Original Article

Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons

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Abstract In the context of widespread interest in the impact of Chinese investment in Sub-Saharan Africa (SSA), this paper focuses on SSA's engagement with large state-owned Chinese firms investing in SSA's resource and infrastructure sectors. Evidence is provided on the extent of different types of Chinese investment, before focusing on the distinctive character of large scale state-owned Chinese investors, whose investments are closely bundled with aid and trade. The paper concludes that SSA countries should maximise the opportunities opened to them by their resource-base by adopting a similarly integrated and focused response to Chinese (and other large) investors who seek to draw on the continent's natural resources.

Dans le cadre de l'intérêt porté aux impacts des investissements chinois en Afrique sub-saharienne (ASS), cet article porte sur l'engagement de ces pays africains dans un partenariat avec des grandes entreprises d'Etat chinoises qui investissent dans les secteurs d'infrastructures et de ressources naturelles. Après avoir démontré l'ampleur des différents types d'investissements chinois, l'attention porte sur les caractéristiques propres à ces grandes entreprises publiques. Ces investissements chinois sont étroitement liés à l'aide et au commerce. L'article conclut que les pays d'ASS devraient adopter une réponse également intégrée et ciblée vis-à-vis les investisseurs chinois ainsi qu'aux autres investisseurs à grande échelle qui cherchent à exploiter leurs ressources afin de maximiser les opportunités qui leur sont offertes du fait des dotations en ressources naturelles du continent.

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Chinese Foreign Direct Investment (FDI) into Sub-Saharan Africa (SSA) has grown rapidly in recent years. Despite the paucity of evidenced research on its magnitude and character a stream of general papers¹ have noted its rapid growth and significance and have identified key policy challenges designed to enable SSA to maximise the potential gains and minimise the potential losses from this incoming FDI. A general theme in these various contributions has been with 'the impact of China on Africa', generally marching under the banner 'Whilst China has a strategy for Africa, Africa lacks a strategy for China'. But the problem with this formulation of the China challenge is that it assumes a homogenous 'China' and a homogenous 'Africa'.

In this paper we seek to refine our understanding of what is meant by 'China' in the phrase 'Chinese FDI in SSA'. Here, emerging research suggests four distinct families of FDI flowing from China to SSA. We identify these streams of FDI, and place them in historical context, noting both the dynamism of these investment flows and the paucity of primary research on their character and size. Then, in the context of a sustained rise in the global demand for commodities, we focus on the family of large, predominantly

state-owned Chinese firms (state-owned enterprises, SOEs) operating in the resource and infrastructure sectors, pointing to their integration with Chinese aid and trade. It is here that we place Chinese FDI into global context, suggesting that it is distinctive in comparison to northern FDI in the resource and infrastructure sectors in SSA. This is followed by a discussion of a suitable policy response by African actors to allow for net gains to be maximised in the continent's intercourse with these large scale SOE investments from China.

The Dynamics of Chinese FDI Flows to SSA

China's relations with Africa in the modern era have passed through three overlapping phases. The first phase followed the Bandung Conference of Non-Aligned Nations in 1955, and resulted in almost four decades of what might be termed 'Third World Solidarity'. Partly driven by its ideological rivalry with the Soviet Union, China offered decolonising Africa moral and political support, in some cases coupled with limited military support and aid.² The period from the mid-1990s onwards – the subject of the analysis below – represents the second phase of Chinese involvement with SSA. Following a substantial growth in China's trade with Africa, and China's growing need for resources, large and predominantly SOEs entered SSA as investors and as contractors to Chinese-aid-funded projects in infrastructure and public buildings.³ The third and emergent phase of Chinese interaction with SSA is one involving small and medium sized, predominantly private sector, enterprises. These comprise a mixture of firms. Some are incorporated in China and have extended their operations from China to SSA. Others have been started *ab initio* in SSA. In some cases this new vintage of investors involves Chinese citizens who had previously been employed in large scale SOE activity in Africa and, through various legal and illegal means, had stayed on to become autonomous entrepreneurs. In other cases, building on family or community links, migrants have moved to SSA to join existing enterprises or to start new ones (Dobler, 2006; Mohan and Kale, 2007).

These four ideal types of overlapping Chinese investors in SSA are characterised in Table 1 and Figure 1. The phrases 'state-owned' and 'private' require some qualification, since one of the unique features of China's recent growth trajectory has been the fuzzy lines drawn on ownership between the state and private sector. Many 'SOEs' function as conduits for private gain, in the sense that profits are appropriated in part by key individuals who are not formal owners of the firms. Similarly, the returns from, and decisions made in many apparently 'private' firms are in part a reflection of the direct decision-making power of state bodies, particularly provincial governments. 'Private' in China means that the state holds less than 50 per cent of the equity. In addition, state officials may also own companies, but in their 'private capacity', and often use the connections gained through their government positions. Thus ownership in China reflects a complex and dynamic amalgam of property rights which Nolan characterises as an 'ownership maze' with 'vaguely defined property rights' (Nolan, 2005, p. 169).

The large SOEs, predominantly investing in resource extraction and infrastructure, can be segmented between those owned by the Central Government and accountable to the State Council, and those accountable to provincial governments. Central government SOEs tend to operate under formal state-to-state agreements, whereas the provincially owned firms often reflect the initiatives of their decentralised state administrations and

Table 1: Four types of Chinese investors in SSA

<i>Central state</i>	<i>Provincial state</i>
<p><i>Predominantly state-owned</i></p> <p>Normally accountable to State Council</p> <p>Tender for Central Government funded EXIM Bank financing</p> <p>Predominantly in resource sector, infrastructure projects and construction</p> <p>Involves formal State to State (that is, China host government) agreements</p> <p>Generally well-documented, but not always transparent agreements</p>	<p>Often loyal to Provincial rather than Central Government objectives</p> <p>Tender for Central Government funded EXIM Bank financing</p> <p>Predominantly in resource sector infrastructure projects and construction</p> <p>Generally some form of twinning between China provinces and SSA governments</p> <p>Generally well-documented, but not always transparent agreements</p>
<p><i>Incorporated in China and SSA</i></p> <p><i>Predominantly private-owned</i></p> <p>Predominantly in manufacturing and services</p> <p>Largely self-financed</p> <p>Act independently of Chinese central government</p> <p>May be supported by Chinese provincial government</p>	<p><i>Incorporated in SSA only</i></p> <p>Predominantly in petty manufacturing and services</p> <p>Self-financed</p> <p>Act independently of Chinese central and provincial governments</p> <p>May not be legally incorporated</p> <p>Familial contacts important</p>

Source: Adapted from Corkin (2009) and Gu (2009).

Figure 1: Size, sector and ownership of Chinese investors in SSA.

often build on regional diasporas in SSA (see Gu in this volume). The private sector firms cover the spectrum of medium and small firms incorporated in China and investing in SSA, perhaps as a first venture outside of their home base. They also include a limited number of very large firms, such as Huawei in telecoms. The large and medium China-based firms generally operate in the manufacturing and communications sectors,

as well as in wholesale trading. The other end of the private spectrum involves small to micro enterprises, either in petty manufacturing or in small scale retail.

This paper is primarily focused on the Chinese SOE FDI in SSA.

Chinese FDI in SSA

Estimates of FDI flows are notoriously inaccurate. Each country estimates these flows in their annual balance of payments accounts and these data are used by the IMF, UNCTAD and other agencies to record official flows. In previous years, exchange control regimes meant that commercial banks kept a record of FDI inflows, providing some consistent reporting procedure for estimating these flows. However, the removal of exchange controls over the past few decades has made the reporting procedure much more haphazard and inconsistent. The difficulty in measuring reinvestment by existing foreign investors compounds these measurement problems. Relatively weak recording practices in SSA increase the unreliability of data on Chinese investment flows to SSA.

In what follows we report four sets of estimates of the extent and nature of these flows. The first draws on official estimates of flows. The second is based on a series of country studies in SSA made as part of the African Economic Research Consortium's Asian Driver programme (www.aercafrica.org). The third reports the results of a UNIDO survey of FDI in SSA, and the final set draws on the limited number of primary studies focusing on small scale Chinese investors in SSA.

Official and Public-domain Estimates of the Extent and Distribution of Chinese FDI in SSA

As China began to emerge in the international global scene, its outward FDI flows remained small; equivalent to just US\$916 million in 2000, not much higher than the \$830 million registered in 1990. However, post 2000, FDI outflows have been rising, reaching \$17.8 billion in 2006. The flows are expected to continue to increase, and to reach \$72 billion by 2011 (EIU, 2007).

Official estimates of China's FDI flows to SSA are contradictory, confusing and almost certainly understate their true significance. Drawing on a variety of official sources, Besada *et al* estimate that Chinese FDI flows into Africa exceeded \$500 million in 2006, rising from \$400 million in 2005 (Besada *et al*, 2008). The more widely used UNCTAD data, working with country estimates of investment-flows, tell a similar story of rising Chinese FDI into SSA, albeit with somewhat different numbers. These data suggest inflows rising from \$1.5 million in 1991 to \$61 million in 2003. UNCTAD estimates that in 2005 the stock of Chinese FDI in 48 African countries reached a value of \$1.6 billion. Although China's FDI in Africa is geographically dispersed, five countries (Sudan, Algeria, Zambia, Nigeria and South Africa) accounted for 56 per cent of the FDI stock in 2005 (Table 2).

In 1995, Africa's share of China's FDI outflows fluctuated around a low base, rising from 0.2 per cent in 1991 to 3.2 per cent in 2005, with a peak of 9.28 per cent in 2000. The forthcoming large investment in the Democratic Republic of the Congo (DRC) (see below), as well as in other SSA countries, suggest that both the absolute magnitude of FDI flows to SSA, and SSA's share in total outward Chinese FDI, will continue to rise in future years.

Table 2: Distribution of China's outward FDI stock in Africa, 1990, 2005 (%)

<i>Country</i>	<i>1990</i>	<i>Country</i>	<i>2005</i>
Zaire	18	Sudan	22
Nigeria	15	Algeria	11
Mauritius	14	Zambia	10
Guinea Bissau	9	South Africa	7
Zambia	7	Nigeria	6
Gabon	6	Tanzania	4
Rwanda	6	Kenya	4
Zimbabwe	6	Madagascar	3
Egypt	4	Guinea	3
Tanzania	4	Zimbabwe	3
Madagascar	4	Others	27
Central African Republic	3		
Sierra Leone	2		
Libya	2		

Source: UNCTAD (2007a).

UNCTAD data suggest that China's investment in Africa as a whole, and SSA in particular, is fairly well distributed across different sectors. Between 1979 and 2000, 46 per cent of investment was in the manufacturing sector. Most of this manufacturing investment was in the clothing sector, initially taking advantage of quota access through the Multifibre Agreement and then after 2001 also taking advantage of Africa's preferential access to US markets under the AGOA scheme (Kaplinsky and Morris, 2008).⁴ Services, mainly construction, accounted for 18 per cent of the FDI flows, with resource extraction accounting for 28 per cent. China's FDI in oil and gas exploration has been concentrated in Nigeria, Angola, Equatorial Guinea, Sudan and Gabon. Investments valued at \$757 million in Sudanese oil and \$2.7 billion in Nigerian oilfields have been made in the past few years by China (Africa Frontier Advisory, March, 2008) This is a dynamic picture however, and in 2007 the state-owned Industrial and Commercial Bank of China invested \$5.4 billion to acquire a 20 per cent strategic stake in Standard Bank, a South Africa based bank with extensive operations across the continent with a view to leveraging investment in a range of sectors and in a range of SSA economies.⁵

UNCTAD estimated that in 2006 approximately 700 Chinese enterprises were operating in Africa, including in three of its first eight overseas economic and trade cooperation zones in Africa located in Nigeria, Mauritius and Zambia (UNCTAD, 2007b). The first Sino-African Business Conference in 2003 in Ethiopia resulted in commitments to 20 projects with a total value of \$680 million, although there are no reports of the extent to which these commitments resulted in actual investment flows (Broadman, 2007, p. 245).

AERC Scoping Study Estimates of the Extent and Distribution of Chinese FDI in SSA

In 2006–2007, the African Economic Research Consortium undertook scoping studies in 20 SSA countries to assess their trade, aid and investment relations with China. Each of these studies were undertaken by national researchers, and was based on national data

sources on the nature of Chinese FDI inflows. These studies were more concerned with mapping the historical context of links with China and the nature of FDI flows than with estimating their value.

Drawing on these reports (www.aercafrica.org/publications/category.asp) we can distinguish three groups of economies – those in which Chinese FDI plays a relatively significant role, those in which it plays a relatively moderate role, and those in which its significance is low. Table 3 below summarises the data from these scoping studies and identifies the key sectors where Chinese investment is located.

The scoping studies show that oil–gas and mining investments are of considerable significance in some economies. However, there are economies where although Chinese FDI does take place in these sectors, its significance is low (for example, Cameroon in oil, and Kenya and Uganda in mining). In agriculture, the primary sector of Chinese involvement is cotton, but only in Zambia does it play an important role in this sector. Chinese FDI in telecoms is widespread throughout the 20 economies, and where this occurs, it plays a relatively important role. There are also significant investments in utilities (notably in Ethiopia and Mali). It is the construction and infrastructure sector where Chinese FDI is most pervasively evident, with much of the physical infrastructure investment in showpiece construction – government buildings and sport stadiums. FDI in manufacturing is primarily in labour intensive activities – garments dominate. But there is also a spread of investments in small scale manufacturing enterprises, which do not surface in official statistics but, like Chinese retail traders, may have a more substantial socio-economic impact. Small scale petty-trading by Chinese migrants is widespread in almost every economy, but is almost always unrecorded. Finally, South Africa is something of a special case. On the one hand, Chinese FDI into South Africa is relatively insignificant as a percentage of total FDI in the country. But, on the other, the size of this FDI is large relative to Chinese FDI in other SSA countries. Furthermore, Chinese FDI in South Africa's banking sector provides it with a platform for extended FDI in other SSA economies.

UNIDO's Survey of FDI in SSA⁶

In 2005, UNIDO conducted a survey of 1216 foreign enterprises operating in 15 African economies. This was a base-survey establishing a platform for future repeated surveys of a much larger sample of firms, and although it does not comprise a stratified sample of investments, it does provide insights into the relative positioning of Chinese FDI in SSA. Comparing Chinese, Indian and South African and northern investors (Table 4), Chinese firms were younger, had lower sales per worker (but with higher sales growth), were more export-oriented and had low investment rates and low annual wages. The data suggest that Chinese respondent firms were disproportionately clustered in low value added export-oriented low-wage assembly operations (no doubt taking advantage of AGOA and Everything but Arms (EBA) incentives in the United States and Europe). In fact, nearly one-third of the Chinese reporting firms produced textiles and garments, whereas the Indian firms in the survey tended to cluster in metals- and chemicals-manufacturing and the South African firms in the service sector.

However, because this survey was a pilot of an ongoing programme and no attempt was made to interview a stratified sample of firms, it is not clear from these data whether these differences in FDI characteristics are a function of the country of origin of the investors, the countries in which they are investing (15 of 54 African economies) or the particular

Table 3: Significance of Chinese FDI in key sectors in 20 SSA economies

Country	Oil/ gas	Mining	Agriculture	Services	Retail	Physical infrastructure	Manufacturing
<i>Economies where Chinese FDI plays a significant role</i>							
Angola	X	—	—	Telecoms	Small traders	Construction, infrastructure	—
Ethiopia	—	X	—	Telecoms, electricity, water	Small traders	Construction	Garments, shoes/leather
Ghana	—	—	Poultry	—	Small traders, import/export	—	Garments, shoes/leather
Madagascar	—	—	Sugar	Financial, telecoms	Small traders, import/export	—	Garments, general spread
Nigeria	X	—	—	Telecoms, technical services	Small traders	Construction, infrastructure	Agro-processing
Mauritius	—	—	—	—	Small traders, import/export	—	Textiles, garments, general spread
Sudan	X	X	—	—	Small traders	—	—
Zambia	—	X	Cotton	—	—	Construction	Agro-processing
<i>Economies where Chinese FDI plays a moderately significant role</i>							
Congo - Brazzaville	—	—	—	Health, telecoms	—	Energy, construction	—
Kenya	—	X	Coffee	—	Small traders, import/export	—	Garments, shoes, general spread
Mali	—	—	Cotton	Electricity, water	—	Construction, infrastructure	Food processing
South Africa	—	—	—	Financial	Small traders	Constructions, infrastructure	Electronic goods
Uganda	—	X	Cotton	Telecoms, electricity	Small traders	Construction, infrastructure	Agro-processing
<i>Economies where Chinese FDI plays a relatively insignificant role</i>							
Cameroon	X	—	Rice, timber, fish	—	Small traders	Construction, infrastructure	—
Chad	—	—	—	—	—	—	—
Cote d'Ivoire	—	—	—	—	—	—	—
Gambia	—	—	—	—	—	—	—
Guinea	—	—	—	—	—	—	—
Namibia	—	—	—	—	—	—	—
Tanzania	—	—	Cotton	—	Small traders	Construction	—

Source: Based on AERC Scoping Studies 2008.

Table 4: Chinese, Indian, South African and northern FDI compared

	<i>China</i>	<i>India</i>	<i>South Africa</i>	<i>North</i>
Sample size (number of firms) ^a	27–46	41–64	51–82	430–632
Age (years)	7	12	13.1	21.6
Sales/worker \$	15 300	38 000	96 800	90 100
Sales growth 2005 (%)	48.3	13.0	17.6	14.6
Export/sales (%)	33.7	13.5	3.3	18.9
Investment/sales (\$)	27.9	70.7	27.4	32.7
Annual wages (\$)	1104	2106	7428	5869

Source: Henley *et al.* 2009, drawn from UNIDO 2007.

^aThis represents the range of firm responses, given that not all firms responded to all questions.

sectors in which respondents operated. The response rate between source country firms also varied, particularly in the case of Chinese firms (see Table 4). Moreover, there are no data on the population of Indian, South African or northern investors – let alone of Chinese investors – so we do not know whether the survey respondents provide an accurate picture of these different sources of FDI in SSA.

Primary Studies of Small Private Sector Chinese FDI

The source of Chinese FDI that is much harder to track, but with increasingly significant socio-economic impact, is the growth in private sector investment. Gu (in this volume) reports Chinese EXIM Bank estimates of around 800 China-incorporated firms who have established operations in SSA as a whole.⁷ However, on the basis of her own primary research in China and in SSA, she estimates the number of private firms to be more than 2000, predominantly operating in manufacturing and trade. Although no numbers are provided on employment, most of these firms appear to be on the small-size-of-medium, with only a few large firms such as Huawei Technologies and the Holley Group.

A second set of primary research on Chinese private sector firms is that on Mauritius (Brautigam, 2008). Brautigam builds on various reports of small scale investments, predominantly in light engineering, in a number of SSA economies (including Angola, Benin, Kenya, Mozambique, Nigeria, Sierra Leone, South Africa, Tanzania and Zambia) to focus on private sector investments in Mauritius. She shows how this in large part results from a long history of Chinese immigration, reinforcing the importance of diasporas in private sector FDI. Chinese firms investing in the export processing zones (predominantly in clothing) alone numbered 89 in 2000–2006, with an additional 50 from Hong Kong. Chinese private investors are also to be found in other sectors of the economy such as in sugar processing. Mauritius (as is South Africa) is something of a special case, however, due to the longevity of the Chinese community, with reports of Chinese firms dating from as far back as 1874. The special nature of Mauritius is evident from Brautigam's matching case study of Nigeria where she shows that Chinese influence in the small scale manufacturing sector is high, but as a source of imported technology and inputs rather than investment or skills.

The final set of research on private sector investment relates to small scale individual or family owned firms operating predominantly in small scale trade and petty manufacturing. A large and almost entirely unrecorded number of Chinese individuals operate as small scale entrepreneurs in selected countries (Dobler, 2006; Mohan and Kale, 2007; Mohan

and Power, 2008), for example, in Angola, Namibia and Madagascar. A relatively new and significant, but as yet small set of trading entrepreneurs are Chinese wholesalers in Kenya, South Africa and Uganda who act as a platform for associated retailing activities in neighbouring countries by other Chinese small scale migrant entrepreneurs (so-called 'platform economies').⁸ These, too, are widely observed but are not systematically recorded.

How Distinctive is Chinese FDI in SSA?

Despite the paucity of the research surveyed in the above section, there are reasons to believe that the SOE category of Chinese FDI in SSA is predominantly clustered in large scale resource oriented ventures (Burke and Corkin, 2006; Broadman, 2007, p. 275; Ajakaiye *et al*, 2008). The reasons for this sectoral concentration are discussed below before we show how these SOE investments are predominantly bundled with Chinese aid in projects designed to meet China resource needs. This then allows us to consider the distinctive nature of Chinese SOE investment on the continent in the concluding discussion.

Terms of Trade Reversal and the Growing Importance of Resources

Since at least the 1870s, there has been a long-run trend for the terms of trade to turn against the commodities sector. That is, prices of manufactures have risen faster than (or fallen slower than) those of commodities. There have been occasional spikes in the general prices of commodities, notably in the early 1920s, the 1950s and the 1970s. But in each case these were short-lived price rises, ('cycles') reflecting commodity demands in periods of wars, or in post-war reconstruction. All of these occasional spikes were temporary in nature (Kaplinsky, 2009). Specific commodities have seen more frequent price rises, such as in the price of coffee, cocoa and other commodities. These have largely arisen as a consequence of environmental and climatic factors.

However, between 2001 and 2008 prices boomed across the spectrum of commodities. This comprised a longer period than previous commodity price spikes and represents a 'super-cycle'. There are sound reasons to believe that this will remain the case for some years to come (a 'secular shift' or 'structural break' in the terms of trade) despite the financial-sector induced bust after August 2008.⁹ This is because unlike previous periods of price-rise, the current boom is fuelled by a massive augmentation of demand in the very large Asian Driver economies which have a high income-elasticity of demand for commodities (IMF, 2007; Farooki, 2009). Inter alia, this affects the demand for energy (and has spin-offs into agriculture because of the resulting drive towards bio-fuels), for minerals (largely for infrastructure, but also for manufactures) and food crops (as Chinese and Indian demand grows for meat products, and hence animal feeds) (FAO, 2007; Freeman *et al*, 2009). Primary commodities are therefore likely to remain in relatively short supply globally, and prices are likely to be sustained for some years to come.

How does this demand for commodities affect SSA? Africa is especially well favoured by these developments, not so much in terms of its existing commodity exports, but rather in terms of its potential exports. Table 5 shows that in many mineral commodities, Africa is the primary resource base for the future. In energy, it is not so much Africa's share of global reserves that is so strategically important, but its reserves of unallocated reserves.

Table 5: Africa's share of global production and reserves (%)^a

<i>Mineral</i>	<i>Production</i>	<i>Reserves</i>
Platinum group metals	54	60 +
Gold	20	42
Chromium	40	44
Manganese	28	82
Vanadium	51	95
Cobalt	18	55 +
Diamonds	78	88
Aluminium	4	45

Source: African Development Bank (2008)

^aThese are known reserves. However, given the underdevelopment of prospecting in SSA, the actual reserves are likely to be significantly higher.

New hydrocarbon discoveries off the west coast of Africa, as well as in Uganda, and the potential for oil discoveries in other parts of Africa, make it an exceptionally attractive region for countries with rapidly growing energy needs. Significantly, the African continent is only poorly prospected, so the likelihood is that the estimates of reserves in Table 5 (as well as in regard to commodities not in this table) are a significant underestimate of Africa's resource potential.

These growing constraints in the resource sector have considerable importance in explaining the nature and growth of Chinese FDI into SSA. As we have seen, a large component of this FDI has been in the resource and infrastructure sectors (see, also Burke and Corkin, 2006; Broadman, 2007; Ajakaiye *et al*, 2008). Much of these infrastructure investments is focused on providing transport routes for the export of resources. For example there have been large investments in an oil pipeline and associated port facilities in Sudan. In Gabon, CEMEC (a large SOE) is constructing a special-purpose deep-water port at Santa Clara, a railway track running 560 km from Belinga to the coast and a hydro-electric power plant to facilitate the energy required for the operations. It is a long-term project, intended to extend over 15–20 years, and will involve not only the extraction of the iron ore, but also the development of auxiliary products (Burke and Corkin, 2006, p. 94). China has made extensive commitments to construct a rail-route to facilitate the exploitation of mineral ores and timber. In Angola, the refurbishment of the rail network is also linked strategically to the export potential of resources. The railway line will run 1300 km from Benguela to Luau in the DRC and also has a link to Lobito, 700 km south of Luanda. This is significant as there is a strong possibility that extensions will be added to Uige and Zambia, providing a direct line of transport from the Zambian copper mines to the Angolan ports. The project, while restoring an important transport backbone to Angola, will also thus facilitate the access to Angola's ports for Zambia's copper (Burke and Corkin, 2006, p. 49).

The Strategic Integration of Chinese Operations in SSA

With the exception of small scale copper mining smelters in Zambia and the DRC, virtually all of these resource-based Chinese investments have been large in scale and have involved Chinese SOE (both central state SOEs and provincial government SOEs). In all these sectors China has become a significant global importer (<http://www>

.commodities.open.ac.uk/cpd). In all these sectors, particularly in infrastructure for trade (Foster *et al*, 2008), Chinese aid has complemented these trade and FDI flows.

The close link between trade, FDI and financial flows has historical precedents. In the Colonial era these three vectors were fused and the imperial powers' interests in SSA were closely coordinated. For example, in the immediate post-war period, British Colonies were seen as providers of traded commodities for UK consumers, involving FDI from UK firms (for example, producing tea in Kenya), with infrastructure to support this trade provided by the UK Colonial Office (roads and ports to transport the tea to the United Kingdom). French and Portuguese presence in SSA was coordinated in a similar way.

But as Africa was decolonised in the second half of the twentieth century, the aid, trade and FDI vectors were increasingly separated. This separation occurred for a number of reasons. First, there was increasing opposition from SSA countries who saw this integration as being very costly. For example, tied aid generally led to much higher-cost inputs. Second, new economic actors were entering the field (notably the United States) and they complained that the integration of vectors locked them out of markets. Third, there was growing public opposition in the OECD economies against what was seen as a framework for the exploitation of many low income economies. Fourth, multilateral aid grew in importance and the International Financial Institutions have increasingly insisted on the delinking of aid, trade and FDI.

China's presence in SSA provides a departure from this recent orthodoxy of the separation of aid, trade and FDI and represents a reversion to the historical precedent of colonial links between mother countries and SSA colonies. Particularly in the case of large scale infrastructural and mining projects, this takes the form of the strategic integration of various inputs from China. It is for this reason that it is virtually impossible to unbundle what constitutes Chinese 'aid' and 'FDI' (Ajakaiye *et al*, 2008). The so-called Angola-mode has become a framework for much of China's SOE activity in SSA. It describes an integrated package in which China's EXIM Bank provides a line of credit, generally at subsidised interests rates. Large Chinese firms then tender for large infrastructural and resource projects, such as those in Angola, that cover mining, oil and railways. Most of these funds are tied to the use of Chinese inputs, and make intensive use of Chinese skills; they also involve investment by Chinese firms in Africa. The bulk of these 'aid' funds never leave China but are transferred directly from the EXIM Bank to the (largely SOE) firms that have won the tenders for the work. These funds are not grants, but are repaid by the recipient country as a drawdown on commodity exports back to China. Although typically, the costs of these large infrastructural projects are 20–30 per cent lower than those of northern, South African and Brazilian competitors, local content in the African recipient economies is low (Burke and Corkin, 2006). But not all aid follows the Angola-mode. China also provides aid for politically sensitive and prestigious projects but these are often in economies where it has a direct resource interest and where seeks to build a long-term presence such as sports stadia in the DRC and Angola.

China's Investment in SSA: A Departure from Trend?

The most widely used framework for assessing the drivers of FDI is that developed over the years by Dunning (see, for example, Dunning, 2000 in his 'eclectic theory of foreign investment'. Dunning identified three primary explanatory factors, the so-called OLI (ownership, location, internalisation) framework.

The *ownership* factor describes motivations that reflect the nature of the firms involved, analysing their particular special competences, which provide them with a global reach, the power to control their foreign affiliates and the capabilities that they possess, which make them an attractive source of finance and technology to other countries. The *location* factor explains why foreign firms operate in a particular country. This may be because of market possibilities for the output of the foreign ventures ('market seeking FDI'), because the country possesses scarce natural resources ('resource seeking FDI'), or because the country has low operating costs ('cost reducing FDI'), which make it an attractive export platform. The *internalisation* factor explains why foreign firms prefer to own their operations in other countries, as opposed to licensing out, or selling their technologies and skills to domestic firms or other foreign firms.

In recent years, a fourth factor has been suggested as explaining a new form of outward FDI from the Asian Tigers, and especially in relation to their investments in high-income economies (Mathews, 2002). This is the *linkages* driver, in which firms invest abroad not so much to exploit their firm-competences (as in the OLI explanation), but in order to augment these competences by learning from their overseas operations. Although there is a debate about whether this 'leveraging' FDI is really a new form of FDI (since it arguably reflects firm-competences in business strategy and technology acquisition) (Dunning, 2006; Narula, 2006), there certainly does seem to have been a distinctly new flow of outward FDI from low income economies such as China, India and Brazil – new, that is, in relation to their previous outward investments that have predominantly exploited firm-specific advantages in product and process technologies and competed on price rather than product differentiation (Lecraw, 1977; Wells, 1983; Lall, 1984).

Utilising the Dunning framework (as augmented by Mathews) and also considering the issue of the bundling of aid, trade and FDI, is it possible to compare these large investments by Chinese SOEs into SSA's resource-sector and related infrastructure with those of the historically dominant northern firms that have until recently been the primary resource and infrastructure investors in SSA? Our conclusions are as follows (and are summarised in Table 6). First, with respect to the strategic integration of aid, trade and investment, Chinese SOE FDI in SSA is distinctive. Over the past decades, despite some differences between different nationalities of Northern investors, in general there has been an un-bundling of Northern investment from aid and trade. Where investment has taken place in export sectors, these exports have been into global markets, rather than to the domestic markets of the investors. By contrast, most incoming FDI from China has reflected a relatively tight bundling of investment with tied-aid, designed to facilitate the export of natural resources, predominantly directly to China.

In terms of ownership characteristics, in general northern firms investing in SSA have been funded, directly or indirectly, through stock markets. The growing emphasis on 'shareholder value' over the past two decades has generally meant that this funding regime has had a short-term profit objective and has been very risk-averse. By contrast, with access to cheap (and often subsidised) long-term capital, Chinese SOEs firms operate with distinctive long-term time-horizons and are less risk-averse than their northern counterparts (Tull, 2006; Zeng and Williamson, 2007; see also the following section below). It is significant that the exception to this has been small investments by Chinese privately owned firms, for example in Zambian and DRC copper smelting. These private firms are much more like the risk-averse and short-term-profit oriented northern firms. When the global copper price fell in early 2009, more than 40 small smelters in the DRC were abandoned over a weekend with their owners vanishing without paying taxes or paying

Table 6: Chinese SOEs and Northern MNC FDI in SSA: Major features

	<i>Historic northern FDI</i>	<i>Incoming large-scale Chinese SOE FDI</i>
<i>Bundling of aid, trade and investment</i>		
Strategic integration of aid, trade and FDI	Low and falling	High-aid and FDI bundled tightly, particularly in countries with natural resources
<i>Ownership specific factors</i>		
	Short term, profit oriented	Long term, resource-seeking, integrated with Chinese government aims
<i>Location specific factors</i>		
Resource-seeking	Natural resource seeking	Natural resource seeking with utilisation of bilateral aid agreements
Market seeking	Producing for domestic market and trading	Trading
Export platforms	Tariff preferences in the United States and EU	Tariff preferences in the United States and EU
Learning linkages	Virtually non-existent	SSA as a test-bed for future FDI
<i>Internalisation factors</i>		
	Agricultural commodities – beverages, cotton, autos in South Africa	Garment exports under AGOA to the United States

their staff (Jopsom, 2009). Finally, most northern firms' operations in SSA are constrained in various envelopes of conditionality including the Paris Declaration, the Accra Accord and various specific agreements and standards affecting, inter alia, labour rights, the environment, product specifications and the transparency of investment decisions. By contrast, Chinese SOEs operate in a relatively unfettered environment. They are able, for example, to continue investing and operating oil and infrastructure activities in Sudan as part of a bilateral agreement. This is despite the international pressures exerted on the Darfur problem, which forced a Canadian oil firm to divest from the Sudan.

With respect to the location-specific factors, resource-seeking investments are found in both Northern and Chinese FDI in SSA. However, unlike Chinese FDI, many large northern TNCs have operations in SSA, which are focused on meeting the needs of domestic consumers in local markets, and occasionally also in regional markets. Many of these investments are long-lived, and reflect previous decades of protected import-substituting industrialisation. By contrast, a relatively small component (by overall value) of Chinese FDI – particularly by large Chinese firms and especially by SOEs – has been market seeking. A notable exception has been in telecommunications, involving the SOE ZTE. The use of SSA as a low-cost export platform is largely confined to the garments sector, and reflects tariff preferences in major northern markets, predominantly AGOA to the United States but also Cotinou and EBA preferences in the EU. Here Asian investors in general, and some Chinese firms in particular, have a distinctively larger presence than do northern foreign investors. Finally, SSA provides protected space (that is, from many northern competitors) to firms that are not subject to various codes of behaviour.¹⁰

This provides special incentives to Chinese foreign investors to locate their resource-sector and other investments in SSA rather than in more regulated environments.

Learning factors also play a more important role in respect of Chinese SSA investment than Northern FDI. Chinese firms are distinctive in their use of SSA as a test-bed for overseas investments in general. For many firms, SSA is an important proving ground in the industrial and service sectors. As a Chinese hotel manager in Sierra Leone observed, 'Africa is a good environment for Chinese investment, because it's not too competitive', (Hilsum, 2005). The substantial but minority investment in Standard Bank of South Africa is an example of using a partnership to gain valuable expertise in respect of northern financial service provision. There is little evidence that such learning-oriented investments are evidenced for previous generations of northern FDI, at least not over the past three to four decades.

Finally, although some Chinese garment exporters incorporate their SSA garments operations in their clothing exports to the United States, these are only very isolated examples of their integration of SSA subsidiaries in global value chains. By contrast, although relatively limited, some northern firms do integrate their African subsidiaries in their global value chains. These are most notable in the beverages and agricultural commodities sectors and, in South Africa, in the automobile and mining-equipment and mining-services sectors.

Conclusion: Policy Implications for Engaging With Large Chinese Dragons

FDI makes both positive and negative contributions to the host economies. The balance of outcomes is generally determined contextually, reflecting a variety of sectoral, temporal and geo-strategic factors, often determined at a global level. However, the outcomes, and the balance of developmental advantage, also reflect the particular policy-environment that host countries adopt. Hence, what conclusions can be drawn about optimal policy responses by SSA economies to ensure that the threat posed by the entrance of Chinese FDI is turned into developmental opportunity? This requires a focus both on the development of strategic capabilities, and the roles played by key developmental actors. It also necessarily places a focus on the patterns and effectiveness of governance and its legitimacy. The discussion that follows relates specifically to the very large state-orchestrated investments from China in SSA's resource and infrastructure sectors.

Developing Strategic Capabilities

SSA, as we have seen, is not without its attractions to Chinese investors, particularly with regard to its potential as a source of natural resources. The key, therefore, is for SSA to use this power in commodities to its best advantage in its relations with the new emerging powers, particularly in the exploitation of these mineral resources and in the provision of related infrastructure. The agreement which the DRC reached with China in 2007 and 2008 shows the potential for using this power to leverage advantageous terms, particularly as China and other emerging economies seek to muscle their way into territories that were previously the domain of northern economic powers. It is not just that an agreement was constructed through which the DRC was able to crowd-in aid-assisted Chinese investments in infrastructure and training, and to ensure minimum local content, with local co-ownership in mineral exploitation. But it was also that it was able to use this

leverage provided by China to force the renegotiation of 61 long-term mining agreements that had previously been reached with northern firms (Komesaroff, 2008; Vandaele, 2008; Wild 2009).

The context is one in which the DRC possesses extensive mineral resources, but lacks the resources or technology to exploit these. (The total DRC state budget in 2007 was only \$1.3 billion, most of which was used to pay salaries.) Before the elections in 2006, the DRC government had approved a large number of 35-year mining contracts in agreements that were not transparent. Reacting to international concern, the new incoming government began a process of reviewing 61 mining contracts entered into between 1997 and 2003. The ability to review these contracts was strengthened by the existence of an alternative path to exploiting the DRC's extensive mineral deposits, in large part by the Chinese aid-trade-FDI package signed in 2007 and 2008.

This constituted two large, but related, initiatives, utilising the 'Angola mode'. The first, entered into in late 2007, involved a loan for \$8.5 billion from the Chinese EXIM Bank. This was to promote exploitation of the mining sector, and was supplemented with a further \$5 billion loan in early 2008. Together, these loans were securitised by providing China with access to, and security provided by \$14 billion of copper and cobalt reserves. This aid was tied to an investment package to exploit these mineral resources by a jointly owned company, Socomin, owned by Chinese (68 per cent) and Congolese (32 per cent) state-owned companies. The \$3 billion investment in the mines will be repaid out of future profits. By agreement, not more than 20 per cent of the workforce can be Chinese, 0.5 per cent of investment will be allocated to training, a further 1 per cent will be spent on social investments and 3 per cent on environmental projects in the surrounding areas. In addition, at least 12 per cent of the work will be sub-contracted to local firms.

In addition to these investments in mines, China committed to provide support for investments in five key areas identified by the DRC state – in water, electricity generation, education, health and transport. \$8.5 billion will be allocated to a variety of projects which include a high-voltage power distribution network, highway and railway extensions, and the construction of 31 hospitals, 145 health clinics, 5000 houses and two universities. Additional resources are allocated to rehabilitate and expand water supplies. Supplementing all of this are a range of additional aid projects, including training programmes in China for poverty reduction and subsidised loans to construct the national People's Palace (the parliament) and the Stadium of the Martyrs outdoor and sports complex. Reacting against this 'new kid on the block', in early 2009 the IMF sought to block this investment, arguing that the DRC could not enter into a new arrangement with a privileged preferential creditor when it still owed northern creditors \$11.5 billion. The DRC government and the Chinese investors however reaffirmed their commitment to this large investment in March 2009.

SSA countries can learn from the DRC experience (which is, of course, not without its flaws, most notably in the criteria to be utilised to value resource exports in the context of fluctuating global prices). In developing a strategic agenda, SSA countries can benefit from adopting a similar strategy of integrating the aid, trade and FDI vectors to that which is being pursued most clearly by Chinese SOEs entering SSA. Increasingly, also, the same strategy is being pursued by large Indian firms investing in SSA's resource and infrastructure sectors. Meeting China's trade needs – SSA as a source of primary commodities and, to a lesser extent, as a market for their exports – should be conditional upon their providing aid to exploit these commodities, as well as to meet SSA's complementary developmental and infrastructural needs. Where appropriate, it should also incorporate

Chinese FDI, and participation in Chinese firm's value chains that serve global markets. For example, Chinese firms exporting garments to the United States and the EU (as well as footwear and other sectors where SSA has resources which are relatively easily transformed into final products) may be induced to include SSA subsidiaries and SSA firms into their global value chains. Embedding this bundling in formal agreements would of course be WTO-illegal. But the scale of these SOE resource-based investments is so large that SSA governments are inevitably drawn into the negotiations. An agreement on bundling can be reached in an informal manner through government-to-government discussions without running-up against WTO rules. After all, China is a member of the WTO itself and manages to informally adopt a bundling strategy without any adverse affect on WTO procedures.

Policy Actors

The issue is who in SSA is going to drive this strategic agenda towards FDI inflows from China? At the most basic level, this must necessarily involve individual SSA governments. Although they do not generally directly control inward FDI and trade flows, they hold the key levers that determine access to their economies. Each of the governments needs to make a cool, informed assessment of its country's specific attractions to incoming Chinese large scale FDI, to situate this in the context of global oligopolistic competition for access to resources, and then to coordinate an integrated strategic response to offer access to resources in a way which best meets their country's needs. This will involve extensive background analysis, but also the convening of appropriate stakeholder groups to ensure an integrated approach providing clear signals to emerging country partners. But formal written strategies that are not implemented effectively are much less used than dynamic and active coalitions of local interests interacting effectively among themselves and with emerging country partners.

Another arena for integrated response is in regional and all-Africa fora such as SADC, ECOWAS, NEPAD and the AU. These multi-country organisations are important for three major and related reasons. First, by aggregating African countries in the bargaining process, they help to avoid contradictory bargaining positions and wars of incentives. As has been evident for many decades in the diamonds sector, there is enormous power in cartelised bargaining. This is not just a matter of achieving the best price for SSA's resources, but also of ensuring that wider objectives can be met, such as the construction of regional infrastructural networks to provide access for non-commodity exporters. Second, and related to this, as observed earlier, not all SSA countries have extensive commodity deposits or are significant commodity producers. Their interests need to be protected by those economies that do have primary resources and markets of interest to China and competitor investors. Including these marginalised economies is not just a matter of altruism for the commodity exporters. Intra-regional trade may be a primary area for the development of the capabilities that are required for long term and sustainable growth. Hence it is in the interests of all parties – commodity exporters and non-commodity exporters alike – that these intra-regional links are strengthened as a consequence of engaging with the emerging economies. A final reason why the multi-country organisations are important is that the emerging economies themselves see these as important organisations for bargaining access to SSA's resources and markets. This is most evident in the case of the Forum for China African Cooperation, but it is also relevant for other emerging economies as well.

In conclusion, although we have pointed to the distinctive character of Chinese SOE driven FDI in SSA, and the opening this creates to negotiating bi- and multi-lateral aid and economic assistance agreements with China, this only addresses part of the problem. It is all very well undertaking the necessary research, developing appropriate policy, and then negotiating advantageous technical agreements with China at either a country or regional level. But the larger problem facing SSA governments is how it ensures that such policy and strategies stick? The real issue is whether SSA countries have the human resource capacity and institutional capability to design and negotiate these agreements effectively, and then (perhaps more importantly) the political will and legitimacy to enforce them and gain maximum advantage from them. Without this implementing capacity, the agreements are likely to be notional, nothing more than granting strategic advantage to China in its interaction with Africa and its global diplomatic strategic initiatives under the cloak of a developmental agenda.

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Notes

1. For example, Broadman, 2007; Kaplinsky and Messner, 2008; Review of African Political Economy Special Issue, 2008; World Development Special Issue, 2008.
2. The most visible project was the Tanzam railway linking Zambia with Tanzania in an attempt to free Central Africa from dependency on Apartheid South Africa's transport infrastructure.
3. This phase mirrors Chinese FDI in general: 'The bulk of China's FDI was made by country's (sic) state owned enterprises (SOEs), in particular those large multinational companies that were administered by the Central Government's ministries and agencies. The shares of FDI flows in 2003–2005 made by SOEs under the Central Government were 73.5 per cent, 82.3 per cent, and 83.2 per cent, respectively. Their shares of FDI stocks by the end of 2004 and 2005 were 85.5 per cent and 83.7 per cent, respectively' (Cheng and Ma, 2007, pp. 9–10).
4. The African Growth and Opportunities Act, AGOA, provides preferential market access to qualifying African firms in the US market. SSA economies that are in the 'Least Developed' category benefit from additional preferences of relaxed rules of entry in the clothing sector.
5. <http://www.moneymorning.com/2007/12/04/china-drills-into-africa-with-54-billion-investment/>. This investment has two objectives – to gain experience in global banking and to use the Standard Bank's independent status and financial reputation to facilitate Chinese FDI in other sectors.
6. UNIDO, 2007 and Henley *et al* (2009).
7. This compares with the UNCTAD estimate of 700 firms in total (see above). Brautigam cites sources that suggest that around 700 of these are small scale firms run by individuals and not incorporated in China.
8. Private communication, Chris Burke.
9. The latter half of 2008 saw a dramatic fall in the prices of many commodities, prompting some observers to conclude that, at best, the post 2001 rise in commodity prices represented a super-cycle rather than a structural break in the terms of trade. However, this fall in commodity prices reflects the implosion of the financial sector. Just as the very large price upswing of 2006–2008 in part resulted from speculation in commodities by hedge funds, the very large fall in prices in late 2008 and early 2009 represented an accentuated downswing as, in the search for liquidity, hedge funds unwound their speculative bets on commodities. The underlying

fundamentals driving the demand for commodities suggest that the long-term structural break in the terms of trade will be sustained, albeit at a less extreme pace than in the super-cycle boom of 2006–2008 (UNCTAD, 2006; Farooki, 2009; Kaplinsky, 2009).

10. Various codes of conduct such as those governing labour and environmental standards and financial transparency affect the operations of northern investors in SSA. In the clothing sector, one of the reasons why US buyers were reluctant to completely switch sourcing from SSA to China after the MFA quota removal in 2005 was that SSA producers had much higher labour standards and these were important in certain US niche markets (Kaplinsky and Morris, 2008).

References

- Africa Frontier Advisory. (2008) *Africa Business Frontier*, Issue 1, March, <http://www.frontier-advisory.com/wp-content/uploads/2008/05/african-business-frontier.pdf>.
- African Development Bank. (2008) *African Development Report 2007*. Abidjan: African Development Bank.
- Ajakaiye, O., Mwega, F.M. and N'Zue, F.F. (2008) Seizing Opportunities and Coping with Challenges of China – Africa Aid Relations: Insights from AERC Scoping Studies. Nairobi: African Economic Research Consortium. Policy Issues Paper No. 1.
- Besada, H., Wang, Y. and Whalley, J. (2008) China's Growing Economic Activity in Africa. NBER Working Paper, 14024.
- Brautigam, D. (2008) 'Flying Geese' or 'Hidden Dragon'? Chinese business and African industrial development. In: D. Large, J.C. Alden and R.M.S. Soares de Oliveira (eds.) *China Returns to Africa: A Rising Power and a Continent Embrace*. London: Christopher.
- Broadman, H.G. (2007) *Africa's Silk Road; China and India's New Economic Frontier*. Washington: The World Bank.
- Burke, C. and Corkin, L. (2006) *China's Interest and Activity in Africa's Construction and Infrastructure Sectors*. The Centre for Chinese Studies, Stellenbosch, South Africa: Stellenbosch University.
- Cheng, L.K. and Ma, Z. (July 2007) China's outward FDI: Past and future, http://www.nber.org/books_in_progress/china07/cwt07/cheng.pdf, accessed 31 July 2008.
- Corkin, L. (2009) *Presentation to Making the Most of Commodities Programme*. Cape Town, South Africa: University of Cape Town.
- Dobler, G. (2006) South-South business relations in practice: Chinese merchants in Oshikango, Namibia, www.ids.ac.uk/asiandrivers, accessed 5 April 2006.
- Dunning, J. (2000) The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review* 9(1): 163–190.
- Dunning, J. (2006) Comment on dragon multinationals: New players in the 21st century globalization. *Asia Pacific Journal of Management* 13: 139–141.
- EIU (The Economic Intelligence Unit). (2007) World investment prospects to 2011: Foreign Direct Investment and the challenge of political risk, http://www.eiu.com/site_info.asp?info_name=eiw_world_investment_prospects_2007&rf=0.
- FAO. (2007) Implications for World Agricultural Commodity Markets and Trade of Rapid Economic Growth in China and India. Committee of Commodity Problems, Sixty-Sixth Session, Rome: FAO.
- Farooki, M. (2009) China's structural demand and the commodity super cycle; implications for Africa. Paper presented at the China-Africa Development Relations Research Workshop, Leeds: Leeds University, [http://asiandrivers.open.ac.uk/\(AD%20webpage\)%20China's%20structural%20demand%20and%20the%20commodity%20super%20cycle.pdf](http://asiandrivers.open.ac.uk/(AD%20webpage)%20China's%20structural%20demand%20and%20the%20commodity%20super%20cycle.pdf).
- Foster, V., Butterfield, W., Chen, C. and Pushak, N. (2008) *Building Bridges: China's Growing Role as Infrastructure Financier for Africa*, Trends and Policy Options: Infrastructure No. 5 Washington: The World Bank.
- Freeman, D., Holslag, J. and Weil, S. (2009) China's foreign farming policy: can land provide security? *BICCS Asia Paper*, Vol. 3 (9), Brussels: Brussels Institute of Contemporary China Studies.
- Gu, J. (2009) China's Private Enterprises in Africa and the Implications for African Development *European Journal of Development Research*, Vol. 21(4): 570–587.

- Henley, J., Kratzsch, S., Külür, M. and Tandogan, T. (2009) Foreign Direct Investment from China, India and South Africa in Sub-Saharan Africa: A new or old phenomenon? In: A. Santos-Paulino and G. Wan (eds.) *Southern Engines of Global Growth and the Role of FDI*. Helsinki, Finland: for Oxford University Press.
- Hilsum, L. (2005) We love China. *Granta* 92, London: Granta Publications. <http://www.granta.com/extracts/2616>, accessed 3 March 2006.
- IMF. (2007) *World Economic Outlook*. Washington: International Monetary Fund, <http://www.imf.org/external/pubs/ft/weo/2007/01/pdf/>.
- Jopson, B. (2009) Chinese copper entrepreneurs flee. *Financial Times*, 20 February.
- Kaplinsky, R. (2009) China, commodities and the terms of trade. In: D. Greenaway, C. Milner and Shujie Yao (eds.) *China and the World Economy: Consequences and Challenges*. London: Palgrave.
- Kaplinsky, R. and Messner, D. (2008) Introduction: The impact of the Asian drivers on the developing world. *World Development Special Issue on Asian Drivers and their Impact on Developing Countries* 36(2): 197–209.
- Kaplinsky, R. and Morris, M. (2008) Do the Asian drivers undermine export-oriented industrialisation in SSA. *World Development Special Issue on Asian Drivers and their Impact on Developing Countries* 36(2): 254–273.
- Komesaroff, M. (2008) China eyes Congo's treasures. *Far Eastern Economic Review* 171(3), April.
- Lall, S. (1984) *The New Multinationals*. New York: Wiley.
- Lecraw, D.J. (1977) Direct investment by firms from less developed countries. *Oxford Economic Papers* 29: 442–457.
- Mathews, J.A. (2002) Competitive advantages of the latecomer firm: A resource based account of industrial catch-up strategies. *Asia Pacific Journal of Management* 19: 467–488.
- Mohan, G. and Kale, D. (2007) The Invisible Hand of South-South Globalisation: A Comparative Analysis of Chinese Migrants in Africa. Report to the Rockefeller Foundation, Milton Keynes: Development Policy and Practice, Open University, <http://asiandivers.open.ac.uk/documents/Rockefeller%20Report%20on%20Chinese%20diasporas%2010th%20Oct%203.pdf>.
- Mohan, G. and Power, M. (2008) New African choices? The politics of Chinese engagement in Africa and the changing architecture of international development. *Review of African Political Economy* 35(1): 23–42.
- Narula, R. (2006) Globalisation, new technologies, new zoologies, and the purported death of the eclectic paradigm. *Asia Pacific Journal of Management* 23: 143–151.
- Nolan, P. (2005) *Transforming China: Globalization, Transition and Development*. London: Anthem Press.
- Review of African Political Economy*, Special Issue 35(115).
- Tull, D.M. (2006) China's engagement in Africa: Scope, significance and consequences. *Journal of Modern African Studies* 44(3): 459–479.
- UNCTAD. (2006) *Trade and Development Report*. Geneva, Switzerland: United Nations.
- UNCTAD. (2007a) *Asian Foreign Direct Investment in Africa: Towards a New Era of Cooperation Among Developing Countries*. Geneva, Switzerland: UNCTAD.
- UNCTAD. (2007b) *World Investment Report 2007; Transnational Corporations, Extractive Industries and Development*. Geneva, Switzerland: UNCTAD.
- UNIDO. (2007) *Africa Foreign Investor Survey 2005*. Vienna, Austria: United Nations Industrial Development Organisation.
- Vandaele, J. (2008) *China Outdoes Europeans in Congo 8th February*. Johannesburg, South Africa: Inter Press Service.
- Wells, L.T. (1983) *Third World Multinationals: The Role of Foreign Direct Investment from Developing Countries*. Cambridge, MA: MIT Press.
- Wild, F. (2009) China to proceed with \$9 billion Congo plan. Ambassador says, <http://www.bloomberg.com/apps/news?pid=20601116&sid=aGh8yVIndUog&refer=africa#>, accessed 13 March 2009.
- World Development Special Issue on Asian Drivers and their Impact on Developing Countries* 36(2).
- Zeng, M. and Williamson, P.J. (2007) *Dragons at Your Door*. Boston, MA: Harvard Business School Press.