Telkom South Africa

James Barber, Angela Fung, Sandeep Toshniwal, Becky Voorheis, and Campbell R. Harvey

James Barber is an investment analyst at SEI Investments in Oaks, Pennsylvania.

Angela Fung is in the institutional foreign exchange sales department of Chase Manhattan Bank in New York.

Sandeep Toshniwal is president of Toshniwal Group in Bombay, India.

Becky Voorheis is an associate in mergers and acquisitions at Intel Corporation in Santa Clara, California.

Campbell R. Harvey is the J. Paul Sticht professor of international business at Duke University, and a research associate with the National Bureau of Economic Research in Cambridge, Massachusetts.

Edward E. Whitacre, Jr., chairman and chief executive officer of SBC Communications in San Antonio, hung up the telephone and leaned back in his chair to think about the news he had just heard. Deutsche Telekom, the favored bidder for 30% of South Africa's state-run telecommunications provider (Telkom), was pulling out of the bidding war. With Deutsche Telekom out of the way, SBC Communications was now the front-runner in the bidding war.

Whitacre wondered whether Deutsche Telekom's withdrawal would cause his board to question SBC's bid for Telkom. Deutsche Telekom, Germany's newly privatized telecommunications firm, had performed extensive due diligence on Telkom. Had it learned something that scared it off? Or might Deutsche Telekom merely have overextended itself with recent purchases of Eastern European telecommunications providers?

Whitacre had spent the better part of six months preparing a bid for Telkom in consortium with Telekom Malaysia (18% SBC, 12% for Telekom Malaysia). He was passionate about its fit with SBC's international expansion effort. Partial ownership of Telkom would open a gateway to South Africa for SBC.

South Africa was an ideal market because of its expanding economy, significant unmet demand for high-quality telecommunications services, and future as the African hub of global telecommunications traffic.[1] Telkom was a prime investment choice in South Africa, with its state-enforced monopoly until 2003 and its desperate need for a partner with technical expertise.[2]

Whitacre e-mailed his valuation team at SBC International (SBCI) to inform it of Deutsche Telekom's withdrawal, and to request an updated analysis of the price SBC should bid for Telkom. SBC's bid was due in less than two months, February 1997, and a lot of work remained to be done.

BACKGROUND ON TELKOM

In October 1991, the South African Posts and Telecommunications separated into three separate entities, one of them Telkom South Africa (Telkom). Telkom was "commercialized" in a public offering with the state as its sole shareholder. As a commercial entity and public company, Telkom was expected to produce dividends, cut costs, stimulate productivity, increase efficiency, and operate under full public scrutiny. The spinoff gave Telkom both a large and valuable infrastructure but an outstanding debt bill of 10.2 billion rand.

Telkom had a painful transition. Adoption of internationally acceptable commercial accounting practices and controls was incomplete. Its transformation into a "client-focused" service company committed to practical and affordable solutions to telecom needs was fraught with problems.

National Framework Agreement

The Telkom privatization is part of the South African government's program to partially privatize state enterprises under the National Framework Agreement, or NFA, commenced in 1995. Before the program began, state-owned enterprises accounted for one-quarter of the country's total fixed capital assets.[3]

The NFA objectives for privatizing state-owned assets include:

- Increasing economic growth and employment.
- Meeting basic needs of all South Africans, with a focus on the poor and disadvantaged.
- Redeploying assets for growth.
- Creating infrastructure development by mobilizing and redirecting private sector capital.
- Reducing state debt.
- Enhancing competitiveness and efficiency of state enterprises.
- Financing growth and requirements for competitiveness.
- Developing human resources.

In 1991, Telkom was the largest partial privatization in sub-Saharan Africa to date, as well as the single largest foreign fixed investment in South Africa since the African National Congress (ANC) took power in 1994. The ANC placed a priority on privatizing Telkom because it was eager for the reduced tariffs, extra calls, and higher tax revenues that had resulted from recent telecom privatizations in other emerging markets.

The ANC chose to sell off only 30% of Telkom and keep the remaining 70% in the state's ownership. Jay Naidoo, South Africa's Minister of Posts and Telecommunications, said 30% was chosen "to bring in the commitment [of a foreign buyer] to become an active partner in the medium to long term."[4]

Perhaps more important, though, the ANC hoped foreign investment in Telkom would be of political benefit to the party by speeding up the delivery of basic services to the black majority. The apartheid system, overturned merely three years earlier, left a legacy of low telephone access for blacks.[5]

Deal Requirements

As part of its Telkom privatization plan, the ANC government required new owners of Telkom to train blacks for management posts, roll out at least 2.7 million lines to underserved areas (particularly black-majority areas), and upgrade network capacity. In total, these requirements would cost the new owner approximately 53 billion rand for infrastructure upgrades and 2.5 million rand for training disadvantaged groups employed by Telkom (60% of the funds would be spent on literacy and sales and service skills). The objective was to create a management team of which at least 35% would come from disadvantaged backgrounds.

These stringent requirements frightened off several potential bidders. See Exhibits 1 and 2.

THE TELECOMMUNICATIONS INDUSTRY IN EMERGING MARKETS

According to Sam Pitroda, founder of World-Tel and former Chairman of the Telecommunications Commission in India, "Modern telecommunications is an indispensable aid in meeting basic needs... Telecommunications lies at the very heart of progress" (Pitroda [1993, p. 2]). Telecommunications is not only good for developing countries' economic and social progress, but it is also a lucrative and comparatively safe investment in emerging markets (with a reliable stream of cash flows and high growth prospects).

For emerging markets:

> The surge of telecommunications privatizations in the 1990s, although financed primarily with conventional sources of debt and equity, introduced many institutional investors to the potential of the telecom business. At the same time, the revolution in technology and new telecommunications products and services enables investors in start-up corporations to realize profits at a much faster rate than traditional project finance borrowers (Grant [1998, p. 12]).

According to a 1995 McKinsey report, emerging markets with "high-readiness" for telecommunications investment (including openness to foreign direct investment, flexible financing requirements, tax benefits, technology neutrality, and lack of purchasing bias) offer returns on equity in the range of 20% to 30%. This report, "Closing the Global Telecommunications Gap" states:

> There is an ever-widening gap between the industrialized and developing world caused by, and

EXHIBIT 1
Network Expansion and Modernization: Capital Expenditure

Year	Amount (billion rands)
1996-1997	4.10
1997-1998	6.90
1998-1999	9.75
1999-2000	10.99
2000-2001	10.95
2001-2002	11.05

Source: *Telecommunications* (April 1998).

> reflected in, poor information infrastructure in lesser-developed countries. A vicious circle of underdevelopment exists whereby economic growth is needed to generate funds to improve telecommunications capacity and capability, but the poor availability and quality of telecommunications deters investors from providing the required capital. Consequently, despite 100 years of progress in telecommunications, nearly four billion of the world's five billion people continue to be denied the basic human right to communicate because they lack access to primary telecommunications services [1995, p. 6].

South Africa, even though it "continues to set the pace for the continent," significantly lags the developed world in telecommunications services.[6] Measured by teledensity (the number of telephone lines per 100 people), South Africa had one of the least developed telecommunications infrastructures in the world in 1997, which SBC considered a positive indication of unmet demand and strong growth potential. On average, South Africa had one telephone line per 100 blacks and sixty lines per 100 whites (see Exhibit 3).[7]

THE REPUBLIC OF SOUTH AFRICA

Political Transformation

From 1910 until 1961, South Africa was under the rule of the British Commonwealth. In 1961, an Afrikaner nationalist group called the National Party (NP) overthrew the British system and declared South Africa a republic. The NP transformed South Africa into a legal and political system of apartheid (translated as "separateness") to enforce segregation, legally bind blacks to poor rural land, and ensure urban areas were "white" areas. Apartheid laws led to years of social, economic, and political oppression for non-white South Africans.

In 1960, the NP barred the African National Congress (ANC), the anti-apartheid party, from political participation. It imprisoned Nelson Mandela, president of the ANC, in 1962. The NP relied on force and militia action to control uprisings from the ANC and other anti-apartheid groups. During the 1980s, tensions climaxed, and countries around the world took a stance against South Africa. In response, F.W. de Klerk, president of the NP, began to dismantle apartheid structures; he lifted the ban on the ANC, and released Nelson Mandela from prison in 1990. Apartheid ended peacefully. In April 1994, South Africa had its first all-race election, and Mandela was elected president.

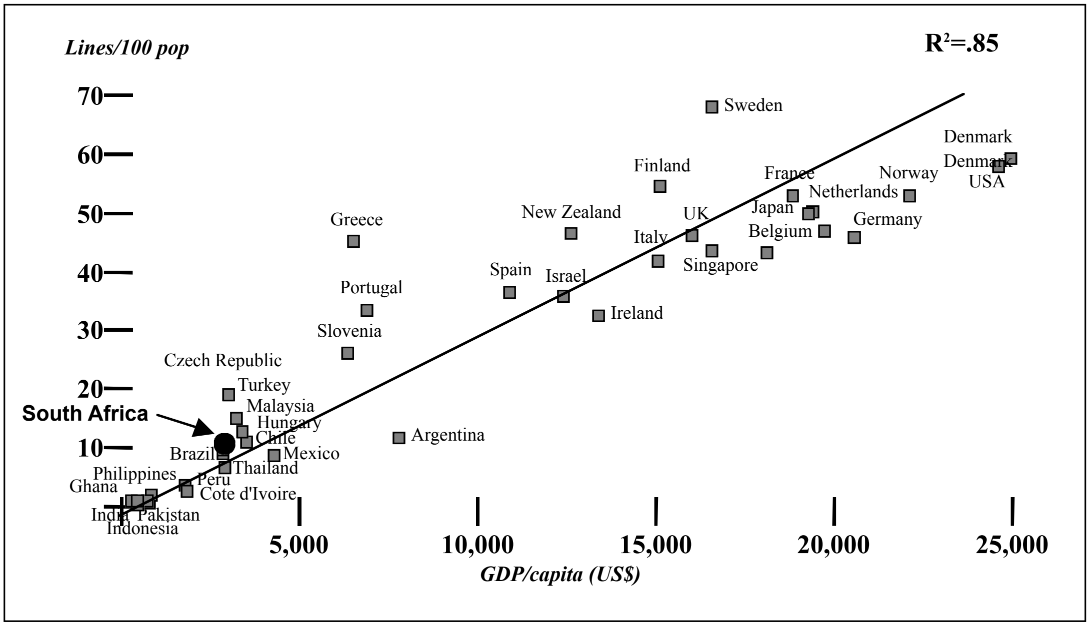
EXHIBIT 2
Telkom Expansion Targets

Year	New Access Lines	Underserviced Areas	Pay Telephones
1997-1998	325,000	265,000	20,000
1998-1999	460,000	318,000	25,000
1999-2000	600,000	359,000	25,000
2000-2001	700,000	357,000	25,000
2001-2002	690,000	378,000	25,000

Source: *Telecommunications* (April 1998).

EXHIBIT 3

Teledensity of Selected Countries versus GDP/Capita (number of telephone lines per 100 people)



Source: "Closing the Global Communications Gap," McKinsey & Company (Australia).

Foreign Investment Access to Africa

In July 1991, President George Bush lifted the Comprehensive Anti-Apartheid Acts prohibition on U.S. investment in South Africa. Soon thereafter, the U.S. became South Africa's second-largest trading partner after Germany. The lifting of trade sanctions by the U.S. and other countries helped pull South Africa out of a five-year recession (1988-1992) caused by drought, political uncertainty, a sluggish international economy, and depressed world commodity prices.

South Africa emerged from its apartheid era as an engine of growth for Africa, a continent historically plagued by economic hardship. South Africa's new openness to trade promised to have a positive impact on southern Africa, a market of 120 million people.

The U.S. took a particularly strong interest in the potential of South Africa, both as a source of investment capital and as a gateway to the continent. The U.S. government undertook numerous measures to encourage positive bilateral trade and investment relations with South Africa. As the most diverse economy in sub-Saharan Africa with a relatively developed manufacturing sector, South Africa was a natural platform from which to approach the rest of Africa.[8]

Alec Erwin, Minister of Trade and Industry in South Africa, stated:

> I think we are as attractive as any country at the moment. This, with our political stability, the fact we are a democratic state, means we are a good destination . . .. We are especially important for those investors who see the African market growing, which it is doing. And increasingly we are aspiring to form an important bridge between the rapid growth in South America and in Asia and the Middle East. South Africa is going to become a very important manufacturing destination for export trade with both regions. We are very strategically located for this sort of south-south cooperation (Matthews [1997b, p. 6]).

Compared to other emerging markets, South Africa has a modern infrastructure supporting an efficient distribution of goods to major urban centers throughout the region and well-developed financial, legal, communications, energy, and transportation sectors. Many economists describe South Africa as a hybrid of the third and first worlds because of its mixed economic indicators.

Concerns about South Africa's potential still abound, though. The World Bank, which does not even include South Africa in its measurements of foreign direct investment, states: "Despite South Africa's promise as a recipient of foreign direct investment, both its inflows and outflows remain small." In fact, South Africa attracts less than 1% of all foreign direct investment worldwide. In a global context, U.S. firms still invest predominantly in Latin America, Japanese firms in Southeast Asia, and European firms in Eastern Europe. Africa has attracted only 2.4% of all foreign direct investment worldwide, and remains a low priority for most investors.

Telecommunications Advantages

South Africa accounts for more than 40% of the telephones on the entire African continent (dos Santos [1997a]). Many market analysts believe that Telkom's privatization will raise the bar for telecommunications all over Africa by introducing competition, foreign direct investment, and leading-edge technology. Minister Naidoo has declared South Africa's intention to become the African hub of global telecommunications traffic.

A 1996 U.S. Department of Commerce report describes the telecommunications industry in South Africa as a "leading sector for U.S. exports and investment." Following the democratization of South African, and the subsequent lifting of sanctions, several U.S. telecommunications companies moved in, including AT&T, Lucent Technologies, Motorola, Sprint, Hughes Network Systems, Iridium, and Teledesic.[9]

Because of its promising future as the African center of telecommunications traffic, Telkom has been particularly attractive to outside investors. SBCI, in addition to valuing Telkom through a discounted cash flow model, considered valuing Telkom as a real option. For example, if an investment in Telkom generates a negative NPV, the cost could be seen as the price of an exercisable option to control telecommunications throughout Africa.

INVESTMENT RISKS AND CONCERNS

Country Risks

Violence. Political, economic, and social tensions (particularly income inequality) continue to sustain a high level of violence in South Africa. Political conflict has claimed the lives of 14,000 South Africans since 1984.

In most areas, though, the biggest concern is criminal violence. A 1995 study by the World Health Organization states that South Africa has the highest murder rate in the world, along with high rates of rape and car/truck hijacks. Crime remains the biggest challenge to economic growth and the abatement of widespread poverty. Investors continue to cite crime as the biggest deterrent to doing business in South Africa.

Openness to Foreign Investment. In general, the South African government applies the same regulations to domestic and foreign investments, so it is perceived as friendly to foreign investment. There are no caps on percentage ownership, no prescreenings, and no performance requirements, but there are local content requirements in the automotive, telecommunications, and television sectors. Also, foreign insurance and banking firms are required to incorporate locally.[10]

Another restriction is that companies that are 25% or more owned or controlled by non-residents face limits on local borrowings. This is to ensure adequate capitalization of foreign investments and to prevent borrowing against share capital.

Despite its relative openness to foreign investment, three issues are still problems for the South African economy — foreign exchange control, privatization, and competition. Although these three problems are priorities for the ANC, the government has been unsuccessful to date in making progress in loosening foreign exchange controls, accelerating the rate of privatization, or increasing competition. Matthews notes that: "Perversely, competition policy, on which the African National Congress shows most political will to make substantial change, is the one on which there has been least progress" [1997].

Credit Rating. Moody's sovereign rating for the Republic of South Africa in 1996 was Baa3 — the top non-investment-grade rating.[11] SBC Communications' long-term credit rating was A-/A2 (S&P/Moody's).

Poor Economy and Income Inequality. Since 1992, the volatility of the South African economy has been reflected in its GDP, unemployment, inflation and interest rates (see Exhibits 4 and 5).

In 1994, the Reconstruction and Development Program was the centerpiece of the government's plans to redress inequalities in the economy and revive growth prospects by increasing spending. Funding was to come from rerouting government expenditures, supplemented by foreign aid and joint financing between the government and the private sector. In fact, actual spending has been sluggish, and the overall impact on GDP is disappointing.

The whole picture has not been disappointing, though. South Africa had made significant economic progress, mostly through the private sector:

> Judged against the emerging markets indices drawn up by global ratings agencies and investment banks, [South Africa's] share of the world's emerging markets funds lags well behind the theoretical targets. Yet, local institutions are loaded with cash, the stock market has sustained its bull run for more than three years, and the prospects for continued growth in corporate earnings are sound (Ashurst [1997, p. 4]).

In the South African economy there are extremes of the affluence and sophistication of the first world — including gleaming shopping centers and an advanced financial services industry — and levels of poverty as extreme as the least developed countries in the world. South Africa has one of the most unequal distributions of income in the world with a Gini coefficient of approximately 0.61 (second only to Brazil in income inequality). See Exhibits 6 and 7.

Political Uncertainty. James Myers, President of Southwestern Bell International Development, Africa, claims that "the new government of South Africa has no history on which it can be judged" (Millman [1997]). The ability of the government to manage the economy has so far gone unproven and is constantly being challenged. People have been concerned that the ANC would concentrate more on short-term political objectives than the long-term goal of managing the economy. Would the ANC revert to "handouts," or would it stick to its original plan of fiscal discipline?

Right-wing AWB (Afrikaner Weerstandsbeweging, or Afrikaner Resistance Movement) and Conservative parties have threatened to become militant in order to reinstitute apartheid. These right-wing parties place many obstacles in the way of political reform.

EXHIBIT 4

South Africa — Macroeconomic Data (1997 data are estimates)

	1996	1997
GDP (US $ billion)	126.2	129.0
Gross Domestic Investment/GDP	17.4	15.9
Exports/GDP	27.5	27.8
Gross National Savings/GDP	16.0	14.4
Current Acct. Bal./GDP	-1.6	-1.5
Interest Payments/GDP	0.7	0.6
Total Debt/GDP	20.6	19.5
Structure of the Economy (% of GDP)		
Agriculture	4.8	4.5
Industry	38.7	38.5
Manufacturing	23.7	23.9
Services	56.4	56.9
Imports	26.2	26.6
Private Consumption	61.0	61.6
General Govt. Consumption	20.4	21.3
Prices and Govt. Finance		
Consumer Prices	7.4	8.6
Implicit GDP Deflator	8.5	7.8
Current Revenue of Govt. (% of GDP)	31.7	32.3
External Debt (US $ million)		
Total Debt Outstanding	26,050	25,222
Total Debt Service	3,782	4,263

Source: World Bank (9/8/98).

Company Risks

Technical Disrepair. By February 1997, Telkom's infrastructure was in technical disrepair. Faulty lines went unrepaired, public telephones were virtually non-existent, a large percentage of customers had service suspended for late payment every month, cable theft was rampant, and the number of customers was actually shrinking — extremely unusual in an emerging market. Telkom's trademarks included "high prices, slow service, an aloof bureaucracy, a bloated work force, and a network engineered for white neighborhoods" (McNeil [1997, p. D1]).

Abhorrent customer service was one of Telkom's biggest problems. When a residential customer ordered service, it took Telkom approximately fourteen days just to process the order — not including telephone installation. The average installation time in early 1997 was, on average, forty days. Only 57% of residential and corporate customers were able to use their telephones within twenty-eight days

Exhibit 5A
Real GDP Growth Percentage

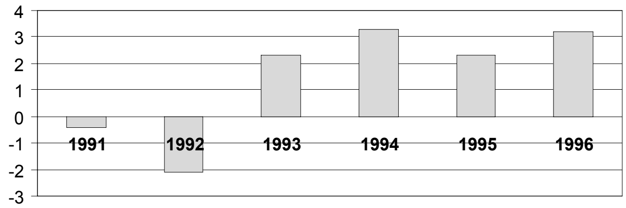


Exhibit 5B
GDP ($ billion)

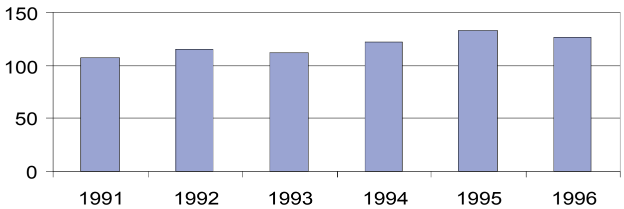


Exhibit 5C
GDP/Capita ($)

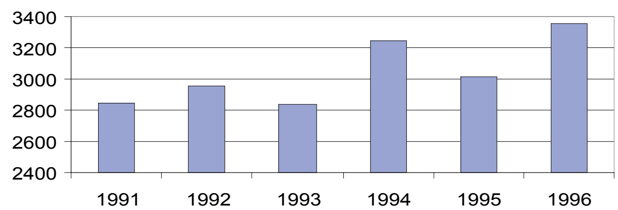
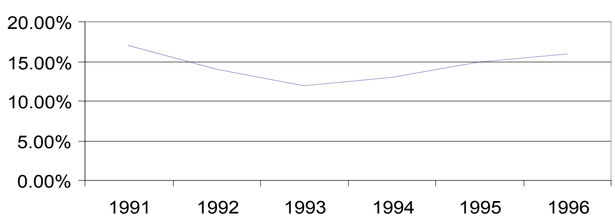


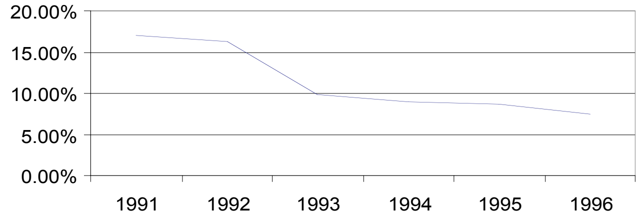
Exhibit 5D
Interest Rates (Reserve Bank Discount Rate — Bank Rate)



of ordering service. When home service failed, as so often happened, Telkom took an average of 103 hours (82 hours for corporate customers) to fix the fault.

Even though SBC was a leading telecommunications provider, Whitacre wondered whether any organization — no matter how advanced — could tackle Telkom's problems.

Exhibit 5E
Inflation



Debt Burden. Beginning in 1991, Telkom increased its leverage by borrowing to meet current capital expenditures. The majority of the debt was secured through Telkom stock as well as the government's guarantee.

In 1995 and 1996, Telkom had extreme debt levels on its balance sheets in the form of interest bearing debt, denominated in rand, U.S. dollars, deutschemarks, and pounds (see Exhibit 8). Its total interest-bearing debt of 9.67 billion rand in 1995 and 9.99 billion rand in 1996 bore interest rates ranging from 10.0% to 18.5% (average effective rate of 16.7%). Annual interest payments equaled 1.6 billion rand. Payments on mature debt are scheduled between 1996 and 2008. The value of debt-to-equity was 1.6 in 1995, and 1.4 in 1996.

Obviously, Telkom relies heavily on debt financing. This makes it difficult to borrow from the capital market at commercial rates. For example, Moody's Investors Service assigned the Republic of South Africa's Baa3 rating to a $185 million unsecured bullet loan bank credit agreement to Telkom, which constrains the rate at which Telkom can borrow. Telkom's aggressive expansion plans require a great deal more capital. With its history of high leverage, though, Telkom faces the threat of a credit rating downgrade if it takes on even more debt.

Cellular Service: A Substitute Product. The single market solution to Telkom's poor service is wireless communications, launched in 1994. While Telkom's monopoly does not extend into the cellular sector, it holds a 50% stake in Vodacom — one of the two cellular license holders in South Africa. The other cellular service provider is Mobile Telephone Networks (MTN). Vodacom is the market leader. Both hold fifteen-year licenses to operate competing cellular telephone networks in South Africa, although the South African government was considering issuing new cellular licenses within two years (before January 1999).[12]

Despite its stake in Vodacom (and the fact that Telkom holds a monopoly for connecting cellular base sta-

EXHIBIT 6
Income Inequality and Comparative Social Indicators

1992	Thailand	Poland	Chile	South Africa	Brazil	Malaysia	Venezuela
Gini Coefficient[a]	0.43	0.27	0.58	0.61	0.63	0.51	0.44
GNP per Capita US$	1,840	1,910	2,730	2,670	2,770	2,790	2,910
Life Expectancy, years	69	70	72	63	66	71	70
Adult Literacy Rate %	10	n.a.	7	39	19	22	8
Total Fertility Rate[b]	2.2	1.9	2.7	4.1	2.8	3.5	3.6
Infant Mortality Rate[c]	26	14	17	70–100	57	14	33
Access to Safe Water %	77	89	87	70	86	70	92

Source: "Key Indicators of Poverty in South Africa." The World Bank.
[a]Gini coefficient is an indicator of income distribution. The higher the value, the more unequal the distribution.
[b]Live births per adult female.
[c]Infant mortality rate indicates the percentage of deaths prior to one year old.

EXHIBIT 7
Average Household Total Monthly Wage by Race (rands)

	All South Africans	Quintile 1 Poorest	Quintile 2	Quintile 3	Quintile 4	Quintile 5
African	757	281	519	859	1,254	2,652
Colored	1,744	485	862	1,500	2,292	3,165
Indian	3,371	n.a.	1,081	1,148	2,496	5,661
White	4,695	n.a.	1,073	1,091	2,620	5,055
Average of All	1,598	287	546	930	1,611	4,689

Shaded areas indicate quintiles that can afford household telecommunication services.
Source: "Key Indicators of Poverty in South Africa." The World Bank.

tions to its basic network), the cellular revolution has represented competition for Telkom for a number of reasons. First of all, cellular service is often more reliable and only slightly more expensive than wire-line service from Telkom. Second, cellular service is a very efficient revenue generator because more rural customers could be serviced more cost effectively over a wider area without the burden of having to lay cables. In addition, wireless technology requires less maintenance and eliminates the threat of copper cable theft. See "South Africa: Africa's Role Model?" [1995].

Racial Tension. In 1993, Telkom was a predominantly white male company. After apartheid was repealed, Telkom launched plans to incorporate more blacks into managerial roles. There was one black manager within Telkom's 58,000 employees as of 1994. Telkom began an aggressive plan to hire, train, and promote more blacks. This resulted in a strike of 5,300 white Telkom employees protesting the new policy to increase black representation within the company. They claimed reverse discrimination. In 1995, Telkom had eighty-three black managers (8% of managers). Telkom has pledged to increase the percentage of blacks in managerial positions to more than 35% by 2002.

As Telkom proceeded with this campaign, though, white managers and employees became more and more nervous. Telkom expected some form of a backlash as blacks were promoted to managerial positions above the whites who once managed them. Telkom couldn't predict what form this backlash would take.

Copper Cable Theft. One of the biggest risks of the telecommunications industry in South Africa is the

EXHIBIT 8A
Telkom Balance Sheet (1,000 of rands)

	1996	1995
Assets		
Tangible Assets	15,346,310	14,784,723
Participating Interests	117,467	108,922
Fixed Asset Investments	51,095	45,806
Investments	529,178	216,530
Inventories	670,568	611,880
Accounts Receivable	2,293,788	2,055,085
Cash on Hand	7,685	5,291
Total Assets	19,016,091	17,828,237
Liabilities		
Accounts Payable	2,576,112	2,471,405
Taxation	169,641	140,397
Shareholder Dividends	302,062	225,258
Net Interest-Bearing Debt	8,522,292	8,380,270
Short-Term Provision	156,735	133,597
Provisions	919,596	796,437
Deferred Taxation	3,097	220,501
Total Liabilities	12,649,535	12,367,865
Shareholders' Interest		
Share Capital	3,899,223	3,899,223
Distributable Reserves	2,467,333	1,561,149
Shareholders' Interest	6,366,556	5,460,372
Total Shareholders' Interest and Liabilities	19,016,091	17,828,237

EXHIBIT 8B
Telkom Income Statement (1,000s of rands)

	1996	1995
Revenue	12,578,209	10,567,288
Net Operating Expenses	(9,574,874)	(7,940,849)
Operating Profit	3,003,335	2,626,439
Income from Investments	21,521	32,175
Net Financing Charges	(1,402,114)	(1,330,922)
Profit Before Taxation	1,622,742	1,327,692
Taxation	(414,496)	(482,973)
Net Profit Attributable to Ordinary Shareholder	1,208,246	844,719
Ordinary Dividend Paid	(302,062)	(225,258)
Retained Profit for the Year	906,184	619,461
Earnings per Share	0.310	0.217
Dividend per Share	0.077	0.058

EXHIBIT 8C

Telkom Cash Flow Statement (1,000 of rands)

	1996	1995
Operating:		
Cash Received from Customers	12,625,409	10,525,520
Cash Paid to Suppliers and Employees	(7,832,938)	(5,805,872)
Taxation Paid	(602,656)	(236,888)
Dividend Paid	(225,258)	0
Cash Flow from Operating Activities	3,964,557	4,482,760
Investing:		
Income from Investments	21,521	32,175
Net Financing Charges Paid	(1,216,229)	(1,140,505)
Proceeds on Disposal of Tangible Fixed Assets	74,253	104,821
Replacement and Renewal of Tangible Fixed Assets	(1,920,852)	(2,147,557)
Additions to Tangible Fixed Assets	(517,812)	(476,048)
Deposits on Asset Purchases Realized	59,978	141,034
Additions to Fixed Asset Investments	(8,966)	(45,806)
Increase in Other Investments	(18,619)	(7,037)
Increase in Participating Interests	(8,545)	(24,699)
Investment in Joint Ventures	(247,455)	(194,256)
Investment in Subsidiary	(32,925)	0
Liquidation Dividend from Subsidiary	11,720	0
Cash Flow in Investing Activities	(3,803,931)	(3,757,878)
Financing:		
Net Increase in Interest-Bearing Debt	78,869	168,638
Deposits Realized	(59,978)	(141,034)
Increase in Interest-Bearing Investments	(351,099)	(209,981)
Cash Flow from Financing Activities	(332,208)	(182,377)
Net (Decrease)/Increase in Cash and Cash Equivalents	(171,582)	542,505
Cash and Cash Equivalents at Beginning of Year	996,483	453,978
Cash and Cash Equivalents at Year-End	824,901	996,483

prevalence of cable theft — relatively common in emerging markets. People dig up cables to sell them for their copper content. Incidents of cable theft in South Africa were at an all-time high in 1996: 4,112 cables stolen at a cost of 41.1 million rand. Ben Bets, Telkom's managing director of customer service, expressed his frustration: "As soon as we fix one portion of the network, another is stolen." Bets added that customers, staff morale, and revenues are all adversely affected by cable thefts, which can halt service for several months.[13]

Several efforts are being made to reduce cable theft, including community policing, legislation to track sellers of stolen copper, and replacing copper wire with fiber optic cables. These efforts have yet to pay off — especially the fiber optic cable replacement, because thieves still dig up the cables, only to discover they are not copper.

Rob Hendricks, a senior financial analyst at SBCI and a direct report to SBC's CFO, notes cable theft as a major concern to SBC in evaluating the potential purchase of Telkom. He mentions wireless local loop (WLL) technology, a combination of wire-line and wireless connections, as a solution.

The Wireless Local Loop technology being deployed in rural areas addresses the network coverage in the rural areas and robbery of copper wire. The underlying technology of WLL is similar to household cordless phones found in the U.S. Political uncertainty and high crime continues to hamper the economic development of South Africa (Hendricks in interview).

THINTANA

Telekom Malaysia Berhad and SBC Communications Consortium

Telekom Malaysia and SBC joined together in a consortium called Thintana to purchase a 30% interest in Telkom South Africa (18% SBC, 12% Telekom Malaysia). The partnership was announced in mid-December 1996. Before the agreement, Telekom Malaysia and SBC had been considered rival bidders (see Ashurst [1996]).

Rob Hendricks stated:

> The government of Malaysia and South Africa have a long history of cooperation. As a strategic partner, Telekom Malaysia offered SBC a proven ability in upgrading telecommunications networks in developing countries. Thintana was formed as a separate legal entity to bid on 30% of Telkom South Africa.

Southwestern Bell International Development's Jim Myers commented that:

> SBC's role in helping in the rapid modernization of Telmex, the Mexican phone company, coupled with Telekom Malaysia's robust growth in telephone service and technical leadership in rural telephony provide a unique combination of strengths that make us an ideal partner for South Africa.

The CEO of Telekom Malaysia, Dato' Mohamed Said Mohamed Ali, confirmed the fit by saying:

> Telekom Malaysia is confident that, in partnership with SBC International, it has the knowledge, experience, and technology to make a significant contribution to meeting the needs of the people of South Africa as Telkom South Africa's strategic equity partner.

Malaysia has strong commercial links with South Africa, and the U.S. has been increasing its foreign investment in the country. Prior to this offering, both companies had smaller investments in Africa. Telekom Malaysia has interests in Gambia, Ghana, and Malawi, and SBC has a 15.5% interest in MTN, a cellular network in South Africa.

Telekom Malaysia Berhad

Thintana felt it stood a reasonable chance of securing a 30% stake in Telkom despite competition, in part because of Malaysia's expertise in the provision of rural telecommunications services (see Jacobs [1996]). Telekom Malaysia has a presence in a number of developing countries including India, Malawi, Sri Lanka, Indonesia, the Philippines, and Iran. By early 1997, Telekom Malaysia was in negotiations for joint ventures in Bosnia-Herzegovina, Oman, Vietnam, Cambodia, and a sub-Saharan nation (see Harun [1996]). Telekom Malaysia privatized in 1990 and is the largest publicly listed company in Malaysia. 1996 revenues were US$2.5 billion [see Exhibit 9].

Telekom Malaysia also has direct and recent experience in Africa. In December 1996, Telekom Malaysia purchased a 30% stake in Ghana Telecom for US$38 million. Telekom Malaysia beat out qualified rival bidders Deutsche Telekom, KPN of the Netherlands, Western Wireless and Lightcom, and Telkom South Africa in a single-round, sealed-bid auction (see Kibazo [1996]).

SBC Communications, Inc.

In 1997 SBC Communications, Inc., was one of the world's leading diversified telecommunications companies. Founded as a Baby Bell in Texas, SBC provides innovative telecommunications products and services under the Southwestern Bell, Pacific Bell, Nevada Bell, SNET, and Cellular One brands. Its businesses include wire-line and wireless services and equipment, cable television, and directory advertising and publishing.

After passage of the Telecommunications Act of 1996 (which largely deregulated the industry in the U.S.), SBC quickly became an active player in acquiring and merging with other Baby Bells. For example, in April 1996, SBC merged with San Francisco-based Pacific Telesis Group. As it expands domestically, SBC also began a campaign to target strategic telecom partners to expand operations globally.

SBC is internationally diverse, with operations on five continents carried out through strategic acquisitions

EXHIBIT 9

Telekom Malaysia Profit and Loss Accounts (in millions of US$)

	1996
Operating Revenue	$ 2,468.88
Operating Costs	$ (1,557.88)
Operating Profit	$ 911.00
Non-Operating Income	$ 27.28
Net Finance Cost	$ 0.44
Net Operating Profit	$ 938.72
Share of Profit less Losses of Associated Companies	$ –
Profit Before Tax	$ 938.72
Tax	$ (190.80)
Profit After Tax	$ 747.92
Minority Interests	$ –
Profit for the Year Attributable to Shareholders	$ 747.92
Dividend	$ (98.04)
Retained Earnings	$ 649.88

and joint ventures. It has continued to pursue opportunities in high-growth international markets. By early 1997, SBC had interests in China, France, Israel, Mexico, South Korea, Switzerland, Taiwan, and Japan. Success with telecom partners in these markets has provided SBC with "experiences that reflected how a strong partnership can help transform a telecommunications monopoly into a responsive, customer-focused company."[14]

In 1995 and 1996, SBC ranked first among *Fortune* magazine's most admired telecommunications companies. As a Fortune 25 company, SBC has tens of millions of customers in thirteen U.S. states and eight countries. Exhibit 10 presents SBC's financial statements.

MTN

In its global expansion, SBC invested $90 million to acquire a 15.5% interest in MTN, one of South Africa's two national cellular service providers. The deal was completed in September 1995. MTN used the proceeds to fund the expansion of its nationwide cellular network and to increase its marketing capacity. At the same time, SBC (along with Cable and Wireless, PLC, in the United Kingdom) entered into a joint venture with New Africa Investments, Ltd., South Africa's largest black-controlled publicly listed company and the parent company of Naftel, a partner of MTN. The joint venture was established to explore telecommunications opportunities in South Africa and nine other African countries.[15]

With the emergence of the Telkom opportunity, SBC's partial ownership of MTN became problematic. Since Telkom owned 50% of Vodacom, MTN's only cellular phone rival in South Africa, SBC could be seen as a rival to Telkom. The South African Department of Posts and Telecommunications considered the cross-holdings to raise considerable competition policy issues. SBC could be certain that the South African government would place a condition on SBC's bid for Telkom — if SBC won the bid, it would have to sell its 15.5% stake in MTN.

VALUATION

Rob Hendricks at SBCI received Whitacre's e-mail message requesting an update on the Telkom valuation model. He reviewed the model and, once again, recognized the overwhelming amount of uncertainty in the deal. He wished he had more time to fully explore each assumption, but the bid was due in a matter of weeks. Hendricks decided to go through each uncertainty and assumption before presenting the model to Whitacre.

Exchange Rates

Since the early 1980s, the floating rand had fluctuated widely due to plunging bond markets and a lack of confidence in the government. From 1995 to 1996, the rand had devalued from 3.5 rand/USD to 4.7 rand/USD, continuing its consistent devaluation against the dollar since 1990. Even as South Africa opened its economy to the world in 1994, it struggled to gain respect in foreign markets, since it hadn't yet formed a solid economic policy or controlled residual foreign exchange policies. In May 1996, South Africa had 14 billion rand ($3.2 billion) in foreign exchange reserves, equal only to four to six weeks of imports.[16]

The average annual historical depreciation rate of the rand from 1990 to 1997 was 10%, which Hendricks decided to use in the model. As the South African economy strengthened (as many economists predict it would) however, the rand would begin to appreciate. Hendricks wondered how to account for this major uncertainty. Exhibit 11 presents some more information on historical exchange rates.

EXHIBIT 10A

SBC Communications, Inc. Consolidated Balance Sheet (millions USD)

Dollars in millions except per share amounts	December 31, 1996	1995
Assets		
Currents Assets		
Cash and Cash Equivalents	**$242**	$490
Short-Term Cash Investments and Other Current Assets	**513**	310
Accounts Receivable — Net of Allowances for Uncollectibles of $138 and $134	**2,575**	2,389
Material and Supplies	**116**	131
Prepaid Expenses	**261**	157
Deferred Charges	**205**	202
Total Current Assets	**3,912**	3,679
Property, Plant and Equipment –– Net	**14,007**	12,988
Intangible Assets –– Net of Accumulated Amortization of $607 and $548	**2,485**	2,679
Investments in Equity Affiliates	**1,955**	1,586
Other Assets	**1,090**	1,070
Total Assets	**$23,449**	$22,002
Liabilities and Shareowners' Equity		
Current Liabilities		
Debt Maturing within One Year	**$1,722**	$1,680
Accounts Payable and Accrued Liabilities	**3,839**	3,125
Dividends Payable	**259**	251
Total Current Liabilities	**5,820**	5,056
Long-Term Debt	**5,505**	5,672
Deferred Credits and Other Noncurrent Liabilities		
Deferred Income Taxes	**784**	723
Postemployment Benefit Obligation	**2,720**	2,736
Unamortized Investment Tax Credits	**255**	287
Other Non-Current Liabilities	**1,530**	1,272
Total Deferred Credits and Other Non-Current Liabilities	**5,289**	5,018
Shareowners' Equity		
Preferred Shares ($1 par value, 10,000,000 authorized: none issued)		
Common Shares ($1 par value, 2,200,000,000 authorized: Issued 620,483,301 at December 31, 1996, and 1995)	**620**	620
Capital in Excess of Par Value	**6,322**	6,298
Retained Earnings	**1,739**	672
Guaranteed Obligations of Employee Stock Ownership Plans	**(229)**	(272)
Foreign Currency Translation Adjustment	**(633)**	(581)
Treasury Shares (20,616,939 at December 31, 1996, and 11,122,981 at December 31, 1995, at Cost)	**(984)**	(481)
Total Shareowners' Equity	**6,835**	6,256
Total Liabilities and Shareowners' Equity	**$23,449**	$22,002

EXHIBIT 10B

SBC Communications, Inc. Statements of Income (millions USD)

	1996	1995	1994
Operating Revenues			
Local Service	**$7,394**	$6,549	$5,788
Network Access	**3,244**	3,067	2,857
Long-Distance Service	**945**	841	917
Directory Advertising	**914**	953	947
Other	**1,401**	1,260	1,263
Total Operating Revenues	**13,898**	12,670	11,772
Operating Expenses			
Cost of Services and Products	**4,135**	3,806	3,747
Selling, General, and Administrative	**3,967**	3,657	3,225
Depreciation and Amortization	**2,240**	2,170	2,038
Total Operating Expenses	**10,342**	9,633	9,010
Operating Income	**3,556**	3,037	2,762
Other income (Expense)			
Interest Expenses	**(472)**	(515)	(480)
Equity in Net Income of Affiliates	**244**	156	223
Other Income (Expense) — Net	**(61)**	114	(71)
Total Other Income (Expense)	**(289)**	(245)	(328)
Income Before Income Taxes and Extraordinary Loss	**3,267**	2,792	2,434
Income Taxes			
Federal	**1,057**	824	684
State and Local	**109**	79	101
Total Income Taxes	**1,166**	903	785
Income Before Extraordinary Loss	**2,101**	1,889	1,649
Extraordinary Loss from Discontinuance of Regulatory Accounting, Net of Tax		(2,819)	
Net Income (Loss)	**$2,101**	-$930	$1,649
Earnings Per Common Share: (Dollars)			
Income Before Extraordinary Loss	**$3.46**	$3.10	$2.74
Extraordinary Loss		(4.63)	
Net Income (Loss)	**$3.46**	($1.53)	$2.74
Weighted Average Number of Common Shares Outstanding (in millions)	**607**	609	601

Taxes

Telkom was commercialized as a public entity in 1991 with the state as the only shareholder. All profits from the company were funneled back to the government via taxation and/or dividends. In 1995, however, Telkom paid an effective tax rate of 23%, which includes one-time deductions and exemptions. The marginal tax rate on corporations in 1997 was 35%, but the prevailing thought was that the South African government would soon reduce corporate tax rates by 3% to 5% in order to induce investment.

EXHIBIT 10C

SBC Communications, Inc. Consolidated Statements of Cash Flows (millions USD)

	1996	1995	1994
Operating Activities			
Net Income (Loss)	**$2,101**	($930)	$1,649
Adjustments to Reconcile Net Income (loss) to Net Cash			
Provided by Operating Activities:			
Depreciation and Amortization	**2,240**	2,170	2,038
Undistributed Earnings from Investments in Equity Affiliates	**(174)**	(94)	(134)
Provision for Uncollectible Accounts	**226**	178	153
Amortization of Investment Tax Credits	**(32)**	(42)	(61)
Pensions and Other Postemployment Expenses	**221**	138	202
Deferred Income Tax Expense	**165**	463	(124)
Extraordinary Loss, Net of Tax		2,819	
Changes in Operating Assets and Liabilities:			
Accounts Receivable	**(412)**	(363)	(303)
Other Current Assets	**(106)**	33	(90)
Accounts Payable and Accrued Liabilities	**660**	(186)	430
Other — Net	**(65)**	(165)	208
Total Adjustments	**2,723**	4,951	2,319
Net Cash Provided by Operating Activities	**4,824**	4,021	3,968
Investing Activities			
Construction and Capital Expenditures	**(3,027)**	(2,336)	(2,350)
Investments in Affiliates	**(29)**	(16)	(22)
Purchase of Short-Term Investments	**(1,005)**	(704)	(325)
Proceeds from Short-Term Investments	**816**	587	390
Dispositions	**67**		141
Acquisitions	**(264)**	(538)	(1,182)
Net Cash Used in Investing Activities	**(3,442)**	**(3,007)**	**(3,348)**
Financing Activities			
Net Change in Short-Term Borrowings with Original			
Maturities of Three Months or Less	**5**	(111)	463
Issuance of Other Short-Term Borrowings	**209**	91	36
Repayment of Other Short-Term Borrowings	**(134)**	(91)	(41)
Issuance of Other Long-Term Debt	**209**	981	345
Repayment of Other Long-Term Febt	**(393)**	(272)	(450)
Early Rxtinguishment of Febt and Related Call Premiums		(465)	
Issuance of Common Shares			40
Purchase of Treasury Shares	**(650)**	(216)	(447)
Issuance of Treasury Shares	**52**	82	18
Dividends Paid	**(928)**	(888)	(837)
Net Cash Used in Financing Activities	**(1,630)**	(889)	(873)
Net Increase (Decrease) in Cash and Cash Equivalents	**(248)**	125	(253)
Cash and Cash Equivalents Beginning of Year	**490**	365	618
Cash and Cash Equivalents End of Year	**$242**	$490	$365

Depreciation on Assets

Telkom's average rate of depreciation on assets was 12% for the past five years, using the straight- line method. It has the option to use an accelerated depreciation method, which would write down assets in four years.

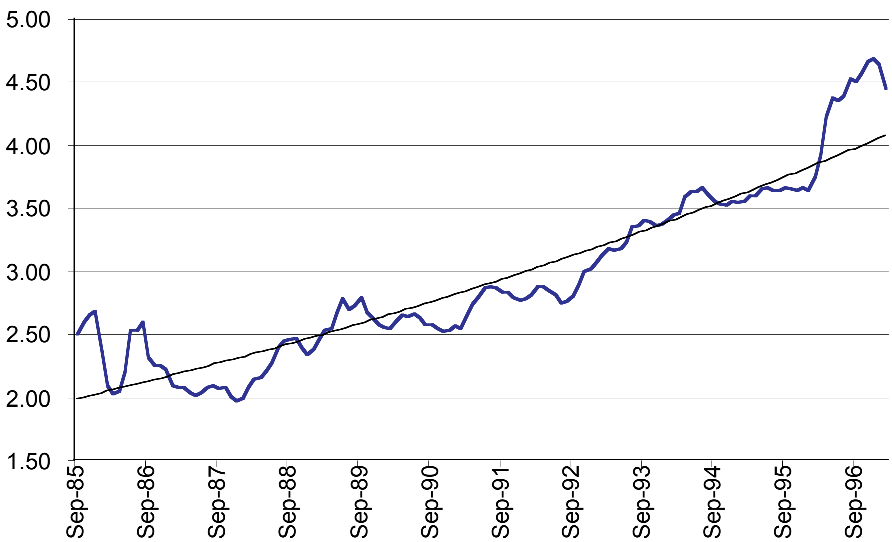
Post-Monopoly Scenario

The South African government guaranteed new investors in Telkom a five-year monopoly with an option for a sixth year if all requirements are met. The sixth year of monopoly would expire in 2003. During the enforced

EXHIBIT 11A
Rand/US$ Historical Exchange Rates

Month	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Jan	2.36	2.09	1.99	2.38	2.56	2.56	2.78	3.07	3.41	3.55	3.64	4.64
Feb	2.09	2.08	2.08	2.46	2.54	2.54	2.82	3.12	3.45	3.56	3.75	4.45
Mar	2.03	2.08	2.15	2.54	2.61	2.65	2.88	3.18	3.46	3.60	3.93	
Apr	2.05	2.04	2.16	2.55	2.66	2.74	2.88	3.17	3.59	3.60	4.22	
May	2.20	2.02	2.21	2.68	2.65	2.80	2.85	3.18	3.63	3.66	4.38	
Jun	2.53	2.04	2.27	2.78	2.66	2.87	2.81	3.24	3.63	3.66	4.35	
Jul	2.54	2.08	2.39	2.69	2.63	2.88	2.75	3.35	3.67	3.64	4.39	
Aug	2.60	2.10	2.45	2.72	2.57	2.87	2.76	3.36	3.60	3.64	4.53	
Sep	2.32	2.07	2.45	2.79	2.57	2.84	2.80	3.41	3.56	3.66	4.50	
Oct	2.25	2.08	2.46	2.67	2.54	2.83	2.89	3.39	3.54	3.65	4.57	
Nov	2.25	2.00	2.39	2.63	2.52	2.80	3.00	3.36	3.52	3.65	4.66	
Dec	2.22	1.97	2.34	2.57	2.53	2.77	3.01	3.38	3.56	3.66	4.68	

EXHIBIT 11B
Historical Exchange Rates



monopoly period, SBC expected the growth rate of revenues per line and costs per line to match historical rates. Is this a correct assumption, though, considering Telkom's aggressive expansion plans? And how should Hendricks account for sales growth after 2003? SBC has no idea what will happen after 2003 — except that revenue per line will probably decline due to the introduction of competition.

Hendricks explained:

SBC is projecting a loss in market share after the period of exclusivity expires and competition enters the market. The government of South Africa will determine if Telkom is allowed another year of exclusivity if it meets the service and access line targets established during the privatization. The regulation of the industry is evolving, however. The vision of the government of South Africa is the provision of basic universal service to disadvantaged

> rural and urban communities with the delivery of high-level services capable of meeting the needs of a growing South African economy. To that end, the government established an independent regulator, the South African Telecommunications Regulatory Authority (SATRA), to regulate telecommunications in the public interest. At this time, SATRA has not determined the nature and time frame for introducing competition into the South African market. It is exploring the feasibility of licensing more than two public operators after 2003.

There was always the possibility that the government would actually encourage competition against Telkom after 2003 by offering inducements to new entrants. This is not uncommon in countries that have privatized their telecom sectors. Hendricks had no idea how to account for revenue per line or capital expenditures in the post-monopoly period — or whether Telkom would even earn the sixth year of monopoly status.

Listing of Shares

The South African government planned to list Telkom's shares on the Johannesburg stock exchange after expiration of the monopoly in 2003. Therefore, Hendricks considered the benefit of a model based on P/E multiples. He had a list of comparable companies for estimating Telkom's beta and projecting an exit-year P/E multiple (Exhibit 12).

Telecom projects are less risky than other foreign direct investment projects (as measured by their betas when regressed on the domestic market). When regressed on the U.S. market, emerging market telecom companies have higher betas (all above 1).

Hendricks' comparables are all listed on the New York Stock Exchange, and Telkom would be listed on the Johannesburg Stock Exchange — a dramatically different market. According to the Economist Intelligence Unit:

> The performance of the Johannesburg Stock Exchange (JSE) since January 1996 has been fairly weak as the result of a combination of factors, including several runs on the value of the rand, dwindling net capital inflows, exchange controls, high interest rates, and, most recently, the contagion effects of the crisis in Asia.

The JSE overall index fell from 8,700 to 7,570 between January 1996 and mid-December 1996. Exhibit 13 compares the JSE with other stock exchanges in sub-Saharan Africa.

Management

If Thintana is awarded the 30% ownership of Telkom, SBC and Telkom Malaysia would be entitled to influence decision-making at Telkom through four of the thirteen seats on Telkom's board of directors, split evenly between the two bidders. SBC and Telekom Malaysia would also be allowed to send a large number of executive managers to Telkom, particularly to the divisions dealing with technology and infrastructure.

SBC was adamant that it wouldn't consider placing a bid if it didn't have significant decision-making power at Telkom. Were four seats sufficient to make Thintana's voice heard? The South African government was adamant about not giving up more than four seats. This was a concern to Thintana, since many of the remaining directors were members of the group that had run Telkom under a system of inefficiency and apartheid.

Financing

SBC International expected to borrow the funds necessary to purchase 18% of Telkom through its parent company, SBC. SBC Communications credit rating on long-term borrowings was A-/A2 (S&P/Moody's) in 1997. SBCI wouldn't raise any rand-denominated debt for the investment and did not plan to hedge the currency risk.

Cost of Capital

One of the greatest uncertainties in the valuation model is the cost of capital. Hendricks had several choices for how to calculate the cost of capital, and each method produced a significantly different answer. Only a few components of the cost of capital were known with any certainty:

- Telkom's expected (post-privatization) debt-to-value ratio is 29%.
- The beta of telecommunications companies in emerging markets is, on average, 1.2 when regressed against the world market.

EXHIBIT 12
Comparable Companies, 1996

Name	Ticker	Country	ICRG Country Credit Rating	Beta	Debt/ Debt + Equity	PE ratio	Price-to-Book Ratio	Price-to-Cash Flow Ratio	ROE	ROA	ROI	Profitability
1 Cable & Wireless	CWC	Britain	82.5	1.41	0.43	14.22					22.01	27.71
2 AT&T	Ticker	U.S.	86.0	0.88	0.60	29.00	6.26	17.31	21.66	8.80	11.95	9.66
3 Matav	MTA	Hungary	77.5	1.08	0.83	27.75	5.62	12.77	22.41	12.17	14.78	19.72
4 Telemex	TMX	Mexico	69.0	1.66	0.20	18.07					11.48	21.10
5 Deutsche Telecom	DT	Germany	84.0	0.95	2.20	54.92					2.30	5.09
6 France Telecom	FTE	France	82.5	0.60	0.93	39.64	5.44	11.66	13.81	4.26	6.38	7.50
7 Telecom Itali	Ticker	Italy	83.0	1.19	0.71	32.03	2.50	7.04	10.68	5.85	9.37	10.92
8 Telefonica	TEF	Spain	81.0	1.19	1.01	31.86					5.77	10.46
9 Esat Telecom	ESATY	Ireland	87.5	1.23	-1.78	n/a	36.73	n/a	(573.29)	(31.07)	(36.70)	n/a
10 Tricom Company de Telecom	TDR	Dominican Republic	69.5	n/a	n/a	9.60					1.68	3.36
11 Compania de Telecommunicaciones de Chile	CTC	Chile	82.5	1.30	0.49	25.56					7.12	21.46
12 Telecom Denmark	TLD	Denmark	89.5	0.46	0.26	75.93					4.13	5.04
13 Philippines Telecom	PHI	Philippines	72.5	1.69	1.17	20.50					5.67	21.42
14 Telecom Argentina	TEO	Argentina	73.0	1.83	0.79	14.53					7.20	11.88
15 Hong Kong Telecom	HKT	Hong Kong	82.0	1.16	0.17	9.23					49.56	48.70
Mean			80.1	1.19	0.57	28.77	11.31	12.20	(100.95)	0.00	8.18	16.00

If Hendricks decided to use the capital asset pricing model (CAPM), should he adjust the beta downward (from approximately 1.2) to account for the lower risk of telecommunications? Should he use the CAPM at all? Some other methods might be more appropriate for an emerging market. This decision is important since the model proves to be very sensitive to the discount rate.

CONCLUSION

Depending on what assumptions Hendricks plugs into the model, he gets dramatically different valuations for Telkom. If SBC ends up winning the bid by overpaying, Hendricks would be the goat. If SBC offers too low a price, loses the bid, and missed out on a once-in-a-lifetime opportunity to control telecommunications traffic in South Africa and on the entire African continent, he would still be at fault.

If he could find out why Deutsche Telekom pulled out of the bid, Hendricks might be able to adjust his assumptions according to that information. Now that Deutsche Telekom was out of the picture, however, SBC had more negotiating power with the South African government.

Hendricks took a deep breath and sent an e-mail message to Whitacre, saying, "I'm ready to present the model. When are you available?"

ENDNOTES

This case study is not intended to draw conclusions about managerial effectiveness. Some of the content is a fictional account created by the authors in order to meet the case study's educational objectives. Additional materials (proposed case solution, presentation slides, supplementary spreadsheets) are available at www.duke.edu/~charvey in the Finance Cases area.

[1]South Africa has over 40% of approximately 10 million lines on the African continent. See dos Santos [1997b].

[2]The South African government promised bidders for Telkom that it would enforce a five-year monopoly with an option for a sixth year if all conditions were met.

[3]See "South Africa Privatization Progress" [1998].

[4]See Ashurst [1997a, p. 2].

[5]South Africa's racial composition is 75% black,

14% white, 9% "colored," and 2% Asian.

[6]See McGoldrick [1998].

[7]See Matthews and Ashurst [1997, p. 8].

[8]In 1995, manufacturing was 26% of South Africa's GDP — the highest percentage of any African nation. See Sudarkasa [1996].

[9]Including fixed line, cellular, broadcasting, telecommunications equipment, and telecommunications services.

[10]See Solomon et al. [1995].

[11]"Telkom SA $185M Bank Credit Pact Rated Baa3 By Moody's." Dow Jones News Service (September 9, 1996).

[12]See Cogburn [1996].

[13]See Bidoli [1998].

[14]"Telkom Deal" [1997, p. 1].

[15]"SBC Communications to Acquire 15.5% Stake In MTN" [1995].

[16]See Sesit [1996. p. 13].

REFERENCES

Ashurst, Mark. "Cornerstone of Development: Interview with Jay Naidoo." *The Financial Times*, March 19, 1997a, p. 2.

——. "Investing in South Africa." *The Financial Times*, March 25, 1997, p. 4.

——. "SA Telecoms Bidders Combine." *The Financial Times*, December 19, 1996, p. 16.

Bidoli, Marina. "South Africa: Preparing for Liberlisation." *Telecommunications*, April 1998, p. S12-S16.

"Closing the Global Telecommunications Gap." McKinsey & Company (Australia), 1995.

Cogburn, Derrick. "Ready to Spring into Action; South Africa's Telecommunications Industry." *Communications International*, December 1996, p. 57.

Country Reports — "South Africa (Political Background)" Economist Intelligence Unit.

dos Santos, Luisa. "South Africa: Network Expansion." *Industry Sector Analysis*, September 1, 1997a.

——. "Telkom Reduces Costs on International Calls." *International Market Insight*, December 3, 1997.

Grant, Peter. "The Attraction of Telecom." Global Finance, September 1998, pp. 12-14.

Harun, Jailani. "Race for 30% of Telkom South Africa." *The New Price Times*, February 21, 1996, p. 1.

Jacobs, Jennifer. "Reasonable Chance of Getting Telkom Stake." *The New Press Times*, March 8, 1996, p. 5.

Kibazo, Joel. "Enticement Comes Out of Africa." *The Financial Times*, December 23, 1996, p. 24.

Matthews, Roger. "Cautious Approach to Problematic Legacies." *The Financial Times*, March 25, 1997a.

——. "Investing in South Africa." *The Financial Times*, March 25, 1997b, p. 6.

Matthews, Roger, and Mark Ashurst. "South Africa Sells Telcoms Monopoly." *The Financial Times*, March 27, 1997, p. 8.

McGoldrick, Beth. "Calling the 21st Century: Competition, Consolidation, and Covergence." *Global Finance*, June 1998, pp. 83-89.

McNeil, Donald G. "Can Phone Service Improve in Absence of Competition?" *The New York Times*, December 17, 1997, p. D1.

Millman, Gregory J. "Some Good News." *Infrastructure Finance*, May 1997, pp. 54-56.

Pitroda, Sam. "Development, Democracy, and the Village Telephone." *Harvard Business Review*, November/December 1993.

"SBC Communications to Acquire 15.5% Stake in MTN." *Dow Jones News Service*, August 7, 1995.

Sesit, Michael. "South Africa Seeks Means to Win Back Investors." *The Wall Street Journal Europe*, May 2, 1996, p. 13.

Solomon, Emily, Katie Moore, Dennis Goldenson, and Sally Miller. "South Africa: Forward Together." *The Big Emerging Markets*, 1995, pp. 301-313.

"South Africa: Africa's Role Model?" *Telecommunications*, October 1995, p. 106.

"South Africa Privatization Process." *International Market Insight*, June 6, 1998.

Sudarkasa, Michael E.M. *The African Business Handbook*. 21st Century Africa, Inc., 1996, p. 37.

"Telkom Deal." *The New Press Times*, May 15, 1997.

"Telkom SA $185M Bank Credit Pact Rated Baa3 by Moody's." *Dow Jones News Service*, September 9, 1996.