

BRITISH CAPITAL, THE BRITISH STATE AND
ECONOMIC INVESTMENT IN SOUTH AFRICA, 1886-1914

by

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We would argue that at least one important reason why Britain went to war was to establish a modern polity in South Africa, one which would provide the necessary infrastructure for the maintenance and development of crucial British economic interests.

S. Marks and A. Atmore (1)

... forms of state are to be grasped neither from themselves nor from the so-called general development of the human mind but rather have their roots in the material conditions of life.

Karl Marx (2)

Introduction

By "material conditions of life", Marx really meant the modes of production. As such any analysis of the state, and certainly of an interventionist state like Britain in Southern Africa, must be based on an examination of the specific capitalist mode of production, its appropriation of surplus value and resulting laws of reproduction of the whole social formation which, in the first place, gave rise to the particular political form.

In capitalist society, the straightforward appropriation of surplus value and the concomitant preservation of the social structure do not depend on direct relations of force, nor do they depend on the repressive force of ideology, though the latter's impact in the case of race relations in South Africa must not be underestimated. Instead, they rely on the operation of the laws of reproduction. However, the very process of social reproduction and appropriation of the surplus product by the ruling class requires the removal or abolition of all restraints, i.e. feudalism, etc., which might impede the establishment of direct relations of control between the owners of the means of production and the labour force. A capitalist form of society will remove these barriers or restraints and organize the manner in which social labour is distributed and surplus produce appropriated; as part of this historical development, however, the direct producers are effectively deprived of control over the direct physical means of force, and this means is now located in a social instance raised above the economic reproduction process itself - namely the bourgeois state.

The bourgeois state not only concerns itself with using force internally against the working class in order to maintain the process of accumulation, but it will also use it externally, especially as the tendency of the rate of profit to fall forces capital to seek investment outlets abroad under the protective aegis of the state. This function of the state can be performed objectively only outside the sphere of influence of individual capitals, but means that the function of the state can never really be more than the creation of "external" or infrastructural conditions for the social reproduction process, which regulates itself on the basis of the law of value. In other words, the social process of production and reproduction cannot itself be an object of state activity, for it is determined solely by the laws and development of the process of reproduction. (3)

Within the context of South Africa between 1886 and 1914, Britain was obliged to create for British capital the necessary "external" conditions of reproduction, for these had been stifled by the activities of the feudalist Boer state. The general necessity of British state interventionism resulted directly from the fact that the capitalist process of reproduction presupposed certain social functions which could not be fulfilled by individual capitals, because of both constraints and structural problems within the mining industry in particular and the fact that capital's limited profit interest prevented it from creating its own infrastructural prerequisites of production. Incidentally, this paper will show that German capital also managed to mobilize the state, albeit initially, with less impact than British capital.

The contradictions in the process of accumulation, which gave rise, amongst other things, to clashes between individual capitals and groups of capital, are reflected, in part, in the apparent inconsistencies in the mode and appearance of state activity. In particular, the bourgeois state's form as an instance above the *melée* of economic reproduction is continually interrupted by the need to use force (the Boer War), intervene indirectly (Uitlanders, dynamite monopoly, etc.), or to be associated openly with one section or another of capital (mining, commercial-industrial). There is no incongruity in this, however; the concrete activities of the state, which are implicit in the form of the "particularization" of the bourgeois state, are the direct result of clashes of interests and pressure exerted by capital over time. The function of the state is not the result of an abstract instance but of a historical process of capitalist development incorporating and reflecting all these separate interests and pressures. Indeed, the bourgeois state as an instance above the direct production process can only really maintain its form if the process of reproduction of capital as a whole is guaranteed and its own material basis thus secured.

The SAR and the Mining Industry

In 1898, barely twelve years after the discovery of gold on the Witwatersrand, the Transvaal was producing 27.5 per cent of the world's output of gold. (4) This rapid development had been due to the mining industry's ability to structure itself in such a way as to cut costs and maximize output. The geological nature of the gold-bearing reef had made it essential from the very start that mining operations be conducted along highly centralized lines: the vast initial capital outlay needed to develop the mines had pushed the smallest claims holders out and had led to the development of the so-called "Group" system, which rationalized the production process and helped to stabilize capital investment. While this administrative rationalization did offset some of the constraints imposed by the low-grade nature of the reef, general labour and overhead costs severely limited management's freedom of action in relation to overall profitability. (5) Generally speaking, profit maximization could not be attained without continued and substantial capital outlays and a high minimum level of output. Moreover, the internationally fixed price of gold meant that increased production costs could not be passed on to consumers and that the industry was very vulnerable to cost inflation.

While the "Group" system enabled the mining industry to tap the resources of international capital, the process of capital accumulation on the Rand itself operated under severe constraints inherent in its operational structure. The minimization of

costs, in particular, could only really be effected by the state through the provision of the general material conditions of production. Yet the Boer state had neither the political inclination nor, more importantly, the resources to provide these conditions.

By virtue of its administrative inefficiency the Kruger regime was unable to enforce and police the pass laws, cut down on gold thefts or prohibit the liquor traffic. (6) The mining industry's own attempts at establishing a monopsonistic control over African labour could not function effectively without active state participation. Wages formed about 69 per cent of the industry's annual working costs and half of the total wages bill went to the African labour force of some 40,000. (7) Labour turnover was high and recruitment was expensive but the pass regulations, which the Chamber of Mines regarded as an integral part of their attempts to cut costs on the wages front, had not even been officially proclaimed as late as 1895. (8) Needless to say that, while all mines suffered from the scarcity of African labour, the deep level mines, whose development only took off in 1895, suffered more as cheap labour could be offset against their higher cost structure.

The supply of African labour for the mines, however, was not the only bone of contention between the Krugerite state and mining capital:

the burden from which relief is most urgently required is the heavy cost, uncertainty and delay of transport caused by the absence of railways ... The sum paid during the year 1889 by the Witwatersrand district alone for the carriage of goods, exclusive of produce from the coast, is estimated at £2,750,000. The cost of importing the same goods by railway from the coast to Johannesburg would be £1,150,000. Thus an actual loss of £1,600,000 was borne by the fields in a single year. (9)

Once the railways did reach the Rand, however, the NZASM, or Netherlands South African Railway Company, which held the railway monopoly in the Transvaal, levied very high freight rates on imported materials, foodstuffs, etc. (10) By 1896 the Rand trade was forced "to pay an additional £2½ million in carrying charges to the NZASM". (11) Nearly all stores, dynamite, machinery, etc., consumed by the mining industry were transported to the Rand by the NZASM for at least part of the way; George Albu noted that "a merchant once brought me a bill of lading for 130 bags of flour. From Bloemfontein to Vaalbridge, a distance of 210 miles, the railway charge is £4.15.6., but from Vereeniging to Johannesburg it costs £6.--. or 50 per cent dearer at only a quarter of the distance". (12) In 1895 the mining industry imported material and stores to the tune of £1,631,132, which amounted to 25.4 per cent of total working costs, and by 1898 this figure had increased to £2,074,758. (13) Mining supplies were the least flexible of the industry's cost components and the NZASM's tariffs only served to frustrate the mining companies' overall attempts at cost minimization. The cost of living on the Rand was also forced up by the railway company's policies, and this in turn necessitated the paying of higher wages in the mines, at least for White workers. Finally, the NZASM's so-called Rand tram, which linked the collieries of the eastern Rand with the main reef, consistently charged high rates for coal freights. (14) In fact, prior to 1894, the NZASM, which owned several coal mines near Springs, possessed a coal monopoly by virtue of its persistent refusal to allow other collieries to construct branch lines connecting their pitheads with the main Rand tram.

As coal formed 10 per cent of total working costs, the NZASM tactics were virulently attacked by the Chamber throughout most of the 1890s, especially once some mines had been forced to cease production temporarily, owing to the railway company being unable to meet their coal and transport requirements. (15)

Although the NSASM was nominally a Dutch company, its capital and considerable financial resources were controlled by a German banking consortium. (16) Moreover, the company's policies were generally thought to be closely allied to those of the Kruger regime, and, as far as the mining industry was concerned, the activities

of the SAR and the NZASM were so close as to be virtually indistinguishable. (17) This attitude towards the NZASM had two important repercussions. Firstly, it established in both the public mind and the Colonial Office the belief in a covert and allegedly close connection between Pretoria and Germany. (18) Secondly, it reinforced mining capital's belief, especially after the Industrial Commission's report of 1897, that the Boer state was incapable of providing the social and economic conditions essential to uninterrupted capital accumulation. In this instance the SAR merely failed to supply those infrastructural conditions of production, such as an efficient and cheap railway and transport system, which capital itself, in the initial phase of the process of accumulation, could not provide.

However, the dynamite monopoly, which allegedly cost the industry some £750,000 per annum in excess charges (19), was another issue over which mining capital and the Boer state clashed. So much so that by 1899 the mining magnates called upon the Salisbury administration to pressurize Pretoria and Chamberlain argued that the dynamite monopoly was inconsistent with those articles of the London Convention which prohibited discrimination of British goods and products. (20) While the industry's anxiety was understandable, especially since dynamite formed 8.6 per cent of total working costs in 1896, Chamberlain's despatch indicated capital's ability to mobilize the British state now that the SAR had proved to be too intractable. (See Table III)

It was the international financial and banking connections of mining capital which greatly facilitated access to British government circles, where, in any case, at a more social and personal level men like Rhodes and Harris were frequently consulted by Colonial Office officials. (21) It was not only the mining industry, however, which focused governmental attention on Southern Africa. British commercial-industrial capital, particularly elated at the election of Chamberlain in 1895, also vigorously lobbied Whitehall about being excluded from the Rand market by the SAR's discriminatory tariff policies and Germany's aggressive trading practices. (22) Finally, both the financially unstable governments of the Cape Colony and Natal spoke of Kruger's initial refusal to allow their railways access to the Rand (23), while the City banking fraternity argued, especially after the Baring crisis of 1890, that the continued strength of the pound sterling now required a more reliable and expanding supply of gold bullion. (24)

Britain and the Transvaal

On the whole, the pressures upon the British state during the 1890s can be broadly analysed as follows: British capital investment abroad, whether in mining or in commerce, was unable to create for itself conditions essential for its own reproduction. In the case of the mining industry this inability was partly due to contradictions inherent in its financial structure and composition, and these will be discussed below. (25) The Krugerite regime prevented capital from establishing the essential material conditions of production; in particular it failed to regulate and control the conflict between wage-labour and capital as well as effectively to police and coerce the labour force generally.

Within Britain itself, the continued existence of the state as a particular form of social relations also depended upon the reproduction of capital relations, especially those intimately tied up with foreign trade. This was so because, inter alia, the tendency of the rate of profit to fall forced capital to seek markets abroad; at the same time, it is the aforementioned tendency, inherent in the contradictions of the capitalist mode of production, which in itself constitutes the dynamic force behind the process of accumulation and thus the very development of the state itself. Thus, when analysing the imperatives and constraints of capital accumulation both on the Rand and in Britain, both capital's articulation with the state and the latter's form become apparent. Finally, capital, when trying to reorganize its own relations of production, will mobilize the state at various stages during this reorganization from competitive capitalism to monopoly capitalism. The particularized form of the state can, therefore, be derived from an analysis of the particular phase of both capital accumulation and the mode of articulation between state and capital. (26)

British trade with South Africa, and the Transvaal in particular, had grown rapidly after the gold discoveries on the Rand. In 1890 Britain exported £9,819,033 worth of products to South Africa, and by 1900 this figure had risen to £14,778,017. (27) The burgeoning Rand market was becoming crucial to the British economy; in September 1892 the British and South African Export Gazette noted that

Board of Trade returns for July show a lamentable falling-off in the general foreign demand for British manufactures. The decrease for the month in total exports is £2,481,515, about 11 per cent upon 1891, while upon the 'piping times' of 1890 the decline is £4,857,739, or 25 per cent. These sinister statistics are largely due to the exclusion of British manufacturers from the Continental and U.S. markets by prohibitive hostile tariffs. If the present restriction of our trade continues, British politicians may have to deal with the question of preferential tariffs between the Colonies and the Mother Country as a serious economic expedient ... (28)

Unfortunately, British trade was not only pushed out of the Continental and American markets but out of the South African market as well. Again, the British and South African Export Gazette claimed that "foreign competition is being increasingly formidable; four or five years ago English firms possessed the entire machinery trade of South Africa ...". (29) Some commercial interests argued that German-owned mining houses such as Goerz Co only purchased German machinery and deliberately refused to buy British. From time to time it was tentatively suggested that British marketing techniques as well as the products themselves were not all they were generally made out to be (30), but this did not detract from the fact that by the mid-1890s there was a widely held view that Britain was being pushed out of the Rand markets and that the British government should aid commerce more overtly. That Whitehall was not necessarily averse to this had been shown as early as 1888.

In that year Sir Donald Currie of the Castle Shipping Co had alleged that the NZASM levied differential duties on British goods. (31) Although Currie's assertions were proved to be incorrect, his position as an MP and influential shipping magnate forced Whitehall to point out to the SAR the offending articles of the railway company's concession which allowed it to levy customs duties. The SAR was then obliged to force the NZASM to agree to another modification of its concession. (32)

In 1892/3 yet another entrepreneur, Sir John Stokes, managed to enlist the Colonial Office's assistance on behalf of his company, Roburite Explosives Ltd. (33) The Roburite Company had been excluded from the Witwatersrand explosives market by the infamous Lippert monopoly and Sir John's lobbying, together with pressure from the Nobel Explosives Co Ltd of Glasgow, actually obliged Lord Ripon to protest to Pretoria about the Lippert scheme. (34) Pretoria promptly capitulated, and between 1893 and 1894 dynamite could be imported more or less freely into the Transvaal under a quota system, whereby Germany, France and Britain were each allocated a percentage of the total dynamite trade. (35)

In the autumn of 1893, however, Kruger decided to set up a new dynamite monopoly, and this time the Anglo-German Nobel Dynamite Trust, of which the Glasgow plant was an integral but minor part, managed to obtain it. (36) Whitehall now found itself in the embarrassing position of having furthered the cause of Nobel's against the interests of the Roburite Co, which was once again excluded from the Rand. The company, however, continued to lobby the Colonial Office at least until 1897/8, by which time even the British government, under pressure from the mining magnates, had come to regret its earlier espousal of Nobel's interests. (37)

The advent of the Salisbury administration in 1895 was greeted favourably by those with commercial-industrial interests in South Africa, as Joseph Chamberlain was generally held to be someone aware of the problems confronting British trade overseas. By 1895-6 the USA and Germany had managed partly to exclude Britain from the highly lucrative mining machinery market - in 1898, for example, the total value

of machinery on the mines was £9,409,059. (38) Germany had also managed to corner the lighting and electrical equipment market, albeit in this instance with considerable aid from the SAR's own public works programme, which placed contracts solely with German companies. (39) Nevertheless, during the period 1895/8 German economic penetration of the Transvaal was regarded as part and parcel of that country's nefarious expansionist schemes in Southern Africa generally. The Colonial Office became obsessed with anything German south of the Limpopo, and the governments of both the Cape Colony and Natal, as well as the British Consul at Lourenço Marques, were instructed to note carefully the arrival and numbers of German nationals, ships, etc., calling at their respective ports. (40)

Chamberlain was infuriated at Berlin's overt assistance to German commerce; rumours of a subsidised shipping line between Hamburg and Delagoa Bay (which later proved to be substantially correct) were "evidence of deliberate hostility to British trade. It may not be surprising and it is not a 'casus belli' but it is useless to shut our eyes to it ..." (41) The attitude of Berlin only exacerbated suspicion of Germany's intentions in the Transvaal; in 1896 the Emperor informed Sir Frank Lascelles, the British Ambassador in Berlin, of the vast commercial interests of Germany in the Transvaal (42), while the German Foreign Minister, Marschall von Bieberstein, found it necessary to point out that "the railway from Pretoria to the Portuguese frontier had been built almost entirely with German capital. There was a feeling that the commercial interests of Germany had not been sufficiently protected by the government ..." (43)

Both Kruger and Leyds made the most of these economic interests by attempting to involve Germany politically as well in their country's relations with Britain. Chamberlain and his predecessor, Lord Ripon, had been aware of Kruger's crude flirtations with Berlin and attempted to limit the SAR's political manoeuvrability by stressing the rights of Uitlanders, suzerainty, etc., and thus simultaneously establishing in front of a wider international audience Britain's claims in Southern Africa as a whole.

Considerations of political hegemony were strengthened and mutually reinforced by demands placed upon Whitehall by commercial-industrial interests unable to secure from the SAR the necessary conditions and co-operation essential if their penetration of the Rand market was to remain successful. Already constrained by aggressive trading practices of Germany, the USA, France, etc., on the Continent and elsewhere, British commercial-industrial interests now also discovered that the world's fastest growing market in large machinery boilers, hoists, etc., was becoming increasingly competitive and that, in addition, the government there was hostile to their influence and expansion. (44) It was no surprise, therefore, that soon after the commencement of the war Chamberlain could enthuse in a meeting of the Imperial Institute about the future of British trade in South Africa:

there will be great numbers going to develop not only the mineral resources of this country which have already been opened up, but those still greater resources which we know to exist. In every kind of business occupation - manufacturing, industrial, mining - there must of necessity be great development and this country will be drawn upon for the majority ... of those who will carry out that development ... (45)

However, the dilemmas of continued capital accumulation affected not only commercial-industrial investment on the Rand. In 1895 the mining industry tried to establish a more amenable administration by organizing and financing the Jameson Raid. Both Blainey and Mendelsohn have noted that the imperatives of deep level mining, in particular, were such that if long-term capital investment was to be at all justified uncertainties about supplies of African labour, "bewaarplaatsen", Gold Law, etc., had to be removed. (46) While the validity of their assertions is beyond doubt, a more detailed analysis of the constraints and imperatives of the relations of production within mining is required in order to consider the relations between state and mining capital. The structure and form of capital accumulation, which depends on the relations of production, are crucial here.

Mining capital had to deal with unusual geological formations of the gold-bearing reef, shortages of labour, etc. In addition, however, certain mining groups such as Wernher, Beit and Consolidated Gold Fields had a financial structure which by its very nature, encouraged a high and speculative market valuation of their shares. In 1896 Wernher, Beit's holdings were valued at 50 per cent of total market value of listed Rand mining shares, and between 1887 and 1895 the company's 10 outcrop mines produced gold valued at £7,780,861, which was just short of 32 per cent of the total gold production for that period. (47)

Yet, in order to raise new working capital, new companies had to be floated and additional shares placed on the market. Periodic booms and depressions like those of 1895 and 1897/8 had made the investing public weary of "kaffirs", more so because many of the spectacular downturns had been due to over-capitalization, straightforward speculation and excessive initial expenditure.

The Economist was particularly scathing of the Rand's financial dealings; in December 1897 it took Wernher, Beit to task about its heavy capital outlay and its non-existent profits in deep level mining. (48) Short-term profit maximization was therefore essential, if only to pay out dividends and satisfy shareholders. In fact, Consolidated Gold Fields had a more novel, if unorthodox, method in dealing with dividends and the Economist's exhortations for profits; in 1894/6 the company simply paid away large sums in dividends, despite management's awareness that the "profits" during the financial year came mainly from the once-off realization of assets and that more concrete profits would only ever be available for distribution when the deep levels came into full production. (49)

On the whole, however, these companies had to work under constraints inherent in their financial structure: short-term profit maximization was needed to create new working capital and to pay out dividends, thus raising the company's speculative appeal, enabling it to raise yet further working capital by share issues and debenture loans. New working capital was particularly crucial if the deep levels were to be developed at all, though, admittedly, some of the capital for those ventures was raised, in the case of Wernher, Beit and Rand Mines Ltd, by the selling of outcrop mines between 1894 and 1895. (50) Furthermore, profit maximization entailed the coercive exploitation of the labour force, together with continual overall cost minimization and the creation of a polity willing to assist in the control of capital-labour relations.

Finally, Wernher, Beit had issued a large proportion of their original shares in companies such as Rand Mines Ltd at or below par to either the vendors themselves or their friends. The partners themselves also held the so-called "founders lieu" (as did Rhodes and Rudd in Consolidated Gold Fields), which entitled them to an additional share of the gross profits, should these rise above a certain predetermined percentage of dividend on capital issued. The main problem, however, with financial quirks such as the retention of much share capital at par by the original vendors was the creation of a highly leveraged capital structure with little mobile share capital, giving large profits to the privileged few and relatively meagre profits to the remaining many. (51) The immobility of share capital in this case made it all the more vital that capital invested within the company's structure should be utilized to its very utmost. This further enhanced the assertion that in those mining companies labouring under the above-mentioned constraints, a greater need existed to extract maximum surplus labour, manipulate the local state, and even call upon another polity for assistance in re-establishing conducive social formations and relations of production.

That the form of capital accumulation and the particular structure of the mining company indirectly associated with it can throw further light on state-capital relations is borne out, in part, when one looks at Adolf Goerz Ltd and General Mining and Finance Co Ltd. By 1895 both mining houses were closely associated with, respectively, the Deutsche Bank and the Dresdener Bank. (52) These "Grossbanken" were manifestations of a distinct phase in the capitalist relations of production in Germany, which corresponded to, and was closely associated with, the growth of monopoly

capitalism. In Germany, monopoly capital was a merger between industrial-productive capital and centralized money capital (banking capital). Both Lenin and Hilferding have charted the growth of monopoly capital in Germany, and it will therefore suffice at this juncture merely to note that from about the late 1870s the reproduction of productive capital was dominated and controlled by banking capital. (53) The centralization of credit and the monopolization of productive capital had also taken place under the benign aegis of the Bismarckian state, itself a concomitant social formation of this process. By the 1880s, however, continued capital accumulation and the need to stave off the falling rate of profit had exceeded in part the limits of the internal market, and this had forced German capital to seek investment outlets abroad. (54) The Bismarckian state encouraged this trend, partly to ensure reproduction of total social capital and also because, in the absence of any government-controlled institution through which national financial policies could be initiated in order to influence the economy, the only remaining field of action by which Berlin could hope to control and regulate economic growth and pursue anti-cyclical policies was that of foreign trade.

The rapidly expanding mining ventures of A. Goerz Ltd and General Mining, etc., were the result of the German state's interventionist direction of overseas capital investment. As early as 1886, the close links between banking capital, through which all German foreign investment was channelled, and the state were illustrated when Berlin vetoed the Disconto Gesellschaft's involvement with the NZASM. (55) When the railway company did eventually obtain financial assistance from another German bank, the Berliner Handelsgesellschaft, the German consul in Pretoria informed Chancellor Caprivi that "it must never happen again that German capital is being used for an operation which is largely run by Dutchmen ...". (56)

In 1891 the Nationale Bank der Zuid Afrikaansche Republiek Beperkt was formed, with the aid of the Berliner Handelsgesellschaft and the very active patronage of the German government which had, at first, vetoed the scheme but later advised the Handelsgesellschaft to participate. (57) The Nationale Bank's close links with German capital were further illustrated by the fact that its agent in London was the local representative of the Deutsche Bank.

The close links between German monopoly capital and Goerz and General Mining cushioned both companies against unwarranted shortages of working capital, which had plagued some of the other mining groups. The "corporate" nature of these links was further illustrated by the fact that both companies tended to purchase their stores and machinery in Germany from factories owned by the "Grossbanken" (58); the latest scientific techniques, such as the Siemens-Halske process for ore extraction (Siemens A.G. was financed by the Deutsche Bank, and its director, Georg Siemens, was a cousin of Adolf Goerz), and management skills could be appropriated through the connections and financial largesse inherent in both the "corporate" structure and the international capital connections of these mining companies. The link between monopoly capital and the mining houses, on the one hand, and between monopoly capital and the German state, on the other hand, allowed the mining houses generous access to the corridors of power in Berlin.

By 1898/9 this became vital in moulding Germany's attitude towards Britain's imperialist intentions in Southern Africa; by then, even the German mining companies had concluded that if deep level mining, with its crucial economies of scale, high cost structure, etc., was going to be profitable the Kruger regime would have to go. This was the substance of a letter by Goerz to the German Foreign Ministry in 1897. (59) During the same year the mining houses and a number of German commercial interests on the Rand first voiced their collective displeasure with the Kruger regime and the findings of the Industrial Commission. (60) Some 500 million marks of German capital had been invested on the Rand (61) and, while at least until 1897 the NZASM had been regarded in some German circles as the prime example of their country's investment in the SAR, by 1898 German mining interests had clearly become dominant. The Anglo-German agreement of 1898 (62), therefore, merely reinforced on a political level the general tenor of mining capital's message to Berlin, namely the advent of British rule in the Transvaal would not necessarily be unwelcome to German economic interests.

Finally, the British government's attitude towards the Transvaal was not just influenced by the need to ensure the uninterrupted reproduction of total social capital abroad, but was also fuelled by a persistent clamour on behalf of the British banking community for more gold bullion. (63) The call for more gold specie as an underpinning of Britain's dischargeable liabilities and debts had been pushed to the centre of the economic stage by the Baring Crisis of 1890. The spectacular defaulting of Baring Bros, which at one stage had been the second most powerful financial institution in Britain after the Bank of England, had severely shaken the City, and throughout the remainder of the decade successive Chancellors of the Exchequer, as well as the well respected Bankers Magazine, called for "a separate stock of gold with which in times of emergency the Bank of England would be able to come to the rescue of the mercantile community generally". (64)

Baring Bros had collapsed because it had been unable, in a time of impending financial crisis in Argentina, to liquidate its assets quickly enough in order to meet immediate liabilities. The main problem, which affected most banks though, ironically enough, not Barings, was the huge discrepancy between liabilities and assets; this was particularly crucial as, between 1879 and 1889, the liabilities of all the largest banks had increased from £126 million to £170 million, while cash balances in the hands of the Bank of England had only increased by £1,300,000 from £16,300,000 (1879) to £17,500,000 (1889). (65)

The proportion of cash to liabilities had fallen during these same ten years from a ratio of 12.9 to 10.3 - a fall in proportion of one-fifth on the whole reserve - and the Bank clearly no longer commanded the same proportionate resources as it had previously. G. J. Goschen, the Chancellor of the Exchequer, was quick to articulate the fears and perceived needs of the banking fraternity, while he noted, correctly, that "we are not only faced by a banking danger. The mercantile and producing classes were threatened as well ..." (66) He then stated:

now, clearly what is necessary to get men out of a difficulty when they have undertaken more liabilities than they can meet, is to have cash. It is cash that is wanted. In the case of foreign liabilities ... bank-notes are of no sufficient avail. What you need is gold which will pay your liabilities in foreign countries. (67)

Any noticeable increase in the Bank of England's stock of gold was constrained by the fact that total world output of gold had been declining steadily, at least until the discoveries on the Rand. (68) Even with the Rand's contribution of new gold, general monetary instability continued throughout the 1890s, with the bimetallic debate raging as fiercely as ever both in England and, more importantly, in the USA at least until 1896. (69)

In 1897 the Bank of England was confronted with the question whether Japan, which had just adopted the gold standard, was likely to withdraw its huge deposits of bullion from the Bank. (70) Throughout this period, also, the demand for the gold standard in India was increasing, so that by 1899 The Statist argued that "our money market will be seriously disturbed if India begins to accumulate a considerable gold reserve ...". (71)

In the same year the Bankers Magazine noted that "there has been a special feature in the gold market during the last few years of purchases of the metal on Russian account which cannot be considered otherwise than exceptional and extraordinary". (72) It was not surprising, therefore, that in the months leading up to the Boer War the City's clamour for gold had reached cacophonous proportions, which reached their crescendo in June with Hicks Beach, the Chancellor of the Exchequer, again calling for a second reserve of gold. (73)

Milner, himself a disciple and assistant to Goschen in the 1880s, cannot have been unaware of the economic implications of a British Rand for Britain's gold

reserves; once the war had broken out, however, it was left to the Bankers Magazine to state that "the war had been estimated at its true value by all other nations", to which the half-yearly report of the Union Bank of London merely added "... exceptionally peaceful relations existed between Britain and the other industrial powers in the World ...". (74)

During the Anglo-Boer war Milner continuously stressed the need for close co-operation and consultation between mining capital and the British state. (75) He was particularly keen that the mineowners should be allowed to combine further to depress wages; the government's role in this would be merely to assist and enforce the mining industry's labour needs to the full. In 1902, for example, Milner was quick to accede to the Chamber's requests not to make the new Gold Law retrospective and to allow the mining companies to deduct war costs from the next year's tax liabilities. Indeed, the Transvaal's new Colonial Secretary and member of Milner's Kindergarten, Patrick Duncan, who had previously lowered the controversial duty on imported dynamite, noted that "whatever stimulates the mining industry is an indirect benefit to the general community". (76)

While the Milner administration's commitment to the mining industry was total and unswerving, Whitehall had nevertheless decided that the Transvaal should pay a war tribute in return for its liberation from the Boer oligarchs. In January 1903 Chamberlain visited the Rand and, following lengthy conversations with assorted mining magnates, it was agreed that a war tribute should be paid in three separate instalments of £10,000,000 each. These instalments would be paid by the floating of local Transvaal loans at 4 per cent and could be subscribed only by the mining companies. (77)

Apparently, the Chancellor of the Exchequer was aghast at Chamberlain's munificence; these loans would be essentially gilt-edged, and at 4 per cent they would be an extremely profitable investment. The most revealing comment on Chamberlain's negotiations with the mining magnates, however, came from Drummond Chaplin of Consolidated Gold Fields. He argued that the loans would be a safe and very valuable means of investing surplus capital profitably, which implied that, in 1903, after several years of severely restricted or interrupted mining, South Africa's second largest mining company in terms of capital expended evidently possessed enough "excess" uninvested capital. (78) However, this does not deny that by 1903 the mining industry was also operating under severe constraints. Rapidly rising costs, of which the problems of labour supply played a major but not exclusive part, as well as a general downward movement in the average grade of gold, severely limited the mining industry's financial flexibility. The demand for Chinese labour was the direct result of trying to minimize labour costs by stabilizing at least part of the labour force on the deep level mines in particular. (79) Nevertheless, Chaplin's remarks on the apparent availability of surplus capital, even though most of that must have been absorbed in the years thereafter by rising costs, etc., were indicative of a change in the financial structure of mining which became more pronounced only after 1905/6.

As early as 1896, in the gloomy aftermath of the "kaffir boom" of the previous year, Wernher, Beit had induced the Banque Française de l'Afrique du Sud to take up and promote their shares on the French exchanges. By 1899 half of the Bank's assets of 17,500,000 francs was in mining shares or debentures. (80) Wernher even noted in 1899 that "in another two years the bulk of the best shares will be in France ...". (81) Some four years later, in 1903, Wernher, Beit set up African Ventures Syndicate "with a view of steadying the market and regaining the confidence of the Transvaal mines ...". (82) German and French banks were allocated 1034 shares out of a total of 2000. In 1905, however, African Ventures was absorbed by General Mining and Investment Co Ltd; here, however, the German and French banks were less predominating as the "corporate" structure was more broadly based. (83)

It was during this period that the mining industry generally was also moving into secondary industry, such as mining machinery manufacture, dynamite, etc. In 1905, for example, de Beers Consolidated Mines and Consolidated Gold Fields set up a

separate dynamite company, The Cape Explosives Works, which had been manufacturing dynamite at Somerset West since early 1903 and which now closely co-operated with the British South African Explosives Co Ltd of Modderfontein in the Transvaal. (84) The latter company, of course, was the reconstituted heir of the old SAR dynamite monopoly.

The move into ancillary and secondary industries by the mining houses was symptomatic of a new phase in their financial and structural development. It corresponded in part to the earlier growth of monopoly capital in Germany in that investment companies or trusts, with their concentrated economic ownership, controlled several diversified production units. This allowed the investment company to raise new working capital within the perimeters of its own "corporate" structure. In 1906 forty-one of the largest mining companies paid out £5,200,000 in dividends to holders of £22,500,000 worth of issued share capital of which, in turn, an astonishing £16,000,000 was in the form of vendors' shares. A further 37 mines in the development stage only had issued £17,500,000 in share capital, of which £11,000,000 had been taken up by the vendors themselves. (85) In other words, the structural problems of little mobile share capital discussed earlier in this paper remained, unless the mining industry, with its diversified investments in secondary and ancillary industries, was able to raise sufficient additional working capital within the new "corporate" structure. This had the distinct advantage that any financial dependence upon either the mercurial vagaries of the stock-holding public or the strings of financial institutions like the banks could be minimized; the pressure to maximize short-term profits, if only to pay out dividends, was also lessened. That a broadly based structure, incorporating various units of production, was economically sound, was illustrated by the development of the financial and productive units of the Wernher, Beit group of companies. In 1910, H. Eckstein Co, together with Wernher, Beit, were absorbed by Central Mining and Investment Co Ltd, which by then had branched into coal mining, machinery workshops, etc. (86)

Throughout the period after 1900 mining capital co-operated closely with the state, if only because in order to extract maximum surplus labour extra-economic and coercive measures were needed, which could only really be enforced with the aid of the state. The importation of Chinese labour, in particular, was done, initially at least, with the enthusiastic backing of the government; the state had to be mobilized by capital in order to mould and reconstitute its relations of production. Moreover, as the state reacts to the imperatives of the process of production and reproduction (as a form it is separated from the actual and immediate process of production), the Milnerite regime was only able to create the necessary social formations and infrastructural conditions for uninterrupted reproduction of capital; in this analysis the advent of self-government in the Transvaal and the subsequent political domination of Het Volk did not signal the demise of Milnerism as a particularized form of apparent state obeisance to capital, but its crowning success. By 1907, the Afrikaner bourgeoisie had been successfully co-opted by mining capital, welding the landed interests of the former to the framework of the state, which state-capital articulation had created in order to ensure continued accumulation. The Botha-Smuts administration's behaviour during the 1907 strike aptly illustrated this.

The development of the function and the form of the state, both in 1907 and after 1910, was the result of the historical development and structure of the process of accumulation; after the war, the mining industry needed the British state, committed as it was to a kind of global management of its economic interests, to reconstitute its relations of production and to allow it (capital) to restructure its financial operations generally. By 1910 mining capital had become more broadly based, financially secure and able to exert additional domestic economic pressure. Its imperatives, however, had become correspondingly more demanding, with South African Railways and Harbours Board, a unified tariff structure, and more total control over supplies of African labour from all over Southern Africa, etc. As such, a more unified and administratively better organized polity - the Union - was required. (87) Again, the form of the state was derived from the more demanding and enlarged relations of production (the different units of production within the new "corporate" structure were, of course, exhibiting autonomous and even contradictory labour processes), which, in time, would call for yet more coercion and control by the state, and as such the stage for closer state-capital articulation was set.

Notes

- (1) Shula Marks and A. Atmore, "The Imperial Factor in South Africa in the Nineteenth Century: towards a reassessment", Journal of Imperial and Commonwealth History, Vol. III, No. 1 (October 1974), 128.
- (2) Karl Marx, Preface to Critique of Political Economy (London, 1976), 220.
- (3) This analysis of state-capital relations owes much to the German "state derivationist" debate. A major contributor to both this debate and my own understanding of the function and form of the state is Joachim Hirsch: see J. Hirsch, "The State Apparatus and Social Reproduction. Elements of a Theory of the Bourgeois State" in John Holloway and Sol Picciotto (eds), State and Capital: a Marxist Debate (London, 1978), 57-107. Also J. Hirsch, Staatsapparat und Reproduktion des Kapitals (Frankfurt, 1974); S. Clarke, "Marxism, Sociology and Poulantzas' Theory of the State", Capital and Class 2 1977, 1-31, on the general problem of dealing with the institutional separation of the state from capitalist enterprise.
- (4) See Table 1.
- (5) F. A. Johnstone, Class, Race and Gold (London, 1976), 17-20. Also P. G. Richardson, "The Provision of Chinese Indentured Labour for the Transvaal Gold Mines 1903-1908" (unpubl. PhD thesis, London, 1978), 19-22.
- (6) CO African (South), 543, 65-66. J. P. Fitzpatrick, Transvaal from Within (London, 1899), 96-97.
- (7) E. P. Rathbone, "Some Economic Features in Connection with Mining on the Witwatersrand Gold Fields, South African Republic", Transactions of the Institute of Mining and Metallurgy (1896-7), V, 56.
- (8) Standard and Diggers News, 25 January 1895, 2; ibid., 20 December 1895, 4.
- (9) Chamber of Mines, Annual Report for the Year 1889 (Johannesburg, 1890), 16.
- (10) J. J. van Helten, "German Capital, the Netherlands Railway Company and the Political Economy of the Transvaal 1886-1900", Journal of African History, XIX, 3 (1978), 369-390.
- (11) J. P. Fitzpatrick, 69.
- (12) Industrial Commission of Enquiry Report (Johannesburg, 1897), Mr Albu's evidence, 51.
- (13) Cmnd 1844, 24; also Indus. Comm. of Enquiry Report, 200.
- (14) Chamber of Mines, Annual Report for the Year 1890, 30; also Memorie ven den Directeur NZASM, Archief Amsterdam (hereafter NZASM A'dam), No. 4, 29.
- (15) NZASM A'dam, Corresp. 1890-95; Rapport van den Regeeringscommissaris, 10 August 1893; see Table III.
- (16) This consortium consisted of the Berliner Handelsgesellschaft, Robert Warschauer, Cie (both of Berlin), and Labouchere, Oyens, Cie, of Amsterdam. See Van Helten, "Dutch Political and Economic Influence in the Transvaal, 1886-1900" (MA thesis, SOAS, 1976), 9-12.
- (17) CO 537/133, Chamberlain to Greene, 13 March 1897; J. P. Fitzpatrick, op. cit., 66; "Handy Notes on South Africa for the Use of Speakers and Others" in Imperial South Africa Association Pamphlet I (1901), "the company and the republican government are indistinguishable ..."
- (18) CO 417/89, Lascelles to Salisbury, 1 Jan. 1896; CO 545/7721, Foreign Office to Colonial Office; CO 417/218, Greene to Goodenough, 28 April 1897.
- (19) Milner MSS 325/2, f. 10. Evans to Milner, 12 June 1897, enclosing the "Memorandum on Estimate of the unnecessary burden borne by the Rand Gold Mining industry and which the Transvaal Government could remove were it so disposed".
- (20) CO Africa (South), 516,682. The Law Lords were not quite sure whether the monopoly did constitute an infringement of the Convention if, as Pretoria claimed, it was a state monopoly and not one granted to individuals. Milner MSS 325/1, f 194-7, Reitz to Greene, 9 March 1899. CO 417/247, Minute by M. W. Just, 5 January 1899, on Butler to Chamberlain, 12 December 1898.

- (21) CO 417/259, Minute by Chamberlain on his meeting with Lord Harris of Consolidated Gold Fields, 14 March 1899, on Milner to Chamberlain, 11 March 1899. CO 537/134, Minute by Selborne, 9 March 1898.
- (22) CO 417/26, Currie to Colonial Office, 3 January 1888; Milner MSS 325/1, f. 99, Roburite Explosives Co Ltd to Colonial Office, 30 December 1896.
- (23) J. v. d. Poel, Railway and Customs Policies in South Africa 1885-1910 (London, 1933), 87; CO African (South), 571, 203.
- (24) The Bankers Magazine, Vol. LXIII (1897), 214; and Vol. LXVIII (1899), 148-150.
- (25) See below, p. 7.
- (26) J. Hirsch, "The state apparatus etc." in Picciotto and Holloway, 66, passim.
- (27) See Table II.
- (28) British and South African Export Gazette (hereafter BSAEG), Vol. I, No. 2 (1892), 46.
- (29) BSAEG, Vol. I, No. 2, 43.
- (30) Cmnd 9093, Report on the Trade, Commerce and Gold Mining Industry of the SAR for the year 1897, 33-4.
- (31) CO 417/26, Currie to Secretary of State for Colonies, 3 January 1888. Another shipping company, the Union Steam Shipping Co Ltd, complained of differential rates. NZASM A'dam, Speciaal Archief, Union Steam Shipping Co to Bake, 22 March 1895.
- (32) NZASM A'dam, Corresp. 1887-1890, Vanity Fair, 18 August 1888.
- (33) CO 417/109, Roburite Explosives Ltd to E. Fairfield, 25 May 1893; CO 417/123, Roburite Ltd to Fairfield, 19 June 1894.
- (34) CO 417/69, Nobel Explosives Ltd to Lord Knutsford, 1 July 1891, with minute by Wingfield "inform the Company we have referred the matter to the High Commissioner ...".
- (35) A. P. Cartwright, The Dynamite Company. The Story of African Explosives and Chemical Industries Ltd (Johannesburg, 1964), 48-9; CO 417/88, Fairfield to General Manager, Nobel Explosives Co Ltd, 19 November 1892: "... a provisional arrangement under which British importers are at liberty to import up to 15,000 cases of dynamite ... has been arranged."
- (36) Cmnd 623, Report of the Transvaal Concessions Commission (1901), 70-1.
- (37) CO 417/237, Milner to Graham, 18 December 1898: "I really cannot see how some action on the part of HMG can now be avoided. I think we should try to stir up the Roburite Company." CO 417/259, Butler to Chamberlain, 17 January 1899: "We ask for the cancellation of the monopoly and a free market in explosives ..."
- (38) BSAEG, Vol. IV, No. 1, March 1896: "German manufacturers are accordingly straining every nerve to increase the hold which they possess upon the important trade in mining machinery and materials created by the wonderful expansion of the Witwatersrand."
- (39) CO 417/182, Department voor Publieke Werken. Specificatie voor het leveren, monteren, en voor geregeld gebruik en in gang stellen der stoommachine, electro-motoren, etc voor de Staatsdrukkerij te Pretoria, 6 November 1895. Er mag slechts een kontinentaal fabrikaat gebruikt worden ... d.w.z. S#chsische Machinen fabrik, Karl Kuhn, etc (*my italics*); BSAEG, Vol. II, May 1894: in an article, "Tenders for Government Supplies", the magazine noted that "the whole of the plant and material required for the continuation of the railway from Charlestown to Jo'burg will be of German origin and workmanship".
- (40) CO 417/184, Memo from Graham to Fairfield, 14 September 1896. CO 417/182, Castle Steamship Co Ltd to Dawkins, 3 June 1896; CO 417/182, Memo from Bramston to Fairfield, 12 June 1896. CO 417/220, Milner to Chamberlain, 29 July 1897.
- (41) CO 417/182, Goodenough to Chamberlain, 19 June 1896, Minute by Chamberlain, 27 June 1896.
- (42) CO 417/89, Lascelles to Salisbury, 1 January 1896.
- (43) CO 417/89, Lascelles to Salisbury, 2 January 1896.

- (44) CO 417/223, Minute by Lambert, 10 December 1897: "the S.A.R. can penalize British trade in defiance of the Convention ..."; CO 417/217, Greene to Goodenough, 5 April 1897.
- (45) J. Chamberlain's speech at the Imperial Institute in March 1900, quoted in W. Bleloch, New South Africa. Its value and development (London, 1901), 239.
- (46) G. Blainey, "Lost Causes of the Jameson Raid", Economic History Review XVIII (1965), 350-66. And R. Mendelsohn, "Blainey and the Jameson Raid: the debate renewed", CSP. The Societies of Southern Africa Vol. 8, ICS.
- (47) A. H. Jeeves, "The Rand Capitalists and Transvaal Politics 1892-1899" (unpublished PhD thesis, Queens University, Ontario, 1971), 156.
- (48) The Economist, 18 December 1897.
- (49) R. Mabson, The Statist's Mines of the Transvaal (London, 1904), 131; African Review, 14 November 1896, 31 December 1896.
- (50) R. Mendelsohn, op. cit., 3-4.
- (51) See R. Kubicek, "Finance Capital and South African Goldmining 1886-1914", Journal of Imperial and Commonwealth History, Vol. III, No. 3 (1975), 386-395.
- (52) C. S. Goldmann, South African Mines (London, 1895-6), Vol. I, 182; R. Mabson, op. cit., 115, 342 and 561; BSAEG, Vol. IV, March 1896; Paul Fmden, Randlords (London, 1935), 215-6.
- (53) V. I. Lenin, Imperialism: the highest stage of capitalism (Moscow, 1975), 29-43; R. Hilferding, Das Finanzkapital (Frankfurt, 1960), Ch. 1; Nicos Poulantzas, Classes in Contemporary Capitalism (NLB, 1976), 130-138.
- (54) Hans-Ulrich Wehler, "Industrial Growth and Early German Imperialism", in E. R. J. Owen and R. B. Sutcliffe (eds), Studies in the Theory of Imperialism (London, 1972), 82.
- (55) P. J. van Winter, Onder Kruger's Hollanders (Amsterdam, 1937), Vol. 1, 166: "als vor einige Monaten die Disconto versucht hat die Regierung zu officiösen Unterstutzung unserer Demarches ... wurde die abgewiesen".
- (56) Herff to Caprivi, 16 November 1890, Handers-und Schiffahrtsverhandlungen. IX.
- (57) Winterfeldt to Oyens, 30 November 1888. Dossier Oyens Nederlandsche Handels Maatschappij Archief (hereafter Oyens NHM): Ich habe entnommen dass unserer Regierung die Beteiligung deutscher Firmen an der Bank sehr erwünscht sein würde auch wenn dieselbe ihren Sitz nicht in Deutschland erhielte ...".
- (58) BSAEG, Vol. IV, October 1895: "There is no doubt that the destination of these orders of machinery which they receive has been influenced not by the superior efficiency of their machinery but by the patriotism [sic] of the German financiers who have control of the expenditures of the mines." BSAEG, Vol. IV, March 1896: "the General Mining and Finance Co Ltd is about to form a subsidiary company to represent large industrial concerns in Johannesburg. The firms embraced by this scheme will be those of Friederich Krupp Grusonwerk, of Magdeburg, Sachsische Maschinen Fabrik, Chemnitz, Union Elektrizität, Berlin, etc."
- (59) Goerz to Auswartiger Amt, 17 December 1897, Handels und Schiffahrtsverh. IX
- (60) CO Africa (South) 543, 340; CO 417/250, Minutes by Graham, Just and Lambert, 1 July 1898; van Kretschmar to Bake, 23 October 1897, NZASM A'dam, Corresp. 1895-1900: "Goerz was disappointed at the meagre results of the Industrial Commission Report ..."
- (61) CO 417/89, Lascelles to Salisbury, 1 January 1896.
- (62) R. Jeffrey Botler, "The German Factor in Anglo-Transvaal relations", in P. Gifford and W. Louis (eds), Britain and Germany in Africa (London, 1967), 205-6.
- (63) P. H. Trewelha, "The Development of World Economy and the War in South Africa 1890-1910" (unpubl. MA thesis, Sussex, 1970), IV (iv), 1-6.
- (64) "Our Cash Reserves and Central Stock of Gold", a speech at the Leeds Chamber of Commerce, January 18 1891, in Viscount G. J. Goschen, Essays and Addresses on Economic Questions 1865-1893 (London, 1915), 106.
- (65) Ibid., 112.

- (66) Ibid., 114.
- (67) Ibid.
- (68) Trewelha, op. cit., III (iv), m: "From 1851-1860 to 1881-90 world gold production declined from an annual average of £26.6 million to £21.2 million." R. Triffin, Our International Monetary System, Yesterday, To-day and Tomorrow (New York, 1968), 25: "during the first gold avalanche of 1849-1872 81 per cent of all new gold was dispersed (my italics) among public and banks, only 19 per cent being accumulated in reserves. These proportions were nearly exactly reversed in the leaner gold years from 1872 through to 1892, 82 per cent of new gold feeding the increase of central reserves; after 1893 the proportion absorbed by central reserves declined to 66 per cent ..."
- (69) Eric Rosenthal, Gold, Gold, Gold (London, 1970), 196.
- (70) The Statist, 5 August 1899; Bankers Magazine, LXIX (1900), 747.
- (71) The Statist, 29 April 1899.
- (72) Bankers Magazine, LXVIII (1899), 4.
- (73) Hicks Beech's speech at Lord Mayor's Banquet, 28 June 1899, in Bankers Magazine, LXVII (1899), 370.
- (74) P. Trewelha, op. cit., IV (i), 5.
- (75) CO 417/292, Milner to Roberts, 5 May 1900: "it's of real importance to oblige the Chamber of Mines as they have been most reasonable and helpful throughout ..."
- (76) Duncan Mss, Duncan to Milner, 14 July 1902, quoted in Donald Denoon, "Capitalist Influence and the Transvaal Government during the Crown Colony Period 1900-1906", Historical Journal, XI, 2 (1968), 307.
- (77) Denoon, op. cit., 313.
- (78) Ibid., 314.
- (79) P. G. Richardson, op. cit., 45-62.
- (80) The Statist, 27 May 1899.
- (81) Wernher to Rouliot, 24 February 1899, RMSA, quoted in Kubicek, op. cit., 390.
- (82) Kubicek, op. cit., 390.
- (83) "Rand Mines, Shareholding - France, Germany and Elsewhere, 31 Dec. 1906", in Kubicek, op. cit., 391.
- (84) A. P. Cartwright, op. cit., 118.
- (85) Report and Minutes of Evidence of the Transvaal Mining Industry Commission (Pretoria, 1908), 40-1.
- (86) Archives of H. Eckstein, Co (HE), 207, File 4, No 1.
- (87) L. M. Thompson, The Unification of South Africa 1902-1910 (London, 1961), 284-291.

Table 1

The Output of Transvaal Gold Mines as Proportion of the Total World Output 1886-1905

<u>Year</u>	<u>World Output (fine ozs)</u>	<u>Transvaal Output (fine ozs)</u>	<u>% of World Output</u>
1886	5,136,000	34,710	0.16
1888	5,351,000	227,749	4.27
1893	7,619,000	1,290,218	16.93
1898	13,878,000	3,823,367	27.55
1903	15,853,000	2,972,897	18.75
1905	18,396,000	4,909,541	26.69

Source: Union of South Africa, Annual Report of the Transvaal Government Mining Engineer for the Year Ending 30th June 1910.

Table II

The following tables (A and B) show the Increase of German Trade and the Relative Decline of British Trade with South Africa in the 1890s.

<u>A</u>	<u>1893 (£)</u>	<u>1895 (£)</u>	<u>1897 (£)</u>
German-South African trade (incl. the SAR)	662,665	828,617	1,054,226
German-SAR trade	94,086	194,810	339,452
SAR-German trade percentage to total German-South African trade	14	23.5	32

Source: British and South African Export Gazette, April 1898, May 1896.

<u>B</u>	<u>1891 (£)</u>	<u>1895 (£)</u>	<u>1900 (£)</u>
British trade with South Africa (incl. the SAR)	8,819,033	12,215,907	14,778,017
Percentage to total imports	80.3	75.9	64.05
Foreign trade with South Africa, e.g. Germany, France, USA, Belgium, Holland	654,455	2,188,247	3,668,087
Percentage to total imports	5.3	13.7	15.9

Source: British South African Export Gazette, June 1901.

Table III

A Selected Extract of an Analysis of Working Costs for the Whole Rand from the Mining Engineer's Report, 1895.

	£s	
White Labour	2,400,000	34.3
African Labour	2,000,000	28.6
Coal	700,000	10.0
Explosives (Dynamite, Gelatine)	600,000	8.6
Cyanide	240,000	3.4
	<u>5,940,000</u>	<u>84.9</u>
Remainder (i.e. food, tools, steel, cement, etc.)	1,060,000	15.1
	<u>7,000,000</u>	<u>100.0</u>

Source: Evidence and Report of the Industrial Commission of Enquiry (Johannesburg, 1879), 200.