CHAPTER 2

THE SOUTH AFRICAN STOCK MARKET AND THE ECONOMIC ENVIRONMENT

2.1 INTRODUCTION

The unique characteristics of the Johannesburg Stock Exchange as well as the socio-economic and political environment in which it functions have an important influence on the course and behavior of the stock market. The performance and trends of the Johannesburg Stock Exchange (JSE) must hence be seen in perspective, taking account of the changes and characteristics of this unique environment. Therefore, a brief description of the JSE will be presented as well as an overview of three aspects of the South African economy, namely the socio-political environment, the policy setting and the influence of globalization and the revolution in international financial markets.

The exceptional socio-political situation in South Africa has had a profound impact on the economy and especially the financial markets. For most part of recent history, political instability caused huge scale capital withdrawal by investors who were either averse to the additional risk that it introduced, or who protested against the political regime. The capital outflow, later combined with economic sanctions and a debt standstill, significantly influenced asset prices.\(^1\) This situation was reversed after the democratic elections in 1994\(^2\).

Monetary policy directly influences the stock market through its influence on interest rates, which is one of the main determinants of the discount rate that investors use to

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\(^1\) For example, during 1985, the year of president P.W. Botha’s Rubincon speech and the introduction of international sanctions against South Africa, the country had a net capital outflow of R4 394 million (www.reservebank.co.za). This contributed to the low growth rate in the JSE all share index of 7.4 percent compared with 20.4 percent from 1980-1984 (www.reservebank.co.za).

\(^2\) South Africa had net capital inflow in 1994 of R4 359 million compared with a net capital outflow of R5 669 in 1993 (www.reservebank.co.za). With the exception of 2001 South Africa had positive net capital inflows from 1994 (www.reservebank.co.za).
discount future dividends in their calculation of the intrinsic value of stocks. In addition, monetary policy has an indirect influence on the stock market through its influence on future economic growth which has a crucial influence on expected dividends and hence on stock prices. Furthermore, interest rates influence the exchange rate, which affects the dollar returns of South African assets and therefore the attractiveness and the demand for (and hence the price of) South African financial assets including shares.

Since South Africa is a small open economy its markets, especially its financial markets, are not only influenced by the domestic economic environment but also by international markets. Globalization has increased this influence of international markets on South Africa’s financial markets. In addition to the changes brought about by globalization, the role of South African financial markets in the international economy was influenced dramatically by South Africa’s classification as an “emerging market”. Since investors regard emerging markets as a single asset class, any change in an emerging market is rapidly transferred to the other emerging markets.

In this chapter a brief overview of the socio-economic background and institutional setting of the South African stock market will be given. In addition, important changes in financial markets in general, as well as South Africa in particular, will be described as well. Figure 2.1 presents the most important events diagrammatically.

### 2.2 THE STRUCTURE OF THE JOHANNESBURG STOCK EXCHANGE

The Johannesburg stock exchange (JSE) was founded in November 1887, 14 months after proclamation of the Witwatersrand goldfields, to enable the new mines and their financiers to raise capital for the development of the mining industry. Both the number and type of companies listed on the JSE have changed dramatically over the years. As the economy expanded and developed, the mining companies that were

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3 The present value model, according to which share prices are determined by the discounted value of all future income, is discussed in chapter three. According to this theory, the discount rate that investors use in this calculation is determined by interest rates and a risk premium.
initially listed on the JSE were joined by an increasing number of industrial companies that listed on the JSE. Today most of the companies listed on the JSE are not mining companies. The rapid growth of the JSE is reflected in the growth in the number of listed companies which grew from only 151 mining, financial and industrial companies listed in 1932, compared to 659 companies in 1998 (see table 2.1) (Van Zyl et al 2003:289). The rapid growth is also evidenced from the necessity to relocate to bigger buildings six times within 90 years.

Table 2.1 Characteristics of the JSE

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<tbody>
<tr>
<td>Number of stocks</td>
<td>462</td>
<td>732</td>
<td>640</td>
<td>668</td>
<td>852</td>
</tr>
<tr>
<td>listed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market capitalization (R million)</td>
<td>141 785</td>
<td>350 726</td>
<td>1 022 656</td>
<td>1 001 556</td>
<td>1 584 100</td>
</tr>
<tr>
<td>Market capitalization (US$ million)</td>
<td>55 439</td>
<td>137 540</td>
<td>280 526</td>
<td>170 252</td>
<td>181 998</td>
</tr>
<tr>
<td>Annual trading value (R million)</td>
<td>6 241</td>
<td>21 130</td>
<td>63 237</td>
<td>323 682</td>
<td>808 662</td>
</tr>
<tr>
<td>Annual trading value (US$ million)</td>
<td>2 836</td>
<td>8 158</td>
<td>17 048</td>
<td>58 444</td>
<td>92 949</td>
</tr>
<tr>
<td>Market index</td>
<td>1 323</td>
<td>2 720</td>
<td>6 228</td>
<td>5 431</td>
<td>10 288</td>
</tr>
</tbody>
</table>

Source: Jefferis and Okeahalam (2000) and www.jse.co.za

The mushrooming of listed companies worldwide during 1980s also took place on the JSE and necessitated the creation of two new categories of shares, namely the Development Capital Market (DCM) which caters for smaller companies and have fewer requirements in terms of profits and company size and the Venture Capital Market (VCM) on which accepted companies undertaking greenfield ventures can be listed provided they meet certain requirements (Van Zyl et al 2003:288). In addition, the JSE announced the first exchange in Africa that will list small and medium
growing companies, the AltX, which will open for trading in October 2003 (www.jse.co.za and www.altx.co.za). The purpose of AltX is to create an alternative exchange where small companies can raise capital in order to stimulate the small and medium enterprises (SMEs). Following the international trend, floor trading ended in June 1996 when the JSE switched to electronic trading on the JET (JSE Equities Trading) System.

The reintegration of South African into the world economy after the abolishment of sanctions and the 1994 democratic elections had a substantial impact on the JSE. Like the rest of the economy the JSE was also caught up in this process of reintegration and it has become deeply entangled in the globalized trading environment characterized by 24-hour share trading. This made the JSE more susceptible for the influence of events and trends in the rest of the world, especially those in other emerging market economies (Van Zyl et al. 2003). The JSE has benefited from huge capital inflows since 1994, but these were mostly portfolio flows, which increased the vulnerability for international events and sentiment as was evident during the recent emerging market crises.

Since the reintegration of South African into the world economy, foreign investors play a more substantial role on the JSE. Total foreign investment now accounts for more than 20 percent of the market capitalization of the JSE and foreign investors sometimes account for more than half of its daily trading (Van Zyl et al. 2003:305). For example, during 2002 the total value of trading on the JSE was R808 662 million of which the value of trading by foreigners was R419 066 million (www.jse.co.za). Several factors contributed to this phenomenon (Van Zyl et al. 2003:305): (i) foreign confidence was boosted by the abolition of exchange controls in March 1995 (see section 2.4) when foreign investors gained unrestricted access to shares on the JSE. Not all emerging markets give foreign investors unrestricted access to their stock market, for example some countries have a ceiling on the amount or the type of shares that foreigners are allowed to hold. Since South Africa’s abolition of exchange

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4 The AltX is similar to the AIM exchange in the UK, which also lists small, growing companies. More than 850 companies have been listed on the AIM exchange, raising more than US$ 10 billion since it opened in 1995.

5 According to the Department of Trade and Industry (DTI), who endorses and supports the AltX, it should also promote black economic empowerment and assist in creating sustainable employment (www.jse.co.za).
controls on foreigners in 1995, foreign investors have been net buyers in excess of R9.3 billion, compared to only R0.185 billion in 1994. (ii) Foreign investors have also welcomed the scrapping of the 15 percent non-resident shareholders’ tax in October 1995. (iii) Many investors that previously left South Africa due to their disagreement with the political regime returned with the introduction of the new political dispensation in 1994. (iv) Foreign investors welcomes the development of financial instruments such as futures and options markets in the rand and share indices in South Africa which enable them to hedge currency and equity risks especially since the JSE is relatively volatile.

Table 2.2  African Stock Markets (Ranked by Turnover) 1998

<table>
<thead>
<tr>
<th>Country</th>
<th>Capitalization (US$ million)</th>
<th>Annual Turnover (US$ million)</th>
<th>Ratio of Turnover to GDP (%)</th>
<th>Number of stocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>293</td>
<td>N/a</td>
<td>N/a</td>
<td>8</td>
</tr>
<tr>
<td>Swaziland</td>
<td>85</td>
<td>0.2</td>
<td>0.2</td>
<td>5</td>
</tr>
<tr>
<td>Namibia</td>
<td>429</td>
<td>13</td>
<td>2.6</td>
<td>15</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>1818</td>
<td>39</td>
<td>2.6</td>
<td>35</td>
</tr>
<tr>
<td>Ghana</td>
<td>1384</td>
<td>60</td>
<td>4.8</td>
<td>21</td>
</tr>
<tr>
<td>Botswana</td>
<td>724</td>
<td>70</td>
<td>10.6</td>
<td>14</td>
</tr>
<tr>
<td>Kenya</td>
<td>2024</td>
<td>79</td>
<td>4.0</td>
<td>58</td>
</tr>
<tr>
<td>Mauritius</td>
<td>1849</td>
<td>102</td>
<td>5.9</td>
<td>40</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2887</td>
<td>161</td>
<td>5.2</td>
<td>186</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1310</td>
<td>166</td>
<td>9.2</td>
<td>67</td>
</tr>
<tr>
<td>Tunisia</td>
<td>2268</td>
<td>189</td>
<td>8.3</td>
<td>38</td>
</tr>
<tr>
<td>Morocco</td>
<td>15676</td>
<td>1385</td>
<td>10.2</td>
<td>53</td>
</tr>
<tr>
<td>Egypt</td>
<td>24381</td>
<td>5028</td>
<td>22.3</td>
<td>861</td>
</tr>
<tr>
<td>South Africa</td>
<td>170252</td>
<td>58444</td>
<td>30.4</td>
<td>668</td>
</tr>
<tr>
<td>Total</td>
<td>225087</td>
<td>65735</td>
<td>29.2</td>
<td>2061</td>
</tr>
</tbody>
</table>

Source: Jefferis and Okeahalam (2000)
The JSE is the oldest and biggest stock market in Africa. In 1998, the JSE was the 17\textsuperscript{th} largest stock market in the world and third largest emerging stock market after China and Taiwan measured by market capitalization. It also accounts for three quarters of total capitalization of African stock markets (see table 2.2). The JSE is relatively illiquid compared to world markets and therefore, measured by turnover, by 1998 JSE was the 20\textsuperscript{th} largest stock market and sixth largest emerging market. The relative illiquidity is also reflected in other characteristics of the JSE such as the domination of share ownership by a small number of large conglomerate companies (Jefferis and Okeahalam 2000).

2.3 THE ROLE AND FUNCTIONING OF THE SOUTH AFRICAN FINANCIAL MARKET AND THE JOHANNESBURG STOCK EXCHANGE

2.3.1 The Role and Functioning of the South African Financial Market

The financial market can be broadly divided into two parts, namely the primary and the secondary markets. Securities are issued in the primary market by institutions that want to borrow money. In South Africa securities are issued by the Treasury, public corporations (e.g. Eskom), public utilities (e.g. Telkom and Transnet), local authorities and private sector companies when they need to finance their activities. The demand for the securities issued in the primary financial market is generally from banks, building societies, insurance companies, pension funds, mining houses, stockbrokers and the Public Investment Commissioners (Fourie \textit{et al.} 1992:121).

The way in which securities are issued depends on the type of security. Government bonds are sold on a tap or tender basis. In the case of a tap issue, the Reserve Bank buys stock from the Treasury at a rate at which the Bank can sell a fairly large volume to the market and then resell it to the public. In the case of a tender issue, the date of the issue and amount of stock available are announced to the public and sold to the highest bidders. Other fixed-interest securities as well as all variable-interest securities are either sold by the issuer or by an underwriter, usually a merchant bank,
acting on behalf of the issuer. The issue may either be by way of a public issue where the terms and conditions are announced to the public at large, or by way of a private issue where it is offered only to selected investors (Fourie *et al.* 1999:185; Fabozzi 1992:523).

The securities issued in the primary market are traded in the secondary market. The financial intermediary sector is the principal supplier of funds to the secondary financial market, in particular insurers, pension funds and building societies, which simply channel the surplus funds of the household sector to appropriate investments. Other banking institutions, the Public Investment Commissioners and other financial intermediaries such as participation mortgage bond schemes and the National Housing Commission are also lenders in the financial markets (Fourie *et al.* 1992:41). The main traders of securities in the secondary financial market are divided into five categories, namely financial intermediaries, the government, corporate business enterprises, households and the foreign sector.

Foreign participants, in other words foreign households, businesses, institutional investors and governments, act in the South African financial markets in the same way as domestic households, businesses, investors and the government. However, technological development and the process of globalization have dramatically increased the importance and role of foreign participants in the domestic capital and other financial markets. Globalization has resulted in the acceleration of international financial transactions and international financial interdependence\(^6\) has increased substantially. Advances in computer technology, coupled with advanced telecommunication systems, link market participants throughout the world and allow the transmission of real-time information on security prices and other key information to many participants in many places. This enables many investors to monitor global markets and simultaneously assess how this information will impact on the risk/reward profile of their portfolios (Fabozzi 1995:15).

The number of new securities issued in the primary market has a substantial influence on the demand for and price of securities in the secondary market. The secondary

\(^6\) See e.g. Arshanapalli *et al.* (1995) and Sheng and Tu (2000).
market serves as a barometer of changes in the markets and reflects these changes in the prices and volumes of traded securities. This gives the issuers in the primary market a good idea of the correct price and interest rate at which they should issue new securities – key decisions for a successful issue. The secondary market also provides investors with the assurance that they will be able to resell their securities and adjust their portfolios, provides an indication of the general availability of funds and enables the Reserve Bank to buy and sell securities in order to influence the liquidity of the financial markets (Fourie 1999:13; Faure et al. 1991:10).

2.3.2 The Role and Functioning of the Johannesburg Stock Exchange

The two main roles of a stock exchange can be identified from the distinction between primary and secondary markets. The main function of the JSE is to raise primary capital (www.jse.co.za) by re-channeling capital into productive economic activity and thereby building the economy while stimulating the creation of wealth and job opportunities. Issuing shares is a way for companies to raise large sums of capital for expansion, to finance new businesses and to create new employment opportunities without borrowing money. This function is essential in any market economy. The second role of the stock market is to provide a market for securities where it can be freely traded in a regulated system. In other words, it provides new investment opportunities, investment liquidity as well as an evaluation of the firms of which securities are traded. (Fourie, Falkena and Kok 1999:189). Liquidity is the most important objective of any stock market since the success of the primary market in fulfilling the function of raising new investment capital depends critically on it.

2.4 THE SOCIO-ECONOMIC ENVIRONMENT

The socio-economic circumstances in South Africa since 1960 can broadly be divided into four decades with distinct characteristics. The 1960s were literally and metaphorically golden years for South Africa, characterized by high and relatively stable economic growth. South Africa, one of the world’s largest gold producers, was heavily influenced by the gold mining industry especially since there was a continuous global demand for gold due to the gold standard regime that prevailed at
the time. Gold exports was not only one of the major earners of foreign currency for South Africa, but also one of the biggest employers, an important source of tax revenue and an important stimulant of industries that provide products or services to gold mines.

The wealth of gold and other commodities meant that South Africa was receiving sufficient foreign capital to maintain a positive balance on the capital account, which could be used to finance a deficit on the current account. Even after the political instability following the Sharpeville riots of 1960-1961, the persistent surplus on the capital account was sufficient to finance the current account deficit despite the huge capital withdrawals of foreign investors. The persistent capital account surplus meant that stimulatory monetary and fiscal policies could be adopted, in contrast with the situation during the 1970s. In order to reduce the capital outflows, exchange controls were introduced by converting foreign investors’ funds into “blocked rand” accounts (Van Zyl et al 2003:336). This meant that funds from foreign investors could only be repatriated by purchasing JSE securities and selling them to other foreigners or by buying certain approved South African bonds and repatriating their proceeds after five years.

The oil price shock of 1973 set the tone for the 1970s as it led to higher inflation and lower economic growth worldwide. South Africa did not escape these problems and inflation became the main priority of policy makers. The problems were aggravated by political problems domestically, where the apartheid policies caused widespread violent protests and riots. Partially due to the increased uncertainty created by these protests and partially to express their disapproval with the apartheid regime, investors started to withdraw their money on a huge scale. After the 1976 Soweto riots capital inflows declined to such an extent that the current account deficit could no longer be financed by the capital account. During 1977, South Africa had a net capital outflow of R126 million (www.reservebank.co.za). Policies had to be redirected to aim at balancing the current account. In the 1976 Budget speech, Owen Horwood introduced an era of “fiscal discipline” and reprioritized policy objectives so that maintaining balance of payments equilibrium was the most important objective, followed by curbing the double-digit inflation. Restrictive monetary and fiscal policies had to be adopted.
South Africa was caught in the “debt trap”; the economy could not grow by more than about 2.5 percent without incurring a current account deficit. After the abolishment in 1971 of the Bretton Woods system of fixed but adjustable exchange rates (Salvatore 1995:696), a variety of exchange rate policies were implemented. The exchange control system also evolved continuously and the blocked rand accounts were replaced by the “securities rand” system which allowed the direct transfer of securities rands into foreigners’ accounts. In 1979 a dual exchange rate was introduced when the securities rand was replaced by the financial rand, which could be used to buy a wider variety of South African assets (Van Zyl et al 2003:337). The system was abolished and reinstated several times until it was finally scrapped in 1995 (Van Zyl et al 2003:337).

The situation has worsened during the 1980s. The introduction of the tricameral parliamentary system for Whites, Indians and Coloured people (with the exclusion of Black people) led to prolonged unrest from 1984. Consumer boycotts, stayaways and violent protests peaked in 1986 and after the introduction of economic sanctions against South Africa and the 1985 debt standstill agreement, a state of emergency was declared. The extensive capital outflows combined with the debt standstill caused a liquidity shortage and it became necessary to have a surplus on the current account. Consequently, the Reserve Bank’s ability to allow economic expansion was inhibited and this was one of the main reasons for the low economic growth rates over this period.

The 1986 budget speech introduced a major policy shift and employment and the economic conditions for social and policy reform were given the highest priority. In addition to the balance of payments and political problems, the gold price started to decline after peaking in January 1980. This, along with double-digit inflation introduced the steady depreciation of the rand, which made South Africa even less attractive to foreign investors.

The situation was reversed during the 1990s when economic sanctions against South Africa were lifted and South Africa re-entered the international economy. The political tension and the radical social change once again manifested in the economy.
and equity prices. The period 1990-94 was characterized by pre-election destabilization, but after the first democratic elections in 1994 foreign capital became available again. The availability of capital made it once again possible to run a deficit on the current account.

To summarize, the socio-economic environment in South Africa since 1960 can be divided into four sub-periods. The period 1960 to 1975 was characterized by high economic growth, low inflation and a balance of payments surplus. From 1976 to 1985, high inflation and the balance of payments constraint necessitated restrictive policies which contributed to low economic growth rates. During the period 1985 to 1994, the need to generate balance of payments surpluses led to even lower economic growth rates. The situation was reversed after 1994 when capital became available again and a current account deficit could be financed. Economic growth almost doubled from an average of 1.24 percent during the period 1985 to 1994, to 2.6 percent from 1994 to 2000 (www.reservebank.co.za).

2.5 THE INSTITUTIONAL AND POLICY SETTING

Changes in the socio-economic environment have always had a crucial influence on the priorities and hence course of monetary policy in South Africa. During the 1960s and 1970s the focus of monetary and fiscal policy was employment, which was achieved by stimulatory economic policies at the cost of higher inflation (Fourie et al 1999:310). During the 1960s, the Reserve Bank attempted to slow down an excessive expansion of liquidity in the banking sector by introducing a required cash reserve ratio\(^7\) in the Bank Act of 1965 and a supplementary reserve requirement in 1968 (Botha 1997). After the promulgation of the Banks Act, there were years of brisk economic activity, increasing inflationary pressures and a rapidly expanding liquidity base of the banking system. Cash reserve requirements proved inadequate, which led to the introduction of variable liquid asset controls, a measure that recognized the potential of near money as a means of credit creation (Botha 1997).

\(^7\) The initial cash reserve ratio in 1965 was eight percent of short-term liabilities. In March 1968 this was increased so that banks had to invest 12 percent of their increases in short term liabilities with the Reserve Bank and 20 percent with the National Finance Corporation.
Capital outflows after the 1960 Sharpeville protests were two-fold in nature: capital flight that reflected the nervousness of foreign investors caused by the political instability and speculative capital outflow caused by expectations of a devaluation due to the steady decline in foreign reserves and the weakening of the rand (Franzen 1983). In reaction to the capital flight, monetary authorities introduced a package of restrictive measures including higher liquid asset requirements, tighter import controls and more intense exchange control on residents.

The oil price shock of 1973 led to higher inflation worldwide and inflation became a policy priority in South Africa. During his tenure, Dr De Jongh (Reserve Bank Governor from 1967 to 1980) implemented a series of additional direct controls such as a ceiling on advances, deposit rate controls, exchange control, import deposits and some direct consumer credit controls in an effort to contain the persistent increases in money supply and the inflationary tendency (Botha 1997). Despite the stringent controls, money supply grew at an average rate of 15 percent per annum – much higher than the inflation rate that only exceeded 10 percent in 1974 and the real economic growth rate of nine percent per annum (Botha 1997).

The controls of the 1960s and 1970s gave way in the 1980s to a general recognition of the need to abolish as many restrictions as possible in a shift towards market-oriented policies (Fourie et al 1999:314, Van Zyl et al 2003:84, Botha 1997). The growing influence of the policy approach of the Thatcher government in the United Kingdom and the Reagan administration in the United States in the 1980s, caused a definite shift across the globe in favor of market-oriented policy measures. This shift in policy approach was further encouraged by the liberalization of international financial markets. South Africa followed and also adopted a more market-oriented approach after the report of the De Kock commission in 1984/1985. The trend gained momentum. In line with the international trend at the time the Reserve Bank, under Dr De Kock\(^8\), started to align its policies with developments in markets, rather than to force markets in a predetermined direction (Botha 1997). More emphasis was placed on using interest rate adjustments rather than direct credit extension restrictions.

\(^8\) Reserve Bank Governor from 1981 to 1989.
The 1980s was undoubtedly a very difficult decade in the history of the Reserve Bank, operating with the limited indirect intervention in the face of widespread international hostility and growing resistance as a result of the economic and racial policies of the government at the time. After President PW Botha’s Rubicon speech in August 1985, international sanctions and the debt standstill agreement⁹ were introduced against South Africa. This led to an immediate outflow of huge amounts of capital, with a total net capital outflow of R4 359 million during 1985. In an attempt to reduce capital outflows and to attract foreign capital, interest rates were kept high during the period of international isolation (Botha 1997; Fourie et al. 1999:314).

Figure 2.1  Returns on the JSE and the South African Social, Economical and Political Environment From 1960

Source: www.jse.co.za

⁹ With the debt standstill agreement in 1985 all foreign banks ceased lending to South Africa. In reaction the South African government prohibited South African banks from repaying foreign obligations to foreign creditors.
Although monetary policy did not change much in the 1990s under Dr. Stals as governor of the South African Reserve Bank, this period was characterized by dramatic socio-political changes. In the early 1990s sanctions were abolished after the first democratic election in 1994 political barriers were removed. South Africa became more exposed to world financial markets. Since 1994, South Africa has adopted a clearly defined policy of actively participating in the process of financial globalization and has implemented a number of economic policies to facilitate the process of its participation in globalization (Stals 1999). Following countries such as Canada and Sweden, South Africa adopted an inflation-targeting regime in February 2000. This framework does not require significant changes in monetary policy, but the new aim of monetary authorities is to play an active role in reducing the inflation expectations of economic agents.

2.6 THE IMPACT OF GLOBALIZATION AND SOUTH AFRICA’S EMERGING MARKET STATUS ON THE JSE

2.6.1 Globalization and Global Financial Revolution

When South Africa re-entered the international economy in the early 1990s, globalization and the revolution in financial markets have transformed the structure and functioning of markets as well as the interaction between international markets. Globalization changed the world into a global village in which national borders and distance no longer matter and the political, social and economic interaction between different countries have increased dramatically. In addition, globalization and deregulation led to the liberalization of trade, finance and investment of which the liberalization and revolution of financial markets have been the most pronounced. Investors can now truly diversify internationally and a portfolio comprising international assets became universal.

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10 In 2000 the Reserve Bank adopted an inflation-targeting regime, with a target range for average CPI inflation, in other words headline consumer inflation excluding mortgage cost. The initial target was between three and six per cent for 2002 and 2003 and between three and five per cent for 2004 and 2005. The target for 2004 was subsequently amended to between three and six percent.
The financial revolution caused irreversible and revolutionary changes in financial markets. Innovations in technology and communication transformed the functioning of financial markets and enabled the development of infinitely more instruments and markets (Handley and Mills 1996:74). International interdependence, especially amongst financial markets, has increased substantially (Arshanapalli et al. (1995) and Sheng and Tu (2000)). Deregulation has changed financial market structures and investors now have instant access to most asset markets worldwide.

The financial revolution that took place in South Africa was partially an adoption of the changes that occurred in the rest of the world, but a couple of domestic factors also contributed to the need for change (Jones and Muller 1992:323). Changes in the structure of the economy led to the expansion of the size and importance of the industrial sector relative to traditionally important sectors such as the agricultural sector. This changed the profile and needs of corporate clients. The higher income per capita increased the wealth of private individuals and banks had to change in order to accommodate the need of their wealthy private clients for a more sophisticated banking system. Technological improvements facilitated the automation of transaction processing and the availability of information. The financial revolution in South Africa was characterized by changed ownership of the leading banks, changes in the function of banks in the economy, increasingly specialized financial institutions, the development of a domestic money market, the transformation of building societies to banks, the increased influence of insurers and the introduction of credit cards and automatic teller machines (ATMs) (Jones and Muller 1992:325).

As a consequence of the transformations brought about by globalization and financial liberalization, financial markets have become more efficient but also more volatile and increasingly subject to speculation practices. Some countries benefit greatly from the opportunity to attract unprecedented inflows of capital. However, international markets tend to ignore countries that are not performing well and capital flight is increasingly prevalent in countries that are perceived not to provide competitive opportunities for investment (Handley and Mills 1996:74).

The structural changes caused by globalization have been particularly profound for the small open economies such as South Africa. The structure and functioning of
South African markets were changed dramatically by globalization and the revolutionary changes in international financial markets. Previously, South African financial and real markets mainly operated in isolation. This all changed when sanctions were abolished in the early 1990s and South Africa become part of the global economy. Domestic markets no longer operate in isolation, but rather form part of the global financial system and are therefore extremely susceptible to changes in foreign markets. In fact, foreign markets play a significant role in driving domestic markets.

2.6.2 The Emerging Market Syndrome

In addition to the changes brought about by globalization, the role of South African financial markets in the international economy was influenced dramatically by South Africa’s classification as an “emerging market”. No universally accepted definition of emerging market exists, but most are based on a combination of factors such as market turnover, per capita income, the degree of freedom from regulations, capital market size and the restrictions on inflows and outflows of funds\textsuperscript{11} (Fifield, Lonie and Power 1998). The group of emerging countries is an evolving, rather than a static group of countries.

Despite the lack of universally accepted definition, emerging market securities received growing recognition as eligible portfolio assets during the past thirty years. In 1971 the International Financial Corporation (IFC) established a unit responsible for capital market development and they succeeded in focusing attention of country members of the World Bank Group on importance of securities markets as an essential mechanism to mobilize domestic savings and to attract foreign capital to developing economies (Fifield, Lonie and Power 1998). With the formation of the Templeton Emerging Markets Fund in the US in 1987, investment in emerging markets became a recognized investment category.

\textsuperscript{11} The most widely accepted definition is the one proposed by the IFC, which classifies the stock markets of all the developing countries as emerging stock markets. They adopt the criteria of the World Bank, whose classification is based on per capita income, in defining “developing” (Fifield, Lonie and Power 1998).
During the 1980s and 1990s, the group of emerging countries experienced higher economic growth than the rest of the world. On average, emerging economies had real economic growth rates of four percent and 4.1 percent during the 1980s and 1990s respectively, compared with the 3.4 percent and 3.3 percent of the world economy (World Bank 2000). This attracted huge capital flows to this group of countries, but these capital flows are mostly portfolio flows and extremely volatile. For example, portfolio flows to developing countries increased from $2.7 billion in 1990 to $51 billion in 1993, before it fell to $16 billion in 1998 following the Asian crises (World Bank 2000).

South Africa receives a high percentage of portfolio flows relative to other emerging markets due to an extremely liquid equity market relative to other emerging economies (Loots 2002, Smith 2001). However, since emerging markets are viewed by investors as a single asset class, any perceived risk in an emerging market is rapidly transferred to the other emerging markets, as was demonstrated by the so-called “contagion” during the 1994 Mexican Tequila crises, the Asian crisis in 1998 and recently the crises in Russia, Turkey and Argentina. This had an important influence on the vulnerability of South Africa’s financial markets to changes in other financial markets, especially those of other emerging markets. South Africa’s classification as an emerging market meant that not only is it influenced by the dominant world markets, but it became extremely susceptible to changes in the financial markets of other emerging countries since investors view them as a single asset class. As a consequence a shock in any of the emerging markets will immediately spill-over to the other emerging markets, as was evident during the various emerging market crises during the last decade.

2.7 CONCLUSION

In this chapter a brief overview was presented of the characteristics of the JSE as well as the socio-economic background and institutional setting in which it operates. In addition, important changes in financial markets in general, as well as South Africa in particular, were also described.
The exceptional socio-political situation in South Africa has had a profound impact on the economy and especially financial markets. For most part of recent history, political instability caused huge scale capital withdrawal by investors who were either averse to the additional risk that it introduced, or who protested against the political regime. The capital outflow, later combined with economic sanctions and a debt standstill, significantly influenced asset prices. This situation was reversed after the first democratic election in 1994.

Monetary policy directly influences the stock market through its influence on interest rates, which in turn is one of the main determinants of the discount rate that investors use to discount future dividends to calculate the intrinsic value of stocks. Monetary policy in South Africa has traditionally to a large extent been determined by the socio-political environment. During the 1960s South Africa earned sufficient foreign currency by commodity and gold exports, so that a current account deficit could be financed by the capital account and therefore stimulatory monetary and fiscal policies could be adopted. This changed during the 1970s, when the oil price shocks led to a worldwide increase in inflation and monetary policy had to be more restrictive. During the 1980s, political instability led to the debt standstill and the introduction of economic sanctions against South Africa by the international community. This forced monetary authorities to adopt more restrictive policies since the current account deficit could no longer be financed by the capital account. In line with the international trend of the time, monetary policy became more market-oriented during this time. In the late 1990s an inflation-targeting regime has been introduced.

However, no market operates in isolation, changes in international financial markets and the changing role of South Africa in the international economy has had a profound impact on the stock market. Globalization transformed the world into a global village in which national borders and distance no longer matters and in which the political, social and economic interaction between different countries has increased dramatically. In addition, deregulation and revolutionary changes in communication and technology gave international investors instant access to any financial assets. This means that the domestic stock market has became even more vulnerable to changes in international markets and that a change or crises in a financial anywhere in the world is rapidly transmitted to all other markets.
In addition to the changes brought about by globalization, the role of South African financial markets in the international economy was influenced dramatically by South Africa’s classification as an “emerging market”. Since emerging markets are viewed by investors as a single asset class, any perceived risk in an emerging market is rapidly transferred to the other emerging markets, as was demonstrated by the so-called “contagion” during the 1994 Mexican Tequila crises, the Asian crisis in 1998 and recently the crises in Russia, Turkey and Argentina. South Africa’s classification as emerging market meant that not only is it influenced by the dominant world markets, but it became extremely susceptible to changes in the financial markets of other emerging countries. As a consequence a shock in any of the emerging markets will immediately spill-over to the other emerging markets, as was evident during the various emerging market crises during the last decade. Therefore, any attempt to model the stock market has to take into account the influential role of foreign markets, especially other emerging markets, in driving the domestic markets.