THE JOHANNESBURG STOCK EXCHANGE (JSE) RETURNS, POLITICAL DEVELOPMENT AND ECONOMIC FORCES: A HISTORICAL PERSPECTIVE

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Abstract

To contribute to economic growth and development a stock market, as a leading economic indicator, should reflect the macroeconomic fundamentals of a country. The reflection of political and economic development in the returns of companies listed on a stock market indicates the risk profile of specific companies and the stock exchange. The objective of this article is to provide a historical perspective on how political and economic developments have been reflected in the returns of the JSE. The history of the JSE was divided into the following broad time periods of roughly similar economic and political developments: 1887-World War II; World War II-1960; and 1960-1990/94. The study concluded that the JSE reflected dramatic macroeconomic conditions, policy changes and political events.

Keywords: Johannesburg Stock Exchange (JSE); returns; economic development; political development.

Sleutelwoorde: Johannesburgse Effektebeurs (JSE); opbrengs; ekonomiese ontwikkeling; politieke ontwikkeling.

1. INTRODUCTION

The relationship between macroeconomics, political factors and share prices offers several insights to investors and policy makers. From an economic development point of view, it can be argued that the stock market can contribute to economic growth and development only if share prices reflect macroeconomic "fundamentals", such as economic growth and inflation.⁴ Macroeconomic forces

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⁴ E Moolman and C du Toit, "An econometric model of the South African stock market", *South African Journal of Economic and Management Sciences* 8, 2005, p. 78.

and political developments, which influence the risk of investing in the stock market and the profitability of listed companies, should be reflected in stock market returns. As such, a well-functioning stock market can be seen as a thermometer, a measuring instrument reflecting the health of the overall economy.

The history of the Johannesburg Stock Exchange (JSE), which has been in existence since 1887, has seen dramatic developments in domestic government policy, including the rise of apartheid, far-reaching changes in the world-wide monetary system, fluctuations in inflation and economic growth, several stock market crashes and the Great Depression, to name but a few. Throughout this period, political factors and policy decisions have influenced factors such as the international gold price, wage levels in the South African mining industry and capital flows. This, in turn, has influenced corporate profitability and the trading environment of the JSE. To what extent were these developments reflected in JSE returns? Or to use our earlier analogy, did the thermometer register the health status of the patient? This question includes several specific components, for example: How did the mining strikes during 1907, 1913 and 1922 impact on JSE returns? Were developments such as Sharpeville, the sanctions era, the political developments in the early 1990s and the outcome of the 1994 elections reflected in JSE returns? Conversely, can major changes in stock market returns be explained by economic and political developments?

These are far-reaching questions and we offer tentative answers based on a review of the available historical data and an extensive literature review of the subject. A qualitative, descriptive approach was employed, where share returns during a specific time period were correlated with economic and political events, as well as the general circumstances of that time. Such correlations were drawn for both single years and for average time periods.

Periods of similar political and economic conditions were identified, and share returns were analysed during those periods. Sub-periods were also analysed, including a decade-by-decade analysis. For JSE returns, the main data source was the Dimson-Marsh Staunton (DMS) global database containing real, all-inclusive returns (dividends and capital gains) for the JSE and 16 other countries since 1900. Several other data sources were also consulted for macroeconomic data and were largely influenced by data availability. A complete set of macroeconomic data is available from the Reserve Bank only since 1946, after the introduction of the national accounts. The history of the JSE was divided into the following broad time periods of roughly similar economic and political developments: 1887-World War II; World War II-1960; and 1960-1990/94 (the isolation years). The era marking South Africa's return to the international arena is referred to only in brief (1990-1994).

2. THE EARLY YEARS: 1887-WORLD WAR II

For the purposes of this article, this period will be divided into the following subperiods, namely: (i) 1887-1910, (ii) 1911-1932 and (iii) 1933-1945.

2.1 1887-1910: Establishment of the JSE – Union formation

During the first period (1887-1910), gold mining companies and the fortunes of the gold industry totally dominated the JSE. This is understandable, since the discovery of the Witwatersrand goldfields was the very reason for the establishment of the JSE in 1887. According to Bryant,⁵ the first decade of the JSE was a decade of unparalleled excitement and achievement. The JSE was established in 1887, just 13 months after the discovery of the Witwatersrand goldfields, the richest fields of their kind in the world at the time. Gold mining on the Witwatersrand rapidly transformed the mainly agricultural South African economy into an industrialising economy with a strong minerals export sector. Gold attracted British capital and European immigrants and made secondary industrialisation possible. The stock exchange was an essential part of the development of the gold mining industry and an instrument with which to raise capital. Initially, 69 gold mining companies were listed on the JSE. Between 1887 and 1934, 200 million pounds were invested in the gold industry, with 60% of this coming from foreign sources.⁶ Compared to the historical average, JSE returns were very low in the decade of 1910-1919, but much higher in the 1920s. This can mainly be ascribed to changes in labour cost during this decade.

2.2 1911-1932: Economic stagnation

During the second period (1911-1932), economic growth was muted and the South African economy experienced two sharp recessions; in the early 1920s and again during the first part of the Great Depression (approximately 1929-1932), with a short period of growth in the mid-1920s.⁷

On the international front, this era was marked by the disruptions of World War I (1914-1918) and the subsequent post-war recovery when international capital markets were reintegrated under the gold exchange standard. Several developed countries experienced stock market booms during the 1920s. Management practices and advances in technology, such as the rapid diffusion of electric power

⁵ M Bryant, *Taking stock: Johannesburg Stock Exchange, the first 100 years* (Johannesburg: Jonathan Ball Publishers, 1987), pp. 1-5.

⁶ J Nattrass, *The South African economy: Its growth and change* (Cape Town: Oxford University Press, 1981), p. 144.

⁷ TA du Plessis, *The industrial growth pattern and the real forces of economic expansion in South Africa, 1916/17-1956/57* (PhD, University of South Africa, 1965).

and the internal combustion engine, created a highly favourable macroeconomic environment in the United States of America (USA).

Developments on the JSE were marked by a decrease in the profitability of gold mines, the catalyst for the labour strikes of especially 1914 and 1922. These strikes also had wider political repercussions and resulted in general protests against government policies. The era also witnessed the birth of several large mining houses that dominated trading on the JSE until 1990. Table 1 gives an indication of how developments in the mining sector during the period 1900-1929 impacted on JSE returns.

1905	Short-lived tin boom in response to reports of discovery of rich deposits.
1907	Labour strike (JSE returns – 11%). Crash in US stocks, following the boom of 1904-1906.
1910 1910-1919	Gold mining expanded into the Far East Rand, and these mines soon dominated the Witwatersrand mines in terms of profitability. A decline in gold mining profitability, mines in near-desperate situation. Industry responded with attempts to cut labour costs – resulted in widespread labour strikes in 1913 and 1914. Negative JSE returns for these two years.
1917	Anglo American formed. Crash in US stocks amid economic boom.
1919	Currency depreciation restored gold mining profitability – lasted for six years and in total amounted to a windfall of about 29 million pounds.
1920	Dow Jones index in USA fell by 31,8%; JSE fell by 52,2%.
1922	"Rand Revolt" and labour strike leading to widespread political unrest. The strike was violently suppressed by the Smuts government, a defeat for mine workers. JSE recorded returns of 70%.
1924-1928	Period of recovery for gold mine industry – reflected in relatively high average annual returns of 14% for the five year period.
1927	Discovery of diamonds in Lichtenburg and Alexander Bay areas. Anglo American expanded into the diamond mining business and into other African countries.
1929	Anglo American took over De Beers.

Table 1: Major developments impacting on JSE returns: 1900-1929⁸

The importance of labour costs for gold mining profitability derives from the unique feature of the gold mining industry at the time – the price of gold was fixed in dollar terms until the breakdown of the Bretton Woods System (BWS) in 1971. During this time of relatively fixed exchange rates, the profitability of the gold mines rested on

⁸ D Innes, Anglo-American and the rise of modern South Africa (Johannesburg: Ravan Press, 1984).

keeping labour costs low. Feinstein⁹ states that during the period 1887-1932, the gold mining industry survived on exploiting black unskilled labour by paying low wages. The legislation structure and the disposition of black people made this exploitation possible; thus contributing to the success of the mining industry. The way in which labour costs were used to support the profitability of the gold mining industry is evident from the fact that the cost of black labour for gold mines dropped between 1911 and 1931. Once it rose back to the 1911 level, labour costs remained constant, in real terms, until 1969. As a result, black employment levels doubled during this period.¹⁰ An analysis by Feinstein¹¹ of the profitability and working cost of South African mines also illustrates the importance of labour costs during this period. As illustrated in Tables 2 and 3, there was a significant fall in profitability from 1910 to 1932 and significant changes in labour costs during the 1920s.

1905-1909	0,7
Average 1910-1932	between 0,44 and 0,58
1933/34 boom	0,89

Table 3: Working cost in sterling per ton mined

1910-1914	0,98
1920/21	1,42 decreased to 1,30 in 1922
1939	1,05

Low wages and working conditions led to several major strikes in the gold mining industry. Some of these strikes had wider repercussions, culminating in general protest against government and government policies. The major strikes took place during 1907, 1913, 1914 and 1922. The 1922 strike took place against the backdrop of an economic downturn after World War I. Proposals to decrease mine worker wages, to increase the number of blacks entering the labour force and the reduction of coal miners' wages triggered the strike. Gold miners joined in on 1 January 1922. The strikers formed commandos and accepted a proposal to overthrow the government by force. Smuts declared martial law in March 1922 and, with the help of the Air Force, the strike was ended on 14 March 1922. The strike was a loss for the mine workers. More blacks were employed and white miners'

⁹ CH Feinstein, *An economic history of South Africa: Conquest, discrimination and development* (New York: Cambridge University Press, 2005), pp. 109-112.

¹⁰ Nattrass, p. 139.

¹¹ Feinstein, p. 106.

wages were reduced.¹² Thus, the strikes did not result in fundamental change in government and labour policy, nor did it improve the wages of mine workers. In fact, the profitability of the gold mining industry improved due to reduced wages. This provides a possible explanation for the 70% JSE returns in 1922 amid labour and political unrest.

Political developments also had a large impact on the history of manufacturing in South Africa during the 1920s. The Pact Government of the National and Labour parties introduced a policy designed to promote industrial development. A central element in the policy of industrial development was tariff protection to promote import substitution. The new government also attached considerable importance to reducing South Africa's dependence on imported steel through the establishment of the South Africa Iron and Steel Industrial Corporation (ISCOR). One powerful motive was to address the poor white problem. A sovereign and independent South Africa was one of the highest priorities of the Prime Minister, General JBM Hertzog, who believed that a robust, self-sufficient industrial base would promote South Africa's independence and help to weaken the position of the mining companies, whose directors and shareholders he suspected of being more sympathetic to foreign interests.

A major international development during this time was the Wall Street Crash of October 1929. Following a brief recovery in early 1930, the US stock market followed a downward trend for the next two years, producing the greatest long-term market declines by any measure. The crash exercised a limited impact on the JSE. Still essentially a mining market, the JSE remained relatively stable and recorded a negative return of only 1,06% in 1929. Table 4 summarises recorded JSE returns by decade between 1900 and 1929.

Decade	1900-1909	1910-1919	1920-1929
Annual average returns	10,75%	1,61%	15,9%
Number of years with negative returns	3	5	3
Lowest annual return	1905: -19,6%	1911: -14,96%	1920: -52,2%
Highest annual return	1908: 41,2%	1919: 33,2%	1922: 70,2%

Table 4: JSE returns between 1900 and 1929¹³

¹² CFJ Muller et al., 500 Jaar Suid-Afrikaanse geskiedenis (Pretoria: Academica, 1990), pp. 413-414.

¹³ J Fourie and JL van Zanden, "GDP in the Dutch Cape Colony: the national accounts of a slavebased society", *South African Journal of Economics* 81(4), December 2013. Real GDP figures were estimated by using GDP per capita estimates from Fourie and Van Zanden (p. 29), and by adjusting them for population size using data from the June issue of the South African Bureau of Census and Statistics (page A-8).

The South African economy did not suffer as adversely during the Great Depression as most other major economies, mainly due to the favourable impact of gold exports. South African farmers were partly protected from crisis due to the fact that they were producing for the domestic market. Job losses were also limited due to public works programmes.

2.3 1933-1945: Gold boom leads to general economic boom

The start of the 1930s marked economic hardship and also difficult times on the JSE with negative returns for three consecutive years (1929-1931). In addition, monetary policy decisions in South Africa aggravated the impact of the worldwide recession. The Union of South Africa decided to remain on the gold standard for a period of 15 months after the depreciation of sterling and other currencies in September 1931. Klasie Havenga, Minister of Finance, argued that to abandon the gold standard would bring unmanageable inflation. The result was falling share prices on the JSE and a sharp deterioration in the country's overall economic situation, with large increases in unemployment and the raising of taxes, along with import duties. Political opposition eventually forced the government to go off the gold standard at the end of 1932. Following the decision to devalue the currency, the consequent increase of almost 50% in the sterling price of gold between 1932 and 1933 led to the "great gold boom", which dominated JSE returns during the thirties.¹⁴ This introduced a sustained period of economic boom, which resulted in the Gross Domestic Product (GDP) per capita to almost double in real terms between 1933 and 1945.15

The relative prosperity of the gold industry, benefiting from a stable and rising gold price and lower working costs due to a general decline in raw material prices, laid the foundation for this boom. Gold production increased as new gold mines were established and the increase in the value of gold exports pulled the economy out of depression with extraordinary speed, starting in 1933. The strong supply of foreign exchange enabled South Africa to accumulate substantial gold reserves and to repay government and private debt.¹⁶ Manufacturing also benefited from the boom in mining and began to grow rapidly during this period. Between 1932 and 1939, total industrial employment (including on the railways) rose from 555 000 to 929 000¹⁷ and South Africa escaped the Great Depression.¹⁸

¹⁴ Bryant, p. 36.

¹⁵ Fourie and Van Zanden, 2012.

¹⁶ J Garmany, "South Africa and the sterling area", *South African Journal of Economics* 17(4), 1949, pp. 487-488.

DH Houghton, "Economic development, 1865-1965". In: M Wilson and L Thompson (eds), *The Oxford history of South Africa*, Vol. II: *South Africa* 1870-1966 (Oxford: Clarendon, 1971), pp. 33-34.

¹⁸ Feinstein, p. 123.

JSE share prices soared amid a flood of foreign share purchase orders, mainly from London and Paris. Within a few months, the market capitalisation of gold and financial shares listed on the JSE rose from about 125 to 350 million as the realisation of what the new dispensation really meant for the gold industry grew. The great gold boom also had a dramatic impact on public interest in investing on the JSE. Some great fortunes were made on the market, and crowds flooded into the public gallery of the JSE. The general aura of speculation was fuelled by rumours of new gold discoveries. One example was an unfounded rumour of a new reef discovered on the property of Doornhoek Platinum Mines (later resulting in criminal prosecution). A new mining house, Anglovaal, was formed during this time. When it floated, the Rand Leases Gold Mining Company set aside 800 000 shares for public subscription, and the Post Office had to employ special delivery vans to carry the applications to the transfer office. The JSE was hard-pressed to keep up with mountains of scrip changing hands between brokers on a daily basis.

In 1934, with the local economy booming, political developments were also favourable. The political alliance of Hertzog and Smuts led to the formation of the United Party, creating hope that past political differences between whites would be settled. Roosevelt's increase in the dollar price of gold in 1934 further increased the prosperity, though much of the potential gain from this was lost because sterling, by that time, had appreciated against the dollar, leaving a relatively small increase in the gold price received by South African mines. Within a short time, the mining industry was highly concentrated and under the control of six giant mining and finance houses. The three biggest mining houses in terms of contribution to gold production were Rand Mines (34%), JHB Consolidated Investments Company (24%) and Anglo American (14%).¹⁹

This decade also marked the 50th jubilee of the South African gold industry in 1936. During 1936, Barclays Bank issued a report emphasising the spectacular growth of the South African gold mining industry in the 1930s. Invested capital increased by 173%, annual dividends almost doubled in the period 1932-1936 and gold mining dividends offered returns of 23,5% in 1936. During the late 1930s, South Africa's prosperity was in sharp contrast with the rest of the world. The JSE, dominated by mining companies at that stage, mirrored this prosperity. The average annual return rate for the decade was 18,1%, the highest for any decade in the 20th century. This high average for the decade was realised despite "Black Friday 1937" and the consequent negative annual returns recorded in 1937 and 1939. The highest single real return figure for the century was also recorded during this decade, namely 102% (see Table 5) in 1933. This high return figure clearly shows the effect that the devaluation of the South African pound in December 1932 had on rates of return.

¹⁹ Ibid., p. 104.

Number of years of negative returns	4
Highest annual returns	102% in 1933
Lowest annual returns	-22% in 1937
Average returns for the decade	18,1%

Table 5: JSE returns during the 1930s

"Black Friday" (9 April 1937) was one of most catastrophic days in the history of the JSE. Prices began to recede slowly in 1937, following the 1936 boom. The political situation deteriorated in Europe and there were rumours that France was about to experience a currency collapse, while Britain and the USA were experiencing serious economic difficulties. Rumours of an undertaking by the US government for the fixed gold price to be scrapped, led to a tense atmosphere on the JSE trading floor, and selling pressure from overseas investors led to a dramatic decline in the share prices of gold shares. President Roosevelt's announcement that the USA had no plans to revalue the price of gold temporarily halted the chaotic trading. The US stock market also crashed in 1937, with a decrease of 22,4% in share prices, falling further in 1938 amid a recession in the US economy.

Figure 1 compares JSE returns with real GDP growth rates over the period 1910-1944. The level of correlation between share returns and economic performance is relatively high, especially when compared to subsequent periods. This clearly reflects the importance and dominance of the mining sector in both economic and share market performance during this phase – a situation that was about to change during the post-World War II era.

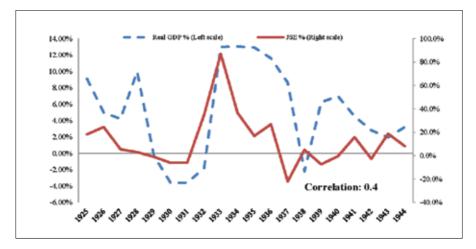


Figure 1: JSE returns and real GDP growth (1925-1944)

3. WORLD WAR II-1960: RAPID INDUSTRIALISATION AND GENERAL ECONOMIC PROSPERITY

This was the golden era of high economic growth and low inflation, with years of spectacular growth, structural change, periods of sustained innovation and modernisation on the supply side, and expanding markets on the demand side. Hobart Houghton referred to this as a, "long period of almost uninterrupted prosperity" that had started in 1933.²⁰ The strong growth rate over the 1950s and 1960s was widely identified as exceptional by global standards, especially the period from 1933 to 1950.²¹ This period was globally also the "golden age" of capitalist development.²²

With the discovery of the Orange Free State (OFS) goldfields and the resulting profits and cash flow to the mining houses, the scene was set for the growth and dominance of the mining house conglomerates, especially Anglo American. This era also saw the start of the National Party (NP) government, the apartheid policy and Afrikaner nationalism. The NP government also increased state support for industrialisation, mainly via import quotas. The new National Party government introduced a swathe of racially discriminatory legislation and policies which further protected white workers from competition, limited the supply of skilled African, coloured and Indian labour, and favoured farming and the mines over manufacturing in terms of access to unskilled labour.

During the first two decades after World War II, global capital controls were slowly eased and the international monetary system was re-established.²³ South Africa benefited from capital inflow during the immediate post-World War II period, mainly due to capital flight from Britain. Accordingly, the average real economic growth rate between 1945 and 1959 averaged 4,27%. This situation would change in response to the Sharpeville shootings in March 1960.

Despite this prosperity, the JSE recorded relatively low average annual returns of 3,83% during the period 1945 to 1959, with nine years of negative returns. Accordingly, the correlation with GDP was mostly negative (see Figure 2).

²⁰ D Hobart Houghton, The South African economy (Cape Town: Oxford University Press, 1976), p. 97.

²¹ S du Plessis and B Smit, "Accounting for South Africa's growth revival after 1994". In: J Aron, B Kahn and G Kingdon (eds), *South African economic policy under democracy* (Oxford: Oxford University Press, 2009), pp. 28-57.

²² T Moll, "Did the apartheid economy fail?", Journal of Southern African Studies 17(2), pp. 271-291.

²³ M Obstfeld and AM Taylor, *The Great Depression as a watershed: International capital mobility over the long run* (Chicago: University of Chicago Press, 1998), pp. 381-391.

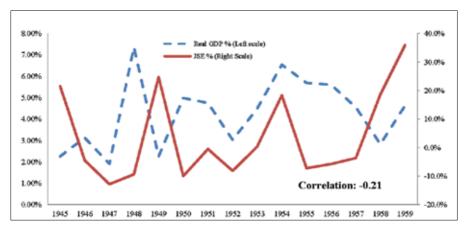


Figure 2: JSE returns and real GDP growth (1945-1959)

This is all the more surprising, given that these decades also saw the discovery and start of production of the OFS goldfields. One possible explanation is the unexpected election victory of the NP in the 1948 election. The National Party's strategy of freeing Afrikaners from foreign capitalism and solving the problem of white Afrikaner poverty initially included the idea of nationalising the gold mines. This led to panic within the English establishment. It later turned out that the panic was unfounded.²⁴ The uncertainty created by this might be a reason for the relatively low average JSE returns as reflected in Figure 2.

Other explanations include the fact that international stock market returns were also relatively low during the 1940s. For example, the US stock markets experienced relatively sharp declines in June 1940 with the defeat of France by the Germans and the Dunkirk evacuation, as well as in September 1946. Uncertainty about the genuineness of the newly discovered OFS goldfields, coupled with the relatively low profitability of South African gold mines in general during the early years of the discovery and production of the OFS goldfields, might be another explanation for the relatively low JSE returns during this time. For example, Bryant describes days of tremendous excitement and frantic trading on the JSE and, "dealers shouting themselves hoarse as they battled to fulfil orders flooding in from London and all over SA", in response to an announcement that came over the ticker of an incredibly rich strike in the Geduld No. 1 borehole in the OFS on 16 April 1946.²⁵ The discovery and value of newly discovered OFS goldfields at that

²⁴ S Terreblanche, *A history of inequality, 1652-2002* (Pietermaritzburg: University of Natal Press, 2005), p. 203.

²⁵ Bryant, p. 45.

stage was largely dependent on borehole results. Consequently, the dissemination of unconfirmed reports of rich borehole strikes and suspicion of tampering with such reports contributed to a feeling of uncertainty about the prospects of the Free State goldfields. The development of the OFS goldfields was a long, costly process and the prospects were very uncertain. For example, exploration in the Free State started in 1936, but shaft sinking commenced only in 1946, while the first gold was produced at the St. Helena and Welkom mines only in 1951.

A dramatic increase in gold mining profitability started to show in 1955, and profits in the 1965-1969 period were much higher than during the late forties and early fifties. Favourable developments in ore grade and labour productivity, combined with resistance to any significant improvement in real wages for African workers, meant that working revenues per ton milled rose much more rapidly than working costs. The start of uranium mining was another factor that boosted goldmine profitability during the fifties.

Another development during this time was the rapid industrialisation of the South African economy. Despite their strong performances, the mining and agricultural sectors were overshadowed by growth in the manufacturing sector. The share of GDP accounted for by manufacturing overtook the combined share of agriculture and mining in the 1950s, and reached 30% by the mid-1960s (see Figure 3).²⁶ This was despite strong performances from the mining and agricultural sectors. In the boom decade of the 1960s, investment in manufacturing grew by 12% p.a. and real output by almost 9% p.a. The major catalyst for this process was World War II. Manufacturers responded vigorously to opportunities created by wartime shortages of imported goods and new demands made by South Africa's war efforts. The output volume (constant prices) almost doubled from 1939 to 1949. From 1939, the industry was transformed and mass production techniques, which until then had been successfully opposed by white unions, were introduced. Armoured vehicles, weapons, shells and trucks were produced, using high-grade steel made by the Iron and Steel Corporation (ISCOR, today ArcelorMittal).

Government policy also played a major role in the expansion of the manufacturing sector. The willingness to extend tariff protection, the establishment of the Scientific and Industrial Research Council (HSRC), The Industrial Development Corporation (IDC) and the South African Bureau of Standards (SABS) were to complement industrial development.²⁷ This development changed the character of the JSE. Before World War II only 50 industrial companies were listed on the JSE. This increased to 178 by 1946 and 348 by 1948, reflecting the growing range of secondary industries.

²⁶ Feinstein, pp. 144, 165-172, 193-199.

²⁷ Muller et al., pp. 458-459.

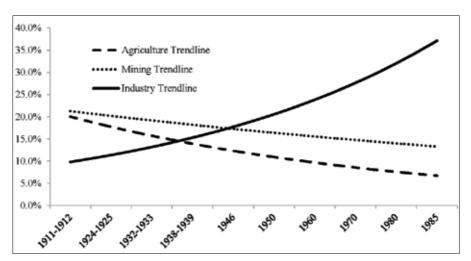


Figure 3: Relative size (% of GDP) of Agriculture, Mining and Industry Sectors in South Africa (1911-1985)²⁸

Although the discovery of the OFS goldfields and the process of industrialisation did not exercise an immediately favourable impact on JSE returns, it did lay the foundation for the conglomerate mining houses to start dominating trading on the JSE until 1990. The giant mining houses made a crucial contribution to the industrial transformation in the 1950s and 1960s. A massive programme of diversification of their investments was a major force behind the modernisation and mechanisation of industry.²⁹ Before the 1950s, the industrial interests of mining houses were primarily confined to the manufacture of products required for their own operation, for example, chemicals for blasting and extracting gold from crushed rock. From the late 1950s the mining houses began to expand the scope of their industrial activity, and this process of diversification was accelerated in the 1960s. The key to this increased involvement was the success of the OFS goldfields. New gold mines were no longer absorbing all their vast resources, but instead were starting to create surplus capital which could be invested outside mining.

This was especially the case with Anglo American, the dominant mining house in the OFS goldfields, and thus in the country as a whole. Anglo had substantial interests in civil engineering and construction, property, cement, timber, as well as printing and publishing. Other mining groups owned broadly similar industrial company portfolios, although not on the same scale as Anglo. Anglo also played

²⁸ SR Lewis, The economics of apartheid (New York: Council on Foreign Relations Press, 1990), p. 25.

²⁹ Feinstein, p. 174.

a significant role in the development of a more comprehensive financial system in South Africa and, working in close relationship with firms in London, it cautiously established a number of private discount houses and merchant banks.³⁰

The 1950s were relatively uneventful and characterised by general economic prosperity and on-going industrialisation. The NP government continued the segregation policies of previous governments and started to formulate the apartheid policy. As previously mentioned, JSE average returns were relatively low, especially given the favourable economic circumstances.

The strong and profitable position of the diamond industry, and of De Beers in particular during this time when there was an unprecedented demand for gemstones, is worth mentioning. The company acquired a large quantity of unsellable diamonds at very low prices during the depression of the 1930s and they could dispose of this stock in the midst of the greatest boom the diamond trade has ever seen, with prices benefiting from the devaluations of sterling. This was an exceptional, once-off profit that was partly used to finance the development of the OFS goldfields.

Worldwide, post-war economic chaos gave way to recovery in Europe and Japan as international trade and payment agreements came into force, and US aid – most notably the Marshall Plan – poured in. By 1951, the per capita incomes of the United Kingdom, France and (West) Germany exceeded their pre-war levels by more than 10%.³¹ In contrast to the relatively low JSE returns, two waves of stock market booms occurred among developed countries during the 1950s; one around 1952-1953, and the other around 1958-1960.

4. THE ISOLATION YEARS: 1960-1994

The Sharpeville shootings in 1960 started an era of international isolation for South Africa and the JSE. This situation was aggravated by the Rubicon speech and the debt standstill in 1985. Government policy, especially exchange controls, strengthened this isolation. Exchange controls effectively "trapped" investment in South Africa. Isolation also impacted on the governance structure and the competitiveness of South African companies, since they were isolated from international "market realities". This further encouraged the forming of conglomerates and led to the distortion of investment returns and decisions, as was particularly evident from the industrial diversification strategy followed by the mining houses at the time. The policy environment biased the mining houses away from mining and towards industrial diversification. Industrial companies were rapidly expanding behind the tariff wall and eagerly absorbed the cash surpluses of the mining houses. Isolation prevented them from following the natural path

³⁰ *Ibid.*, pp. 176–179.

³¹ JB de Long and B Eichengreen, *The Marshall Plan: History's most successful structural adjustment plan* (Cambridge: National Bureau of Economic Research, 1993), p. 391.

of expansion, namely pursuing mining interests abroad. Trade on the JSE was characterised by low turnover and liquidity, concentrated ownership of shares and dominance by the mining houses.

In contrast to the positive impact of international isolation on JSE returns, it had a negative impact on the overall economy. The slow growth of the 1980s was in part due to the negative effects on investment of the township revolt and general political uncertainty, which discouraged investment, while sanctions inhibited trade (exacerbating pressure on the balance of payments). But the political crisis was itself in part due to the economic one. The township revolt in 1984 was initially concentrated primarily in areas – especially the Vaal Triangle and East Rand – where the downturn in manufacturing had resulted in deepened hardship, exacerbated by drought in the countryside.³²

The isolation years can broadly be classified into three sub-periods, namely (i) 1960-1969, reflecting years of high economic growth, low inflation, balance of payment surpluses and initially market-oriented monetary policy; (ii) 1970-1979, marking the start of high inflation and balance of payment constraints and necessitating restrictive policies, which contributed to low economic growth; and (iii) 1980-1990, a period of political instability, huge capital withdrawal, sanctions, the debt standstill, tighter monetary policy and even smaller economic growth.

4.1 1960-1969: The start of the isolation years

Referred to as the golden decade, the sixties experienced great economic growth, low inflation and a manufacturing boom. The low start to economic growth after Sharpeville in 1960 was followed by economic growth rates of 8,1% in 1963, 6,7% in 1964 and 6,6% in 1965.³³ The Sharpeville shootings, and consequent capital outflows, is one of the defining moments of the 1960s and of South Africa's entire history. The first assassination attempt on Prime Minister HF Verwoerd and the Coalbrook Colliery mining disaster exaggerated this situation. The government responded by introducing exchange controls on non-residents and the financial rand. The imposition of capital controls created inefficiencies, as well as incentives for capital flight, especially at times of instability which had reached substantial proportions by the end of apartheid.

The proscription of the African National Congress and the Pan Africanist Congress drove them into exile and created an increasingly potent form of off-shore pressure on the apartheid state. Despite the political turmoil, gold mining shares continued to draw interest from European investors.³⁴ At the end of 1960,

³² J Seekings, *Quiescence and the transition to confrontation: South African townships, 1978-1984* (PhD, Oxford University, 1990).

³³ Muller et al., p. 557.

³⁴ JA Bell, "The influence on the South African economy of the gold industry 1925-2000", *The South African Journal of Economic History* 16, 2001, p. 34.

622 companies were listed on the JSE. The stock exchange was still dominated by gold mining companies. The market value of industrial shares, with a market capitalisation of R300 million, was not much more than half of the gold mining shares, and financial shares were at a minimum. Growth in the manufacturing sector eventually changed the situation, putting industrial shares ahead of gold mining.³⁵

A long bull market, led by industrial shares, started in 1963. The bull market lasted until the stock market crash in 1969, reflecting the prosperous economic conditions that prevailed during the period. Mutual funds started operating in 1965. New listings increased dramatically, with 86 companies listed in 1968 and 63 in 1969. The *Financial Mail* reported that 45 families had reached millionaire status through listing on the JSE in 1969. The market continued to climb until May 1969. The market crash was characterised by a collapse in industrial share prices. For example, within six months South African Breweries went down from 700c to 169c, OK Bazaars from 2350c to 1375c and Trust Bank from 1010c to 360c.³⁶ Low turnover led to further depressed prices in 1969. The US stock market also started to drift downwards in November 1968 and bottomed in June 1970 for a 30,6% drop.

As can be seen from Figure 4, average JSE returns in the 1960s were quite high when compared to that of the early 1970s, despite the market crash in 1969. This was the first decade where the high share returns can be attributed to not only favourable economic conditions, but also a bull market in industrial shares.

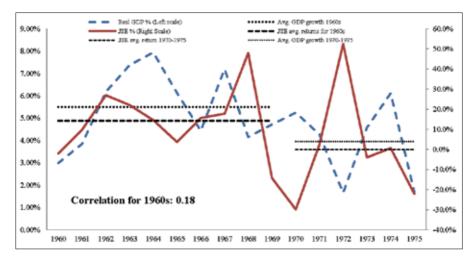


Figure 4: JSE returns and real GDP growth (1960-1975)

³⁵ J Fedderke and C Simkins, "Economic growth in South Africa", *Economic History of Developing Regions* 27(1), 2012, p. 179.

³⁶ Bryant, pp. 86, 100, 103.

4.2 1970-1979: Global instability and the deteriorating political situation in South Africa

During the early seventies, worldwide macroeconomic developments were dominated by the oil price shock of 1973 and the resulting stagflation, which was eventually amplified by the second oil price hike in 1979. Despite these shocks, the economy grew at an average annual rate of close to 4% throughout the 1970s, but faster in the first half of the decade (average of 4,37%) than in the second half (2,13%). The unfavourable macroeconomic conditions were reflected in most countries in low stock market returns. For example, the twelve-month declines ending in October 1974 were 30,4% for the S&P 500 Index, while the JSE averaged -10% for the first half of the 1970s.

However, countries where energy and mining stocks carried a relatively heavy weight in the market indices experienced a stock market boom. These countries included Australia, Canada and South Africa. As can be seen from Table 6, average returns for the decade were relatively high and correlation with economic performance was generally negative. Once again, this can mainly be attributed to the gold sector, since fundamental changes in factors that influenced goldmine profits occurred during the seventies. The collapse of the Bretton Woods System in 1971 created new dynamics in the dollar gold price. In August 1971, the Federal Reserve announced that its "gold window" was shut. The dollar's link with gold ended and the artificial gold price of \$35, which had survived since 1933, went out "of the window". The gold price rose throughout the decade,³⁷ and nearly doubled to \$90 in 1971, while the gold index rose from 10,3 to 152,4 in 1972.

Number of years of negative returns	4
Highest annual returns	70% in 1979
Lowest annual returns	-30% in 1970
Average returns for the decade	14,3
Correlation with real GDP	-0,23

Table 6: JSE returns during the 1970s

The oil price shock in 1973 led to a gold price increase from \$90 to \$170 and in 1979, with the second oil price crisis, the subsequent increase in the gold price improved the economic climate. Lower interest rates and financial rand investment all led to an increase in the value of securities. The JSE recorded dramatic returns of 70% in 1979, the gold board rose 110% and industrials rose by 81,9%. The Krugerrand was also listed on the JSE in 1979.³⁸

³⁷ *Ibid.*, pp. 14, 16.

³⁸ Ibid., pp. 130, 140.

The gold mining industry continued to have a positive impact on the South African economy. Production was expanded as new mines were developed. The value of gold sales grew for the decade at an annual rate of 16,3% in constant prices.³⁹ It provided a tax income windfall that enabled the government to continue with its controversial political policies in an increasingly hostile world while, at the same time, undertaking massive investments in infrastructure.

These relatively high average returns for the decade were remarkable, given the slow recovery after the stock market crash of 1969, a decrease in the number of listed companies and a low JSE turnover. Ownership concentrated in the hands of conglomerates was one of the reasons for the low turnover. The number of listed companies continued to decline, and 39 companies were delisted during 1977. These high JSE returns were also recorded despite a highly unfavourable economic and political environment. Macroeconomic conditions were dominated by slow growth and volatile, accelerating inflation. The political situation was characterised by social unrest, uncertainty and increasing international isolation. The Soweto Uprising of June 1976 was one of the defining moments of the 1970s. It was to set a precedent for political struggle over the next 18 years and it had an immediate effect on confidence in the economy; even the JSE could not escape the aftermath, as was reflected in the overall JSE performance of -12,2% during 1976. This would serve as a harbinger of things to come in the following 15 years.

4.3 1980-1990: A lost decade

The international economic and financial climate in the 1980s and early 1990s was more favourable than in the 1970s and was characterised by declining energy prices and inflation, higher average output growth, and buoyant financial markets in many countries.⁴⁰ In sharp contrast, the South African economy experienced low economic growth and high inflation, and government spending continued to rise. Although the economy benefited from the gold price spike in 1981 and real per capita income achieved its highest level ever, the trend from 1981 until 1994 was downwards, with real per capita income in 1994 almost 18% lower than it had been 13 years earlier. The economy only really recorded growth during four years of the eighties (1981-1982, 1984 and 1988), while the increase in population growth contributed to the decline in per capita income.⁴¹

³⁹ The Chamber of Mines of South Africa, Economics Department, "The South African mining industry in the 1980s", South African Journal of Economic History 9(2), 1994, pp. 49-65.

⁴⁰ AB Wigmore, *Security markets in the 1980s: The new regime, 1979-1984* (New York, Oxford University Press, 1997), p. 39.

⁴¹ S Jones and J Inggs, "An overview of the South African economy in the 1980s", *South African Journal of Economic History* 9(2), 1994, pp. 1-2.

The decline in the gold mining industry also had a large impact on economic performance and fiscal deficits during the decade. Gold's contribution to the GDP was also halved during the eighties, while the contribution of gold mines to total tax revenue declined from 38% in 1980 to 6% in 1990.42 This occurred amid high government spending, mainly resulting from military spending, subsidising homeland governments and projects such as Mossgas. The 1980s will also stand out in history as a period of important changes in South Africa's industrial relations arrangements. In 1981 the industry recognised the National Union of Mineworkers (NUM), which had a large influence on labour cost in the mining industry. Other factors that contributed to the lower economic growth include the drought that ravaged some parts of the agricultural sector and rising manufacturing costs that signalled the potential loss of export markets, as well as sanctions against South Africa. The situation with regard to foreign exchange and capital controls changed several times during the decade. During the early 1980s, the so-called "Tequila crisis" made South Africa attractive as a lender to foreign bankers, with a high gold price also boosting confidence. On 7 February 1983, exchange controls on non-residents and the dual exchange rate were abolished.⁴³ However, the funds invested in South Africa were short-term funds, and these funds were withdrawn when the gold price started to drop and campaigns against apartheid increased.

Increased political isolation and the debt standstill of 1985 resulted in balance of payment constraints, which necessitated restrictive policies that further restricted economic growth. The debt crisis followed after PW Botha's Rubicon speech on 15 August 1985. An announcement of significant political reforms was expected, but the speech did not contain any worthy announcements. The disappointment in the slow rate of political transformation and the uncertainty of the political situation resulted in South Africa becoming a capital exporter. In August 1985, Chase Manhattan Bank of New York announced that no further loans would be granted to South Africa. The South African government retaliated by declaring a debt repayment standstill in September 1985. The economy showed symptoms of large capital outflows, intensified financial sanctions and low gold and foreign reserves.⁴⁴ The financial rand was reintroduced to increase the cost of foreigners withdrawing their funds from South Africa.⁴⁵ The rand depreciated sharply against the US dollar and all other major currencies, falling from R1,25 per dollar in early 1984 to R2,38 in January 1985. The escalation of violence generated a general lack of confidence in the country, and the depreciation of the rand fuelled the double-digit inflation.

⁴² S Jones, "Mining in the 1990s", South African Journal of Economic History 18, 2003, p. 141.

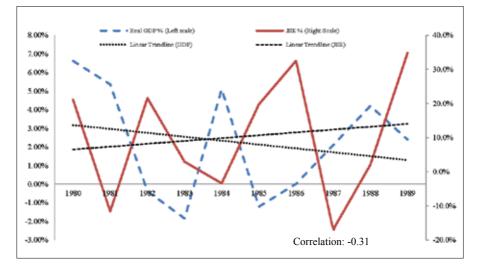
⁴³ South African Reserve Bank, *Quarterly Bulletin* (Pretoria: SARB, 1983), pp. 16-17.

⁴⁴ South African Reserve Bank, *Quarterly Bulletin* (Pretoria: SARB, 1988), p. 17.

⁴⁵ Feinstein, p. 229.

In contrast with the slack and continuously deteriorating economic activity and net selling of securities by non-residents, the capital market was buoyant. As indicated in Figure 5, share prices increased by 133% from 1985 to August 1987, and demand for shares was maintained by local institutions buying shares disposed of by foreigners and investors seeking a hedge against inflation. A decline in interest rates and the upward trend in the dollar price of gold also contributed.⁴⁶

Stock exchanges all around the world crashed on 19 October 1987. The JSE trading hours were reduced by two hours on 21 and 22 October 1987, due to the heavy volume of share trading.⁴⁷ Within two weeks the average level of all shares on the JSE fell back by 40%. The drop exceeded that of overseas stock exchanges and was even larger than the decline in the early stages of the crash in May 1969. The failure of the gold price to rise during these turbulent conditions contributed to the drop in gold mining shares, which exceeded the drop in average share prices. Share prices began to recover only in the second quarter of 1988.





The end of the decade also brought changes that would lead to a new political and policy dispensation in the 1990s and would eventually end international isolation for the country. In 1989, FW de Klerk became President of South Africa and Dr Chris Stals became Governor of the South African Reserve Bank (SARB).

⁴⁶ South African Reserve Bank, *Quarterly Bulletin* (Pretoria: SARB, 1986), pp. 15-16.

⁴⁷ South African Reserve Bank, *Quarterly Bulletin* (Pretoria: SARB, 1987), pp. 16-17.

5. 1990-1999: RETURN TO THE INTERNATIONAL ARENA

The nineties marked South Africa's return to the international arena and its integration into the world's capital markets. After President FW de Klerk announced the unbanning of all political parties and the release of political prisoners in February 1990, the stage was set for a new political dispensation in the country. Real GDP declined in 1990, 1991 and 1992, due mainly to uncertainty about the future of the economy and balance of payments constraints. Growth improved markedly after the 1994 elections, but for the decade as a whole the average annual growth rate was significantly lower than during the previous decades (even the 1980s). The negative economic growth during the first few years was accompanied by double-digit inflation, but as in the case of growth there was a significant improvement from 1993 onwards. The first single-digit annual inflation rate in 20 years was recorded in 1993, and the rate subsequently declined fairly consistently. The lifting of sanctions and expectations of improved prospects in the South African economy boosted share prices. During 1991 and 1992 the financial rand brought favourable returns for non-residents and encouraged investment on the JSE from abroad.

After 1994, the uncertainty of economic policies implemented by a new ANC-led government led to nervousness in the markets. Fear of a new government nationalising the mines, banks and monopolies was eased when Nelson Mandela moderated his stance in Davos, Switzerland, after being confronted by world leaders. The relaxation of exchange controls and the inclusion of the JSE in the International Finance Corporation's Investable (IFCI) emerging market index paved the way for a dramatic increase in foreign participation on the JSE. This era also saw an increase in the exchange rate and stock market volatility, and the JSE became the victim of contagion and emerging market crises. Especially during the emerging market crises in 1997 and 1998, trading conditions were marked by dramatic share price decreases and exchange rate instability, including a dramatic depreciation of the Rand against the major currencies.

During the early 1990s, foreign institutions were highly critical of the returns and management of the South African mining houses. The poor returns were attributed to depressed commodity prices and low industrial holding returns; a result of the integration of South Africa into the global economy: valuation of mining houses implied a significant discount relative to the value of their assets, an indication of investors' perception that mining houses do not invest retained earnings wisely. Foreign investors were also critical of the exploitative and racially discriminatory practices in the South African mining industry. The discount encouraged restructuring and changes to the mining houses, such as focusing on core business and becoming global players. The drop in commodity prices and the Asian financial crisis in the second half of the nineties emphasised the need for restructuring.⁴⁸ The mining houses started restructuring in several ways, *inter alia* by unbundling and reducing

⁴⁸ S Malherbe, *A perspective on the South African mining industry in the 21st century*. Report prepared for the Chamber of Mines of SA by the Graduate School of Business, University of Cape Town, p. 22.

diversity of investment. The result was the disappearance of traditional diversified mining houses and the emergence of global South African mining companies that were replaced by a holding company with a reallocation of activities and assets.

These developments also marked the JSE's own "big bang" in 1995, with reforms leading to increased liquidity and turnover, and the unbundling of conglomerate mining houses. In summary, this was an era of major adjustment that posed challenges for the corporate sector and government, having to adapt to international standards with regard to corporate and governance structures, as well as to labour practices.

The reintegration of South Africa into the world markets, Black Economic Empowerment transactions, changes in the mining sector, and globalisation led to a decline in ownership of conglomerates on the JSE. By 1997, ownership of the five largest conglomerates dropped to 67,2%.⁴⁹

Despite the reconstruction and the diminishing role of the mining industry, the JSE was still being dominated by a few large mining conglomerates and was considered a resource-based stock exchange. Overall, the nineties brought about an era of hope and expectation that was again reflected in an overall positive correlation between the JSE and economic performance.

The JSE, despite recording five years of negative returns, managed a highest return of 60% in 1999 and averaged 7% for the decade, while GDP growth, despite political uncertainty and international financial crises, eventually averaged around 1,4% for the decade (see Figure 6).

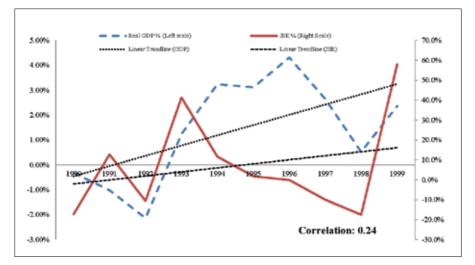


Figure 6: JSE returns and real GDP growth (1990-1999)

49 CP Oman, Corporate governance in development: The experiences of Brazil, Chile, India and South Africa (Paris: OECD Publications, 2004), p. 24.

6. CONCLUSION

Our findings suggest that major economic and political developments were often reflected in JSE returns - though not in a consistent manner - where positive stock market returns always occurred during times of economic prosperity. In fact, several sub-periods in the sample can be identified where high stock market returns occurred during times of low economic growth and vice versa. The 1940s, 1950s and 1980s are examples of the latter, where generally low and even negative correlation coefficients between stock market returns and economic growth are testimony to this weak relationship. On the other hand, and as would be expected, positive correlations when economic prosperity was mirrored in high stock market returns were also present in certain sub-periods; the 1930s and the 1960s. After a turbulent start, the 1990s eventually also exhibited a positive correlation, reflecting the positive expectations related to global re-integration. This apparent inconsistent behaviour of correlations can often be ascribed to political and/or international factors, since these also shaped stock market returns in several ways and to different degrees. This was especially true during several phases of South Africa's history. For example, in the earlier years of the period that this study covers, political decisions linked to wage determination had a drastic influence on the profitability of the gold mining industry, and thus on share market performance. Government's handling of strikes and labour disputes in 1922 shaped labour costs and consequently the profits of gold mining, which in turn affected JSE returns. Not only had the gold mine industry a dramatic impact on JSE returns, but also on economic development and political development and government policy. Similarly, in 1934 a policy decision to devalue sterling positively influenced gold mine returns and JSE performance, and also shaped the economy in terms of relative prosperity. During later periods, especially the 1970s and 1980s, apartheid policies, which led to increased international isolation, had a dramatic impact on both the economy and on JSE returns. Whereas political events such as the Soweto Uprising in 1976, the debt standstill of 1985 and the resulting international isolation had a very negative impact on the economy, it had a much more muted impact on JSE returns. A possible explanation is that international isolation led to a situation of trapped investment where institutional investors and the mining conglomerates could invest in South Africa only.

Global developments also shaped the South African economy and returns on the JSE. World War II, for example, was the catalyst for industrialisation in South Africa and a more dominant position of manufacturing on the JSE since the 1960s. International crises also affected the local economy and JSE returns, although the impact often varied in degrees of severity. After the 1929 crash, for instance, the South African economy managed to recover much quicker than the rest of the world due to the booming gold mining industry, while the effect on the JSE was muted throughout. Contrary to this, the US stock market crash of 1969 and 1987 was mirrored on the JSE. South Africa's reacceptance into the world community in 1994 resulted in share prices and returns being much more affected by global economic events than by local political events.