, modifying the tax environment and increasing the length of the contract. Woodside resolved the

dispute with the new government in 2006 by paying a settlement fee of almost \$140 million and by agreeing to pay an annual \$1.4 million environmental bond.¹⁴⁸

Corruption

According to Transparency International's (TI) 2007 Corruption Perceptions Survey, of the 52 African countries surveyed, 36 scored below '3', suggesting that corruption is seen there as rampant, and 14 scored '3-5' indicating that corruption is seen as a serious challenge. Only two African countries scored above '5', indicating that they were reasonably 'clean' — Botswana and South Africa.¹⁴⁹ (For details on countries' corruption rankings go to Appendix 2, Figure A2.3.)

Corruption is a particularly thorny issue for ethical companies to handle. It is often near-impossible to do business in a country with a corrupt government without being tainted.

Life isn't made any easier by the fact that the dividing line between illegal bribes and lawful 'facilitation payments' is often a fuzzy one. In some countries such as the UK the criminal code makes no distinction between the two. Facilitation payments are, however, permitted in Australia and America as long as they are disclosed.

In 1999 the British NGO Global Witness exposed the misuse of petrodollars by the Angolan government and complicity of foreign oil companies. Its report noted that the government was disclosing virtually nothing about its revenues or dealings with foreign companies. The NGO called on companies to 'publish what you pay' so that malfeasance would be either discouraged or immediately discovered. This call was taken up by other NGOs and culminated in 2003 in the launch of the Extractive Industries Transparency Initiative (EITI) by the then British Prime Minister Tony Blair.

Because of the sort of criticism received by the oil companies in Angola, many companies now rule out involvement with corruption point-blank. But this places them in a dilemma, because to do business in certain countries one has no choice but to deal with dishonest officials, middlemen or politicians. Small wonder then that corruption can often be a deal-breaker.

Of 23 oil, gas and mining companies surveyed by Control Risks, a specialist risk consultancy, in 2002, more than half said that they had put off an otherwise attractive investment because of corruption. And of 32 'world-class' mining companies surveyed by business advisory firm PricewaterhouseCoopers in 2001, 41% said they had refrained from investing or had withdrawn from an investment because of corruption.¹⁵⁰

Will corruption become a bigger or smaller problem in future? There are some tentative signs that it could become smaller.

Like many things in this world, corruption is governed by supply and demand. The supply comes from 'corruptors'; the demand from 'corruptees'. If supply or demand, or both, diminish, so will the volume of corruption transacted in the political and commercial marketplace.

On the supply side, anti-corruption laws are tightening, at least in OECD countries.

- In 1997, the 29 OECD member states and five others signed the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. Signatories agreed to introduce laws making it a crime to bribe foreign officials.¹⁵¹ The Australian law was passed in June 1999 — the Criminal Code Amendment (Bribery of Foreign Public Officials) Act 1999.
- In 2000, the OECD published Revised Guidelines for Multinational Enterprises that 'provide voluntary principles and standards for responsible business conduct in a variety of areas including human rights, anti-corruption, taxation, labour relations, environment, information disclosure, and consumer protection'. Though not legally binding on companies from OECD member states, 'The Australian Government is committed to promoting the use of the Guidelines'. More to the point, the Guidelines allow reporting to an 'Australian National Contact Point (ANCP)' of 'specific instances' of corporate behaviour believed to violate the Guidelines. The ANCP is the Executive

Member of the Foreign Investment Review Board, who is also the General Manager of the Foreign Investment and Trade Policy Division at the Australian Treasury. Where the ANCP judges the instance to be ‘material and substantiated’, they will try to resolve it through conciliation or mediation.¹⁵²

- In 2006, official OECD ECAs agreed an Action Statement on Bribery and Officially Supported Export Credits. This requires companies using ECA finance and insurance facilities — often critical to closing deals in SSA — to make a ‘no engagement in bribery’ declaration.¹⁵³

In Australia, companies also have to pay heed to the corruption sections in the ASX’s corporate governance guidelines and the so-called CLERP9 amendments to the Corporations Act.

Together, the obligations imposed on companies by the OECD and by local laws have made it a lot harder for any company to pay bribes or do other corrupt things.¹⁵⁴

One of the concerns about state-owned and -directed companies playing the New Great Game is that they could add to the supply of corruption even as it diminishes from the OECD. This is a development to watch.

On the demand side, ‘Africa is producing good results in the fight against corruption’, says TI. Even if it is happening from a low base, countries like Namibia, Seychelles, South Africa and Swaziland did score significantly better in TI’s 2007 survey than previously.

Sticking with the supply/demand metaphor: what is fairly clear is that the supply of corruption from OECD countries will decrease. It could, however, rise from non-OECD countries. Meanwhile, the demand for corruption may diminish, but any decline is likely to be slow, fitful and patchy. If the demand for corruption doesn’t decline, and the non-OECD supply increases, companies from OECD countries will find themselves increasingly crowded out from business opportunities on the subcontinent.

Strategic competition

As Chapter 1 noted, concerns are beginning to surface that state-owned and state-directed companies may be unfairly competing for concessions with profit-driven private sector companies. For instance, Mikkal Herberg has remarked that ‘Though the major international oil companies are accustomed to intense competitive environments, some Asian NOCs appear to have important competitive advantages in what may increasingly become an uneven playing field’.¹⁵⁵

What are these advantages? They vary, but can include: a remit to secure resources without regard to profit; soft loans; government offers of aid, trade preferences, infrastructure and defence cooperation in support of bids for licences and contracts; freedom from constraints like anti-corruption laws; and little scrutiny from the media, banks and shareholders.

- **DRC.** Some Western companies and NGOs are reportedly concerned that Beijing’s recent pledge of more than US\$9 billion in concessional loans to the DRC (discussed in Chapter 1) could persuade the government in its current review of mining licences to transfer to China some licences held by smaller companies — despite Kinshasa’s assurances to the contrary.¹⁵⁶ A group of NGOs have noted a 28 January decision by Kinshasa to transfer two mining concessions previously held by the Katanga Mining Company to China’s Sinohydro Corporation and the China Railway Engineering Corporation. ‘The organisations say that it is increasingly apparent that new deals are being struck behind closed doors ...’¹⁵⁷
- **Gabon.** Another instance where it is claimed that a state-owned company exercised an unfair advantage took place in 2005 — the Gabonese government directed Brazil’s CVRD (since renamed Vale) to re-bid for a mining permit in competition with a Chinese company; the Chinese company won.¹⁵⁸

It remains an open question how big a threat such strategic competition will pose for Australian and other companies lacking state support. Although Herberg warns of unfair competition he arrives at a rosy

conclusion: over the long run self-interest and pressure from other countries will force Asia's NOCs to adopt market-oriented norms. But as we have argued earlier in this chapter and in Chapter 1, the competition could heat up before cooling down.

Box 3: Additional, mistaken criticisms of state-directed investment

'Unfair competition' against Western resource companies isn't the only charge that has been laid at the door of state-owned and -directed companies. We argue that while the issue of 'unfair competition' is complex and the charge of unfairness isn't always justified, the phenomenon is a real, and arguably growing, one.

That can't be said of another accusation — that state-directed investment allows its perpetrators to 'take supply off world markets', maybe to the point of 'cornering the market'.

If a strategic investor decides to acquire 'customer equity' in an African mine or oilfield whose supplies it will then consume, it thereby saves itself the need to go onto the open market to buy such supplies. So the net effect on the market's supply/demand balance is nil.

Could it 'corner the market'? In other words, establish such a dominant position as producer that open market supplies to the rest of the world are restricted. Hypothetically: yes. But in that case it would be sorely tempted to supply its commodities to the open market to take advantage of the high price, thereby easing supply on the open market.

More to the point, if the strategic investor is undertaking uncommercial investment that would be spurned by a profit-motivated company, it is thereby adding to world supply, and all else equal, pushing the market price down, not up.

Managing risk

How are companies — and their financiers — managing the risks discussed above? Broadly speaking, in three ways: by being good corporate citizens, undertaking 'constructive engagement' with 'stakeholders' to achieve 'win-win outcomes'; by doing thorough political risk assessment; and by taking out political risk insurance.

Corporate social responsibility

Good corporate citizenship — or corporate social responsibility (CSR) as it has come to be called — is increasingly being viewed by companies as a way to win support — or at least grudging acceptance — from groups with the capacity to make trouble for them — NGOs, shareholder activists, the media, home country regulators, host country governments, local activists, local communities. As one commentator has remarked, CSR is a way to gain a 'social licence to operate'.¹⁵⁹ Or as the International Council on Mining and Metals (ICMM), a body representing the world's 16 largest mining companies, says: a stress on sustainable development will 'best ensure continued access to land, capital and markets as well as build trust and respect'.¹⁶⁰

An extension of this viewpoint says that while Western companies cannot hope to match the incentives offered to African leaders by countries like China — pipelines, railways, roads and sports stadiums, not to mention cheap credit — they can offer something different, but equally compelling: high ethical, social and environmental standards. (Notice the parallel with the use of 'hard' and 'soft' power by nations to achieve foreign policy objectives.) During the last election in Zambia in 2006, the opposition leader, Michael Sata, boosted his appeal among voters by questioning the practices of Chinese investors in the mining industry, especially labour practices. A couple of months before the election campaign, six striking workers were shot during riots at a Chinese-owned copper mine, and a year earlier lax regulations were thought to have caused an explosion which killed around 40 workers at an explosives factory next to the mine.¹⁶¹ In Angola, the government decided in 2007 to cancel a contract to build an oil refinery by China's

Sinopec. All these incidents suggest a dawning recognition among African governments that bids for contracts or offers of investment by countries playing the New Great Game, for all their attendant sweeteners, can have drawbacks.¹⁶²

CSR policies differ from company to company. But generally, the bigger and better resourced the company, the more ambitious its policy. Most large companies have some code of conduct stating their commitment to preserving the environment, paying fair wages, respecting human rights, establishing safe working conditions, avoiding corruption, dealing fairly with stakeholders, and contributing to the local community. The big effort major companies put into CSR reflects the large sums of money they stake for long periods — money it makes sense to go to some lengths to safeguard against political risk.

Publicly listed companies need to make a special effort because stock exchanges and institutional investors demand high standards of corporate governance. Shareholders will typically want assurance, for instance, that capital isn't being recklessly gambled on investments at risk from expropriation, local community backlashes, lawsuits, consumer boycotts, negative publicity and the like.

Another reason for a public company to take CSR seriously is the growing weight of money demanding ethical corporate behaviour. The socially responsible investment sector is still a small portion of the Australian sharemarket, with around A\$21½ billion in total investments, of which \$3.6 billion was in managed funds, in 2004. Still, an indication of how quickly the sector might grow comes from America, where socially responsible investment had quickly expanded to around 11 % of all investment assets under professional management by 2003.¹⁶³ Not only do these funds shun companies which they believe fall short of acceptable CSR benchmarks; they also criticise and sell out of companies they perceive to be backsliding. For instance, in 2001 a group of fund management companies managing between them £400 billion issued a statement expressing concern about companies invested in Burma.¹⁶⁴ And in 2002, the London- and ASX-listed Henderson Global Investors decided to withdraw its socially responsible investment funds from BP, out of concern with the company's safety record in Alaska.¹⁶⁵

Junior companies have fewer resources to do CSR and less investment to protect with CSR. Concentrating as they do on exploration, they also leave a smaller mark on their surroundings than majors investing in large development projects, and so have correspondingly smaller environmental and social obligations. Still, an increasing number of juniors now recognise that the value of their discovery can be significantly reduced if surrounding communities are antagonistic. It is increasingly common for relatively small exploration outfits to have social specialists working on site to facilitate communications with local communities, manage expectations and promote good relations. The benefits that an investor can provide before a mine proceeds are limited, but the impacts from a large exploration exercise can be substantial — roads, camps and drilling can be extensive even for a relatively modest project — and poor mitigation work done at the outset can cause trouble later.

Unethical junior companies might be tempted to neglect their social and environmental obligations and bribe officials. The proverbial unethical junior is Canada's Bre-X, which 'salted' its Indonesian mine in 1997 in a bid to attract investors. There have also been cases in Africa. In Ghana, for instance, foreign investors have pressed the government to allow exploration and mining in forest reserves subject to a moratorium on such activities.¹⁶⁶ But the number of companies tempted to cut ethical corners like this seems to be dwindling.

How do companies operating in Africa make a CSR policy? They can either make their own, or adopt principles from an ever-growing menu of standards, voluntary guidelines and codes sponsored by individual firms, multilateral bodies, industry bodies and NGOs.

Four prominent codes that companies look to for benchmarks of good corporate conduct in areas like human rights, the environment, ethical conduct and labour are the Equator Principles, the EITI, the OECD Guidelines for Multinational Enterprises and the ICMM's Sustainable Development Principles.

- **Equator Principles.** Based on environmental and social standards from the International Finance Corporation (the World Bank's private-sector financing arm), the Equator Principles

are a set of benchmarks adopted by 59 financial institutions working on project financing in developing countries, the ANZ, National Australia Bank and Westpac among them. They are fast becoming *the* benchmarks for resource projects seeking project finance, ECA support and PRI.

- **EITI.** A fiscal transparency initiative, this calls upon companies to ‘publish what they pay’ and governments to ‘disclose what they receive’. Australian resource companies that have committed to EITI include BHP Billiton, Rio Tinto and Woodside.
- **OECD Guidelines for Multinational Enterprises (and associated Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones).** These Guidelines are a set of voluntary recommendations to multinational companies on business ethics, including employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition, and taxation. In 2006, Anvil Mining commissioned an independent external audit of its DRC operations with reference to these two instruments. The auditor gave it an 82 % mark — 100 % being full compliance.
- **ICMM’s Sustainable Development Principles.** The ICMM says it has developed a ‘badge of excellence’ for companies to demonstrate their credentials in ethics, environmental protection and safety. BHP Billiton, Rio Tinto and Pasminco have committed to measuring their performance against these Principles.

There are also many other guideposts.

- Multilateral initiatives include the UN Global Compact, UN Norms on the Responsibilities of Transnational Corporations With Regard To Human Rights, and International Finance Corporation Performance Standards.

- NGO initiatives include the Global Sullivan Principles on Social Responsibility, the Global Reporting Initiative and the Voluntary Principles on Security and Human Rights.
- Industry initiatives include the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold.
- Standards Australia’s Standard AS 8001-2008 on fraud and corruption control.

Resource companies in Africa, especially the large ones, haven’t just adopted external benchmarks. They also fashion their own codes. A survey conducted in 2002 by the specialist risk consultancy Control Risks found that 94 % of British and 92 % of American companies surveyed had codes forbidding bribe payment.¹⁶⁷ Industry sources suggest that the number would be similarly high in Australia.

Apart from general statements of principle, companies set themselves specific benchmarks in their environmental and social management plans for individual projects — the documents they present to host country governments to gain and maintain licences and to bankers to secure debt funding. Anvil Mining, for instance, allocates 10 % of the profits from its Dikulushi copper/silver mine in the DRC to local community development. These plans are often audited by both governments and bankers.

As already noted under ‘Corruption’ above, official OECD ECAs have separately adopted an Action Statement on Bribery and Officially Supported Export Credits. They also take a common line towards environmental impact assessment of projects they finance. In 2007, they agreed to strengthen their environmental standards.¹⁶⁸

Political risk assessment

Many resource companies subject investment proposals to ‘country’ or political risk assessment, the better to manage their political risks. Majors like Shell and BHP Billiton have established in-house risk

assessment capabilities. Their assessments can often be quite complex and comprehensive, involving techniques like scenario planning. Other companies hire consultants and subscribe to intelligence and analysis from research companies and institutes. As with CSR policies, the larger the company and the more it has to lose from political risk, the greater the tendency to invest in political risk assessment.

Companies generally evaluate political risks on both a project and portfolio basis. In other words, they evaluate the risk of loss on individual projects — and on the overall asset portfolio taking into account possible offsetting or reinforcing effects of a particular ‘risk event’.

Risks typically evaluated include: expropriation, political violence, currency inconvertibility and contract frustration. These are often given a numerical rating. These ratings, in turn, enable the company to calibrate its risk management parameters — things like hurdle rates of return, country exposure ceilings, gearing ratios, and risk mitigation strategies.

The ratings also guide the decision on whether to insure. If the expected loss (or worst expected loss) from a political risk event is judged to be bearable or non-catastrophic, and expensive to insure, a company may decide to self-insure. Then again, if the converse applies, the company may decide to seek political risk insurance.

Political risk insurance

To what extent do resource companies and their financiers use political risk insurance (PRI) to cover the hazards of going into Africa?

The leading international organisation representing the export credit and investment insurance industry is the Berne Union. Despite its broad oversight, however, it doesn’t collect data by industry. At the end of 2007, Berne Union members had a total PRI exposure to SSA of US\$11.6 billion.¹⁶⁹ Much of this was reportedly to the resource sector, but there was a lot out to the telecom and infrastructure sectors as well.

The Berne Union consists of predominantly official ECAs, though it does have some private sector members. Outside it, there is a big private sector PRI market, consisting of the Lloyd’s market and the corporate market. Then finally, there are two multilateral PRI providers — MIGA

(Multilateral Investment Guarantee Agency) and ATI (African Trade Insurance Agency).

None of these agencies supplies much information, either. Since its founding in 1988, MIGA says it has issued US\$2.3 billion in guarantees for investments in Africa, supporting 90 projects ranging in size from less than US\$1 million to more than US\$1 billion, and spanning 27 countries. But again, it does not divulge how much of this business was with the resource sector.

What risks do the PRI providers cover? The three risks they have traditionally covered are currency inconvertibility, expropriation and asset damage due to political violence. In recent years, however, many providers have increased the breadth of coverage to include: breach of contract, arbitral award default, unfair or wrongful calling of guarantees and performance bonds, forced divestiture or abandonment of assets, terrorism, and dishonouring of commodity hedge contracts because of political events.

Despite the data shortcomings, industry sources state that PRI coverage of African resource projects is extensive. Or rather, PRI coverage of the debt financing and hedge facilities supplied by banks to projects is extensive. A surprisingly large number of equity investors choose to self-insure these risks. There seem to be two reasons for this. The major companies can reduce their overall portfolio risk by having a wide span of mineral and geographic exposures. Meanwhile, investors don’t necessarily want junior companies to hedge all their risks. To the contrary, so long as there is sufficient prospective reward to compensate for the risk, they may actually urge companies to embrace risk. Then through careful selection of uncorrelated shares, investors can hedge the risk of specific companies, including political risks.

The importance of fairness

Ultimately, the best defence an investor can mount against political risk is to ensure a fair sharing of benefits between itself, the local community and the national government.

There is still a tendency among some resource companies to haggle for all sorts of indemnities, warranties, tax holidays and stabilisation

clauses to protect themselves. However, if this results in a one-sided contract, it should come as no surprise if the contract is challenged. At best, it will be renegotiated; at worst, the property will be nationalised.

What might fair shares look like? This hinges on the profitability of the project, but World Bank investigations suggest that 45-55% is a typical ‘effective tax rate’ for a well-structured mining project.¹⁷⁰

Anything too out of kilter with this benchmark or the country’s mining code could be a sign of trouble.

Implications for public policy

Another issue raised by the push of Australian resource companies into Africa is how public policy should respond.

Australian foreign, defence, trade and aid policies have traditionally focused upon Australia’s neighbourhood — the Asia/Pacific region — in recognition that this is where our major commercial and security interests lie. Africa was in policymakers’ peripheral vision, but no more than that.

Will that now have to change? The extent of Australian-African business links outlined in this report wouldn’t justify any wholesale change. Our traditional diplomatic, military, trade, investment and aid partners (and rivals) continue to loom largest.

Nevertheless, there may be a case for some marginal recalibration.

We certainly aren’t arguing for a corporatist ‘Australia Inc’ approach to taking on Africa in the manner of other countries playing the New Great Game. As we noted earlier in this chapter — leaning on the arguments of Raghuram Rajan — this is an approach that isn’t in our commercial or broader national interest and is therefore likely to end in tears. (It is bad enough for a net mineral and energy importer to back its companies with subsidies. It would be especially misguided for a large exporter like Australia to do so.)

Still, an important feature of African life does need to be acknowledged: commerce is heavily politicised and subject to arbitrary government intervention. Fiscal, regulatory and contractual frameworks can shift abruptly. You don’t necessarily win a contract because you have offered

the lowest price and best capabilities. You often have to do more than offer the highest price and first rate capabilities to win an exploration or development permit. Just because you have a government licence or contract doesn’t mean it will always be honoured. You will sometimes be competing on unequal terms for concessions and contracts with state-backed companies.

From these facts it is possible to make the case that Canberra should provide some help to Australian companies to overcome the disadvantages they face — either from arbitrary or corrupt African governments or unfair competition from state-backed companies — insofar as it can do so efficiently and effectively.

The policies that suggest themselves for review are foreign, trade and aid; and on a subsidiary level, positions in international organisations.

Foreign policy

Should the government re-open some diplomatic posts? And if so, where?

At present, there are five diplomatic posts in SSA: in Ghana, Kenya, Nigeria, South Africa and Zimbabwe (all Commonwealth or former Commonwealth members). These are all resource-rich countries in which Australian companies are active. But this coverage leaves out many other SSA countries, where activity has also been extensive, or promises to be. Notable instances are Mozambique, Zambia, the DRC and Guinea.

The chief advantage to having a diplomatic post is that it enables Canberra to carry on a dialogue with the SSA government over governance to complement and reinforce the one it is having with multilateral organisations. A post would also enable Australian diplomats to make representations on behalf of individual investors in cases where they were being discriminated against or otherwise treated unfairly or unlawfully.

Trade policy

Should Canberra negotiate BITs — bilateral investment treaties — with SSA countries? (They are also known as IPPAs — investment promotion and protection agreements.) Many investors from other countries rely on the BITs their governments have negotiated with host

country governments to give them guarantees of equal treatment with other investors, compensation for any expropriation, freedom to make income remittances and capital repatriations, and access to independent dispute settlement.

At present, Australia has no BIT with an SSA country. It has 20 BITs, but the closest one to SSA is Egypt. In recent times, Canberra has been negotiating investment chapters in its FTAs. These chapters contain all the investment protections normally found in a BIT, but again no Australian FTA is with SSA.

Before the government would consider entering a BIT with another government, two things would need to happen. Industry would normally have to make representations to the government stating the case for a BIT. And the government would need to be satisfied that the other country was willing to negotiate a high-quality treaty. (Some governments might shy away from a BIT, fearing that it would restrict their freedom to make policy or open the door to a flood of arbitration).

These circumstances hardly make BITs with SSA inevitable, but nor do they rule them out. It is quite conceivable that an African BIT or two could be negotiated over the next few years if the trends we describe in this paper continue.

As an aside, note that even if no BIT with SSA does eventuate, it may still be possible for some dual-listed Australian resource companies to take advantage of the BITs other governments have negotiated. Thus, BHP Billiton and Rio Tinto with their London listings may be able to avail themselves of British BITs; and companies with Toronto listings, Canadian BITs. Both the UK and Canada have numerous BITs with SSA.

Aid policy

Should the government allocate more aid to SSA? What types of aid should it consider?

As a general principle, it is bad public policy to try to use the foreign aid program to advance Australia's commercial interests. Good public policy is about horses for courses — aid policy for relieving development constraints and reducing poverty in poor countries, commercial policy for achieving commercial interests like gaining market access or

'national' (non-discriminatory) treatment of investors. Trying to give the aid program commercial as well as aid objectives risks undermining the program's developmental impact. It mightn't be very effective in achieving commercial objectives, either.

An exception to this rule is where an aid objective might also serve a commercial purpose. Encouraging and helping SSA governments to adopt better governance and anti-corruption programs is one such example of killing two birds with one stone. Better governance and less corruption relieve an important constraint on economic development *and* improve the investment climate for resource investors.

In recognition of this, the government in 2006 donated A\$250,000 in aid money to the EITI.¹⁷¹ It is also encouraging the so-called OECD/NEPAD Investment Initiative, under which the OECD is working with African governments in NEPAD — the New Partnership for African Development — to improve investment climates in their countries.

Could more be done along these lines? The aid agency AusAID is currently reviewing its African aid policy. It anticipates giving a greater focus to the delivery of 'African aid' through multilateral organisations. It believes that forming partnerships with international and regional institutions with an influential voice in Africa will do more to achieve important aid objectives like reaching the Millennium Development Goals than handing out money in bilateral penny packets.¹⁷²

Such a greater multilateral focus should also be of benefit to Australia's commercial interests in the SSA resource sector because it will give Canberra a greater voice in forums encouraging good governance.

A final point to consider is whether, again at the margin, AusAID should hand out more bilateral aid to SSA of the traditional kind that supports development and poverty alleviation. There could be goodwill to be had from such a gesture — goodwill that serves the government well when it comes to talking about Australia's commercial interests. Scope might exist to accommodate a modest and focused increase in African aid while attending to the needs of traditional aid partners, since the aid program is currently being scaled up to reach ½ % of gross national income by 2015 from 0.3 % in 2007-08. This is hardly a new idea: such 'enlightened self-interest' informs the whole aid program.

International organisations

Should Australia's representatives on the IMF and World Bank boards and in the UN, OECD and WTO speak out more during African discussions and matters with an African angle?

They already do urge countries to adopt the EITI and other benchmarks of good governance. And especially on the Fund and Bank boards where there is leverage to do so because of the credit they extend, our directors also speak up on behalf of macroeconomic stabilisation policies and structural, trade, legal and regulatory reform — all things that improve the business and investment climate for resource investors.

Should our representatives seek only to influence African governments in broad terms — to improve economic management and regulation, security, rule of law and the like? Or should they also seek to support individual companies facing corruption, discrimination, unfair competition and arbitrary treatment?

Support for individual companies is more a job for a diplomatic post — with one proviso. Where some act of an SSA government has put an Australian company at a disadvantage, it may be appropriate for the multilateral representative to remind the government concerned what the alternative better policy is — giving every company full and equal access in a competitive market to all licences and contracts; establishing fiscal, legal, regulatory and contractual conditions that are stable, yet responsive to project profitability; establishing terms in line with international norms; adhering to due process etc. The point is that the representative would be urging good policy that is in the country's national interest, not lobbying for a particular company.

A final area worth looking at is the leverage – or influence – that might be exerted on governments playing the New Great Game to scale back their credit and investment subsidies. This might be done in three bodies – the OECD, the WTO and the Berne Union. In each organisation members have taken on commitments not to distort trade by offering subsidised export credits (though in the Berne Union, the commitments are non-binding ones).

- **OECD.** In the OECD, 35 countries are parties to an 'Arrangement on Guidelines for Officially Supported Export Credits' – Australia, Canada, European Union countries, Japan, South Korea, New Zealand, Norway, Switzerland and the United States. The Arrangement places limitations on the terms and conditions of officially supported export credits (eg. minimum interest rates, risk fees and maximum repayment terms) and the provision of tied aid. Pricing one's export credits, credit guarantees and credit insurance below the stipulated minimum rates is a derogation from the Arrangement and must be reported.¹⁷³ The aim of the Arrangement is to have exporters compete on price and quality, not on the credit terms their governments can provide. Except for Korea and perhaps Japan, the countries engaging in strategic competition for SSA resources aren't parties to the Arrangement. Nevertheless, under an outreach program the OECD is trying to bring non-OECD export credit providers into the Arrangement. In July, it signed a pact with Brazil to limit government support for export deals involving civil aircraft – Brazil being a major exporter of such aircraft.¹⁷⁴
- **WTO.** The WTO Agreement on Subsidies and Countervailing Measures contains a broad prohibition on the use of export subsidies, including provision of export credit at below-market rates. Under the agreement, a country can use the WTO's dispute settlement procedure to seek withdrawal of a subsidy or removal of its adverse effects. Or the country can launch its own investigation and ultimately charge extra duty ('countervailing duty') on subsidised imports found to be hurting domestic producers.¹⁷⁵
- **Berne Union.** The Berne Union recently agreed a series of Guiding Principles setting out values common to its members. Though non-binding and somewhat vague, the principles do urge careful risk management, sound business practice, cost recovery and transparency – the antithesis of the way the New Great

Game is played. Moreover, the Berne Union, unlike the OECD, includes many of the official ECAs that subsidise export credit.

Success in persuading governments to limit their subsidies won't come easy given the seeming determination of certain governments to use such subsidies as a lever to secure mineral and petroleum concessions. Then again, there could be the occasional breakthrough, as the agreement between Brazil and the OECD over civil aircraft noted above illustrates. And because such successes can pay big dividends, a review of this area of policy does seem warranted.

Conclusions

Australian resource companies aren't innocents abroad when it comes to handling political risk. They have been investing in challenging countries for decades before the SSA resource boom came along — in countries like Indonesia, the Philippines, Papua New Guinea and the Solomon Islands. Over that time they have sustained their fair share of losses and gained the experience that comes with that.

Still, in SSA they are likely to encounter some risks they are unaccustomed to. Competition from state-owned and state-directed companies that have the exchequers and diplomatic clout of their governments behind them is one. This risk is largely unmanageable and uninsurable.

The cluster of issues that greets 'good companies in bad countries' — political violence, corruption, human rights abuses and intense public scrutiny — is another. These risks — often summed up as 'reputational risk' — are not confined to the subcontinent, but are prevalent there.

So far, no Australian company has suffered a political risk-related loss of the order of the Bougainville mine closure in Papua New Guinea in 1989. But such a loss is thinkable. Embedding CSR practices and political risk assessment into company policies, and taking out PRI to cover catastrophic loss, are arguably the best precautions companies can take against such large losses.

Above all, negotiate fair agreements with the host country government and the local community.

As for public policy, all the policy options outlined above need careful examination. All entail drawbacks as well as advantages. Even if no drawbacks are obvious, there is always the opportunity cost of the resources deployed. For instance, negotiators redeployed to negotiating BITs can't be used in multilateral or bilateral trade talks. Still, it would seem to be worth examining the trade-offs to see if there are any big results to be gained in Africa at the expense of less important goals elsewhere.

Boiling it all down, the message to resource companies is: be a good corporate citizen and a serious political risk assessor. Consider PRI to cover possible catastrophic loss.

For the government? Companies have to take the risks they face more or less as given, whereas governments have some scope to influence the risk environment for the better.

How? Through greater political and diplomatic support for companies facing specific problems on the subcontinent; and through BITs, targeted bilateral aid, and stronger advocacy for good African governance in multilateral organisations. All of these initiatives can, at least at the margin, foster better investment climates and fairer deals for individual investors.

Then there are a set of initiatives the government might consider to elicit better behaviour from state-backed companies able to compete unfairly for concessions and contracts. These initiatives are essentially about persuading governments to sign up to international rules and principles limiting credit and investment subsidies (and if that doesn't work, there is the alternative to consider: challenging some of the subsidies in the WTO).

Appendix 1

Sub-Saharan Africa's resource potential

Although Africa is currently enjoying strong demand for mineral and petroleum exports and an influx of investment, this wasn't always so: the SSA resource sector has had a troubled history and has suffered relative decline over the last two decades. As a result, its share of current worldwide production is modest and, for most mineral commodities at least, sharply lower than what it was four decades ago. Too frequently, SSA countries have failed to translate resource riches into higher production and durable economic growth.

This appendix elaborates upon three aspects of the region's resource potential

- Extensive mineral and oil endowments
- Modest-declining shares of world mineral production until recently, though with some prospect of a pick-up
- Resource dependence.

Extensive mineral and oil endowments

SSA is richly endowed with minerals, ranking first or second for reserves of minerals such as diamonds, bauxite, gold and cobalt.¹⁷⁶

The subcontinent also has a substantial share of the world's proven petroleum reserves¹⁷⁷ (Table A1.1).

Table A1.1: Africa's resource wealth

Resource	Africa's share (% of world reserves)	Main countries
Platinum	88	South Africa
Diamonds	56	DRC, South Africa, Botswana
Cobalt	41	DRC, Zambia
Gold	40	South Africa
Bauxite	27	Guinea
Iron ore	15*	South Africa, Mauritania, Guinea, Liberia
Oil	10	Nigeria, Libya

Source: US Geological Survey; Department of Minerals and Energy (South Africa); BP Statistical Review of World Energy. * Based on figures compiled by MBendi (excludes South Africa) and reported by the African Iron and Steel Association.¹⁷⁸

SSA's significant mineral deposits are clustered in central and southern regions, with the DRC, Botswana, South Africa and Zambia standing out (Table A1.1). The Kasai diamond belt in the DRC alone is estimated to have around 27% of the world's diamonds and the country's Katanga province more than one-third of the world's cobalt.¹⁷⁹ South Africa is estimated to have around 40% of the world's gold and almost all the world's platinum reserves.¹⁸⁰ Outside these superstars, Africa also has significant reserves of copper, uranium, iron ore, nickel and manganese.

Sizeable oil deposits occur in the Gulf of Guinea, with Nigeria claiming the largest reserves, followed by Angola, Equatorial Guinea and Gabon (Table A1.1). Smaller, but still significant, oil deposits exist in countries such as Sudan. East Africa is believed to have substantial reserves of recoverable oil, although they remain highly speculative. Nigeria has sizeable proven reserves of natural gas.¹⁸¹

Modest international market shares

Although the SSA resource base may be rich and large, production lags badly. In minerals, apart from two standout examples, cobalt and diamonds, SSA's share of world production is modest (Table A1.2). Even for cobalt and diamonds, the sub-continent's share of world production has been trending down, especially in the last 10-15 years.¹⁸²

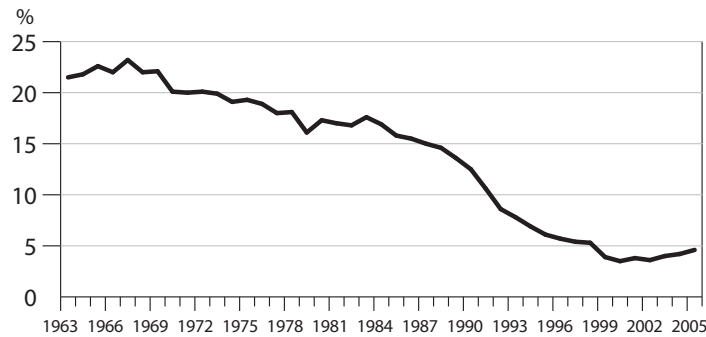
Table A1.2: Africa's Share of Global Production, 2005

Resource	Share (% world production)	General trend (1963-2005)
Diamonds	52	Down
Cobalt	59	Down
Copper	5	Down
Gold	22	Down
Oil	7	Up
Composite ¹	7	Down ²

Source: British Geological Survey.¹ Un-weighted average share of output of six metals (gold, copper, zinc, iron ore, nickel, lead) from World Bank (2006)² 1990-2005

The decline in SSA's share of world production is most pronounced in copper, where it has fallen sharply since the early 1960s (Figure A1.1). These days, Chilean mines are the No. 1 suppliers, producing more than a third of world output.¹⁸³

Figure A1.1
Africa's share of world copper production



Source: British Geological Survey

This wasn't always so. In the mid-1960s, two African countries — Zambia and the then Belgian Congo (renamed Zaire in 1965 and now the DRC) produced 20% of the world's copper. In 1965, Zambia was among the world's largest producers of copper ore, accounting for around 14%¹⁸⁴ of the world's output, most of it from the rich ore belt in the country's north. The DRC was also a substantial copper producer, with a world output share of 6%. Copper production in both countries, however, was severely damaged through a combination of statist economic policies, corruption, and in the DRC, civil war.

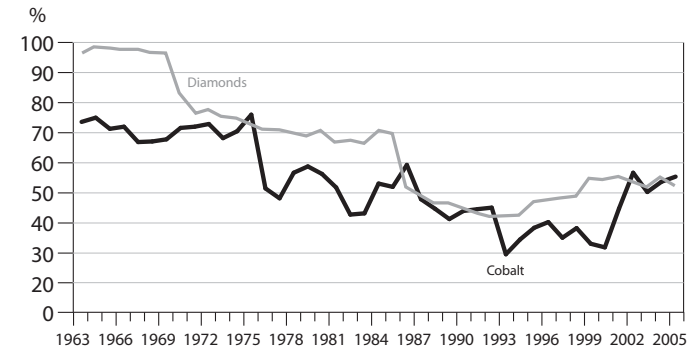
The slight uptick in Africa's share of world copper production since 2000 largely reflects the recovery in Zambia's copper industry. After several abortive attempts, the country's copper industry was opened up to foreign involvement, resulting in substantial inflows.

SSA's declining share of world gold production is almost entirely due to falling production in South Africa, the sub-continent's largest producer since the early 1960s and also the world's largest gold producer. In recent years, South African gold miners have curtailed expansion plans and closed some mines in the face of rising production costs and a stronger exchange rate.

Diamonds and cobalt are two exceptions to the typical modesty of Africa's world production share. After dropping steadily from the mid-

1960s, Africa's share of diamond and cobalt production recovered in the early to mid-1990s. By 2005, Africa was producing around 55% of the world's cobalt and around 52% of the world's diamonds.

Figure A1.2
Africa's share of world diamond and cobalt production



Source: British Geological Survey

The cobalt recovery is largely due to a substantial increase in DRC production since 2001 on the back of improving security and the entry of foreign mining companies. As impressive as this recovery is, however, it only takes Africa's share back to where it was in the mid-1980s. The current share is a far cry from the virtual dominance through the 1960s and early 1970s.

The diamond recovery comes from expanding production in Botswana and an easing of the government's direct control over diamond mining and export in the DRC.¹⁸⁵ Again, while impressive, the recovery has only brought Africa's world share back to its 1986 level.

Resource dependence

In many African countries, mining and oil production is often the main source of export earnings or fiscal revenues. Even in those countries lacking a substantial formal sector, income from the informal, or artisanal, sector supports a significant proportion of the population.¹⁸⁶

Some countries, such as Sierra Leone, and Guinea (and further north, Algeria), earn almost all of their export income from energy or minerals (Table A1.3). Even in South Africa, the continent's largest and most diversified economy, minerals are a substantial source of export earnings.

Table A1.3: Resource export earnings, selected countries, 2000-2005

Resource export share (% total goods export values)	Countries	Main resource exports
80 % or more	Algeria Libya Sierra Leone Botswana Republic of Congo Gabon Guinea Equatorial Guinea Chad	Petroleum Petroleum Diamonds Diamonds, copper, nickel Oil Petroleum, manganese Bauxite, alumina, gold, diamonds Petroleum Petroleum
50 % -80 %	Mauritania Namibia Zambia DRC	Iron ore Diamonds, uranium, gold, zinc Copper, cobalt Diamonds, cobalt, copper
Less than 50 %	South Africa Ghana Cameroon	Gold, diamonds Gold Petroleum

Source: IMF

In some countries, mining and petroleum are the chief sources of government revenue (Table A1.4).

Table A1.4: Resource share in government revenues, selected countries, 2000-2005

Resource share of fiscal revenues (% total fiscal revenue)	Countries
80 % or more	Libya Equatorial Guinea Angola
50 % -80 %	Gabon Nigeria Botswana Algeria
10% -50 %	Guinea Cameroon Chad
Less than 10 %	Namibia

Source: IMF (2007)

Appendix 2

Benchmarking Sub-Saharan Africa's investment climates

Africa is a continent, not a country. Resource investors face a patchwork of economic and political risks, with substantial variation both across and within countries.

This appendix compares risk in 20 resource-rich African countries, as well as five competing resource investment destinations outside Africa — Indonesia, Mongolia, Papua New Guinea, Russia and Venezuela. ('Resource-rich' countries are ones in Tables 1 (hydrocarbon-rich) and 2 (mineral-rich) in Appendix 1 of the IMF's Guide on Resource Revenue Transparency.)

The comparison shows:

- Most resource-rich African countries have low levels of economic and social development. Although some countries might appear to be 'middle-income' based on per capita GDP — for example, Gabon and Equatorial Guinea — they typically have wide income and wealth inequalities and low Human Development Index (HDI) scores. The HDI combines measures of four things — life expectancy, adult literacy, school/university enrolment and per capita GDP. See Table A2.1.

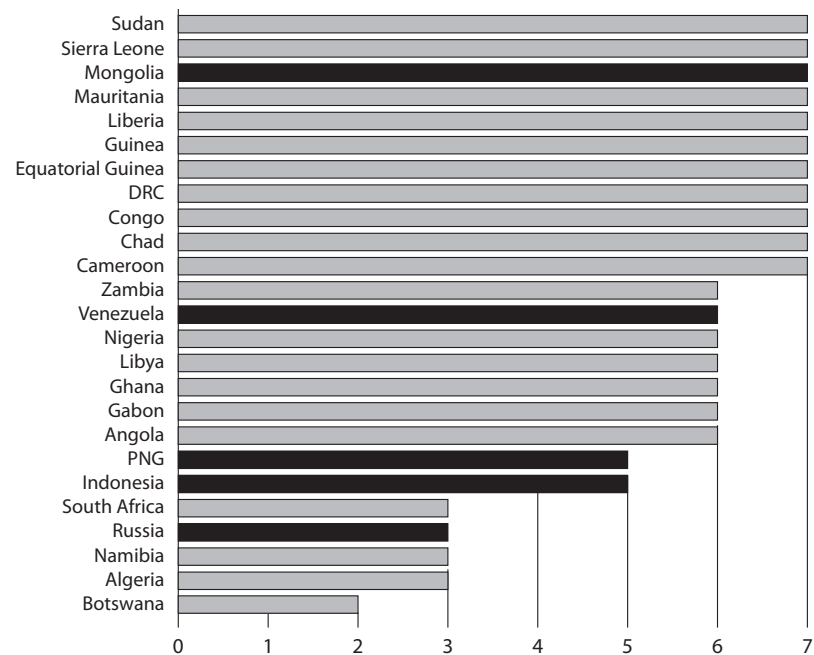
- Country risk ratings suggest that many resource-rich African countries are at high risk of external and sovereign debt default. The OECD rates many countries in the region as either six or seven out of seven for default risk, the lowest category. Only 20 African countries are covered by the ratings agencies — Botswana, Namibia and South Africa are rated investment grade while the rest tend to be assigned speculative grades. See Figure A2.1 and Table A2.2.
- World Bank governance indicators show that the governance framework of most resource-rich African countries is severely backward by international standards. However, South Africa, Botswana, Namibia and Ghana tend to have percentile rankings on each of the six aspects (voice and accountability, political stability/absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption) much higher than their regional counterparts, sometimes putting them in the top 50% of countries worldwide. See Figures A2.2.1–A2.2.6.
- Resource-rich African countries tend to perform relatively poorly on most respected indicators of perceived corruption. See Figure A2.3.
- Sixteen African countries are EITI candidates. See Table A2.3.
- Zambia, Botswana, Namibia and Ghana rank highly on the Fraser Institute’s mineral and policy potential indexes. Note, however, that the survey was probably completed before the announcement of significant changes to Zambia’s mining taxation regime in January, which have worsened the investment climate. See Figure A2.4.

Table A2.1: Economic and social indicators

	GDP (US\$b, current prices)	GDP (per capita US\$, current prices)	HDI Rank (2005)
Russia	984.9	6,897	67
Indonesia	364.2	1,640	107
South Africa	255.3	5,376	121
Venezuela	181.6	6,736	74
UAE	163.3	38,613	39
Nigeria	116.5	777	158
Algeria	113.9	3,400	104
Libya	50.4	8,449	56
Angola	45.2	2,847	162
Sudan	37.4	1,034	147
Cameroon	18.3	999	144
Ghana	12.9	602	135
Zambia	10.9	921	165
Botswana	10.6	6,756	124
Gabon	9.6	6,835	119
Equatorial Guinea	8.6	7,319	127
DRC	8.5	144	168
Congo	7.7	2,227	139
Chad	6.4	687	170
Namibia	6.3	3,085	125
PNG	5.6	945	145
Mongolia	3.2	1,217	114
Guinea	3.1	329	160
Mauritania	2.7	938	137
Sierra Leone	1.4	254	177
Liberia	0.6	172	–

Source: IMF World Economic Outlook Database (September 2007) and UNDP

Figure A2.1
OECD country risk grades



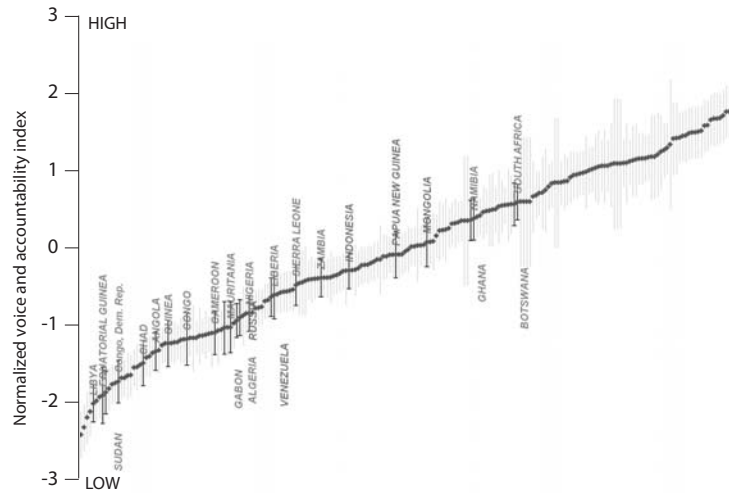
Source: OECD. Current at 16 May 2008.

Table A2.2: Sovereign credit ratings

	S&P	Moody's	Fitch
Algeria	-	-	-
Angola	-	-	-
Botswana	A	A2	-
Cameroon	B	-	B
Chad	-	-	-
Congo	-	-	-
DRC	-	-	-
Equatorial Guinea	-	-	-
Gabon	-	-	BB-
Ghana	B+	-	B+
Guinea	-	-	-
Indonesia	BB-	Ba3	BB-
Liberia	-	-	-
Libya	-	-	-
Mauritania	-	-	-
Mongolia	BB-	-	B+
Namibia	-	-	BBB-
Nigeria	BB-	-	BB-
PNG	B+	B1	B+
Russia	BBB+	Baa2	BBB+
Sierra Leone	-	-	-
South Africa	BBB+	Baa1	BBB+
Sudan	-	-	-
Venezuela	BB-	-	BB-
Zambia	-	-	-

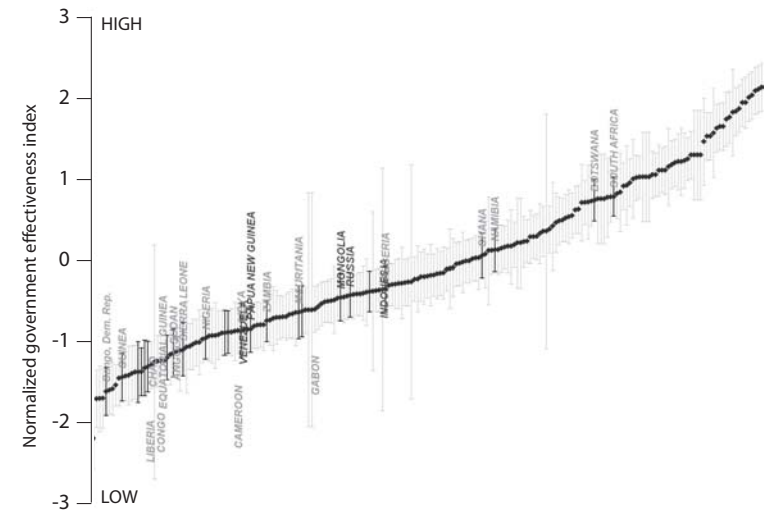
Source: Standard and Poor's, Moody's and Fitch. Note: Current at 1 May 2008

Figure A2.2.1
Voice and accountability



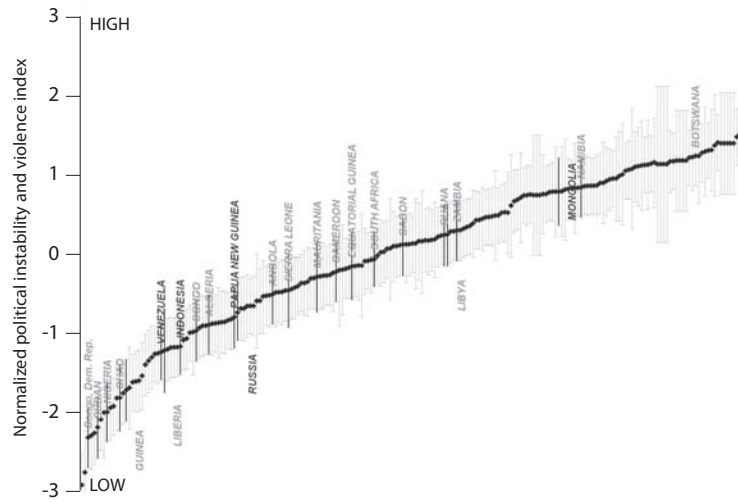
Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo

Figure A2.2.3
Government effectiveness



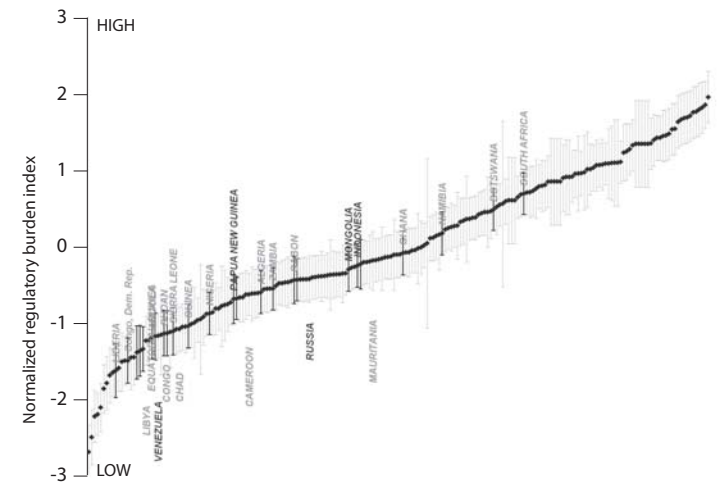
Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo.

Figure A2.2.2
Political stability and absence of violence



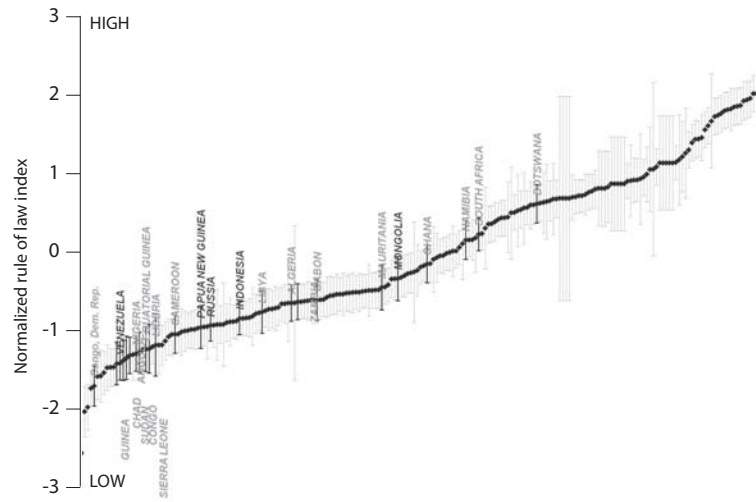
Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo.

Figure A2.2.4
Regulatory quality



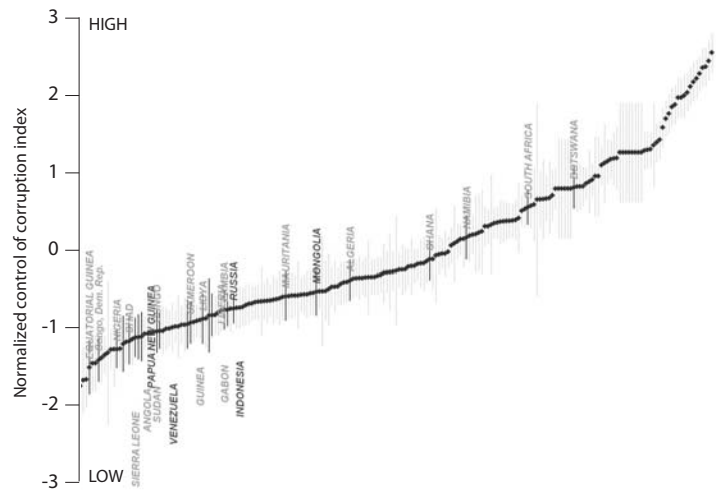
Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo.

Figure A2.2.5
Rule of law



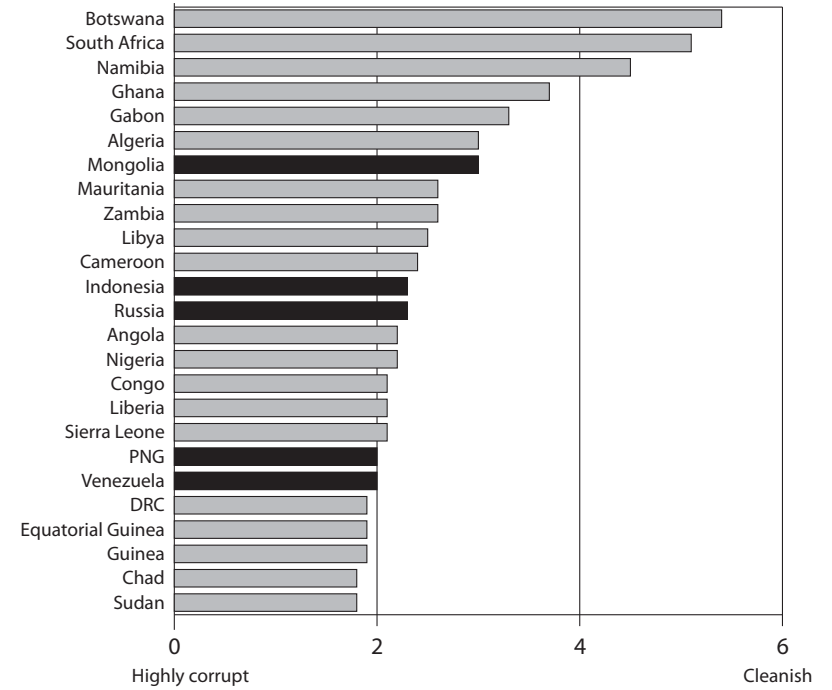
Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo.

Figure A2.2.6
Control of corruption



Source: "Governance Matters VI: Governance Indicators for 1996-2006" by Daniel Kaufmann, Aart Kraay and Massimo.

Figure A2.3
Transparency International corruption perceptions index



Source: Transparency International

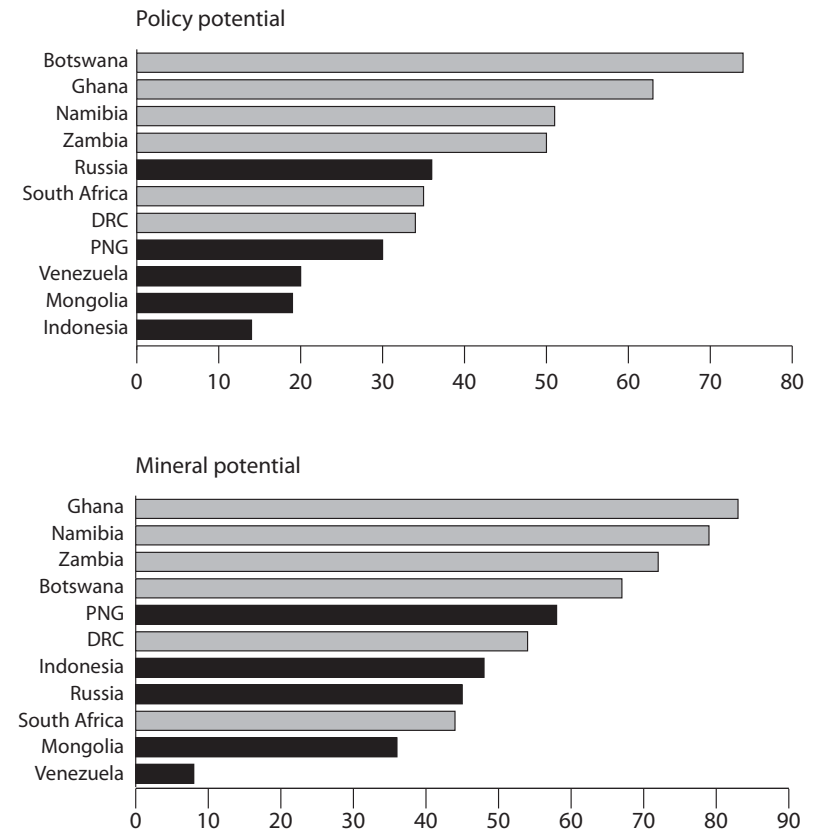
Note: The Corruption Perceptions Index is a composite index of 12 surveys implemented by international bodies and institutions. The scale ranges from 0 to 10 (highly corrupt to highly clean) but has been truncated to 6 here for presentational convenience. Data are for 2007.

Table A2.3: EITI status

Candidate countries	
African	Other
Cameroon	Azerbaijan
Congo (Rep)	Kazakhstan
DRC	Kyrgyzstan
Cote D'Ivoire	Mongolia
Equatorial Guinea	Peru
Gabon	Timor-Leste
Ghana	Yemen
Guinea	
Liberia	
Madagascar	
Mali	
Mauritania	
Niger	
Nigeria	
Sao Tome and Principe	
Sierra Leone	

Source: EITI Secretariat. Current at 16 May 2008

Figure A2.4
Fraser Institute indexes



Source: Fraser Institute. Data are for 2007/2008.

Notes

- ¹ Malcolm Maiden, Internet reveals the risk of doing business in Africa, 12 June 2008: www.businessday.com.au.
- ² Ausdrill Limited, financial year ending 30 June 2007.
- ³ Abdoulaye Bio-Tchané and Benedicte Vibe Christensen, Right Time: Africa needs to build on its recent success to catch up. *Finance & Development*, December 2006. p 8.
- ⁴ IMF World Economic Outlook Update, 29 January 2008: www.imf.org.
- ⁵ Although the International Rescue Committee estimates that as many as 45,000 Congolese continue to die every month mainly due to non-violent causes such as malaria, diarrhoea, pneumonia and malnutrition. See www.theirc.org.
- ⁶ West Africa: Islamic political influence may be waning. *Oxford Analytica*, 4 May 2007. Mauritania has been the AQIM's latest target. In December 2007 it killed four French tourists and in January sprayed the Israeli embassy in Nouakchott with machine gun fire.
- ⁷ US/Africa: Terror policy strains other strategic goals. *Oxford Analytica*, 7 August 2007.
- ⁸ www.freedomhouse.org.
- ⁹ World Bank governance indicators: info.worldbank.org/governance.
- ¹⁰ Debt Relief under the Heavily Indebted Poor Countries (HIPC) Initiative — A Factsheet, International Monetary Fund, Washington DC, April 2007.
- ¹¹ Actually, the three investment-grade countries gained their ratings before the State Department and UN Development Program initiatives South

- Africa in 1994, Mauritius in 1996 and Botswana in 2001.
- ¹² Carolyn Cohn, Sovereign bonds at risk of floundering. *Arabian Business*, 12 December 2007: www.arabianbusiness.com.
- ¹³ How IDA resources are allocated. World Bank, Washington DC: web.worldbank.org.
- ¹⁴ See Foreword, IMF world economic outlook. October 2007: www.imf.org. Even when GDP is calculated at market prices — less flattering for emerging markets — China makes the largest contribution to world growth. Its contribution is 17%, compared with America, 14%.
- ¹⁵ World Bank, The outlook for metals markets, Discussion paper prepared for G20 Deputies Meeting. Sydney, September 2006. p ii.
- ¹⁶ Ibid. p iii.
- ¹⁷ Ken Henry, Address to Australian business economists. Sydney, 16 May 2006: www.treasury.gov.au.
- ¹⁸ The increase in government, enterprise and household saving is in turn related to factors such as rising government capital transfers to state enterprises, rising profits and retained earnings in restructured state enterprises, a growing number of profitable private companies, demographic transition, declining social welfare, lack of household credit, and capital controls. See Louis Kuijs, How will China's saving-investment balance evolve? World Bank Policy Research Working Paper 3958. July 2006.
- ¹⁹ Raghuram Rajan advances several other interesting, if more speculative, reasons for the investment drought. See Is there a global shortage of fixed assets? Speech to G30 meeting, New York. 1 December 2006: www.imf.org.
- ²⁰ Australian exporters to develop Africa's largest open pit copper mine. Press release, Export Finance and Insurance Corporation, 4 December 2006: www.efic.gov.au.
- ²¹ Jason Kerr, Investment in African oil and gas gathers pace. 29 September 2006: www.whiteandcase.com.
- ²² IMF, Global financial stability report April 2008. p 18.
- ²³ Francesco Guerrera and Jennifer Hughes, World's top banks call for rules on write-downs to be relaxed. *Financial Times* 22 May 2008.
- ²⁴ Ibid.
- ²⁵ Numbers are based on discussions between authors and market participants.

- ²⁶ Judith Mosely, (Societe Generale), 'Mining finance – credit crunch? Mines & Money Conference. London, 21 November 2007.
- ²⁷ IMF, Global financial stability report, April 2008. p10.
- ²⁸ Ibid. p 34.
- ²⁹ See, for instance, Michael Vaughan, Hard times, but explorers tap a few deep pockets. *Australian Financial Review*, 28 March 2008.
- ³⁰ See for instance, Raghuram Rajan, The great game again? *Finance & Development*, December 2006. pp 54-55.
- ³¹ For China, another motive seems to be persuading Africa's large voting bloc in multilateral organisations such as the UN to support Chinese positions.
- ³² World Bank, *IDA interim strategy note for the Republic of Angola*. Report No. 39394-A0, World Bank, Washington DC, 26 April 2007; Indira Campos and Alex Vines, *Angola and China: A pragmatic partnership*. Working Paper Presented at a CSIS Conference, Prospects for Improving U.S.-China-Africa Cooperation, December 5, 2007; *Africa Research Bulletin*, Vol. 44 Issue 10. pp 17585A-17586A. December 2007; E Pan, China, Africa, and oil. Council on Foreign Relations, New York, 26 January 2007; David H Shinn, China's approach to east, north and the horn of Africa, testimony before the U.S.-China economic and security review commission, China's global influence: objectives and strategies, Dirksen Senate Office Building, 21 July 2005.
- ³³ Erica S Downs, The fact and fiction of Sino-African energy relations. *China Security*, Vol. 3 No. 3 Summer 2007. p 53.
- ³⁴ William Wallis, Congo details China venture. *Financial Times*, 10 May 2008.
- ³⁵ Matthew Green and Richard McGregor, China in \$50bn move to woo Nigeria. *Financial Times*, 2 April 2008; Matthew Green, China oils Nigeria talks with loan. *Financial Times*, 21 April 2008.
- ³⁶ Richard McGregor, Sino-African summit ends with swipe at critics. *Financial Times*, 5 November 2006; Javier Blas and Matthew Green, Feeding an insatiable appetite. *Financial Times*, 24 January 2008.
- ³⁷ India/Africa: Policy shortcomings undermine potential. *Oxford Analytica*, 6 May 2008: www.oxan.com.
- ³⁸ SR Rao, Eximbank: Partner in Africa's Development, OECD, Paris, 16-17 March 2006: www.oecd.org.
- ³⁹ India/Africa: Delhi moves to boost status in Africa. *Oxford Analytica*, 28 June 2007, www.oxan.com.

- ⁴⁰ Africa: Gulf investment mainly reflects commercial aim. *Oxford Analytica*, 4 January 2008: www.oxan.com.
- ⁴¹ South Korea: Resource diplomacy can only intensify. *Oxford Analytica*, 19 March 2008: www.oxan.com
- ⁴² Brazil: Outward FDI reaches record highs, *Oxford Analytica*, 2 November 2007: www.oxan.com.
- ⁴³ Angola: Brazil Prepare [sic] One Billion Dollar Accord, Angola Press Agency, Luanda, 17 October 2007: www.unpan.org.
- ⁴⁴ UNCTAD, World Investment Report 2007. p 231: www.unctad.org.
- ⁴⁵ www.petronas.com.
- ⁴⁶ Malaysia: Overseas expansion key to Petronas success. *Oxford Analytica*, 24 October 2003: www.oxan.com.
- ⁴⁷ www.gazprom.com.
- ⁴⁸ Dino Mahtani, Gazprom Nigeria move bodes ill for the west. *Financial Times*, 6 January 2008.
- ⁴⁹ David Pilling, Tokyo shows mettle in the race for Africa's ore. *Financial Times*, 22 May 2008.
- ⁵⁰ Downs, op cit.
- ⁵¹ Mikkal E Herberg, The rise of Asia's national oil companies. NBR Special Report No. 14 December 2007: www.nbr.org.
- ⁵² Downs, op cit. p 48.
- ⁵³ Ibid. p 51.
- ⁵⁴ A Lorenz and T Thielke, The age of the dragon: China's conquest of Africa. *Spiegel Online* 2007: www.spiegel.de.
- ⁵⁵ Downs, op cit. p 51.
- ⁵⁶ Herberg, op cit. p 4.
- ⁵⁷ Herberg, *ibid.* p 4.
- ⁵⁸ Ibid.
- ⁵⁹ J Peter Pham, Mr. Bush goes to Africa. *World Defense Review*, 22 May 2008: worlddefensereview.com.
- ⁶⁰ Damian Ondo Mañe, Emergence of the Gulf of Guinea in the global economy: prospects and challenges. IMF Working Paper WP/05/235, December 2005: www.imf.org.
- ⁶¹ Bush, The farewell tour. *Africa Confidential*, Vol. 49 No. 5, 29 February 2008.

- ⁶² France/Africa: Paris shifts Africa policy priorities. *Oxford Analytica*, 25 August 2006: www.oxan.com.
- ⁶³ NCTAD, *World investment report 2007*. United Nations, Geneva and New York, 2007. pp 40-42.
- ⁶⁴ BP, *Statistical review of world energy*. 2007. p 8.
- ⁶⁵ International Energy Agency, *World energy outlook*. Paris, 2006. pp 321-325.
- ⁶⁶ International Energy Agency, *World energy outlook*. Paris, 2006. pp 331-332.
- ⁶⁷ UNCTAD, *World investment report 2007*. United Nations, Geneva and New York, 2007. pp 42, 263-264.
- ⁶⁸ Metals Economics Group, *World exploration trends*. PDAC, Toronto, 2006.
- ⁶⁹ US Geological Survey, *Mineral commodity summaries*, various years.
- ⁷⁰ BHP, *Quarterly report on exploration and development activities*. 24 July 2007.
- ⁷¹ Rio Tinto, *Rio Tinto exploration in Africa*. Mining Indaba 2007, Cape Town, 6 February: www.riotinto.com/media/speeches_5170.asp.
- ⁷² A Stablum, Money trail leads to the lodes of Africa. *The Sydney Morning Herald*, 23 October 2007.
- ⁷³ Rio Tinto, *Rio Tinto in Africa — a long history and a strong future*. Mining Indaba 2008, Cape Town, 5 February: www.riotinto.com/medi/speeches_7115.asp.
- ⁷⁴ However, there is considerable uncertainty about Africo's project plans as their ownership of the Kalukundi asset has been disputed. Updated information about the dispute can be found on Africo's website: www.africoresources.com/.
- ⁷⁵ Arcelor Mittal press release, 11 December 2006: www.arcelormittal.com/index.php?lang=en&page=49&tb0=30&tblng=1; Dino Mahtani, Arcelor Mittal project approved. *Financial Times*, 1 May 2007.
- ⁷⁶ BHP Billiton, Sangaredi refinery project briefing paper: www.bhpbilliton.com/bbContentRepository/bhpbSangarediRefineryBriefingPaper.pdf.
- ⁷⁷ Rebecca Bream, Rio looks to China to develop Africa mine. *Financial Times*, 15 May 2008.
- ⁷⁸ Barry FitzGerald, Guinea shakes up Río's claim to Simandou mine, smh.com.au, 12 June 2008.
- ⁷⁹ UNCTAD, *World investment report 2007*, United Nations, Geneva and New York, 2007. pp 99-128.

- ⁸⁰ Bureau of Economic Analysis, U.S. direct investment position abroad on a historical-cost basis, 2000-2006. Washington DC, 2006.
- ⁸¹ *ibid.*
- ⁸² A Lemieux, Canada's global mining presence, Canadian minerals yearbook 2005. Natural Resources Canada, Ottawa, 2005. p 7.15.
- ⁸³ Financial statements in 2007 annual reports for BHP Billiton and Rio Tinto.
- ⁸⁴ The analysis of South Africa's outward investment is further complicated by the dual listing of South African-headquartered companies. For example, Anglo American is listed on the London Stock Exchange.
- ⁸⁵ UNCTAD, *FDI in least developed countries at a glance: 2005/2006*. United Nations, Geneva and New York, 2006. p 92; S Page and D Willem te Velde, *FDI by African countries*,. Paper prepared for UNCTAD meeting on FDI in Africa, 22-24 November 2004, Addis Ababa. pp 22-26.
- ⁸⁶ UNCTAD, *Case study on outward foreign direct investment by South African enterprises*. Expert meeting on enhancing the productive capacity of developing country firms through internationalisation, 5-7 December 2005, Geneva. pp 4-6; L Thomas, *Foreign investment and regional integration in Southern Africa*. Presentation prepared for: How to decrease debt costs in Southern Africa, Johannesburg, 25-26 March 2004.
- ⁸⁷ UNCTAD, *World Investment Directory, Volume X, Africa*. United Nations, Geneva and New York, 2008. pp 13-20.
- ⁸⁸ UNCTAD, *Asian foreign direct investment in Africa*. United Nations, Geneva and New York, 2007. pp 51-65; Erica S Downs, The fact and fiction of Sino-African energy relations. *China Security*, Vol. 3 No. 3, Summer 2007. p 43.
- ⁸⁹ UNCTAD, *Asian foreign direct investment in Africa*. United Nations, Geneva and New York, 2007. pp15-21.
- ⁹⁰ UNCTAD, *World investment report 2006*. United Nations, Geneva and New York, 2006. p 43.
- ⁹¹ Erica S Downs, The fact and fiction of Sino-African energy relations. *China Security*, Vol. 3 No. 3, Summer 2007. pp 43-45.
- ⁹² *ibid.*
- ⁹³ Harry Broadman, Connecting Africa and Asia. *Finance and Development*, Vol. 44 No. 2, 2007.
- ⁹⁴ Some estimates are as high as US\$16 billion. Since no official figures are published, all estimates should be treated as 'back of the envelope'.

- ⁹⁵ Princeton N Lyman, *China's Rising Role in Africa*. Presentation to the US-China Commission, July 21, 2005: www.cfr.org/publication/8436/.
- ⁹⁶ UNCTAD, *World investment report 2006*. United Nations, Geneva and New York, 2006. p 43.
- ⁹⁷ A Russel, India plays down race for Africa's assets. *Financial Times*, 6 June 2007; Harry Broadman, Connecting Africa and Asia. *Finance and Development*, Vol. 44 No. 2, 2007; UNCTAD, *Transnational corporations, extractive industries and development: implications for policies*. Expert meeting on FDI in natural resources, Geneva, United Nations, 2006.
- ⁹⁸ Arcelor Mittal press release, 11 December 2006: www.arcelormittal.com/index.php?lang=en&page=49&tb0=30&tblng=1; Dino Mahtani, Arcelor Mittal project approved. *Financial Times*, 1 May 2007.
- ⁹⁹ P Garvey, Iron ore groups raise sights all the way to Africa. *The Australian Financial Review*, 1 October 2007.
- ¹⁰⁰ S Thomsen, *Foreign direct investment in Africa: the private sector response to improved governance*. Briefing Paper IEP BP 05/06, International Economics Program, Chatham House, 2005.
- ¹⁰¹ Data under the Africa not elsewhere specified category has not been published by the ABS since the 2001-02 financial year.
- ¹⁰² *Africa Research Bulletin*, 16 November 2006.
- ¹⁰³ This estimate does not include companies that have African interests but do not separately identify these interests. It also excludes companies, such as engineering firms, which may generate significant revenues from African activities but do not have any physical African assets. It also excludes the large number of private, typically SME, companies operating in Africa.
- ¹⁰⁴ For an overview of Woodside's international exploration interests see: [www.woodside.com.au/Our + Business/Exploration/International.htm](http://www.woodside.com.au/Our+Business/Exploration/International.htm).
- ¹⁰⁵ Financial Statements in 2007 annual report for BHP Billiton.
- ¹⁰⁶ Financial Statements in 2007 annual report for Rio Tinto.
- ¹⁰⁷ UNCTAD, *FDI in least developed countries at a glance: 2005/2006*. United Nations Geneva and New York, 2006. pp 90-91.
- ¹⁰⁸ Tata Steel signs JV with Riversdale Mining for Mozambique Coal Project. 30 November 2007: www.tata.com.
- ¹⁰⁹ The estimate was published in an Austrade press release ahead of the 2007 mining Indaba conference in Cape Town. See: www.austrade.gov.au/Austr

- alia-digs-into-African-mining-boom/default.aspx, 1 February 2008.
- ¹¹⁰ Mining companies in the material sector are grouped with companies like Boral and Paperlinx.
- ¹¹¹ HLB Mann Judd, IPO watch: *The market for emerging companies*, January 2007.
- ¹¹² AIM, *Market statistics*. April 2001: www.londonstockexchange.com/NR/rdonlyres/7CC61494-1275-47B5-84B1-FDF4F295BE73/0/32.pdf.
- ¹¹³ TSX, Toronto stock exchange and TSX venture exchange: A global resource for capital, 2007. Company websites.
- ¹¹⁴ AIM, *Market statistics*, December 2006: www.londonstockexchange.com/NR/rdonlyres/B7A0DF24-36E9-4EC3-AF89-9FE36AC8BCC8/0/Aimfs0612.pdf.
- ¹¹⁵ AIM, *Market statistics*, January-December 2006: www.londonstockexchange.com/en-gb/about/statistics/factsheets/aimmarketstats.htm; company websites.
- ¹¹⁶ First Quantum Minerals has now graduated to the main board of the London Stock Exchange.
- ¹¹⁷ D Lagace, *Canadian mining sector presence in Africa*. Presentation at Canada Africa Mining Procurement Seminar, Natural Resources Canada, Ottawa, 2 May 2007.
- ¹¹⁸ Authors' calculation based on main activity of ASX-listed companies in energy and materials industry category active in Africa as summarised in Aspect Huntley's ASX annual reports database.
- ¹¹⁹ Rio Tinto, *Rio Tinto in Africa — a long history and a strong future*. Mining Indaba 2008, Cape Town, 5 February: www.riotinto.com/medi/speeches_7115.asp.
- ¹²⁰ The World Bank makes this statement about metal supply, but it seems also apt for energy. See World Bank, *The outlook for metals markets*. Discussion Paper Prepared for G20 Deputies Meeting, Sydney, September 2006. p iii.
- ¹²¹ Andrew Trounson, No recession in sight for busy mineral exporters. *The Australian*, 24 January 2008.
- ¹²² Asian Development Bank, Japan Bank for International Cooperation and World Bank, *Connecting East Asia: a new framework for infrastructure*, 2005: web.worldbank.org.
- ¹²³ Roger Donnelly, The next Asian boom. *Business Review Weekly*, 13 September 2007.

- ¹²⁴ Thailand plans to spend \$50-56 bln on mega projects, Reuters, 13 May 2008: www.guardian.co.uk
- ¹²⁵ Kuijs, op cit.
- ¹²⁶ Rajan, op cit. p 55.
- ¹²⁷ Africa: Gulf investment mainly reflects commercial aim. *Oxford Analytica*, 4 January 2008: www.oxan.com. Even though this investment might be chiefly commercial, it may still have implications for Australian resource companies that differ from the implications posed by private western investors. For instance, state-owned enterprises might use their considerable diplomatic clout to secure resource concessions – a strategy unavailable to private western investors. This is discussed further later in Chapter 5.
- ¹²⁸ World Bank, *Global development finance*. Vol. 1, 2006. p 108.
- ¹²⁹ OPIC has paid only one other claim in the African mining and petroleum sector — in 1976, US\$60,620 to Caltex for currency inconvertibility in Southern Rhodesia (now Zimbabwe). See: www.opic.gov/insurance/claims/index.asp for more detail.
- ¹³⁰ It could of course be that macroeconomic instability triggers political instability or civil unrest with knock-on effects to resource companies. So investors can't be entirely indifferent to the ups, and especially downs, of the local economy.
- ¹³¹ A production cap set lower than the available output of an oil producing site/facility.
- ¹³² Hostages released in Niger Delta, BBC, 12 June 2007; Nigeria: Rough ride ahead for oil sector. *Oxford Analytica*, 15 August 2007: www.oxan.com; Nigerian military seizes tankers used for bunkering oil. *Global Insight*, 2 October 2007: www.globalinsight.com.
- ¹³³ John Bray, Attracting reputable companies to risky environments: Petroleum and mining companies, in *Natural resources and violence conflict: options and actions*. Ian Bannon and Paul Collier (eds), World Bank, 2003. p 296.
- ¹³⁴ Designed to give jurisdiction for complaints against pirates on the high seas, ATCA allows courts to hear 'any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States'. Modern ATCA litigation began in 1980 when the US Court of Appeals for the Second Circuit validated a grant of jurisdiction in a suit brought by a Paraguayan making claims of torture.

- ¹³⁵ CorpWatch, Barrick's dirty secrets: Communities worldwide respond to gold mining's impact. May 2007; CAO/Ombudsman, Assessment report summary, Complaint regarding MIGA's guarantee of the Bulyanhulu Gold mine, Tanzania: www.cao-ombudsman.org.
- ¹³⁶ More trouble at Anvil's African mine. *The Sydney Morning Herald*, 27 April 2006; Digging in corruption: Fraud, abuse and exploitation in Katanga's copper and cobalt mines. *Global Witness*, July 2006.
- ¹³⁷ AngloGold Ashanti acts on DRC allegations: www.miningmx.com/gold_silver/445618.htm; AngloGold Ashanti's activities in the Democratic Republic of Congo: www.anglogoldashanti.com.
- ¹³⁸ Congo court clears former Anvil staff of war crime. *Reuters*, 28 June 2007; CAO/Ombudsman, CAO audit of MIGA's due diligence of the Dikulushi Copper-silver mining project in the Democratic Republic of the Congo. November 2005: www.cao-ombudsman.org.
- ¹³⁹ This clever phrase comes from Michael Ross, *The natural resource curse: how wealth can make you poor*, in *Natural resources and violent conflict: options and actions*. Bannon and Collier (eds), World Bank, 2003. p17.
- ¹⁴⁰ Ian Bannon and Paul Collier, *Natural resources and violent conflict: options and actions*. World Bank, 2003. p 1.
- ¹⁴¹ Michael Ross, op cit. p17.
- ¹⁴² Matthew Green, Nigeria warns on oil contracts. *Financial Times*, 22 January 2008.
- ¹⁴³ Andi Hoffman, Congo deals major blow to miners. *Globe and Mail*, 6 February 2008.
- ¹⁴⁴ Saliou Samb, US Hyperdynamics: Guinea contract 'in full force'. *Reuters*, 16 April 2006.
- ¹⁴⁵ Simandou position, 11 June 2008: www.riotinto.com.
- ¹⁴⁶ Maiden, op cit.
- ¹⁴⁷ Tom Burgis and Barrey Jopson, AngloGold tax deal in Tanzania. *Financial Times*, 30 September 2007; FT interview: Jakaya Kikwete, *Financial Times*, 6 November 2007.
- ¹⁴⁸ Kate Askew and Violeta Ayala, Slick operator. *The Sydney Morning Herald*, 3 June 2006.
- ¹⁴⁹ 2007 Corruption perceptions index regional highlights: Africa: www.transparency.org, September 2007.

- ¹⁵⁰ John Bray, Attracting reputable companies to risky environments: Petroleum and mining companies, in *Natural resources and violent conflict: options and actions*. Ian Bannon and Paul Collier (eds), World Bank, 2003. p 295.
- ¹⁵¹ OECD Convention on combating bribery of foreign public officials in international business transactions: www.oecd.org.
- ¹⁵² See: www.ausncp.gov.au.
- ¹⁵³ OECD Document TD/ECG(2000)15: www.oecd.org/dataoecd/2/32/2726700.pdf.
- ¹⁵⁴ Anti-corruption initiatives: www.efic.gov.au.
- ¹⁵⁵ Herberg, op cit. p 5.
- ¹⁵⁶ Congo-Kinshasa: Chinese loans reflect wider strategy. *Oxford Analytica*, 12 October 2007: www.oxan.com.
- ¹⁵⁷ Mining Watch Canada, NGOs fear that Congolese mining contract review process has been hijacked: Time for authorities in Europe and North America to act. 4 February 2008: www.miningwatch.ca.
- ¹⁵⁸ US State Department investment climate statements: www.state.gov/e/eeb/ifd/2007.
- ¹⁵⁹ John Bray, Attracting reputable companies to risky environments: Petroleum and mining companies, in *Natural resources and violent conflict: options and actions*. Ian Bannon and Paul Collier (eds), World Bank, 2003. p 317.
- ¹⁶⁰ International Council on Mining & Metals, Sustainable development framework: www.icmm.com.
- ¹⁶¹ Zambia: High prices will blunt rising copper royalties. *Oxford Analytica*, 2 August 2006: www.oxan.com.
- ¹⁶² Angola: China strategy provides Africa-wide lessons. *Oxford Analytica*, 21 September 2007: www.oxan.com; M Green and A Russell, Africa-China trade 2008: Big push to be more assertive. *Financial Times*, 24 January 2008; V Mallet, The ugly face of China's presence in Africa. *Financial Times*, 13 September 2006; A Russell, Angola forces China to rethink its approach. *Financial Times*, 24 August 2007: www.ft.com.
- ¹⁶³ ASX, Ethical investing: www.asx.com.au.
- ¹⁶⁴ John Bray, Attracting reputable companies to risky environments: Petroleum and mining companies, in *Natural resources and violence conflict: options and actions*. Ian Bannon and Paul Collier (eds), World Bank, 2003. p 303.
- ¹⁶⁵ Henderson Global Investors, BP and Henderson's socially responsible

- investment funds. 22 January 2003: www.henderson.com.
- ¹⁶⁶ UNCTAD, Transnational corporations, extractive industries and development: implications for policies. TD/B/COM.2/EM.20/2, 17 October 2006. p 11.
- ¹⁶⁷ John Bray, Attracting reputable companies to risky environments: Petroleum and mining companies, in *Natural resources and violence conflict: options and actions*. Ian Bannon and Paul Collier (eds), World Bank, 2003. p 304.
- ¹⁶⁸ They now benchmark projects against all 10 World Bank Safeguard Policies or, where appropriate, all eight International Finance Corporation Performance Standards. OECD adopts stronger environmental rules for export credits, 12 June 2007: www.oecd.org.
- ¹⁶⁹ Number obtained from the Berne Union intranet.
- ¹⁷⁰ Email from William Bulmer, Head, Mining Division, World, Gas, Mining & Chemicals Department, International Finance Corporation, 21 May 2008.
- ¹⁷¹ Australia supports greater transparency in resource-rich developing countries, Press release, Australian cabinet agency for International Development, 11 November 2006: www.ausaid.gov.au.
- ¹⁷² Correspondence between AusAid and authors.
- ¹⁷³ www.oecd.org.
- ¹⁷⁴ Brazil joins OECD countries in landmark pact on civil aircraft export credits, 30 July 2007: www.oecd.org.
- ¹⁷⁵ www.wto.org.
- ¹⁷⁶ *The mineral industries of Africa*. United States Geological Survey, 2004.
- ¹⁷⁷ *BP statistical review of world energy*. June 2006.
- ¹⁷⁸ S A Mohamed, The African iron and steel industry: realities and prospects. Presentation to Arab Steel Industry 2006.
- ¹⁷⁹ *Mineral commodity summaries*. US Geological Survey, 2007.
- ¹⁸⁰ *South Africa's mineral industry, 2005-2006*. Department of Minerals and Energy (South Africa).
- ¹⁸¹ *BP statistical review of world energy*. June 2006.
- ¹⁸² Based on a non-weighted average share of output of six metals (gold, copper, zinc, iron ore, nickel, lead), The outlook for metals markets. World Bank background paper prepared for G-20 Deputies meeting in Sydney, October 2006. p 29.
- ¹⁸³ British Geological Survey, *World mineral production, 2001-2005*. p 19.
- ¹⁸⁴ British Geological Survey, *World mineral production, 1963-1968*.
- ¹⁸⁵ International Monetary Fund, *Democratic Republic of the Congo: Selected issues and statistical appendix*. Washington DC, International Monetary Fund, 2005. p 48.
- ¹⁸⁶ International Monetary Fund, *Democratic Republic of the Congo: Selected issues and statistical appendix*. Washington DC, International Monetary Fund, 2005. p 48-49.

Bibliography

- Abraham, T. *Reviving an old dream of Afro-Asian cooperation*. Yale Global Online, 2005.
- African Research Bulletin. Africa-Australia: mining and agri-business. *Africa Research Bulletin: economic, financial and technical series*, Vol. 43 No.11, 2006, pp 17174A–17175A.
- African Research Bulletin. Uranium: the new exploration grounds. *Africa Research Bulletin: economic, financial and technical series*, Vol. 43 No.12, 2007, pp 17230B–17230C.
- African Research Bulletin. Minerals, *Africa Research Bulletin: economic, financial and technical series*, Vol. 44 No. 2, 2007, pp 17307B-17311C.
- African Research Bulletin. Copper/cobalt: democratic republic of Congo, iron ore: African promise and uranium: Zambia. *African Research Bulletin: economic, financial and technical series*, Vol. 44 No. 3, 2007, pp 17346A–17347C.
- Africo Resources Ltd. *Mining Indaba 2007*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- AIM. *Market statistics*. London Stock Exchange, London, January – December 2006.
- Anvil Mining. *Annual report 2006*. Toronto, Anvil mining, 2007.
- Arbache, J, Gi, D S and Page, J. Is Africa's economy at a turning point? Policy Research Working Paper 4519, World Bank, Washington DC, February 2008.
- Ausdrill. Investor presentation, October/November 2007.
- Ausenco. *Full year results for the year ended 31 December 2006, 22 February 2007*.
- Austrade. *Australia digs in to African mining boom*. Press release, Australian Trade Commission, 1 February 2007.

- Australian Bureau of Statistics. *International investment position, Australia 1998-99: supplementary country statistics*. Australian Bureau of Statistics, Cat No. 5352.0, Canberra, 2000.
- . *International investment position, Australia 2001-02: supplementary country statistics*. Australian Bureau of Statistics, Cat No. 5352.0, Canberra, 2003.
- . *International investment position, Australia 2005 (re-issue): supplementary country statistics*. Australian Bureau of Statistics, Cat No. 5352.0, Canberra, 2006.
- Australian Department of Foreign Affairs and Trade. *African renewal: business opportunities in South Africa, Botswana, Uganda, Mozambique and Kenya*. Canberra, 2006.
- ASX. *Supporting mining and resources for growth*. Excellence in exploration and mining conference, Sydney, 18 October 2005.
- Barrick Africa. *Mining Indaba 2007*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- Basu, A and Srinivasan, K. Foreign direct investment in Africa — some case studies. *IMF Working Paper No. 02/61*, International Monetary Fund, Washington DC, 2002.
- BHP Billiton. *Mining in Africa: opportunities and challenges*. African Junior Mining Congress, Midrand, South Africa, 4-6 July 2006.
- BHP Billiton. *Annual report 2006*. BHP Billiton, Melbourne, 2006.
- BHP Billiton. *Annual report 2007*. BHP Billiton, Melbourne, 2007.
- BHP Billiton. *Quarterly report on exploration and development activities: Quarter ended 30 June 2007*. BHP Billiton, 24 July 2007.
- Bio-Tchané, Abdoulaye and Vibe Christensen, Benedicte, Right Time: Africa needs to build on its recent success to catch up. *Finance & Development*, December 2006.
- BP. *Statistical review of world energy*. London, June 2007.
- Bream, R. Democratic Republic of Congo: a problematic destination. *Financial Times*, 14 July 2006.
- . Stability tempts mining companies back to Congo. *Financial Times*, 21 February 2007.
- British Geological Survey. *Statistical summary of the mineral industry, World production, exports and imports, 1963-1968*. Keyworth, Nottingham, 1970.

- British Geological Survey. *World mineral statistics 1986-1990. Volume 1: Metals & energy*. Keyworth, Nottingham, 1992.
- British Geological Survey. *World mineral statistics 1986-1990, Volume 2: Industrial minerals*. Keyworth, Nottingham, 1992.
- Broadman, H G. Connecting Africa and Asia. *Finance and Development*, Vol. 44 No. 2, 2007.
- Broadman, H G. *Africa's silk road: China and India's new economic frontier*. World Bank, Washington DC, 2007.
- Bromby, R. Cashing in on a flood of floats. *The Australian*, 16 June 2007.
- Buchan, D. Why investors take the risk of big gambles on small oils. *Financial Times*, 7 January 2006.
- Bureau of Economic Analysis. *U.S. Direct investment position abroad on a historical-cost basis, 2000-2006*. Washington DC, 2007.
- Burns, J and Catan, T. Oil groups 'face global threats to operations'. *Financial Times*, 5 October 2005.
- Centre for Chinese studies. *Ni-Hau Africa*. Paper presented at the Africa mining conference, Perth, Australia, 10 May 2007.
- Chung, J. Global investors eye Nigeria. *Financial Times*, 20 April 2007.
- . Sub-Saharan Africa confident it can attract investment. *Financial Times*, 2 May 2007.
- Deutsche Bank Research. *Africa's natural resources in the spotlight again*. Frankfurt, Deutsche Bank Research, 2007.
- Department of Minerals and Energy, *South Africa's mineral industry 2005/2006*. Pretoria, 2006.
- Downs, E S. The fact and fiction of African-Sino energy relations. *China Security*, Vol. 3 No. 3, Summer 2007, pp 42-68.
- Dupasquier, C and Osakwe, P N. *Foreign direct investment in Africa: performance, challenges and responsibilities*. African Trade Policy Centre, 2005.
- Economic Commission for Africa, *African governance report 2005*. Addis Ababa, November 2005.
- Economist. The flicker of a brighter future. *The Economist*, 7 September 2006.
- Economist Intelligence Unit. *Africa economy: Why the UN is predicting a slowdown in FDI inflows*. Economist Intelligence Unit, London, 18 December 2007.
- EITI Secretariat, *EITI factsheet*. 15 January 2008.

- England, A. Concession to history: when miners in Congo must look beyond the bottom line. *Financial Times*, 21 August 2006.
- Finlayson, E. *Rio Tinto exploration in Africa*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- Ford, N. Gas widens African appeal. *New African*, Oil and gas special, May 2006.
- Foreign Affairs and International Trade Canada. Sub-Saharan Africa merits second look. *Canadexport*, Vol. 24 No. 15, 2006.
- Fraser Institute, *Annual survey of mining companies 2006/2007*. Vancouver, April 2007.
- Fraser Institute, *Annual survey of mining companies 2007/2008*. Vancouver, February 2008.
- Garvey, P. Iron ore groups raise sights all the way to Africa. *The Australian Financial Review*, 1 October 2007.
- . Miners tap American pockets through Toronto. *The Australian Financial Review*, 2 January 2008.
- . Party's nearly over for many mid-tier miners. *The Australian Financial Review*, 23 January 2008.
- GRD Group. *Full year results 2007* Presentation to investors and analysts. March 2008.
- Green, M and Peel, M. Halliburton unit's role in Nigeria faces probe. *Financial Times*, 10-11 May 2008.
- Guest, R, *The shackled continent: Africa's past, present and future*. Pan Macmillan, Oxford, 2004.
- Hamilton, K and Ruta, G. *From curse to blessing: natural resources and institutional quality*. World Bank, 2006.
- Hanson, S. Vying for West Africa's oil. *Daily Analysis*, Council on Foreign Relations, New York, 7 May 2007.
- Harford, T and Klein, M. *Aid and the resource curse: How can aid be designed to preserve institutions?* The World Bank, 2005.
- Hetherington, L E, Brown, T J, Benham, A J, Lusty, P A J and Idoine, N E. *World mineral production 2001-05*. Kenworth, Nottingham, British Geological Survey, 2007.
- Horn, M P M, Chaplin, R I and Zausmer, D. *Junior Mining Review*. M Horn & Co, August 2006.

- Hoyos, C. Resource-starved countries fuel spree. *Financial Times*, 15 March 2007
- IEA. *World energy outlook 2006*. Paris, International Energy Agency, 2006
- International Monetary Fund. *Democratic Republic of the Congo: Selected issues and statistical appendix*. Washington DC, International Monetary Fund, 2005
- . *Revised guide on resource revenue transparency*. 2007
- . *Debt relief under the Heavily Indebted Poor Countries (HIPC) initiative*. December 2007
- . *The multilateral debt relief initiative*. December 2007
- . *Global financial stability report*. April 2008
- International Rescue Committee, *Mortality in the Democratic Republic of Congo: An ongoing crisis*. 2007.
- IPO Watch. *The market for emerging companies*. HLB Mann Judd Corporate Finance Pty Ltd, 2007.
- JP Morgan, *Democratic Republic of the Congo: resource riches versus political risk*. JP Morgan, 2007.
- Kivuitu, M, Yambayamba, K and Fox, T. How can corporate social responsibility deliver in Africa? Insights from Kenya and Zambia. *Perspectives on Corporate Responsibility for Environment and Development*, No. 3, July 2005, International Institute for Environment and Development.
- Kendall, J. Analysis: African oil. *Energy Economist*, No. 299, 2006.
- Koncz, J L and Yorgason D R. Direct investment positions for 2005: Country and industry detail. *Survey of Current Business*, Vol. 86 No.7, 2006, pp 20-35.
- Kuijs, Louis. How will China's saving-investment balance evolve? World Bank Policy Research Working Paper 3958, July 2006.
- Lagace, D. *Canadian mining sector presence in Africa*. Presentation at Canada-Africa Mining Procurement Seminar, Natural Resources Canada, Ottawa, 2007.
- Lai, J. *International investment in Africa: trends and opportunities*. African Development Bank, 2001.
- Leahy, J. World is moving into synch with Tata's global ambitions. *Financial Times*, 25 January 2007.
- Lemieux, A. *Canada's Global Mining Presence*. Natural Resources Canada, Ottawa, 2005.

- Lorenz, A and Thielke, T. The age of the dragon: China's conquest of Africa. *Spiegel Online*, 30 May 2007.
- Lyman, P N. *China's rising role in Africa*. Presentation to the US-China Commission, July 21 2005, Council on Foreign Relations.
- Mahtani, D. Arcelor Mittal project approved. *Financial Times*, 1 May 2008.
- Mano River Resources Inc. *Perseverance ... paying off*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- Maponga, O and Maxwell, P. The fall and rise of African mining. *Minerals & Energy – Raw Materials Report*, Vol. 16 No.3, 2001, pp 9 – 27.
- McDonald, G, Treichel, V and Weisfeld, H. Enticing investors. *Finance and Development*, Vol. 43 No. 4, December 2006.
- McGregor, R. India and China overseas deals 'to explode'. *Financial Times*, 31 October 2006.
- MEG. *World Exploration Trends*. PDAC 2006 international convention. Metals Economics Group, Halifax, Nova Scotia, 2006.
- MEG. *World Exploration Trends*. PDAC 2006 international convention, Toronto, 2007.
- Miller, J W. Why miners look for buried treasure in Belgian museum. *The Wall Street Journal*, 19 March 2007.
- Minder, R and Bream, R. Strong Australian appetite. *Financial Times*, 10 October 2006.
- Mooney, P. China's African safari. *Yale Global*, 3 January 2005.
- Morrison, K. Boom sending ripples through world markets. *Financial Times*, 2005.
- ODI. *Meeting the challenge of the resource curse*. Overseas Development Institute 2006.
- Office of the Compliance Advisor/Ombudsman. *CAO audit of MIGA's due diligence of the Dikulushi copper-silver mining project in the Democratic Republic of the Congo*. Final Report, International Finance Corporation and Multilateral Investment Guarantee Corporation, Washington DC, November 2005.
- Oxford Analytica, www.oxan.com.
- . Malaysia: Overseas expansion key to Petronas success, 24 October 2003.
- . China/ Africa: Is China helping Africa's development? 21 August 2006.
- . France/Africa: Paris shifts Africa policy priorities, 25 August 2006.

- . Africa: Commodities carry security and economic risks, 9 October 2006.
- . East Africa: Region's hydrocarbons spur major interest, 30 March 2007.
- . West Africa: Islamic political influence may be waning, 4 May 2007.
- . China/ Africa: Hosting AfDB part of evolving aid agenda, 15 May 2007.
- . Africa: Commodity boom underlies growth upsurge, 17 May 2007.
- . India/Africa: Delhi moves to boost status in Africa, 28 June 2007.
- . Nigeria: Rough ride ahead for oil sector, 15 August 2007.
- . Angola: China strategy provides Africa-wide lessons, 21 September 2007.
- . Africa: Gulf investment mainly reflects commercial aim, 4 January 2008.
- . India/Africa: Policy shortcomings undermine potential, 6 May 2008.
- Paladin Resources Ltd. The new energy in the market. Global Resources Conference, Tampa Florida, 26-28 February 2007.
- Pan, E. *China, Africa, and oil*. Council on Foreign Relations, New York, 26 January 2007.
- Petra Diamonds. *Investor presentation*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- Pham, J Peter. Mr. Bush goes to Africa. *World Defense Review*, 22 May 2008: worlddefensereview.com
- Ramachandran, S. India turns its energies on Africa. *Asia Times*, 10 November 2007.
- Rajan, R. The great game again? *Finance and Development*, Vol. 43 No. 4, December 2006.
- Resolute Mining Limited. 2007 Annual report. Resolute Mining, Perth, 2007.
- Rio Tinto. *2007 Annual report and financial statements*. Rio Tinto, Melbourne, 2007.
- Rio Tinto. *Rio Tinto Exploration in Africa*. Mining Indaba, Cape Town, South Africa, 6-8 February 2007.
- Rio Tinto, *Rio Tinto in Africa – a long history and a strong future*. Mining Indaba, Cape Town, South Africa, 5 February 2008.
- Russel, A. India plays down race for Africa's assets. *Financial Times*, 6 June 2007.
- Sarraf, M and Jiwanji, M. *Beating the resource curse: The case of Botswana*. Environmental Economics series, World Bank, Washington DC, 2001.
- Simpkins, E. First Quantum to leap on AIM in £45m debut. *The Telegraph*, 18 April 2001.

- Sphere Investments Limited. ASX announcement. 6 February 2008.
- Stablum, A. Money trail leads to the lodes of Africa., *The Sydney Morning Herald*, 23 October 2007.
- Soussa, F and Paillat-Chayriques, V. *Mixed outlook for African sovereign ratings amid commodity boom*. Standard and Poor's, London, 28 April 2008.
- Standard Bank. *Winners' curse*, Standard Bank, Johannesburg, 2007
- Thomas, L. *Foreign investment and regional integration in Southern Africa*. Presentation prepared for OECD seminar: How to decrease debt costs in Southern Africa, Johannesburg, 25-26 March 2004.
- Thomsen, S. *Foreign direct investment in Africa: the private sector response to improved governance*. Briefing Paper IEP BP 05/06, International Economics Program, Chatham House, 2005.
- Transparency International, *Corruption Perceptions Index 2007*. Berlin.
- Trounson, A. BHP weighs \$3.4bn Congo aluminium smelter. *The Australian*, 24 October 2007.
- TSX Group. *Accessing equity capital for Africa through TSX*. TSX Group, Toronto, 2005.
- TSX Group. *A global resource for capital*. TSX Group, Toronto, 2005.
- TSX Group. *A global resource for capital*. TSX Group, Toronto, 2007.
- UNCTAD, *Prospects for foreign direct investment and the strategies of transnational corporations 2005-2008*. United Nations, New York and Geneva, 2005.
- UNCTAD. *Economic development in Africa: rethinking the role of foreign direct investment*. Geneva, United Nations, 2005.
- UNCTAD. *WID country profile: Australia*. United Nations, 2005.
- UNCTAD. *FDI in extractive industries: resource-based development*. Expert meeting on FDI in natural resources. Geneva, United Nations, 2006.
- UNCTAD. *FDI in least developed countries at a glance: 2005/2006*. Geneva, United Nations, 2006.
- UNCTAD. *Report of the expert meeting on foreign direct investment in natural resources*. Expert meeting on FDI in natural resources. Geneva, United Nations, 2006.
- UNCTAD. *Transnational corporations, extractive industries and development: implications for policies*. Expert meeting on FDI in natural resources. Geneva, United Nations, 2006.

- UNCTAD. *World investment report 2006*. United Nations, Geneva and New York, 2006.
- UNCTAD. *World investment report 2007*. United Nations, Geneva and New York, 2007.
- UNCTAD. *Asian foreign direct investment in Africa*. United Nations, Geneva and New York, 2007.
- UNCTAD, *Case study on outward foreign direct investment by South African enterprises*. Expert meeting on enhancing the productive capacity of developing country firms through internationalisation, 5-7 December 2005, Geneva.
- UNCTAD, *World investment directory, Volume X, Africa*. United Nations, Geneva and New York, 2008.
- United Nations. *World Economic Situation and Prospects 2007*. New York, United Nations, 2007.
- United National Economic Commission for Africa (UNECA). *Economic report on Africa 2006: Capital flows and development financing in Africa*. Addis Ababa, Ethiopia, 2006.
- US Department of Commerce. *US direct investment position abroad: Detail for historical-cost position and related capital and income flows, 2003-2005. Survey of current business*. Department of Commerce, Washington DC, September 2006.
- USGS. *Mineral commodity summaries, various years*. United States Geological Survey, Washington DC, 2007.
- Vines, A. China in Africa: A mixed blessing? *Current History*, May 2007, pp 213-219.
- Wallis, W. Congo outlines \$9bn China deal. *Financial Times*, 10-11 May 2008.
- White, D. Diamonds: A mutual dependence. *Financial Times*, 19 June 2006.
- World Bank. *Natural Recourses: When blessings become curses. Economic growth in the 1990s: Learning from a decade of reform*. World Bank, Washington DC, 2005.
- World Bank. *Mauritania, managing natural resources: Challenges and options*. World Bank, Washington DC, December 2006.
- World Bank. *The outlook for metals markets*. G-20 Background Paper, World Bank Washington DC, September 2006.
- World Bank. *Snapshot Africa: Benchmarking FDI competitiveness in Sub-Saharan African countries*. MIGA, Washington DC, 2007.
- Yager, T R, Mobbs, P M, Bermudez-Lugo, O, Coakley, G J. and Willburn D R. *The Mineral industries of Africa. U.S. geological survey minerals yearbook 2004*. Washington DC, 2005.

Other Lowy Institute Papers

- 01 Mark P Thirlwell, *India: the next economic giant* (2004)
- 02 Milton Osborne, *River at risk: the Mekong and the water politics of Southeast Asia* (2004)
- 03 Alan Dupont, *Unsheathing the samurai sword: Japan's changing security policy* (2004)
- 04 Michael Fullilove & Chloë Flutter, *Diaspora: the world wide web of Australians* (2004)
- 05 Anthony Bubalo & Greg Fealy, *Joining the caravan? The Middle East, Islamism and Indonesia* (2005)
- 06 Malcolm Cook & Craig Meer, *Balancing act: Taiwan's cross-strait challenge* (2005)
- 07 Mark Thirlwell, *The new terms of trade* (2005)
- 08 Peter Edwards, *Permanent friends? Historical reflections on the Australian-American alliance* (2005)
- 09 Ben Scott, *Re-imagining PNG: culture, democracy and Australia's role* (2005)
- 10 Simon Chesterman, *Shared secrets: intelligence and collective security* (2006)
- 11 Milton Osborne, *The paramount power: China and the countries of Southeast Asia* (2006)
- 12 Alan Dupont & Graeme Pearman, *Heating up the planet: climate change and security* (2006)
- 13 Rod McGibbon, *Pitfalls of Papua* (2006)
- 14 John Edwards, *Quiet boom* (2006)
- 15 Paul Kelly, *Howard's decade* (2006)
- 16 Hugh White, *Beyond the defence of Australia* (2006)
- 17 Malcolm Cook & Kit Collier, *Mindanao: A gamble worth taking* (2006)
- 18 Mark Thirlwell, *Second thoughts on globalisation* (2007)

(cont.)

LOWY INSTITUTE
FOR INTERNATIONAL POLICY

- 19 Jamie Mackie, *Australia & Indonesia: current problems... future prospects* (2007)
- 20 Meryl J Williams, *Enmeshed: Australia & Southeast Asia's fisheries* (2007)
- 21 Coral Bell, *The end of the Vasco da Gama era: the next landscape of world politics* (2007)
- 22 Michael Fullilove, *World wide webs: diasporas and the international system* (2008)
- 23 Russell Trood, *The emerging global order: Australian foreign policy in the 21st century* (2008)

To order copies of these Papers contact:
The Lowy Institute for International Policy
www.lowyinstitute.org
31 Bligh Street Sydney 2000
New South Wales Australia
Tel: + 61 2 8238 9000