

“Global since Gold”

The Globalisation of Conglomerates: Explaining the Experience from South Africa, 1990–2009.

Grietjie Verhoef

University of Johannesburg

gverhoef@uj.ac.za

Keywords: overseas foreign direct investment, internationalisation, business history, conglomerates, competitiveness, industrial protection, management strategy.

JEL classification: L14; L21; L32; M48; N60; N67; N87; N97; O31 ; O32.

The internationalisation of enterprises is one of the essential ways to strengthen the competitiveness of firms from developing countries (UNCTAD, 2005c: 3). Strong growth in outward foreign direct investment (OFDI) from developing countries has become the distinguishing feature of the twenty-first century. This OFDI flows from state-owned enterprises, sovereign wealth funds (SWF) as well as private enterprises operating as multinational companies from a home base or as free-standing companies. Multinational corporations have commenced activities since the 1960s by moving operations to resource-rich, low-cost labour and capital markets (Wilkins, 1970; 1974; 1988; Jones, 1994; 2005). The first wave of OFDI during the 1960s and 1970s was motivated by efficiency and market-seeking factors. This wave was dominated by firms from Asia and Latin America. A second wave of OFDI followed in the 1980s led by strategic asset-seeking enterprises from Hong Kong, Taiwan, Singapore and South Korea (Dunning et al, 1996; UNCTAD, 2005b: 3s). Since the 1990s China, Brazil, India, Russia (the so-called BRIC countries) Malaysia, Turkey and South Africa are among the countries expected to add significantly to OFDI growth (UNCTAD, 2005c: 4). The flow of investment funds from developed countries was expected, but the reverse trend displayed the emerging capacities in countries and firms outside the core of the international economy, which challenged the dominance of developed countries and companies from developed country. These developments have prompted several questions: how do developing country firms succeed in entering global markets? Do these firms improve their competitiveness through OFDI? This paper investigates this phenomenon from the experience of South Africa. The emergence of EMNC (Emerging Market Multinational Corporations) prompted extensive analysis and debates about the nature of and motives for EMNCs, but has also led to more in-depth analysis of specific country characteristics and firm-specific reasons for OFDI.

Is South African an 'emerging economy'? The most commonly used definition of emerging markets in management literature is the one used by Hoskinsson et al. They define emerging economies as "low-income, rapid-growth countries using economic liberalization as their primary engine of growth" (Hoskinsson, 2000: 249). Their definition includes 51 rapid-growing developing countries in Asia, Latin America and the Middle East as identified by the International Finance Corporation, as well as another 13 economies in the former Soviet Union and China as identified by the European Bank for Reconstruction and Development. This definition thus includes 44 countries, but South is not one of them. Eden describes the core characteristics of these economies "as dynamic economies, with fundamentally changed institutional environments after the early 1990s when liberalization, privatization and deregulation were experienced as policy shocks, and as economies suffering from weak market-based institutions, especially property rights and legal infrastructure" (Eden, 2008: 333–334). Amighini et al (2009) use 'developing' and 'emerging' country interchangeably when assessing the origin of MNEs. Other authors place South Africa squarely in the category of 'emerging markets'. Goldstein and Prichard (2009) and Golstein (2008) include South Africa in the discussion of emerging market MNEs. The UNCTAD literature refers to South Africa as an 'emerging market' and a 'developing' economy (WIR09: 22). The World Bank classifies South Africa among 'upper middle income' countries (World Bank, 2000: 334). That South Africa does not fit comfortably into these categories is testimony to the fact that the country can be described as a 'unique' example of an 'emerging' or 'developing' market. Klein and Wöcke (2007) and Goldstein (2009) acknowledge peculiarities in the South African market that set the country apart from other emerging or developing markets.

The permanence in the reversal of the direction of MNC activities since the beginning of the twenty-first century has prompted a growing literature on emerging market MNCs or EMNCs. (See Sauvart (2008); Ramaruti & Singh (2009); and Dick and Merrett (2007).) The statistics released by the United Nations Conference on Trade and Development (UNCTAD) show that the contribution of Europe to OFDI stock rose from 49.5% in 1990 to 57% in 2006, while the contribution of the USA declined from 24,3% to 19.1%. The most notable contribution to OFDI stock was that by emerging markets/developing countries, which rose from 8.3% in 1990 to 12.8% in 2006 (Ramaruti & Singh: 15). By 2008 the OFDI from developing countries rose to 16%, the largest share of global OFDI (UNCTAD WIR09: 16–17). While Africa was a net recipient of FDI amounting to US\$86,7 billion in 2008, OFDI was rising and stood at US\$9,2 billion in 2008 (UNCTAD WIR09: B1, 247). The rising trend in OFDI from developing countries is explained by reference to global market liberalisation and privatisation in developing countries. In seeking solutions to the economic problems of developing countries,

including Africa (Madison, 2007: 231–237), OFDI is explored as a mechanism to enhance the profitability and efficiency of EMNCs (UNCTAD, 2005b: 4–5)

The discourse in the literature on why and how EMNC rose so rapidly can be divided into ‘old’ and ‘new’ theories of internationalisation to explain the ongoing process of MNC expansion from the developing world. EMNCs are relatively small compared to MNCs from developed countries, and in some instances partially state-owned. The mainstream theory of internalisation of firms is the *OLI* hypothesis. Firms would expand operations abroad on the basis of *Ownership (O)*, *Location (L)* and *Internalisation (I)* considerations. Ownership advantages refers to ownership of firm-specific resources to be exploited externally. Location refers to advantages of the host country with natural resource endowments. Internalisation refers to the advantages following from the internalisation of firms-specific advantages, rather than exploiting those advantages in other markets through arms-length transactions. Dunning (1993: 2000) added his own set of motivation typologies for OFDI: market-seeking investments targeted access to third markets; efficiency-seeking investments sought to improve efficiency through specialisation; resource-seeking investments sought natural resources unique to specific foreign locations; and strategic asset-seeking investments aimed to add to the existing proprietary resources of the firm. Firms had to have some firm-specific advantages, according to Rugman (2007 – FSAs), complemented by country-specific advantages (Rugman, 2006 – CSAs), which equated to the *O* and the *L* advantages in the *OLI* model. Dunning later expanded on his initial *OLI* model by incorporating the phenomenon of alliance capitalism and the growth of firm networks in international business activities. The advantage of ownership gradually incorporated the advantages of knowledge shared in networks and alliances which became incorporated into firm ownership structures (Dunning, 1995, 2000, 2006). The organisational structure of internationalising firms reflected new organisational forms. Firm integration no longer displayed only the hierarchical mode of integration, based on the transaction cost theories, but through alliances and networks constructed new forms of ownership domains. Through networks and alliances firms thus internationalised their operations by seeking strategic assets to augment their existing proprietary resources. As the role of institutions was integrated into the understanding of CSAs, Dunning later acknowledged the importance of institutions for internationalisation into each element of the *OLI* paradigm (Dunning & Lundan, 2008; Dunning & Zhang, 2008).

The new theories of internationalisation of EMNCs attempted to account for the pattern of firm internationalisation from developing countries. Firms in developing countries had to overcome the latecomer effect as well as technology gaps, which implied a need not just to access strategic resources, but also to learn strategies to overcome the initial disadvantages in new international

markets: “Thus, internationalization becomes a strategy aimed at strengthening the firms themselves thanks to the accumulation of resources previously not available” (Amighini et al, 2009: 5). Internationalisation from emerging market firms is not purely on the basis of their *O*. These firms also *I* existing resources differently – they engage in OFDI to strengthen their former *O* (see Aulakh, 2007: 237; Goldstein, 2007: 81). Amighi et al explain that the *OLI* paradigm was criticised as ‘static’, since its premise was the advantages existing prior to FDI and a failure to take into consideration the dynamic acquisition of capacity and experience through internalisation. It was argued that EMNCs endogenously and dynamically added to ability by acquiring new resources and internalising them on firm level to generate knowledge to succeed in the international context. It was Matthews (2002) who developed this evolutionary view of the internationalisation process (Amighi et al, 2009: 5; Matthews, 2002a, 2002b). Matthews’s analysis of the internationalisation of specifically South-East Asian firms led to the observation that those firms did not possess domestic assets that they could exploit abroad. These firms had to find resources first, then internalise them in the firm and finally develop linkages or partnerships or networks to leverage against the risks involved in their outward strategies. His analysis resulted in an amended *OLI* framework, the *LLL* framework – *Linkage, Leverage and Learning* framework. This framework explained joint ventures and other forms of collaboration in global value chains as the mechanism whereby EMNCs accessed much needed new resources, then leveraged those resources, learnt about them, their cost and competitive advantages and how to utilise them in international operations. Amighi explains the new *LLL* model as follows: “Within this framework, the global economy is described as a set of resources available to firms and internationalization is defined in a broader sense, as: ‘*the process of the firm’s becoming integrated in international economic activities*’”(Amighi et al, 2009: 6). The new thinking thus interpreted EMNC operations not to be asset-exploiting at the outset, but to start their endeavour into the global economy by searching for assets or asset-exploring.

The value of the *LLL* framework is that it led to a linkage of the OFDI process with the EMNC strategies. Firms in emerging markets established links to inward FDI activities by establishing networks with foreign producers and by learning from them (capability enhancement) – this amounted to ‘experiential learning’. Firms in the developing country acquired knowledge and experience in equipment manufacturing, joint ventures and participation in GVC. Depending on the ability of the emerging market firm’s capacity to internalise or ‘absorb’ (“identify, assimilate and exploit”) the new skills, technology or resources, the EMNC would then venture into the global market (Li, 2007; Lou and Tung, 2007; Cohen and Levinthal, 1990). The appeal of the Matthews framework and the recognition of the capacity-building effect of inward FDI towards facilitating future EMNCs was criticised on the basis of the case studies used to develop this framework – these

were almost exclusively taken from emerging markets in the Asia Pacific region. Renewed emphasis was placed on country-specific analyses and an appreciation of the Gerschenkron effect, i.e. the ability of late-comers to access and take over advanced technologies from developed market leaders and catch-up as fast as possible through linkages, collaboration and the leveraging of resources, made accessible through such linkages.

The internationalisation of South African enterprises displays some idiosyncrasies as well as alignment to some international trends. South African economic development by 1950 was more advanced than that of several nations currently included in the emerging market category, such as South Korea, China, India, Ghana, Kenya and Tanzania (Buchheim, 2006: 53–54). The growing international isolation of South Africa since the country walked out of the Commonwealth in 1960, right up until the early 1990s when political changes took place, limited the development of international linkages. South Africa was never entirely isolated from the global environment. The internationalisation of business enterprises was contained by political isolation, sanctions and domestic statutory exchange controls and ownership restrictions, but the domestic development of commerce and industry created in an incubated space developed an adequate platform for rapid internationalisation once political and economic restrictions were removed. The case of South Africa justifies a careful analysis of the country-specific conditions (CSAs) that enabled strong economic growth and internationalisation capabilities (FSA) unmatched by any other African state.

The South African context

Since the nineteenth century the different colonies which would later form the Union of South Africa in 1910 had been integrated into the international economy through trade with Europe (Netherlands, Germany, France), Britain and the USA (Müller, 1977: 86–90; 139–141; Schuman, 1951: 166–167; Jones & Müller, 1992: 117). Sustained trade with these developed economies characterised the relationship between South Africa and the international economic metropole, despite the sanction years. The discovery of diamonds in 1867 and the main large gold deposits on the Witwatersrand in 1886 cemented these links. Britain had to fight two wars to crush the independent Boer Republicsⁱ to secure control of the gold mines. The gold mining industry established the core of the modern South African economy, creating downstream manufacturing and service industries. Demand for food and other consumer goods stimulated the agricultural sector, imports of goods and equipment and financial services. The modernisation of the South African economy developed in close alignment to the British economy – the ‘Randlords’ of the mining industry were British capital, and so were the downstream industries and the banking

industry. By 1910 the structure of the South African economy was predominantly primary – mining and agriculture (Schumann, 1940: 81, 88; Jones & Müller, 1992: 11; Feinstein, 2005: 115).

Diamond mining was consolidated in Cecil John Rhodes's De Beers Consolidated Mines in 1888 and the 124 gold mining companies owned by British, French and German owners at the end of the nineteenth century were consolidated into four dominant companies by the early 1920s (Newbury, 1995: 3–29). The Anglo-American Corporation (AAC) was established with British, American and South African capital in 1917. In 1927 the AAC acquired a majority stake in De Beers, leading to a dominant position in the mining industry ever since. Diversified investments by the mining industry in the production of food, consumer goods, mechanical and engineering equipment led to the development of the industrial sector in South Africa. The mines also needed capital and financial services; therefore they established their own finance houses and bought stakes in banks. Mining, finance and industry were closely interlinked, and primarily to British and other European capital (Yudelman, 1983: 258, 278–279). By 1938 Afrikaner enterprises' turnover was 8 percent of total turnover in commerce, 3 percent of manufacturing, 5 percent of finance, 1 percent of mining and 5 percent on aggregate turnover of the entire economy – the rest had been in English control (Sadie, 2001: 28).

The South African government responded to calls by industrialists for the protection of local industries and between 1912 and 1993 industrial protection by means of tariffs, import quotas and sectoral subsidies protected local industries. These industries were primarily in the hands of English capital and remain so to this day. Industrialisation was given a major boost by industrial protection, but also by the establishment of several key state-owned industrial enterprises (SOE). In 1928 the Iron and Steel Corporation of South Africa (ISCOR) was established by an act of parliament to ensure the production of affordable, accessible steel and iron for the growing industrial economy. The first steel was produced in April 1934; in 1923 the Electricity Supply Commission of South Africa (ESCOM) was established to ensure sufficient energy supplies for the growing economy; and in 1940 the Industrial Development Corporation (IDC) was established to assist industrial development through capital, expertise and management consultancy (Jones & Müller, 1992: 168–172; Feinstein, 2005: 120–121). In 1950 the South African Oil and Gas Corporation (Sasol) was established to produce petroleum from coal. International pressure was mounted against South African domestic policies at the United Nations by the Non-Aligned Movement led by India (Verhoef, 2003: 88–90). This prompted the implementation of policies and programmes to enhance the self-sufficiency of the South African economy.ⁱⁱ An advanced industrial sector, dependent on protection, state involvement, a steady supply of labour, foreign exchange earnings of the mining sector and FDI,

developed. The South African economy developed with close reciprocal ties to the former colonial power, Britain, and other Commonwealth and European countries. In the period between the rapid international economic growth recovery after 1945 and the 1970s South African firms had operated along the *LLL* paradigm, learning from developed country firms doing business in South Africa. The industrial development initiatives were driven by the policies of the South African state to put “South Africa first!” This implied that South African interests were to be paramount to Commonwealth interests in all respects, not subject to the interests of the British monarchy. This strong sense of independence, despite alignment to the Commonwealth, served as a unique motivation for economic self-sufficiency. Afrikaners had a direct impact on this ambition: in Australia and New Zealand the settler populations were content with the British connection; in South Africa Afrikaners desired sovereignty. This had a profound impact on economic and industrial development. Until the 1950s industrial development in South Africa was still inefficient and heavily dependent on the foreign exchange earnings of the mining sector (especially gold) to finance vital industrial raw materials imports. A broad industrial base had nevertheless emerged. Lumby noted: “Consequently, the massive and diversified industrial structure that has been developed in South Africa was unable to finance its own expansion. The significantly higher price for gold during the late 1970s provided South Africa with a windfall which enabled her to delay the process of substituting secondary industry for the primary sector, but did not obviate the ultimate need for such substitution. Hence the pronounced emphasis upon the need to stimulate the development of export industries became part of the major strategy whereby the government hoped to cut the Gordian knot which tied the expansion of South African industry to the primary sector” (Lumby, 1983: 244; also see Feinstein, 2005: 180).

The result of the protectionist policies was that the most diversified industrial economy in Africa developed in South Africa. Industrial production remained highly protected, and, after the establishment phase, by the 1970s had become inefficient and uncompetitive. Rapid economic growth between 1940 and 1973 could not be sustained in a limited domestic market where no comprehensive policy existed to improve all human capital to serve the needs of a technologically advanced industrial sector. Since the 1970s a ‘structural break in economic performance’ became visible: real GDP per capita, real output in gold mining and the mining of other minerals, agriculture and manufacturing declined. Output per worker, output per unit of capital and real fixed capital formation have dropped since 1973. The average annual rate of growth of real manufacturing output dropped from 7 percent between 1948 and 1974 to 1.6 percent between 1974 and 1994 (Jones, 2002; Feinstein, 2005: 180, 202, 221; Van Dyk, 2003: 127–133). By 1979 the manufacturing sector imported R7 billion worth of goods and exported goods valued at R3 billion – the shortfall of

R4 billion was financed by mining earnings abroad (Yudelman, 1983: 278). Attempts to reform the labour market by legalising trade unions, improving access to training and scrapping employment reservation in the early 1980s could not overcome the structural inefficiencies in manufacturing. Global market liberalisation (see Yegin & Stanislav, 1998: xv–xvi) and strong export-led growth from emerging markets dwarfed the South African industrial sector.

Ironically, by 2007 South Africa had become the leading OFDI nation in Africa. With nine companies in the top 100 non-financial MNCs from developing countries (ranked by foreign assets) South Africa is the only African state in those ranks. The top performer is Sasol at number 22 (WIR, 2009: A.11: 231–233; UNCTAD, 2005c: 6). What is the explanation for this?

Internationalisation of South African enterprises: general trends

The need to enhance competitiveness has been the most significant driver of the globalisation of South African enterprises. Macro-economic motives stem from the termination of political isolation in 1990 and economic liberalisation, which commenced with monetary liberalisation in the mid-1980s (Verhoef, 2009: 172–176). Liberalisation offered the opportunities for enterprises to internationalise their operations and gain access to more and cheaper capital to finance expansion, for example through dual listings on international stock exchanges, and to expand out of the saturated domestic market. Access to the global value chain, markets, natural resources and technology, the possibility of diversifying operations and participating in global trade channels and taking advantage of global investment opportunities were all drivers towards internationalisation (UNCTAD, 2005a: 3, 8; UNCTAD 2006b: 5; Gelb, 2005: 202; Klein & Wöcke, 2007: 320).

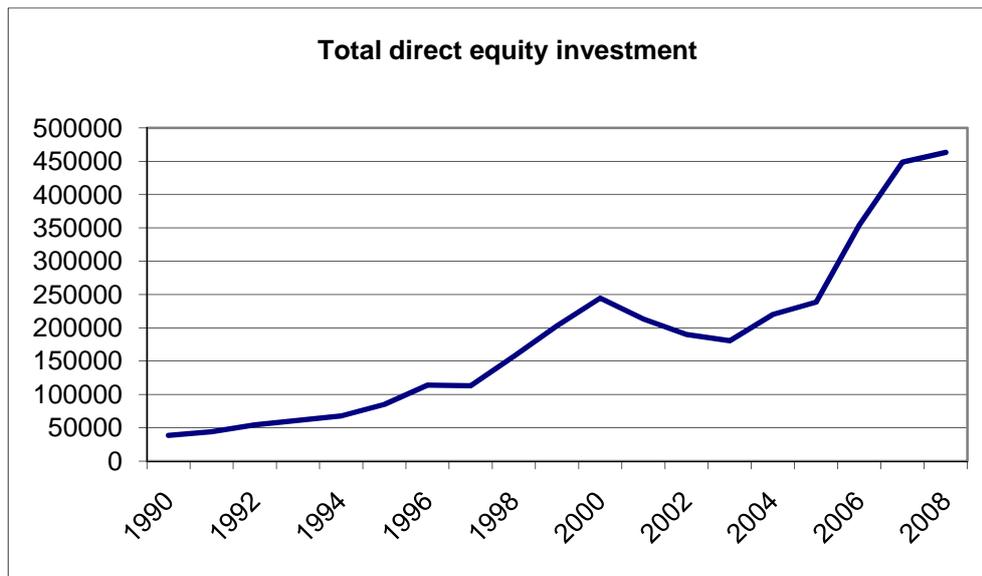
Table 1: South Africa Outward Foreign Direct Investment , 1990–2008 (Rm)

	Direct Investment By public Corporations – Equity capital	Direct Investment by banking sector – equity capital	Direct Investment by Private non-bank sector- Equity capital	Total direct Equity Investment (1)	1 as % of GDP
1990	0	299	36,912	38,463	3,53
1991	0	175	5,574	44,171	4,11
1992	0	196	7,348	54,329	5,16
1993	0	206	8,630	61,020	5,72
1994	0	285	12,911	67,698	6,15
1995	0	473	18,746	84,991	7,49
1996	0	1,039	25,809	114,013	9,63
1997	23	1,349	33,539	113,170	9,31
1998	302	4,946	38,233	157,385	12,88
1999	714	6,683	48,419	203,036	16,24
2000	870	8,636	61,754	244,653	18,79
2001	50	3,588	65,917	213,184	15,94
2002	75	2,364	55,331	189,911	13,69
2003	81	2,605	58,909	180,507	12,64
2004	78	1,972	75,773	220,036	14,74
2005	108	745	82,756	238,490	15,17
2006	141	651	121,907	354,254	21,35
2007	187	267	140,839	448,629	25,63
2008	202	127	116,314	463,143	25,52

Source: South African Reserve Bank, Time Series dataset.

Official SARB data on OFDI does not reflect reinvested earnings or long- or short-term capital invested abroad, but the trend of investment in equity is clear: SOE OFDI had risen sharply between 1998 and 2000, but since then declined. SOE from South Africa invested primarily in infrastructure projects. The IDC acquired minority equity stakes in joint ventures with the Mozal Aluminium smelter in Mozambique; Escom entered in joint ventures with the Mozal project as well as telecommunications service providers in Lesotho; and Transnet’s subsidiary South African Airways acquired a 49 percent stake in privatised Tanzania’s national airways (UNCTAD, 2005a: 9). Expansion of the banking sector followed actively after banks were permitted in 1994 to invest abroad (Singleton & Verhoef, 2010). The growth in direct equity investment by the banking sector rose

dramatically to R8,6 billion in 2000,



representing an annual average growth of 278,8 percent. Since the initial strong outward performance, this OFDI had slumped to well below the 1990 levels. The only sustained OFDI activities were those of the private non-bank sector. In 1990 a substantial OFDI was made, but then OFDI showed a gradual and steady increase until 2007, after which a slight reduction was posted for 2008. The contribution of SOEs and the banking sector is insignificant compared to the OFDI by the non-bank private sector. Market liberalisation occurred in the domestic market after South Africa signed the Uruguay Round of world trade negotiations in 1993, and removed tariff and quota protection, which had protected South Africa's industrial sector. Only enterprises well positioned with competitive advantage in production efficiency, and access to capital, technology and management, could benefit from this. A limited number of private sector enterprises were favourably positioned to sustain and expand operations. Despite the inherent weakness of the industrial sector referred to above, some enterprises were capable of extending their operations internationally. OFDI by the non-bank private sector rose by 6,98 percent annual compound growth between 1990 and 2008, compared to negative growth of ODFI by the banking sector.

The rising ratio of OFDI to GDP since 1990 is a clear indication of the growing globalisation of South African business. Total direct equity investment as a proportion of GDP rose gradually from 3,53 percent in 1990 to 25,52 percent in 2008 (see Table 1 above). This represents an 86 percent increase, and does not fully reflect the full position, since the OFDI of companies listed in London as their primary listing do not submit to the SARB. The internationalisation of South African business compares relatively well with that of Australia. In 1990 Australian outward stock was 9,8 percent of GDP and in 2003 26,4 percent. South Africa had just emerged from isolation in 1990 and then OFDI

was 3,53 percent of GDP, but by 2003 the SA ratio was still well below the Australian figure at 12,64 percent. By 2008 South African ODFI had reached the level of Australian ODFI in 2003, namely 25,52 percent (Dick & Merrett, 2007: 25).

The most important aspect of ODFI by the non-bank private sector is that the bulk of these investments target developed markets, not developing markets, as was explained by Khanna and Palepu (2006). The historic links with the UK and Europe made them the preferred markets. By 2005 European markets were the recipients of 81,24 percent of direct equity investments from South Africa, while the OECD accounted for 87,48 percent. Africa received only 8,19 percent of ODFI equity investments, although this ratio is increasing. This distribution had changed to the following by 2008: ODFI in direct equity investments to the UK comprised 24,5 percent of total ODFI in direct equity investments; 54,8 percent went to European nations, 7,35 percent to North and South America, 21,7 percent to Africa, 10,7 percent to Asia and 4,6 percent to Australia (SARB, 2006, 2009). South African business is therefore beginning to expand into the emerging markets of Asia, Oceania and Africa. The historic network of the OECD/UK, which served as the initial location to which South African firms expanded, is slowly diverging into a new network, i.e. the emerging markets in the South-South alliance and the 'comrade/liberation struggle' network in Africa. The geographical direction of EMNCs from South Africa does not comply with the Uppsala model of Johansson and Vahlne (1977), which argued that firms from developing countries expand first through exports to neighbouring ethnically similar countries, then to neighbouring non-ethnically-related countries and only much later to more distant 'developed' markets. This was also the Investment Development Path (IDP) thesis of the 1980s (Dunning, 1981, 1986). If the former colonial power and the European base of the white minority population is seen as the 'ethnically similar' entity to which South African enterprises exported, then the theory holds for the period before 1994, but the theory does not hold for the post-1994 South Africa. Perhaps the fact that South African firms were primarily in the hands of white owners explains the geographical direction of ODFI immediately after 1994. South African ODFI is currently displaying expansion into countries further away from their home base and "those further away in terms of psychic distance" (Tolentino, 1993: 364). The 'neighbours' of South African enterprise are African markets, which are different in character from the UK/OECD markets historically targeted by them. The change in the dominant 'culture' in South Africa after 1994 has had a profound impact on internationalisation strategies of enterprises.

Most ODFI from South Africa takes place by means of mergers and acquisitions (Goldstein, 2009: 253–257; Klein & Wöcke, 2007: 324–330; UNCTAD, 2005a: 6). New investments are made, but this strategy represents a minority of initiatives. New investments in Africa were relatively small (below

R7m – or US\$1m) and primarily market-seeking, taking commodities in demand to communities deprived of properly functioning markets (Grobbelaar, 2008). The M&A acquisition wave was stimulated by the international unbundling trend of the late 1980s and 1990s. In South Africa the first major conglomerate unbundling exercise was the unbundling of Gencor by Sankorp in 1993 (Verhoef, 2009: 154–157; UNCTAD, 2005a: 3). Subsequent unbundling exercises to improve the focus and strategic direction of business groups in South Africa opened up M&A opportunities in the domestic market. Better-focused business groups then gradually set their eyes on the acquisition of expanded markets, which led to international M&As. The dominant South African conglomerate outward M&As were by Anglo American Corporation, South African Breweries (SAB) and Old Mutual, but smaller deals were concluded by Sappi, Sasol, Billiton, the MTN Group and Dimension Data (E&Y, 1998-2009). The most transactions and the largest OFDI transactions occurred between 2000 and 2001. Since 2005 more inward FDI has occurred (E&Y, 2009: 14, 23). AAC, SABMiller (after 2002) and Old Mutual secured primary listings on the London Stock Exchange (with a secondary listing on the Johannesburg Stock Exchange) (*Economist*, 10/12/98). The strategy of this move was to display managerial and performance professionalism, improving focus by selling off non-core assets and thus gain international investors' acceptance as sound, not too risky investments and a profoundly better track record than EMNCs from competing emerging markets. The result was that further OFDI by London primary listed companies were no longer captured in SARB statistics and therefore official SARB OFDI statistics do not reflect the entire spectrum of South African enterprises' globalisation.

Some brief analyses were conducted on internationalisation strategies of leading South African OFDI enterprises, SAB Sappi and Barloworld (Klein & Wöcke, 2007). Goldstein (2008) and Goldstein and Pritchard (2009) offered a general overview of the globalisation trend of South African companies. The general assessment is that CSAs existed in each case, which, coupled with FSAs, provided South African enterprises with a competitive advantage in globalisation.

The first big business from South Africa to move across the borders was SAB. In 1993 SAB acquired a stake in the loss-making Tanzanian national brewer and then entered into an agreement with the Castel group. A pan-African strategic alliance was formed. SAB operated in the south and eastern parts of the continent and Castel in francophone or central, west and north Africa. The expansion into African markets absorbed excess capacity and improved efficiency. SAB then targeted the eastern European markets – first Hungary. In 1994 SAB moved into China and established a dominant presence in five African countries, as well as in Poland, Russia, Romania, Slovakia and the Czech Republic by 2000. In 2001 SAB expanded into Central America. By 2002 SAB was represented in 24 countries. In May 2003 SAB acquired a 100 percent interest from Phillip Morris in the Miller

Brewing Company in the USA. Since then, SAB has been registered as SABMiller. In 2005 SABMiller became the second-largest brewer in Latin America after the acquisition of Grupo Empresarial Bavaria, the largest drinks firm based in Colombia (*Economist*, 20/07/05; 21/07/05). SABMiller moved its primary listing to London in March 1999, to access more hard currency for further expansion. The depreciation of the South African currency since 2002, political instability in Zimbabwe and a lack of confidence in African leadership were all reasons to grow the business in global markets. UNCTAD ranked SABMiller in 2003 as a TNC from a developing country in position 20 in terms of foreign assets and 18th in TNI (Transnationality index),ⁱⁱⁱ with a score of 55 percent. SABMiller's foreign assets in 2003 were US\$2,785 billion, foreign sales US\$2,433 billion and 15 450 employees in foreign employment (WIR, 2003). By 2008 SABMiller was no longer ranked as a developing country TNC in the non-financial sector, but as a TNC among the world's top 100 non-financial TNC's. SABMiller is ranked in the 76th position, with a TNI of 76 percent, foreign assets of US\$25,139 billion, foreign sales of US\$12,585 billion and 56 195 foreign employees (WIR, 2009: 229). SABMiller used the protected South African market to develop expertise and excess capacity, but the limitations of scale and scope in the isolated domestic market resulted in massive diversification into non-core industrial activities. Once isolation was ended, SAB sold off non-core assets, and globalised through M&As following the 'springboard' strategy. SABMiller used its expertise to expand into developing markets in Africa and Eastern Europe, and then, after listing, made the leap into developed markets. By 2008 SABMiller was no longer a South African company, and earned the bulk of its income from outside South Africa – *The Economist* refers to SABMiller as a "British-based firm" (*Economist*, 21/07/05).

While SABMiller initially moved into developing markets and then excelled in developed markets, most South African enterprises engaged in rapid globalisation, primarily into developed markets. Some, such as Sappi, has a minority exposure in developing markets. The exposure to OECD and other developed markets has remained remarkably stable since 2000 (Goldstein & Pritchard, 2009: 257–260). AAC unbundles its industrial assets, strengthened its focus and then merged with Minorco in 1998. AAC then listed on the London Stock Exchange as AAC Plc. The subsequent restructuring of AAC entrenched the company more firmly in the OECD market and reduced exposure to the troublesome, politically volatile, South African mining industry. In 2008 AAC Plc was ranked, 56th among the world's top 100 non-financial TNCs, with a TNI of 83,7 percent. The only other former South African company on that list was SABMiller. The ease of AAC internationalisation followed from the sophisticated technological and managerial expertise of the group of mining and industrial enterprises since the 1920s. AAC was by far the dominant listed company in terms of market capitalisation on the JSE since the 1930s until its exit to London. Superior resource endowments

facilitated the development of a strong mining/industrial sector in South Africa and AAC was the most powerful. As soon as political power shifted in South Africa, AAC started to seek less threatening and more stable markets, with less exposure to the militant labour unions firmly entrenched in political power in South Africa. In the words of Moletsi Mbeki, Deputy-Chairman of the South African Institute of International Affairs, the internationalisation of large companies can be seen as ‘political risk management’ (*Financial Mail*, 9/4/10).

In the case of Sappi (South African Pulp and Paper Industries) the company benefited from industrial protection policies, but the limited domestic market restricted opportunities for production efficiencies on economies of scale. Organic growth in the domestic market made Sappi the market leader. In 1987 Sappi also acquired Saiccor, the world’s single-largest producer of chemical cellulose. Sappi needed to manufacture on a larger scale. Domestic excess capacity required market-seeking expansion. Sappi commenced exports in the mid-1980s and in 1986 established Sappi International to manage foreign sales, which had expanded to 50 percent of production by then (www.sappi.com; *Financial Mail*, 6/2/04). Sappi commenced aggressive international expansion through M&As: in 1991 five fine paper mills were acquired in the UK, specialised pulp services in Hong Kong were acquired, and in 1992 the company acquired control of Hanover Papier in Germany and listed on the London and Frankfurt Stock Exchanges, followed by a listing on the Paris bourse. In 1994 Sappi acquired 75 percent of S D Warren, the world leader in coated paper in the USA and by 1997, after acquiring Europe’s largest coated paper producer KNP Leykam, Sappi was the world’s largest producer of coated paper and market leader in Europe, North America and Africa. In 1998 Sappi listed on the New York Stock Exchange as well, but never shifted its primary listing overseas. In 2004 the expansion into the Asian market occurred: Sappi acquired 34 percent in a Chinese joint-venture Jiangxi Chenming to build paper machines, a mechanical pulp mill and a de-inked pulp plant. By 2008 Sappi is the world leader in the manufacturing of coated wood free paper. Sappi. (*Economist*, 13/07/06; www.sappi.com/Sappi web) By 2008 Sappi is ranked in the 50th position among non-financial TNCs from developing countries, with assets of US\$4001 million, foreign sales of US\$3 898, foreign employees numbering 9 802 (or 65%)out of a total of 15 081 employees in the group. Sappi’s TNI is 67,2 percent – thus acknowledged as a truly global company. Sappi still has substantial operations in South Africa, but utilised its superior managerial expertise and market leadership in the technology of coated paper production developed and refined in South Africa as an internationalisation strategy – first into the developed markets of Europe, the UK, Hong Kong, Germany and the USA, and finally into China. Sappi did not expand into other developing markets, but operated in line with the Dunning (1981) theory of *world-class ownership advantages*.

A similar internationalisation strategy was displayed by Barloworld, the industrial brand management company. Barlows was established in 1902 as a family business in England. The company sold woollen goods and later expanded into engineering goods. In 1927 Barlows sold the first caterpillar tractor and soon other heavy engineering caterpillar equipment. Barlows listed on the JSE in 1941 and soon diversified industrial operations similar to the conduct of other South African enterprises in the 1960s and 1970s. Barlows listed on the London Stock Exchange in 1969 and acquired trading operations in the UK, Botswana and Namibia. In 1970 Barlows acquired Rand Mines and changed its name to Barlow Rand, which led to a rapid diversification into extensive mining, industrial, property and electrical equipment. This was the characteristic of all the large mining and industrial concerns in South Africa in the 1970s – international expansion was restricted, but domestic M&As allowed rapid organic growth. Barlows’s international expansion had commenced as early as the 1980s, when acquisitions were made in Belgium, Spain and Portugal. These global exposures provided the springboard from which Barlows catapulted itself internationally after 1990. Following the international trend of conglomerate unbundling and refocusing on core business, Barlows disposed of its mining interests and embarked in further international acquisitions in the engineering equipment brand sector. New acquisitions were made in Australia and the USA and distribution networks extended to Siberia. Barlow Rand changed its name to Barloworld in 2000 to reflect the global footprint of the enterprise. The opportunities for expansion had already run out for Barlows in South Africa in the 1970s and in the twenty-first century Barloworld set itself the target of 75 percent income and 66 percent sales from international markets by 2003 (Business Report, 2000; Klein & Wöcke, 2007: 328–329). Since 2000 Barloworld expanded operations in the USA, Australia, the UK and China. Although Barloworld remained a South African company, it “owns and maintains the British Ministry of Defence’s entire fleet of more than 4500 pieces of material-handling equipment worldwide” (Business Report, 2003). By means of a clear company vision to achieve three goals, Barloworld established itself as a global enterprise. The three goals are: co-branding activities in which leading international brands are marketed and distributed, manufacturing, marketing and distribution of its own brands, and financial services operations (leasing and insurance) to support the distribution function (Klein & Wöcke, 2007: 329). In 2005 Barloworld was ranked 21st in terms of the TNI index for non-financial companies from developing countries, with transnationality at 51,6 percent, but 32nd in terms of foreign assets. Barloworld’s foreign assets rose from US\$409 billion in 2001 to US\$2,030 billion in 2008. Barloworld’s ranking in foreign assets had dropped to 83rd in 2008 and its transnationality to 68th position, with 41, 1 percent. In 2008 Barloworld’s foreign assets as a proportion of total assets was 45,1 percent. Foreign sales as a proportion of total sales were 43 percent (WIR, 2009: 233).

The performance of Barloworld underlines the observation that most South African MNCs' globalising conduct conforms with that of MNCs from developed countries, i.e. seeking markets for advanced industrial commodities and services in developed markets. The other rapidly internationalising South African MNCs listed under the top 100 non-financial TNCs from developing countries are Gold Fields Limited, Naspers Limited, Steinhoff International, the MTN Group Limited, Datatec and the Bidvest Group. Gold Fields is a gold mining group expanding into gold and precious minerals mining in other parts of the world; Naspers is the old Afrikaans company in media and communication technology; Steinhoff International is a diversified consumer goods company; MTN is the mobile telecommunications company and Datatec is the information technology company. All of these enterprises utilise and distribute advanced technology, commodities aimed at the middle and higher consumer markets – or, in the case of Gold Fields, expanded on the strength of its competitive advantage in deep-level mining. None of these enterprises are seeking to access developing markets with low-technology, high labour-intensive commodities, or seeking to access low-cost markets. All of these enterprises engaged in market- as well as capital-seeking strategies to overcome the limitations of the domestic capital market in order to develop growth capacities. All of these enterprises also internationalised rapidly – within the scope of between three and five years.

Financial services enterprises were slow to internationalise and made much slower progress. FDI inward into the financial sector was slow after foreign banks were allowed to invest in local banks or establish operations in South Africa. The price of these enterprises as well as the political risk discouraged foreign investors. The financial enterprises actually engaged in OFDI from this market into global markets, but on a comparatively limited scale. By 2009 revenue from foreign operations by South African banks and financial services was less than 10 percent. Their foreign loans and advances rose from 4,3 percent of total loans and advances in 1994 to 11.8 percent in 2008. Foreign banks' business in South Africa remained below 9 percent of total loans and advances of the entire banking sector. South African banks opened international offices very quickly: ABSA established new subsidiaries or bought financial services companies in Jersey and the British Virgin Islands. First National Bank established offices overseas and obtained trade and financial services subsidiaries in the British Virgin Islands, in Guernsey Island, Ireland and Hong Kong. Investec Bank obtained foreign interests in financial services companies in the British Virgin Islands, Kenya, Zimbabwe, Botswana, Hong Kong, Australia, the Jersey Islands and other parts of the UK, the Netherlands, the USA and Mauritius. Nedbank extended interests beyond its long-standing London office to Hong Kong, Malta and Mauritius. Standard Bank spread its interests to the UK, Hong Kong, Liberia, the United Arab Emirates and Russia. Rand Merchant Bank invested in Plessey Australia Pacific. These new ventures represented a wide variety of financial services companies, investments

subsidiaries and some other related concerns such as health care companies. By the end of 1999 South African banks had established further interests in Latin America (Standard Bank established offices in Argentina, Brazil, Peru and Colombia), The People's Republic of China, Singapore, Germany, Switzerland Italy and Iran (SARB, 1999: 116–117). The foreign expansion in 2000 included establishment of interests by Nedbank in India and by Standard Bank in seven African countries, Turkey and Australia. Nedbank, First Rand Bank and PSG Investment Holdings established subsidiaries or representative offices in Australia (SARB, 2000: 120–121). The most notable trend in the foreign expansion of South African banks between 2000 and 2005 was the expansion into Africa (Botswana, Uganda, Nigeria, the DRC and Angola), the Cayman Islands, Canada and Australia and more extensively into Guernsey Island. In Ireland the proliferation of South African banks led to the signing of a Memorandum of Understanding between the Department of Bank Supervision of SARB and the banking regulatory authority of Ireland in 2000 on the regulation of such operations (SARB, 2000: 26). The number of approvals by the SARB for the acquisition of foreign banking interests by South African banks rose from 40 in 1997 to 68 in 1999, then dropped to 43 in 2000, 34 in 2003 and 19 in 2005. The Barclays Bank acquisition of 51 percent interest in ABSA in 2005 was primarily motivated by the Barclays desire to gain access to the ABSA footprint in Africa. Despite the global presence of South African banks, the bulk of their revenue remains firmly rooted in the domestic market (Verhoef, 2009b: 185–195).

Even broad-based financial services concerns struggle to internationalise. After demutualisation Old Mutual (OM) moved its primary listing to London. OM proceeded rapidly with M&As in Europe, the USA and in 2005 in Scandinavia. OM relied on its capital strength, but failed to achieve profitability, because the company did not have unique technical abilities to add value to the market. Expansion into the USA market was a failure and OM withdrew in 2009 (E&Y: Mergers and Acquisitions, 2009: 23; Old Mutual Annual Reports, 1998–2009). A much more cautious approach was taken by Sanlam, the life assurer that also demutualised in 1998. Sanlam waited until 2001 before embarking on an explicit internationalisation strategy. Sanlam argued that it wanted to be confident of the superiority of the products with which it would target the international markets prior to global expansion. Not all of the internationalisation initiatives of Sanlam were successful, but the company took a more conservative approach. Sanlam cautiously expanded into the UK, Africa and India by distributing financial products appropriate to those markets (Sanlam Annual Reports, 2000–2009).

The highest-ranked South African conglomerate in the top 100 non-financial enterprises in 2008 is Sasol, the chemical giant. In 2008 Sasol was ranked 22nd in terms of foreign assets of the top 100 non-financial TNCs and 82nd in terms of its TNI (31,6 percent) (WIR, 2009: 231). This company has a

unique dimension, which justifies more systematic and detailed attention: i.e. Sasol was an SOE, but privatised itself and then developed into a leading international player and world leader in the synthetic fuel (CTL and GTL technology) industry.

SASOL – from national champion to global player

Sasol was established in 1950 to adapt the German Fischer-Tropsch process for the production of fuel from coal for the South African climate, quality of coal and stage of technological development. The German army had already produced diesel from coal during the Second World War, but further sophistication in the United States of America in the Kellogg Synfuel process required specific adaptation to South African conditions. Sasol chemical engineers registered the unique Sasol Synthol process in 1953, developed the technology commercially and applied it without much adjustment until the 1970s (Rahmim, 2003). The first fuel from coal was produced in 1955 at the initial Sasol plant in Sasolburg. Despite the success in transforming the vast coal deposits of South Africa into synthetic fuel, production technology was expensive and highly subsidised by the South African government.^{iv} Sasol was a strategic industry to South Africa, since international sanctions put pressure on the country's access to international oil reserves. The fuel production at Sasol remained cost-inefficient until late in the 1980s, but state subsidies protected the industry (Verhoef 2003: 188, 196–199; Lambrechts, 1998: 5).

Two factors have influenced the operational focus of Sasol since the early 1970s. The first was the OPEC decision to increase the oil price from \$3 to \$12 per barrel. Suddenly Sasol's synthetic fuel production was considerably more viable. Secondly, the threat of isolation and sanctions following the UN Security Council threat of mandatory sanctions against South Africa posed a very real geo-political problem. These developments motivated the expansion of operations into two new plants in the eastern Transvaal during the 1980s. Two additional synthetic fuel production plants were constructed to supplement initial production at Sasol 1 in Sasolburg. Simultaneous diversification in downstream chemical production opened the doors to the globalisation of Sasol research, technology and business operations. The diversification and expansion of Sasol soon placed extensive capital and human resource constraints on the company. The capital costs of Sasol 2 was R2.5 billion and of Sasol 3 R3.3 billion (approximately equal to 8.5% of the South African GDP for Sasol 2 and 7.7% for Sasol 3 at that stage). The restructuring of Sasol was effected by its listing on the Johannesburg Securities Exchange. Private investors acquired the state shareholding in Sasol 1, as well as 50% in both Sasol 2 and Sasol 3. Sasol management want to free itself from protection by government (Bates, 1981), and accessed capital for expansion in the market, rather than from the state. This conscious move away from the state did not terminate

the regulatory control by government of Sasol's operations, but was the beginning of the formulation of a strategy by a sheltered SOE to expand outside the restricted domestic market. Sasol diversified operations into downstream chemicals production mining and related activities, oil refining and fuel marketing and the production of synthetic fuel. Rapid diversification of operations resulted in a fundamental restructuring of operations in Sasol into five subsidiary companies in the early 1980s. Sasol Chemical Industries (Pty) Ltd (SCI) was the chemicals vehicle; Sasol Synthetic Fuels (Pty) Ltd (SSF) was the vehicle for the production of synthetic fuels; Sasol Mining (Pty) Ltd was the vehicle co-ordinating the diversified mining activities of Sasol and Sasol Oil (Pty) Ltd took responsibility for oil refining and fuel marketing. Research and development activities were housed in Sasol Technologies (Pty) Ltd (ST). International expansion of synthetic fuel operations led in 2000 to the establishment of Sasol Synfuels International (SFI) and Sasol Petroleum International (SPI).

The research by chemical engineers in ST at the synthetic fuel division of Sasol was ultimately responsible for the development of strategic technology that provided the company with its major competitive and environmental advantage in the twenty-first century. Technological leadership was used to steer the company out of the confines of the sheltered market. Sustained expenditure on R&D since the establishment of Sasol, but more aggressively since the 1970s, in collaboration with international research institutions, assisted Sasol in staying abreast of CTL and petrochemicals technology. Annual provisions for R&D averaged about R5 million, but by the early 1990s this provision leapt to in excess of R55 million and R66 million in 1995 (Annual Report, 1995: 70). In 1996 Sasol declared that the company engaged increasingly in "projects aimed at improving Sasol's international competitiveness, at an approved cost of R1 800 000" (Annual Report, 1996: 16).

Table 1. R&D Cost,1994-2009: percentage of overall expenditure (Rm)

Year	R&D	Capex spent	Cash to suppliers & employees	Total spent	%
2009	1,325	15,672	96,776	112,448	1.2%
2008	818	10,855	88,712	99,567	0.8%
2007	745	12,845	68,907	81,752	0.9%
2006	309	13,296	55,694	68,990	0.4%
2005	188	12,616	49,080	61,696	0.3%
2004	358	11,418	44,801	56,219	0.6%
2003	461	10,968	48,699	59,667	0.8%
2002	350	8,742	40,592	49,334	0.7%
2001	380	4,095	25,294	29,389	1.3%
2000	230	2,171	17,124	19,295	1.2%
1999	147	2,348	14,438	16,786	0.9%
1998	150	2,927	12,146	15,073	1.0%
1997	108	2,617	11,229	13,846	0.8%
1996	91	1,998	9,185	11,183	0.8%
1995	66	1,480	8,052	9,532	0.7%
1994	54	1,272	6,655	7,927	0.7%
	5,780	115,320	597,384	712,704	

Source: Sasol Annual Reports, 1994-2009.

Sasol's expenditure on R&D rose steadily since the mid-1990s and reached a peak of 1,3 percent of total expenditure in 2001, when the synthetic fuel GTL technology was developed and refined. R&D expenditure as a proportion of total expenditure then declined until 2004. In 2009 the R&D expenditure stood at 1,3 percent of total expenditure, showing the vital business supportive role of new technological development in the company.

In 2008 yet further international accreditation was received for the innovative research by ST developing fully synthetic jet fuel (Sasol Review, 2009: 26). Sasol's R&D expenditure made the company the largest R&D institution in South Africa. The benefits of the R&D were exported to the global market via the global operations of Sasol. This constituted the competitive advantage of Sasol and facilitated its internationalisation, a strategy usually characterising developed market MNCs.

- New technology for international fuel competitiveness.

The privatisation of Sasol and the political changes after 1990 opened international markets to Sasol's commodities and intellectual property. The first step was to improve profitability by reducing its dependence on synthetic fuel production, the international oil price and the limited domestic market. This was a conscious and strategic business decision. The first step was to

improve the initial Fisher-Tropsch adapted technology applied at Sasol 1 in Sasolburg. It commenced in 1981. This new research was based on earlier research which had been undertaken in Brownsville, Texas, by Dobie Keith of Hydrocarbon Research Inc during the 1940s. Worldwide anxiety escalated about the possibility that crude oil reserves might run out (Collins, 2007: 118). Researchers under the leadership of Keith investigated the methodology to convert natural gas to fuel by using a fluid flatbed (FFB) reactor. This research was not completed, but was shelved as the price of natural gas rose and vast new oil reserves were found in the Middle East late in the 1940s. Sasol engineers continued this investigation to improve the efficiency of its own synthetic fuel reactor. In 1981 Sasol management authorised the designing of an FFB demonstration reactor and in 1987 the new reactor was installed in Sasolburg. The demonstration reactor was the Sasol Advanced Synthol (SAS) reactor and was easier to operate, cheaper to run and more efficient in producing clean gas. The SAS reactors were installed at Sasol 2 and Sasol 3 in Secunda in 1992 and by 1996 all synthol reactors at Secunda were replaced by SAS reactors. (Collins, 2007: 123) This technology-improved efficiency had reduced production costs at the time that Sasol was informed by government that tariff subsidies would be phased out. Sasol spent US\$1 billion on this development, which reduced its operational costs by the equivalent of US\$1 a barrel of crude oil (Collins, 2007: 129). Sasol's profitability was therefore enhanced by technological developments and contributed to freeing Sasol further from world oil prices.

In the following decade synthetic fuel production grew proportionally. Between 1991 and 1995 Sasol Synfuels' contribution to operating profits rose from 37% to 43,6%. Despite stronger growth in the production of chemicals, synthetic fuel production as the niche focus remained the core of Sasol's operations. Sasol fuel by 1990 supplied 23% of domestic fuel demand. This was a strategic cushion to an economy under growing isolation. For Sasol the changing international environment posed a serious threat. The international oil price weakened consistently during the 1980s – 35% between 1979 and 1985 and another 40% in 1986. The domestic economy suffered from currency depreciated, cost-push inflation, a severe drought and the termination of tariff protection, depressing the demand for Sasol's chemical products. A final blow to Sasol was the elimination of tariffs on basic feedstocks for fertilizers and plastics (ammonia and monomers), while the downstream derivatives were subject to an ad valorem tariff of 15%–30%. The petrol levy and excise duty protection on synfuel production was also abolished in 1985. The strategic advantage of Sasol under these depressed economic conditions was its technology.

Improved advanced synthol technology implemented at both the two new Sasol plants at Secunda (Sasol 2 and Sasol 3) enabled the company to break even towards the end of the 1990s.

Sasol commenced with the manufacturing of unleaded petrol and the export of liquid petroleum gas to neighbouring countries. Fuel alcohol was exported to Brazil and towards the mid-1990s Sasol was exporting products to the value of R350m (Sasol Annual Report, 1995: 17; 1996: 15).

In the rapidly changing geopolitical environment of the late 1990s South Africa signed the Uruguay Round of GATT negotiations in 1993. The new South African government appointed the Liquid Fuels Industry Task Force (LFITF) to investigate the tariff protection awarded to SASOL since listing in 1979. The dramatic rise in international oil prices since late 1999 in actual fact meant that Sasol received no tariff protection since the last quarter of 1999 until 2002 (Sasol Annual Report, 2002: 25). The marketing of Sasol's synthetic fuel was highly regulated – Sasol had to supply petrol to coastal retailers at the same price as to inland distributors. That was the inland basic landed cost (IBLC) plus transport cost from the coast to inland locations. Sasol could also not operate its own service stations, but could sell its petrol only at designated sites, or at clearly identified blue pumps ('Blue Pump Agreement') at the service stations of other petroleum companies. Finally speculation about the deregulation of the domestic fuel industry convinced the management of Sasol that the company would perform far better without any protection or restriction. In December 1999 Sasol officially announced that in five years it would terminate the Blue Pump Agreement as well as the agreement to supply fuel to other oil companies in South Africa. Sasol welcomed the new approach by government to deregulate the liquid fuels industry. In a statement Sasol announced; "Such an approach will afford all participants in the industry, particularly the small players and previously disadvantaged groups, the opportunity to grow and transform in order to become more competitive" (*Engineering News*, 17-25/6/98; *The Star Business Report*, 10/12/98; *Business Day*, 10/12/98). A confluence of the impacts of the domestic political transition, global market transformation and international trade deregulation thus helped shape the business strategy of Sasol by the beginning of the twenty-first century.

A conscious business strategy towards the globalisation of operations emerged at Sasol at the beginning of the new millennium. The chairman, Mr Paul Kruger announced in the Chairman's statement, in 1999 that, "Sasol has clearly signaled that it is becoming more of an international player and events in the rest of the world are therefore of greater importance to it". (Sasol Annual Report, 1999: 6) The new business strategy for a privatised and non-tariff-protected and subsidy-free Sasol was twofold: first the corporation would develop new international business and joint ventures in collaboration with international marketing companies, by means whereof Sasol would diversify its operations into established former markets of Sasol, but also to seek and develop new markets offshore. This aspect of its new vision was firmly directed at the distribution

of the existing product base. The second dimension of Sasol's business strategy was premised on the pioneering technology, developed in Sasol, which afforded the corporation a competitive advantage in the international synthetic fuel industry. The strategy entailed the further development of its ground-breaking Slurry Phase Distillate (SPD) technology as an engine of significant future global growth (Chemical Marketing Reporter, 1996: 9). The Arge reactor used in the SPD process to manufacture petrol actually produced more diesel. Soon the Sasol Lurgi process was used to manufacture diesel from gas, as opposed to manufacturing diesel from crude oil. This unique Sasol gasification process produced a variety of co-products, but the most important application was the use of synthesis feed gas at a lower temperature than in the case of the SAS reactors, to produce high-quality diesel. This production process was the most efficient in the world (Van Dyk, Keyser, Coetzer, 2004: 3–4). Since May 1993, Sasol plants in South Africa produced 3,2 million m³/synthesis gas per hour in its 9 gassifiers, while the Dakota Gas Company in the USA operated 14 similar gassifiers, the Schwarze Pumpe in Germany only 7 and even less in the Czech Republic (Van Dyk, Keyser, Coertzen, 2004:5) The significance of this most efficient gassification process was that Sasol was producing the world's purest diesel – a major environmental advantage over conventional diesel products, since governments in developed countries were imposing more stringent environmental demands on vehicle emissions (Rahmim, 2003: 9; Sasol Annual Report, 2000: 56–57). This was a major competitive advantage to Sasol internationally.

Sasol announced its intention to advance its SPD technology internationally in May 1996 at the Fourth World Forum for chemicals, in Paris which addressed sustainable development, with specific emphasis on the need for new fuels and fuel production processes, together with the development of materials which minimise waste and pollution, particularly in areas such as transport and construction. (Chemical Marketing Reporter, 1996: 10) The global positioning of Sasol was inevitable: businesses built around natural resources are usually global, because they serve international customers in advanced markets, they seek alternative sources of resources due to the saturation or cost of domestic materials, and because such “companies move up the value chain, selling branded products or offering solutions to niche markets” (Khanna and Palepu, 2006: 67). The improved SPD technology offered the opportunity for the global development of gas-to-liquid technology (GTL).

Worldwide, companies were searching for new fuels and new production processes which would minimise waste and pollution (Chemical marketing report, 1996: 9). The key to the exploitation of the new GTL technology lay in sourcing sufficient feedstocks of natural gas. New unexplored

natural gas deposits were located outside the developed world. These so-called 'stranded' or remote natural gas resources presented a solution to the problem of feedstocks for the oil companies (Taylor, 2007: 51–53; *Economist*, 20/04/06). The Sasol adaptation of the Fischer-Tropsch process, whereby methane gas is converted into synthesis gas, offered a unique advantage to Sasol in the search for environmentally conducive fuel. Methane gas is one of six gasses targeted under the Kyoto Protocol. Sasol's adaptation of the Fischer-Tropsch process using a cobalt-based catalyst in its slurry phase reactor offered an internationally leading technology. (Taylor, 2007: 35; Wilhelm, Simbeck, Karp, Dickenson, 2001: 145–146). The main problem in the application of this innovation lay in the high cost. Fleisch et al argued that the cost of the chemical conversion process was high, and therefore inhibitive for the development as a serious alternative to oil (Fleisch, et al, 2002: 3–8). The Sasol cobalt-based catalyst and SPD reactor has been widely acclaimed for improving the economics for producing Fischer-Tropsch diesel fuel (Norton, et al, 1998: 4–5). The most efficient way to reform methane (natural gas) into diesel and for hydro cracking wax into diesel was required to advance the innovative Sasol SPD process commercially. Sasol decided on the auto thermal reforming process (ATR) as the most suitable and efficient method to reform methane gas (Wilhelm, et al, 2001: 145; Fleisch et al 2002: 6–8). The ATR had been developed in Denmark by the Haldor Topsøe company. Sasol purchased this technology under licence for application in its gas installations (Sasol Annual Report, 2002: 50; Fleisch, et al, 2002: 4). Sasol then entered into a joint venture with cash-rich Chevron Texaco to perform the process of hydro cracking wax into diesel (Engineering News Record, 242 (24); 22; Pump Industry Analyst July 1999: 2; Oil and Gas Journal, 98(51): 46). Sasol Chevron (incorporated in London) was launched as a joint-venture and exclusive vehicle for the application of the Sasol SPD technology. It started the search for commercially efficient applications of GTL technology on a global scale.

The first application was the Oryx GTL plant in Ras Laffan in Qatar. A joint-venture was signed with Qatar General Petroleum Corporation and Phillips Petroleum of the USA for the construction of a new-generation plant to produce 20 000 barrels of fuel per day, applying the Sasol SPD process (Sasol Annual Report, 2000:47; Sasol Press Release: <http://www.sasol.com>, 16/04/02). While Qatar aimed to become the world leader in GTL projects (European Chemical News, 2002:54), with six major GTL projects planned since 2000, Sasol Chevron offered groundbreaking technology to reduce the cost of such new plants. The GTL Oryx plant went into production in 2007. (Sasol Annual report, 2009:2; *Economist*, 6/01/05) The Sasol Chevron technology was licensed and sold to potential licensors as a bundle of GTL products. The bundle consisted of an ATR process provided by Haldor Topsøe (from Lyngby, Denmark) for syngas production, the Sasol

SPD process for Fischer-Tropsch, and Chevron's isocracking or isodewaxing processes for fuels or lube-based oil (Oil and Gas Journal, 2000: 47). This groundbreaking technology had been perfected since 1995 to reduce establishment capital costs of GTL plants by 20%.

The next initiative was the construction of the 34 000 bpd GTL plant at Escavros River in Nigeria using the same technology bundle applied in Qatar. Construction commenced in 2006, but has not yet been completed. Sasol also entered into an agreement with the government in Mozambique to transport natural gas by means of a 865-kilometre pipeline from Mozambique to Secunda (at the Sasol 2 and Sasol 3 plants in Mpumalanga) to use gas as primary feedstock in the production of synthetic fuel. The Sasol Mozambique Natural Gas Project saw the construction of a central processing facility at Temane in Mozambique. Natural gas has been imported from Mozambique since 26 March 2004. Reserves were sufficient to guarantee delivery for 17 years (DME, 2005: vii; Sasol Annual Report, 2004: 36; 2002: 43). Sasol also took its global pioneering Coal-to-liquid (CTL) technology to China and India, where CTL plants are planned for future use of coal deposits (Sasol Annual report, 2009: 51).

- Chemicals international

Sasol used the increased capacity at Sasol 2 and Sasol 3 to diversify into sophisticated chemicals production. It was a conscious strategy to develop a niche area as a platform for international expansion. Between 1990 and 2000 operating income increased by 19% per annum, total assets rose from R7,189 to R29,7m (an increase of 16,6%), while returns on shareholders' funds rose from 22,8% to 24,4% per annum (Verhoef, 2003: 193). Sasol diversified its downstream chemical production by establishing a separate chemicals division, Sasol Chemicals. Sasol Chemicals' contribution to the total operating profit increased from 20% in 1991 to 31,2% in 1995 (Sasol Annual Report; 1992: iv; 1996: 9). In 1991 Sasol Chemicals Europe was formed and soon thereafter Sasol Pacific in Hong Kong (Sasol Annual Report, 1991: 16–20). In 1994 Sasol merged domestic chemical and plastics interests with those of AAC competitor AECL, but an attempted takeover in 1998 was blocked by the South African Competition Commission (Verhoef, 2003: 188–201). The breakthrough for SCI internationally came in 1995 when SCI acquired Schumann Waxes in Hamburg, Germany, to form Schumann Sasol AG. By 1998 this company had 10 percent of world waxes market share. The second strategic acquisition was in 1997: Sasol acquired DHB Holdings Inc of Rosemount, Minnesota, with its wholly owned subsidiary Continental Nitrogen and Resources Corporation (CNR). Sasol then developed new explosives for DHB, the so-called EXPAN products, which improved safety in mines by virtually eliminating air-pollution fumes during blasts (*Mining Weekly*, 1997: 13).

SCI's acquisition in 2000 of Condea transformed SCI from a South African-based chemicals group into a global player in the chemicals industry. Condea was a subsidiary of RWE-DEA, one of Germany's largest petro-chemical industries. When RWE-DEA unbundled its diversified conglomerate in 1999, Sasol put in a bid for Condea and was successful in June 2000. Condea was the largest global producer of raw materials and intermediaries for the detergent industry and had seventeen production facilities in the USA, Netherlands, Germany and Italy. The acquisition of Condea increased the Sasol Group's non-African revenue from 21 percent in 2000 to 47 percent in 2001. The new entity was Sasol Wax GmbH. Sasol wax offered the synergies needed for increased production and distribution of chemical products to the East Asian markets which SCI had developed since the late 1990s. Dedicated sales and marketing offices were opened in Dubai to grow Sasol's solvents business in the Middle East (Sasol Review, 2001: 33; Gulf News, 30/5/99). Sasol Polymers entered into three joint ventures with Asian companies to increase the production of polymers: Optima Olefins (Malaysia), Petlin (Malaysia) and Wesco (China). Optima Olefins was a joint-venture of Petronas Berhard of Malaysia, Dow Chemical of the USA and Sasol Polymers. The Petlin plant was a joint venture with Sasol Polymers, Petronas and DSM, a Dutch polymer producer. These joint-ventures were highly successful and by 2008 supplied an outlet to new products flowing from South Africa into the growing Chinese market. In November 2007 an ethane cracker was established as a joint venture with the Iranian National Petroleum Company to supply new polymers and ultimately to export them to the rest of the world. By 2009 the SCI cluster contributed more than 40 percent to the Sasol Group's total turnover (Sasol Review, 2009: 57-71).

The efficiency and profitability of Sasol has improved in the last decade since active internationalisation. Table 3 below shows the strong performance in profitability ratios since 2000. The severe downturn in international business in 2008/2009 is reflected in the profitability of Sasol in 2009, as shown in Table 3 below. Two important observations are reflected: the global downturn impacted negatively on Sasol's operations and profitability as a global player in 2009. The profitability of Sasol improved markedly since 2000, when internationalisation gained momentum. ROE increased from 24,2 percent to 32,7 percent before it slumped in 2009 to 17 percent. ROA (net) rose from 38,1 percent in 2000 to 42,6 percent in 2008

Table 3: Sasol Profitability, 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Return on Shareholder's equity *	24,2	34,5	35,6	23,7	16,9	24,0	21,6	29,8	32,5	17,0
Return on total assets**	24,1	26,6	25,5	17,7 7	13,3	18,2	18,5	24,2	26,9	18,7
Return on net assets***	38,1	52,6	54,5	36,7	27,4	37,1	36,5	46,2	48,9	32,4
Operating margin****	24,4	25,9	24,6	18,2	15,2	20,8	20,9	26,1	26,0	17,9

Source: Sasol Annual Financial Statements, 2009:31.

*Attributable earnings ÷ average shareholders' equity

** Net profit before finance expenses and taxation ÷ Average non-current assets ÷ average current assets

*** Net profit before finance expenses and taxation ÷ Average total assets – average total liabilities.

**** Operating profit ÷ turnover

before the slump down to 35,8 percent in 2009. Sasol succeeded in maintaining a fairly stable operating margin between 2000 and 2008 – around 24,4 and 26 percent (excluding 2009). The extensive international operations contributed to safeguard the Group's operations.

As the leading South African-based TNC in the top 100 non-financial companies of the developing world, Sasol realised that global competitiveness in technology, productivity and entrepreneurial drive were the keys to sustained performance. After privatisation R&D drove technological development and diversification to strengthen the platform for global expansion. Even before political isolation was ended in 1990, Sasol had adopted an outward-looking strategy to improve production efficiency and competitiveness. Marketing offices in several international locations and global distribution networks had exported advanced Sasol products since the early 1980s. In 2006 Sasol listed on the New York Stock Exchange to access USA capital markets. Sasol did not relinquish its primary listing on the JSE, but acted "like a multinational enterprise and transfer(ed) its technology and services abroad with its investment" (Wilkins, 1974: 166–167). As a true national champion, Sasol utilised the country-specific advantages of state ownership, protection, capable management and access to sufficient natural resources to establish itself and grow domestic competitive advantage. State regulatory protection was removed after 1994, but Sasol had

established itself as a private enterprise long before that and expanded operations globally through the transfer of its unique internationally leading technology.

South African business internationalisation

The development of the gold mining industry since the last quarter of the nineteenth century led to the establishment of large, well-capitalised mining companies with direct ownership connections to the hub of international capital, Britain. Gold mining companies required other industrial goods, and employed people in need of consumer goods and food. International trade was stimulated by this demand, as well as the domestic development of an industrial sector. After the formation of the Union in 1910 strong domestic nationalism demanded recognition of South African sovereignty. The 'South Africa first' policies of the South African government stimulated protectionist industrial and agricultural policies, which favoured the development of local industries. Protectionism and state intervention resulted in the emergence of a substantial state-owned industrial and utilities sector mutually dependent on the foreign exchange earnings of the mining sector. This sectoral subsidisation of the industrial sector in South Africa is not unique to this country. It was not the case in resource-scarce South East Asian countries, but definitely happened in Australia. The co-existence of the mining and industrial sectors in South Africa led to concentration of business, which was exacerbated since the 1960s when international political pressures mounted. The highly concentrated domestic business sector encouraged the development of managerial capacities conducive to big business operations in developed markets. Isolation suppressed competition, but it did not in South Africa lead to stagnation and backwardness. International sanctions intensified from the 1980s. The South African state intervened further by means of exchange controls to protect the economy. This behaviour Jones describes as 'Government as Home', where the strategic importance of an economy serves as justification for state intervention and protection (Jones, 2005: 218–221). The political and institutional environment favoured the development of domestic conglomerates. The inward-looking economic policies nevertheless created the environment for the development of a certain level of economic development in the home economy that would later serve as a precondition for domestic firms to compete abroad (Dunning, 1981).

The isolation of South Africa, although never comprehensive or completely paralysing, did offer business the opportunity to establish itself. International sanctions impacted negatively on domestic production efficiency, technological development and international competitiveness. South African conglomerates succeeded in making relatively good return on investments in manufacturing facilities, marketing systems and modern management methods, which ensured

ultimate success after the end of 'isolation' (Dosi, Nelson and Winter, 2000). Advanced managerial capacity also developed in big SOEs and business conglomerates as a result of 'incubated concentration' in the economy and sustained international links. This served as a CSA which developed FSAs in all the conglomerates discussed in this paper. Although inhibited from global expansion through domestic regulation, South African businesses developed important ownership advantages or FSAs in the form of production and R&D capacities, market knowledge of and historic links to developed markets and advanced managerial skills. This contradicts the conventional view of developing country firms expanding primarily into 'low and medium research-intensive industries' (Barnard, 2008: 52; Dick & Merrett, 2007: 5–6). The nature of globalisation and target markets of internationalisation by South African MNCs corresponded with the globalisation trends of OECD and other developed economies' MNCs (Goldstein, 2009: 141).

Deregulation and liberalisation in many countries of the world favoured, but also threatened, South African firms. Global expansion since the early 1990s was not their first experience in international operations. The gold mining industry and the banking sector were internationally linked in terms of markets as well as finance, since the nineteenth century. It was the manufacturing sector that was the latecomer to international participation. Companies such as Sappi, SABMiller and Sasol needed global expansion opportunities and access to capital and markets to develop production efficiencies in the competitive advantages of their businesses. These companies had well-developed manufacturing capabilities and excess capacity as well as innovative modern management structures, which provided the FSAs for globalisation as soon as political circumstances permitted. The excess capacity created a strong demand for supply opportunities in international markets. Strong management was cultivated in trying domestic contexts, such as discriminatory government policies, cultural and racial diversity and social unrest and violence. Management had acquired experience in dealing with political risk by developing a foreign presence. The ability of management to transform those problems into positive firm performance was exceptional and proved to be internationally appreciated (Klein & Wöcke, 2007: 332).

The opening up of the South African market after 1990 actually posed a serious threat of competition by international business. The companies discussed in this paper had strong ownership advantages, which were used to develop themselves into leading global players, primarily into high-income developed markets. The concentration of South African business and the protectionism as a result of South African nationalism and international isolation nurtured the development of core skills and knowledge, which provided the initial advantage of international

expansion. These advantages were not sufficient to sustain that expansion indefinitely, but the capacity to adapt to global markets and new demands ensured sustained international success and further expansion. Innovative technologies or proprietary production processes were the prime drivers in both Sappi and Sasol. The strategies were similar: M&As in their narrowly defined industrial sectors, starting with small take-overs and followed by more substantial transactions.

Two factors were most important in the internationalisation decisions of South African conglomerates: access to capital for expansion and minimisation of risk. Witt and Lewin described this as “misalignment between firms’ needs and home country institutional environments in spurring outward foreign direct investment (OFDI)” (Witt & Lewin, 2007). These push factors manifest frequently in emerging market environments from which MNCs attempt to diversify. Dual listings on international bourses emerged as a popular strategy for South African conglomerates to achieve both. The established international networks of South African management and business facilitated this development. The existing alliances with business in developed countries, as well as the subsequent listings, did indeed facilitate internationalisation and minimised risk. The Black Economic Empowerment policies of the current regime constitute a serious infringement of market forces and place a burden on local business. The successes with the foreign listing strategies were embedded in existing competitive advantages, such as technology (Sappi and Sasol), managerial expertise (Sappi, SABMiller, AAC, Sasol) and marketing capacity (Sasol, SABMiller). These characteristics compare favourably with those of developed country MNCs since the 1970s.

It is ideological populism to ascribe the success of South African conglomerates in post-1990 global markets to discrimination, the dualistic nature of the economy and the privileged position of the mining industry (Goldstein and Pritchard, 2009). Systematic historical analysis explains that an entrepreneurial spirit and good business leadership manifested in the successful management of enterprises capable of dealing with market imperfections. Not all South African enterprises that engaged in international operations were successful. The SOEs, such as Transnet and Escom, and some SMMEs only expanded their business activities into neighbouring countries or SADC members (Gelb, 2007: 202–203). Conglomerates were successful in developing a critical mass in the protected isolated domestic market, which developed management capabilities, innovative technologies and distributive capacities capable of entering global markets the moment political restrictions were removed. Home market protection developed domestic ‘monopolies’ that ‘springboarded’ from there to markets with similar levels of development and demand characteristics. Networks based on history, language, culture and family ties contributed to the accessibility of those markets. No single homogeneous internationalisation strategy can be identified for all successful South African conglomerates. Dynamic abilities of visionary

management combined the specific competitive advantages of each enterprise to develop internationalisation strategies. OFDI from domestic EMNCs enhanced efficiencies and competitiveness, which stimulated further operational globalisation. Sasol is the local 'champion'. The Sasol Group of companies operates in some 30 countries on all continents, but maintained its primary listing on the JSE. The next decade of business globalisation outward from the South African market will depend on whether domestic economic policies accommodate the openness of global business or contain them by the ideological bias of the current regime.

Reference List

Alkire, S and A Ritchie (2009) *Winning Ideas: Lessons from free-market economics*. Oxford Poverty & Human Development Initiative, Working Paper No 6: University of Oxford. www.ophi.org.uk.

Amighini, A, M Sanfilippo and R Rabellotti (2009) *The Rise of multinationals from emerging countries. A review of the literature*. Emerging economic regional powers and local systems of production: new threats or new opportunities? WP Series – N 04/09.

Aulakh, P S (2007) Special issues on emerging multinationals from developing economies: motivations, paths and performance, *Journal of International Management*, 13(3);235–402.

Barnard, H (2008) Capability, development and the geographic destination of outbound FDI by developing country firms. *International Journal of Technology and Globalization* 4(1): 39–55.

Bates, R (1981) *Markts and Strategies in Tropical Africa*. Berkeley: University of California Press.

Buccheim, C (2006) What causes successful late development? Insights from History, *South African Journal of Economic History*, 21(1&2): 52–83.

Business Day, 10/12/98

Business Report (2000) “Barlow sets sail for high seas”: 24 July. (A Macmillan)

Business Report (2003) “ Barloworld handling pulls off military coup” : 19 June. (R Morris)

Cohen, W M and D A Levinthal (1990) Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Journal*, 36: 128–152.

Collins, J (2002) *Mind over Matter. The Sasol Story: a half-century of technological innovation*. Sasol: Johannesburg.

Dick, H and D T Merrett (eds) (2007) *The Internationalisation Strategies of Small-country Firms. The Australian Experience of Globalisation*. Cheltenham: Edward Elgar.

Dosi, G, R Nelson and S Winter (2000) ‘Introduction: The Nature and Dynamics of Organizational Capabilities’ in G Dosi, R Nelson and S Winter (eds) *The Nature and Dynamics of Organizational Capabilities*. Oxford University Press: Oxford.

Dunning, J H (1981) Explaining the international direct investment position of countries: towards a dynamic or developmental approach. *Weltwirtschaftliches Archiv*, 117(1): 30–64.

- (1986) The Investment development cycle revisited. *Weltwirtschaftliches Archiv*, 122 (4): 667–676.
- (1993a) *Multinational Enterprises and the Global Economy*. Addison-Wesley: Wokingham.
- (1993b) *The Globalization of Business*. Routledge: London.
- (1995) Reappraising the eclectic paradigm in an Age of Alliance Capitalism. *Journal of International Business Studies*, 26(3): 461–491.
- (1998) Location and the Multinational Enterprises: A Neglected Factor? *Journal of International Business Studies*, 29(1): 45–86.
- (2000) The eclectic paradigm as a envelope for economic and business theories of MNE activity, *International Business Review*, 9: 163–190.
- (2006) Towards a new paradigm of development: Implications for the determinants of international business, *Transnational Corporations*, 15(1): 173–227.
- and S M Lundan (2008a) Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, 25:

Dunning, J H , R van Hoesel and R Narula (1996) Explaining the “new” wave of outward FDI from developing countries: The case of Taiwan and Korea. *Research Memoranda 009*. Maastricht Economic Research Institute on Innovation and Technology.

Dunning, J H and F Zhang (2008b) Foreign direct investment and the location competitiveness of countries. *Transnational Corporations*. 17(3) UNCTAD New York: United Nations Publications: 1–30.

Economist (1998) “All change in South Africa”, 19/02/98.

Economist (1998) “South Africa’s jumbos hed north”, 10/12/98.

Economist (2001) “The end of minority rule”, 22/02/01.

Economist (2005) “The rise of big gas”, 6/01/05.

Economist (2005) “Globalisation with a third-world face”, 7/04/05.

Economist (2005) “ Seeking new beer drinkers in the high Andes”, 20/07/05.

Economist (2005) “Andean Thirst”, 21/07/05.

Economist (2006) “Steady she goes”, 20/04/2006.

Economist (2206) : Going global”, 13/07/06.

Economist (2009) “ Selling BEE”, 8/07/09.

Economist (2010) “Small island for sale”, 25/03/10)

Economist (2010) “Grow, grow, grow”, 15/04/10.

Eden, L (2008) ‘The rise of TNCs from emerging markets: threat or opportunity?’, in Sauvant, K, K Mendoza and I Ince (eds) (2008) *The Rise of Transnational Corporations from Emerging Markets. Threat or Opportunity?* Cheltenham: Edward Elgar: 333–338.

Engineering News, 17–25/6/98

Erikson, K, A Mjkgård and D Sharma (2000) Path Dependence and Knowledge development in the Internationalization Process. *Management International review*, 40(4): 307–328.

Ernest & Young (1998) *Mergers and Acquisitions*. Review of activities in the year 1998. (Various years 1998–2009)

Ernst, D (2008) Asia’s “upgrading through innovation” strategies and global innovation networks: an extension of Sanjaya Lall’s research agenda. *Transnational Corporations*. 17(3) UNCTAD New York: United Nations Publications: 31–58.

Farrel G N (2006) “Capital flows, capital control regulations and foreign exchange policies in South Africa” ., *South African Journal of Economic history*, 21(1&2): 84 – 123.

Feinstein, C (2005) *An Economic History of South Africa. Conquest, discrimination and development*. Cambridge University Press: Cambridge.

Financial Mail, (2004) Q & A conversations: On Top of the World, 6 February.

Financial Mail, 9 April 2010: Communication between SA business and Government.

Fleisch, T.H., R.A. Sills, M.D. Briscoe (2002) “Emergence of the Gas-to-Liquids Industry: a Review of Global GTL Developments”, in Journal of Natural Gas Chemistry, 11: 1–14.

Gelb, S (2005) South-South Investment: The Case of Africa, in J J Teunissen and A Akkerman (eds) *Africa in the World economy – The National, Regional and International Challenges*. The Hague: GONDAD: 200–205.

Gerschenkron, A (1962) *Economic Backwardness in History [Historical?] Perspective*. Cambridge MA: Harvard University Press.

Goldstein, A (2002) *EMBRAER. From national champion to global player*. CEPAL Review: August 2002: 97–115.

Goldstein, A (2007) *Multinational Companies from Emerging Economies. Composition, Conceptualization and Direction in the Global Economy*. Palgrave: London.

Goldstein A (2008) 'Who's afraid of emerging-market TNOs? Or: are developing countries missing something in the globalization debate?', in Sauvant, K, K Mendoza and I Ince (eds) (2008) *The Rise of transnational Corporations from Emerging markets. Threat or Opportunity?* Cheltenham: Edward Elgar: 183–203.

Goldstein A (2008) Emerging Economies' Multinationals: Explaining the Case of Tata. *Transnational Corporations*. 17(3) UNCTAD New York: United Nations Publications: 85–108.

Goldstein A and W Prichard (2009) 'South African multinationals: Building on a unique legacy', in Ramaruti, R and J V Singh (eds) (2009) *Emerging Multinationals in Emerging Market*. Cambridge: Cambridge University Press: 244–279.

Goldstein, A (2009b) Multinational Companies from Emerging Economies. Composition, Conceptualization and Direction in the Global Economy. *The Indian Journal of Industrial Relations*, 45(1): 137–147.

Grobbelaar, N (2008) *Unlocking Africa's potential: The Role of Corporate SA*. South African Institute of International Affairs: Johannesburg.

Gulf News: "Chemicals major Sasol to open office in Dubai": Special Report, 30/05/99.

Gwynne, R N (1990) *New Horizons? Third World Industrialization in an International Framework*. New York: Longman.

Hewitt, T, H Johnson and D Wiled (1992) *Industrialization and Development*. Oxford: Oxford University Press.

Hoskinsson, R E , L Eden, C M Lau and M Wright (2000) 'Strategy in emerging economies, *Academy of Management Journal*, 43: 249–267.

Hu, Y (1995) The International Transferability of the Firm's Advantages. *California Management review*, 4: 73–89.

Johansson, J and J E Vahlne (1977) The Internationalization Process of the Firm – a model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies*, 8(1): 23–32.

Jones, F S and A L Müller (1992) *The South African Economy, 1910–1990*. London: Macmillan.

Jones, G (1994) British Multinationals and British Business since 1850, in M Wilkins and H Schröter (eds) *Business Enterprise in Modern Britain from the Eighteenth to the Twentieth Centuries*. London: Routledge.

Jones, F. S (2002) *the Decline of the South African Economy*. Cheltenham: Edward Elgar.

Jones, G (2005) *Multinationals and Global Capitalism from the nineteenth to the twenty-first century*. Oxford: Oxford University Press.

Khanna, T and K Palepu (2000) Emerging Market Business Groups, Foreign Intermediaries and Corporate Governance. Morck, R (ed) *Concentrated Corporate Ownership*. NBER. Chicago: University of Chicago Press. <http://www.nber.org/chapters/c9012>.

Khanna, T. , K. Palepu and J. Singh (2006). Strategies that Fit Emerging markets, *Harvard Business Review*, 84 (6), 1 June: 63 – 76.

Khanna, T. and K. Palepu (2006) Emerging Giants. Building World-Class Companies in Developing Countries, *Harvard Business Review* , 84(10): 60–69.

Klein, S and A Wöcke (2007) Emerging Market Contenders: The South African experience. *Journal of International Management*, 13: 313–337.

Kokke, M and M Vander Stichele (2008) Promotion of Foreign Direct Investment. What are the costs? *Somo Paper*, Stichting Onderzoek Multinationale Ondernemingen, Amsterdam 2008: 1–11.

Lambrechts, N. (1998) *South African Liquid Fuels Industry*. Johannesburg: 1–72.

Li, P P (2007) Towards an Integrated Theory of Multinational Evolution: the Evidence of Chinese Multinational Enterprises as Latecomers, *Journal of International Management*, 13(3): 296–318.

Lumby, A (1983) Industrial development prior to the Second World War, in F L Coleman (ed) *Economic History of South Africa*. HAUM: Pretoria: 195–219.

Lumby, A (1983) The Development of secondary industry: The Second World War and after, in F L Coleman (ed) *Economic History of South Africa*. HAUM: Pretoria: 220–244.

Lumby, A (1988) Economic History and theories of the multinational corporation. *The South African Journal of Economic History*, 3(2): 104–124.

Luo, Y and R L Tung (2007) International Expansion of Emerging Markets Enterprises: A Springboard Perspective. *Journal of International Business Studies*, 38: 481–498.

Mahidhar, V, C Giffi and A Kambril (2009) Foreign offshoring to strategic expansion. *Deloitte Review*, 4: 31–43.

Matthews, J A (2002a) *Dragon Multinationals – A new model for global growth*. Oxford University Press: Oxford.

Matthews, J A (2000b) Competitive Advantage of the Latecomer Firm: A Resource-based Account of Industrial Catch-up Strategies. *Asia Pacific Journal of Management*, 19: 467–488.

Matthews, J A (2008) *Energizing industrial development*. *Transnational Corporations*. 17(3) UNCTAD New York: United Nations Publications: 59–84

Mining Weekly, “Blasting System gives added bang to underground mining”, 4/08/97: 13.

Müller, A L (1977) *Die ekonomiese geskiedenis van Suid-Afrika*. Pretoria: Academica.

Norton, P., K. Verti, B. Bailey, N.C. Clark, S.W. Lyons, S. Goguen and J. Eberhardt (1998). *Emissions from Trucks using Fischer-Tropsch Diesel Fuel*. SAE Technical Papers 982526. San Francisco.

Newbury, C (1995) South Africa and the International Diamond trade – Part 1: Sir Ernest Oppenheimer, De Beers and the evolution of central selling 1920–1950. *South African Journal of Economic History*, 10(2): 1–22.

Porter, M (1987) From Competitive advantage to corporate strategy. *Harvard Business review*, May–June” 43–59.

Rahmim, I. I. (2003) *Gas to Liquid Technologies: Recent Advances, Economics, Prospects*. Paper presented at 26th IAEE Annual International Conference. Prague: June.

Ramaruti, R and J V Singh (eds) (2009) *Emerging Multinationals in Emerging Market*. Cambridge: Cambridge University Press.

Pump Industry Analyst, July 1999: 2: “Chevron and Sasol pursue global GTL JV.”

Rugman, A M (1981) *Inside the Multinationals: The Economics of International Markets*. Columbia University Press: New York. This source was re-issued in (2006) *Inside the Multinationals*. 25th Anniversary Edition. Palgrave Macmillan: New York.

Sadie, J L (2001) *The Fall and Rise of the Afrikaner in the South African Economy*. Stellenbosch Annale 2001/2002. University of Stellenbosch: Stellenbosch.

Sahaym A, H K Steensma and J Q Barden (2009) The influence of R&D investment on the corporate venture capital: An industry-level analysis. *Journal of Business Venturing*, doi:10.106/j.jbusvent.2008.12.001.

Sasol Annual Reports, 1970–2009. Rosebank: Johannesburg.

Sasol Review, 2000 – 2009. Rosebank: Johannesburg.

Sauvant, K, K Mendoza and I Ince (eds) (2008) *The Rise of transnational Corporations from Emerging markets. Threat or Opportunity?* Cheltenham: Edward Elgar.

Schumann, C G W (1940) *Die Ekonomiese Posisie van die Afrikaner*. Nasionale Pers: Cape Town.

Schumann, C G W (1951) Landbou-Mynbouland, 1870–1909, in A J H van der walt, J A Wiid and A L Geyer (eds) *Geskiedenis van Suid-Afrika. Part 2*. Cape Town: Nasionale Boekandel: 240–269.

Singleton, J and G Verhoef (2010) Regulation, Deregulation and Internationalisation in South African and New Zealand banking. *Business History*, 2010 (forthcoming)

South African Reserve Bank, (various years) *Quarterly Bulletin of Statistics*. Pretoria: Government Printer.

South African Reserve Bank (200 [?]-2008) *Bank Supervision. Annual report*. SARB: Pretoria.

Taylor, M (2007) *Alternative Liquid Fuels: Global Availability*. Economics and Environmental Impact. (www.med.govt.nz)

Tolentino, P E (1993) *Technological Innovation and Third World Innovations*. Routledge: London.

The Star Business Report, 10/12/98

UNCTAD (2005a) *Case Study on outward foreign direct investment by South African enterprises*. Trade and Development Board. Commission on Enterprise, Business Facilitation and Development. Expert meeting on Enhancing the Productive Capacity of Developing Country Firms through Internationalization. Geneva, 5–7 December 2005.

UNCTAD (2005b) *Report of the Expert Meeting on Enhancing Productive Capacity of Developing Country Firms through Internationalization*. Trade and Development Board. Commission on Enterprise, Business Facilitation and Development. Expert meeting on Enhancing the Productive Capacity of Developing Country Firms through Internationalization. Geneva, 5–7 December 2005.

UNCTAD (2005c) *Internationalization of Developing-Country Enterprises through Outward Foreign Direct Investment. Issues Note by UNCTAD Secretariat*. Trade and Development Board. Commission on Enterprise, Business Facilitation and Development. Expert meeting on Enhancing the Productive Capacity of Developing Country Firms through Internationalization. Geneva, 5–7 December 2005.

UNCTAD (2007) *World Investment Report*. New York: United Nations Publications.

- (2008) *World Investment Report*. New York: United Nations Publications.
- (2009) *World Investment Report*. New York: United Nations Publications.

United Nations Conference on Trade and Development (UNCTAD) *World Investment Report*, 2006, 2007, 2008, 2009.

Van Dyk, M (2003) South African manufacturing Performance in International Perspective, 1970–1999. *South African Journal of Economics*, 71(1): 119–142.

Verhoef, G (2003) “Innovation for Globalisation or Globalisation of Innovation? SASOL in the Chemical Industry during the 1990s.” *South African Journal of Economic History*, 18(1 & 2): 88–121.

Verhoef G (2009) ‘Savings for life to build the economy for the people: The Emergence of Afrikaner corporate conglomerates in South Africa 1918–2000’ *The South African Journal of Economic History*, 24(1) 2009: 118 – 163.

Verhoef, G. (2003) “Innovation for Globalisation or Globalisation of Innovation. Sasol in the chemical industry during the 1990s,” *South African Journal of Economic History*, 18 (1&2): 188–212.

Wilhelm, D.J., D.R. Simbeck, A.D. Karp, R.L. Dickenson (2001) “Syngas production for gas-to-liquid applications: technologies, issues and outlook,” in *Fuel Processing Technology*, 7; 139–148.

Wilkins, M (1970) *The Emergence of Multinational Enterprise*. Cambridge MA: Harvard University Press.

- (1974) The Role of Private Business in the international diffusion of technology, *Journal of Economic History*, 34: 166–188.
- (1988) The Free-standing company, 1870–1914: An important type of British foreign direct investment, *Economic History Review*, 61(2): 259–285.
- Wright, M, I Filatotchev, R E Hoskisson and M W Peng (2005) Strategic research in Emerging Economies: Challenging the Conventional Wisdom. *Journal of Management Studies*, 42(1): 1–33.
- World Bank (2001) *World Development report 2000/2001. Attacking Poverty*. New York: Oxford University Press.

Yergin, D and J Stanislaw (1998) *Commanding Heights. The Battle for the World Economy*. New York: Touchstone Books.

Yudelman, D (1983) *The Emergence of Modern South Africa. State, Capital and the Incorporation of Organized Labour on the South African Gold Fields, 1902–1939*. Westport: Greenwood Press.

ⁱ Britain entered into full warfare against the Zuid-Afrikaansche Republiek and the Oranje Vrijstaat in the First Anglo-Boer war of 1881–1882, in which Britain was defeated, and again in the 1899–1902 Anglo-Boer war in which Britain defeated the independent Boer republics by committing the full force of the British Army to the war and by burning down farms and interning women and children in concentration camps, where 26 000 died.

ⁱⁱ Goldstein (2009:248) is misleading readers by blaming domestic protectionist policies and the rise of SOEs on policies “to create jobs for Afrikaner workers”. Economic self-sufficiency through structural diversification demanded state involvement. This strategy was closely followed in Japan and several countries in South East Asia. *Gwynne,1990:63,175-198;Hewitt et al,1992:110,132)The leading industrialists such as W J Laite, who put pressure on the government to introduce protectionist policies, were Englishmen, the main beneficiaries of industrial protection were both entrepreneurs and employees. Afrikaners never dominated the industrial sector (Lumby,1983: 200–201). By the late 1970s Afrikaner-controlled enterprises contributed 18 percent to the mining sector, 15 percent to manufacturing, 16 percent to commerce, 25 percent to finance and 38 percent to professions. The aggregate Afrikaner contribution to the private sector economy, including agriculture, in 1975 was 27,5 percent and excluding agriculture 20,8 percent (Sadie, 2001:28).

ⁱⁱⁱ The Transnationality Index is calculated as the average of the following three ratios: foreign assets to total assets; foreign sales to total sales; foreign employment to total employment.

^{iv} The protection afforded to Sasol consisted of an allowance paid to Sasol for every litre of fuel manufactured from local raw materials (coal). After 1979 the oil price rose substantially to a level in January 1985, when the payment of the subsidy was suspended. Another protection mechanism was introduced in 1989, for 70% of Sasol’s petrol and 30% of its diesel production. This was based on an internationally desired floor price for crude oil. Should the floor price of crude oil drop below the protection level fixed in the agreed \$/barrel price, Sasol would be compensated 0,78 US cents/litre for every dollar the dollar price settled below the protected level. After the expansion into Sasol 2 and Sasol 3 the state had to create space for the expanded production capacity of Sasol. The government struck a deal with the oil companies whereby they shut down some capacity at their refineries and bought 91% of Sasol’s output in order to let Sasol into the market. In return Sasol was not allowed to own any petrol stations and could only market the remaining 9% directly into the market. The

companies would buy the synthetic fuel from Sasol at the prevailing In-Bound Landed Cost (IBLC – the set price at which refineries sold refined products to the liquid fuel wholesaling and marketing companies). Product-swapping between the companies to reduce costs already existed. The PBLIC was also set artificially high by using the Bahrain and Singapore markets. This effectively acted as a tariff on all refined fuels – synthetic or not. The IBLC included a 6c/litre transport cost for piping crude from the coast to the interior. Sasol did not have to pay this, since it was located in the interior. This gave Sasol an advantage over other refineries. The lower returns suffered by the other oil companies meant that they negotiated a levy of 3c/litre, which was rebated to the oil companies for buying Sasol synfuel (Lambrechts, 1998: 60-63; Engineering News, 19-25/6/98): “Everything you wanted to know about South Africa’s energy policy, but were afraid to ask Minister Maduna.” The Star: Business Report, 10/12/98: “Sasol terminate supply pact.”; Business Day, 10/12/98: “Sasol to end supply deals.” Chemical Marketing Reporter (1996). New York, 6 May, 249 (19): 9-10 “Sasol talks deals on its technology.”