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Foreign Companies in South Africa: Entry, Performance and Impact. Descriptive Report

By

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This research project explores the relation between institutions in emerging markets and the entry strategies chosen by foreign direct investors. The merits of alternative strategies from investors' perspective as well as the impact on the host economy are investigated. For this purpose, FDI strategies are investigated and compared in four important emerging markets India, Egypt, South Africa and Vietnam.

Project working papers no 1 to 12 present the field research reports, cases and data collected by the country teams. The "*Background Paper: Institutional Development and FDI*" outlines the economic and institutional context in the country. The "*Case Studies of FDI*" explore in depth the three case companies with respect to investor strategies and interaction with the local environment. The "*Survey of FDI*" summarizes and interprets the main results of the questionnaire survey.

Paper no.	Title	Authors
1	Background Paper: Institutional Development and FDI in Egypt	Maryse Louis and Heba Handoussa
2	Case Studies of FDI in Egypt	Azza El-Shinnawy and Heba Handoussa
3	Survey of FDI in Egypt	Maryse Louis, Heba Handoussa and Saul Estrin
4	Background Paper: Reform and FDI in India	Laveesh Bhandari, Subir Gokarn and Anjali Tandon
5	Case Studies of FDI in India	…
6	Survey of FDI in India	…
7	Background Paper: Institutional Development and FDI in South Africa	Stephen Gelb
8	Foreign Companies in South Africa: Entry, Performance and Impact. Descriptive Report	Stephen Gelb
9	Case Studies of FDI in South Africa	Anthony Black and Stephen Gelb
10	Background Paper: Institutional Development and FDI in Vietnam	Ha Thanh Nguyen and Hung Vo Nguyen
11	Case Studies of FDI in Vietnam	Ha Thanh Nguyen, Hung Vo Nguyen and Ca Ngoc Tran
12	Survey of FDI in Vietnam	Hung Vo Nguyen, Ha Thanh Nguyen and Klaus Meyer

Introduction

The onset of constitutional negotiations in South Africa in 1990 ended the disinvestment pressures which foreign investors in South Africa faced in the context of international opposition to apartheid. Foreign investors began to invest in the country again and attracting new foreign investment has been a major thrust of official economic policy since the installation of the country's first democratically elected government in 1994. Investment promotion agencies have been established, a variety of tax incentive schemes have been put in place, and the single most important economic policy statement since 1994 – the *Growth, Employment and Redistribution* (GEAR) policy announced in June 1996 – made increased levels of FDI one of its central objectives.

Yet the public policy debate about foreign direct investment in South Africa is for the most part narrowly focussed on the financial aspect of investment and capital flows. The primary variables of concern with regard to entry of foreign investment are the capital account of the balance of payments and the gross savings rate, while investment impact is primarily concerned with employment. This is illustrated in the GEAR statement, a document produced by the National Treasury, which might account for the macroeconomic bias of the concerns.[1] But the same is true also of the recent industrial policy statement produced by the department responsible for improving efficiency and enhancing the country's productive base. The section entitled 'Investment Promotion' states that "The promotion of domestic and foreign direct investment is critical given the low savings and investment rates in the economy."[2] There is no further mention in the entire 40-page document of either the impact of foreign direct investment or of the rationale for its promotion.[3]

The explanation for this narrow framing of the policy debate is to be found in the macroeconomic instability which has plagued the economy for over two decades, and in particular the periodic binding of the balance of payments constraints during growth upswings, and the apparently structural problem of low domestic savings. The progressive liberalisation of the capital account since 1994 has meant that the economy has experienced a series of capital account shocks, involving large and rapid capital outflows as well as nominal exchange rate depreciations.[4] Thus, not only has policy debate emphasised capital flows, but *direct* investment has been seen as critical to reducing capital account volatility, given its less reversible nature compared with portfolio flows.

The focus upon the financial and macroeconomic aspect of foreign direct investment results in a 'beauty contest' approach, in which the key questions are whether the country is receiving 'enough' investment relative to its 'competitors', what the latter are doing to

[1] See Government of South Africa (1996), pages 8 and 24.
[2] See Government of South Africa (2002), page 32.
[3] A qualified exception is the mention on page 27 of the important role of multinational corporations in integrated value matrices.
[4] Ref.

attract companies and what measures are necessary to get more foreign companies 'through the door' into South Africa. The consequence has been little interest in systematic collection or analysis of data about how foreign companies enter South Africa, what companies do once they enter, or their impact on the economy's growth and development.[5]

This report aims to initiate a debate about foreign investment in South Africa which focuses upon these questions. The report presents detailed results of a survey of foreign firms which entered South Africa for the first time between 1990 and 2000. The survey was carried out between November 2001 and July 2002, and focussed on firms' entry strategies, the performance of their investment based on their expectations at entry, and the impact of the investment on South Africa's economic development.[6]

The report presents a descriptive overview of the data produced by the firm survey. The report has nine sections. The first two sections discuss the population of foreign firms in South Africa and the survey sample respectively. Section C then turns to look at the nature of the foreign investors in South Africa, presenting details of the parent firm characteristics. Section D covers the choice of mode of entry, while Section E extends the discussion of the process of entry to examine the resources identified by firms as critical for their success, and Section F reports firms' perceptions of the South African operating environment – markets for key inputs as well as the official environment – at the time they entered the economy as well as currently. Section G reports on firms' performance in South Africa. Section H assesses the economic impact of foreign firms' presence in South Africa in a number of areas, including exports, market competition, human resource development, technology transfer and Black Economic Empowerment. Section I concludes, setting out some directions for further analysis of the data.

[5] To the knowledge of the author, empirical firm-level analysis (as opposed to information-gathering) has been undertaken on FDI only in relation to specific host countries (eg. Valodia & Padayachee (1999)), specific sectors (eg. Roberts & Thoburn (2002)), or as part of larger studies of firm behaviour in South Africa (eg Hawkins & Lockwood, in Gelb (2001)). Most discussion of FDI in South Africa – both academic and policy analysis as well as the media – has relied on the data published by BusinessMap, a private research organisation which has for some years collated press reports about foreign investment. Although this data has been helpful in filling a vacuum, it suffers from a number of well-known problems: it relies entirely on information published in the media, and is often partial or inaccurate; it presents firms' intentions, not necessarily their actions; it includes only projects larger than a threshold value, which is too high to include many foreign firms, as seen below; and the definitions of acquisitions, new operations etc do not fully accord with the widely accepted formal definitions.

[6] The South African survey was part of a four-country project managed by the Centre for New & Emerging Markets at the London Business School. It was also carried out in three other developing countries – Egypt, India and Vietnam.

A. **Population & methodology**

The survey population includes firms in South Africa which meet four criteria:

- at least 10% foreign ownership
- at least 10 employees currently in South Africa
- some value-adding activity in South Africa (so that sales or representative offices were excluded)
- first entry to South Africa between 1990 and 2000, so that the survey covered at least 2 years of operation in South Africa .[7]

The population excluded firms which had a presence in South Africa in 1990 and subsequently expanded their investments, as well as firms which 'warehoused' their investments[8] during the 1980s and returned after 1990 by repurchasing the same assets they previously owned. The population included firms which withdrew fully prior to 1990, but then returned by establishing new or different operations to those they previously owned.

Since no authoritative listing existed of foreign firms in South Africa (either official or unofficial), The EDGE Institute compiled its own population listing of companies which fit the four criteria above. A number of sources were consolidated, including company listings complied for market research and policy research purposes, media reports, lists of companies from their countries provided by 12 foreign trade missions or embassies in South Africa, and lists of members from 8 international chambers of commerce. Every effort was made to ensure that the population and the sample included firms from all home countries represented in South Africa.

The initial list consolidating the information obtained from these sources consisted of over 3500 firms. Each of these firms was contacted telephonically to establish its conformity with the four criteria above. This process of elimination produced a population for the survey of 516 firms meeting all four criteria.[9] These firms were then contacted in random order to request interviews with the chief executive or another senior manager to complete the survey questionnaire.

The South African sample totalled 162 firms. A small number of firms - between 10 and 15 - were interviewed in late 2001, the bulk of the interviews took place between February and May 2002, and interviews continued until July. A sample size of 150 firms had originally been targeted for each of the four participating countries. As the target of 150 interviews was approached, there was a departure from fully random sampling to ensure that the sample structure matched the population structure as closely as possible.

[7] The sample includes one exception to this criterion, a firm which started operations in 2001.

[8] During the period of anti-apartheid disinvestment pressures in the 1980s, several foreign firms underwent management buyouts, with tacit or explicit agreements enabling the original foreign parent firm to re-purchase its equity as and when political circumstances changed.

[9] A separate list was compiled including 452 companies which invested in South Africa before 1990 and also met the other 3 criteria in 2002. This may appear a rather low figure, but the criteria of value-addition and more than ten employees excludes a large number of foreign firms with high visibility in the country, but only a sales or distribution presence.

Thus, efforts to arrange interviews late in the survey period concentrated on firms within sectors or from home countries which were under-represented in the sample until then.

A member of the EDGE Institute survey team conducted a personal interview with the chief executive or another senior manager in the foreign affiliate to obtain responses to the survey questionnaire. The survey team included EDGE Institute staff as well as graduate students in Economics or Political Studies at the Universities of Cape Town and the Witwatersrand (Johannesburg). All members of the team went through comprehensive training, and graduate students accompanied Institute staff to an interview before being sent out alone. Interview arrangements were made by The EDGE Institute survey manager who then assigned the interview to a member of the survey team, who was in turn debriefed after each interview. This excluded the possibility of data fabrication, and helped to minimise missing values.

Tables 1, 2a and 2b provide breakdowns of the base population and sample by firm sector and home region, as defined in the CNEM project.

Nine sectors were specifically defined to take account of particular factors relating to foreign investment during the period. Agriculture and mining are combined in a Primary sector. Fast-moving consumer goods, as well as printing & publishing, are part of Basic Consumer goods, while Materials processing includes all intermediate goods. The Machinery & equipment sector includes transport, electrical and electronic machinery and components, except for computers. Telecommunications is included in Infrastructure, together with other utilities (electricity and water), transport and construction. Entertainment industries (broadcasting, gaming and sports) are included in Trade & hospitality together with retail and wholesale distribution, and tourism and leisure (hotels and restaurants). An IT sector was constructed to include production of both computer hardware and software. The Pharmaceutical sector has been separately identified to take account of its knowledge-intensive nature.[10]

Table 1 shows that Financial & business services and Machinery & equipment were the two leading destinations for new foreign companies entering South Africa after 1990, each accounting for about one-fifth of the entering companies. The other two manufacturing sectors – Basic consumer goods and Material processing – each include 14% of the firms, so that manufacturing (excluding IT and Pharmaceuticals) comprises just under half of the population. This can be compared with the manufacturing sector's contribution to GDP, which is just over 20%. Interestingly, the proportion of the population within the Financial & business services sector matches this sector's contribution to GDP, which rose markedly over the decade from below 15% in 1990 to just under 20% in 2001.

[10] The sectoral divisions are inevitably a matter of judgement. A detailed 'bridge' between the breakdown here and the official SIC and ISIC codes is available.

Table 1 - Population of FDI Entrants since 1990 by Sector

	Population		Sample	
Sector	No of firms	Percentage	No of firms	Percentage
Primary	14	3	5	3
Consumer	73	14	21	13
Materials	73	14	27	17
Machinery	108	21	31	19
Infrastructure	56	11	19	12
Trade & hospitality	36	7	8	5
Financial & business services	114	22	33	20
IT	33	6	13	8
Pharmaceuticals	9	2	5	3
TOTAL	516	100	162	100

Table 2a shows the regional breakdown of home countries, in the five-region format enabling comparison across the four survey countries. Table 2b provides a more detailed breakdown appropriate to the South African data. Although the 516 countries originate from 33 different countries, it is evident from these tables that the sources of foreign direct investment in South Africa remain highly concentrated. Nearly two-thirds of the companies originate from only four countries – the US[11], the UK, Germany and France. In all, 18 European countries are represented[12], and six East Asian countries.[13] At the same time, there is increased diversity amongst home countries as compared with the pre-1990 apartheid-era situation. Twelve countries which had no companies investing in South Africa are now represented in Table 2.[14] The Other category includes companies from Australia, India, Nigeria, Mauritius and Turkey.

Table 2a - Population of FDI Entrants since 1990 by Home Country

	Population		Sample	
Country/Region	No of firms	Percentage	No of firms	Percentage
Europe	282	55	92	57
East Asia	58	11	25	15
MENA	5	1	0	0
North America	152	30	36	22
Other	19	4	9	6
TOTAL	516	100	162	100

[11] Only 11 of the 152 North American companies in the population (7%) are from Canada.
[12] Israel is classified here as a European country.
[13] The 6 countries are Japan, PR China, Malaysia, Taiwan, Thailand and South Korea. Though 8 Taiwanese companies are included in the population, none were included in the sample due to logistical difficulties in organising interviews related to firm location in South Africa and/or language barriers.
[14] Before 1990, there was only one company from each of Republic of Korea and Malaysia, amongst the 452 investors, so effectively 14 countries have been added to the list since that date.

Table 2b - Population of FDI Entrants post-1990 by Home Country (detail)

	Population		Sample	
Country/Region	No of firms	Percentage	No of firms	Percentage
United Kingdom	62	12	19	12
France	61	12	16	10
Germany	53	10	18	11
Rest of Europe	106	21	39	24
Japan	15	3	5	3
Rest of East Asia	43	8	20	12
MENA	5	1	0	0
North America	152	30	36	22
Other	19	4	9	6
TOTAL	516	100	162	100.0

Tables 1 and 2 also present the sectoral and home country breakdown of the 162 firms comprising the survey sample. It is evident that the sample's sectoral and home country distribution structure both closely reflect that of the population. There is a degree of oversampling from the rest of East Asia, in particular from the People's Republic of China. On the basis of the sample's proportion of the population (31.4%) and sampling methodology, together with these indications that the sample reflects the population structure along critical dimensions, we can conclude that the sample is statistically representative of the overall firm population.

B. **The sample**

Table 3 presents the sample broken down by sector and size of labour force in 2000.

Table 3 – Sample - CNEM Sector by Size (Employment 2000)
No of firms

	10 – 50	51 – 100	101 – 250	251 – 1000	> 1000	TOTAL	Median No of workers
Primary				2	3	5	1500
Consumer	6	5	2	4	3	20	78
Materials	10	5	8	3	1	27	85
Machinery	10	5	7	5	4	31	100
Infrastructure	7	2	3	5	1	18	147
Trade & hosp	1		3	1	2	7	220
Fin & bus serv	12	9	6	6		33	70
IT	5	3	1	2	1	12	55
Pharmaceuticals	4	1				5	23
TOTAL	55	30	30	28	15	158	90

It is noteworthy that more than one-third of the firms fall into the smallest category, between 10 and 50 workers, and more than half the firms had fewer than 100 workers: the median is 90. This pattern holds across all sectors except Primary and Trade & hospitality (each with fewer than 5% of the firms) and Infrastructure. It has often been observed that there is a 'missing middle' in the South African economy, that is, a low proportion of

medium-sized firms, which has implications for the impact of growth on employment creation. Foreign investment appears to bear out this generalisation.

It is worth noting that there was an increase of 67% in the median size of firms' labour force from their date of entry to 2000, while 44% of firms at least doubled the size of their workforce. However, excluding greenfield entries where the initial workforce is often a small fraction of the intended complement at full capacity, the median growth in employment between entry and 2000 was only 14%, and only one-third of firms doubled in size. Nonetheless, although foreign firms are relatively small, their employment creation record has been relatively good.[15]

A significant minority of the sample (around 14%) outsource all their operations, or at least a substantial share of the labour-intensive segments. Thus, small firm size does not necessarily imply that the foreign investor is not creating jobs in the economy as a whole. In addition, nearly one-third of the firms are in the skill- and knowledge-intensive Financial & business services, IT and Pharmaceutical sectors, where labour force size and turnover are not strongly correlated. Nearly 40% of firms in the lowest employment category (fewer than 50 workers) are in the top 60% of firms by value of turnover, while a quarter of the firms in the top quintile for turnover have fewer than 250 workers.

For the issues of interest in the CNEM research project – entry, performance and development impact – the primary consideration of relevance is the number of firms entering each sector, rather than the financial inflow into each sector. Nonetheless, the value of fixed assets is of some interest, though it should be noted that this value at the start of operations is not equivalent to the capital inflow associated with the investment: working capital, for example, is excluded.

Capital stock at entry and in 2000 is presented in Tables 3a and 3b below. This data reflects a fundamentally different distribution across the nine sectors than the distribution of the number of firms in the sample, even though the sectoral distribution of the 110 firms reporting this data is close to the sectoral distribution of the full sample – only the Machinery & equipment sector is over-represented (24% as against 19% of the full sample – see Table 1) and financial & business services under-represented (16% as opposed to 20%). The Primary sector has only 5 firms in the sample but some of these are extremely large, and the sector accounts for 28% of the total value of reported starting capital stock. The Consumer goods and Trade and hospitality sectors also contain some very large investors. What is most noteworthy is that the Materials processing and Machinery & equipment sectors, which might be expected to be relatively capital-intensive, represent very small shares of the total value of starting capital stock, both well below each sector's share of the number of firms in the sample.

[15] Of course, it is *net* job creation that is ultimately of concern: foreign firms may have increased their labour force by enhancing market share at the expense of domestic competitors who shed workers as a result.

Turning to the data for capital stock in 2000 in Table 3b, the relatively small size of foreign firms' fixed investment is again evident. Nearly 40% of firms had less than US$1 million of capital stock in 2000, and another 30% between $1m and $5m. The median value[16] of the capital stock data was $1.94 million, equivalent to just under R13.5 million at the time.[17]

Table 3a - Sample distribution by size of capital stock at entry

Sector	% total investment	% of reporting firms
Primary	28	4
Basic consumer goods	19	13
Basic materials processing	8	18
Machinery & equipment	4	24
Infrastructure	10	10
Trade & hospitality	17	5
Financial & business services	13	16
IT	1	8
Pharmaceuticals	0	3
Total	100	100
Actual value	US$ 2257 m	110 firms

Table 3b - Sample - CNEM Sector by Capital Stock in 2000 ($m)
No of firms

$ million	< 0.25	0.251 - 1	1.01 - 5	5.01 - 20	> 20	Total	Median Capital Stock
Primary	0	0	0	1	4	5	24.50
Consumer	7	3	4	0	4	18	0.65
Materials	0	6	11	4	2	23	2.45
Machinery	1	6	14	7	2	30	2.00
Infrastructure	7	0	2	0	4	13	0.22
Trade & hosp	0	0	1	3	3	7	13.69
Fin & bus serv	6	7	5	3	1	22	0.86
IT	2	2	4	1	0	9	1.01
Pharmaceuticals	3	1	0	0	0	4	0.08
TOTAL	26	25	41	19	20	131	1.94

At the sectoral level, Finance & business services and IT are dominated by firms with small fixed asset bases, as would be expected, but it may be more surprising that small firms are also prominent in Basic consumer goods and in Infrastructure. The latter sector contains some large firms, but in addition several firms with small capital asset bases providing services such as infrastructure system design and management, rather than directly owning and operating infrastructure installations.[18]

[16] The most useful average measure in this context.
[17] The 2000 rand-dollar exchange rate used was $1 = R6.940.
[18] A third of the firms in the sector failed to report capital stock data.

As emerged from the labour force data, the median size of firms' capital stock in the three manufacturing sectors is low. As we will see below, the main focus of firms in these sectors is the domestic and regional (Southern African) markets, and it would appear that the limited size (and slow growth) of these markets, together with the secular depreciation of the currency through the 1990s, result in an unwillingness of foreign investors to commit to large stocks of fixed assets which are relatively irreversible. Large capital investments are found where markets are more oriented to exports and hard currency revenue streams, such as the Primary sector, or have grown faster, such as Trade & hospitality.

Table 4 reports the age profile of firms and reflects prior expectations about FDI patterns in South Africa since 1990.

Table 4 - Sample - CNEM Sector by Age
No of firms

	To 1994	1995-1998	Post 1999	TOTAL
Primary		4	1	5
Consumer	5	15	1	21
Materials	4	15	8	27
Machinery	5	19	7	31
Infrastructure	7	10	2	19
Trade & hosp	2	2	4	8
Fin & bus serv	7	21	5	33
IT	1	10	2	13
Pharmaceuticals		4	1	5
TOTAL	31	100	31	162

Small numbers of firms entered up until 1993, but from 1994 the numbers increase quite quickly, peaking in 1997, though still significant during 1998 and 1999 (over 12% of the sample in each of these years).[19] The increase in entries after 1994 is clearly related to the decline in fears about social and political instability once the constitutional negotiations culminated in the country's first democratic election in April 1994. There may well also have been some country-specific factors – such as the Rand exchange rate crisis in 1996 – impacting upon the decline in the number of entries after 1997. But a similar pattern was found in the other three countries in the survey, where peaks in the number of entries were also experienced early in the second half of the decade, suggesting that the pattern may be partly accounted for by factors relating to the supply of FDI to (some sub-group of) developing economies. In particular, the Asian crisis in 1997 is likely to have discouraged both foreign investment sourced from that region[20], and overall flows to emerging market economies.

[19] The figure for 2000 is not necessarily an accurate reflection of the number of firms investing in that years, because the survey aimed to include firms with at least two financial year-ends.
[20] There is substantial anecdotal evidence regarding the full or partial withdrawal of Malaysian firms after 1997. See Valodia & Padayachee. Firms from PRC on the other hand seem not have been deterred by the Asian crisis, which of course had limited impact in China.

C. **The investors**

Turning now to look at the parent firms, Table 5 presents the sectoral distribution of each home region's investors.

Table 5 - Sample - CNEM Sector by Home Country

No of firms

	North America	Europe	East Asia	MENA	Other	TOTAL
Primary	3	1	1			5
Consumer	1	17	2		1	21
Materials	8	10	9			27
Machinery	5	16	9		1	31
Infrastructure	1	15	2		1	19
Trade & hosp	2	6				8
Fin & bus serv	10	17	2		4	33
IT	6	6			1	13
Pharmaceuticals		4			1	5
TOTAL	36	92	25	0	9	162

Basic consumer goods, Infrastructure, Trade & Hospitality and Pharmaceuticals are dominated by European firms, which also have a very strong presence in Financial & business services. The North American firms are spread evenly across the sectors, dominating only small number of firms in the Primary sector, but with a significant presence in Materials processing, Financial & business services and IT. East Asian firms are concentrated in manufacturing, particularly Materials processing and Machinery & equipment.

Table 5a - Sample - CNEM Sector by Home Country (detail)

No of firms

	North America	UK	Germany	Rest of Europe	East Asia	Other	TOTAL
Primary	3	0	0	1	1	0	5
Consumer	1	6	7	4	2	1	21
Materials	8	0	1	9	9	0	27
Machinery	5	0	3	13	9	1	31
Infrastructure	1	3	4	8	2	1	19
Trade & hosp	2	2	0	4	0	0	8
Fin & bus serv	10	7	3	7	2	4	33
IT	6	1	0	5	0	1	13
Pharmaceuticals	0	0	0	4	0	1	5
TOTAL	36	19	18	55	25	9	162

Tables 6 though 8 illustrate that foreign investors in South Africa cover the full spectrum of multinationals, from small companies with operations in three or four countries to global giants.[21] Each of the seven tables is briefly summarised, followed by a discussion

[21] Note that in these tables, conglomerates and firms owned by individuals have been split out from the local affiliates' sector.

of sectoral characteristics, looking across all seven indicators in Tables 6 through 8 to assess whether a 'typical' affiliate exists within different sectors.

Table 6a - Parent - Sector by Affiliate as % of Turnover
No of firms

% of Turnover	< 0.1	0.1-0.5	0.5 – 2	2 – 5	5 – 20	> 20	TOTAL
Primary						1	1
Consumer	4	4	2	1	2	1	14
Materials		3	2	2	4	1	12
Machinery	6	7	9	2	6		30
Infrastructure	3	3	3	3	4		16
Trade & hosp	1	3	4		2		10
Fin & bus serv	10	4	5	1	2	4	26
IT	3	5	3	3	2	1	17
Pharmaceuticals	3		1		1		5
Conglomerate	7	3	2	2	1	3	18
Indiv owner						2	2
TOTAL	37	32	31	14	24	13	151

Table 6a shows the relative size of the South Africa affiliate to the parent firm. Nearly half the local affiliates provide less than 0.5% of global turnover (columns 1 and 2), but for about a quarter of the firms, the local affiliate provides more than 5% of global sales (columns 5 and 6). For thirteen firms (9%), all with parents having seven or fewer affiliates, the South African operation exceeds 20% of global turnover.

Table 6b - Parent - Sector by Global Employment
No of firms

'000 workers	< 1	1 - 10	10 - 100	> 100	TOTAL	Median ('000 workers)
Primary	1		1		2	2
Consumer	1	4	4	1	10	115
Materials	4	2	4		10	4.25
Machinery	5	7	14	4	30	30
Infrastructure	2	5	7	1	15	17.5
Trade & hosp	3	4	1	1	9	10
Fin & bus serv	7	8	7	3	25	4.5
IT	3	5	6	2	16	15
Pharmaceuticals		4	1		5	5.5
Conglomerate		4	10	3	17	n.a.
Indiv owner	2				2	n.a.
TOTAL	28	43	55	15	141	10.25

Table 6b shows global employment levels. The table suggests that the majority of firms are clustered in the middle of the employment range, and this is confirmed by a more detailed frequency distribution which shows that the median is 10250 employees, and 50% of the firms lie between 2500 and 54400 employees.

Table 7a - Parent - Sector by R & D Expenditure (% of global turnover)
No of firms

	< 0.5%	0.5-1%	1 - 2%	2 - 4%	4 - 8%	8 - 15%	> 15%	TOTAL
Primary							1	1
Consumer	1		2	2	4	1	1	11
Materials				3	3	1	3	10
Machinery	3	1	2	5	7	6	3	27
Infrastructure	6	3		3	1		1	14
Trade & hosp	3	1	1	2				7
Fin & bus serv	10	5	1	2	1		2	21
IT	1	1		4	2	1	5	14
Pharmaceuticals					3	1	1	5
Conglomerate	2	1	3	3	1	2		12
Indiv owner	1							1
TOTAL	27	12	9	24	22	12	17	123

Tables 7a and 7b report on the parent firms' investment in the key firm-specific assets, technology and brands, which can then be deployed in the domestic economy. In both tables, the sample is distributed fairly evenly across the categories, with mean scores of 3.16 for advertising and 3.86 for R&D, both within the 1-2% range of global turnover. This would suggest that the 'typical' investor entering South Africa during the 1990s is a 'mid-size' firm, investing significantly in firm-specific assets, rather than a 'global giant' spending very large amounts in brands or technologies.[22]

Table 7b - Parent - Sector by Advertisement Expenditure (% of global turnover)
No of firms

	< 0.5%	0.5 - 1%	1 - 2%	2 - 4%	4 - 8%	8 - 15%	> 15%	TOTAL
Primary				1				1
Consumer	3	1	3	2	2	1	1	13
Materials	3	1		1	3		2	10
Machinery	8	4	3	6	3	2		26
Infrastructure	3	4	1	2	2	2		14
Trade & hosp	3	1	1	4	1			10
Fin & bus serv	9	5	3	2	2		2	23
IT	1	3	3	4	1	1	1	14
Pharmaceuticals					2	2		4
Conglomerate	4	2	2	1	1	1	1	12
Indiv owner	1							1
Total	35	21	16	23	17	9	7	128

[22] In fact, many of the latter were already in South Africa before 1990.

Tables 8a, 8b, 8c and 8d assess the parent firms' "global footprint" and structure. Table 8a suggests there is a relatively even split between sectorally focussed and more diversified firms, in the sample as a whole and across most sectors.

Table 8a - Parent - Sector by degree of Parent's Diversification
No of firms

	Conglomerate	Diversified Firm	Focused firm	TOTAL
Primary			2	2
Consumer	1	7	7	15
Materials		8	5	13
Machinery	1	11	18	30
Infrastructure	2	7	9	18
Trade & hosp		3	7	10
Fin & bus serv		14	14	28
IT		9	8	17
Pharmaceuticals			5	5
Conglomerate	17	3		20
Indiv owner	1	1	1	3
TOTAL	22	63	76	161

Table 8b and 8c present the extent of emerging market experience of firms which enter South Africa, such prior experience obviously being a major advantage.

Table 8b - Parent - Sector by Presence in Emerging Market Regions
No of firms

	None	Africa	Asia	E Europe	Lat Am	MENA	Total
Primary	2	1	2	0	1	1	5
Consumer	6	3	10	13	5	3	21
Materials	4	9	17	13	16	7	27
Machinery	1	13	28	21	19	15	31
Infrastructure	4	11	14	12	14	10	19
Trade & hosp	0	4	4	6	7	3	8
Fin & bus serv	7	11	22	22	21	16	33
IT	1	4	10	11	10	8	13
Pharmaceuticals	0	2	5	4	3	4	5
TOTAL	25	58	112	102	96	67	162

Table 8b shows that only 25 firms (about 15% of the sample) had no emerging market experience at all, while over one-third (58 firms) were present elsewhere in Africa before coming to South Africa, and more than half had experience in one or more of Latin America, Asia and Eastern Europe.

Table 8c - Parent - Sector by Number of emerging market regions in which present

No of firms

	0	1	2	3	4	5	Total
Primary	2	1	2	0	0	0	5
Consumer	6	6	1	6	2	0	21
Materials	4	4	8	4	5	2	27
Machinery	1	6	4	6	6	8	31
Infrastructure	4	2	1	0	3	9	19
Trade & hosp	0	0	3	3	1	1	8
Fin & bus serv	7	4	4	1	8	9	33
IT	1	1	2	1	5	3	13
Pharmaceuticals	0	0	1	1	2	1	5
TOTAL	25	24	26	22	32	33	162

As Table 8c indicates, more than half the firms had experience of three or more emerging market regions. It is also worth repeating that, as shown in Tables 2a and 2b, the vast majority of firms (87%) are from developed economies. One interpretation of the data here is that developed economy firms do not enter South Africa with the intention of learning how to operate in developing countries, but instead may find it easier to invest in South Africa on the basis of extensive developing country experience. An alternative view, possibly more likely, is that firms which might have entered South Africa earlier, instead delayed their entry decision until the political changes of 1994 facilitated the process, and in the meantime had invested in a number of other developing countries.

Table 8d - Parent - Sector by Number of affiliates worldwide

No of firms

	0 - 5	6 - 10	11 - 25	26 - 100	>100	TOTAL
Primary	1	1				2
Consumer	3	2	2	3		10
Materials	6	1	1	1	2	11
Machinery	7	4	4	10		25
Infrastructure	3	2	4	4	2	15
Trade & hosp	3	1	5	1		10
Fin & bus serv	3	2	5	11	2	23
IT	1	2	5	6	1	15
Pharmaceuticals			1	4		5
Conglomerate	4	5	1	4	2	16
Indiv owner	1					1
TOTAL	32	20	28	44	9	133

Finally, Table 8d reports the number of global affiliates of parent firms in the sample. The median number of affiliates is 20, and only about one quarter of the firms have five or fewer affiliates. About one-third of the firms (48 of 133) have between six and 25 affiliates, but only 7% more than 100. A firm with six or more global subsidiaries can be taken to be a well-established multinational, underlining the point that the majority of new entrants to South Africa are 'medium-sized' multinationals.

In summary, looking at parent firm characteristics by sector, it appears that the basic consumer goods sector, which is predominantly European (17 of 21 firms), are mainly mid-size firms (in employment terms) which have only recently started to expand into developing economies internationally – they have a small number of affiliates, mainly in Central and Eastern Europe and Asia, and would likely see South Africa (or Southern Africa) as a potentially promising market. As already noted, many large European consumer brand producers entered South Africa well before 1990.

The Materials processing firms which have entered South Africa – originating in roughly equal numbers from Europe, North America and East Asia – are somewhat smaller multinationals than the sample average (median global employment is 4250), with the South African affiliate providing a relatively larger share of turnover. The Machinery & equipment firms by contrast are considerably larger globally, with the South African affiliates less significant within the parent firm. Perhaps because their products are better suited to economies of scope, they tend to have a larger number of affiliates with a more diversified presence in emerging markets than the Materials processing firms, where economies of scale might be more relevant (and the affiliates' capital stock is larger). Both Materials processing and Machinery & equipment firms appear to spend fairly heavily on R&D relative to the overall sample, but not on advertising.

The major distinctive feature of the Infrastructure firms is that a significant number have extensive emerging market experience, possibly related to the growing involvement of the private sector in infrastructure provision in developing countries.

In the Finance & business services sector, firms have a large number of affiliates with relatively low employment and dispersed widely across regions. Firms in this sector provide fairly standardised services in which trust and personal networks are important, so that spending on both R&D and advertising is relatively low. As would be expected given the depreciation of the domestic currency, the South African affiliates contribute a very small share to global revenues.

Finally, in the IT sector, the firms which have entered South Africa have a relatively large number of affiliates and substantial emerging market experience and spend a large share of turnover on R&D.

D. **Choice of Mode of entry**

We turn now to look at firms' strategies for entry into South Africa. The mode of entry distinguishes between greenfield operations, joint ventures, partial acquisitions (between 10 and 95% of equity) and full acquisitions (more than 95% of equity). South Africa turned out to be the only one of the four countries in the survey to have a significant proportion of acquisitions.

Table 9 - Affiliate - Entry Mode by sector
No of firms

	Greenfield	Full Acquisition	Joint Venture	Partial Acq	TOTAL
Primary			3	2	5
Consumer	4	7	6	4	21
Materials	5	11	4	7	27
Machinery	10	10	8	3	31
Infrastructure	10	3	5	1	19
Trade & Hosp	1	1	4	2	8
Fin & Bus serv	17	10	2	4	33
IT	2	6	5		13
Pharmaceuticals	2	2	1		5
TOTAL	51	50	38	23	162

Table 9 shows that 31% of the sample were full acquisitions and another 14% partial acquisitions. This underlines the maturity of South Africa's market for corporate control, enabling equity purchases of this nature. It also suggests a relatively high proportion of potential investors in South Africa find the country's asset base and asset structure attractive because they are familiar with it. The proportion of acquisitions is particularly high in Materials processing and in IT, and particularly low in Infrastructure. In both these latter sectors, this may be due in part to regulatory restrictions, though in some activities within Financial & business services where these do not exist, greenfield entry is more attractive with the critical issue being hiring labour with the right skills.

Table 10a - Affiliate - Entry Mode by Size (affiliate employment)
No of firms

	10 - 50	51 - 100	101 - 250	251 - 1000	>1000	TOTAL
Greenfield	21	13	6	8		48
Full Acquisition	12	8	15	11	4	50
Joint Venture	17	3	7	6	4	37
Partial Acq	5	6	2	3	7	23
TOTAL	55	30	30	28	15	158

Table 10a presents affiliates' size distribution (by employment) by the mode of entry. This table shows that Full acquisitions are particularly prominent in the medium-size categories, between 101 and 1000 employees, while partial acquisitions dominate the largest firms. Greenfields on the other hand are more prominent amongst small firms, with fewer than 100 workers. Indeed, most greenfields have been very small: 73% of

greenfield entries had fewer than 100 workers in 2000, and 50% of greenfields had a capital stock value at start-up of less than $1 million.

Table 10b - Affiliate - Entry Mode by Parent Size (global employment)
No of firms

	< 1000	1001 - 10 000	10 001 - 100 000	> 100 000	TOTAL
Greenfield	11	13	20	2	46
Full Acq	8	14	20	3	45
Joint Venture	3	10	11	7	31
Partial Acq	6	6	4	3	19
TOTAL	28	43	55	15	141

Table 10b presents parents' size distribution (by employment) by the mode of entry. Amongst the largest global firms, joint ventures are more common while smaller parent firms opt more heavily for greenfield operations. This seems to again underline that the larger South African firms are seen as potential local (and perhaps regional) partners by well-established multinationals, while smaller entrants have less need, or less capacity, to spread their risk by establishing a partnership with a local firm. It is also possible that the smaller foreign firms are of less interest as potential partners to South African firms.

Table 11 - Affiliate - Entry Mode by date of entry
No of firms

	1990 - 1994	1995 - 1998	After 1999	TOTAL
Greenfield	11	33	7	51
Acquisition	9	34	7	50
Joint-Venture	8	18	12	38
Partial Acq	3	15	5	23
TOTAL	31	100	31	162

Table 11 shows the distribution of date of entry of investors in South Africa. The most noteworthy point from the table is that joint ventures are heavily represented amongst the more recent entrants, those which entered after 1999 (in fact from 1998). This may once again be a risk-sharing strategy by foreign firms in the context of currency depreciation.

E. **Resources for success**

Firms were asked to identify the three critical resources for success during their first two years of operation in South Africa, out of a list of sixteen possible resources. Tables 12 and 12a show the distribution within sectors of the three choices of critical resources. The entry in cell (r,c) reflects the percentage of firms in sector c who identified resource r as one of its three critical resources.[23]

The 'All firms' column indicates that Managerial Capabilities was identified by the largest proportion of firms as a critical resource, followed closely by Brands and by Technology, the two firm-specific assets most commonly seen to provide advantages to

[23] In Tables 12 to 15, the choice of a resource as 1st, 2nd or 3rd most important is weighted equally. In Tables 12, 13 and 14, the columns total to 300%, to take account of the fact that each firm had *three* choices of key resources.

foreign investors. Marketing capabilities and Business networks are also prominent across the full sample. The latter two factors, together with Managerial capabilities, impact upon the integration and co-ordination of firm-specific assets with location-specific factors, which comprise most of the rest of the list.

It is clear that eight of the sixteen resources constitute a 'primary' sub-group which the overwhelming majority of firms identify as critical – these are the five mentioned already, together with Distribution networks, Machinery and Licences. Licences are included because they are ranked fifth in Table 12a, which presents only firms' first-ranked choices. In that table, four of the top eight resources stand out. Brands were chosen by the largest share of firms (17%), followed by Managers (14%), Technology and Business networks. Licences are next as first choice, though relatively few firms ranked them as second or third choice – clearly, when a licence is required, it is an absolute priority. The remaining three resources – Marketing capability, Machines and Distribution network – were a more common choice of firms as second or third key resource, than as first choice – they are complementary to the others.

The sectoral breakdown provides some suggestive indications. Technology is the most important resource in the Materials processing, Machinery & equipment and IT sectors when the 'first three' choices ranking is used, but the most common *first* choice only in Materials processing. Perhaps surprisingly, Distribution networks were seen as the most important resource by the largest group of firms in Machinery & equipment, perhaps underlining after-sales relationships as an important issue in building a customer base. A substantial number of firms in Machinery & equipment ranked Brands first, also underlining the product quality issue. Probably for similar reasons, Brands were identified by the largest group of IT firms, and were also significant in Financial & business services and Basic consumer goods, all sectors where product quality is important. Managers are important in labour-intensive sectors, including the relatively high-skill IT sector.

The Basic consumer goods, Machinery & equipment, Financial and Business services and IT sectors all appear to have a similar profile with respect to key resources: Brands and Managers are primary, complemented by Technology in the sectors where production involves high capital- and skill-intensity (IT and Machinery & equipment) , and by resources required for product distribution – Marketing, Distribution networks – in the Basic consumer goods and Financial & business services, where products are standardised and the market more homogeneous.

Equity was significant for the capital-intensive firms in the Primary sector and in Trade & hospitality. Though Machines are more important in the three manufacturing sectors than elsewhere, this resource was not especially prominent relative to other resources within manufacturing.

Table 13 - Affiliate - 3 key resources by Mode of Entry

% of firms within mode of entry choosing resource as 1 of 3 key

	Greenfield	Acquisition	Joint-Venture	Partial Acq	ALL FIRMS
Buildings	6	0	5	4	4
Brand	39	38	37	26	36
Business network	45	30	24	30	33
Distribution network	24	30	26	17	25
Equity	12	12	13	26	14
Innovation	12	10	13	4	10
Licences	12	6	18	17	12
Loans	2	4	13	4	6
Machines	16	20	18	30	20
Managers	31	50	37	43	40
Marketing	37	28	26	39	32
Authorities network	8	4	3	0	4
Patents	2	2	0	0	1
Sales outlets	2	6	5	13	6
Technology	35	40	50	26	39
Trade	8	10	3	13	8
Other	10	8	8	4	8
No of firms	51	50	38	23	162

Tables 13 and 13a show the choice of critical resources by mode of entry. On the basis of this data, there seems little to distinguish between Full Acquisitions and Joint ventures – in both modes, substantial groups of firms emphasise Brands, Technology and Managers, with other resources some way back amongst 'top three' choices, though Machines and Distribution networks are important first choices for Full acquisitions, and Licences for JVs. In the latter case, this may help to explain the choice of JV as entry mode, since local partners may be a pre-requisite for obtaining a licence, as in some sub-sectors of hospitality.

Greenfield firms emphasise Brands and Technology, as would be expected, but also Business networks and Marketing as key location-specific resources, and perhaps less easily acquired by the entering firm. Managers are less important for Greenfields, presumably because they bring in employees from affiliates elsewhere, at least in the first instance. For reasons that are not immediately clear, Distribution networks have some importance for Full acquisitions.

Table 12 - Affiliate - 3 Key resources by sector

% of firms within sector choosing resource as 1 of 3 key

	Primary	Consumer	Materials	Machinery	Infrastr	Trade & hosp	Fin & bus serv	IT	Pharma	ALL FIRMS
Buildings	0	0	4	0	11	25	3	0	0	4
Brand	20	38	22	45	37	13	46	46	20	36
Business network	20	19	19	35	58	0	49	23	60	33
Distribution network	20	29	30	42	16	38	9	8	60	25
Equity	60	24	15	3	11	38	15	0	0	14
Innovation	0	5	4	6	11	13	24	15	0	11
Licences	20	14	7	3	16	50	12	0	40	12
Loans	20	5	4	6	0	13	6	8	0	6
Machines	0	33	33	32	16	13	0	15	0	20
Managers	60	57	37	35	21	25	46	46	40	40
Marketing	20	43	37	19	37	38	28	31	60	32
Authorities network	0	5	4	3	0	0	9	8	0	4
Patents	0	0	0	3	0	0	0	8	0	1
Sales outlets	20	0	7	3	5	0	6	8	20	6
Technology	20	14	59	48	37	25	28	77	0	39
Trade	0	14	4	6	11	13	9	8	0	8
Other	20	0	15	6	16	0	9	0	0	8
No of firms	5	21	27	31	19	8	33	13	5	162

Table 12a - Affiliate - 1st choice key resource by sector

% of firms within sector choosing resource as 1st

	Primary	Consumer	Materials	Machinery	Infrastr	Trade & hosp	Fin & bus serv	IT	Pharma	ALL FIRMS
Buildings	0	0	4	0	5	13	0	0	0	2
Brand	0	33	4	13	16	0	18	38	20	17
Business network	0	10	7	16	16	0	18	8	0	12
Distribution network	0	5	0	23	5	13	3	0	40	8
Equity	40	5	7	0	5	13	6	0	0	6
Innovation	0	0	0	3	5	0	9	0	0	3
Licences	20	5	0	0	11	50	12	0	40	9
Loans	0	5	4	0	0	0	0	0	0	1
Machines	0	14	15	10	0	0	0	0	0	6
Managers	20	14	19	16	5	0	12	23	0	14
Marketing	20	10	7	3	5	13	6	0	0	6
Authorities network	0	0	0	0	0	0	3	0	0	1
Patents	0	0	0	0	0	0	0	0	0	0
Sales outlets	0	0	4	0	0	0	3	0	0	1
Technology	0	0	26	13	16	0	6	31	0	12
Trade	0	0	0	3	5	0	0	0	0	1
Other	0	0	4	0	5	0	3	0	0	2
No of firms	5	21	27	31	19	8	33	13	5	162

Table 13a - Affiliate – 1st choice key resources by Mode of Entry
% of firms within mode of entry choosing resource as 1st

	Greenfield	Acquisition	Joint-Venture	Partial Acq	ALL FIRMS
Buildings	4	0	0	4	2
Brand	22	16	16	9	17
Business network	22	6	5	13	12
Distribution network	6	16	3	4	8
Equity	4	8	3	9	6
Innovation	4	4	3	0	3
Licences	10	4	16	4	9
Loans	0	2	0	4	1
Machines	4	10	3	9	6
Managers	6	16	18	17	14
Marketing	6	0	13	9	6
Authorities network	0	2	0	0	1
Patents	0	0	0	0	0
Sales outlets	0	2	0	4	1
Technology	12	10	16	13	12
Trade	2	2	0	0	1
Other	0	2	5	0	2
No of firms	51	50	38	23	162

Partial acquisitions stand out as a mode of entry requiring a distinct combination of resources for success. Brands are less important for Partial acquisitions, as might be expected since the foreign investor has limited control over the disposition of these firm-specific assets when the firm enters via this mode. The other major firm-specific asset, Technology, is important as one of the top *three* choices for only a quarter of Partial acquisitions, but ranks high amongst *first* choice resources. This suggests that foreign firms are willing to transfer proprietary technology to affiliates even when control is not total, *if* this resource is crucial to the affiliate's success. Possibly for similar reasons, Technology is a critical resource for more firms in the JV category. Managers, Marketing, Machines and Business networks are important 'top three' resources for Partial acquisitions – these resources all lower (transaction and integration) costs of entry, and if strong in the local partner, may have been an important source of attraction for the foreign investor. On the other hand, if these resources are underperforming in the acquired firm, it would be critical for the foreign entrant to strengthen them in the short-term.

Tables 14 and 14a show the choice of resources by affiliate size. No clear picture emerges from these tables, since the different size classes appear to focus upon the same key resources amongst the set of eight critical resources identified above.

Table 14 - 3 Key resources by affiliate employment size

% of firms within employment size class choosing resource as 1 of 3 key

	10 - 50	51 - 100	101 - 250	251 - 1000	>1000	ALL FIRMS
Buildings	5	0	0	4	7	3
Brand	27	53	37	36	27	35
Business network	33	37	23	36	40	33
Distribution network	29	20	23	25	20	25
Equity	11	10	10	14	47	15
Innovation	9	17	10	11	7	11
Licences	13	13	10	11	13	12
Loans	9	7	0	4	7	6
Machines	15	20	23	21	33	20
Managers	36	30	50	54	33	41
Marketing	38	27	37	32	13	32
Authorities network	5	7	3	4	0	4
Patents	4	0	0	0	0	1
Sales outlets	5	0	10	7	7	6
Technology	44	40	40	29	40	39
Trade	11	10	7	7	0	8
Other	5	10	13	7	7	8
No of firms	55	30	30	28	15	158

Table 14a – 1st choice key resources by affiliate employment size

% of firms within employment size class choosing resource as 1st

	10 - 50	51 - 100	101 - 250	251 - 1000	>1000	ALL FIRMS
Buildings	2	0	0	0	7	1
Brand	15	23	13	14	13	16
Business network	15	10	10	14	7	12
Distribution network	9	3	13	11	0	8
Equity	7	0	0	7	20	6
Innovation	2	10	0	4	0	3
Licences	9	7	7	11	13	9
Loans	2	3	0	0	0	1
Machines	4	10	3	7	13	6
Managers	9	7	27	14	20	14
Marketing	9	7	3	7	0	6
Authorities network	0	3	0	0	0	1
Patents	0	0	0	0	0	0
Sales outlets	2	0	3	0	0	1
Technology	11	17	13	11	7	12
Trade	4	0	0	0	0	1
Other	2	0	7	0	0	2
No of firms	55	30	30	28	15	158

Having identified the three resources critical to success in the initial phase of their operations in South Africa, firms were then asked where they sourced these resources for the South African operation. The possibilities were: within the parent firm, within the local partner, or from 'the market', either South African or globally. This was a pivotal question in the survey. The long-held standard view is that foreign investors combine their firm-specific assets with location-specific advantages sourced in local markets, implying a greenfield mode of entry is optimal. More recently, mergers and acquisitions have become common amongst developed country firms wishing to enter markets in other *developed* countries, as firms have sought to leverage their existing advantages by integrating successful foreign firms into their operations. In many emerging economies, incomplete domestic markets for essential resources and high transaction costs may push foreign firms to internalise location-specific knowledge and other resources by linking with a local partner, either by acquiring local firms which already own these resources, or by entering into JVs with local firms, rather than entering via greenfields, requiring the purchase of such resources in host country markets.[24]

Table 15 - Source of 3 Key resources [25]

Mean % of resource

Mean % of sourcing of factor	Local Partner	Foreign Parent	Domestic Markets	Foreign Markets	Other	TOTAL	% of all firms identifying resource as key	No of firms
Managerial capabilities	46	28	24	2		100	40.1	65
Technological know-how	23	63	8	6		100	38.9	63
Brand names	20	69	9	2		100	36.4	59
Business networks	37	31	28	4		100	34.0	55
Marketing capabilities	38	34	27	1		100	32.1	52
Distribution networks	56	11	27	3	3	100	25.3	41
Machinery & Equipment	41	28	8	22	2	100	19.1	31
Licences	20	23	29	8	20	100	11.0	20

Table 15 – in which the top eight factors have been ranked according to the number of firms which identified them as critical – throws some light on this hypothesis, by identifying the relative importance of alternative sources for the key factors identified in Tables 12 through 15. The table confirms the essential contributions of parent firms to Brand names and Technological know-how, contributing 69% and 63% respectively of these two firm-specific resources. Local firms were particularly significant sources for Managerial capabilities (a term which may have been interpreted by some respondents as a proxy for very high-skill employees), and interestingly, Local markets were as important as Foreign parents as a source for managers. Even amongst greenfield firms, local markets provided 31% of managers (see Table 15a). Local firms were the major source of Distribution networks, while Foreign parents were insignificant, probably

[24] See Meyer & Estrin (2001).

[25] For simplicity, Table 15 only includes the seven most important resources, as identified in Table 12. Licences are included as well because of their importance as a *first* choice within the three critical resources.

reflecting the domestic market orientation of the majority of companies. Foreign markets appear to have little relevance for obtaining essential resources, except for machines.

For the top three resources in Table 15, as well as Distribution networks (rated sixth), the table suggests strong complementarities between local and foreign firms, in relation to sourcing critical resources. These complementarities are not present in relation to Business networks and to Marketing capabilities. Because the sample contains a large proportion of acquisitions (full and partial), there is little to distinguish amongst the overall scores for these two resources for foreign parents, local partners and local markets.

Table 15a, which presents the means of the different sources for the eight factors according to mode of entry, helps to clarify the sourcing of Business networks and Marketing capabilities. The table shows significant differences in the sourcing of Business networks, depending on the mode of entry.[26] Local partners supply a significantly larger share of Business networks for Full acquisitions than for Partial acquisitions, which have a similar pattern to JVs with respect to Business networks. The Business networks variable concerns access to critical inputs into operations, and is a strongly location-specific asset. But Foreign parents, as well as Local markets, appear to contribute larger shares where the parent has *less* control (that is, in Partial acquisitions and JVs). In other words, this data seems to counter the view that foreign firms enter via acquisitions rather than greenfields to obtain location-specific assets at lower cost, in a context of incomplete markets. One possible explanation may be that the Full acquisitions represent more successful local firms with well-functioning business networks which can be integrated into foreign parents' operations, while Partial acquisitions involve less successful operations (and JVs untested operations), where the parent firm brings its own assets to lower its risk. Another possibility is that a particular location-specific asset is more cheaply obtained via a local firm, rather than in the local market, making entry via partial acquisition a lower risk option. Other necessary resources are either brought in by the parent or accessed from local markets as for a greenfield.

It is also interesting to note that the local target firm appears to retain its own brand far more frequently in partial acquisitions, as compared with full acquisitions. This difference cannot be explained on the basis of brand familiarity, since this would not necessarily differ between full and partial acquisitions; instead, the level of control may be significant, with the parent less willing to risk its own brand, an important firm-specific asset, unless it has sufficient control over the affiliate.

[26] It should be noted however that the number of firms in each different mode of entry in Table 15a is rather small. In the full sample, 23 firms entered via partial acquisition, and since each resource is relevant to only 25-33% of these, the data in column 4 applies to only between 6 and 9 firms.

Table 15a - Source of 3 Key resources

Mean % of resource within mode of entry

Resource	Source	Greenfield	Acquisition	Joint-Venture	Partial Acquisition	ALL FIRMS
Brand *59 firms*	Local Partner	0.03	0.32	0.10	0.62	0.20
	Foreign Partner	0.88	0.66	0.68	0.22	0.69
	Local Markets	0.10	0.03	0.20	0.00	0.09
	Foreign Markets	0.00	0.00	0.01	0.17	0.02
	Other	0.00	0.00	0.00	0.00	0.00
Business networks *54 firms*	Local Partner	0.09	0.76	0.44	0.41	0.38
	Foreign Partner	0.45	0.11	0.26	0.30	0.31
	Local Markets	0.45	0.08	0.19	0.29	0.28
	Foreign Markets	0.01	0.05	0.11	0.00	0.04
	Other	0.00	0.00	0.00	0.00	0.00
Distribution networks *41 firms*	Local Partner	0.13	0.80	0.65	0.75	0.56
	Foreign Partner	0.09	0.13	0.05	0.25	0.11
	Local Markets	0.60	0.07	0.30	0.00	0.27
	Foreign Markets	0.10	0.00	0.00	0.00	0.03
	Other	0.08	0.00	0.00	0.00	0.02
Machinery *31 firms*	Local Partner	0.00	0.48	0.43	0.69	0.39
	Foreign Partner	0.68	0.12	0.37	0.04	0.29
	Local Markets	0.04	0.13	0.03	0.11	0.08
	Foreign Markets	0.29	0.27	0.08	0.17	0.22
	Other	0.00	0.00	0.08	0.00	0.02
Managers *65 firms*	Local Partner	0.06	0.62	0.47	0.66	0.46
	Foreign Partner	0.62	0.11	0.31	0.14	0.28
	Local Markets	0.31	0.23	0.22	0.21	0.24
	Foreign Markets	0.02	0.04	0.00	0.00	0.02
	Other	0.00	0.00	0.00	0.00	0.00
Marketing capability *52 firms*	Local Partner	0.09	0.58	0.38	0.68	0.38
	Foreign Partner	0.47	0.24	0.27	0.28	0.34
	Local Markets	0.43	0.15	0.33	0.04	0.27
	Foreign Markets	0.01	0.03	0.02	0.00	0.01
	Other	0.00	0.00	0.00	0.00	0.00
Technology *63 firms*	Local Partner	0.08	0.28	0.24	0.52	0.23
	Foreign Partner	0.75	0.52	0.69	0.42	0.63
	Local Markets	0.06	0.18	0.03	0.00	0.08
	Foreign Markets	0.11	0.03	0.04	0.07	0.06
	Other	0.00	0.00	0.00	0.00	0.00
Licences *20 firms*	Local Partner	0.17	0.47	0.09	0.25	0.20
	Foreign Partner	0.21	0.43	0.14	0.25	0.23
	Local Markets	0.41	0.00	0.34	0.25	0.29
	Foreign Markets	0.06	0.09	0.00	0.25	0.08
	Other	0.17	0.00	0.43	0.00	0.20

In the case of Marketing capability, there is a predictable difference between existing and new operations – acquisitions, whether full or partial, both rely substantially on contributions from the local partner, with small proportions from the parent and local markets, while new operations in the form of greenfields and JVs source much more heavily in local markets.

It is also possible that where there appear to be alternative sources of a resource – for Business networks and for Marketing capabilities – domestic and international assets are independent of each other and sourced separately. To examine this, Table 15b shows the sources of critical factors by domestic market orientation at entry. Here, the sourcing of Marketing capability looks very different for those firms which sell 75 – 99% of their output to the domestic market, than for firms which sell either 100% of output, or less than 75%, to the domestic market.[27] In fact, for the 75-99% category, the local partner is the source of an overwhelming share of all the location-specific assets. It turns out that of the 35 firms in this domestic market orientation category, three-quarters (26 firms) are Full or Partial acquisitions, a much higher proportion than in the full sample. In other words, it is not surprising that local partners are so important in providing critical resources for this sub-group of firms, and the mode of entry remains the more salient factor rather than the international vs. domestic categorisation.

[27] 56% of all firms fall into the '100% sales to domestic market' category, and the remaining 44% are divided evenly between those selling more than 75%, and those selling less than 75%. The destination of these firms' exports needs to be identified.

Table 15b - Source of 3 Key resources by domestic market orientation at entry

Mean % of resource within share of domestic market in total turnover in 1st year of SA operation

Resource	Source	0	1 – 25%	26 – 74%	75 – 99%	100%	ALL FIRMS
Brand *59 firms*	Local Partner	0.30	0.50	0.50	0.34	0.10	0.20
	Foreign Partner	0.56	0.50	0.50	0.65	0.75	0.69
	Local Markets	0.14	0.00	0.00	0.01	0.12	0.09
	Foreign Markets	0.00	0.00	0.00	0.00	0.03	0.02
	Other	0.00	0.00	0.00	0.00	0.00	0.00
Business networks *54 firms*	Local Partner	0.50	0.32	0.23	0.51	0.36	0.38
	Foreign Partner	0.40	0.32	0.56	0.31	0.25	0.31
	Local Markets	0.10	0.36	0.19	0.15	0.34	0.28
	Foreign Markets	0.00	0.00	0.02	0.03	0.06	0.04
	Other	0.00	0.00	0.00	0.00	0.00	0.00
Distribution networks *39 firms*	Local Partner	0.00	0.00	0.17	0.85	0.55	0.56
	Foreign Partner	0.00	0.00	0.37	0.08	0.13	0.12
	Local Markets	0.75	1.00	0.40	0.04	0.26	0.26
	Foreign Markets	0.25	0.00	0.07	0.04	0.00	0.03
	Other	0.00	0.00	0.00	0.00	0.05	0.03
Machinery *30 firms*	Local Partner	0.50	0.00	0.30	0.49	0.37	0.41
	Foreign Partner	0.00	0.00	0.50	0.24	0.29	0.27
	Local Markets	0.00	0.00	0.00	0.19	0.05	0.08
	Foreign Markets	0.50	0.00	0.20	0.09	0.26	0.22
	Other	0.00	0.00	0.00	0.00	0.03	0.02
Managers *65 firms*	Local Partner	0.53	0.85	0.50	0.56	0.37	0.46
	Foreign Partner	0.20	0.07	0.20	0.13	0.38	0.28
	Local Markets	0.27	0.08	0.30	0.25	0.24	0.24
	Foreign Markets	0.00	0.00	0.00	0.06	0.01	0.02
	Other	0.00	0.00	0.00	0.00	0.00	0.00
Marketing capability *51 firms*	Local Partner	0.25	0.00	0.27	0.77	0.28	0.37
	Foreign Partner	0.58	0.40	0.43	0.12	0.38	0.34
	Local Markets	0.18	0.60	0.28	0.07	0.34	0.27
	Foreign Markets	0.00	0.00	0.02	0.04	0.01	0.01
	Other	0.00	0.00	0.00	0.00	0.00	0.00
Technology *62 firms*	Local Partner	0.32	0.25	0.00	0.37	0.18	0.24
	Foreign Partner	0.28	0.75	1.00	0.58	0.66	0.62
	Local Markets	0.27	0.00	0.00	0.02	0.10	0.08
	Foreign Markets	0.13	0.00	0.00	0.04	0.07	0.06
	Other	0.00	0.00	0.00	0.00	0.00	0.00
Licences *20 firms*	Local Partner	0.00	0.00	0.20	0.50	0.16	0.20
	Foreign Partner	0.00	0.00	0.17	0.50	0.20	0.23
	Local Markets	0.00	0.00	0.47	0.00	0.31	0.29
	Foreign Markets	0.00	0.00	0.17	0.00	0.08	0.08
	Other	0.00	0.00	0.00	0.00	0.25	0.20

F. **Institutional and market environment**

The next set of tables, Tables 16 through 21, report firms' perceptions of the local operating environment. The first group of tables, 16 through 18a, examine the availability in 'unbundled' form on domestic markets of inputs needed for operations. The latter include high-skilled occupational categories (especially managerial and professional employees); production inputs (raw materials and intermediates, machinery and equipment, utilities and real estate); and operational inputs affecting transactions costs (communications, professional services). An adequate supply of suitable operational inputs is likely to be critical in affecting firm performance.

On the other hand, the administrative and institutional (official) environment, presented in Tables 19 through 21, affects transactions costs for the acquisition of key location-specific *assets* required to establish the operation (as distinct from transactions costs for production and sales activities). If these transactions costs are high, it could impact on the choice of entry mode itself, by pushing the firm towards one or other form of partnership with a local firm, rather than a greenfield. The official environment also, of course, influences the firm's perception of risk in the domestic economy. While the perception of those firms included in the survey has obviously not been that the risk is too high to permit entry via an equity stake, risk perceptions can affect not just the mode of entry, but also the *nature* of entry. In other words, high risks could lead to entry in a form that is more easily reversible, involving a smaller stock of fixed assets, or more extensive arm's length relationships in operations (such as outsourcing) than might otherwise have been the case.

All the questions in this section asked the firms to rate the South African operating environment on a Likert scale of 1 through 5, at their time of entry into the economy, as well as at the time of their enumeration for the survey. The labour and operating inputs questions assessed the availability of the inputs with respect to *both* quality *and* cost. It is important to reiterate that the data for 'then' must be interpreted with care, as the time of entry differs amongst firms.

i. The skilled labour market

Table 16 indicates that foreign firms do not feel that a binding skills constraint exists in the South African labour market. The overall mean scores are 3.84 at entry ('then') and 3.87 at the time of the survey ('now'), both very close to 4.0 which is interpreted in the questionnaire as 'mostly available'. The mean scores for all sectors in all job categories are above 3, meaning 'sometimes available'. The range of all means is fairly short (3.16 through 4.40), which also suggests that some of the changes in perception after entry (from 'then' to 'now') are fairly significant, up to 40% of the range. The very small shifts for the full sample (in the "Total' column) mask bigger variations across sectors.

Table 16 - Labour Market - Availability of suitable skilled labour by sector

Means

	Primary	Consumer	Materials	Machinery	Infrastr	Trade/hosp	Fin/bus serv	IT	Pharma	Total	N firms
Executive Manager then	4.00	3.74	3.54	3.16	3.35	3.25	3.64	3.23	4.00	3.48	157
Executive Manager now	3.60	3.62	3.56	3.58	3.47	3.75	3.42	3.38	4.40	3.56	160
Change	*-0.40*	*-0.12*	*0.02*	*0.42*	*0.12*	*0.50*	*-0.21*	*0.15*	*0.40*	*0.08*	
Professionals then	4.40	4.26	4.04	4.03	4.11	4.38	4.28	4.00	4.40	4.16	158
Professionals now	4.40	3.90	3.96	4.13	4.16	4.50	4.13	4.15	4.40	4.11	161
Change	*0.00*	*-0.36*	*-0.08*	*0.10*	*0.05*	*0.13*	*-0.16*	*0.15*	*0.00*	*-0.05*	
Operations Manager then	4.20	4.17	3.62	3.58	3.39	3.63	4.03	3.50	4.00	3.76	156
Operations Manager now	4.20	3.90	3.74	3.58	3.33	4.00	3.97	3.58	4.20	3.76	159
Change	*0.00*	*-0.27*	*0.13*	*0.00*	*-0.06*	*0.38*	*-0.06*	*0.08*	*0.20*	*0.00*	
Skilled Non-Mger then	4.20	4.26	4.00	4.06	3.63	3.63	3.94	3.58	4.40	3.96	158
Skilled Non-Manager now	4.20	4.14	4.15	4.10	3.74	4.13	4.06	3.50	4.40	4.03	161
Change	*0.00*	*-0.12*	*0.15*	*0.03*	*0.11*	*0.50*	*0.12*	*-0.08*	*0.00*	*0.08*	
All labour then	4.20	4.09	3.80	3.71	3.64	3.72	3.97	3.56	4.20	3.84	159
All labour now	4.10	3.89	3.85	3.85	3.71	4.09	3.90	3.67	4.35	3.87	162
Change	*-0.10*	*-0.20*	*0.05*	*0.14*	*0.07*	*0.38*	*-0.08*	*0.10*	*0.15*	*0.03*	

Suitable executive managers are seen to be the most difficult group to find, though in some sectors – Machinery, Trade & hospitality and Pharmaceuticals – there was substantial improvement in this category. By contrast, Professionals scored highest both at entry and 'now', even though there was some deterioration in their score over time, mostly due to a big decline in the Basic consumer goods sector. The latter sector, together with Financial & business services, was above average at entry, but declined subsequently. By contrast, Trade & hospitality started below the sample average, but then improved substantially, with Machinery, IT and Infrastructure also improving.

Table 17 - Labour Market - Availability of suitable skilled labour by Mode of entry
Means

	Greenfield	Acquisition	Joint-Venture	Partial Acq	TOTAL	N firms
Executive Manager then	2.90	3.60	3.75	4.04	3.48	157
Executive Manager now	3.10	3.72	3.95	3.57	3.56	160
Change	*0.20*	*0.12*	*0.20*	*-0.48*	*0.08*	
Professionals then	3.92	4.26	4.22	4.39	4.16	158
Professionals now	4.00	4.16	4.18	4.13	4.11	161
Change	*0.08*	*-0.09*	*-0.03*	*-0.26*	*-0.05*	
Operations Manager then	3.49	3.77	4.06	3.86	3.76	156
Operations Manager now	3.65	3.80	3.97	3.59	3.76	159
Change	*0.16*	*0.03*	*-0.08*	*-0.27*	*0.00*	
Skilled Non-Manager then	4.00	3.85	4.08	3.87	3.96	158
Skilled Non-Manager now	4.22	3.82	4.24	3.74	4.03	161
Change	*0.22*	*-0.03*	*0.16*	*-0.13*	*0.08*	
All labour then	3.57	3.87	4.04	4.03	3.84	159
All labour now	3.74	3.88	4.10	3.76	3.87	162
Change	*0.17*	*0.01*	*0.06*	*-0.28*	*0.03*	

Table 17 presents perceptions of skilled labour availability by mode of entry. Greenfield firms were generally most pessimistic at the time of entry, but perceptions improved after greater exposure to the local market, with substantial increases in three of the four occupational categories. Interestingly, Partial acquisitions (presumably involving significant exposure to South African conditions prior to entry in the due diligence process) moved in the opposite direction, starting with the most optimistic outlook but then reflecting significant declines in all four categories. One possible explanation for this may be that foreign companies entering alone (via greenfields) form modest expectations based on one set of comparator countries (such as other developing or middle-income economies, for example), while companies establishing linkages with South African companies base their initial expectations on norms closer to those of developed economies, which South African firms are generally more wont to do. The need for *ex post* justification of firms' actions may also be a factor here, however.

ii. The market for inputs into production & transactions

Tables 18 and 18a turn to look at inputs impacting upon production and operational transactions costs. Once again, the most important point is that the overall mean scores are very high, at well over 4 (meaning 'mostly available'), and indeed are higher than those for skilled labour inputs.[28] Utilities (energy and water), Professional services[29] and Real estate are all at a similarly high level, with IT & telecoms lagging behind somewhat (though improving post-entry). Direct inputs into production – Machinery & equipment and Raw materials & components – scored somewhat lower than inputs affecting transaction costs. The deterioration in the rand's exchange rate during late 2001 (as the fieldwork was beginning) may have contributed to the lower responses for these import-intensive items. However the mean scores in both cases are between 3.5 and 4, or between 'sometimes' and 'mostly' available, and so are not an indication of a significant problem.

Looking at the sectoral means in Table 18, there is a significant decline in the Basic consumer goods sector's scores for direct production inputs, while the Trade & hospitality and IT sectors both show significant improvements for these categories.

[28] Of course, firms' responses to the skilled labour and production & transaction inputs are not directly comparable. But the questions do have exactly the same format and the Likert scale scores have the same meaning.

[29] This refers to outsourced professional services such as auditing and banking services, as opposed to professionals employed within the firm in Tables 16 and 17.

Table 18 - Inputs - Availability of suitable inputs by Sector

Means

	Primary	Consumer	Materials	Machinery	Infrastr	Trade/hosp	Fin/bus serv	IT	Pharma	Total	N firms
Utilities then	4.00	4.68	4.65	4.48	4.26	4.38	4.53	4.77	5.00	4.54	158
Utilities now	4.40	4.62	4.89	4.58	4.32	4.38	4.59	4.77	5.00	4.62	161
Change	*0.40*	*-0.07*	*0.24*	*0.10*	*0.05*	*0.00*	*0.06*	*0.00*	*0.00*	*0.08*	
IT and Telecom then	4.20	4.16	4.19	4.13	3.63	4.25	3.91	4.00	4.60	4.05	159
IT and Telecom now	4.00	4.19	4.52	4.45	3.84	4.25	4.15	4.23	4.60	4.26	162
Change	*-0.20*	*0.03*	*0.33*	*0.32*	*0.21*	*0.00*	*0.24*	*0.23*	*0.00*	*0.21*	
Prof Services then	4.40	4.53	4.50	4.48	4.37	4.50	4.39	4.38	4.40	4.45	159
Prof Services now	4.20	4.52	4.52	4.55	4.37	4.63	4.42	4.46	4.40	4.48	162
Change	*-0.20*	*0.00*	*0.02*	*0.06*	*0.00*	*0.13*	*0.03*	*0.08*	*0.00*	*0.03*	
Real Estate then	4.20	4.67	4.61	4.44	4.19	4.50	4.38	4.54	4.80	4.47	139
Real Estate now	4.20	4.59	4.58	4.44	4.19	4.50	4.59	4.62	4.80	4.51	142
Change	*0.00*	*-0.08*	*-0.03*	*0.00*	*0.00*	*0.00*	*0.21*	*0.08*	*0.00*	*0.04*	
Machinery & Equipment then	4.80	3.65	3.76	3.40	3.76	3.00	4.13	4.45	3.33	3.77	139
Machinery & Equipment now	4.80	3.42	3.85	3.57	3.88	3.38	4.22	4.64	3.33	3.85	142
Change	*0.00*	*-0.23*	*0.09*	*0.17*	*0.12*	*0.38*	*0.09*	*0.18*	*0.00*	*0.08*	
Raw Material & Cmpnts then	4.75	3.92	3.72	3.11		3.50	3.50	2.67	3.00	3.51	81
Raw Material & Cmpnts now	4.75	3.50	3.50	3.21		4.50	3.50	3.33	3.00	3.46	84
Change	*0.00*	*-0.42*	*-0.22*	*0.11*	*0.00*	*1.00*	*0.00*	*0.67*	*0.00*	*-0.04*	
All inputs then	4.37	4.29	4.25	4.02	4.04	4.04	4.25	4.34	4.37	4.19	159
All inputs now	4.37	4.19	4.32	4.16	4.11	4.18	4.37	4.47	4.37	4.27	162
Change	*0.00*	*-0.10*	*0.07*	*0.13*	*0.07*	*0.14*	*0.12*	*0.14*	*0.00*	*0.08*	

In Table 18a, there is some variation across modes of entry, especially in Professional services and Machinery & equipment. As with the skilled labour inputs, Partial acquisition entrants scored production and transaction inputs highest at entry, while Greenfield entrants scored these inputs lowest. And as with the skilled labour inputs, Partial acquisitions scores in Table 18a declined (or increased less) over time, *relative to* the rest of the sample, though in this case the decline was modest. In fact, variations in the scores amongst both sectors and entry modes are probably too small to be statistically significant.

Table 18a Inputs - Availability of suitable inputs by Mode of entry
Means

	Greenfield	Acquisition	Joint-Venture	Partial Acquisition	TOTAL	N firms
Utilities then	4.47	4.57	4.49	4.70	4.54	158
Utilities now	4.63	4.63	4.58	4.65	4.62	161
Change	*0.16*	*0.06*	*0.09*	*-0.04*	*0.08*	
IT and Telecom then	3.86	4.06	4.11	4.35	4.05	159
IT and Telecom now	4.08	4.28	4.37	4.43	4.26	162
Change	*0.22*	*0.22*	*0.26*	*0.09*	*0.21*	
Prof Services then	4.25	4.46	4.51	4.74	4.45	159
Prof Services now	4.35	4.48	4.47	4.74	4.48	162
Change	*0.10*	*0.02*	*-0.04*	*0.00*	*0.03*	
Real Estate then	4.45	4.50	4.31	4.68	4.47	139
Real Estate now	4.48	4.57	4.42	4.58	4.51	142
Change	*0.02*	*0.07*	*0.11*	*-0.11*	*0.04*	
Machinery & Equipment then	3.46	3.78	3.74	4.33	3.77	139
Machinery & Equipment now	3.65	3.85	3.83	4.24	3.85	142
Change	*0.19*	*0.07*	*0.09*	*-0.10*	*0.08*	
Raw Material & Cmpnts then	3.20	3.42	3.48	4.14	3.51	81
Raw Material & Cmpnts now	3.30	3.36	3.41	4.00	3.46	84
Change	*0.10*	*-0.07*	*-0.07*	*-0.14*	*-0.04*	
All inputs then	4.06	4.21	4.15	4.49	4.19	159
All inputs now	4.19	4.28	4.23	4.46	4.27	162
Change	*0.13*	*0.07*	*0.08*	*-0.04*	*0.08*	

iii. Official institutions and environment

Tables 19, 20 and 21 focus on public administration and the policy environment. The Likert scale here ranged from 1, 'not conducive at all' to profitable business operations, to 5, 'very conducive'. The indicators are divided into three groups: official procedures, general public institutions and government policies and institutions.[30] It is immediately noticeable that although the mean scores for these questions are – with a single exception – well above 3.0 (the mid-point of the Likert scale), they are nonetheless somewhat lower than the means for skilled labour and operational inputs, and their range is considerably

[30] It should be noted that for many firms, some of the indicators - Real estate, Environmental regulations and Local government – were not relevant, and the number of responses is correspondingly lower.

wider. In addition, all three groups show a small downward shift over time, whereas skilled labour and operational inputs moved in the opposite direction, showing a small improvement over time. Without overstating these differences, this does suggest that the official environment is seen as a more significant constraint on business operations than either skilled labour or operational inputs.[31]

Within the official environment, public institutions and official procedures score somewhat higher than do government policies (in terms of mean scores for each group of questions). There is little to distinguish the scores of the different *levels* of government – that is, provincial and local as against national government – so that the *level* of government does not seem to be an important variable in the South African context.

Looking at the different indicators, Tables 19 to 21 clearly underline the well-known concerns of firms operating in South Africa about visas and work permits for foreign workers.[32] The mean score on this issue for the full sample is well below the rest, both 'then' and 'now'. Indeed this indicator is the only one where the mean is below 3.0. For seven of the nine sectors, the score for Visas and work permits is the lowest of all ten indicators, and for eight sectors, there is a decline from 'then' to 'now'.

The Unofficial payments indicator also raises some concerns, although the means scores are high (well above 4.0), suggesting that most firms are not confronted with demands for such payments. But there is a noticeable deterioration in the score from 'then' to 'now', and there is also quite wide variation in the sectoral scores.

Looking at the sectoral responses in Table 19, two sectors where the regulatory framework is an important dimension of firms' operating environment – Infrastructure and Financial & business services – reflect scores well below the full sample means on most of the indicators, and in addition a downward trend after entry. These two sectors each contain relatively large shares of the sample. In the Primary and Pharmaceutical sectors, each with small numbers of firms, the scores are even lower and the deterioration (at least in the Primary sector) more pronounced.

Table 20 shows that the stance towards the operating environment amongst both JVs and Partial acquisitions has deteriorated significantly over time. For the latter mode of entry, this reinforces a conclusion emerging from Tables 17 and 18a, that Partial acquisition entrants came into South Africa with unduly high expectations, possibly reflecting an assumption that the operating environment was very similar to their home environment. But these expectations have been disappointed post-entry.

Table 21 reports mean scores for perceptions of the official environment by firms' home country. Language, culture or ethnic differences linked to the latter might affect managers' views of their interaction with host country public institutions. But Table 21 suggests that there are no significant differences amongst firms entering South Africa

[31] Strictly speaking, the scores across questions cannot be directly compared, but the differences are indicative.

[32] See the discussion in Centre for Development and Enterprise (2002).

based on national origins. The scores for East Asian firms are slightly below the sample means in all three groups of indicators, and the downward trend somewhat larger, but it is not clear that this is statistically significant. Amongst British firms, there are less positive perceptions of government than for firms from elsewhere.

Table 19 - Institutions – Perceptions of official environment by Sector
Means

	Primary	Cons	Mtrls	Mach	Infrastr	Trade/ hosp	Fin/bus serv	IT	Pharma	Total	N firms
Licences then	3.60	3.82	3.67	3.81	3.59	3.38	3.79	3.62	2.80	3.67	144
Licences now	3.00	4.00	3.96	3.81	3.83	3.57	3.96	3.83	2.40	3.80	141
Change	*-0.60*	*0.18*	*0.29*	*-0.01*	*0.25*	*0.20*	*0.18*	*0.22*	*-0.40*	*0.13*	
Real Estate then	3.80	4.45	3.95	4.24	3.10	3.86	4.30	3.71	5.00	4.04	103
Real Estate now	3.80	4.38	4.00	4.24	3.73	4.00	4.26	3.71	5.00	4.10	106
Change	*0.00*	*-0.07*	*0.05*	*0.00*	*0.63*	*0.14*	*-0.04*	*0.00*	*0.00*	*0.06*	
Visas then	2.50	2.93	3.00	2.77	3.33	2.88	2.86	3.62	2.50	2.99	134
Visas now	1.75	2.44	2.68	2.81	2.95	2.63	2.79	3.31	2.33	2.76	137
Change	*-0.75*	*-0.49*	*-0.32*	*0.04*	*-0.39*	*-0.25*	*-0.07*	*-0.31*	*-0.17*	*-0.23*	
Env't regs then	3.60	3.90	3.61	3.76	3.23	3.50	3.67	3.75	3.67	3.63	101
Env't regs now	2.80	3.58	3.48	3.84	3.36	3.33	3.64	4.00	3.67	3.56	105
Change	*-0.80*	*-0.32*	*-0.13*	*0.08*	*0.13*	*-0.17*	*-0.03*	*0.25*	*0.00*	*-0.07*	
All procedures then	3.43	3.72	3.60	3.61	3.41	3.27	3.61	3.66	3.13	3.55	157
All procedures now	2.88	3.62	3.63	3.61	3.48	3.24	3.60	3.58	3.03	3.52	161
Change	*-0.55*	*-0.10*	*0.03*	*0.00*	*0.07*	*-0.03*	*-0.01*	*-0.08*	*-0.10*	*-0.03*	
Law enforcement then	3.40	3.74	3.69	3.45	3.11	3.38	3.36	3.92	3.20	3.49	158
Law enforcement now	2.80	3.52	3.15	3.19	3.21	3.50	3.39	3.85	3.20	3.33	162
Change	*-0.60*	*-0.21*	*-0.54*	*-0.26*	*0.10*	*0.13*	*0.03*	*-0.08*	*0.00*	*-0.17*	
Unofficial Paymts then	4.00	4.35	4.25	4.18	3.94	4.71	4.48	4.25	5.00	4.30	147
Unofficial Paymts now	3.40	4.30	4.00	4.24	3.72	4.71	4.38	4.17	5.00	4.19	150
Change	*-0.60*	*-0.05*	*-0.25*	*0.06*	*-0.22*	*0.00*	*-0.10*	*-0.08*	*0.00*	*-0.11*	
Stability of Rules then	3.60	3.68	3.77	3.37	3.56	3.63	3.73	4.00	3.40	3.64	157
Stability of Rules now	3.20	3.90	3.59	3.47	3.37	3.63	3.52	3.85	3.40	3.57	161
Change	*-0.40*	*0.22*	*-0.18*	*0.10*	*-0.19*	*0.00*	*-0.21*	*-0.15*	*0.00*	*-0.07*	
All institutions then	3.67	4.00	3.89	3.65	3.51	3.85	3.82	4.04	3.87	3.80	160
All institutions now	3.13	3.90	3.56	3.63	3.39	3.90	3.74	3.94	3.87	3.68	162
Change	*-0.53*	*-0.10*	*-0.34*	*-0.02*	*-0.11*	*0.04*	*-0.09*	*-0.10*	*0.00*	*-0.13*	
Central Govt then	3.00	3.39	3.25	3.43	3.27	3.38	3.38	3.33	2.60	3.32	149
Central Govt now	2.00	3.35	3.44	3.37	3.00	3.25	3.31	3.42	2.60	3.25	153
Change	*-1.00*	*-0.04*	*0.19*	*-0.07*	*-0.27*	*-0.13*	*-0.06*	*0.08*	*0.00*	*-0.06*	
Prov Govt then	2.80	3.50	3.26	3.55	3.27	3.50	3.29	3.44	2.67	3.35	110
Prov Govt now	2.00	3.44	3.35	3.45	2.92	3.50	3.29	3.56	2.67	3.27	114
Change	*-0.80*	*-0.06*	*0.09*	*-0.10*	*-0.36*	*0.00*	*0.00*	*0.11*	*0.00*	*-0.07*	
Local Govt then	2.60	3.44	3.61	3.60	3.08	3.43	3.29	3.44	3.00	3.38	110
Local Govt now	1.80	3.39	3.58	3.55	2.85	3.14	3.14	3.67	3.00	3.27	114
Change	*-0.80*	*-0.05*	*-0.03*	*-0.05*	*-0.24*	*-0.29*	*-0.14*	*0.22*	*0.00*	*-0.11*	
All Government then	2.80	3.34	3.28	3.44	3.17	3.46	3.33	3.36	2.87	3.34	152
All Government now	1.93	3.29	3.41	3.41	2.86	3.33	3.24	3.38	2.87	3.27	156
Change	*-0.87*	*-0.05*	*0.14*	*-0.03*	*-0.30*	*-0.13*	*-0.09*	*0.03*	*0.00*	*-0.08*	

Table 20 - Institutions - Perceptions of official environment by Mode of entry
Means

	Greenfield	Acquisition	Joint-Venture	Partial Acquisition	TOTAL	N firms
Licences then	3.67	3.73	3.50	3.86	3.67	144
Licences now	3.74	3.93	3.74	3.78	3.80	141
Change	*0.07*	*0.20*	*0.24*	*-0.08*	*0.13*	
Real Estate then	3.87	4.06	3.96	4.44	4.04	103
Real Estate now	3.97	4.06	4.12	4.44	4.10	106
Change	*0.10*	*0.00*	*0.16*	*0.00*	*0.06*	
Visas then	2.85	3.03	3.13	3.00	2.99	134
Visas now	2.76	2.77	2.88	2.53	2.76	137
Change	*-0.10*	*-0.26*	*-0.25*	*-0.47*	*-0.23*	
Env't regulations then	3.68	3.52	3.52	4.00	3.63	101
Env't regulations now	3.71	3.52	3.39	3.67	3.56	105
Change	*0.03*	*0.00*	*-0.13*	*-0.33*	*-0.07*	
All procedures then	3.47	3.59	3.55	3.73	3.55	157
All procedures now	3.46	3.58	3.57	3.56	3.52	161
Change	*-0.02*	*-0.01*	*0.02*	*-0.17*	*-0.03*	
Law enforcement then	3.36	3.60	3.54	3.48	3.49	158
Law enforcement now	3.29	3.42	3.29	3.26	3.33	162
Change	*-0.07*	*-0.18*	*-0.25*	*-0.22*	*-0.17*	
Unofficial Payments then	4.22	4.49	4.31	4.05	4.30	147
Unofficial Payments now	4.13	4.38	4.11	4.05	4.19	150
Change	*-0.09*	*-0.11*	*-0.20*	*0.00*	*-0.11*	
Stability of Rules then	3.47	3.77	3.59	3.83	3.64	157
Stability of Rules now	3.44	3.76	3.42	3.70	3.57	161
Change	*-0.03*	*-0.01*	*-0.17*	*-0.13*	*-0.07*	
All institutions then	3.66	3.97	3.81	3.75	3.80	160
All institutions now	3.60	3.82	3.60	3.64	3.68	162
Change	*-0.06*	*-0.14*	*-0.21*	*-0.11*	*-0.13*	
Central Government then	3.50	3.14	3.31	3.29	3.32	149
Central Government now	3.45	3.22	3.11	3.14	3.25	153
Change	*-0.05*	*0.08*	*-0.20*	*-0.14*	*-0.06*	
Provincial Govt then	3.38	3.29	3.32	3.44	3.35	110
Provincial Govt now	3.36	3.28	3.17	3.25	3.27	114
Change	*-0.01*	*-0.02*	*-0.15*	*-0.19*	*-0.07*	
Local Government then	3.50	3.32	3.27	3.44	3.38	110
Local Government now	3.43	3.36	3.04	3.13	3.27	114
Change	*-0.07*	*0.04*	*-0.23*	*-0.31*	*-0.11*	
All government then	3.43	3.19	3.29	3.29	3.34	152
All government now	3.36	3.23	3.12	3.12	3.27	156
Change	*-0.08*	*0.04*	*-0.17*	*-0.17*	*-0.08*	

Table 21 - Institutions - Perceptions of official environment by Home country

Means

	North America	UK	Germany	Rest of Europe	East Asia	Other	Total	N firms
Licences then	3.67	4.00	3.56	3.52	3.73	4.14	3.67	144
Licences now	3.82	4.00	3.94	3.69	3.83	3.63	3.80	141
Change	*0.15*	*0.00*	*0.38*	*0.17*	*0.10*	*-0.52*	*0.13*	
Real Estate then	3.91	4.27	3.91	4.09	4.05	4.00	4.04	103
Real Estate now	3.86	4.30	3.92	4.24	4.10	4.29	4.10	106
Change	*-0.05*	*0.03*	*0.01*	*0.15*	*0.05*	*0.29*	*0.06*	
Visas then	3.17	2.93	3.08	2.89	2.48	4.00	2.99	134
Visas now	2.86	2.47	2.93	2.72	2.45	3.56	2.76	137
Change	*-0.31*	*-0.47*	*-0.14*	*-0.17*	*-0.02*	*-0.44*	*-0.23*	
Env't regs then	3.45	3.75	4.00	3.66	3.48	4.50	3.63	101
Env't regs now	3.43	3.50	3.67	3.72	3.38	4.00	3.56	105
Change	*-0.02*	*-0.25*	*-0.33*	*0.06*	*-0.10*	*-0.50*	*-0.07*	
All procedures then	3.58	3.71	3.61	3.47	3.44	4.01	3.55	157
All procedures now	3.48	3.57	3.68	3.51	3.45	3.79	3.52	161
Change	*-0.09*	*-0.14*	*0.06*	*0.04*	*0.01*	*-0.22*	*-0.03*	
Law enforcement then	3.47	3.58	3.56	3.48	3.50	3.33	3.49	158
Law enforcement now	3.25	3.68	3.33	3.31	3.20	3.33	3.33	162
Change	*-0.22*	*0.11*	*-0.23*	*-0.17*	*-0.30*	*0.00*	*-0.17*	
Unofficial Paymt then	4.36	4.78	4.31	4.21	3.92	4.63	4.30	147
Unofficial Paymt now	4.09	4.72	4.31	4.22	3.64	4.63	4.19	150
Change	*-0.27*	*-0.06*	*0.00*	*0.01*	*-0.28*	*0.00*	*-0.11*	
Stability of Rules then	3.78	3.79	3.50	3.62	3.33	4.00	3.64	157
Stability of Rules now	3.78	3.68	3.72	3.48	3.12	4.00	3.57	161
Change	*0.00*	*-0.11*	*0.22*	*-0.14*	*-0.21*	*0.00*	*-0.07*	
All institutions then	3.85	4.02	3.88	3.74	3.58	3.96	3.80	160
All institutions now	3.69	4.01	3.77	3.64	3.32	3.96	3.68	162
Change	*-0.16*	*-0.01*	*-0.11*	*-0.11*	*-0.26*	*0.00*	*-0.13*	
Central Govt then	3.31	3.06	3.58	3.35	3.18	3.71	3.32	149
Central Govt now	3.44	2.83	3.36	3.29	3.00	3.71	3.25	153
Change	*0.14*	*-0.22*	*-0.23*	*-0.06*	*-0.18*	*0.00*	*-0.06*	
Prov Govt then	3.46	3.00	3.50	3.36	3.32	3.50	3.35	110
Prov Govt now	3.46	3.07	3.30	3.28	3.10	3.50	3.27	114
Change	*0.00*	*0.07*	*-0.20*	*-0.08*	*-0.22*	*0.00*	*-0.07*	
Local Govt then	3.48	3.00	3.30	3.50	3.45	3.00	3.38	110
Local Govt now	3.40	3.00	3.08	3.41	3.24	3.00	3.27	114
Change	*-0.08*	*0.00*	*-0.22*	*-0.09*	*-0.21*	*0.00*	*-0.11*	
All Government then	3.31	3.02	3.36	3.36	3.30	3.46	3.34	152
All Government now	3.36	2.89	3.20	3.28	3.10	3.46	3.27	156
Change	*0.05*	*-0.13*	*-0.16*	*-0.08*	*-0.19*	*0.00*	*-0.08*	

G. **Firm performance in South Africa**

Tables 22 through 27 present responses to the survey question asking whether the performance of the affiliate has fulfilled the investor's original objectives. Two of the four objectives identified – profitability and revenue growth – have been combined into a single score, by arithmetic averaging.[33] The central message from this set of tables is the very high proportion of firms in the sample as a whole – 74 firms (46% of the sample) - whose expectations were 'all or mostly' met. Almost as many - 69 firms (43% of the sample) - indicated their expectations were 'partially' met, leaving only 11% of firms feeling disappointed. In other words, firms entering South Africa are by and large satisfied with their investment. Table 22 also shows no significant differences amongst firms' views of their performance due to their mode of entry.

Table 22 - Affiliate - Performance by mode of entry
No of firms

Expectations met	Greenfield	Acquisition	Joint-Venture	Partial Acquisition	TOTAL
A little or worse (0 – 2)	4	8	3	4	19
Partially (2.5 - 3.5)	24	18	17	10	69
All or mostly (4 – 5)	23	24	18	9	74
TOTAL	51	50	38	23	162

Table 23 - Affiliate - Performance by Sector
No of firms

Expectations met	A little or worse (0 – 2)	Partially (2.5 - 3.5)	All or mostly (4 – 5)	TOTAL
Primary	1	1	3	5
Consumer	4	10	7	21
Materials	1	15	11	27
Machinery	7	14	10	31
Infrastructure		6	13	19
Trade & hosp	1	3	4	8
Fin & bus serv	3	11	19	33
IT		7	6	13
Pharmaceuticals	2	2	1	5
TOTAL	19	69	74	162

Table 23 does show some variation across the nine sectors, with the Primary sector, Infrastructure, Financial and business services and IT performing somewhat better than the other sectors. The three manufacturing sectors have all performed less well than other sectors, with just over one-third of firms in the top category, where objectives have been met 'all or mostly'.

[33] The objectives omitted here are productivity and domestic market share.

Table 24 - Performance by Market orientation
(Share of sales to domestic market in 1st year)

No of firms

Domestic market share	None	1-25%	26-74%	75-99%	100%	TOTAL
A little or worse (0 – 2)	1	1	2	6	9	19
Partially (2.5 - 3.5)	6	2	6	17	37	68
All or mostly (4 – 5)	6	5	5	12	45	73
TOTAL	13	8	13	35	91	160

Table 24 tabulates performance by market orientation at entry, that is, share of South African sales in total turnover. The majority of firms (56%) are in the extreme right column, selling entirely into the domestic market. Not surprisingly, these firms have roughly the same distribution as the full sample, with about half being very satisfied, and another 41% being partially satisfied. However, of the 22% of firms selling more than three-quarters of output domestically (in column 4), a relatively small proportion – one-third – are very satisfied, while half are only relatively satisfied. For some firms, this may be because exports growth is too slow, but for firms entering South Africa for market-seeking reasons (the majority of firms, as seen in Table 28 below), the lower level of satisfaction is probably because domestic market growth has not met expectations, so that some output has been exported to support higher capacity utilisation. However, these firms are primarily acquisitions (as pointed out in the discussion of Table 15b above), where local partners provided location-specific assets. This fact may be connected with the affiliates' relative lack of satisfaction.

Table 25 - Performance by Business environment

Means

Expectations met	A little or worse (0 – 2)	Partially (2.5 - 3.5)	All or mostly (4 – 5)	TOTAL
All skilled labour then	3.70	3.79	3.92	3.84
All skilled labour now	3.79	3.91	3.85	3.87
All inputs then	3.98	4.21	4.23	4.19
All inputs now	3.99	4.29	4.32	4.27
All procedures then	3.48	3.62	3.53	3.55
All procedures now	3.28	3.59	3.55	3.52
All institutions then	3.81	3.71	3.89	3.80
All institutions now	3.72	3.55	3.79	3.68
All government then	3.04	3.26	3.42	3.34
All government now	2.93	3.22	3.31	3.27
N firms	19	69	74	162

Table 25 plots performance by business environment, with the cells containing the mean scores of firms in each performance category for the various groups of environmental indicators. Looking across the rows, firms in the middle column which rate their performance as satisfactory (expectations 'partially' met), are more satisfied with input markets, official procedures and government policies than are firms who felt their

performance was poor. The 'satisfactory' group rated institutions significantly worse than the poor performance firms, but this did not appear to affect their perceptions of their performance.[34] By contrast, the biggest difference between 'good' performers and 'satisfactory' ones was that the former rated 'Institutions' and 'Government' much better than the latter, but 'Procedures' and 'Skilled labour inputs' '*now'* as somewhat worse. The 'Institutions' variable includes law enforcement, unofficial payments and corruption, and predictable and stable rules and regulations. Hence these results may imply that foreign firms which achieve satisfactory results are those able to ignore a general context of inadequate governance because of effective functioning of specific aspects of the public environment which have bearing on their operations, such as utilities and telecoms inputs or licence and visa procedures. But to move from satisfactory to strong performance may require a more favourable and stable regulatory and policy environment.

Table 26 - Performance by Competition (No of competitors at start)

No of firms

N competitors	None	1 to 2	3 to 5	6 to 10	More than 10	TOTAL
A little or worse (0 – 2)	1	5	4	1	8	19
Partially (2.5 - 3.5)	7	7	23	12	19	68
All or mostly (4 – 5)	8	6	25	14	20	73
TOTAL	16	18	52	27	47	160

Tables 26 and 26a look at the impact on performance of the competitive environment in the domestic market. Neither of these tables suggests a strong correlation between the degree of market competition and the performance variable. A small number of firms which have more than 75% of the domestic market in Table 26a (column 4) felt much more satisfied with their performance than those with more modest market share. However, firms with a monopoly felt less satisfied, perhaps because aggregate economic growth (and firm revenue growth) was slower than hoped for.

Table 26a - Performance by Competition (Current domestic market share)

No of firms

Domestic market share	0 - 19%	20 - 49%	50 -74%	75 - 99%	100%	TOTAL
A little or worse (0 – 2)	5	4	1	1	0	11
Partially (2.5 - 3.5)	24	18	6	1	3	52
All or mostly (4 – 5)	22	20	7	5	1	55
TOTAL	51	42	14	7	4	118

[34] Note that for all three groups of firms, institution scores (as well those for 'government') declined from 'then' to 'now'.

Table 27 looks at performance by firm 'age' in South Africa, that is, date of entry. Once again, there appears to be little connection between the two variables.

Table 27 - Performance by age
No of firms

Expectations met	1990 - 1994	1995 - 1998	After 1999	TOTAL
A little or worse (0 – 2)	2	16	1	19
Partially (2.5 - 3.5)	13	41	15	69
All or mostly (4 – 5)	16	43	15	74
TOTAL	31	100	31	162

H. **Impact on the South African economy**

This section of the report looks at the impact of foreign companies on South Africa's economic development. In theory, foreign firms impact upon domestic welfare and growth in five broad areas: capital markets and finance, labour markets and employment, domestic goods markets, technology and international trade.[35] In each of these areas, there are a number of different possible channels, and the impact may be either positive or negative. Construction of the survey questionnaire required choices about the focus of the project, to prevent the required interview time or the content of questions becoming a disincentive to firm participation, and to keep the size and scope of the dataset manageable. As a result, many impact issues had to be excluded.

In relation to finance and the capital markets, the survey addressed the question of possible financial constraints on firm growth and expansion and the availability of capital from the parent. These issues are not reported here. The survey did not enquire about the level of financial investment or its sources, nor about financial outflows (dividends and interest). It is of course extremely difficult to obtain data on the vexed issue of transfer pricing.

The impact on the labour market is addressed by looking at firms' expenditure on training in Section iv below. Firms' perceptions of a skilled labour constraint has already been discussed, but the potential for any constraint to be relaxed by transferring staff from parent firms is also discussed in Section iv. Wages and conditions of employment, labour relations and the detailed composition of the labour force were excluded from the survey. The impact of the movement of labour from foreign to local firms was not addressed.

The survey's concern with goods market impact is limited to 'horizontal' effects, that is, effects on other firms in the same market as the foreign investor. 'Vertical' spillovers, via backward linkages to suppliers or forward linkages to customers, were excluded. Section ii below looks at domestic market competition, with respect to changes in both market share and in the number of competitors in the sector. The impact of foreign firms on concentration and competition is the focus of a hotly contested literature. Increased market competition from more efficient foreign firms can pressure domestic producers to

[35] For a thorough and balanced account of these channels of impact, see Dicken, chapter 8. See also Blömstrom & Kokko (1998) and Görg & Greenaway (2002).

raise efficiency under some circumstances. On the other hand, if domestic firms are crowded out of the market by foreign entrants, an anti-competitive outcome could result, with negative consequences for both domestic consumers and national industrial capacity. Section iii discusses changes in domestic firm behaviour and performance subsequent to the foreign entry, looking at a number of dimensions of efficiency and competitiveness. Section v examines the potential for technology to be transferred from the parent firm, thereby enabling the affiliate to establish and maintain an efficiency advantage. Investigating the actual transfer of technology would have required a very much longer set of questions, and so had to be omitted.

In examining international trade, the survey excluded any consideration of imports by foreign affiliates, but export impact is of great interest. Section i discusses market orientation of foreign affiliates, distinguishing between arm's-length sales into foreign markets, and non-arm's length exports to other affiliates of the parent. The latter give some insight into the economy's integration into international production chains and networks, even though the project excluded non-equity hierarchical links between foreign and domestic firms.

Finally, the discussion of development impact also includes, in Section vi, a consideration of the impact of foreign firms on black economic empowerment in South Africa, an important dimension of transformation in the new democratic dispensation. This is based on a set of questions appended to the survey in South Africa.

(i) Market orientation

Table 28 shows market orientation for the sample as a whole, and by sector.[36]

Table 28 - Market Orientation by sector (starting & latest means & change)

Sector	Domestic Market			Regional Market			Global Market			Other Affiliates		
	Start	Latest	*Chg*	Start	Latest	*Chg*	Start	Latest	*Chg*	Start	Latest	*Chg*
Primary	0.17	0.13	*-0.04*	0.10	0.00	*-0.10*	0.73	0.87	*0.14*	0.00	0.00	*0.00*
Consumer	0.94	0.85	*-0.09*	0.05	0.07	*0.01*	0.01	0.08	*0.07*	0.00	0.00	*0.00*
Materials	0.84	0.73	*-0.10*	0.01	0.06	*0.05*	0.15	0.19	*0.05*	0.00	0.01	*0.01*
Machinery	0.86	0.77	*-0.09*	0.02	0.10	*0.08*	0.06	0.08	*0.02*	0.07	0.05	*-0.01*
Infrastructure	0.67	0.69	*0.02*	0.03	0.07	*0.04*	0.24	0.22	*-0.02*	0.06	0.03	*-0.04*
Trade & hosp	0.80	0.82	*0.02*	0.01	0.02	*0.01*	0.19	0.16	*-0.03*	0.00	0.00	*0.00*
Fin & bus serv	0.84	0.78	*-0.05*	0.06	0.10	*0.05*	0.06	0.08	*0.02*	0.05	0.03	*-0.01*
IT	0.85	0.53	*-0.31*	0.01	0.26	*0.25*	0.08	0.14	*0.06*	0.07	0.07	*0.00*
Pharmaceuticals	0.96	0.87	*-0.09*	0.04	0.11	*0.07*	0.00	0.00	*0.00*	0.00	0.01	*0.01*
Total	0.81	0.73	*-0.08*	0.03	0.09	*0.06*	0.12	0.15	*0.03*	0.04	0.03	*-0.01*
N firms	161	162		161	162		161	162		161	162	

[36] Since the start of operations was not the same for all firms, the shift from 'start' to 'latest' cannot be interpreted as a change in exports over any specific time period. Nor is the data in Chart 11 weighted by the value of firm sales.

'Regional markets' refers either to Southern Africa or to sub-Saharan Africa, depending on how firms define their regional focus. The important distinction for development impact is between export markets within Africa, and markets outside Africa, labelled here 'Global markets'. For domestic firms, exports outside Africa are seen to have a greater productivity-enhancing impact via '*learning*-by-exporting' than exports within Africa, which are often motivated by the need for a 'vent-for-surplus', so that they fluctuate inversely with domestic demand.[37] The process of learning-by-exporting is less relevant for foreign affiliates than domestic firms, but the pressures on affiliates to improve productivity and competitiveness over time are likely to be smaller where the region is the primary export market, rather than global markets. In these circumstances, parents may well not supply affiliates with the most up-to-date technology, moderating the overall efficiency impact of the presence of foreign affiliates.

'Other affiliates' in the table refers to companies associated with the parent firm, and is intended to assess the integration of South African operations into global production chains.

It is evident that with the exception of the Primary sector, and to some extent Infrastructure, foreign firms have entered South Africa for market-seeking purposes. Their initial focus has been predominantly on the domestic market. On average, 81% of firms' sales during their first year of operation were to the domestic market. [38]

Expansion into domestic markets has of course long been the major motivation for FDI in South Africa, at least in the manufacturing and service sectors. The survey data illustrate that this historical pattern has undergone an important extension since the political transition in 1994, in the form of expansion by many affiliates into Regional markets elsewhere in Africa. Initial sales into the region were very low, presumably because most firms were still establishing themselves in the domestic South African market. But seven sectors increased the regional share of sales significantly, with a huge increase in the IT sector, and strong rises also in Materials, Machinery and Pharmaceuticals (the first two from a very low base).[39] The exceptions are the Primary sector, and surprisingly, Trade & hospitality. The reasons for the limited share of sales to the region in the latter sector are hard top explain. Four sectors have combined domestic and regional sales at 90% or more of the total: Consumer goods, Machinery & equipment, Pharmaceuticals and Financial & business services. In these sectors, as well as IT, it appears that South Africa and the region are seen as a single market.

Only 12% of sales go to Global markets. Most sales from Primary sector firms are into the latter, but this sector includes a very small number of firms. Firms in Materials processing, Trade & hospitality (including tourism) and Infrastructure entered with stronger intentions of selling into global markets, with sales to the latter ranging from 15-24% in their first year of operations. While the share of output going to global markets

[37] See Rankin (2001).
[38] Note that the mean shares of firm sales in Table 28 are unweighted.
[39] The limited contribution to distribution networks by parent firms (as reported in Table 15) reflects the focus of most affiliates on local and regional markets.

from the Materials sector has increased from 15% to 19%, in the latter two sectors the global share has declined since entry. In contrast, the global share in two sectors – Consumer goods and IT – has grown rapidly from a low base in each case. The impact on the shift to global exports of the rand's depreciation over the past decade should be taken into account, not just in increasing export volumes, but also in reducing the weight of domestic sales in overall sales value expressed in dollars.

Table 28 illustrates that South African affiliates are selling to Other affiliates of their parent firm to only a very limited degree. Firms in only four sectors had sales to other affiliates during their first year of operations, including only one sector in manufacturing. The latest financial-year data provided shows that the Other affiliates component of the market has not increased its share in any significant way. This suggests that direct equity links are not commonly used by firms with no prior South African presence to *extend* global chains into South Africa. It cannot be concluded from this data alone that South African firms in general are not becoming integrated into global production chains and networks. First, there are a variety of other possible (non-equity) links between local operations and global chains or networks, which the survey did not explore. Second, there is some evidence – from the auto industry, for example[40] – that firms longer-established in South Africa (entry pre-1990) have undertaken 'intensive' structuring of global chains to incorporate their local operations. In sum, however, it appears that foreign investors who entered South Africa during the 1990s did so primarily for market-seeking reasons, rather than efficiency-seeking reasons.[41]

This conclusion is reinforced by data from the National Enterprise Survey carried out in 1999-2000 by the present author.[42] This survey of 1425 South African firms included 68 firms (4.8% of the sample) with more than 10% foreign equity and which entered South Africa after 1990.[43] For this sub-group, the mean share of exports in turnover was 31.5%[44], with domestic sales accounting for 68.5%, as compared with 73% of turnover for the year 2000 in the current (CNEM) sample. The National Enterprise Survey indicated that 47.5% of exports – or 15% of turnover – went to the rest of Africa. This is well above the 9% of turnover sold to the region in 2000, according to the CNEM data.[45]

Table 28a shows market orientation by size of affiliates' turnover. The top segment of the table categorises firms on the basis of sales in their first year of South African operations, and the lower segment on the basis of 2000 sales, so that the two segments are not strictly

[40] See Black (2001).
[41] This is also the conculsion reached in Jenkins & Thomas (2002).
[42] See Gelb (2001).
[43] Another 89 firms (6.2% of the total sample) had more than 10% foreign ownership but entered before 1990.
[44] Of the 68 firms, 52 indicated they were exporters, but only 40 firms provided detailed export and turnover data for their most recent financial year, in general 1999.
[45] The NES export data for pre-1990 foreign investors is also instructive. 55 of 89 firms provided values of exports and turnover, with a mean export share of only 14.3%. Of these exports, 62% went to the rest of Africa, equivalent to 8.9% of total turnover. Average turnover is much larger for the pre-1990 investors than for post-1990 group.

comparable.[46] The table confirms that firms in all turnover categories are focussed predominantly on the domestic market, though less so than when they first entered South Africa. The biggest shift away from the domestic market has been amongst firms with the smallest and largest turnover levels, especially the latter.[47]

Firms with small turnovers have shifted mainly into the regional market, but this group comprises only 0.26% of total sales. The seventeen firms with sales above $100 million provide more than two-thirds (68.6%) of total turnover for the sample, and by contrast, these large firms have moved into global markets. This provides a very important corrective to the data in Table 28, as it suggests that on a sales-weighted basis, foreign affiliates in South Africa are moving quite rapidly towards exporting to global markets. It is worth mentioning that these large firms are found in all nine sectors except Pharmaceuticals.

On the other hand, the increase in total exports due to this group is offset by the fact that firms with 2000 sales of $20-100 million (comprising just below 25% of all sales) are selling a larger share domestically, and less into global markets, than the same group in their first year of operations. Nonetheless, the share of the total turnover of foreign affiliates going to exports, and to global markets in particular, has increased very significantly.[48]

Table 28a - Market orientation by size of sales

Means

		<$2m	$2-10m	$10-20m	$20-100m	>$100m	Total
Sales 1st yr of ops	Domestic Market Start	0.81	0.89	0.81	0.70	0.98	0.83
	Regional Market Start	0.04	0.02	0.01	0.02	0.02	0.02
	Global Market Start	0.15	0.07	0.09	0.26	0.00	0.12
	Other affiliates Start	0.00	0.02	0.09	0.01	0.00	0.02
	N firms	*37*	*38*	*15*	*22*	*10*	*122*
Sales 2000	Domestic Market Latest	0.67	0.79	0.76	0.73	0.69	0.74
	Regional Market Latest	0.16	0.10	0.06	0.05	0.09	0.09
	Global Market Latest	0.13	0.07	0.17	0.20	0.19	0.14
	Other affiliates Latest	0.03	0.04	0.01	0.02	0.04	0.03
	N firms	*22*	*54*	*15*	*39*	*17*	*147*

[46] The data in the Total column differ slightly from those in Table 28 due to the differences in time and in the number of firms represented.

[47] The group with $10-20 million is selling significantly less to parents' affiliates than in the first year of operations, which is difficult to understand without further analysis.

[48] The impact on this data of the rand's depreciation over the past decade should be taken into account, not just in increasing export volumes, but also in reducing the weight of domestic sales in overall sales value.

(ii) Domestic market competition

Tables 29, 29a, 30 and 30a look at competition in the domestic market. The scope of the market was defined by the respondents, so that the tables provide subjective perceptions of market share.

Table 29 - Domestic market share in 2000 by sector
No of firms

	0 - 19	20 - 49	50 - 74	75 - 99	100	TOTAL
Primary	1	1				2
Consumer	9	6	2	1		18
Materials	6	8	1	2	1	18
Machinery	14	6	3	3		26
Infrastructure	6	6	1	1		14
Trade & Hosp		1	3		1	5
Fin & Bus serv	11	10	2			23
IT	1	3	2		2	8
Pharmaceuticals	3	1				4
TOTAL	51	42	14	7	4	118

Table 29a - Domestic market share at entry & in 2000, by sector
Means

	Market share 1st year operations	Market share 2000	Change
Primary	0.08	0.23	*0.15*
Consumer	0.21	0.27	*0.07*
Materials	0.28	0.35	*0.07*
Machinery	0.22	0.26	*0.04*
Infrastructure	0.18	0.28	*0.11*
Trade & hosp	0.49	0.61	*0.13*
Fin & bus serv	0.19	0.22	*0.03*
IT	0.67	0.52	*-0.15*
Pharmaceuticals	0.31	0.13	*-0.18*
TOTAL	0.26	0.30	*0.04*
N firms	111	119	

The data in Table 29a confirm that foreign investors enter markets in which substantial market share is available: the mean market share at entry was 26%, which then rose to 30% in 2000. This makes sense for market-seeking foreign firms. In addition, the number of firms in the markets entered was on average small: fewer than five (data not shown). In Trade & hospitality and in IT, the initial market share was especially high, and the number of competitors was lower than the other sectors, only about 2.5 on average. In IT and Pharmaceuticals, there were significant drops in the average market share after entry, but in all other sectors, average market share increased, with especially significant increases in Infrastructure and in Trade & hospitality. More detailed analysis suggests that the rise in the sectoral means was due to firms with initially low market shares (below 20%) increasing their share above that level. In Table 29, 42 firms are in the 20-49% market share in 2000, as compared with only 17 in that category at the time of entry.

Several firms in the IT sector had very high market shares on first entering, and appeared to be monopolising their particular market niche. Subsequent to entry, their market share was reduced by increased competition from new entrants, presumably in the same niche market. It is not clear whether the recent entrants are domestic or other foreign firms, but to the extent it is the former, the drop in market share may indicate some technology spillover. In Financial & business services, domestic firms appear to have held their own, with average market share and the number of competitors both rising very slightly post-entry.

In the case of the three manufacturing sectors, the sectors' performance scores (Table 23) were below average, notwithstanding the increase in market share. In these sectors, there was no change in the number of competitors post-entry, suggesting that market growth disappointed firms.

Table 30 - Domestic market share by mode of entry

No of firms

	0 - 19	20 - 49	50 - 74	75 - 99	100	TOTAL
Greenfield	21	12	2			35
Acquisition	14	14	5	4	1	38
Joint-Venture	11	10	6		3	30
Partial Acquisition	5	6	1	3		15
TOTAL	51	42	14	7	4	118

Table 30a - Domestic market share at entry & in 2000, by mode of entry

Means

	Market share 1st year operations	Market share 2000	Change
Greenfield	0.12	0.19	0.06
Acquisition	0.34	0.35	0.01
Joint-Venture	0.31	0.33	0.01
Partial Acquisition	0.25	0.37	0.12
Total	0.26	0.30	0.04
N firms	111	119	

Table 30a shows that foreign entrants look for South African partners with significant market shares – all 3 modes involving local firms had substantial market shares at entry, while greenfields have a much smaller share at 12%, reflecting their small entry size (see Table 10a). Joint ventures and full acquisitions were not really able to increase their shares after entry. By contrast, both greenfield and partial acquisition entrants increased their market shares by about 50% by 2000, suggesting the value to the operation of the technological and productivity strengths brought to bear by the foreign firm. This perhaps reinforces the view expressed earlier (in Table 15a) that full acquisitions involve already successful local firms, whereas partial acquisitions have involved less successful, even under-performing, local firms.

(iii) Comparison with local industry

Tables 31 to 33 present data on foreign affiliates' views of their South African competitors on a series of dimensions: product quality and range, management and marketing capabilities, level of technology and labour productivity. As before, views presented apply to the time of entry ('then') and of the firm's enumeration ('now'). On the 5-point Likert scale, 3 was interpreted as meaning the local industry was (is) 'almost as good as' the foreign affiliate, with 4 meaning the local industry was (is) 'as good as the affiliate'. The change between 'then' and 'now' indicates whether local industry has improved or deteriorated during the period of the foreign firm's market presence, though causality cannot necessarily be attributed directly to the foreign presence.

For the sample as a whole in Table 31, the mean scores cluster close to 3 in almost all dimensions, with only Marketing capabilities being significantly above 3, though still well below 4. Table 15a showed that Marketing was obtained predominantly from local partners in all three entry modes involving local partners, which is consistent with the data in Table 31. It is worth underlining the decline in Marketing in the Consumer goods and Pharmaceuticals sectors, in contrast to strong increases in Trade & hospitality and in IT. Local industry fares worst in the comparison on the issues of product quality and technology.

Interestingly, the service sectors – Infrastructure, Trade and hospitality, Financial & business services and IT – were seen as comparatively weaker at the time of entry, than was manufacturing. But the service sectors have shown much greater improvement, with local IT firms in particular increasing significantly in all dimensions, having started out as clearly inferior to the foreign entrants. This reinforces the interpretation of Table 29a above, which suggested that the drop in foreign firms' market share in the IT sector reflects improved competitiveness of domestic firms. In contrast, domestic firms in the manufacturing sectors appear to have fallen further behind in comparison with foreign investors[49], though technology in the Materials and Machinery sectors did improve marginally. Overall the improvement in technology in seven of the nine sectors provides some tentative support for the existence of spillovers from foreign to domestic firms.

This table also shows that in six of the nine sectors, local management capability was rated 'almost as good' as that of affiliates at the time of entry. This is consistent with the argument (based on Table 15) that local partners were identified as a much more important source of management capabilities than either local or foreign markets or the parent firms.

[49] Again, this is consistent with the interpretation of Tables 29 and 29a.

Table 31 - Comparison with Local industry by sector (starting & latest means & change)

	Primary	Consumer	Materials	Machinery	Infrastr	Trade/hosp	Fin/bus serv	IT	Pharma	Total	N firms
Product Quality then	3.80	3.33	2.92	3.20	2.61	2.43	2.88	2.00	3.60	2.95	150
Product Quality now	2.80	3.15	2.85	3.07	3.17	3.00	3.06	2.83	3.40	3.03	156
Change	*-1.00*	*-0.18*	*-0.07*	*-0.13*	*0.56*	*0.57*	*0.18*	*0.83*	*-0.20*	*0.08*	
Management then	3.40	3.67	3.32	3.60	3.18	2.43	2.91	2.56	3.60	3.23	149
Management now	3.40	3.00	3.35	3.37	3.33	3.00	3.06	3.50	3.60	3.25	156
Change	*0.00*	*-0.67*	*0.03*	*-0.23*	*0.16*	*0.57*	*0.15*	*0.94*	*0.00*	*0.02*	
Marketing then	4.00	3.83	3.00	3.53	3.41	3.14	3.48	3.00	3.80	3.43	147
Marketing now	2.60	3.50	3.04	3.57	3.44	3.57	3.58	3.50	3.40	3.42	154
Change	*-1.40*	*-0.33*	*0.04*	*0.03*	*0.03*	*0.43*	*0.10*	*0.50*	*-0.40*	*-0.01*	
Technology then	3.50	3.39	2.72	3.03	3.12	3.00	3.06	2.56	3.20	3.03	147
Technology now	3.75	3.00	2.85	3.20	3.50	3.29	3.31	3.08	2.80	3.17	154
Change	*0.25*	*-0.39*	*0.13*	*0.17*	*0.38*	*0.29*	*0.25*	*0.53*	*-0.40*	*0.14*	
Labour then	2.75	3.82	3.38	3.28	2.65	3.17	3.00	2.89	3.75	3.20	138
Labour now	3.25	3.11	3.36	3.28	2.78	3.67	2.89	3.67	3.25	3.18	145
Change	*0.50*	*-0.72*	*-0.02*	*0.00*	*0.13*	*0.50*	*-0.11*	*0.78*	*-0.50*	*-0.02*	

However, in these sectors, there was no perceived improvement in local management capabilities after entry, indeed two of the manufacturing sectors saw a significant decline. By contrast, in the three sectors where local firms' management was initially rated lower – Trade & hospitality, Financial & business services and IT – there was substantial improvement post-entry.

Table 32 - Comparison with Local industry by mode of entry (starting & latest means & change)

	Greenfield	Acquisition	Joint-Venture	Partial Acquisition	Total	N firms
Product Quality then	2.92	2.98	3.09	2.76	2.95	150
Product Quality now	3.12	3.06	3.11	2.62	3.03	156
Change	*0.20*	*0.08*	*0.02*	*-0.14*	*0.08*	
Management then	3.14	3.20	3.42	3.24	3.23	149
Management now	3.37	3.15	3.36	3.00	3.25	156
Change	*0.23*	*-0.05*	*-0.06*	*-0.24*	*0.02*	
Marketing then	3.57	3.41	3.39	3.19	3.43	147
Marketing now	3.76	3.29	3.47	2.81	3.42	154
Change	*0.18*	*-0.12*	*0.08*	*-0.38*	*-0.01*	
Technology then	3.06	2.80	3.25	3.10	3.03	147
Technology now	3.35	2.98	3.37	2.80	3.17	154
Change	*0.29*	*0.17*	*0.12*	*-0.30*	*0.14*	
Labour then	3.11	3.14	3.23	3.47	3.20	138
Labour now	3.15	2.93	3.55	3.21	3.18	145
Change	*0.04*	*-0.21*	*0.31*	*-0.26*	*-0.02*	

Table 32 shows local industry comparisons by mode of entry. There are important differences between new operations (greenfields and joint-ventures) and existing operations where entry was via acquisition. The greenfield firms saw local firms as 'almost as good' at entry, with only the Product quality mean score being below 3. All five dimensions improved subsequent to entry, with significant improvements in product quality, management and technology. Joint-venture firms saw the local industry as even closer to foreign firms at entry, but with smaller improvements subsequently.[50] In contrast, full and partial acquisitions took a similar view of most dimensions at entry to JV and greenfield entrants. But the perception of acquisition firms is that local industry has declined relative to the foreign firm since entry, or conversely that the acquired firm has moved ahead of the rest of local industry, presumably in part a result of the foreign entry. For partial acquisitions, the gap between local and foreign firms grew especially significantly. For partial acquisitions, technology in the local industry is strong at entry, but then declines. This conforms with the choice of Technology as the most important critical resource by many PA firms (see Table 15a).

[50] The responses here may have come disproportionately from local nationals.

Table 33 - Comparison with Local industry by performance (starting & latest means & change)

Performance - mean of profitability & revenue growth

	Poor	Satisfactory	Good	Total	N firms
Product Quality then	2.74	2.91	3.06	2.95	150
Product Quality now	2.84	3.15	2.97	3.03	156
Change	*0.11*	*0.25*	*-0.09*	*0.08*	
Management then	3.58	3.22	3.15	3.23	149
Management now	3.37	3.30	3.17	3.25	156
Change	*-0.21*	*0.08*	*0.02*	*0.02*	
Marketing then	3.68	3.41	3.37	3.43	147
Marketing now	3.42	3.58	3.26	3.42	154
Change	*-0.26*	*0.16*	*-0.11*	*-0.01*	
Technology then	3.12	2.87	3.15	3.03	147
Technology now	3.06	3.20	3.17	3.17	154
Change	*-0.06*	*0.32*	*0.02*	*0.14*	
Labour then	3.47	3.19	3.14	3.20	138
Labour now	3.27	3.25	3.10	3.18	145
Change	*-0.20*	*0.06*	*-0.04*	*-0.02*	

Table 33 shows the comparison with local industry by performance of the foreign affiliate. Perhaps surprisingly, firms which performed poorly relative to their own expectations also saw local firms as slipping back relative to themselves, whereas firms which were mostly happy with their own performance felt that local firms had more or less held their own. The middle group of firms, partially satisfied with their own performance, saw significant improvement in local firms, especially in the two key dimensions of product quality and technology.

(iv) Human capital accumulation

Tables 34 to 38 look at affiliates' efforts to improve their human resources by training their local workers, and their capacity to improve performance by bringing in managers from the parent firm. These two categories assess the contribution of foreign investors to human capital development in South Africa. There is of course not a one-to-one correspondence between training spending and accumulation in human capital, since the expenditure level tells us nothing about the quality of the training, the extent to which it is firm-specific, the movement of skilled workers amongst firms, or various other factors. Nonetheless, training spending does provide an indication of firms' investment in their labour force.

The data in Table 34 present total training expenditure, though the survey also distinguished between training of managers and of other job categories.[51] The table shows that just less than one-third of firms spend less than 0.5% of turnover on training, and another third between 0.5% and 2%. To put these figures in context, it can be noted that foreign affiliates in South Africa spend a larger proportion of revenue on training than affiliates in the other three countries in the CNEM survey. Furthermore, foreign affiliates in South Africa may be spending slightly more than domestic firms on training. This emerges from a somewhat crude comparison of this data with the data from the National Enterprise Survey of South African firms.[52] Nonetheless, average levels of training spending appear rather low, given the broad perception that skills shortages are a major constraint on economic growth performance in South Africa.[53] But the data here reinforce the argument from Table 16 that foreign firms do not perceive that shortages of high-skill labour categories have significantly harmed their own operations.

There appears to be limited sectoral variation with regard to overall training expenditure. Pharmaceuticals, Infrastructure and Consumer goods spend slightly more on average, with IT and Financial & business services spending somewhat less, notwithstanding their higher skilled-labour intensity. The lower half of Table 34 indicates that about two-thirds of firms are usually or always able to obtain managers from the parent firm when necessary. It is perhaps surprising that one-third of firms are *not* usually able to avail themselves of this sort of support from their parent, with scores between 'sometimes' and 'never'.

Table 34a presents the same data cross-tabulated by mode of entry. There is an interesting contrast again between Partial acquisitions and JVs. The former, perhaps surprisingly, appear to invest little in human capital, in comparison with the other three modes. Three-quarters of the group are clustered into the bottom two categories, while only half the firms are usually or always able to access management resources from the parent. Joint ventures, on the hand, perform very strongly in both categories, relative to Full acquisitions and Greenfields. Once again, the issue is not the degree of control, which is incomplete for both JVs and Partial acquisitions. Rather the issue may be one of risk. If, as implied earlier (see Table 15a), Partial acquisitions do reflect high-risk, somewhat speculative investments for the parent firm, it may be less willing to invest substantially in human resources since the extent to which returns can be internalised is extremely uncertain. At the same time, Table 10a showed that a majority of the affiliates in the largest labour force size category are Partial Acquisitions, so that low levels of spending on training may reflect the preponderance of semi-skilled labour amongst their employees.

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[51] The survey also distinguished between internal and external training, with the (implicit) assumption that internal training was largely tied to the firm's own technologies and organisation. More detailed analysis of the data along these breakdowns is forthcoming.

[52] See Gelb (2001). In the National Enterprise Survey, manufacturing firms were found to spend about 0.67% of their capital stock value, with service firms spending about double this level. Mean values of capital to turnover were used to enable crude comparison of training expenditure means across the two surveys.

[53] J Lewis (2000).

Table 34 - Training expenditure & Parent Manager Availability by Sector

Number of firms

		Primary	Consumer	Materials	Machinery	Infrastr	Trade & hosp	Fin & bus serv	IT	Pharma	TOTAL
Training as % of sales: Total	0 - 0.5%	1	4	9	11	4	3	11	2		45
	0.5 - 2%	2	5	9	14	6	3	8	5	1	53
	2 - 4%	1	1	5	3	1	1	4	1	3	20
	4 - 8%		4	2	2	2		6	4		20
	8 - 15%		4		1	4		4			13
	Over 15%	1		2		2	1		1	1	8
	No of firms	*5*	*18*	*27*	*31*	*19*	*8*	*33*	*13*	*5*	*159*
Parent-manager availability	Never	1	1	1		1					4
	Rarely	1	5	4	1	1		4			16
	Sometimes		6	9	3	3	2	4	4	2	33
	Usually	1	2	7	10	7	3	11	6	2	49
	Always	2	7	5	17	7	3	13	3	1	58
	No of firms	*5*	*21*	*26*	*31*	*19*	*8*	*32*	*13*	*5*	*160*

Table 34a - Training expenditure & Parent Manager Availability by Mode of entry
Number of firms

		Greenfield	Acquisition	Joint-Venture	Partial Acquisition	ALL FIRMS
Training as % of sales: Total	0 - 0.5%	11	14	11	9	45
	0.5 - 2%	18	14	13	8	53
	2 - 4%	7	8	4	1	20
	4 - 8%	8	9	1	2	20
	8 - 15%	6	4	2	1	13
	Over 15%	1	1	5	1	8
	No of firms	51	50	36	22	159
Parent-manager availability	Never	1	1	1	1	4
	Rarely	3	6	3	4	16
	Sometimes	10	12	5	6	33
	Usually	16	13	12	8	49
	Always	21	17	17	3	58
	No of firms	51	49	38	22	160

Table 35 - Training expenditure & Parent Manager Availability by Size
Number of firms

		10 - 50	51 - 100	101 - 250	251 - 1000	>1000	TOTAL
Training as % of sales: Total	0 - 0.5%	14	8	8	8	6	44
	0.5 - 2%	22	9	9	8	3	51
	2 - 4%	4	6	4	5	1	20
	4 - 8%	4	3	4	6	2	19
	8 - 15%	7	2	2	1	1	13
	Over 15%	3	1	3		1	8
	No of firms	*54*	*29*	*30*	*28*	*14*	*155*
Parent-manager availability	Never	1				2	3
	Rarely	5	2	3	5	1	16
	Sometimes	12	9	7	2	3	33
	Usually	15	9	13	7	5	49
	Always	22	10	7	12	4	55
	No of firms	*55*	*30*	*30*	*26*	*15*	*156*

Table 35 looks at training by affiliate size of labour force. In the smallest size category, there is more of a bipolar distribution of firms than for the sample as a whole. Low-spending small firms may be unwilling to increase their investment in South Africa due to uncertainty about the size of the return and/or the firm's ability to internalise it, while high-spending small firms may be more dependent on high skills in their operations. The largest firms also spend less on training, probably reflecting the predominance of lower skill occupations in their labour force, but a worrying indicator of the level of commitment to labour force upgrading.

Table 36 - Training Expenditure & Parent Manager Availability by Mean availability of suitable skilled labour at entry

No of firms

		Never available	Rarely available	Sometimes available	Mostly available	Readily available	Total
Training as % of sales: Total	0 - 0.5%	0	5	10	21	9	45
	0.5 - 2%	1	7	13	21	9	51
	2 - 4%	1	0	7	7	5	20
	4 - 8%	0	2	7	10	1	20
	8 - 15%	0	5	1	6	1	13
	Over 15%	0	1	1	4	1	7
	Total	2	20	39	69	26	156
Parent-manager availability	Never	0	1	1	0	2	4
	Rarely	0	0	8	4	2	14
	Sometimes	1	5	6	17	4	33
	Usually	1	4	14	24	5	48
	Always	0	10	8	26	14	58
	Total	2	20	37	71	27	157

Table 36 shows training expenditure cross-tabulated with firms' perceptions of a skilled labour constraint at the time of entry (based on the mean score across the four skilled labour categories, reported in Tables 16 and 17). There appears to be little correlation between firms' training expenditure and their concerns about skilled labour availability. Thirty percent of firms which saw skilled labour as 'rarely available' (more than the sample mean) spent more than 8% of turnover on training, but 60% (close to the sample mean) spent less than 2% of turnover. Firms in the 'sometimes available' category did not spend substantially on training.

Table 37 - Training expenditure & parent manager availability by parent R&D

No of firms

		0 - 0.5%	0.5 - 1%	1 - 2%	2 - 4%	4 - 8%	8 - 15%	Over 15%	TOTAL
Training as % of sales: Total	0 - 0.5%	6	4	3	5	4	2	4	28
	0.5 - 2%	19	3	2	8	5	3	4	44
	2 - 4%	1	2	2	3	5	1	3	17
	4 - 8%			1	4	2	4	3	14
	8 - 15%		3		2	4		1	10
	Over 15%	1			1	2	1	2	7
	Total	27	12	8	23	22	11	17	120
Parent-manager availability	Never	2			1				3
	Rarely	2	2	1		2		1	8
	Sometimes	4	2	4	4	3	3	7	27
	Usually	11	3	1	8	8	6	3	40
	Always	7	5	3	11	8	3	6	43
	Total	26	12	9	24	21	12	17	121

Table 37 suggests a strong relationship between parent firms' global R&D expenditure levels, and affiliates' training expenditure – firms which invest heavily in technology also invest in employees' skill levels, presumably because the return on R&D depends on employees' ability to make effective use of the technology. By contrast, firms with low parent R&D spending also spend very little on training. There appears to be no correlation between R&D spending and manager availability from parent firms. But the level of R&D spending by the parent appears to be the only factor which positively influences affiliates' training expenditure, though the (imputed) risk perception may be negatively correlated.

Table 38 - Training expenditure & Parent Manager Availability by Performance

No of firms

	Expectations met	A little or worse	Partially	All or mostly	TOTAL
Training as % of sales: Total	0 - 0.5%	8	18	19	45
	0.5 - 2%	6	24	23	53
	2 - 4%	2	8	10	20
	4 - 8%		12	8	20
	8 - 15%	3	4	6	13
	Over 15%		3	5	8
	Total	19	69	71	159
Parent-manager availability	Never		1	3	4
	Rarely	2	10	4	16
	Sometimes	4	14	15	33
	Usually	6	23	20	49
	Always	7	20	31	58
	Total	19	68	73	160

Table 38 implies a correlation between human resource investment and performance (measured as before by combined revenue growth and profitability). A larger proportion of better performing firms spend more on training than poor performance firms, and better performing firms also are more easily able to obtain additional managerial resources from their parents. It seems reasonable to hypothesise that causality runs from investment in human resources to performance, rather than the reverse.

(v) Technology transfer

Tables 39 to 41 address the issue of technology transfer. Firms were asked to indicate the ease of obtaining technology from the parent firm. Scores here were uniformly relatively high but with some variation amongst both modes of entry and sectors.

Table 39 - Technology Transfer - availability from parent by sector

No of firms

	Never	Rarely	Sometimes	Usually	Always	TOTAL
Primary	1	1		2	1	5
Consumer	2	2	1	8	8	21
Materials	2	3	2	6	13	26
Machinery			2	7	22	31
Infrastructure	1	1		6	11	19
Trade & hosp				4	4	8
Fin & bus serv	2	2	3	10	16	33
IT		1	2	5	5	13
Pharmaceuticals				2	3	5
TOTAL	8	10	10	50	83	161

Table 39 shows that the Consumer goods and IT sectors are less able to access technology from the parent, whereas the Machinery sector finds it easier than other sectors. Table 40 shows that parent firms are much less willing to provide technology to Partial acquisitions, where the parent's degree of control is low. This is notwithstanding that 13% of the PA firms indicated that technology was the most critical resource during their first two years of operations in South Africa. Almost all the Greenfield entries and Joint ventures are at least 'usually' able to get whatever technology they require from parent companies. Finally, Table 41 shows that there is possibly some correlation between performance and the ability to obtain technology from the parent firm – a somewhat larger proportion of the poor performers indicating greater difficulty in accessing technology.

Table 40 - Technology Transfer - availability from parent by mode of entry

No of firms

	Greenfield	Acquisition	Joint Venture	Partial Acquisition	TOTAL
Never	2	3		3	8
Rarely	2	5	2	1	10
Sometimes	2	3	1	4	10
Usually	11	17	16	6	50
Always	34	22	19	8	83
TOTAL	51	50	38	22	161

Table 41 - Technology Transfer - availability from parent by performance
No of firms

	Poor	Satisfactory	Good	TOTAL
Never	1	3	4	8
Rarely	3	4	3	10
Sometimes	1	6	3	10
Usually	4	22	24	50
Always	10	34	39	83
TOTAL	19	69	73	161

(vi) FDI & black economic empowerment (BEE)

The final set of tables, Tables 42 to 47, present the results of a set of questions dealing with Black Economic Empowerment (BEE). These questions were added to the survey in South Africa because of the pertinence of the issue. At the time of the country's first non-racial election in 1994, both equity ownership and management in South Africa's private sector were overwhelmingly white, and there was broad consensus on the need to extend both to the country's black majority, though substantial disagreement on the appropriate scope, scale and speed of the process. From 1993, large white-owned corporations embarked on a 'market-driven' approach characterised by loan-financed equity sales, in which loans provided largely by the sellers of equity were secured by future earnings flows. This peaked in 1998, following the collapse of the Johannesburg Stock Exchange, as well as poor growth prospects. At that time, black-controlled companies accounted for about 7% of the JSE's market capitalisation; by 2002, this had dropped to about 2.2%. In 1998, black business associations established a non-statutory Black Economic Empowerment Commission which in 2001 recommended a more interventionist strategy to the government, focussing upon sectoral targets to be achieved over a ten-year period for ownership, management and high-level occupations and government procurement. During 2002, the government began to publish draft sectoral "transformation charters", starting with the mining sector. The target in the published first draft was 51% black mining ownership by 2014, but this was revised downwards to 26% after discussions with the industry. The government estimates current ownership in the sector to be 14%.[54]

Given this background, the CNEM/EDGE survey offered an opportunity to explore the role and contribution of foreign direct investment to Black Economic Empowerment.[55] One page of additional questions was added to the survey, covering 'BEE'[56] ownership of

[54] See Black Economic Empowerment Commission (2001).
[55] To this author's knowledge, no previous data exists on the relationship between FDI and BEE.
[56] In the survey, the term 'Black' in BEE was defined as people from 'historically disadvantaged communities', that is, those classified as "African", "coloured" and "Asian" under the *apartheid* categories. In the case of ownership, the questionnaire referred simply to 'BEE companies'. This is a term whose definition is highly variegated and contested in South Africa, and it seemed appropriate in the survey to allow the respondent to use his/her preferred interpretation of the term, rather than impose a single interpretation.

more than 10% of equity (by either companies or individuals), black participation in the four high-skill labour categories used earlier in the survey, and the share of the affiliate's domestic sales to the South African public sector. The latter issue is related to the importance of procurement as a lever for promoting BEE. As before, data was provided for the time of entry and the most recent financial year.

In sum, the survey indicates that foreign direct investment by firms entering South Africa for the first time has not been a major vehicle for expanding BEE ownership levels. But foreign firms have been fairly effective in promoting black participation in high skill job categories. The survey also suggests that public procurement has not been an effective lever to promote BEE ownership in foreign affiliates.

Table 42 - Black Economic Empowerment - total

	% BEE All firms	N firms with BEE	% firms with BEE	% BEE per BEE firm
Ownership Then	2	11	7	41
Ownership Now	3	20	12	33
Exec Management Then	5	28	17	29
Exec Management Now	11	74	46	25
Professionals Then	6	42	26	24
Professionals Now	17	84	52	33
Ops Management Then	14	74	46	30
Ops Management Now	28	131	81	34
Skilled non-Managerial Then	31	112	69	45
Skilled non-Managerial Now	46	148	91	50
% Sales to Govt. Then	11	50	31	35
% Sales to Govt. Now	12	77	48	25

The first row in Table 42 shows that for the sample as a whole, the mean share of BEE ownership at the time of entry into South Africa was just 2% (column 1). Only 11 firms (column 2), or 7% of the 162 firms in the sample (column 3), had BEE ownership above 10%. But within this group of firms with BEE ownership, the mean level of BEE ownership was relatively high, at 41% (column 4). At the time of the survey (Ownership 'now'), the share of BEE ownership of the sample as a whole had risen by about half, to 3%, and the number of firms to 20 or 12% of the sample. But within this group of firms which did have BEE ownership, the share of BEE owners had dropped to 33%, indicating that BEE owners who acquired equity in firms after entry obtained smaller stakes than the 41% mean share at entry.

These results are close to those for foreign firms in the National Enterprise Survey (carried out in 1999-2000). Of the 157 foreign firms, six percent had more than 10% BEE ownership, with an average level of ownership per BEE company of 41 percent. The

mean level of BEE ownership in the 157-firm FDI sub-sample as a whole was just below 3%.[57]

The rest of Table 42 presents data on the four skilled labour categories and government procurement for the full sample. BEE executive management in post-1990 foreign affiliates has risen overall from about 5% to 11%, and the proportion of companies with more representative executive managers was 46% at the time of the survey, compared with 17% at the time of entry. The share of BEE executive management per company (amongst those companies which do have BEE in this category) is currently 25%, four percentage points lower than at entry.

Amongst Professionals, Operations managers and Other skilled categories, the proportion of companies with BEE participation was substantially higher at the time of enumeration than at the point of entry. A majority of companies – 52% – had black professionals on their staff, and 81% have black operations managers, compared with 26% and 46% respectively at the point of entry. At the time of the survey, 28% of operations managers in foreign firms were black. The final two rows show that nearly half of foreign firms are now selling to the public sector, compared with less than one-third during the first year of South African operations. The share of public sector sales amongst those firms which are selling to the public sector is only 25%, compared with 35% at entry.

Table 43 shows some important sectoral variation. The Trade & hospitality sector is the best performing sector in BEE, with a presence in ownership and in all occupational categories well above the sample mean both at entry and at enumeration (with the exception of Professionals at entry). The very high BEE ownership level at entry, which probably reflected regulatory requirements, has not risen since, though it is still far higher than other sectors. By contrast, in all occupational categories in this sector, the improvement after entry was more than in other sectors.

The Financial & business services and IT sectors started with lower levels of BEE than the rest of the sample and remain below par, but their rate of increase in most occupational categories has been more rapid than in other sectors. The Pharmaceutical sector performed better with regard to ownership and the top two occupational categories, than to the Operational management and Skilled non-managerial categories. Finally, the Primary sector has transferred a higher share of equity than other sectors to BEE owners, but its improvement in the occupational categories has been limited.

[57] See Gelb (2001). The NES results on BEE reported here do not distinguish between pre- and post-1990 entrants amongst foreign firms. Since the NES asked only about BEE ownership, not about BEE in skilled labour categories, further comparison with the CNEM survey is not possible.

Table 43 - Black Economic Empowerment - by sector										
% of BEE										
	Primary	Consumer	Materials	Machinery	Infrastr	Trade & hosp	Fin & bus serv	IT	Pharma	All firms
Ownership Then	0	5	0	1	2	16	0	3	6	2
Ownership Now	6	6	0	1	5	15	2	3	6	3
Exec Management Then	5	5	1	4	9	7	6	2	21	5
Exec Management Now	11	14	3	8	12	29	12	14	21	11
Professionals Then	7	6	2	8	16	0	2	5	20	6
Professionals Now	13	17	10	16	24	22	18	12	33	17
Ops Management Then	11	26	18	13	16	19	4	11	8	14
Ops Management Now	20	29	34	32	29	45	19	23	11	28
Skilled non-Managerial Then	37	34	44	38	28	54	21	10	5	31
Skilled non-Managerial Now	34	61	59	48	54	70	33	19	7	46
% Sales to Govt. Then	0	14	1	5	16	3	14	37	16	11
% Sales to Govt. Now	0	17	3	6	24	2	14	24	24	12
No of firms	*5*	*21*	*27*	*31*	*19*	*8*	*33*	*13*	*5*	*162*

Table 44 provides data on BEE by affiliates' home country. There is unevenness across the different BEE categories amongst firms from the same country or region. The UK, US and Canadian firms, together about one-third of the sample, have transferred ownership and top management positions to black people relatively rapidly, but black empowerment in operational management has barely shifted for the British firms, and skilled non-managers have increased slowly amongst the North American firms. By contrast, East Asian firms have not transferred any equity, but have increased the black presence significantly at top management level (from a zero base), and blacks are also far more numerous in skilled non-manager positions. The 'Other' category, firms from a small but highly diverse group of mostly developing countries, has done very well in bringing blacks into management positions, but poorly in transforming ownership and skilled non-managerial occupations.

Table 44 - Black Economic Empowerment - by home country							
% of BEE							
	North America	UK	Germany	Rest of Europe	East Asia	Other	Total
Ownership Then	3	3	0	3	0	6	2
Ownership Now	4	6	3	4	0	1	3
Exec Management Then	3	6	3	6	0	19	5
Exec Management Now	12	17	6	11	5	26	11
Professionals Then	4	5	5	5	9	17	6
Professionals Now	17	22	8	18	13	27	17
Ops Management Then	15	13	16	13	13	15	14
Ops Management Now	30	14	26	31	26	32	28
Skilled non-Managerial Then	29	13	27	30	49	37	31
Skilled non-Managerial Now	41	37	53	43	62	41	46
% Sales to Govt. Then	5	7	13	19	5	3	11
% Sales to Govt. Now	7	13	20	15	6	12	12
No of firms	*36*	*19*	*18*	*55*	*25*	*9*	*162*

Table 45 - Black Economic Empowerment - by affiliate size of labour force
% of BEE

	10 - 50	51 – 100	101 - 250	251 - 1000	> 1000	TOTAL
Ownership Then	2	0	2	3	7	2
Ownership Now	3	2	3	7	3	3
Exec Management Then	6	1	3	7	9	5
Exec Management Now	11	11	7	12	18	11
Professionals Then	7	6	1	6	13	6
Professionals Now	20	17	9	19	21	17
Ops Management Then	16	8	14	16	14	14
Ops Management Now	28	29	26	29	25	28
Skilled non-Managerial Then	34	18	34	32	40	31
Skilled non-Managerial Now	44	41	50	48	53	46
% Sales to Govt. Then	16	8	7	10	8	11
% Sales to Govt. Now	15	7	11	13	9	12
No of firms	*55*	*30*	*30*	*28*	*15*	*158*

Table 45 looks at BEE by size of labour force. Small firms (fewer than 100 employees) have done well in increasing BEE representation in the top occupational categories, with firms with 51-100 employees increasing both Executive and Operational managers at impressive rates. The two large firm categories show opposite trends in ownership, with the group of firms with 250 – 1000 employees raising BEE ownership substantially, while the group with more than 1000 employees have seen BEE ownership decline, but top management improve substantially.

Table 46 - Black Economic Empowerment - by mode of entry
% of BEE

	GF	FA	JV	PA	Total
Ownership Then	0	0	7	4	2
Ownership Now	1	3	8	2	3
Exec Management Then	4	2	11	6	5
Exec Management Now	10	8	15	15	11
Professionals Then	9	3	7	6	6
Professionals Now	22	9	22	20	18
Ops Management Then	13	8	21	17	14
Ops Management Now	27	19	32	38	27
Skilled non-Managerial Then	29	28	40	35	32
Skilled non-Managerial Now	45	39	48	53	45
% Sales to Govt. Then	7	18	8	3	10
% Sales to Govt. Now	12	14	9	4	11
No of firms	*51*	*50*	*38*	*23*	*162*

Table 46 shows a strong contrast between Greenfields' low levels of BEE ownership and management, and the other entry modes involving local partners.
JVs have been established with BEE partners and/or executive managers in larger than expected numbers, while both Full and Partial acquisitions have moved relatively quickly in transforming Executive management (as well as ownership in the case of Full acquisitions). Given the recent origins and limited progress of BEE in overall South African equity ownership, very few BEE companies are likely to be available for acquisition by foreign entrants, accounting for low ownership numbers but strong increases in BEE management. But a BEE equity stake has value in certain regulated activities, and the short operational histories of most existing BEE firms, a JV partnership would be attractive to both foreign entrants and BEE companies, and would involve BEE in senior management.

The last two rows of Table 46 underline further the apparently limited value of procurement as a mechanism to promote BEE – Greenfields have strongly increased their share of public sector sales, while in the other modes, these are stagnant or declining. This links back to the *un*importance of 'Networks with authorities' as a critical resource in Section E above (Tables 12 through 14).

Finally, Table 47 reports BEE according to firms' perceptions of the availability of suitable skilled labour at their time of entry. Table 16 showed that firms on the whole were not greatly concerned about skilled labour availability. But this table shows that firms which did feel skilled labour shortages more keenly (suitable skilled labour 'rarely or never' available) have been more willing to introduce blacks into the skilled occupations than those firms less concerned with skill constraints.

Table 47 - Black Economic Empowerment by Mean of all skilled labour at start
% of BEE

	Rarely or never	Sometimes	Mostly or always	Total
Ownership Then	4	2	2	2
Ownership Now	7	3	3	3
Exec Management Then	7	4	5	5
Exec Management Now	18	11	10	11
Professionals Then	9	4	7	6
Professionals Now	23	13	19	18
Ops Management Then	16	11	15	14
Ops Management Now	41	22	28	27
Skilled non-Managerial Then	44	27	32	32
Skilled non-Managerial Now	70	40	43	45
% Sales to Govt. Then	16	6	11	10
% Sales to Govt. Now	14	10	11	11
No of firms	*22*	*39*	*95*	*156*

I. **Conclusions**

As promised in the Introduction, this report has described the essential characteristics of foreign firms and their South African affiliates, including sector, size, investment in firm-specific assets, experience in other markets, and mode of entry to South Africa after 1990. These characteristics have then been used to structure the examination of affiliates' perceptions of their South African operating and competitive environment, their behaviour in relation to firm resources and to output markets, and their assessment of their own performance and their competitors' progress since entry. More rigorous statistical analysis will be undertaken to investigate determining factors and causal relationships, in connection with entry, performance and development impact. But a number of tentative conclusions can be drawn here based on the earlier discussion.

Firstly, foreign investment by firms entering South Africa for the first time has had little impact either on employment growth or as a supplement to domestic savings via capital inflows. During the decade of the 1990s, only fifty to sixty new firms per annum entered the economy on average. A small proportion of these established very large affiliates, but the vast majority are very small both by labour force size and by value of capital invested. Furthermore, only a little more than half of the entrants establish new operations in the form of greenfield operations or joint ventures with South African partners, and the greenfields are on average tiny.

In other words, the benefits of foreign direct investment need to be found elsewhere than in the relaxation of macroeconomic constraints on aggregate output and employment growth. This conclusion is reinforced by the qualitative impression emerging from many of the affiliate interviews, that many investing firms adopted entry strategies which would mitigate risk, and in particular, increase the reversibility of their investment. Affiliates were found to be outsourcing substantial shares of their operations, restricting their own activities to strategic management, marketing and technical services, while others were engaging in service provision, in contrast to the production activities of affiliates their parents elsewhere (or in contrast to their original intention on entering the South African market). These and similar strategies appear to be responses to risks identified by investors (domestic and foreign) in the South African operating environment, including policy risk (a new political regime and government, still not fully tested at the time of entry), currency risk (secular depreciation of the ZAR), and market risk (slow economic growth).

The firms which have entered South Africa are by and large well-established multinational corporations, with significant experience in developing economies. It is possible that for some firms, entry to South Africa was delayed by political factors, and would otherwise have occurred prior to the 1990s. The South African operating environment is likely therefore to have held few surprises for them in terms of unanticipated risks or costs and difficulties of establishing an affiliate. On the contrary, as reflected in the high proportion of acquisitions (full or partial) and the strong responses suggesting lack of concern over skilled labour shortages, large proportions of entering firms have seen South African factor markets as above par by developing country

standards. This point is further underscored by the strong complementarities in sourcing critical resources, with local partners providing significant shares of the most important location-specific assets, in particular managers and distribution networks.

The large number of acquisitions (full and partial) is also linked to the primary motivation for entry, that is, "market-seeking", as reflected in the predominance of domestic sales within turnover. "The market" here needs to be understood as encompassing both the domestic South African market and the regional market elsewhere in Africa. However, entering firms have sought to link with South African partners who already have a substantial share in the domestic market. Linkages of this sort also mitigate risk associated with entry, and it is noteworthy that amongst the group of investors with very large affiliates (in terms of labour force size), there is a predominance of partial acquisitions, which provide established market share while also limiting the (initial) commitment to the investment.

Both the mode of entry and the sector appear to be correlated with a number of other variables. The six resources identified most often as key resources for the establishment of an affiliate were clearly distinguished from those regarded as less important. But firms differed according to mode of entry as well as sector, in the importance they assigned to the resources within this top-ranked group. In sourcing these critical resources, complementarities between local firms and foreign investors were evident for the top three resources – Brands, Technology and Managers – but in the remainder, where the sources appeared to be substitutes, the mode of entry helped to distinguish between alternative sources.

Firms also varied according to mode of entry in their views on labour and operational inputs. Greenfields moved from low initial expectations in a more positive direction, while firms with local partners had been optimistic initially but were disappointed after experiencing South African conditions. It is possible that the initial frame of reference was inappropriate here, rather than that conditions have actually deteriorated.

The official institutional environment appeared for most firms to be a more serious constraint than markets for labour and operational inputs. The restrictions on foreign worker entry to South Africa are clearly a significant problem for investors, but not the only issue of concern. Sectoral differences were important: in sectors where regulation plays a significant role, firms rated the administrative environment poorly at entry, and their anxieties increased subsequently.

Perhaps offsetting this point, those firms that were satisfied with their performance rated specific aspects of governance (such as regulation) highly, while stronger performers generally were more comfortable with the broader dimensions of government policy and institutions. Not surprisingly, affiliates' happiness with their performance was in turn in part related to sectoral differences, probably as a result of market growth rates. Manufacturing firms and consumer services (Trade & hospitality) were less satisfied than other sectors. But it is worth reiterating that the vast majority of foreign affiliates have met all or most of investors' expectations at entry. Even discounting for any possible bias

by respondents not wishing to give themselves a bad 'report card', this suggests that South Africa should be a very attractive destination for potential foreign investors.

Notwithstanding slow growth in the economy as a whole, an important contributing factor to affiliates' high rates of satisfaction with their own performance has been their ability to increase market share, in many cases even from a high base. There are some grounds here for concern about foreign investors dominating local firms and squeezing them out of the market. In only two sectors did affiliates see their market share decline on average, and in one of those – IT – this was offset (in relation to affiliate performance) by rapid sectoral market growth in both the domestic economy and the region.

Indeed, the IT sector presents strong evidence for spillovers from foreign to domestic firms, since not only did the latter gain market share, but they were also rated as 'now' much stronger in all dimensions relative to the foreign affiliates than they had been at entry. In other 'service' sectors also (Trade & hospitality, Infrastructure and Financial & business services), local firms were also seen to have improved relative to entry. But domestic manufacturing firms were regarded by their new foreign competitors as having deteriorated since entry.

The mode of entry also impacts upon the benefits of foreign investment accruing to domestic firms. Those domestic firms which establish partnerships with foreign companies via acquisitions appear to have improved in most dimensions relative to their competitors, raising efficiency for the affiliates (formerly local firms), but suggesting that 'horizontal spillovers' to competing firms are more limited with these entry modes, and the net impact on efficiency unclear. Greenfields and JVs, on the other hand, perceive that local industry has narrowed the advantage which foreign companies held at entry, which may imply that horizontal spillovers are more possible when these entry modes are adopted.

Exports are another important channel for spillovers. As noted earlier, a large share of the total sales of all foreign affiliates is being exported to global markets, but these sales come from a relatively small number of firms. Most affiliates are not exporting substantial shares of their output to global markets, or to other firms associated with the parent company, and this suggests that South Africa is not at this point deeply integrated into global production processes, at least not on the basis of equity linkages with foreign companies. Unfortunately, the impact of these exports on domestic firms and on overall efficiency via backward linkages remains to be explored in other research.

Finally, the contribution of foreign investment to black economic empowerment has been rather poor in terms of ownership, but strong in relation to participation in the directing of economic assets, probably outperforming domestic firms in this regard. Over the longer term, this may well turn out to be one of the most important economic benefits of foreign investment during this period.

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