



DEPARTMENT OF OVERSEAS TRADE.

Economic Conditions
IN
BRAZIL

November, 1929.

REPORT

BY

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Commercial Secretary, H.M. Embassy, Rio de Janeiro.

TOGETHER WITH

REGIONAL REPORTS BY H.M. CONSULAR OFFICERS

AT

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DEPARTMENT OF OVERSEAS TRADE.

COMMERCIAL REPRESENTATION ABROAD.

To foster British overseas trade, the Department has developed and controls the following Services of Commercial Intelligence Officers:—

1. IN THE EMPIRE.

The Trade Commissioner and Imperial Trade Correspondent Services.

At the present time there are 15 Trade Commissioners' offices. These are situated, four in Canada (Montreal, Toronto, Vancouver, Winnipeg); two in Australia (Sydney, Melbourne); South Africa (Capetown, Johannesburg); and India (Calcutta and Bombay—to cover also Ceylon); and one each in New Zealand (Wellington), Irish Free State (Dublin), British East Africa (Nairobi), British West Indies (Trinidad), and Malaya (Singapore).

The Trade Commissioners in the Dominions have the assistance of Imperial Trade Correspondents at a number of important centres.

In various parts of the Empire in which at present there are no consulates, there are correspondents with whom the Department deals direct.

2. IN FOREIGN COUNTRIES.

(a) The Commercial Diplomatic Service attached to the British Diplomatic Missions.

This service consists of 36 officers who are stationed in all the more important foreign markets of the world. The members of the Commercial Diplomatic Service are styled "Commercial Counsellors" in the highest grade, and "Commercial Secretaries" in the two lower grades. They are members of the staff of the British Embassy or Legation in which they serve.

The Commercial Diplomatic Officer has general supervision over the commercial work of the consular officers in his area and, with the co-operation of these two services, a complete network of Government commercial representatives is thrown over foreign countries.

The Department is represented in Brazil by Mr. S. G. Irving, Commercial Secretary, Rio de Janeiro.

(b) The British Consular Service.

Particular attention has been given to the commercial side of consular work since the re-organisation of the service. In certain countries where no Commercial Diplomatic Officer is stationed the senior Consular Officer undertakes duties of a similar character.

Members of British firms are urged to call upon the Department's representative abroad when they visit an overseas country. It is also important that they should make a point of their representatives abroad keeping in close touch with the Department's officers.

NOTE.

It should be understood that the views expressed in annual reports are the views of the officers themselves, and are not necessarily in all respects those of the Department.

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COMMERCIAL SUMMARY.

<i>Area</i>	3,300,000 sq. miles.
<i>Population</i> (Government estimate, 31st December, 1928)	39,103,855
<i>Total External Debt</i> (October 1st, 1929) (including States and Municipalities)	£244,700,770 (approx.)
<i>Total Notes in Circulation</i>	£83,000,000 (equivalent)
<i>Exchange Rate</i> : Paper Milreis	5·57/64d.
Gold ,,	27d.
1 Conto = 1,000 Milreis, or approximately £25.	
<i>Federal Government Revenue</i> , 1929 estimates	£53,921,230 (approx.)
,, ,, <i>Expenditure</i> ,, ..	£51,643,244 ,,
<i>Imports</i> , 1928	£90,669,000
,, ,, <i>from United Kingdom</i>	£19,518,764
<i>Exports</i> , 1928, <i>total</i>	£97,426,000
,, ,, <i>Coffee</i>	£69,701,000
<i>Railway Mileage</i> , 1929	19,967 miles
<i>Road</i> ,, ,,	44,400 ,,
<i>Agricultural Production</i> , 1928, estimated	£178,650,000
<i>Industrial Production</i> estimated (manufactures)	£185,000,000
<i>Water Power</i>	25,000,000 h.p.
,, ,, <i>developed</i>	500,000 h.p.

HINTS FOR TRAVELLERS.

As a rule the best time for travellers to visit Brazil is during the winter (May-October). Not only is this season the best from a health point of view, but it is also the time when dealers order stocks, in anticipation of the most active retail selling period, which is during the summer. Firms interested in Government tenders are advised to visit Brazil in the early part of the year, between January and April, when Government Departments are engaged in working out their programmes of expenditure.

Good passenger services to Rio de Janeiro from England are maintained by the Royal Mail Steam Packet Co., from Liverpool and Southampton, the Blue Star Line and the Nelson Line, from London. The Blue Star ships have no second-class. The return first-class minimum fare to Rio de Janeiro is from £100 to £140 approximately, according to the ship.

The principal towns of Brazil which should be visited, in order of importance are :—

- (a) Rio de Janeiro, São Paulo.
- (b) South—Porto Alegre, Curityba.
- (c) Centre—Bello Horizonte.
- (d) North—Bahia, Pernambuco, Ceará, Maranhão, Pará, Manáos.

The minimum time required by a commercial traveller or representative, including the journey from Rio de Janeiro, is as follows :—

- (a) 4 weeks.
- (b) 4 „
- (c) 4 days.
- (d) 3 months.

Travellers usually take a full range of samples to the first two above-named cities (a), and a condensed selection to the others. While visiting São Paulo the opportunity should be taken of making flying visits to some of the towns within easy reach by rail, such as Campinas.

Communication between Rio and São Paulo can be either direct by rail (one night's journey; good sleeping accommodation) or by steamer and rail, via Santos. All the other towns mentioned above are best reached by sea, except Bello Horizonte (rail journey of 36 hours; sleeping cars obtainable) and Curityba, to which access is by sea to Paranaguá and a short rail journey.

There are two important steamship companies operating passenger services on the coast of Brazil :—the *Lloyd Brasileiro*, which is partly Government-owned, and the *Cia. Nacional de Navegação Costeira*, a privately-owned steamship line. The larger ports are also visited by foreign steamship lines, which are allowed to carry passengers coastwise, but not cargo.

Railway fares vary on the different systems, no universal rate having been adopted. It may be assumed that fares are as a whole cheaper than in the United Kingdom. All baggage by rail must be paid for. Meals are usually provided in restaurant cars on long-distance journeys, at approximately hotel prices. Sleeping berths are charged for by a supplement added to the ordinary fare. Tips are a great aid to smooth travelling.

Tram fares in Brazil are generally below those of the United Kingdom, fares of Rs.0\$100 (½d.) being common. The usual minimum fare is Rs.0\$200 (1d.). Taxis commence to mark at Rs.2\$000 (1s.), and distance charges are reasonable. The time rate in Rio de Janeiro is Rs.15\$000 (7s. 6d.) an hour. Auto-omnibus lines are common in all the principal centres of Brazil, at prices from two to three times those of the tram services. Rio de Janeiro is especially well served by 'buses.

At the best hotels in Rio and São Paulo a traveller can live at from £2 to £2 10s. per day, exclusive of extras. Second-class hotels may run to £1 or £1 10s. per day. Hotels at other large towns compare with the second-class in Rio de Janeiro in both price and comfort. In the interior the accommodation is not generally good, and prices are about that of the second-class hotels in Rio de Janeiro. A list of suitable hotels is appended. As regards tipping, the rules applicable to travelling in Europe will serve in Brazil. Ten per cent. is a workable basis. A sympathetic treatment of servants and hotel employees goes a long way.

An allowance of £1 per day is suggested for entertaining and incidental expenses.

Commercial travellers' samples, if of no commercial value, are exempt from import duty. Samples of any value must be accompanied by a consular invoice and a consular certificate giving a detailed description. Temporary free admission may be obtained against security, which may take the form of a bond or a deposit of the duties, but such bond or deposit can only be released by presenting a certificate that the samples have arrived at their next destination. The ratification by the Brazilian Government of the Geneva Convention for the simplification of Customs formalities may lead to the removal of this difficulty, but under the existing conditions it is the practice of some travellers to pay the duties and sell their samples on the completion of their visit, having first arranged for a new set to be sent ahead to their next destination.

All commercial travellers to Brazil should travel first-class on the steamer in order to avoid emigrant restrictions, which apply to second and third-class passengers. On arriving at an hotel visitors should register their names in order to comply with police regulations. This is not always enforced, but may be so, especially in up-country towns. Vaccination certificates are continually asked for at the ports; by rail they are not needed. To avoid possible complications British subjects travelling in Brazil should register at the British Consulate, where there is one.

Winter climatic conditions are similar to those of European summer in the centre and south of Brazil. In the north winter is a season of tropical rains. Summer conditions all over Brazil are tropical, with a damp heat ranging between 80 and 100 degrees Fahrenheit (October-March). Only the lightest clothing, such as palm beach or white drill, and straw hats or Panamas, is suitable for summer. For winter in the south light summer suitings and felt hats are usual. Light footwear should be worn, as the hot pavements tire the feet. All clothing in trunks, boxes, etc., should be protected by naphthalene balls. Airtight trunks are to be preferred.

The Associação Commercial decreed the following Bank holidays for 1929, in addition to the Monday and Tuesday of Carnival, Ash Wednesday (up to midday), Thursday of Holy Week (from midday), and Good Friday :—

1st January	National holiday and Saint's Day.
20th "	Municipal holiday (Rio de Janeiro).
24th February	National holiday.
21st April	" "
1st May	" "
3rd "	" "
13th "	" "
1st July	Bank holiday (balance of accounts).
14th "	National holiday.
7th September	" "
20th "	Municipal holiday (Rio de Janeiro).
12th October	National holiday.
30th "	" " (empregados do commercio—half-day).
2nd November	" "
15th "	" "
25th December	" "

*List of Hotels in the principal Towns of Brazil.**Rio de Janeiro—*

- Gloria Hotel.
- Copacabana Palace Hotel.
- Palace Hotel.

São Paulo—

- Esplanada Hotel.
- Hotel Terminus.

Bello Horizonte—

- Grande Hotel.

Porto Alegre—

- Grande Hotel.

Curitiba—

- Grande Hotel.

Bahia—

- Grande Hotel.
- Hotel Meridional.

Ceará—

- Hotel de France.

Pará—

- Grande Hotel.

Pernambuco—

- Palace Hotel.
- Recife Hotel.
- Hotel do Parque.

Maranhão—

- Hotel Central.

REPORT on ECONOMIC CONDITIONS in BRAZIL.

GENERAL SURVEY.

The development of Brazil since the establishment of the Republic has been so rapid that a continually expanding prosperity has come to be regarded as a matter of course. It is liable to be forgotten when things are good that this development has been accompanied by a succession of so-called crises, and when things are bad it is liable to be forgotten that the recurrent so-called crises have not prevented the development. Any pause in the ascending figures, or temporary difficulties affecting trade, tend to distract attention from the underlying facts whenever some temporary excess or error is followed by the necessary adjustment which the laws of economics impose. In the twelve months since October, 1928, business in the capital and the principal cities has been conducted in an atmosphere of depression and pessimism. Innumerable articles have appeared in the press on "the crisis," its causes, consequences and remedies. It is true that a large number of failures and compositions have occurred, and that bank accommodation has been increasingly difficult to obtain. Yet the imports of motor cars in the first six months of 1929 showed an increase of 98 per cent. compared with the first half of the year before, which had already shown a large increase on former years. Those who, under the influence of temporary or local reactions, are prone to question whether Brazil is really making progress should bear in mind the record of the Brazilian Traction Co., whose activities are greater than ever and continually increasing. Rapid progress is being made with this Company's power stations at Cubatão between São Paulo and Santos, which, when completed, will increase the reserve capacity of their system to more than 30 times that of 1925. The new power station, at present intended to provide 96,000 h.p., will be capable of producing over 500,000 h.p. as the demand increases. The same company are also installing automatic telephones in Rio de Janeiro and São Paulo. Meanwhile the tram, telephone and lighting services of several other less important cities have been taken in hand by an American group, and will undoubtedly be much improved in the next few years. There is more than a possibility that within a year or two the construction will be undertaken of a new electric broad gauge double railway from São Paulo to Santos, having six times the capacity of the existing line, and the Santos Docks Co. have already prepared plans for largely increasing the accommodation of the port. Another scheme destined to give a great impetus to the economic development of Brazil—the Itabira iron ore scheme—appears to be about to materialise. An advance party of

American engineers arrived in Brazil in July, 1929, to draw up a plan for the construction of a railway to carry the ore to the coast. This scheme is expected to bring some £15,000,000 of new capital into Brazil for railway and port construction, the development of the mine and the installation of steel works.

In view of these events and such prospects, not to mention the numerous activities of the Federal and State Governments, it appears to be safe to predict not only a continuance of Brazil's progress but also an acceleration. Still in her early stages of formation, Brazil can avail herself of all the latest scientific and mechanical inventions to build up a great national structure on the most modern lines.

A legitimate cause of anxiety, on the other hand, is the continued falling off in the surplus of exports which, after having been as high as £26,766,000 in 1924, has decreased year by year until in 1928 it was only £6,757,000, and in the first half of 1929, £1,080,552. Serious doubts are expressed as to the ultimate effect of the coffee defence policy on which so much depends. The consensus of opinion is that the emergence of a record crop largely exceeding the world's requirements in 1927-28 justified, and in fact demanded, special action on the part of the authorities and, had the succeeding crops been small, the policy would have worked out smoothly. But, though the next crop was small, it has been followed by another very large one, which cannot fail to increase the stocks to an alarming extent. There can be no doubt that planting has been encouraged by the maintenance of the price. It is argued that, owing to the defence scheme, the surplus stocks are now held in Brazil instead of in various foreign coffee markets, and that the producers are no longer at the mercy of the foreign dealer as they used to be. This is true, and it is certainly not in Brazil's interest that every crop, however large, should come on to the market all at once. It might have been better if the requirements of the situation could have been met by providing credit and storage facilities for the growers without any artificial restriction of shipments. Such facilities are features of the existing policy, and its ultimate success appears to depend on the gradual relaxation of the control of shipments by the Coffee Institute and its substitution by the extended financing of the producers, to enable them to defend their own interests against speculators, while leaving the laws of supply and demand to rectify the tendency to over-production. But in the conditions prevailing at the time the present control was established, restriction of shipments was considered essential, and it would be dangerous to withdraw it suddenly.

From one point of view—that of exchange stabilisation—it is advisable that the control should not be withdrawn sooner than necessary, for its sudden removal, if followed (as it would be to-day) by a sharp break in prices not compensated by a corresponding increase in the quantity exported, would seriously affect

the national balance of payments. Any fall in the price of coffee would react, not only on the exports at the moment, but also on the accumulated stocks, which, at £5 a bag, represented a value on June 30th, 1929, of £65,000,000. By June 30th, 1930, according to indications at the time of writing, the value of stocks retained, at the same value will have risen to £100,000,000. When all these points are considered it will be seen that the problem* is not a simple one.

Another factor of first rate importance which demands close attention is the state of commercial credit. High rates of interest are inevitable in a new and promising country where there is a great demand for working capital to develop its natural resources. But high rates of interest are none the less a check on progress, and the cheapening of money and extension of credit on a sound basis in Brazil would help more than almost anything else to open up the country quickly by encouraging trade and facilitating constructive activities of all kinds. The first essential is a steady exchange, which has been the main object of the President's policy. And it must be remembered that the rate could not have been kept as stable as it has been during the past three years without some measure of coffee control. In spite of the steadiness of exchange money rates have remained high. Twelve per cent. may be taken as an average in 1929 for well secured commercial advances. Many private borrowers have paid as much as 20 per cent. These rates are a measure of the risk as well as of the insufficiency of money for the needs of the market. The risks are great owing to the common tendency to overtrade, which is encouraged rather than discouraged by the operation of the old law dealing with commercial default. The market is accustomed to periodical crises, with the result that a wide toleration and sympathy are shown towards any trader who is so unfortunate as to find himself unable to meet his engagements. The need for an up-to-date bankruptcy law is recognised by the Brazilian Government, and a Bill embodying some necessary reforms is on its way through Congress.† A Bill has also been drafted for the revision of the company law. But for any early improvement foreign creditors—that is to say lenders of money and suppliers of goods—must rely more on their own care and their own efforts. Some sort of clearing house for credit information is badly needed, or a system of credit information exchange among suppliers. One important group of manufacturers have established a special bureau of their own with this object. If some of the leading banks and other groups of manufacturers were to follow suit the situation might speedily change for the better, and interest rates would fall.‡ The recurring credit crises are not so much a reason to avoid the market

*v. Chapter I (The Coffee problem).

†This bill was passed in December, 1929.

‡This subject is discussed in more detail in another chapter.

as to use additional care in dealing with it. Brazil is rather a difficult than a bad market. The amount of bad business represents less than 2 per cent. of the entire turnover, and a considerable part of the 2 per cent. has been rendered possible by the omission of suppliers to take adequate precautions.

While the commercial credit of the Brazilian market has experienced a momentary setback the financial standing of the country has tended to improve. Not that any external loans have been obtained or offered on better terms than before, for the Federal Government has not been in the public loan market since 1927, but the financial record of the Government was improved by the budget result for 1928. The decision of the Hague Court that the pre-war loans from France should be paid in gold had the effect of increasing the external obligations of the Federal Government by approximately £11,200,000—the difference between the amounts due in gold and paper respectively. The decision also affects indirectly certain States having similar loans—though these were not included in the arbitration—and one, that of Minas Geraes,* had already been the subject of an agreement, signed on January 7th, 1928, between the State Government and the creditors, by which the latter accepted a compromise of 42 per cent. of the total. The difference to the other States concerned, if the loans are paid in full, will amount to approximately £8,156,000.

Minas Geraes and the State of Rio de Janeiro are the only States which have borrowed any foreign capital during the twelve months under review. Both were New York loans, the former for \$8,000,000 U.S. issued by Messrs. Schroeders, to be followed in 1930 by two more similar issues, and the latter for \$6,000,000 U.S. Other States have been tentatively desirous of raising money abroad, but have not met with encouragement owing to the tightness of the London market and the wave of speculation in New York. Authorisation was obtained for raising loans by the State Governments of Bahia and Paraná and by the city of Rio de Janeiro; but such offers as were received were considered unfavourable, and the negotiations, where inquiries got so far, were discontinued. The municipality of Bahia, assisted by the State Government, at last arrived at a settlement of their long-standing obligations to the debenture holders in the original tram and telephone company by paying them a percentage of the proceeds of a new contract made with United States interests. This, following the Great Western of Brazil Railway settlement and the acceptance of the Hague decision on the franc debt, brings Brazil appreciably nearer to having a clean slate as regards her external obligations. But the State debts of Amazonas and Pará and the municipal debt of the city of Pará are still in arrears. Negotiations were in progress in September, 1929, for an arrangement of the Amazonas debt.

*The State of Paraná has also made an arrangement.

How soon Brazil will become independent of foreign finance depends very largely on the growth of her export trade in agricultural products other than coffee. The world consumption of coffee is not expanding fast enough to offer a solution of Brazil's need for increased exportation, and as alternatives special attention is being directed by the Federal Government and by the Government of the State of São Paulo in particular to a development of the trade in meat, oranges and bananas.

Only three other countries possess a larger number of cattle than Brazil. Serious efforts are being made to improve the quality of the meat, both by the Brazilian Government and by private interests, including an experienced British company who are understood to be trying to overcome the prejudice against zebu meat, which, it appears, when chilled is quite good eating. It is well within the bounds of probability, in view of the threatened world shortage and of the steps that are being taken to improve the quality of cattle and means of transport, that the Brazilian meat export trade will increase to 15 or 20 million lbs. in the next 15 years. The first big national cattle show was successfully held at São Paulo in July, 1929, on a new ground constructed and equipped in the most modern manner by the Government of the State.

As regards oranges, several British fruit brokers who have recently visited Brazil expressed the opinion that a large trade with Great Britain is likely to be built up in the near future in view of the abundant supplies of good oranges and—what is still more important—the fact that they are available in the late months of the year when no other supplies, except South African oranges, are obtainable in the English market. A considerable impetus has been given to planting by Government propaganda and practical encouragement in the form of official packing houses, as well as by new roads which have brought much suitable land for orange growing into touch with the railways and the ports. Unfortunately, owing to the bad condition in which much of the fruit arrived in England in 1929, prices were often far from satisfactory. It is calculated that there are 6,000,000 orange trees in the State of São Paulo under five years old. This is more than four times the number of fully grown trees.* The State of Rio de Janeiro has 4,500,000 trees, of which probably more than half have yet to reach maturity.

There is a prospect of still greater development in the banana trade. Large areas have been planted in recent years, and one British firm alone, who own extensive plantations in the State of São Paulo, are said to be aiming at an annual production of £7,000,000 of bananas for export, to be carried by the Blue Star Line.

*1,236,000.

Mention must be made of another product on which equally high hopes are placed by the Brazilian Government—that is the babassú nut, the kernel of which yields 75 per cent. of its weight in edible oil, besides various by-products. There are believed to be four or five hundred millions of babassú palm in the north and west centre of Brazil, a figure which, if even approximately accurate, means that about £100,000,000 worth of babassú nuts are wasted every year. The exploitation of this latent wealth on a big scale seems only to await the invention of a high speed cracking machine.

Any considerable increase in the exportation of the above products, especially meat, oranges and bananas, and, of course, also cotton—for the growth of which the conditions of climate and soil in Brazil are equal to those of North America and Egypt—would have a particularly important bearing on Anglo-Brazilian trade, seeing that, taken all together, they are in greater demand in Great Britain than in any other country. In recognition of this fact British capital and enterprise are already actively participating in the national efforts to build up a large movement. There was an increase in the exports of meat, oranges and bananas in 1928 of 99 per cent., 71 per cent. and 24 per cent. respectively over 1927. The reason why the products in question have not assumed greater importance hitherto is not for want of markets, but owing to the difficulties and cost of organising labour and transport.

Transport continues to be, and must long continue to be, Brazil's main problem. It is an extremely difficult problem, for the interior, except in the north, is cut off from the coast by a steep mountain wall the scaling of which by road or rail is extremely costly. Roads being less expensive than railways and increasingly useful for transport owing to the rapid improvement of motor vehicles, the President has concentrated on roads. The motor lorry already plays a relatively large part in Brazilian transport—the number of these vehicles exceeding that in the Argentine. The climate, as well as the surface of the country, is against cheap transport. It is being found necessary to surface part of the two new main highways from Rio to Petropolis and Rio to São Paulo with cement, owing to the heavy rains, which quickly render an unprotected earth or macadam surface impassable. In order to obtain additional funds for road construction a substantial increase was made in 1929 in the tax on motor car accessories. Another device, adopted by the State of São Paulo, was the grant of a concession to a private company for the construction of a toll road. The construction problem was discussed in every aspect by the Second Pan-American Roads Congress, which was held at Rio de Janeiro in August, 1929.

The diminution* of her visible trade balance, on which, in the absence of substantial invisible exports, Brazil depends to main-

*From £9,055,000 to £6,757,000.

tain the credit side of her balance of payments, was due in 1928, not to a decrease of exports, which were 10 per cent. larger than the year before, but to an increase of 14 per cent. in imports—which considerably exceeded any other year except 1920. In the first eight months of 1929 the surplus was £3,837,000, a further increase in imports having been accompanied by a still larger recovery in exports. There was a falling off in this period in hides and cocoa, the exports of which were £2,671,000 less than a year earlier. The largest fall was in hides. Meat, cotton and fruit all showed proportionately big increases.

If coffee prices hold, the situation may improve during the remaining four months of the year, as a result of the usual seasonal increase in exports. The difficult credit situation caused partly by the excessive cotton goods imports and partly by a justified increase of caution on the part of the banks is also likely to be reflected in later imports statistics. The purchasing power of consumers in the interior has apparently been diminished by the coffee defence policy. Though the amount of money received by Brazil for coffee exported is not less since the control than before, it passes through different and fewer channels, and is largely tied up in financing the accumulated stocks.

Some comfort may be derived by Brazil from the fact that a large part of her imports consist of goods of a reproductive character, such as transport material and manufacturing machinery, which are not immediately consumed and might be regarded as in the nature of an investment. Such imports, often paid for out of special development loans for constructional purposes, are not only permissible but desirable in a new country. Material that may be imported eventually for the Itabira enterprise mentioned above, for example, would appear to reduce the favourable trade balance, whereas in reality it would represent a large invisible export of latent wealth, and a means of enrichment to the country, enabling the ore to be exported and, in so far as it results in the local production of steel, ultimately also reducing imports. The exact proportion of imports which could be included in this category in 1928 is impossible to calculate without a special investigation, but engineering goods of various kinds amounted to £20,000,000, most of which will be applied to increase national production. Some allowance may be made also for the increase in goods imported for sales stock at the cost of suppliers, and in imports for sale on long credit terms, such as the two new night expresses for the Central Railway, or for sale on instalments such as automobiles.

The manufacturing industries of Brazil, especially the cotton goods industry, have suffered from the war's reactions, but their continued expansion is certain. Already the bulk of the home demand for most articles, except engineering products, is supplied

by national factories. Several of the most important and successful are financed with British capital and under British management, producing among other things paints, cotton and woollen goods, biscuits, nuts, bolts, screws, buttons, cigarettes, matches, gramophone records. Every year sees more factories established with foreign capital. This is an aspect of the development of Brazil which deserves constant study on the part of British manufacturers and business men. Owing to the high duties the importation of some articles has become so difficult that the only way remaining by which Britain can get a share of the Brazilian market is by establishing local factories.

On the other hand, there is a not unnatural tendency for some of the national manufacturers to be too precipitate—a tendency which the war encouraged by interrupting the ordinary sources of supply.

The persistent efforts of the cotton industry to obtain additional protection resulted at the end of 1928 in a general increase in the duties on all cotton goods except a few of the finest counts. The immediate effect, instead of easing the position, was to aggravate it through the importation, before the increased duty came into operation, of large quantities of goods which only served to glut a market already suffering from overproduction. The failure of this measure to bring about any improvement in the condition of the industry has prejudiced the cause of those who favour higher protection all round and has, in fact, tended to retard the general revision of the tariff as a whole, which is not now likely to be completed during the term of office of the present President, partly, it is understood, for the reason that he is unwilling to accede to a purely upward revision, and partly owing to circumstances connected with the approaching presidential election, which makes it improbable that the Government could get a new tariff Bill through Congress. It may, therefore, be assumed that there will be no drastic alteration in the Brazilian customs duties on imports for at least two years.

While there is a tendency for Brazil to become more and more self-supporting, it will be a long time before anything like independence can be attained and the import trade, though it may change in character, will at the same time tend to increase in value as the nation grows and produces more exports. Large quantities of machinery and engineering goods will be required for industrial expansion and transport. An increase may also be expected in the demand for quality and luxury articles.

During the war Great Britain was displaced as the leading supplier of Brazil's imports by the United States, and though the gap between the two countries was reduced in 1928, it widened again considerably in the first half of 1929, during which period, compared with the first half of 1928, imports from the United States increased by 31 per cent., while there was a decrease in

imports from Great Britain of 6 per cent. The total import trade of Brazil increased by 4 per cent.

British manufacturers cannot afford to accept the present situation with equanimity and must consider ways and means of getting a larger share of this rapidly growing market. British trade has its foundations in the merchant system established a century ago, and it is to-day based on a survival of that system. United States trade, on the other hand, has been built up in recent years on a direct basis and now, while probably not more than 20 per cent. of British imports in Brazil come direct from the manufacturer without passing through the hands of merchants, as much as 90 per cent. of American goods are handled only by special sales organisations connected with groups of factories, or by exclusive representatives. The British method is not without its advantages nor incapable of adjustment to new conditions, but the difference and the trend of trade are indicative of the need of a thorough investigation by British manufacturers. The visit in September, 1929, of an Economic Mission headed by Lord d'Abernon was a welcome and encouraging sign of the British Government's appreciation of this need. The visit was cordially received and should prove of great practical value.

The States.—Reports on the various States, of which there are 20, are contained in the annexes to this report. Each State has almost complete autonomy and is responsible for its own finances. Their independence enables each one separately to concentrate on a definite programme of development, and even this brief general sketch of conditions in Brazil as a whole would be incomplete without a note on conditions in the principal States individually.

São Paulo.—Some of the chief features in the progress of the State of São Paulo have been mentioned above. 117,201 contos (£2,930,000) over and above the budget estimates were spent on the water supply service of the capital, the Sorocabana Railway extension, road construction and other development. This expenditure was made possible by loans raised during the year for £3,500,000 and \$15,000,000 (U.S.), which together yielded 232,663 contos.

In addition to the agricultural exhibition grounds and buildings already mentioned, a large permanent exhibition of São Paulo products, both raw and manufactured, was opened during the year. Both these new institutions, which were only begun in 1927, surpass any others of the kind in South America.

Minas Geraes.—Next to São Paulo the most important State is Minas Geraes. It has the largest population (7,303,853). Apart from the production of coffee its chief industry is dairy farming. But it has over 100 cotton mills and a number of important mines, including the S. João del Rey gold mine which belongs to a

British company—and several producing manganese. The Itabira iron ore deposits are in this State. The total iron ore deposits of Minas Geraes are officially estimated at 11 billion tons.

The population of Belo Horizonte, the capital of Minas Geraes, increased from 52,000 to 120,000 between 1920 and 1928. Seven other towns have over 80,000 inhabitants.

Rio Grande do Sul.—Rio Grande do Sul is primarily a cattle region. It is also the largest wheat growing State and has a number of flourishing factories. The population is predominantly of German and Italian origin. Important schemes for railway extension and port improvement are under consideration.

Paraná.—Paraná has great possibilities as a coffee producer, being adjacent to São Paulo, having the same climate and a soil still largely virgin. It is rich in timber suitable for furniture and building.

Bahia.—The State of Bahia relies at present mainly on cocoa, of which it is one of the world's largest producers, and on its tobacco, which is the raw material of the important national cigar industry. Sugar and cotton are also grown on a considerable scale.

Pernambuco.—Pernambuco has not been seriously affected by the decreasing demand in foreign markets for cane sugar, owing to the high protective tariff which keeps imported sugar out of the Brazilian market. But the Pernambuco sugar plantations are showing signs of exhaustion and the outlook for the industry is not very promising. Cotton is the next most valuable crop. There is a future for fibres, oilseeds and fruit.

North-Eastern States.—The cotton of Pernambuco and the neighbouring States in the north-east, of which it is the chief product, is of longer staple than São Paulo cotton, and is preferred in Manchester for that reason. The obstacles to its cultivation on a largely increased scale are lack of organisation. With careful selection and treatment Pernambuco cotton could compete favourably with Egyptian cotton. A serious local climatic drawback is the periodical recurrence of droughts, which is being combated gradually by the construction of reservoirs. An irrigation scheme which would have solved the problem for the State of Ceará was undertaken in 1921-22, but was only partly carried out.

Pará and Amazonas.—The Amazon States have experienced a series of vicissitudes in recent years in consequence of the fluctuating price of rubber. 1928 was a year of depression. But the uncertainty regarding rubber is not wholly a misfortune, for it tends to turn attention to the advantages which this region offers for the production of rice and cotton, and for cattle breeding, as well as to its resources in timber and babassú. His Majesty's Consul at Pará reports that the most interesting feature of the rubber situation is the steadily increasing proportion of rubber

which is being washed and crêped before shipment. Great interest continues to be shown locally in Mr. Ford's rubber scheme. Large areas in the State of Pará have been conceded to a Japanese company for colonisation purposes.

It has been calculated by the Brazilian Government Statistics Department that, at the rate of increase between the last two censuses Brazil will have a population of 42 millions in 1930, 76 millions in 1950, and 240 millions in 1990. In 1940, according to the same authority, São Paulo, as well as Rio de Janeiro, will have a population of over 2 millions and four other cities, Pará, Pernambuco, Bahia and Porto Alegre, each more than half a million.

I. THE COFFEE PROBLEM.

On June 30th, 1929, the retained stocks of coffee in Brazil amounted to 9,325,000 bags. The visible world stocks on the same date were 5,335,000 bags, making a total world stock of 14,660,000 bags. This, added to the estimated world production during the following twelve months ended June 30th, 1930, viz., 21,500,000 bags in Brazil and 9,000,000 bags in other countries, gives a total of 45,160,000 bags. The estimated world consumption in the same period being 24,000,000 bags, it appears probable that there will be a world surplus on June 30th, 1930, of 21,160,000 bags, of which total, unless Brazilian exports exceed the average of recent years, 18,000,000 bags—nine months' world's supply—will be in Brazil. This estimate may be regarded as the minimum. The Coffee Institute's figure has been taken for stocks retained, though it is difficult to reconcile it with the fact that coffee is being held up 20 months in the interior awaiting its turn for shipment. On July 1st, 1930, a new crop will begin, on the size of which much will depend.

The average exports of coffee from Brazil during the five years 1925-29 were 14,412,000 bags.

If the estimated crop for 1929-30 materialises Brazil will be saddled with a surplus which only a complete failure of the succeeding crop, or a succession of small crops, would enable her to export under the existing conditions of control without a fall in price.

The Institute maintain that a large crop is invariably succeeded by a small one because the coffee tree gets exhausted after giving a heavier yield than usual, and suffers a reaction. How far this is a botanical fact, and how far the variation in yield is due to variation in weather conditions, is not established. The actual variation in yield during the past 17 years is shown in the accompanying table, which shows also the production in other countries. That the unprecedented size of the 1927-28 crop is not by itself proof of

a definite increase in the scale of production is shown by the smallness of the succeeding crop, which was not due to abnormally bad weather conditions, such as the frost which caused the failure of the 1918-19 crop. The largest Brazilian crop on record before 1927-28 was 20,188,000 bags in 1906-07. The smallest known crop was 7,500,000 bags in 1919-20. The disposal of the surplus of the exceptional 1906-07 crop was accompanied by exceptionally low prices and the prohibition of new planting.

PRODUCTION OF COFFEE IN BRAZIL COMPARED WITH OTHER COUNTRIES.

Crop.	Thousands of sacks.		Total.
	Brazil.	Other countries.	
1912-13	12,131	4,265	16,406
1913-14	14,459	5,284	19,743
1914-15	13,458	5,053	18,511
1915-16	14,374	4,584	18,958
1916-17	12,741	3,951	16,692
1917-18	15,836	3,011	18,847
1918-19	9,712	4,500	14,212
1919-20	7,500	7,681	15,181
1920-21	14,496	5,787	20,283
1921-22	12,862	6,296	19,788
1922-23	10,194	5,705	16,899
1923-24	14,864	6,868	21,732
1924-25	13,721	6,762	20,483
1925-26	14,009	7,047	21,056
1926-27	14,184	7,068	21,252
1927-28	28,334	8,003	36,337
1928-29	9,932	12,068	22,000
1929-30	21,000	8,000	29,000

Complete statistics are not obtainable of the number of new trees planted in the past few years. The total number of trees existing in 1928 in Brazil was given by the Coffee Institute as 2,290,763,700, out of a world total of 3,280,239,039—or 69·9 per cent. Of the total in Brazil just over half, or 51·5 per cent., were in the State of São Paulo; and just over a quarter, or 25·7 per cent., in the neighbouring State of Minas Geraes. 156,000,000 trees are stated to have come into bearing in the year 1929, which means that this number was planted in or about 1925. Some observers estimate the rate of more recent planting in Brazil as high as 300,000,000 trees a year. In 1926, according to a figure given in a Brazilian official publication, the number of trees in Brazil was 2,011,136,271. This, compared with the total in 1928 given above, represents an increase in those two years of 14 per cent. The same publication stated that the aggregate increase in the State of São Paulo in 10 years prior to 1926 was 210,716,460, a yearly average of 21,000,000. São Paulo's annual share, say 50 per cent., of the increase in 1926-28 would be 140,000,000. An

annual increase of 7 per cent. would not appear excessive if, as is estimated, 3 per cent. of the trees cease to yield each year, and there is an increase in world consumption of 5 per cent.

The President of the State of São Paulo in his message of July, 1929, expressed the view that no one would continue to plant in face of the existing surplus. This is the view of the Institute. It is possible that the alarm which has been raised regarding the outcome of the defence policy may have recently deterred some of the more prudent growers. On the other hand, it is difficult to imagine that the guarantee of an admittedly good price over an extended period will not be reflected in production, and there is a widespread belief, which can be supported by numerous concrete instances, that planting has been abnormally large in the past three or four years for that reason.

In any case the size of the crops for the next four years will depend on the trees already planted, for the yield of coffee trees under four years old is negligible.

The true test of the soundness of the present policy resolves itself into an inquiry whether the price which is being maintained results in an excessive margin of profit to the producer, for if it does it will inevitably lead to excessive production. The price at Santos, which is not directly fixed by the control though its flexibility is checked by the limitation of shipments, has varied in the past three years between 30 and 40 milreis per 10 kilos for type 7. In 1924 and 1925, that is before the present system of control was established, prices were obtained as high as 60 milreis, with lowest prices in the same years of 25 and 35 milreis respectively. In September, 1929, the price at Santos was 36 milreis. The cost of production naturally varies according to the age and yield of the trees. Between 7 and 12 years, which is the most productive age, the yield may be anything between 50 and 100 arrobas* per 1,000 trees. In his message to Congress quoted above the President of the State of São Paulo adopted the following estimates of the cost of producing 10 kilos :—

Old zone (yielding 37 arrobas per 1,000 trees)	= 28\$510.
Intermediate zone (55 " ")	= 23\$860.
New zone (yielding 70 " ")	= 21\$770.

Though the normal productive life of a coffee tree is generally considered not to exceed 60 or 70 years, some of the trees on the estate in the old zone which was selected for the above calculation were 140 years old and still bearing. The estimates include 10 per cent. interest on the capital invested and 12 per cent. on the value of the coffee while waiting for shipment. The usual period of delay is now (October, 1929), about 20 months. Allowance is made also for freight, warehouse charges, taxes, depreciation and replanting. On a well-managed plantation in São Paulo, yielding 80 arrobas per 1,000 trees, for which figures happen to be

*1 arroba = 15 kgs.

*available, the actual production cost works out at about 1 milreis per tree, freight and selling costs average 0\$333 per kilo, and with the addition of interest for 20 months at 12 per cent. the total cost of production is just over 13\$000 per 10 kilos, not including interest on capital—which is really profit—as the above estimates do. Excluding interest on capital the four estimates quoted, compared with selling prices in September, 1929, show surpluses as follows:—

	Production cost delivered in Santos.	Price of 10 kgs. type 4, Santos, September, 1929.	Surplus.
	Rs.	Rs.	Rs.
Old Zone	21\$240	34\$000	12\$760
Intermediate Zone	18\$740	34\$000	15\$260
New Zone	17\$570	34\$000	16\$430
New Zone (80 arrobas per 1,000 trees)	13\$000	34\$000	21\$000

Thus there is a difference in the producer's favour of from Rs.12\$760 to 21\$000 on every 10 kilos sold in Santos, which, on the basis of a purchase capital cost per tree of Rs.4\$000, 5\$000 and 6\$000 respectively, represents a profit of from 13 per cent. to 33 per cent. All the foregoing figures are producers' figures, and therefore likely to be conservative.

That such an interest yield can be obtained in spite of the cost of the control shows how big a margin there is for Brazilian coffee to compete with foreign coffee. The first three of the above estimates include 12 per cent. interest on the value of the stock for a period of 16 months, while the last allows for the same rate during 20 months, which was the normal delay when the calculation was made, viz., in July, 1929. The control tax included in the above estimates is Rs.4\$600 per bag of 60 kgs., payable to the Coffee Institute. The cost of the control—which is added to the actual production cost—is this tax, plus the cost of financing the retained stocks. There are also other taxes, comprising export, transit and port charges, imposed by the State of São Paulo, which exceed 20\$000 a bag. In view of these heavy burdens it is hardly surprising that many small growers in the interior have recently sold their crop to dealers at Rs.80\$000 a bag cash. The payment of the Coffee Institute tax and the State taxes leaves a margin of approximately Rs.95\$000, out of which the dealer has to finance the period of delay pending release for export. But most of the coffee plantations are large, and most of the coffee is warehoused for the account of the producers.

The scheme of the Coffee Institute provides for advances through the Banco do Estado de São Paulo of Rs.60\$000 a bag for one year at a time, interest being charged at 11 per cent. to 12 per

cent. The bank named claim to have financed over 4,780,000 bags in the year 1928. The larger producers generally obtain advances of Rs.80\$000 to 100\$000 a bag from their own banks, and do not make use of the Institute's funds. It is estimated that considerably more than half of the financing of the coffee stocks is done by or through "commissarios." A "commissario" is a commission agent who arranges for storing, selling and shipping stocks for the account of the producer, and also for his own account.

The Banco do Estado de São Paulo, the Institute's bankers, nearly 70 per cent. of whose share capital is held by the State, on August 31st, 1929, held mortgages of Rs.2\$000 a tree on 100,000,000 coffee trees, in guarantee for advances made out of the £3,750,000 issued up to date of the £5,000,000 loan negotiated with Messrs. Lazard Brothers in 1927. The proceeds of this loan, added to the £10,000,000 negotiated by the Institute with the same House in 1925 and a £5,000,000 short term credit, represent the total capital resources of the control, which are kept replenished by the tax of Rs.1\$000 gold (27*d.*) per bag.

In considering the probable effect of the defence policy on production it is essential to remember that the expense of it is limited to the States of São Paulo, Minas Geraes, Rio de Janeiro and Espírito Santo, and that these four States are carrying the burden, not only for other countries, but also for other parts of Brazil. This is a feature of no small importance. Though the production in other Brazilian States is not yet large, the potentialities are—especially in Paraná where land is both richer and cheaper than in São Paulo State. The production of Paraná is said to be capable of increasing from the present figure of 700,000 bags to 5,000,000 within a few years. Except as regards transport, the other States under existing conditions have every advantage, including cheaper labour, over São Paulo. Thus the elements exist for a competition in over-production within the frontiers of Brazil itself—though there is no superfluity of either labour or finance.

Meanwhile other countries are enjoying the full benefit, free of expense to themselves, of the measures adopted by Brazilian producers to protect themselves against the consumer. There are, moreover, no export taxes in most of these competing countries, which have the further advantage that, generally speaking, their coffee is preferred to Brazilian coffee and obtains a higher price. It is feared also that the tendency among coffee roasters to use more and more non-Brazilian coffee in their blending may gradually prejudice consumers' tastes against the flavour of Brazilian coffee. The São Paulo Coffee Institute are working to encourage the demand for Brazilian coffee by propaganda, but they do not accept the theory which is put forward in the United States that consumption of coffee can be increased by lowering

the price. On the other hand they have considerable hopes of its wider adoption as a substitute for alcohol.

It will be seen that many arguments can be marshalled both for and against the control. Its effectiveness as a defence against speculation has been fully established. Its administration has been ably carried out. At present the effect of control is the virtual elimination of Brazil itself as a competitor, though the cost of production in other countries is from 20 per cent. to 40 per cent. more. A leading São Paulo grower, in a speech on the coffee situation in June, 1929, speaking of the growers in that State, said: "What we have to study is a means of selling coffee at remunerative prices; but these prices must not be such as to provide an incentive to production in other parts of the world."

II. FINANCE.

National, State and Municipal Debt.—The debt of the Federal Government, both external and internal, and of the principal States, and the external debt of the principal municipalities, is set out in detail at the end of this report. No foreign loan has been raised by the Federal Government since 1927, but the decision of the Hague Arbitration Court that the existing francs debt should be paid in gold has the effect of adding £11,200,000 to this debt, compared with the paper equivalent. The Government were, of course, aware of the contingency and to some extent prepared for it.

The total external national debt in equivalent sterling, which can now be definitely calculated, will amount on December 31st, 1929, to £148,828,066, on which the service for 1930, including interest, amortisation and commissions, works out at £11,429,251.

The Hague decision referred only to the Federal Government debt, and it is uncertain whether, or to what extent, the francs debts of the States will be paid in gold. The Government of Minas Geraes arranged before the Hague decision to pay 48 per cent., but since the Hague decision it is not unnatural that the French holders of debts outstanding in other States should be disposed to insist on repayment at the full gold rate. The amount at stake in all the States and municipalities combined is Fcs.317,708,877. In the event of these francs debts being regarded as payable in gold the total external debt of all the States and municipalities will amount, according to the latest figures available, to approximately £116,198,568. In this are included all the loans raised by the Coffee Institute of São Paulo and their bankers, the Banco do Estado de São Paulo, mentioned above under "the Coffee Problem."

Between October, 1928, and October, 1929, there was no Federal loan and no municipal loan, and there were only two State loans. The State loans were Rio de Janeiro \$6,000,000 (U.S.) in July, and Minas Geraes \$8,000,000 (U.S.) in September. The latter is the first of a series of three equal issues at half-yearly

intervals. \$3,500,000 (U.S.) of the Rio de Janeiro loan are to be applied to dredging work on the São João Marcos canal and certain rivers, the balance on other public works. This loan was issued at 89, the rate of interest being $6\frac{1}{2}$ per cent. The loan to Minas Geraes is for railway and road construction and paying off the French loans.

The municipalities of Rio de Janeiro and São Paulo each initiated negotiations for loans in New York, but discontinued them. It is possible that other applications (including one from Rio Grande do Sul) would have been made, had the conditions in the London and New York markets been favourable.

The internal funded debt of the Federal Government on December 31st, 1928, was 2,101,713 contos (approximately £51,261,000), slightly lower than a year before. The annual service of the internal debt amounts to approximately £3,324,359. The total internal funded debt of all the States is approximately £26,002,489.

The floating debt of the Federal Government on January 1st, 1929, was 92,894 contos (approximately £2,265,707).

Budget.—The estimates for 1928 provided for a surplus of 117 contos* paper. This was exceeded by the actual results, which showed a surplus of 198,354 contos paper. The revenue amounted to 2,216,512 contos, as against an estimate of 2,088,933 contos. Ordinary expenditure showed a saving on the estimates of 166,655 contos. There was thus a balance of 294,351 contos paper, of which 95,996 contos was used to meet extraordinary expenditure, leaving a final surplus of 198,354 contos (approximately £4,958,850).

The following table shows how the receipts from the principal sources of revenue in 1928 compared with the estimates for that year, and with the actual results in 1927:—

	1928		1927
	Estimate.	Actual.	Actual.
	(000's omitted).		
Customs duties	£ 21,402	£ 23,081	£ 19,961
Consumption tax	9,425	10,824	9,904
Industrial tax	7,075	7,039	5,309
Circulation tax	5,928	6,193	5,922
Income tax	2,175	1,677	1,503
Other sources	5,888	5,673	3,972

It will be noted that the actual revenue in 1928 exceeded that for 1927 under every head. Economies were made in all the Departments of the State. The expenditure of the Ministry of Transport

*1 conto = 1,000 milreis, or approximately £25.

was approximately £1,750,000 less, and that of the Ministry of War £925,000 less, than the amounts authorised.*

The estimated receipts in 1929 were:—

				(000's omitted).
				£
Customs duties ...	...	...	...	22,800
Consumption tax ...	...	...	...	11,200
Industrial tax ...	...	...	...	8,175
Circulation „	...	...	...	6,250
Income „	...	...	...	1,825

The receipts up to the end of August of customs duties at Rio de Janeiro exceeded the figures for 1928 by 8,415 contos. Receipts from the consumption tax, on the other hand, were 4,571 contos less than in the corresponding period of the year before.

The budget estimates for 1930,† compared with those for 1929, are as follows:—

	1930		1929	
	Gold.	Paper.	Gold.	Paper.
	Contos.	Contos.	Contos.	Contos.
Revenue ...	199,271	1,371,431	187,897	1,352,645
Expenditure ...	135,113	1,639,104	134,536	1,502,946

These estimates allow for a surplus of 93,399 contos paper (approximately £2,296,000) in 1929, and 25,338 contos paper (approximately £633,450) in 1930.

A table is appended showing the proportion of the Federal Government revenue received from each tax in the past five years, and in 1913:—

PERCENTAGE OF TOTAL REVENUE.

Duty or tax.	1913	1924	1925	1926	1927	1928
	%	%	%	%	%	%
Import duties ...	52.9	43.0	41.4	35.1	39.8	42.3
Consumption tax ...	10.0	20.7	17.9	22.1	19.8	19.9
Circulation „ ...	4.4	13.4	12.7	13.9	11.8	11.4
Income „ ...	1.2	1.4	2.0	2.2	3.0	3.1
Industrial revenue ...	11.2	14.7	12.8	13.0	11.6	12.9
Other revenues ...	9.1	2.2	8.1	4.2	7.9	4.8
Total ...	88.8	95.4	94.9	90.5	93.9	94.4
Earmarked revenue ...	11.2	4.6	5.1	9.5	6.1	5.6
Total revenue ...	100.0	100.0	100.0	100.0	100.0	100.0

*October, 1929.

†Not yet passed.

Banking.—The twelve months under review have been a difficult and unsatisfactory period for most of the banks. The numerous failures have caused them much inconvenience as well as losses, and they have not escaped considerable criticism. Prior to 1927 many of the foreign banks had for some years derived their profits largely from exchange business, and they would willingly have dispensed with the advantages of stabilisation. They were in fact accused of having endeavoured to break the exchange by a concerted attack on the milreis when it weakened in March, 1929. The Bank of Brazil quickly succeeded in restoring firmness by restricting currency overdrafts, and exchange speculation was again eliminated from the market. During the reaction as much as 12 per cent. for three months deposits was paid by one or two banks which were caught short.

Apart from this, interest has been centred on the efforts of the Bank of Brazil to put its affairs in order by calling in doubtful credits and refusing to grant facilities without good security. Complaints that advances had been given too freely before accompanied the execution of this policy, and the bank was criticised for having encouraged the overtrading which was subsequently the cause of its restriction policy. But the necessity for restriction was painfully clear. In 1928 the bank was a creditor in 133 failures and 186 concordatas. At the annual meeting in April, 1929, it was announced that the Board had adopted a policy since September, 1928, of limiting advances to a period of six months, accepting as guarantee only securities of a readily realisable character, and taking no part in the promotion of new business. The motive of this policy, apart from the necessity for putting the bank's business on a sound footing, is to prepare the ground for the reform contemplated in the Government's scheme of stabilisation under Law No. 5,108 of December 18th, 1926, which includes a central bank of issue and rediscount under the ægis of the Bank of Brazil. The majority of the shares in the bank are held by the Government. That the conduct of its recent business has not been without difficulties is evidenced by the fact that it has had three Presidents in nine months.

In the twelve months since December 31st, 1928, the Bank's cash increased from 505,265 contos to 817,629 contos on July 31st, 1929, or from 49 per cent. of the sight liabilities to the abnormally high proportion of 80 per cent. For some years past the proportion has remained between 45 per cent. and 50 per cent. The cash in hand on the latter date amounted to nearly a quarter of the entire national currency. The accumulation of this large amount is partly explained by the policy mentioned above. It has served also to cover credits in London for the purpose of maintaining exchange, which has at times needed support, especially in March and again in October, 1929. It is presumably with a view to such contingencies that the Bank has been accumulating gold notes. Its large reserves of cash enabled it to relieve the situation created by the temporary suspension of coffee advances by the Banco do Estado de São Paulo in October, 1929. The difference between the Bank's

buying and selling rate in the latter month was cut so fine that it was insufficient to pay commission or stamps. The cash in hand decreased by October 31st, 1929, to 664,430 contos.

The assets of the Bank on December 31st, 1928, exceeded the assets on the last day of 1927 by 725,936 contos. Discounts, loans on current account, and bills receivable exceeded the 1927 figure by 160,062 contos. There was also an increase of 236,759 contos in deposits. The profits decreased from 126,807 contos to 111,368 contos, but the dividend of 20 per cent. was maintained. The fall in profits was due mainly to the steadiness of exchange, the receipts from the department concerned having been 23,316 contos less than in 1927. The note issue of the Bank remained unchanged at 592,000 contos. There are 73 branches and agencies of the Bank of Brazil established throughout the country, including two which were opened in 1928.

The total amount of bills discounted and advances on current account in all the banks in 1928 was £148,000,000, practically equally divided between the two headings. The year before the corresponding figure was £122,000,000. The main part of the increase was in advances, which were £20,000,000 larger in 1928 than in 1927. Bills receivable amounted to £91,333,000, the highest total ever reached. The nearest approach was £79,217,000 in 1925.

The above 1928 totals were shared among national and foreign banks as follows:—

	Bills receivable.	Bills discounted.	Advances.
	£	£	£
National banks	59,148,000	59,941,000	51,258,000
*British „	12,094,000	5,817,000	8,694,000
American „	5,514,000	1,502,000	2,911,000
Other foreign banks	14,577,000	6,687,000	10,901,000

The cash and deposits were distributed as follows †:—

	Cash.	Deposits.
National banks	20,911,000	108,466,000
*British „	2,384,000	16,171,000
American „	619,000	4,637,000
Other foreign banks	1,778,000	15,327,000

The total of cash in hand on December 31st, 1928, was £25,692,000, against £20,140,000 a year earlier. The former amount also exceeded the 1926 total, but was less than any other year since 1917. The ratio of cash to deposits was 17 per cent. in 1927, and in 1928, 18 per cent.

The movement in the national banks has recently increased more rapidly than the movement in the foreign banks, though the latter continue to transact nearly a quarter of the total business. Their share in 1927 out of a movement ‡ of 23,311,113 contos was

* English and Canadian.

† December 31st, 1928.

‡ Balance sheet totals.

5,879,684 cotos. Between 1918 and 1927 the paid-up capital of the national banks increased from 339,106 contos to 750,359 contos, while the capital of the foreign banks increased from 87,834 contos to 122,350 contos. The total deposits in all the banks increased from 1,336,107 contos to 3,443,000 contos in the same period.

Forty-three per cent. of the total banking movement throughout the country in 1928 took place in the banks in the State of São Paulo, which showed an increase of 31 per cent. The cash in these banks amounted to £16,000,000, or 62 per cent. of the total cash balances of the whole of Brazil. São Paulo State also accounted for 46 per cent. of the total deposits. The combined capital of the São Paulo banks, viz., £9,000,000, is 41 per cent. of the total in the whole country. The banks in São Paulo whose movement exceeded 100,000 contos (approximately £2,500,000) were :—

Banco do Estado de São Paulo.	The British Bank of South America, Ltd.
Banco do Commercio e Industria de S. Paulo.	The National City Bank of New York.
Banco Commercial do Estado de São Paulo.	The Royal Bank of Canada.
Banco do Brasil.	Banco Italo-Belga.
Banca Francese e Italiana per l'America del Sud.	Banco Noroeste do Estado de São Paulo.
Bank of London and South America Ltd.	Banco Brasileiro-Allemão.
Banco de São Paulo.	Banco Allemão Transatlantico
	Casa Bancaria Rodolfo Crespi.

The movement of the first-named, which is the bank of the State and of the Coffee Institute, was nearly double that of the second on the list. The following items of the Banco do Estado de São Paulo are interesting in view of the problem of coffee finance :—

	Contos.
Advances on current account	375,000
	(approximately £9,375,000)
Securities held as guarantee	707,000
*Mortgages	494,000

The transactions of this bank showed an increase, compared with the year before, of 90,000 contos. The Banco do Commercio e Industria showed a decrease of 44,000 contos, and the São Paulo branch of the Bank of Brazil a decrease of 60,000 contos.

III. TRADE. †

IMPORTS.

The tendency which has been manifest since 1924 for the imports of Brazil to increase faster than the exports continued in 1928, when the imports passed the £90 million mark for the second time in the country's history—the other occasion having been in 1920, the first year after peace was signed, when they reached the

*Mainly on coffee plantations.

†v. Appendix VII.

abnormally high figure of £125,000,000. Since then the highest year was 1925. Compared with 1927 the imports in 1928 showed an increase of 14 per cent.

The leading countries of origin and the respective percentage increases on the year before were as follows:—

	£	%
United States	24,089,750	= 5 increase.
United Kingdom	19,518,764	= 15 "
Germany	11,304,292	= 33 "
Argentina	10,461,429	= 10 "
France	5,755,754	= 14 "
Belgium	3,572,744	= 10 "
Italy	3,367,066	= 22 "

About £850,000 of goods came from British India, Canada, New Zealand and South Africa.

It will be seen that Germany's trade increased by a third, Italy's by more than a fifth, while the United Kingdom and France secured their share of the general increase. Of all the leading countries, the one that gained relatively least was the United States—a setback which appears likely from the figures given below to be fully counterbalanced by the results of 1929.

Of the total imports 58 per cent. consisted of manufactured goods, which showed an increase of 17 per cent. Foodstuffs and raw materials accounted for 21 per cent. each, showing an increase of 11 per cent. in the former, and of 5 per cent. in the latter.

The following items exceeded £1,000,000, in the order given:—

Machinery and mechanical apparatus; iron and steel and manufactures; wheat and flour; automobiles; cotton piece goods; coal, coke and patent fuel; gasoline; chemical products; codfish; paper; beverages; raw wool; vehicles other than automobiles; cement; raw iron and steel; kerosene; woollen manufactures; prepared skins and hides; rubber goods; earthenware, porcelain and glass; fruits and nuts. In 1927 the first two items were in the reverse order; coal, coke and patent fuel came third; cotton piece goods fourth; fuel oil was in the place of beverages, followed by cement, kerosene, jute, rubber goods, and raw wool.

The goods of which the importation *increased* most in value relatively were:—Woollen yarn, 48 per cent.; motor cars, 44 per cent.; fruits and nuts, 36 per cent.; cotton piece-goods, 28 per cent.; chemicals and drugs, 28 per cent.; prepared skins and hides, 27 per cent.; paper and paper manufactures, 22 per cent.; dried cod, 22 per cent.; earthenware and porcelain, 21 per cent.; machinery, apparatus, utensils and tools, 16 per cent.; manufactures of iron and steel, 12 per cent. The largest *decreases* were in fuel oil, 34 per cent.; coal, 27 per cent.; raw materials of iron and steel, 21 per cent.; rubber manufactures, 12 per cent.; kerosene, 11 per cent. The principal supplies from Great Britain in order of value were:—Cotton piece-goods (£3,466,000), coal (£2,439,000), codfish, woollen piece-goods, cotton yarn, tinsplate, jute yarn, cotton sewing thread, linen piece-goods, patent fuel,

wool yarn, rails, fishplates and railway accessories, locomotives. British supplies of each of these items exceeded £250,000.

In the first half of 1929* the total imports were 4 per cent. higher than in the previous corresponding period. Their origin was as follows:—

	£	%
United States	14,482,826	= 31 increase.
United Kingdom	9,096,872	= 6 decrease.
Germany	5,361,764	= 5 increase.
Argentina	4,774,726	= 15 decrease.
France	2,352,125	= 12 "
Belgium	1,913,510	= 16 increase.
Italy	1,307,729	= 20 decrease.

In this period the proportion of manufactured goods in the total increased to 62 per cent. The proportion of foodstuffs decreased to 18 per cent. Raw materials comprised 20 per cent., instead of 21 per cent. The largest percentage increases were shown by motor cars and trucks, 98 per cent.; manufactured iron and steel, 22 per cent.; porcelain and earthenware, 18 per cent.; timber, 12 per cent.; machinery and tools, 10 per cent.; dried codfish, 10 per cent.; manufactured iron and steel, 9 per cent. The largest decreases were in prepared skins and hides, 33 per cent.; raw wool, 30 per cent.; wheat and flour, 13 per cent.; chemical products and drugs, 11 per cent.

Motor Cars.—The most striking feature in the 18 months covered by the above figures is the increase in motor cars and trucks of 44 per cent. in 1928, and 98 per cent. in the first half of 1929. The amount imported in the latter period was £3,797,000—over 8 per cent. of the total. Latterly the trade has shown signs of reaction. Statistics of the sources of supply later than May, 1929, are not yet available, but in 1928, 97 per cent. came from the United States and 1½ per cent. from Great Britain—the latter chiefly lorries. The average value of the British vehicles was three times the average value of those from the United States. The figures for January to May, 1929, inclusive show that the United States percentage was maintained. According to United States estimates more than 90 per cent. of the business in passenger cars, including taxis, in Brazil is now done on the instalment system; and there is only 1 per cent. of default. In case of default the supplier recovers possession. The usual period of payment is 12 months. Despite the smallness of the losses 16 per cent. interest is usually charged on the unpaid balance. There is no British passenger car manufacturer or group yet established in Brazil with a selling organisation comparable to the United States sales services; but it is hardly credible that this rapidly growing market will continue much longer to be comparatively unexploited by the British motor car industry.

The importation of *motor car tyres and inner tubes* did not increase proportionately in 1928 with the increase in cars, the total

*The total in the first eight months was £59,763,000—an increase of 4 per cent. on the corresponding period of 1928.

of £821,207 being in fact less than the corresponding figure for either 1927 or 1926. The British share was $9\frac{1}{2}$ per cent.—slightly more than in 1927, but much less than in 1926 or 1925, when the British percentages were 14 and 20. The share of the United States was 60 per cent., and most of the balance came from France and Canada in equal proportions, though in 1927 France had double and Canada nothing. An increase in the road tax on imported automobile accessories stimulated buying prior to its application in June, 1929. Preparations are being made for the manufacture of tyres in the State of São Paulo by the Michelin Co. and by Messrs. Pirelli.

Cotton-piece Goods.—The trade in cotton piece-goods was disturbed towards the end of 1928 by a revival of the attempt made by the national mills unsuccessfully a year before to obtain increased protection. This time the attempt succeeded, and there was a large increase in the imports in December, followed by a rush of orders at the beginning of 1929 for delivery before April 10th, when the new duty came into effect. The result was an importation in 1928 of £5,015,063, as against £3,912,000 in 1927; and in the first three months of 1929, £1,923,000 as against £1,005,000 the year before. By then the market was heavily overstocked and a strong reaction set in, so that by the end of June the imports for 1929 showed only a small increase. By August imports from Great Britain* actually showed a decrease on the corresponding period of the year before, the only item not reduced being bleached goods. The largest fall was in coloured cottons. The imports of 1928, and 1929 up to the end of June, added together, amount to £7,180,000, which represents an increase on the corresponding 18 months of 1927-28 of £1,200,000. This may be taken to indicate the surplus stocks existing in the market on June 30th, 1929, over and above normal stocks. This surplus is equal to about four months' normal imports, and if importation had ceased entirely the stocks might be expected, other conditions being as usual, to return to their normal level by the end of October. From March to June inclusive the imports were under £250,000, at which rate the surplus should be completely absorbed by the end of 1929. Unfortunately other conditions are not as usual owing to reactions of the coffee policy on purchasing power and to the nature of the developments in the cotton trade itself. The situation was greatly aggravated by the way in which many importers placed excessively large orders without having the necessary financial resources to hold the goods. The consequences were disastrous both for themselves and for their suppliers. Firm after firm failed to meet their liabilities and disorganised the market by forced selling. By October the worst appeared to be passing, but no real revival can be expected before the spring of 1930.

*From British Board of Trade returns, the only figures available.

The extent to which the new duties will check imports when the situation becomes normal may not prove so serious as was at first feared. Hitherto the increases, instead of helping the national mills, have made matters worse for them owing to the preliminary glut of imported goods, and they have not therefore been able yet to take any appreciable advantage of the added protection. Only a very small minority in any case are in a position to benefit without being completely reorganised and re-equipped. In particular the national industry cannot effectively compete with Manchester in supplying the varied demand for fancy goods owing to the comparative smallness of the market which makes the cost of frequently changing patterns unprofitable for the local mills.

The nature of the supplies from the principal countries of origin in 1928 is indicated in the following table of percentages. Dyed goods comprise 70 per cent. of the total. Sixty per cent. of the dyed goods weigh over 60 grammes a square metre, and 30 per cent. between 49 and 60 grammes:—

Country of origin.	Bleached.	Unbleached.	Printed.	Dyed.	Other.
Great Britain ...	73	39	54	74	47
United States ...	7	—†	20	5	11
France ...	8	—†	15	8	11
Switzerland ...	8	—†	8	6	—†
Germany ...	2	52	—†	2	9
Italy ...	—†	—†	—†	5	10

†Not shewn, if any.

The printed goods from the United States are practically all cheap voiles. Among the imports most in demand are muslin, zephyr, duck, pongee, khaki, warp sateen, tricoline, luisine and umbrella cloth.

It is improbable that any substantial amount of trade in Brazil is captured from Manchester on length of credit alone, and the chief competition in this respect has been among Manchester firms themselves, some having secured orders which would have gone to Manchester in any case by offering 180 days, against 120 days offered by rival firms. As a means of shortening the credit risk the experiment is being tried of selling from local stocks for the manufacturer's account.

Woollen Piece-goods.—The imports of *woollen piece-goods* increased from £793,000 in 1927 to £972,000 in 1928, of which £621,000, or 64 per cent., came from Great Britain, 21 per cent. from France and 7 per cent. from Germany. A loss of 3 per cent. in Great Britain's share was due to the competition of these two countries. Most of the French trade is in light weight dress materials for ladies. Germany also supplies ladies' dress materials of the styles suited to the Latin taste.

Woollen carpets and tapestry were imported to a value of £94,744,000, of which 43 per cent. came from Great Britain, 30 per cent. from Germany and 20 per cent. from France.

The statistics of woollen piece-goods imports in the first half of 1929 are not available separately, but the total of woollen manufactures was £612,000—3 per cent. more than in the first half of 1928.

Jute.—The imports of jute, both raw and yarn, decreased in 1928. Ninety-six per cent. of the yarn came from Great Britain. During the year one of the largest national mills withdrew from the ring which had been formed to control production. The demand for jute sacks has been affected somewhat by the increasing use of cotton and paper sacks. An American factory for the production of paper sacks was established at São Paulo in 1928.

Linen Piece-goods.—Linen piece-goods imports were the largest on record, amounting to £774,316, of which Great Britain supplied 47 per cent. After Great Britain the principal sources of supply were Belgium with 25 per cent.—an increase of nearly 5 per cent. on the year before—and France with 21 per cent. It is not improbable that part of the goods shipped from France are really of Belgian origin. The bulk of the purchases from these countries consist of cambrics and sheetings.

Coal.—Imports from Great Britain of coal, patent fuel and coke just exceeded 2,000,000 tons, a figure reached only once before, viz., in 1913. The value, £2,832,000, was also the largest since that year. This improvement was due not to a general increase in the trade, which was in fact less than the year before—when the figures were 2,215,000 tons and £4,167,000—but to an increase in the percentage secured by Great Britain. In 1913 Great Britain supplied 85 per cent. in quantity and 86 per cent. in value; in 1927, 70 per cent. in quantity and 62 per cent. in value. The only coal imported from any other country in 1928 was 151,000 tons of gas coal, value £251,000, from the United States. In 1927 the United States supplied 580,000 tons. A trial order for 15,000 tons of German briquettes was placed by the Central Railway in the early part of 1929.

Railway Material.—Brazil's trade in railway material in 1928 showed double the decrease—namely, 17 per cent.—on 1927 which that year showed on 1926. In a total of £2,503,000 the only item which did not fall below its 1927 figure was the smallest—wheels and axles.

Of the orders for *rails, fishplates, &c.*, amounting to £1,172,000, Great Britain secured 25 per cent., as against 19 per cent. the year before. Belgium, the leading supplier, did better with 38 per cent., as against 33 per cent. in 1927; while the United States share of 25 per cent. was 7 per cent. less than the previous

year. Contracts have been placed recently for both Bessemer and Siemens Martins rails for the Sorocabana line which is being constructed for Mayrink to Santos, and further purchases will be necessary. Other new railway construction is mentioned in the chapter on transport.

A large decrease in the total imports, and a large increase in Great Britain's share, were the outstanding features of the *locomotive* trade. In 1927 Great Britain supplied 16 per cent. out of a total of £1,112,000; in 1928, 48 per cent. out of a total of £577,000. The United States share decreased from 64 per cent. to 24 per cent. In 1928, 23 per cent. came from Germany. The increase in the supplies from Great Britain was entirely due to orders placed by the Leopoldina and Great Western of Brazil railways, both British companies. The United States supplies included 10 steam locomotives, 2 electric, 1 gasoline and a few small mining and industrial locomotives. Of this material the Victoria a Minas, the Paulista and Mogyana railway companies, were the chief buyers. The Noroeste do Brasil railway bought four locomotives. An order from the same company for five mountain type locomotives was secured by a German firm, but as the specifications called for certain parts only obtainable in the United States it is doubtful whether the order will be carried out, owing to the high prices demanded for these parts by the United States manufacturers.

There is a good opening in Brazil for light railway material. Many of the national sugar factories are in need of rolling stock and are likely purchasers when sugar prices permit.

The value of *cars and wagons* imported in 1928 was £519,000, of which 26 per cent. came from Great Britain, as compared with 35 per cent. the year before. The United States share increased from 24 per cent. to 41 per cent. Belgium lost a point with 29 per cent. Germany had only 2 per cent., against 9 per cent. in 1927. Imports from the United States in 1929 include two new passenger trains with sleeping coaches for the Federal Government railway running between Rio de Janeiro and São Paulo, which are being paid for by means of a special supplement charged on the two trains in addition to the ordinary fare. In the meantime they remain the property of the suppliers. The American share of the trade in 1929 will also include part of a large order for steel freight wagons which was placed with a United States firm by the Paulista Railway in 1928, and is now in course of being delivered. This is the first time that all-steel wagons have been imported into Brazil.

Wheels and axles increased from £181,000 in 1927—an exceptionally small year—to £235,000, of which Great Britain supplied 42 per cent., as against 61 per cent. the year before; the United States 18 per cent., Belgium 17 per cent. and Italy the same. In 1927 the United States share was 11 per cent. and Italy's only 9 per cent.

Machinery.—Machinery, including mechanical apparatus and tools (£11,514,000), which is usually the largest item in the list of Brazilian imports, in 1928 accounted for more than 12 per cent. of the total. The value exceeded that for the year before by £1,667,000. The first half of 1929 showed an increase of 10 per cent. on the corresponding period of 1928.

Great Britain's share in the supplies of material for *electricity and electric light*, which amounted in 1928 to £1,247,000, was under 14 per cent.—the smallest for several years. Germany's share increased from 16 per cent. to 20 per cent., while the United States slightly more than maintained her position by supplying just over 50 per cent.

The United States also supplied 35 per cent. of the *electric motors* (£251,000*), 62 per cent. of the *transformers* (£207,000*), and 33 per cent. of the *dynamoes and generators* (£172,000*). Great Britain's share was 15 per cent. of the motors, 8 per cent. of the transformers and 18 per cent. of the dynamoes and generators. Germany supplied 24 per cent., 18 per cent. and 35 per cent. respectively, having gained ground in all three—at the expense of the United States in motors, dynamoes and generators, and at the expense of Great Britain in transformers. American and German manufacturers of electric material have thoroughly efficient selling organisations, keep local stocks and give expert service. By these means they have secured a very favourable position in the market.

Oil and gasoline motors were imported to a value of £261,000, an increase of 36 per cent. on 1927 and the largest importation for several years. Great Britain, after being the leading supplier in 1927 with 25 per cent., supplied only 20 per cent. in 1928 and yielded first place to Germany, whose share was 28 per cent., as compared with 13 per cent. the year before. Belgium, Sweden and Switzerland followed not far behind. A similar development occurred in the class "motors, unenumerated" (£83,000), of which Germany supplied 32 per cent., as against 15 per cent. the year before, and took the lead from Great Britain, whose share fell from 49 per cent. to just under 32 per cent. In the north of Brazil gas engines are gradually being displaced by Diesel engines, while in the south electric motors are ousting both. The demand for electric motors up to 50 h.p. is supplied from local stocks.

The relative position of the principal suppliers of *spinning machinery* (£351,000), not including looms, was unchanged. Sixty-three per cent. was British and 16 per cent. German. Great Britain supplied the same proportion of accessories for *spinning machines* (£317,000), which was 7 per cent. less than her share in 1927. Germany secured 11 per cent. and Italy 7 per cent. Switzerland was Great Britain's chief competitor in the supply of *looms*

*Total imports.

(£85,000), with 21 per cent. Germany supplied 20 per cent. and Great Britain 49 per cent.

Unspecified industrial machinery amounted to £707,000. Great Britain was displaced as the leading country of origin by Germany, whose share was 34 per cent., against Great Britain's 22 per cent. after supplying 30 per cent. in 1927. The United States went back from 25 per cent. to 18 per cent., while Belgium and France advanced to 9 per cent. and 8 per cent. respectively.

The trade in *agricultural machinery*, not including tractors, increased from £88,500 in 1927 to £167,500 in 1928, of which *ploughs and ploughing apparatus* accounted for £36,000 in 1927 and £91,000 in 1928. Of these latter totals the United States supplied £24,000 in 1927 and £64,000 in 1928; Germany £11,000 and £20,000, and Great Britain only £1,000 in each year. The main demand is for light reversible hillside ploughs for use with horses or oxen. There is national manufacture of ploughs at São Paulo and Pernambuco. British agricultural machinery is considered too heavy and too expensive to compete successfully against American machinery. The value of *threshing machines* imported in 1928 was £21,000, an increase of 50 per cent. on 1927. Eighty-eight per cent. came from Germany.

The demand for *coffee machinery* is satisfied by local factories.

Seventy-eight per cent. of the imports of *tractors* (£70,000) in 1928 came from Germany; 17 per cent. from Great Britain.

Considerable purchases of *road machinery* were made in 1928, including scarifiers, levellers, stone crushers, concrete mixers, road compressors and pneumatic drills. The United States, through two firms who both keep local stocks, were the chief suppliers. British manufacturers held their own in road compressors and stone crushers. Brazilian granite is generally very hard, for which light types of crusher are not suitable. A special size of ballast is sometimes stipulated in ordering these machines. It is believed that if local stocks were available British pneumatic tools would find a good sale. Weight is a very important factor in Brazil's importation of road machinery, as it affects both freight and duty. British machines are often several tons heavier than American and German. Quick delivery is also liable to have an important influence on the placing of orders.

The total value of *cranes* imported in 1927 was £84,000. In 1928 it was £278,000. The whole of the increase was shared between Great Britain, whose contribution rose from £17,000 in 1927 to £137,000, and the United States, who contributed £107,000, after having sold under £1,000 in 1927. The figures include supplies for the ports of Santos and Pernambuco.

An increase in the imports of *tools* (£582,000) was accompanied by a decrease from 19 per cent. to 13 per cent. in the supplies from

Great Britain. The United States and Germany increased their respective shares from 35 per cent. to 39 per cent., and from 34 per cent. to 37 per cent. *Hoes*, in which there is an important trade with Great Britain, were formerly included in this class, but since 1926 they have come under the heading "hoes, shovels, pickaxes and similar products." There was a large increase in the imports in 1928 (£666,000) compared with 1927 (£396,000).

The imports of *hydraulic pumps* (£81,000) were 37 per cent. larger in 1928 than the year before. Small German pumps up to 4 in. are stocked locally and have a good sale. Large pumps come chiefly from the United States. One of the best known American pump manufacturers has a branch sales office in Rio de Janeiro.

Unspecified machinery imports, amounting to £2,707,283, came chiefly from the United States (£955,000), Germany (£930,000), Great Britain (£385,000) and France (£93,000). The corresponding figures in 1927 were:—United States (£718,000), Germany (£705,000), Great Britain (£400,000), France (£132,000); total £2,306,000. Thus the United States and Germany both gained substantially at the expense of Great Britain and France.

Iron and Steel.—In 1928, while the imports of *unmanufactured iron and steel* decreased by £343,000 to £1,266,000, *manufactures* more than made up the difference by increasing £813,000 to £7,220,000, the proportion of manufactured being 85 per cent., as against 80 per cent. the year before. In the first half of 1929 iron and steel showed an addition of 9 per cent. on the corresponding period of 1928, and unmanufactured iron and steel an addition of 22 per cent.

The bulk of the unmanufactured imports consists of iron bars, rods, plates and sheets (£1,000,452), almost equally divided between *bars and rods* (£496,000) and *plates and sheets* (£504,000). Of bars and rods Belgium supplied more than half (£256,000), Germany £75,000, Great Britain £63,000, and France £38,000. In 1927 France was the second largest supplier, with Great Britain and Germany equal third.

Imports of iron plates and sheets were less by 51 per cent. than in 1927. The principal suppliers in 1928 were United States with 36 per cent., Belgium with 29 per cent., Great Britain with 24 per cent. and Germany with 10 per cent. In 1927 Great Britain's share had been more than 70 per cent., Belgium following with 13 per cent.

In 1928 Great Britain was the largest supplier of *steel bars and rods* (£187,000), followed by Germany and Belgium, and of *steel plates* (£42,000), followed by the United States.

The importation of *galvanised corrugated iron sheets* was larger than for several years, and the demand tends to continue active. Great Britain lost the first place that had been hers in

1927, coming second to the United States, whose share of the total (£396,000) was 57 per cent., against Great Britain's 41 per cent. While the trade in corrugated iron sheets in Rio de Janeiro is largely in British hands through one important supplier who carries local stocks, the São Paulo market, where there is no similar British selling house, buys chiefly American sheets. The establishment of a similar British organisation in São Paulo would probably enable British manufacturers to recover the lead in this line, as their sheets compare favourably with American sheets, both in quality and in price. British statistics show an increase of 23 per cent. in the exports of galvanised sheets to Brazil in the first eight months of 1929, compared with the corresponding period of 1928.

Of a slightly reduced total (£230,000) of *structural iron and steel* imported in 1928, Great Britain supplied only 6 per cent. Belgium, the United States and Germany supplied between 22 and 25 per cent. each and France 12 per cent. In 1913 Great Britain supplied 14 per cent. of a total of £938,000. Reinforced concrete is used for most of the new office buildings in Rio de Janeiro and São Paulo, each city having reinforced concrete buildings of over 20 stories. There are hardly any steel buildings.

In spite of criticism of the packing, sorting and annealing of Welsh *tinplates* Great Britain recovered some lost ground in the Brazilian market in 1928, supplying 73 per cent. of a total importation amounting to £742,000, as compared with 64 per cent. out of £796,000 in 1927. There is still a margin for improvement. In 1913 Great Britain's share was 82 per cent. The United States is the only competitor.

Tin bars, rods and sheets imports amounted to £189,000, of which £161,000 came from Great Britain.

Imports of *iron tubes, pipes and joinings* were larger in value in 1928 than ever before, though less in quantity than in 1913, the next largest year, when 36 per cent. of the total of £925,000 came from Great Britain. In 1928 Great Britain's share was 19 per cent. of a total of £1,006,000. This was, however, an improvement of 2 per cent. on 1927. In 1928 Belgium was again the leading country of origin, but with a percentage reduced from 35 in 1927 to 28. The rest of the trade was divided among the United States (18 per cent.), Holland (16 per cent.), and Germany (14 per cent.), Holland's share having quadrupled, while the United States lost 6 per cent. A new water supply service for São Paulo was completed in 1928. A contract was placed also by the municipality of Nictheroy for a water supply service involving the purchase of a considerable quantity of piping, but owing to the unexpected appearance of salt water in the area of the scheme, the execution of the contract was indefinitely suspended. A competition opened early in 1929 for a considerable supply of piping to the city of Bahia was annulled.

The value of *telegraph and telephone posts* imported in 1928 was £195,000, of which Great Britain supplied 29 per cent., Germany 27 per cent., Belgium 20 per cent., and the United States 17 per cent. In 1927 the United States was the leading supplier with 32 per cent. of the total, followed by Belgium, Great Britain (17 per cent.), and Germany.

More than 90 per cent. of the *barbed wire* imported in 1928 (£689,000) was supplied by Germany, the United States and Belgium. Great Britain supplied 5 per cent., i.e. £34,000.

Other iron and steel wire was imported to a value of £464,000, of which 16 per cent., or £69,000, came from Great Britain, an increase of 3 per cent. on 1927; while Germany and Belgium supplied 41 per cent. and 29 per cent. respectively, both slightly less than the year before. Supplies from Holland more than doubled.

In 1928 Great Britain, after having been the leading supplier in 1927 of *staples, screws and rivets* (£108,000), fell back to fourth place behind Germany, the United States and Belgium. Great Britain's share decreased from £33,000 to £19,000.

Germany (45 per cent.) and the United States (28 per cent.) supplied the bulk of the imported *iron nails* (£70,000). Great Britain's share of this trade was just under £10,000. There are two important local factories, one British and one German, of nails, rivets, bolts, nuts and screws.

Copper.—*Copper castings, mouldings and filings* (£301,000) came, as in 1927, chiefly from the United States (£221,000), followed a long way behind by Great Britain (£32,000) and Germany (£22,000).

In *copper ingots, bars and plates* (£239,000) Germany (40 per cent.) and Great Britain (25 per cent.) retained their leading positions. Though the total value of *copper electric cables* (£182,000) was less than in 1927, Great Britain supplied more, viz., £70,000, against £54,000. The United States came next with 20 per cent. of the total, followed by Canada (15 per cent.), Belgium (10 per cent.), Germany (9 per cent.), and Italy (7 per cent.)—the last two having been overtaken by the other two. Canada appears as a source of supply for the first time. Snr. Pirelli, the Italian industrialist, during a visit to São Paulo in 1929, announced that he had decided to establish a factory for copper cables at São Paulo.

Unspecified copper manufactures, including ornaments, lamp brackets and other fittings amounted to £260,000, of which £31,000 came from Great Britain, £96,000 from Germany, £61,000 from the United States and £51,000 from France. Germany also leads, with Great Britain close behind, in supplying *copper tubes and piping*, including raw material for locally manufactured electric light fittings.

Chemicals.—Great Britain is the largest supplier of heavy chemicals, of which the chief is *caustic soda* (£401,000). The value of Great Britain's share (£229,000) in this line represented a decrease of 19 per cent. on the year before. The United States came next with £105,000, or 26 per cent., which was 7 per cent. more than in 1927. Great Britain supplied 96 per cent. of *potash* imports in 1928. Of the *copper sulphate* (£47,000) Great Britain supplied 73 per cent. and Germany 24 per cent. Of *lysol and similar disinfectants* Great Britain supplied 81 per cent. The leading suppliers of the large range of *chemical products not separately specified* (£810,000), which includes drugs and pharmaceutical medicines, were in 1928:—France (24 per cent.), Germany (23 per cent.), United States (15 per cent.), and Great Britain (15 per cent.). The total imports of all chemical products and drugs in 1928 amounted to £2,288,000—28 per cent. more than in 1927—and in the first half of 1929 to £977,000. The demand for drugs is large, and there is a large local production from imported raw material. Chemists' shops are very numerous.

Cement.—In the market for cement (£1,403,000), there is close competition among Denmark, Belgium, Great Britain and Sweden, which in 1928 supplied 20 per cent., 18 per cent., 15 per cent. and 11 per cent. respectively, in the order given. In 1927 Denmark was second with 15 per cent. to Belgium's 21 per cent. In the first half of 1929 the imports were £760,000, a slight increase. Germany became one of the three largest suppliers. In the first eight months of 1929 Great Britain supplied £91,000, as against £77,000 in the same period of the year before. The national factory at São Paulo, which has worked at maximum capacity since its establishment, increased its output during the year, but its effective selling range is limited to the State of São Paulo and neighbouring States. The north and south continue to depend entirely on imported cement. The Government of Minas Geraes are understood to have approved a German scheme for establishing a cement factory in that State, with a minimum annual product of 300,000 barrels.

Sanitary Ware.—Sanitary ware imports amounted to £96,000, of which 82 per cent. were from Great Britain and 10 per cent. from the United States. A Bill to increase the import duty on these goods was introduced into Congress in July, 1929, but made no progress. There is only one national factory, one of the partners in which is the Deputy who introduced the Bill. In the trade in *unspecified porcelain and earthenware* (£457,000) Great Britain retained the leading place with 43 per cent. against Germany's 35 per cent., Japan's 12 per cent. and France's 5 per cent. This represented an important advance by Germany compared with 1927, when Great Britain supplied 56 per cent., Germany 27 per cent. and Japan 8 per cent. The imports in the

first half of 1929 (£617,000) were 18 per cent. more than in the first half of 1928. There is a considerable amount of Czechoslovakian porcelain and earthenware in the market which does not appear separately in the statistics, and is presumably included in the German share, as the result of being shipped at German ports. Japan and France compete chiefly in porcelain. Germany chiefly in earthenware and porcelain. A report from Genoa in July, 1929, stated that an important scheme was on foot to increase the sale in Brazil of Italian glassware and porcelain, and that stocks would be kept at the most important centres with that object.

Glass.—Forty-nine per cent. of the *window glass* in 1928 (£177,000) came from Belgium, followed by Great Britain with 20 per cent. Germany increased her share from 16 per cent. to 19 per cent. Great Britain's share has decreased gradually year by year since 1925. Of *polished glass without foils* (£80,000), Belgium supplied 76 per cent. and Great Britain 20 per cent.

Paints.—The United States increased her share of the trade in *oil paints* (£183,000) to 57 per cent., followed by Great Britain with 26 per cent. In 1927 the shares of these two countries were United States 51 per cent. and Great Britain 30 per cent. The British share has been on the decrease for several years. *Dry paints* (£40,000) came chiefly from Germany (59 per cent.), Great Britain's share being only £5,262. The leading supplier of the *white zinc* imports in 1928 (£171,000), which were the largest for many years, was Belgium with 52 per cent. of the total, followed by France with 17 per cent. and Great Britain with 14 per cent. There are important factories of oil paints both at Rio de Janeiro and São Paulo, largely using local raw material.

Linseed Oil.—Great Britain was the principal supplier of linseed oil in 1928 (£192,000) with 67 per cent., Holland coming next with 25 per cent.

Varnishes.—Before the war Great Britain was the largest supplier of varnishes, but in 1928 (£46,000) only 28 per cent. came from that country, while the United States supplied 49 per cent.

Paper.—Nearly half the *newsprint* imports in 1928 (£565,000) came from Norway, practically all the rest from Germany, Sweden and Finland. The value of *printing paper* imported was £208,000. Great Britain's share increased to 25 per cent., Germany still being ahead, though with a share reduced to 26 per cent. from 33 per cent. in 1927. In 1928 Norway doubled the value of her exports to Brazil and supplied 11 per cent., Holland supplied 10 per cent. Germany was also the largest supplier of *writing paper* (£154,000), with 32 per cent., and of *paper unspecified* (£301,000) with 34 per cent., followed in the former by Holland, Norway, Sweden, the

United States and Great Britain, in that order, and in the latter by Great Britain with 15 per cent, and the United States with 14 per cent. *Strawboard* and *Bristol board* is imported chiefly from Holland, the United States and Germany, *blotting paper* from the United States, *drawing* and *photographic paper* from the United States and Great Britain. British manufacturers might increase their trade in *labels*, *paper table napkins*, *doilies* and *tissue paper*.

Prepared Hides and Skins.—Prepared skins and hides increased from £821,000 in 1927 to £1,066,000 in 1928. This includes *upper and patent shoe leather*, of which by far the largest supplier is the United States. French, German and English tanners also compete.

Leather Goods.—Imports of *leather belting* tend to decrease, owing to local production. In 1928 the total value was £54,000, of which 43 per cent. came from Great Britain, 20 per cent. from France and 15 per cent. from the United States. The imports of *unspecified manufactures of skin and leather*, on the other hand, have increased in the past three years, and Great Britain's share also. In 1928 Great Britain supplied 72 per cent. of a total of £153,000.

Furs.—Beaver, rabbit and other furs for the manufacture of felt were imported in 1928 to a value of £543,000, the principal sources being Holland (£191,000), Great Britain (£173,000) and France (£60,000).

Enamelled Iron Manufactures.—In spite of the existence of several national factories and the growing popularity of aluminium the imports of enamelled iron manufactures were larger in 1928 than ever before. The increase was almost wholly supplied by Germany, whose share of a total of £158,000 was £129,000, while Great Britain supplied £5,072. German supremacy is largely due to the light weight of their goods, which enables them to enter at a lower rate of duty than the heavier British manufactures.

Gramophones.—The imports of gramophones, &c., increased from £133,000 in 1927 to £244,000 in 1928, Great Britain's share meanwhile increasing proportionately from £21,550 in 1927 to £38,600 in 1928. *Gramophone records and accessories for gramophones* amounted to £141,000, almost wholly from the United States and Germany.

Among imports of considerable value in which Great Britain's share is very small are included *pianos* (£217,000), *photographic apparatus*, *plates*, &c. (£182,000), *cinema films* (£100,000), *wireless apparatus* (£86,000), *electric lamps* (£221,000), *sewing machines* (£836,000), *typewriting machines* (236,000), *calculating machines* (£182,000). *Cash registers* were imported by Brazil to a value of £50,000, all from the United States.

EXPORTS.

Brazil is constantly being exhorted not to continue relying entirely on one crop for her exports, but to concentrate on developing a variety, which would put an end to the uncertainty which with the growth of the nation's responsibilities and external liabilities tends to become more and more a cause of apprehension. It is, however, a mistake to suppose that the Brazilian Government and Brazilian economists—in fact all thinking Brazilians—are not fully alive to the danger. Coffee has been the basis of Brazil's remarkable progress hitherto because it has been the simplest and most profitable commodity to produce. As long as that continues to be the case preference for the cultivation of coffee will continue and alternative sources less obvious or less accessible to the mass of the population will remain correspondingly neglected. It is not a lack of alternatives, but rather an embarrassment of riches, that constitutes Brazil's problem. Probably no other country has a range of climate suitable for producing so great a variety of products—from wheat to rubber. If there had been no coffee Brazil might have become a great exporter of cotton, or of silk, or of fruit, or of sugar, or of meat. And it will yet become a great exporter of some, if not all, of these products, as well as of minerals, which may prove more valuable still. Hitherto the absence of the necessary combination of capital and labour has prevented a large development, and cultivation apart from coffee has been comparatively casual and spasmodic.

These conditions are reflected in the irregularity of the export figures. The following table shows maximum and minimum quantities exported, with corresponding values, in the period from 1910 to 1928. The figures for these two years are also given, except in respect of meat, the exportation of which only began on an appreciable scale in 1915.

Sugar.			Cotton.		
Year.	Tons.	Value.	Year.	Tons.	Value.
1910	58,824	£ 679,000	1910	11,160	£ 893,000
1922	252,112	3,323,000	1913	37,424	2,308,000
1925	3,182	55,000	1916	1,071	120,000
1928	30,037	511,000	1928	10,010	893,000

Meat.		
Year.	Tons.	Value.
1916	33,661	£ 1,415,000
1923	76,829	1,933,000
1926	6,994	281,000
1928	65,103	2,002,000

The above figures do not exaggerate the fluctuations in sugar and cotton, but 1926 is the only year that the exports of meat have been under 30,000 tons since 1916. The cause of the exceptional drop in that year was the fear in the English market of introducing foot and mouth disease.

The total value of Brazilian exports in 1928 was £97,426,000, of which Great Britain took under 4 per cent. Up to 1918 Great Britain's purchases were always above 10 per cent., consisting chiefly of rubber. The highest point reached by the exports prior to the war was £74,649,000 in 1912. The first year after the war, in 1919, the total shot up to £130,000,000, owing to the abnormally high prices. 1928 was the best year since 1920, with the exception of 1925, when the average value of coffee was £5 10s. a bag as against £5 in 1928. The proportion of coffee to the total exports in 1928 was 71 per cent. Owing to the restriction of shipments by the Coffee Institute this figure does not necessarily represent the full extent of the influence of coffee on the export trade. In the past few years it has tended more and more to divert agriculturists from the cultivation of other export commodities. In 1928 the exports of coffee amounted to a value of £69,700,000. Prior to 1919 the largest value exported was £46,558,000. And in 1910 coffee only slightly exceeded rubber, the respective figures for that year being coffee £26,696,000, rubber £24,646,000. By 1928 the competition of Asiatic rubber had reduced this figure to £1,448,000—a loss which few countries could have borne so successfully.

Though fourth in actual numbers, Brazil has more cattle in proportion to population than any other country in the world. Pigs, horses and goats are also very numerous. That animal products should be an item of primary importance in her export trade is therefore natural, and the large increase in 1928 compared with any other year unaffected by the war may be regarded as indicating a legitimate expansion which is likely to continue. In 1913 the total exports of animal products amounted to a value of £3,875,000. From 1917 to 1920 inclusive, a war and early post-war period, the prices were abnormally high and the exports varied between £11,000,000 and £20,000,000. Since 1920 the best year prior to 1928 was 1923, when the value was £7,650,000. The 1928 figures were £10,432,000. Of this total the shipments to Great Britain (£972,000) were slightly under 10 per cent., more than half (£586,000) being chilled and frozen beef. The total exports of chilled and frozen beef to all countries in 1928 were £2,002,000, and in the first eight months of 1929, £2,376,000. But the chief of the animal products as regards exports are hides and skins, which in 1928 amounted to £6,768,000—a figure exceeded only twice in 1919 and 1920—when prices were abnormally high. The quantity exported in 1928 was larger than in any other year. The value exported in the first eight months of 1929 was £2,610,000.

In 1928 the largest export, after coffee, was hides and skins. In 1927 the second largest export was cocoa, in 1926 it was rubber. In 1928 cocoa (£3,656,000) was next to hides and skins, and was followed by maté (£2,594,000), meat, oilseeds (£1,763,000), tobacco (£1,709,000), rubber, manganese ore, cotton, carnauba wax, table fruit including nuts, wool, timber and sugar (£511,000).

The chief markets for these products were:—

United States	...	(44,279,000)	Coffee, cocoa, rubber, hides.
Germany	...	(10,909,000)	Coffee, hides, cocoa, tobacco, wool, meat.
France	...	(8,932,000)	Coffee, hides, meat.
Argentina	...	(5,784,000)	Coffee, maté, fruits, tobacco.
Holland	...	(5,612,000)	Coffee, cocoa.
Italy	...	(4,834,000)	Coffee, hides, meat.
Great Britain	...	(3,354,000)	Cotton, nuts, sugar, rubber fruit (oranges and bananas), cottonseed, wax, tallow.

The export figures for the first half of 1929 show a decrease compared with 1928 of £2,515,000, the total value being £46,017,000. The decrease is mainly due to a falling off in the trade in hides and coffee. The difference in hides, which fell heavily in both quantity and price was £1,674,000. In coffee there was a difference against Brazil of £1,308,000, in spite of the higher price. The trade in meat and fruit showed an improvement; meat increased by £589,000 and fruit by £106,000.

MARKETING METHODS.

This subject was carefully discussed in the last report, and the remarks made then continue to apply. The importance of making a careful investigation of local conditions before entering the market, and especially of studying competitors' methods, needs to be emphasised. The only really satisfactory method of initiating business with Brazil is by a personal visit. No amount of correspondence can convey a complete picture to the mind of the country and the people, their needs and the ways in which those needs are being supplied. If a personal visit is impossible it is vital to take advantage of every available source of information and advice. It is surprising how often agents are appointed by letter, on superficial information, and left to their own devices indefinitely without either visiting their principals or being visited.

The success of United States suppliers leads inevitably and repeatedly to a comparison of their methods with the methods of British suppliers. The outstanding general difference is that the Americans co-operate more. As a result of co-operation their selling is more organised and their credit information better. The conservative individualist British attitude which has been the pride and, in a sense, the strength of the English business man in the past has become a hindrance in competition with team methods. A single manufacturer cannot pit himself with any real

prospect of success against a large industrial group in supplying the Brazilian market, where quality is generally the least telling factor, and where advertising, local stocks and credit facilities are decisive.

The visitor to Rio de Janeiro or São Paulo cannot fail to be struck by the American atmosphere of the main streets, an effect which is due to the fact that nearly all the most striking advertisements are of American products, especially motor cars and tyres. Among other conspicuous signs are advertisements for refrigerators, office appliances, electrical goods, optical goods, toilet preparations and novelties of all kinds. Advertising is not a substitute for local representation, but in many lines a necessary adjunct. The best results are obtained by a combination of a good agent, systematic advertising and periodical visits from a competent travelling representative.

It is hardly necessary to point out the advantages of co-operation in the granting of credit, which involves capital and depends on good information for success. United States firms have rarely figured as creditors in recent failures—which has, it must be allowed, been mostly in lines of business in which their trade is small, but a large proportion of American trade with Brazil is primarily a credit trade. Ninety per cent. of the business in motor cars is now done on the instalment system—American sewing machines and domestic refrigerators are also sold in this way. Several years' credit have been given to Brazilian importers of American railway stock.

Considerable purchases are made every year by the Federal and State Governments of railway and port material, road machinery, workshop equipment and stores of all kinds, including hardware, clothing and linen. The constitution requires that Federal Government contracts should be placed by public competition, and this formality is almost invariably carried out. But the approach of a competition is always known beforehand, and none but those suppliers whose representatives keep in constant touch with the Departments concerned have much chance of tendering successfully. Tenders may be presented only by locally-established firms legally authorised to represent the manufacturer, and manufacturers in Great Britain not already represented but wishing to compete should get into touch with the market and make provisional arrangements to save time. When tenders are called for goods which are known to be locally stocked conditions of delivery are often such that only local suppliers can supply.

The foregoing remarks apply also to State contracts.

COMMERCIAL CREDIT.

The immediate causes of the periodical waves of depression which visit the Brazilian market vary, but the fundamental cause of its supersensitiveness to sudden strain is the widespread habit

of trading with little or no capital and depending on profits to pay for stocks. The Brazilian importer is generally an optimist as long as he can obtain credit and, by applying to several banks in turn, he has frequently been able to obtain local credit far beyond the safety line and has ordered goods for which, in the event of any unforeseen falling off in consumption or other check on selling, he finds himself unable to pay. When this happens it is too often considered rather a reason for sympathy than a just retribution for a lack of ordinary commercial prudence. The debtor almost invariably receives more sympathy than the creditor. Many of the firms that have failed or entered into compositions recently owed ten or twelve times their capital.

Since the end of 1928 the market, especially in Rio de Janeiro and São Paulo, has been in a more than usually disturbed condition as a result of this overtrading. The situation has assumed a more than ordinarily serious character for foreign suppliers, owing to the manner in which some firms have attempted to avoid their liabilities.

The two failures which at the end of 1928 first directed attention to the insecure condition of the market were a well-known jeweller's, and that of a public contractor in Rio de Janeiro, who failed for approximately £750,000 between them—more than ten times their capital. The former had obtained advances from 24 banks and banking firms.

In Rio de Janeiro during the first half of 1929 there were 514 recorded failures and compositions, with total liabilities assessed at approximately £7,000,000. The corresponding total of assets was approximately £4,000,000, or, say, 57 per cent. Even if the assessed assets are reduced by half to allow for loss on realisation, the yield to the creditors should be nearly 30 per cent., but the proportion actually recovered averages less than 10 per cent. According to the existing bankruptcy law a debtor cannot obtain a composition to pay less than 21 per cent. within two years. It is the exception for the minimum to be exceeded, and debtors very often fail to carry out even arrangements made on the lowest basis. There is a penalty for non-compliance, but it is rarely applied.

The Bank of Brazil, which was a creditor in more than a third of the failures and concordatas of 1928, recovered 37 per cent. in the concordatas, and 27 per cent. in the failures. That the percentage is as high in this case is due to the fact that the Bank of Brazil generally has priority over other creditors.

The precipitation of the present difficulties cannot be attributed to one cause alone. The state of over-production in the national cotton industry and the restriction of credit by the Bank of Brazil have both been important factors, and the abnormal importation of cotton piece-goods in anticipation of the tariff increase which

came into effect in April, 1929, undoubtedly contributed very largely to aggravate the situation. Criticism of the Bank of Brazil, which figured in a large proportion of the failures, was inevitable. The bank began calling in doubtful accounts in September, 1928, and has since continued to liquefy its position.

Further information regarding the policy of the bank will be found in the Section on Banks. (See back.)

It is of vital importance to the trade of Brazil and to all concerned that a radical remedy should be found for the existing unsatisfactory conditions. A Bankruptcy Bill is on its way through Congress.* It is maintained by many that the existing law would suffice if it were strictly administered. That is no doubt partly true, but there are obvious loopholes which should be closed up. Among the most important changes proposed are that no composition (concordata) may be made for the payment of less than 40 per cent. cash, or 75 per cent. in two years; that the assets shall be liquidated within a fixed period; and that a creditor who votes against a concordata must present his embargoes, under penalty. This provision is inserted to prevent the applicant for a concordata from making a private arrangement with some of his creditors at the expense of the others. It has also been proposed that it should be made a criminal offence for a firm to fail with liabilities exceeding three times its registered capital. Another commercial evil which calls for legislative action is the practice of issuing "papagaios," or accommodation bills having no basis in actual transactions. There is nothing in the present law to prevent a debtor who finds himself in difficulties, but whose reputation continues good for some time, from accepting bills drawn by a friend, who may or may not be an accomplice, to be discounted for him. Bills of this kind once discounted by a bank are legal for the purposes of recovery by the bank holding them.

That the banks should co-operate to prevent unscrupulous or ill-advised firms from borrowing up to the limit of their credit from several banks in turn is a suggestion which, though admittedly difficult to put into practice, it is most important to follow up. The inadequacy of the present information of the banks was illustrated by the failure in Rio de Janeiro of a merchant in May, 1929, regarding whose financial position twelve local banks had given favourable reports within a week before he

*In its final form the Bill, while fixing the minimum for a cash composition at 40 per cent., establishes the following minimum percentages payable at intervals as indicated, up to two years, beyond which no composition is allowed:—

50 per cent.	if payment is to be made in	6 months.	
55	"	"	12 "
60	"	"	24 "
		(Art. 106)	(See note on p. 11).

failed. He was found to have been insolvent for two years. This case exemplifies the difficulty banks have under existing conditions to estimate accurately the credit which it is safe to allow to their clients, and how much it is to their common advantage to combine in self-defence against those who do not scruple to take advantage of the existing lack of co-operation.

Interchange of credit information might be adopted with advantage also by suppliers. It is already being tried by one important group. The method is simple. A number of importers subscribe equally to the upkeep of a small office, in charge of a trustworthy secretary to whom each of the co-operating firms furnishes certain particulars of business done with local clients. Thus a means is provided of checking abuses of credit, all the subscribers having the right to a report from the secretary of the information office regarding the credit of any prospective purchaser. Names of suppliers are not disclosed, and their independence is not affected. In June, 1929, several of the leading importers of textiles formed themselves into a credit defence society to deal with claims against defaulting clients. No composition on a basis of less than 40 per cent. will be considered.

Probably the worst of the present trouble is now over, but there is certain to be a recurrence sooner or later unless steps are taken by all concerned.

NATIONAL MANUFACTURING INDUSTRIES.

References will be found in the Trade chapter and the General Survey to the national production of manufactured articles, the importance of which is emphasised by the fact that, according to official figures, it represents to-day a larger value than agricultural production, the statistics being agricultural production, 7,146,185 contos; industrial production, 7,400,000 contos (approximately £185,000,000).

Cotton Goods.—During the year the cotton industry continued to work an average of three days a week, and half a dozen important mills in São Paulo and Rio de Janeiro failed. Others, including one large group which had considerably over £1,000,000 of bills outstanding, were only kept going by their bankers.

In view of the fall in cotton goods prices, owing to heavy importation consequent on the decision to increase the import duties, it would not have caused surprise if many more mills had failed. The market will probably recover somewhat towards the spring of 1930, and the existing mills may survive till then, but the state of over-production in the industry will continue until they are able to reorganise and adapt their plants to present-day requirements.

At present the majority are hardly able to pay their way. Even the most efficient mills in Rio de Janeiro and São Paulo have found it hard to make ends meet since the change in the tariff. In Minas Geraes and the northern States, where the local demand is now mainly supplied by local mills, the conditions have been better, though some of the mills in Pernambuco have had a difficult year. An important new mill has been established in Pará. It is being equipped with British machinery.

The total Brazilian production of cotton goods in 1928 is officially estimated at £22,784,000, representing 582,000,000 metres of cloth. Other official statistics of the industry in 1928 are: number of mills, 351; looms, 79,249; spindles, 2,552,079; capital, £17,221,000. The looms and spindles are located chiefly in the following States: of the total number of looms São Paulo has 32 per cent., the Federal District 21 per cent., the States of Rio de Janeiro and Minas Geraes 7 per cent. each; of the spindles, São Paulo has 32 per cent., the Federal District 29 per cent., the States of Rio de Janeiro and Minas Geraes 9 per cent. each. There are also numerous local mills in Bahia, Pernambuco, Alagoas, Maranhão, and Sergipe.

Woollen Goods.—A tendency to increase production has been accompanied by a falling off of demand in the woollen industry, and several mills have had to ask their suppliers for extended credit.

The estimated production of woollens in 1928 was 8,000,000 metres.

Silk Goods.—In the early part of 1929 an important group of silk factories was forced to reorganise, being on the verge of bankruptcy. The most flourishing branch of the silk industry is the manufacture of silk stockings, which has increased rapidly in recent years. The production of animal silk tends to increase rapidly. It is estimated that there are 7,000,000 mulberry trees in and near the State of São Paulo, mostly newly planted by small farmers and peasants. Silkworm larvæ have been known in Brazil to begin spinning their cocoons within 30 days after emerging from the egg. Artificial silk is not distinguished from real silk in the Brazilian customs tariff and pays the same duty.

Boots and Shoes and Hats.—Two of the most important and prosperous industries in Brazil are those producing footwear and headgear. A leading manufacturer in São Paulo of boots and shoes said in September, 1929, that this industry was so flourishing that it could dispense with tariff protection without fear of foreign, in particular United States, competition. According to official figures the number of boots and shoes produced by national factories in 1928 exceeded 30,000,000; the number of hats 9,000,000.

Paper.—In March, 1929, the President of the Paper Manufacturers' Association of São Paulo, which is the centre of this

industry, stated that local production had overtaken demand, and that a curtailment of output by 20 per cent. was necessary to restore the balance. The output of the 18 important paper factories engaged in the making of paper, chiefly cardboard and wrapping paper, is estimated at 75,000 tons. In addition to cardboard and wrapping paper, a considerable quantity of cheap stationery is made up locally from imported paper.

Other Industries.—The national industries of *furniture, tobacco, cement and paint* continue to prosper.

New Factories.—Important new factories have been erected in the past year, or are projected, for producing the following among other articles:—

Gramophone Records ...	(American).
Pneumatic tyres ...	(British).
Copper cables ...	(Italian and French).
Soap ...	(British).
Food products ...	(American).
Cement ...	(German).
Superphosphates and sulphuric acid	(National).
Boots and shoes ...	(British).

V. TRANSPORT.

Railways.—In 1928 the deficit on the lines administered by the Federal Government was reduced from 72,866 contos to 8,519 contos. The deficit on the Central Railway, which in 1927 exceeded 56,000 contos, was converted in 1928 to a surplus of 1,800 contos. Fifty-six per cent. of the total difference consisted of increased receipts, and 44 per cent. represented reduction in expenditure. More than half of the saving was due to a decrease in the price of coal, accompanied by economies in consumption. The average suburban tariff on the Central Railway is less to-day per passenger kilometre than it was 30 years ago, the average in 1928 being 9 reis, as against 25 reis for second-class in 1897.

The additional tax of 10 per cent. on tariffs, assigned to improvements and kept for that purpose in a separate account in the Bank of Brazil, amounted on all the lines on which it is collected, namely all the Federal-owned lines and most of the private lines, to 13,736 contos, the largest amounts being derived from the São Paulo, Rio Grande, Sorocabana, Leopoldina and Mogyana Railways. The companies are authorised to apply the proceeds of this tax to the service of loans raised for development work.

The total length of new lines opened in 1928 was 265 kilometres, divided approximately equally between Federal extensions and State extensions, as follows:—

<i>Federal—</i>	Total.
Petrolina-Therezina Railway (Afranico to Mafrense)	23km.800
<i>Bahia Railway System—</i>	
Central of Bahia Railway (Sincorá to Contendas)	24km.520
Bomfim-Paraguassú Line (Itaberaba to Itahyba)	11km.448
	<hr/> 35km.968
<i>São Paulo-Rio Grande Railway—</i>	
Parapanema Branch (Platina to Engenheiro Guimarães Carneiro) ...	8km.480
<i>Rio Grande do Sul Railway System—</i>	
Branch line from Cruz Alta to Santo Angelo, extension (Santo Angelo to Giruá)	43km.217
West of Minas Railway (Jussaral to Angra dos Reis)	20km.000
	<hr/> 131km.465
<i>State—</i>	
<i>State of Espirito Santo—</i>	
Coastal Railway (Paineiras to Rio Novo)	13km.605
<i>State of São Paulo—</i>	
Paulista Railway Agudos Branch (Gallia to Marília)	48km.384
Santa Rita Branch (Moema to Vasununga)	12km.089
São Paulo and Minas Railway ...	43km.720
	<hr/> 104km.193
<i>State of Minas Geraes—</i>	
Machadense Railway	15km.590
	<hr/> 133km.388

The most important line under construction in 1929 was the Sorocabana metre gauge railway from Mayrink to Santos, which is being constructed by the State of São Paulo with the proceeds of an external loan contracted in 1928. The decision to build this railway appeared to be connected with the rejection by the Federal Government of a scheme submitted by the São Paulo Railway Company for the construction of a double adhesive line to relieve the threatened traffic congestion on the existing railway and so

allow for the rapidly increasing movement of merchandise between São Paulo and Santos. That the two propositions were not mutually exclusive has since been confirmed by the resumption of negotiations between the São Paulo Railway Co. and the Federal Government on the basis of a guarantee of 7 per cent. on the capital employed in the construction of the proposed adhesive line. It is probable that the new railway would be electric. Within the next few years, therefore, instead of the existing São Paulo railway, which is only a single line operated on the mountain section by a rope haulage system, there may well be three railways serving the hinterland of Santos, unless it be found advisable to scrap the existing rope line when the new broad gauge double electric railway is built. The Sorocabana line will not compete with the São Paulo railway except for a comparatively small proportion of its traffic from the south of the State. Up to August 31st, 1929, the sum of 50,000 contos (approximately £1,250,000) had been spent on the roadbed and 60 per cent. of the roadbed was stated to have been completed. The total length of line in construction is 135 kilometres of double line, and it will have 32 tunnels totalling 4,500 metres, 18 viaducts with a total length of 1,500 metres and 6 bridges. Purchases of rails are being made regularly as the construction progresses.

Another important scheme is the construction of a broad gauge railway from Santa Cruz, near Victoria, to Itabira, in the State of Minas Geraes. A party of 20 American engineers arrived in Brazil in July, 1929, to make a preliminary examination. The chief purpose of this railway will be the transportation of iron ore from the Itabira mines.

The Great Western of Brazil Railway Co., Ltd., are engaged on the following extension:—(a) To the central line from Rio Branco west to Petrolina and Flores; (b) Bananeiras branch line to Picuhy (90 kilometres); (c) Quebrangulo to Collegio on the São Francisco River (130 kilometres).

After São Paulo Minas Geraes is the State which has most extensive schemes of railway construction. Part of a loan raised by this Government in New York in 1929 is to be devoted to railway construction. A concession was authorised by State Decree No. 8,174, of January 27th, 1928, for the construction of a line 540 kilometres in length from Lavras to Jaguará on the Mogyana railway, running almost parallel with the Rio Grande River and connecting the Triangulo Mineiro with the Sul Mineira railway. A line is projected also from Formiga on the west of Minas railway to Passos, about 200 kilometres distant, on the Mogyana railway. The estimated cost of this connecting link is £500,000. The same State granted a private concession in 1929 (Decree 9,002 of March 7th, 1929), for a line to be constructed between Uberabinha and Ituyutaba, a distance of about 300 kilometres. The electrification of the metre gauge line from Barra Mansa to

Augusto Pestana was completed early in 1929. The length of the railway is 73 kilometres, of which 26 are in the State of Minas Geraes. The work was carried out by an English company.

The Cia. Paulista de Estradas de Ferro are proceeding with the gradual electrification of their line in sections. United States material has been used almost exclusively in the change-over up to the present time.

Railway schemes of some importance are under consideration also in Rio Grande do Sul and Paraná. The plan of the Government of the former State to construct a railway to the port of Torres, the construction of which is also part of a combined scheme, involves the raising of a foreign loan of which there appears to be no immediate prospect. Another new line for the construction of which the President of Rio Grande do Sul has expressed his readiness to receive proposals is to connect Pelotas-Caçapava-São Sapê-São Pedro, a distance as the crow flies of 300 kilometres.

A treaty ratified in June, 1929, between Brazil and Bolivia provides for the construction of a road from Cochabamba through Santa Cruz to the Amazon basin, also linking up the Paraguay River with the Brazilian railway system. The road is intended later to be transformed into a railway, at the cost of the Brazilian Government under the same treaty. The Bolivian Government will construct a line of railway from Santa Cruz to Puerto Grether, to the cost of which the Brazilian Government will subscribe £1,000,000 sterling.

In Novo Horizonte a company has been formed with a capital of 3,000 contos (approximately £75,000) to construct and work a railway between Ibitinga and Novo Horizonte, passing through Borborama (Decree No. 4,601 of 5th June, 1929). The line will be 60 kilometres in length.

Roads.—The special fund created in June, 1927, for road construction by the Federal Government has yielded much less than had been estimated. The total receipts in 1928, 20,904 contos (approximately £500,000), were not much more than half the anticipated yield. For 1929 the estimate was reduced to 18,000 contos. This figure was increased to 30,000 contos (approximately £750,000) in the preliminary estimates for 1930. The actual receipts should, however, be very much more as a result of the new method of calculating the tax. By this method, which was put into effect on June 1st, 1929, the 30 per cent. surtax will be calculated after the conversion of the gold portion (60 per cent.) of the basic duty, instead of on the nominal duty in paper. The tax thus calculated is approximately three times as much as when calculated on an all-paper basis. In view of the fact that 20,000 contos were collected by this tax in 1928, when the 20 per cent. rate was levied on the all-paper duty, the subsequent increase to 30 per cent. on the all-paper duty would have

sufficed to justify the estimate above quoted of 30,000 contos. But calculated on a 60 per cent. gold conversion basis the tax should yield in 1930 about 90,000 contos (approximately £2,250,000). The 5 per cent. road bonds authorised in October, 1928, the service of which is to be met out of the above special fund, in that year produced 48,361 contos, this sum being the net receipts from the sale of 66,683 contos of bonds out of an authorised issue of 80,000 contos. The issue of an additional 20,000 contos was authorised early in 1929. The bonds had in 1929 fallen from their issue price of 1,000 milreis to 780 milreis. They are repayable at par.

The cost of roads under construction, largely through marsh or rock, has greatly exceeded the estimates. Expenditure on the Rio-Petropolis, Rio-São Paulo, São João-Barracão, and Tijuca roads in 1928 amounted to 63,416 contos (approximately £1,585,000). In 1929 it was found necessary to reconstruct considerable sections of the first two with concrete, owing to the damaging effect of heavy rains on the macadam or earth surface. Before this the surface of the Rio-Pouso Secco section of the Rio-São Paulo road was composed as follows:—

	Sq. metres.
Macadam silicate	4,200
Waterbound macadam	191,701
Treated with road oil	8,320
Crushed stones	69,312
Silicate sand	710,368

The section which is being relaid in concrete is 23 kilometres in length.

The composition of the Rio-Petropolis road was:—

	Sq. metres.
Silicate sand	287,400
Crushed stone	40,000
Waterbound macadam	114,618
Bituminous macadam	77,387
Concrete	26,680
Treated with road oil	56,640
Paved	56,640

Thirty-five kilometres of this road have since been relaid in concrete.

The importance of these two highways running north and west from Rio de Janeiro is that they link up the roads on the plateau in the interior of the country with the capital and the coast. The States of São Paulo and Minas Geraes are actively extending the net work of roads inland. The São João-Barracão road, of which more than 160 kilometres have been constructed, will when completed be 500 kilometres long. São João is on the São Paulo-Rio Grande Railway, from which the road runs west towards the Argentine frontier.

The São Paulo Government allocated £1,500,000 for the concrete paving of highways in 1929. They also granted a concession in July, 1929, to a local company for the construction of a concrete

road from São Paulo to Santos. The work must be completed within three years from the date of commencement, which must not be later than July 4th, 1930. The concessionnaires will have the right to collect tolls at rates to be approved on all vehicles using the road, except State-owned vehicles. The period of the concession is 25 years, at the end of which the road reverts to the Government. Up to September, 1929, work had not begun, owing to a lack of finance. It is estimated that the cost of this road will exceed £1,000,000. A motor road which the Government of São Paulo began many years ago from São Paulo city in the direction of Curitiba, the capital of the neighbouring State of Paraná, has reached Guapiara, 280 kilometres from São Paulo. It is now within 120 kilometres of the road which is being built by the Paraná Government to meet it. In 1929 the State of São Paulo called for tenders for the surfacing of 105 kilometres of road between São Paulo and Campinas, and 63 kilometres between São Paulo and Santos. On December 31st, 1928, the length of first-class roads in the State of São Paulo was 2,711 kilometres. There were also 10,000 kilometres of second-class roads. During the year 2,696 contos (approximately £67,400) were spent on the repair and construction of road bridges, and 15,277 contos (approximately £381,925) on road construction. Two-thirds of this was assigned to the São Paulo-Paraná road. The total length of new roads completed was 160 kilometres. A further 318 kilometres were in course of construction on December 31st, 1928. 11,755 contos (approximately £293,875) were spent on keeping State roads in repair. The total expenditure on roads by the São Paulo Government in 1928 thus amounted to £743,200.

The Minas Geraes Government have spent £1,250,000 on road construction in the past three years. The most important road in this State is that from the capital, Bello Horizonte, to Rio de Janeiro, of which 350 kilometres are in Minas Geraes. Of this total in February, 1929, 70 kilometres remained to be completed. Several branch roads are also in construction. Plans are also being considered for a direct road from Bello Horizonte to São Paulo, of which about 500 kilometres will be in Minas Geraes. The plans are completed as far as Oliveira, 195 kilometres from Bello Horizonte, and 108 kilometres are already constructed. This road will also be served by several new branches.

A Highways Institute was formed in Paraná in 1929 for the development of the road system of that State.

The extent and condition of roads in the far north may be judged from the fact that there are only two leading out from Pará, the largest town in the Amazon region, and on neither of them is it practicable to motor at more than 20 kilometres an hour. Two important roads are in construction in the State of Amazonas, both from Manáos—one to Rio Branco on the frontier

of British Guiana, a distance of 600 kilometres of which 100 kilometres have been completed; and the other to the Colombian frontier. Of this road 71 kilometres have been constructed.

As regards the south, in the State of Rio Grande do Sul, H.M. Consul reported in July, 1929, that roads were practically non-existent. Tenders have been called for the construction of a road of 180 kilometres length between the towns of Erechim and Nonohay, on the borders of the State of Santa Catharina, and several hundred kilometres more are in construction in the north of the State.

The municipalities of Nioac, Bella Vista and Aquidauna in the State of Matto Grosso have agreed to combine in the construction of 240 kilometres of road joining these towns with the Paraguayan frontier.

Plans have been drawn up for the construction of 143 kilometres of road in the State of Espirito Santo, linking up various towns with the railway.

The Second Pan-American Roads Congress, which was held in Rio de Janeiro in August, 1929, discussed the question of constructing an inter-American highway linking up the capitals of the South American republics. Approximately half the total length is already in existence.

Shipping.*—The tonnage of all shipping entered at all Brazilian ports in 1928 amounted to over 44,000,000 tons, the largest total ever reached, exceeding by 10 per cent. the total in 1927, which was the largest since the war. 1927 was practically equal to 1914, the largest year before, and including, the war. Of the 1928 total 17,768,000 tons was Brazilian, leaving 26,357,000 tons of foreign shipping, one-third of which was British. Of the increase 60 per cent. was national, 10 per cent. British and 30 per cent. other foreign shipping. United States tonnage decreased from 2,555,000 tons to 2,099,000 tons, and fell from third place among the foreign countries to fifth place, being passed by France and Italy, though the tonnage of both these countries also decreased. The most striking change was an increase of 25 per cent. in German tonnage, which totalled 5,522,000 tons, against 8,791,000 of British tonnage.

Four new fast passenger and cargo motor ships built for the Furness Withy group, who have absorbed the old Prince Line forming a new service called the Furness Prince Line, were put on the New York-South American route during the year. The formation has been announced of a new British line of steamships, to be known as the White Cross Line. The White Cross fleet is to comprise 16 cargo ships, four of which are already built. London and Belgian ports are included in the itinerary. Prior to 1928 no British merchant vessel had called at Porto Alegre for 30 years.

*Additional information will be found in the report for the Consular District of Rio de Janeiro.

In that year it was visited by three cargo ships belonging to the Anglo-Brazilian S.S. Co., Ltd., of Swansea. It is understood that this company intend maintaining a regular service with four steamers.

A new Japanese steamship service to Pará was initiated by the call at that port on September 17th, 1929, of the s.s *Manila Maru*, belonging to the Osaka Shosen Kaisha.

A scheme was mooted and attracted some notice during the year for the establishment of a new national cargo steamship line for coastal service, operating from Santos.

The exemption on a reciprocal basis of foreign shipping companies trading to Brazil from taxation on the entire profits was decreed in December, 1928.

Ports.—The new graving dock at Rio de Janeiro, though not quite finished, was inaugurated in June, 1928. It is rapidly approaching completion. The length of this dock, which, though primarily intended for naval use, is also available for merchant shipping, is 256 metres.

Important changes are contemplated at Santos, including the extension of the quay wall and the construction of a bridge with a double railway line to establish connection between the São Paulo railway and the south side of the bay.

The Government of the State of Paraná are understood to be seeking a loan for the purpose of expediting the construction of a new port at Paranagua, the preparatory dredging being finished.

The Itabira iron ore scheme, to which reference is made elsewhere, includes the construction of a new port at Santa Clara, a few miles north of Victoria.

Work is proceeding on the extension of the quay walls at Pernambuco, Bahia and Rio de Janeiro.

Some particulars of the principal ports are appended :—

Port.	Authority or Concession Co.	Quay* Length.	Depth.	Warehouses.		Cranes.
				No.	Area.	
Rio de Janeiro	Cia. Brasileira de Exploração de Portos ...	3,298	8-10	86	Sq. metres. 97,000	90
Santos... ..	Cia. Docas de Santos ...	4,720	7-9	43	197,745	96
Bahia	Cia. Docas da Bahia ...	1,185	8-10	9	—	14
Pernambuco ...	State of Pernambuco ...	583.87	8-10	11	7,350	12
Pará	Port of Pará Co.	1,455	3-2-10	8	27,700	11
Manáos	Manáos Harbour	1,266	4-19	71	19,031	8
Rio Grande ...	State of Rio Grande do Sul	3,188	4-5-10	11	22,000	20

*The quays in the above ports, except Manoás, are all of concrete or stone. At Manoás there are 386 metres of floating quays included in the total length assigned to that port.

Aviation.—The French air mail service from Europe and the German air mail and passenger service between Rio de Janeiro and Rio Grande have been supplemented by a United States air mail service from New York. The operating company, which is a subsidiary of Trimotors Airways Inc., is called the New York, Rio, Buenos Aires Line Incorp. Rights have been granted to this company for the exclusive use of 19 air ports as regards the transport of air mail between Brazil and the United States. It is anticipated that the distance from New York to Rio de Janeiro will be covered in seven days. One of the managers of the Hanse Luft Co. visited Brazil in October to make a preliminary study of the conditions with a view to the establishment of a German airship service from Europe at the end of 1930.

APPENDIX I.

EXTERNAL DEBT OF THE FEDERAL GOVERNMENT—DECEMBER 31st, 1929.

Year.	Object.	Nominal amount.	Actual amount received.	Rate.	Outstanding Dec. 31st, 1929.	Service for 1930.
	<i>Issued in London.</i>	Sterling.	Sterling.	%	Sterling.	Sterling.
1883	Federal Railways, Rio Water Supply, etc.	4,599,600	4,000,000	4.5	2,316,604	255,508
1888	Federal Railways ...	6,297,300	6,000,000	4.5	3,674,520	349,812
1889	Conversion of Loans 1863, 1871, 1875, 1886 ...	19,837,000	17,213,500	4.0	16,768,843	901,595
1895	West of Minas Railway ...	7,442,000	6,000,000	5.0	6,606,960	450,990
1898	1st Funding Loan ...	8,613,717	8,613,717	5.0	7,014,105	478,493
1901	Purchase of shares of various railway companies ...	16,619,320	16,619,320	4.0	10,361,590	755,426
1903	Rio Port Works ...	8,500,000	7,860,000	5.0	7,223,615	558,030
1908	Rio Waterworks and new construction Federal Railways	4,000,000	3,840,000	5.0	732,700	518,130
1910	Lloyd-Brazileire ...	1,000,000	1,000,000	4.0	592,900	189,036
1910	Conversion and Redemption West of Minas Railway shares and Loan for State of São Paulo ...	10,000,000	8,750,000	4.0	9,548,248	454,500
1911	Rio Port Works ...	4,500,000	4,140,000	4.0	3,418,000	405,888
1911	Ceará Railway ...	2,400,000	1,992,000	4.0	2,369,030	108,795
1913	Various Port Works and West of Minas Railway ...	11,000,000	10,670,000	5.0	10,652,519	666,600
1914	Second Funding Loan ...	14,502,397	14,502,397	5.0	14,292,927	805,619
1927	Consolidation of Floating Debt ...	8,750,000	7,395,000	6.5	8,544,600	673,266
	Totals ...	128,061,334	118,595,934		104,117,162	7,571,688
	<i>Issued in Paris.</i>	Gold francs.	Gold francs.		Gold francs.	Gold francs.
1908	Itapura - Corumbá Railway ...	100,000,000	100,000,000	5.0	97,292,861	5,540,455
1909	Pernambuco Port Works ...	40,000,000	38,100,000	5.0	39,479,750	2,216,217
1910	Goyaz Railway ...	100,000,000	78,831,284	4.0	96,722,808	4,532,961
1911	Bahia Railways ...	60,000,000	49,800,000	4.0	59,225,760	2,719,836
1916	Goyaz Railway ...	25,000,000	25,000,000	5.0	24,352,000	1,280,874
1922	Purchase of Diamantina Railway ...	14,850,500	14,850,500	5.0	14,689,000	760,450
	Totals ...	339,850,500	306,581,784		331,762,179	17,050,793
	<i>Issued in New York.</i>	U. S. dollars.	U. S. dollars.		U. S. dollars.	U. S. dollars.
1921	Treasury Loan ...	50,000,000	45,500,000	8.0	33,817,500	5,431,954
1922	Electrification of the Central do Braz. Railway ...	25,000,000	22,750,000	7.0	19,899,668	2,263,010
1926	Consolidation of Floating Debt ...	60,000,000	50,214,305	6.5	58,047,259	4,545,000
1927	Idem. idem. ...	41,500,000	36,539,889	6.5	41,036,000	3,193,115
	Totals ...	176,500,000	155,004,194		152,800,427	15,433,079
<i>Note.</i> —The above are Brazilian Official Estimates (October, 1929).						
SUMMARY.						
	Total issued in London (Sterling)	128,061,334	118,595,934		104,117,162	7,571,688
	“ “ Paris (Gold francs)	13,594,020	12,263,271		13,270,487	682,032
	“ “ New York (U.S. dollars)	36,316,872	31,893,867		31,440,417	3,175,531
	Grand Total sterling ...	177,972,226	162,753,072		148,828,066	11,429,251

APPENDIX II.

INTERNAL DEBT OF FEDERAL GOVERNMENT DECEMBER 31st, 1929.*

Year	Amount issued.	Outstanding Dec. 31st, 1929.	Interest in 1930.
	Milreis.	Milreis.	Milreis.
1827	Apolices exchanged for Conversion issue 5% ...	529,344:200\$	25,362:535\$
1827	Old unconverted Apolices ...	3,423:800\$	171:190\$
1909-1926	Various issues of registered stock—5%	982,537:700\$	48,732,885\$
1917-1926	Various issues of Bearer Stock—5%	632,058:000\$	29,977:450\$
1903	Port Works Apolices: Bearer Stock—5%...	17,300:000\$	760:150\$
1909	Bolivia Treaty, Registered Stock—3% ...	1,629:000\$	48:870\$
	Total funded ...	2,166,292:700\$	105,053:080\$
1921	Treasury Bonds—7%	200,000:000\$	6,211:870\$
1925	Railway Bonds—7%	130,000:000\$	6,629:210\$
1928	Road Bonds, Registered Stock—5% ...	30,000:000\$	1,500:000\$
	Idem, Bearer Stock, 5% ...	50,000:000\$	2,500:000\$
	Total unfunded ...	410,000:000\$	16,841:080\$
	*Provision for interest on unissued bonds. Redemption of unconverted Apolices (1827) ...		1,800:000\$
	*Funded Stock held by Treasury as fund for Internal Debt Redemption ...	Value. 64,579:500\$	3,233:759\$
	Total interest ...		126,927:919\$
	<i>Redemption of Unfunded Debt.</i>		
	Treasury Bonds: 10% per annum ...	20,000:000\$	
	Railway Bonds: 10% per annum ...	13,000:000\$	
	Road Bonds: 5% per annum ...	4,000:000\$	
			37,000:000\$
	Carried forward ...		37,000:000\$
			126,927:919\$

APPENDIX II—continued.

	Amount issued.	Outstanding Dec. 31st, 1929.	Interest in 1930.
Brought forward ...	Value.	Milreis. 37,000:000\$	Milreis. 126,927:919\$
<i>Less</i> :—			
Estimated Income in 1930 from Railway Taxes for Railway Bond Sinking Fund	19,629:210\$		
Estimated income in 1930 from Vehicle and Petrol Taxes for Road Bond Sinking Fund	8,000:000\$		
		27,629:210\$	9,370:790\$
Total Expenditure for 1930 (Int. and Redemption) ...			136,298:709\$
			Sterling equivalent £3,324,359
<i>Total Outstanding Internal Debt</i> :—			
		Milreis.	
Funded		2,101,713:200\$	
Unfunded		263,444:000\$	
Total		2,365,157:200\$	
			Sterling equivalent £57,686,785

*Government Budget Estimates for 1930.

APPENDIX III.

PUBLIC DEBT OF STATES OF FEDERAL UNION OUTSTANDING ON OCTOBER 31ST.
1929.

	External.			Internal £*	Floating £*
	£ Sterling.	Francs.	Dollars. U.S.		
Alagoas ...	300,000	15,015,000	—	15,000	26,500
Overdue int.	?	13,000,000	—	—	—
Amazonas ...	—	103,295,000	—	902,000	2,110,000
Overdue int.	—	47,000,000	—	—	—
Bahia ...	3,176,395	48,215,500	—	1,574,000	268,270
†Ceará ...	—	13,346,500	1,980,000	84,000	145,584
Federal District	1,881,460	—	40,170,000	8,616,120	231,867
‡Espírito Santo...	—	1,492,924	—	**573,800	—
Goyaz ...	—	—	—	—	—
Maranhã ...	—	16,401,500	1,884,824	490,000	940,000
Matto Grosso ...	—	—	—	§160,000	§28,000
Minas Geraes ...	1,821,900	—	8,452,000	1,940,244	467,415
Pará ...	2,875,639	—	—	—	—
Overdue int.	1,032,004	—	—	617,000	509,380
Parahyba ...	—	—	—	58,000	?
††Paraná ...	2,758,400	5,004,953	4,860,000	700,000	344,336
Pernambuco ...	589,200	26,385,000	5,760,500	700,000	17,000
Piauí ...	—	—	—	—	17,060
Rio de Janeiro ...	3,908,680	—	6,000,000	720,365	436,036
Rio Grande 'do Norte ...	—	7,032,500	—	41,000	92,000
Rio Grande do Sul ...	—	—	40,626,500	185,560	680,855
Santa Catharina	88,558	—	4,800,000	318,400	52,326
São Paulo ...	12,265,033	—	44,129,000	8,157,000	7,020,070
(Florins) 12,460,000	—	—	—	—	—
Sergipe (1928) ...	—	—	—	150,000	26,000
Totals— (Florins) 12,460,000 ...	30,697,269	296,188,877	158,662,824	26,002,489	13,412,699

*Converted at Rs.41\$000 per £ sterling.

†Ceará has deposited Rs.4,236:443\$ (£104,000) against francs loan until rate of exchange is decided.

‡Espírito Santo francs loans in process of repayment.

§Amounts for 1928.

**Includes Internal Dollar Loan of \$1,755,000.

††Parana has deposited £732,000 against repayment of francs loans and sterling loans of 1905 and 1913.

APPENDIX III—*continued.**Total External Debt of States excluding Coffee Institute Debt*
(v. infra)—

	£
	Sterling equivalents.
Sterling	30,697,269
Francs, equivalent at 25=£1 ...	11,847,555
Dollars ,, 4.86=£1 ...	32,646,672
Total	75,191,496
<i>Coffee Institute External Debt</i> :—	Outstanding.
Sterling loan to State of São Paulo guaranteed by Federal Government ...	£ 9,795,900
Short term credit to the Banco do E. de S. Paulo guaranteed by State of São Paulo	5,000,000
Mortgage Bonds issued by the Banco do Estado de S. Paulo, guaranteed by the State of São Paulo	3,750,000
	18,545,900
Total External Debt of States and Coffee Institute	£93,737,396
Total Internal Debt of States (converted into sterling)	£26,002,489
Total Floating Debt of States (converted into sterling)	£13,412,699

APPENDIX IV.

DEBT OF BRAZILIAN MUNICIPALITIES OUTSTANDING ON OCTOBER 31ST, 1929.

	External.			Internal Funded Debt where known.*
	£ Sterling.	Dollars.	Francs.	
<i>São Paulo</i> —				
City of S. Paulo	445,918	15,842,200	—	1,100,000
„ Santos	2,185,000	—	—	?
<i>R. Gr. do Sul</i> —				
Porto Alegre	365,500	9,590,000	—	387,720
Pelotas	472,220	—	—	?
Cachoeira, Pelotas, Urugua- yana, Caxias, Livra- mento, Bagé, Rio Grande, São Leopoldo (joint loan)	—	3,950,000	—	?
<i>Pará</i> —				
Belem do Pará	3,239,960	—	—	?
Overdue interest... ..	1,480,000			
<i>Bahia</i> —				
São Salvador	3,084,000	—	21,520,000	204,500
Overdue interest	2,683,000 (14 years)			
<i>Rio de Janeiro</i> —				
Nictheroy (1928)	800,000	—	—	?
<i>Amazonas</i> —				
Manaos	350,000	—	—	902,000
Overdue interest	155,814			
<i>Pernambuco</i> —				
Recife	293,240	—	—	292,506
<i>Minas Geraes</i> —				
B. Horizonte	—	—	—	264,330
	15,554,652	29,382,200	21,520,000	3,151,056*

*Converted into sterling at Rs.41·000 to £.

Total External Debt of Municipalities converted into £ sterling.

Sterling Debt... ..	15,554,652
Dollar Debt (at \$4·86 per £)	6,045,720
Francs Debt (at Fcs. 25 per £)	860,800

APPENDIX V.

ESTIMATED AND ACTUAL REVENUE OF FEDERAL GOVERNMENT, 1913-1928.

Year.	Revenue in paper currency.	
	Estimated. (Contos).	Collected.
1913	393,982	640,615
1914	587,843	418,751
1920	758,181	646,838
1921	953,746	862,137
1922	1,120,400	918,165
1923	1,191,302	1,283,354
1924	1,475,760	1,510,508
1925	1,438,719	1,713,208
1926	1,562,038	1,644,582
1927	1,797,979	2,039,506
1928	2,088,933	2,216,513

APPENDIX VI.

IMPORTS INTO BRAZIL IN 1926, 1927 AND 1928.

	Quantity (in metric tons, except livestock per head, and motor cars, in units).			Value £1,000			Quantity.	Value £1,000.
	1926	1927	1928	1926	1927	1928	1st half 1929	1st half 1929
CLASS I.—Livestock (head)	15,564	10,436	16,212	169	163	193	4,771	97
CLASS II.—Raw Materials—								
Patent fuel, coal and coke	1,939,580	2,214,598	2,181,784	3,589	4,167	3,125	1,158,616	1,729
Cement	396,322	441,959	456,212	1,313	1,435	1,403	265,420	760
Iron and steel	100,593	131,641	107,579	1,096	1,609	1,266	58,857	665
Jute	20,582	28,475	20,764	1,273	1,283	972	10,875	501
Wool	1,518	1,800	2,620	788	1,018	1,510	966	559
Lumber and timber	29,862	36,302	54,785	384	459	690	27,945	339
Hides and skins	1,131	1,108	1,248	950	897	1,144	423	411
Miscellaneous	122,671	137,142	187,596	6,515	6,834	8,662	82,901	3,904
Total, Class II.	2,612,259	2,993,025	3,012,588	15,908	17,702	18,772	1,606,003	8,868
CLASS III.—Manufactured articles—								
Cotton (piece goods)	7,319	7,246	8,311	3,979	3,912	5,015	4,066	2,171
,, (other manufactures)	1,485	1,294	1,324	691	622	668	731	336
Motor cars (units)	32,954	29,591	45,379	3,775	3,855	5,555	37,502	3,797
Other vehicles	46,591	21,996	19,242	2,106	1,428	1,448	16,707	1,210
Rubber	3,951	5,645	5,324	1,102	1,267	1,127	3,749	739
Copper and alloys	4,699	6,634	5,263	707	844	736	3,921	450
Iron and steel	312,484	325,423	374,126	6,203	6,407	7,220	184,996	3,775
Gasoline	152,552	201,242	254,324	2,404	2,694	2,882	133,536	1,635
Kerosene	91,021	111,841	103,697	1,196	1,398	1,243	51,092	645
Wool	1,089	902	1,133	1,038	927	1,149	587	612
Linen	985	922	1,435	478	517	848	520	295
Earthenware, porcelain, glass and crystal	15,768	14,418	18,132	953	924	1,126	10,820	617
Machinery, apparatus, utensils and tools	81,742	75,193	86,487	9,830	9,843	11,514	50,174	6,195
Fuel oil	217,599	358,427	336,705	680	1,241	811	146,808	384
Paper and manufactures	53,918	47,721	58,296	1,757	1,532	1,872	30,103	860
Chemicals, drugs and pharmaceutical special- ties	38,441	45,231	66,737	1,746	1,782	2,288	50,510	977
Miscellaneous	75,526	69,999	83,094	5,792	5,449	7,039	24,493	3,047
Total Class III.	1,158,082	1,345,054	1,500,435	44,437	44,642	52,541	777,096	27,745

APPENDIX VI—continued.

	Quantity (in metric tons).			Value, £1,000.			Quantity,	Value,
	1926	1927	1928	1926	1927	1928	metric tons	£1,000.
							1st half 1929	1st half 1929
CLASS IV.—Foodstuffs—								
Rice	4,656	24	2,219	103	1	44	789	17
Olive oil	5,108	4,382	9,074	549	584	945	2,099	222
Codfish	36,978	36,088	41,103	1,850	1,619	1,984	18,559	959
Potatoes	43,210	35,764	27,834	470	317	281	17,540	166
Beverages	35,176	27,088	31,463	1,738	1,520	1,659	13,129	701
Wheat flour	221,356	204,167	209,157	4,478	3,581	3,356	87,949	1,289
Fruit and nuts	16,098	12,784	18,940	937	778	1,059	4,390	240
Salt, rock and white	65,053	72,917	73,866	150	160	162	30,033	64
Wheat	542,658	595,537	695,407	7,569	7,232	7,849	375,819	3,740
Fodder	435	3,124	5,578	3	21	36	1,431	10
Miscellaneous	24,173	21,754	27,132	1,515	1,324	1,788	12,402	794
Total Class IV.	994,901	1,013,629	1,141,773	19,362	17,137	19,163	564,140	8,202
Grand total	4,769,192	5,353,606	5,656,880	79,876	79,634	90,669	2,947,769	44,912

APPENDIX VII.

BRAZILIAN IMPORTS.*

Principal articles classified, showing Great Britain's position in relation to other important suppliers of each article in the years 1926, 1927 and 1928.†

	Weight (metric tons).			Value‡ (in £1,000).		
	1926	1927	1928	1926	1927	1928
CLASS I.						
<i>Cotton, Wool, Linen,</i>						
<i>Jute, Silk (raw</i>						
<i>yarns and textiles).</i>						
Cotton Piece Goods,						
bleached—						
<i>Total imports</i> ...	1,344	848	643	590	416	380
Great Britain ...	1,156	692	477	493	322	287
France ...	76	50	65	25	25	31
United States ...	23	35	46	8	19	26
Switzerland ...	—	45	30	—	37	31
Germany ...	24	11	15	1	6	10
Cotton Piece Goods,						
unbleached—						
<i>Total imports</i> ...	46	78	121	16	22	41
Great Britain ...	22	42	50	8	10	16
Germany ...	17	31	61	5	10	22
Cotton Piece Goods,						
printed :						
<i>Total imports</i> ...	522	570	677	401	457	560
Great Britain ...	333	320	381	237	239	305
United States ...	109	137	140	79	113	112
France ...	54	79	99	40	70	85
Switzerland ...	—	18	42	—	23	46
Cotton Piece Goods,						
dyed—						
<i>Total imports</i> ...	4,755	5,169	6,201	2,596	2,642	3,565
Great Britain ...	4,096	4,380	4,844	2,197	2,116	2,644
France ...	233	306	416	114	181	269
Italy ...	—	120	369	—	58	167
United States ...	100	165	231	47	118	167
Switzerland ...	—	118	188	—	116	205
Germany ...	53	51	90	33	39	76
Cotton Piece Goods,						
unenumerated—						
<i>Total imports</i> ...	652	530	670	375	375	468
Great Britain ...	276	302	301	166	183	222
Italy ...	—	46	81	—	27	46
United States ...	79	71	80	32	41	51
France ...	94	49	67	48	40	53
Germany ...	80	56	59	40	42	41

*Arranged as follows:—Great Britain first, and other countries in 1927 order, except for cotton goods and cast iron.

†Note.—Figures for 1913 were given in the 1928 report.

‡1927 values converted at 40\$000=£1.

1928 „ „ at 41\$000=£1.

APPENDIX VII—continued.

	Weight (metric tons).			Value (in £1,000).		
	1926	1927	1928	1926	1927	1928
Cotton Manufactures, unspecified—						
<i>Total imports</i> ...	574	524	551	286	244	276
Great Britain ...	236	193	296	136	107	147
United States ...	147	147	72	54	46	23
France ...	67	70	59	35	41	41
Germany ...	65	77	85	36	34	43
Raw Jute—						
<i>Total imports</i> ...	13,501	20,612	13,143	733	799	505
Great Britain ...	—	450	392	—	19	19
India ...	13,501	19,883	12,453	733	767	471
Wool Yarn—						
<i>Total imports</i> ...	1,194	1,450	1,981	727	934	1,372
Great Britain ...	189	357	485	121	204	323
France ...	600	634	902	344	428	650
Belgium ...	149	97	—	97	61	—
Germany ...	40	40	157	30	26	108
Woollen Piece Goods						
<i>Total imports</i> ...	837	677	830	883	793	972
Great Britain ...	446	419	495	561	530	621
France ...	241	145	199	199	157	210
Linen Piece Goods—						
<i>Total imports</i> ...	849	775	1,293	412	451	774
Great Britain ...	311	380	552	186	251	368
France ...	193	180	303	79	95	166
Belgium ...	232	186	351	97	93	193
CLASS II.						
<i>Iron, Steel and Manu- factures.</i>						
Iron Bars and Rods—						
<i>Total imports</i> ...	55,805†	56,272*	59,693†	487†	493*	496†
Great Britain ...	3,861	4,194	6,382	46	48	63
Belgium ...	25,683	34,704	34,117	199	269	256
France ...	10,938	9,936	5,556	82	91	38
Germany ...	12,054	4,608	5,719	118	50	75
Iron Plates and Sheets—						
<i>Total imports</i> ...	20,251	37,661	33,798	330	622	505
Great Britain ...	2,543	24,504	6,723	53	450	119
Belgium ...	6,934	8,722	14,313	76	89	146
United States ...	5,319	1,605	8,483	131	38	181
Germany ...	4,660	2,177	3,693	58	34	51
Iron, Cast, Pig, Pud- dles and Filings—						
<i>Total imports</i> ...	16,231	20,323	3,081	96	149	29
Great Britain ...	5,356	3,314	1,885	35	21	12
Germany ...	3,080	201	345	18	2	6
United States ...	—	29	161	—	1	5
France ...	4,115	3,083	75	22	21	2
Belgium ...	—	12,268	478	—	89	3

* Excl. galvanised sheets.

† Incl. " "

APPENDIX VII—continued.

	Weight (metric tons).			Value (in £1,000).		
	1926	1927	1928	1926	1927	1928
Steel Bars and Rods—						
<i>Total imports</i> ...	6,033	6,376	7,542	167	179	187
Great Britain ...	1,621	2,732	2,903	45	64	59
Belgium ...	1,508	642	1,000	50	25	15
Germany ...	1,135	684	1,104	36	25	43
Steel Plates—						
<i>Total imports</i> ...	2,273	2,285	2,750	41	32	42
Great Britain ...	798	1,503	1,158	15	20	20
Belgium ...	299	423	240	3	5	3
United States ...	721	113	1,271	17	2	17
Germany ...	199	41	51	2	1	1
Structural Iron and Steel—						
<i>Total imports</i> ...	15,871	22,840	18,756	227	279	230
Great Britain ...	1,568	670	800	35	15	14
Germany ...	3,347	5,621	3,413	54	77	51
Belgium ...	5,645	7,718	7,803	45	69	58
United States ...	1,952	2,281	2,267	53	51	58
Rails, Fishplates, etc.—						
<i>Total imports</i> ...	127,601	108,325	113,399	1,306	1,135	1,172
Great Britain ...	9,693	16,434	25,834	145	220	294
Belgium ...	56,170	42,835	49,249	479	381	449
United States ...	22,155	32,188	23,769	281	373	295
France ...	12,873	10,605	7,370	116	96	68
Germany ...	15,047	3,347	2,617	130	34	25
Telegraph and Telephone Posts, Bridges and Fences—						
<i>Total imports</i> ...	7,462	10,144	9,348	216	260	195
Great Britain ...	1,046	587	2,089	64	47	56
United States ...	3,792	3,162	1,404	93	84	33
Germany ...	999	2,003	2,517	22	46	53
Tubes, Pipes and Jointings—						
<i>Total imports</i> ...	40,199	39,675	56,222	801	747	1,006
Great Britain ...	5,856	5,103	9,101	140	122	187
Belgium ...	11,734	19,107	22,903	167	260	287
United States ...	5,362	6,753	6,901	158	183	186
Germany ...	7,730	3,132	4,958	178	91	143
France ...	6,399	2,783	3,564	73	48	37
Barbed Wire—						
<i>Total imports</i> ...	30,442	38,613	47,655	474	530	639
Great Britain ...	497	2,170	2,147	9	36	34
Belgium ...	10,013	15,554	10,474	145	230	151
Germany ...	12,773	10,394	16,815	201	158	242
United States ...	6,122	8,757	15,972	101	131	229
Wire (not including barbed)—						
<i>Total imports</i> ...	21,028	27,059	35,204	303	336	464
Great Britain ...	2,041	2,812	4,702	36	49	69
Germany ...	10,317	10,735	13,154	157	157	189
Belgium ...	6,572	10,133	11,134	74	127	129
United States ...	1,335	1,090	1,557	24	20	25

APPENDIX VII—continued.

	Weight (metric tons).			Value (in £1,000).		
	1926	1927	1928	1926	1927	1928
Galvanised Corrugated Sheets—						
<i>Total imports</i> ...	12,363	12,438	17,904	337	310	306
Great Britain ...	6,083	6,458	7,453	167	162	163
United States ...	5,569	5,478	9,919	156	137	223
Germany ...	—	280	82	—	7	2
Tinplate—						
<i>Total imports</i> ...	16,191	32,083	33,467	415	796	742
Great Britain ...	11,074	20,584	24,238	277	511	542
United States ...	4,928	10,698	9,143	132	263	197
Tools and Utensils (including machine tools)—						
<i>Total imports</i> ...	6,334*	2,826	3,475	802*	481	532
Great Britain ...	2,862	633	430	288	92	78
United States ...	1,006	761	1,036	210	168	228
Germany ...	1,890	1,000	1,556	228	164	213
France ...	303	187	215	41	32	42
Cutlery—						
<i>Total imports</i> ...	539	384	544	280	222	288
Great Britain ...	17	18	15	15	15	13
Germany ...	334	261	419	161	120	180
United States ...	107	55	36	39	43	59
France ...	...	...	...	...	...	...
CLASS III.						
<i>Transport Material and General Machinery.</i>						
Locomotives—						
<i>Total imports</i> ...	12,856	12,281	6,986	1,224	1,112	577
Great Britain ...	476	2,195	2,387	49	176	278
United States ...	5,485	6,656	1,203	567	715	142
Germany ...	6,362	2,235	1,720	582	196	132
Railway Cars and Wagons—						
<i>Total imports</i> ...	39,970	14,880	10,487	1,284	607	519
Great Britain ...	3,404	3,844	1,534	90	112	135
Belgium ...	28,477	6,918	6,225	817	187	126
United States ...	1,123	2,829	1,898	61	146	211
Germany ...	2,814	1,055	455	204	54	12
Axles, Wheels, etc., for Railway Stock—						
<i>Total imports</i> ...	18,404	6,179	8,676	514	181	235
Great Britain ...	4,712	2,990	3,911	140	111	100
Belgium ...	3,227	1,787	2,340	63	30	40
United States ...	7,687	401	1,258	261	20	42
Germany ...	2,508	815	—	40	16	—
Motor Cars—		(No. of cars).				
<i>Total imports</i> ...	25,992	16,504	27,906	3,024	2,671	3,583
Great Britain ...	83	158	50	49	147	24
United States ...	24,705	15,753	27,647	2,703	2,338	3,502
France ...	258	209	58	60	64	19
Italy ...	407	137	76	130	55	20
Canada ...	477	116	12	70	25	2
Germany ...	17	96	33	4	27	6

* Incl. hoes—a large item.

APPENDIX VII—continued.

	Weight (metric tons).			Value (in £1,000).		
	1926	1927	1928	1926	1927	1928
Motor Trucks—						
<i>Total imports</i> ...	6,962	13,068	17,521	756	1,290	1,975
Great Britain ...	79	126	198	30	41	59
United States ...	6,600	12,710	17,130	590	1,130	1,834
Germany ...	62	110	76	44	68	36
Italy ...	76	26	50	18	9	19
France ...	48	25	6	12	6	3
Switzerland ...	78	47	55	53	20	24
Spinning and Weaving Machinery (including looms)						
	(Met. Tons).					
<i>Total imports</i> ...	8,422	5,027	4,734	683	414	473
Great Britain ...	6,293	3,506	2,997	483	260	262
Germany ...	922	675	764	167	63	73
Agricultural Machinery (unspecified)						
<i>Total imports</i> ...	735	553	842	55	36	54
Great Britain ...	108	112	51	7	7	3
Germany ...	198	165	216	15	12	16
United States ...	344	186	380	23	13	25
Ploughs, Ploughing Apparatus and Parts—						
<i>Total imports</i> ...	1,503	794	1,953	65	37	91
Great Britain ...	13	8	46	1	1	1
United States ...	670	464	1,110	34	24	64
Germany ...	743	296	751	25	11	20
Threshing Machines—						
<i>Total imports</i> ...	192	110	171	21	14	21
Great Britain ...	12	3	8	2	0.5	1
United States ...	168	101	148	18	13	18
Printing Machinery and Attachments—						
<i>Total imports</i> ...	Not separately distinguished.	474	541	Not separately distinguished.	135	178
Great Britain ...		15	17		5	6
United States ...		133	171		89	116
Germany ...		175	249		23	42
France ...		112	23		15	4
Other Industrial Machinery—						
<i>Total imports</i> ...	8,131	6,866	7,171	740	679	707
Great Britain ...	2,268	2,600	1,607	215	241	157
Germany ...	2,407	1,401	1,970	242	178	238
United States ...	877	1,230	839	117	170	129
Belgium ...	970	580	1,314	38	36	67
France ...	976	415	804	51	26	58
General Machinery Mechanical Appliances (unspecified)—						
<i>Total imports</i> ...	20,398	18,114	20,893	2,566	2,370	2,707
Great Britain ...	3,231	3,423	3,550	383	400	385
United States ...	3,425	4,025	5,572	773	718	955
Germany ...	8,219	6,147	8,237	876	705	930
France ...	1,457	908	708	157	133	93

APPENDIX VII—continued.

	Weight (metric tons).			Value (in £1,000).		
	1926	1927	1928	1926	1927	1928
Cranes—						
<i>Total imports</i> ...	1,525	1,305	3,641	99	84	278
Great Britain ...	373	274	2,089	20	17	137
Germany ...	481	482	368	29	36	25
United States ...	278	69	898	25	7	107
Boilers—						
<i>Total imports</i> ...	2,575	1,518	2,032	139	99	117
Great Britain ...	1,132	934	1,003	59	61	63
United States ...	303	170	453	22	18	25
Germany ...	388	166	386	23	9	21
CLASS IV.						
<i>Copper.</i>						
Copper Plates, or Sheets—						
<i>Total imports</i> ...	1,740	1,479	2,695	160	144	239
Great Britain ...	371	376	652	34	34	58
Germany ...	925	794	1,055	85	70	94
France ...	211	65	149	18	7	13
Copper (Cast, Mould- ed, Fillings, etc.)						
<i>Total imports</i> ...	3,637	3,643	4,015	272	270	301
Great Britain ...	308	313	394	30	28	32
United States ...	2,658	2,716	2,963	189	195	221
Germany ...	508	251	296	39	20	22
France ...	68	133	85	6	16	9
Electric Cables and Wire (insulated)						
<i>Total imports</i> ...	3,197	3,542	3,789*	269	272	294*
Great Britain ...	1,345	951	1,408	95	59	85
United States ...	878	709	792	91	85	89
Germany ...	295	706	468	24	46	35
Italy ...	249	586	323	19	35	21
CLASS V.						
<i>Chemical Products.</i>						
Caustic Soda—						
<i>Total imports</i> ...	13,277	18,063	21,734	301	374	401
Great Britain ...	8,616	13,403	15,913	204	284	229
United States ...	2,605	3,693	5,384	55	73	105
Germany ...	1,721	547	not known	30	10	not known.
White Zinc Paints—						
<i>Total imports</i> ...	4,184	4,411	5,399	159	157	171
Great Britain ...	470	524	729	19	19	24
Belgium ...	2,786	2,532	3,043	106	91	96
Germany ...	231	330	429	8	10	12
Oil Paints—						
<i>Total imports</i> ...	1,831	1,645	2,000	165	159	183
Great Britain ...	973	744	802	61	48	47
United States ...	660	583	858	80	81	105
Germany ...	110	158	169	11	15	16
Chemical Fertilisers—						
<i>Total imports</i> ...	7,711	9,911	21,121	76	92	193
Great Britain ...	307	526	1,087	5	7	14
Germany ...	4,738	5,746	13,418	44	56	140
Holland ...	1,019	1,402	1,504	6	7	7

* Incl. uninsulated electric wire.

APPENDIX VII—continued.

	Weight (metric tons).			Value (£1,000).		
	1926	1927	1928	1926	1927	1928
Chemical Products, unspecified—						
<i>Total imports</i> ...	12,946	8,554	10,993	1,114	708	810
Great Britain ...	3,591	2,178	2,717	188	108	123
Germany ...	4,868	2,442	3,427	308	144	186
United States ...	1,136	1,110	1,077	163	125	125
CLASS VI. <i>Electrical Material and Apparatus.</i>						
Apparatus and Ap- pliances for Elec- tric Light—						
<i>Total imports</i> ...	4,709	5,217	6,129	986	1,063	1,247
Great Britain ...	670	759	782	198	173	171
United States ...	2,131	2,162	2,915	496	531	637
Germany ...	1,214	1,183	1,601	172	177	250
Electric Dynamos and Generators—						
<i>Total imports</i> ...	1,281	1,345	1,065	182	194	172
Great Britain ...	53	70	130	16	15	32
United States ...	461	610	237	73	97	57
Germany ...	476	373	505	52	44	61
Electric Motors—						
<i>Total imports</i> ...	1,906	1,605	1,690	242	244	251
Great Britain ...	231	205	212	40	35	37
United States ...	346	494	475	70	93	88
Germany ...	583	379	440	54	50	59
Switzerland ...	102	108	60	15	18	10
Italy ...	151	121	104	15	15	13
Transformers—						
<i>Total imports</i> ...	1,317	1,526	1,717	165	202	207
Great Britain ...	114	261	173	16	37	17
United States ...	637	759	948	97	107	128
Germany ...	310	265	361	21	28	38
CLASS VII. <i>Fuels, Oils and Cement.</i>						
Coal—						
<i>Total imports</i> ...	1,771,904	2,007,675	1,950,258	3,235	3,728	2,721
Great Britain ...	651,863	1,403,230	1,778,233	1,112	2,297	2,439
United States ...	1,085,071	580,354	151,109	2,028	1,358	251
Cement—						
<i>Total imports</i> ...	396,322	441,959	456,212	1,313	1,435	1,403
Great Britain ...	36,541	56,278	60,837	131	187	198
Germany ...	127,146	114,814	not shewn	438	405	not shn.
Belgium ...	63,562	86,784	85,010	193	277	246
Denmark ...	66,927	69,866	101,725	210	211	281
Sweden ...	49,561	47,239	52,237	157	145	149
United States ...	2,154	2,471	not shewn	20	20	not shn.
Lubricating Oils—						
<i>Total imports</i> ...	38,650	34,112	38,417	752	822	840
Great Britain ...	928	636	811	29	20	23
United States ...	28,445	32,450	35,517	620	776	776
Germany ...	235	306	—	6	7	—

APPENDIX VII—continued.

	Weight (metric tons),			Value (£1,000).		
	1926	1927	1928	1926	1927	1928
<i>Gasolene—</i>						
<i>Total imports</i> ...	152,551	201,242	254,345	2,404	2,694	2,882
United States ...	120,704	113,860	128,947	1,946	1,760	1,820
Mexico ...	30,907	38,800	56,603	425	494	509
<i>Total imports</i> ...						
United States ...	91,021	111,840	103,697	1,196	1,398	1,243
Mexico ...	78,680	89,182	82,007	1,038	1,114	1,009
	11,919	21,944	20,020	147	270	213
CLASS VIII.						
<i>Foodstuffs.</i>						
<i>Wheat—</i>						
<i>Total imports</i> ...	542,658	595,537	695,407	7,569	7,232	7,849
Argentina ...	392,706	576,278	673,241	5,441	6,982	7,585
Uruguay ...	3,495	12,758	22,121	90	159	263
United States ...	85,508	6,499	2	1,194	87	*
<i>Wheat Flour—</i>						
<i>Total imports</i> ...	221,356	204,167	209,157	4,478	3,581	3,356
Argentina ...	83,364	99,058	42,324	1,695	1,637	1,696
United States ...	112,173	87,499	76,456	2,317	1,653	1,351
Uruguay ...	11,046	16,260	18,167	212	260	275
<i>Dried Codfish—</i>						
<i>Total imports</i> ...	36,978	36,088	41,703	1,850	1,619	1,984
Great Britain ...	13,272	12,456	14,296	726	591	683
Newfoundland ...	13,670	14,620	16,014	632	623	774
Norway ...	6,590	5,110	6,273	325	224	309
United States ...	1,461	2,125	1,732	67	102	84
Canada ...	1,744	555	568	90	24	30
CLASS IX.						
<i>Various.</i>						
<i>Enamelled Iron Man- ufactures—</i>						
<i>Total imports</i> ...	856	820	1,233	108	100	158
Great Britain ...	48	50	51	5	5	5
Germany ...	670	644	1,002	81	77	129
United States ...	27	33	29	4	6	4
<i>Window Glass—</i>						
<i>Total imports</i> ...	8,011	7,788	9,385	162	143	177
Great Britain ...	1,302	1,235	1,537	36	31	36
Belgium ...	5,042	4,960	5,398	76	76	86
Germany ...	1,053	728	1,168	32	23	33
<i>Printing Paper—</i>						
<i>Total imports</i> ...	38,163†	4,756	6,802	813†	148	208
Great Britain ...	1,395	881	1,471	46	31	51
Germany ...	10,865	1,484	1,542	270	49	53
Norway ...	8,813	438	1,119	167	11	24
Sweden ...	6,148	388	689	114	10	17
Finland ...	9,642	360	138	172	7	3

*Under £1,000.

†Incl. newsprint.

APPENDIX VII—continued.

	Weight (metric tons).			Value (£1,000).		
	1926	1927	1928	1926	1927	1928
Rubber Tyres, and Inner Tubes (excluding solid tyres)—						
<i>Total imports</i> ...	3,226	4,730	4,294	867	988	821
Great Britain ...	478	399	381	125	82	78
United States ...	1,201	3,185	2,709	300	637	500
France ...	1,195	1,078	471	376	259	109
Canada ...	286	5	567	61	1	104
Leather Belting—						
<i>Total imports</i> ...	121	111	100	61	62	54
Great Britain ...	42	53	41	22	29	24
United States ...	26	16	15	14	12	8
France ...	19	18	16	10	11	11
Germany ...	19	6	7	9	4	3
Manufactures of Skins and Leathers, unspecified—						
<i>Total imports</i> ...	76	88	121	103	118	153
Great Britain ...	38	54	80	62	80	110
Germany ...	14	10	8	13	12	10
France ...	9	6	7	8	8	6
Skins and Hides Tanned or otherwise prepared—						
<i>Total imports</i> ...	1,120	705	794	950	821	1,066
Great Britain ...	44	21	29	39	23	39
United States ...	281	310	304	352	371	459
Germany ...	117	102	154	199	170	295
France ...	123	74	95	128	88	116
Argentine ...	385	104	127	154	87	96
Uruguay ...	142	70	66	53	36	27
Pianos —	(No.)	(No.)	(No.)			
<i>Total imports</i> ...	4,275	3,346	3,379	261	165	217
Great Britain ...	124	64	242	8	5	7
Germany ...	3,529	3,056	2,872	219	145	196
France ...	219	102	104	15	7	6
Gramophones, Gramophone Records and Accessories—		(Metric tons).				
<i>Total imports</i> ...	299	493	932	134	211	385
Great Britain ...	31	49	89	13	21	38
United States ...	189	314	644	91	146	259
Germany ...	66	109	168	27	44	59
Photographic apparatus, Plates, Paper, Films and Accessories—						
<i>Total imports</i> ...	327	340	428	122	125	182
Great Britain ...	15	13	20	5	4	8
Germany ...	116	182	211	42	58	81
United States ...	47	52	67	38	42	61

APPENDIX VII—continued.

	Weight (metric tons).			Value (£1,000).		
	1926	1927	1928	1926	1927	1928
Cinematograph Films—						
<i>Total imports</i> ...	38	38	46	127	110	100
United States ...	33	34	39	119	103	85
Germany ...	1	2	3	1	3	7
France ...	2	2	2	6	5	6
Wireless Apparatus and Accessories—						
<i>Total imports</i> ...	Not separately distinguished	177	177	Not separately distinguished	93	86
Great Britain ...		4	5		5	4
United States ...		154	134		80	63
Germany ...		13	21		7	9
Sewing Machines—						
<i>Total imports</i> ...	1,909	2,745	4,812	361	506	836
Great Britain ...	32	25	37	5	7	9
United States ...	1,025	1,986	3,301	213	365	559
Germany ...	560	704	1,194	98	127	225
Typewriting Ma- chines and Ac- cessories—						
<i>Total imports</i> ...	286*	318	323	207*	213	236
Great Britain ...	2	10	3	1	2	2
United States ...	229	256	254	167	180	182
Germany ...	33	27	48	22	19	27
Calculating Ma- chines—						
<i>Total imports</i> ...	—	129	219	—	112	182
United States ...	—	122	208	—	98	165
Germany ...	—	5	9	—	12	14
Stoves—						
<i>Total imports</i> ...	569	435	547	60	49	57
Great Britain ...	41	37	37	3	3	3
United States ...	261	216	229	31	26	28
Germany ...	230	147	227	22	15	22

* Incl. calculating machines.

APPENDIX VIII.

AGRICULTURAL PRODUCTION OF BRAZIL.
Crops, 1927-28.

Product.	Quantity (in metric tons except where otherwise stated).	Value Sterling in 1,000's of £.
Coffee	1,501,887	110,758
Maize	3,306,715	22,760
Sugar	836,537	16,451
Rice	822,961	14,161
Mandioca flour	943,877	11,601
Beans	527,845	11,580
Cotton	109,504	8,075
Tobacco	68,046	6,189
Aguardente and alcohol (hectolitres) ...	1,858,684	4,112
Herva Maté	140,000	3,447
Cocoa	79,048	2,915
Potatoes... ..	227,567	2,797
Wines (hectolitres)	840,726	2,273
Hay	248,746	1,590
Wheat	114,398	1,547
Rubber	27,876	1,370
Brazil nuts	35,282	1,243
Coconuts	58,171	572
Babassá nuts	22,000	433

ANNEX.

REPORTS ON CONSULAR DISTRICTS.

I.

RIO DE JANEIRO.

Federal District and the States of Rio de Janeiro, Espirito Santo, Minas Geraes and Goyaz.

By C. A. Goodwin, M.B.E., H.M. Consul General.

Commercial Summary.

Area and Population.

	Area in sq. kms.	Popula- tion.	Average density.
Federal District	1,167	1,431,700*	1,226,811
State of Rio de Janeiro	42,441	1,944,700	45,861
„ Espirito Santo	44,684	635,800	14,228
„ Minas Geraes	593,810	7,257,800	12,222
„ Goyaz	643,303	687,500	1,041
Totals	1,325,405	11,957,500	
Totals for Brazil	8,511,189	39,103,856	4,595

Language.—Portuguese is the language of the country, but English is understood in most large business houses in Rio de Janeiro. Failing Portuguese, English or French should be used.

Cost of Living.—Index number for Rio de Janeiro :—

1912	100
1925	259
1926	266
1927	273
1928	269

Railway and Road Mileage.—(On January 1st, 1928),

	Railways. kms.	Roads. kms.
Federal District	172	372
State of Rio de Janeiro	2,666	1,913
„ Espirito Santo	714	700
„ Minas Geraes	7,849	9,381
„ Goyaz	297	3,500
Totals for the Consular District	11,698	15,866
Totals for Brazil	31,881	71,688

*According to the latest statistics of the Department of Public Health the population of Rio de Janeiro is 1,730,000.

Shipping.—Steamers of all nationalities entered at Rio :—

	1926	1927	1928
		(Number).	
Foreign	1,410	1,604	1,500
British	504	698	654
Brazilian	2,000	2,007	2,242
Totals	3,914	4,309	4,396
		(Tonnage).	
Foreign (including British)	9,032,020	9,199,588	8,623,570
Brazilian	216,868	264,380	1,106,110
Totals	9,248,888	9,463,968	9,729,680

Imports.—

	Rio de Janeiro.		Brazil.	
	Tons.	£	Tons.	£
1926 ...	2,410,609	32,312,405	4,945,852	79,875,825
1927 ...	2,717,109	31,764,257	5,519,682	79,634,046
1928 ...	2,856,035	36,209,622	5,838,414	90,668,685

Exports.—

	Rio de Janeiro.		Brazil.	
	Tons.	£	Tons.	£
1926 ...	561,281	15,962,877	1,858,432	94,254,315
1927 ...	499,201	13,293,897	2,017,219	88,688,829
1928 ...	604,325	14,345,693	2,075,048	97,426,147

Imports into Victoria in 1928...	...	Tons.	£
Exports from Victoria in 1928	...	21,539	302,967
		64,665	4,327,054

General Conditions.

The political tranquillity which the country enjoyed since 1926 and the fact that the Coffee Institute had dealt successfully with the bumper crop of 1927, while the milreis remained stable throughout the year, caused 1928 to open in promising fashion and business circles looked forward to a gradual return to normal, but unfortunately this feeling of optimism was only of short duration and business activities in Rio de Janeiro were overshadowed by an atmosphere of depression and anxiety during the whole of the period under review (October, 1928, to September, 1929). This was probably due to a variety of causes, viz. : (1) fear of a break-down of the stabilisation policy of the Government, engendered by the inevitable effects of an unfavourable balance of international payments resulting from a steadily decreasing excess of exports over imports; (2) fear of collapse of the coffee defence scheme, the financing of which is becoming an increasing burden

and tends to react unfavourably on (1); (3) the number of failures and "concordatas," largely due to overtrading on the part of many firms; (4) the consequent restriction of credits by the banks, which in its turn caused a more rapid increase of failures (incidentally this helped to weed out many unsound firms); (5) the great money stringency and embarrassment of the money market due to the curtailment of discounts and loans by the Bank of Brazil; (6) the high cost of living, due to heavy taxation, a high customs tariff and artificially controlled prices of the staple products (coffee, sugar, etc.) of the country, coupled with the reduced purchasing power of a large portion of the community which has not adjusted itself to the low stabilisation rate of the currency; (7) the yellow fever epidemic and its effects on local trade during the summer months; (8) the inevitable nervousness caused by the uncertainty of the political situation in view of the Presidential elections next year.

The remedies to some of these evils are comparatively easy to find, but stabilisation of exchange and coffee valorisation which are interdependent, in some measure conflicting and equally vital, constitute a problem of the first magnitude which is occupying the minds of all the leading men in the country.

The encouragement which is being given to the cultivation of oranges in this district shows that the authorities are alive to the necessity of developing the export of products other than coffee with a view to becoming less dependent on a single artificially controlled commodity. Indeed they must know that one of the fundamental causes of existing conditions is the fact that the expansion of exports is not keeping pace with the increase in the population and that a more intensive exploitation of the natural resources of the country is the quickest and surest way to prosperity.

The wave of pessimism which is passing over Rio de Janeiro is perhaps not altogether unjustified, but all those who take a longer view of the situation agree that, notwithstanding the present unsatisfactory state of trade and national industries (notably that of the cotton textile industry), the future outlook is not unpromising. And they add that if half the energy and capital now spent on the creation and development of all kinds of manufacturing industries were applied to opening up the interior of the country and exploiting the prodigious possibilities of wealth with which nature has endowed Brazil, more rapid economic progress would undoubtedly be assured.

FEDERAL DISTRICT.

Municipal Finance.—It has required much persistent effort on the part of Dr. Antonio Prado, Junior, to extricate the municipal finances from the precarious condition in which he found them when he became Prefect of Rio de Janeiro three years ago, while maintaining efficiency in the public services and initiating extensive improvements.

In his last message, which he presented to the Municipal Council on June 1st, 1929, he stated that all salaries and material acquired had been paid up to date; that the payment of interest and amortisation on foreign loans had been regularly met; that the service of the internal debt which had been very irregular for many years had been resumed and that the obligations (overdue accounts) taken over from previous administrations had been further reduced by 2,547 contos during the year 1928, leaving a balance of 14,129 contos still outstanding.

The year closed with a deficit of 16,773 contos, so that another loan will be required in the near future to cover the very heavy expenditure involved in the extensive improvement works which are now in progress.

The total revenue of the Municipality of Rio de Janeiro was 167,515 contos and the total expenditure (ordinary authorised expenditure plus expenditure out of "special" and "extraordinary" credits) amounted to 184,288 contos. Apart from this, 45,000 contos were spent on improvement works in Rio, 12,000 contos for the demolition of the "Morro do Castello"

(Castle Hill), and 5,000 contos for the construction of schools. This was achieved with the assistance of two external loans, one of 30,000,000 dollars and one of 1,770,000 dollars which brought the total funded debt of the Federal District up to 756,000 contos (£18,900,000) made up as follows :—

Foreign Loans.—

Years.			Issue amount.	Interest.	Amount in circulation.
1912	...	...	£ 2,500,000	% 4	£ 1,881,460
1921	...	...	\$ 12,000,000	8	\$ 8,400,000
1928	...	...	30,000,000	6½	30,000,000
1929	...	...	1,770,000	6½	1,770,000

Total in circulation :—

£1,881,460 =	75,258 contos.*
\$40,170,000 =	330,981 „
	406,239 „

Internal Loans.—

Balance in circulation of 1904 sterling loan :—

£3,465,940 =	138,638 contos.
Currency bonds ...	211,157 „
	349,795 „

Total debt at the end of 1928 = 756,034 contos.

as against 757,581 contos (397,632 foreign and 359,949 internal) at the end of 1927 and 664,108 contos (302,559 foreign and 361,549 internal) at the end of 1926.

The floating debt at the end of 1928 amounted to 95,000 contos (£2,375,000).

The service of these debts swallowed up about 35 per cent. of the total revenue, 33,447 contos being required for the foreign debt and 30,148 contos for the internal debt.

Part of the thirty million dollar loan was applied to the redemption of existing loans, while 60,000 contos were set aside for expenditure in connection with the scheme for embellishing the city of Rio de Janeiro.

The second loan of 1,770,000 dollars was entirely devoted to the termination of the demolition of the Morro do Castello.

Both loans, which were offered to the public at 97, carry 6½ per cent. interest.

On the 16th August the Municipal Council authorised the Prefect to raise a further loan of 40,000 contos (internal) or 8,000,000 dollars (external) the proceeds of which are to be applied to :—

- (1) the payment of salaries and wages ;
- (2) expenditure in connection with the improvement works in progress.

In the event of a foreign loan being raised the 1928 loan of 1,770,000 dollars will probably be redeemed.

The financial situation described above is not to be wondered at when the rapid growth of the town, whose population is approaching two million, and the improvements which are being carried out on such an extensive scale are considered.

*At 6d. to the milreis and corresponding rate for the dollar.

Critics maintain that however attractive all the schemes for beautifying the city may be, non-essential expenditure should be restricted in order not to increase taxation which tends to become so high as to hamper normal progress. Indeed protests emanating from commercial and industrial circles have been so numerous that the Prefect decided to appoint a Commission, whose members included representatives of the business community, to prepare the budget estimates for 1930. These show an estimated revenue of 200,488 contos and an estimated expenditure of 217,312 contos. The export tax, which the Prefect considers as economically unsound, has been abolished.

In his last message Dr. Prado Junior said that the fact that the external bonds had only dropped one point from £83 to £82 since 1927, while the quotations of internal bonds for the year 1928 showed an average rise of 13.5 per cent., proved that the credit of the Federal District abroad was unimpaired and that the confidence of the Brazilians themselves in the present administration had improved.

Public Works.—The demolition of the Morro do Castello to which I have already referred is now practically completed. The cost of razing the hill is said not to have exceeded 100,000 contos, whereas the value of the cleared and reclaimed land which is made available for building (about 220,000 square metres) in the business centre of the town, after allowing for public thoroughfares, etc., is estimated at a much higher figure.

It is the Prefect's intention to raze the Santo Antonio Hill next.

The work of remodelling Rio has already gone beyond the preliminary stages. The programme comprises the beautifying of the centre of the town (improvement of streets, laying out of gardens, etc.), the construction of buildings on the Morro do Castello site, the reclamation of the Sacco da Gloria, where a large monument, the "Porta do Brazil," is to be erected and the reconstruction of the east end of the town.

The Municipality are confronted with two serious problems which are engaging the special attention of the technical department, namely the extension of the water supply and the effective drainage of the town in order to avoid the frequent flooding of the low-lying sections during the rainy season when enormous volumes of rain water heavily charged with earth come down from the surrounding hills.

Many streets have been repaved with asphalt and a number of new water, gas and sewage mains have been laid.

Five thousand workers are said to be employed in road developments in the Federal District. Old roads are being improved and new ones constructed. When this work will be completed the Federal District will have a network of 522 kilometres of good roads.

Motor Vehicles.—14,747 licences were issued by the Prefeitura of Rio de Janeiro to owners of motor vehicles during the first five months of 1929.

A Road Machinery and Materials Exhibition was held in Rio de Janeiro, under the auspices of the Brazilian Government, at the same time as the Pan-American Highway Congress in August last.

Other Activities.—Good progress was made with the aero-photographic survey of Rio which is being carried out by the Aircraft Operating Co., Ltd.

The second Rio de Janeiro Samples Fair was held between the 29th June and the 28th July. While last year's fair was purely local, this year the exhibits were drawn from different parts of Brazil. Both the number of exhibits and the attendance were larger. It is hoped that from next year on the fair will assume an international character.

The Municipality are doing all they can to make the natural beauties of Rio better known and to attract tourists in every way.

Port Developments.—The work on the extension of the quays to the Ponta do Cajú was suspended in September, 1928, owing to the lack of funds. A special credit of 25,000 contos had to be voted for the conclusion of the

1,300 metres of quay wall and for the equipment of the 300 metres which are already completed.

Naval Arsenal at Ilha das Cobras.—The work on the new arsenal at the Ilha das Cobras, which is being carried out by the Companhia Mechanica e Importadora de São Paulo, is making good progress.

The expenditure during 1928 amounted to about 21,000 contos. A special credit for a similar amount was opened at the beginning of the current year.

When the new arsenal is completed the old buildings on the mainland opposite the island will probably be demolished, and the Mauá wharf extended.

Imports into Rio de Janeiro.—

			Rio de Janeiro.		Total for Brazil.	
			Tons.	£	Tons.	£
1926	...	...	2,410,609	32,312,405	4,945,852	79,875,825
1927	...	...	2,717,109	31,764,257	5,519,682	79,634,046
1928	...	...	2,856,035	36,209,622	5,838,414	90,668,685

The above figures seem to indicate that the sudden reduction in the exchange value of the currency two years ago and the consequent diminished purchasing power of the population which would have led one to expect a drop in the value of imports are more than compensated by the steady increase in population and the gradual improvement in the standard of living.

During the first few months of 1929 excessive quantities of cotton textiles were ordered abroad in order to secure entry before April 10th, when the higher import duties came into force.

For the first time Rio de Janeiro, which had always been the principal importing port of Brazil, took second place after Santos in 1928.

			Rio.	Santos.
			£	£
1924	...	...	29,824,713	23,819,308
1925	...	...	34,622,976	31,961,953
1926	...	...	32,312,405	29,603,916
1927	...	...	31,764,257	31,195,715
1928	...	...	36,209,622	36,302,168

This is no doubt partly due to the fact that the hinterland of Santos is developing more rapidly than that of Rio de Janeiro, but it would seem that a considerable volume of traffic has been diverted to Santos in order to avoid the 2 per cent. gold tax imposed at Rio. This tax which was instituted in 1903 for the improvement and maintenance of the port, has already yielded more than double the amount expended for that purpose in the last 26 years.

In order to mitigate the effects of this inequality goods reshipped from Santos to Rio de Janeiro in the original packing have to pay the tax, but this does not appear to be really effective and a measure providing for a substantial reduction of the tax and for its application at all ports without exception is being considered by Congress.

The Associação Commercial are now asking that the 2 per cent. gold tax be abolished and that, by way of compensation, the other port dues be increased so as to be brought into line with those levied at Santos.

In 1927 the situation was as follows:—

		Port dues.	2% gold tax.	Total.
		Contos.	Contos (paper).	Contos.
Rio	...	25,422	38,666	64,088
Santos	...	47,715	—	47,715

Exports from Rio de Janeiro.—

	Rio de Janeiro.		Total for Brazil.	
	Tons.	£	Tons.	£
1926	561,281	15,962,877	1,858,432	94,254,315
1927	499,201	13,293,897	2,017,219	88,688,829
1928	604,325	14,345,693	2,075,048	97,426,147

Coffee.

	1st July to 30th June.				Bags of 60 kilos.	
1924-25	3,143,728
1925-26	3,638,260
1926-27	3,441,785
1927-28	3,651,653
1928-29	2,799,642

Manganese Ore.

	Tons.	Contos.	£
1926	319,825	—	—
1927	241,823	—	—
1928	361,829	37,143,974	909,082

Oranges.—Both the authorities and private enterprise have been actively engaged in organising and developing the production and export of oranges. It is sought to improve the methods of cultivation and special attention is now devoted to the all-important question of selecting, grading, packing and warehousing. Two packing houses of the most modern type with a daily capacity of about 2,500 boxes each are being installed in the State of Rio de Janeiro, one by the Government at Novo Iguassú and the other by private interests at Cabuçu, and the erection of several others is contemplated.

The present number of orange trees in the States of Rio de Janeiro, Minas Geraes and Espirito Santo is estimated at 4,500,000, 1,465,000 and 400,000, covering areas of 11,500, 3,600 and 1,000 hectares respectively.

The formation of co-operative societies of growers is encouraged by the authorities.

In May last the Ministry of Agriculture issued instructions regulating the shipment of oranges to foreign countries, with a view to ensuring that only properly selected fruit suitable for export and adequately packed leaves the country.

Considerable expansion in the export of citrus fruits may therefore be expected in the near future. This will be facilitated by the increasing refrigerated cargo space available on transatlantic routes.

The following quantities of oranges were exported to Europe during the years 1928 and 1929 :—

1928	London.	Hamburg.	Amsterdam.	Total.
	Cases.	Cases.	Cases.	Cases.
June	37	—	—	37
July	3,391	1,902	1,000	6,293
August	5,956	2,950	2,500	11,406
September	51,241	9,837	1,000	62,078
October	6,787	2,133	2,471	11,391
	67,412	16,822	6,971	91,205

1929	London, Liverpool, South- ampton.	Hamburg.	Amsterdam, Rotterdam.	Total.
	Cases.	Cases.	Cases.	Cases.
May	3,739	Nil.	805	4,544
June	7,205	2,320	1,000	10,525
July	57,963	6,630	4,430	69,023
August	79,843	5,699	3,966	89,508
September	51,753	2,353	2,000	56,106
October	36,977	Nil.	Nil.	36,977
	237,480	17,002	12,201	266,683

The export of oranges from Rio de Janeiro to Buenos Aires was as follows:—

	1928	1929	
	Cases.	Cases.	
August	—	9,978	} 143,138
September	88,332	36,416	
October	118,206	96,744	
November	89,497		
December	32,686		
	328,721		

Shipping.—Return of shipping of all nationalities entered at Rio de Janeiro in 1927 and 1928.

Flag.	Number.	
	1927	1928
British	698	654
German	299	339
French	310	213
Italian	259	145
American	166	166
Dutch	106	112
Norwegian	95	114
Belgian	76	54
Swedish	109	116
Spanish	31	40
Argentine	19	16
Greek	—	78
Japanese	—	45
Danish	—	24
Finnish	—	17
Yugo-Slav.	—	11
Danzig	—	6
Chilian	—	2
Peruvian	—	1
Czechoslovakian	—	1
Other flags	134	—
Total foreign	2,302	2,154
Total Brazilian	2,007	2,242
Grand total	4,309	4,396
Total tonnage—Foreign	9,199,588	8,566,614
Brazilian	264,380	1,088,206

In May, 1929, the Furness Prince Line inaugurated their new fortnightly service between New York and South America (New York-Rio-Santos-Montevideo-Buenos Aires-Santos-Rio-Bahia-Trinidad-New York) with four new motor vessels of 12,000 tons.

The five new passenger and refrigerated cargo motorships of the Nelson Line are now in service. The first one, the *Highland Monarch* left London on her maiden voyage to South America in October, 1928.

The new general and refrigerated cargo motor vessels *Sud Americano* and *Sud Expresso* of the Linea Sud Americana Inc. (Garcia & Diaz, New York) have recently started a new service between New York, Cuba, Rio, Santos and the River Plate. They have accommodation for about 20 first-class passengers. These vessels, which were built in Germany (Kiel), sail under the Norwegian flag.

A new line, the White Cross Line (Managers: Messrs. Pardoe, Thomas & Co., Ltd.) are starting a regular cargo service from London and Antwerp to Brazil and the River Plate. They are expected to begin with four new ships of 6,400 tons deadweight.

The Westfal-Larsen Line have started a new cargo service between California, Panamá, Bahia, Rio and Santos. (They used to go round the Magellan Straits and tranship cargo for Brazil in the River Plate.)

Messrs. J. & R. Grant, Ltd., have started a monthly cargo service (general cargo) from London and Antwerp to Pernambuco, Bahia, Rio, Santos, Rio Grande and Porto Alegre.*

The Hamburg-Amerika Line have added the *General Osorio*, a vessel of 14,000 tons gross (intermediate and third-class only), to their fleet.

Passenger Traffic.—According to statistics prepared by the harbour police 111,325 passengers landed (44,364 from abroad) and 88,529 embarked (30,572 for foreign ports) at Rio de Janeiro during the year 1928.

Immigration.—Immigration through Rio de Janeiro in 1928 :—

Nationalities.	Number.
Portuguese	18,791
Poles	3,738
Italians	1,895
Spaniards	1,717
Germans	1,386
Lithuanians	1,226
Syrians	960
French	549
Russians	472
British	420
Armenians	353
Rumanians	326
United States Citizens	173
Czechoslovaks	162
Swiss	138
Uruguayans	136
Turks	117
Hungarians	101
Others... ..	2,202
Total	34,862

Aviation.—The Compagnie Générale Aeropostale, which is connected with the French Latecoere Line, continues to run a regular weekly service (mails only) between Europe and South America. The distance covered by their planes in 1928 was 528,000 kms.

*Messrs. J. & R. Grant, Ltd., are the London agents of the Lloyd Brasileiro who gave up their line from London in April, 1929.

The Syndicato Condor (German), who use Dornier Wal seaplanes, maintained a regular service transporting passengers, mails and cargo between Rio and Porto Alegre with several intermediary stops.

The Condor Syndicate propose to start a new line from Rio de Janeiro to Natal with stops at Campos, Victoria, São Matheus, Caravellas, Belmont, Ilheós, Bahia, Aracajú, Recife and Parahyba. They have already built an air port at Ilheós in the State of Bahia and another is being prepared at Victoria.

The "Eta" (Empreza de Transportes Aereos) Company inaugurated its daily postal service between Rio and Campos in June, 1929* and a bi-weekly postal service between Rio and São Paulo in August. The Rio-Campos service will be extended to Victoria later and other services into the interior (e.g., Rio to Bello Horizonte) will probably be started.

Two American companies have announced their intention of establishing a regular service for the transport of passengers and mails between New York, Rio and Buenos Aires.

Telephone Service.—The much needed reorganisation and extension of the Rio telephone service, which had been delayed for six years owing to the repudiation by the Municipality of the contract which they had entered into with the Brazilian Telephone Co. in 1922, is now being proceeded with, the litigation having been decided in the Company's favour by the Supreme Federal Court. About 30,000 automatic telephones are to be installed in Rio within the next two years.

STATE OF RIO DE JANEIRO.

Public Works.—The State of Rio de Janeiro has embarked on an ambitious programme of development works which includes the construction of the ports of Nictheroy and Angra dos Reis.

Port of Nictheroy.—According to the President's last message to Congress the sum of 38,636 contos has so far (August, 1929) been expended on the port works of Nictheroy. The eight-metre wharf, which was inaugurated in December, 1927, is 435 metres long. Another wharf 1,024 metres long and only two metres deep is practically completed. Channels giving access to the docks are being dredged and large areas are being reclaimed. Two sheds 22 by 76 metres have been built and the Minister of Finance has been authorised to spend 950 contos on the construction of a Custom House.

It is desired to make Nictheroy a port of call for transatlantic steamers in order to avoid the necessity of transshipping the coffee and other produce of the State via Rio de Janeiro.

In August, 1928, a concession was granted to the Companhia Brasileira de Portos, which is financed by the Credit Foncier du Brésil et de l'Amérique du Sud, for the working of the ports of Nictheroy and Angra dos Reis (loading, discharging and warehousing), and an internal loan of 12,000 contos was raised, the proceeds of which are to be entirely devoted to the construction of these two ports.

Port of Angra dos Reis.—The work at Angra dos Reis has been speeded up and the construction of the quays is making good progress. Two stone quays, 170 and 350 metres long respectively, are already completed, and a steel wharf 300 metres long and 8 metres deep is expected to be ready by the end of 1929.

The Soc. Anon. Moinho Santista have already acquired 1,100 square metres of land outside the customs area of the port for the purpose of erecting large wheat silos.

This port, which will give another outlet to the products of the States of Minas Geraes, Goyaz and Matto Grosso, may help to relieve the congestion at Santos.

*This has now been discontinued.

Sanitation Works.—Extensive sanitation works are in progress in the State of Rio de Janeiro. In July, 1929, an extraordinary credit of 3,000 contos was opened to cover the initial expenses incurred in this connection.

Roads.—During the year ended 30th July, 1929, the sum of 6,090 contos was expended on the construction, reconstruction and maintenance of roads and bridges.

The members of the Second Pan-American Highway Congress, which was held in Rio de Janeiro in August, 1929, unveiled a monument in the Araras Mountains on the Rio-São Paulo road.

Agriculture.—*Coffee.*—The quantities exported from the State during the last two seasons were as follows:—

		Via Rio.	Via Nichteroy.	Total.
		Bags.	Bags.	Bags.
1927-28	... ..	1,101,314	22,319	1,123,633
1928-29	... ..	748,195	46,229	794,424

In view of the development of the port, a coffee warehouse with a capacity of 250,000 bags is being constructed at Nichteroy.

Advances on warehoused coffee by the Instituto de Fomento e Economia Agricola amounted to 371 contos in 1927, 2,497 contos in 1928 and 1,023 contos during the first six months of 1929.

Sugar-cane.—The following is an extract from the last report of the General Manager of the Leopoldina Railway dated April, 1929.

"Sugar-cane growers experienced an exceptionally bad season as the result of a prolonged drought and serious damage to the plants from a disease known as 'Mosaic,' with the result that our traffic of cane only amounted to 247,285 tons, which is 159,832 tons, equal to 39.26 per cent., less than in the preceding year.

"Had not energetic steps been taken to replant the fields with a variety of cane immune to the mosaic disease, the industry would very soon have disappeared. Such a cane, known as 'Java,' is grown in the State of Minas Geraes, but the quantities which could be drawn from there were only small, so the Government of the State of Rio de Janeiro resolved to purchase considerable quantities of shoots in the State of S. Paulo, where a similar variety is grown, and to have them distributed to the planters in our zone at 50 per cent. of the actual cost. The railway was approached by the Government, planters and sugar manufacturers to assist in this work and we agreed to transport the shoots free of charge. This was much appreciated. We carried some 2,700 tons of shoots under these conditions. Unfortunately about half of them were damaged in transport, but all those received in sound condition were immediately planted and renewed prosperity for the industry is assured. The effects of this action will be felt in this year's crop, which, it is estimated, will be greatly in excess of that of last year.

"One ton of 'Java' cane shoots, which is sufficient to plant one hectare (2½ acres), produces 200 tons of cane for the extraction of sugar, so that it will not take long to replant all plantations."

Industries.—The output of *sugar* was naturally affected by the scarcity of cane and the quantity transported by the Leopoldina Railway during the year was only 60,550 tons, or 27,028 tons less than the previous year.

Steel.—In 1928, the total output of the "Companhia Brasileira de Usinas Metallurgicas" at São Gonçalo, who produce steel by the Martin Siemens process, was only 3,998 tons, as against 4,041 tons during the first seven months of 1929. The capacity of the plant is said to be 40 tons per 24 hours. The pig iron is obtained from the Company's mines and furnaces in Morro Grande (Minas Geraes).

Cement (Portland).—In July, 1929, a concession was granted for the construction in the State of Rio de Janeiro of a factory with a capacity of 300,000 barrels of 170 kilos.

Meat.—88,756 head of cattle, weighing 17,792 tons (value 22,367 contos) were slaughtered by the S. A. Frigorifico Anglo at Mendes during the year 1928.

Finance.—The ordinary revenue for the year 1928 amounted to 39,963 contos (the export tax yielded 18,540 contos as against 16,744 contos in 1927), and the ordinary expenditure was 79,891 contos, the difference being covered by extraordinary resources which comprise the proceeds of loans (foreign and internal), etc.

The sum of 39,963 contos does not include 5,300 contos, derived from the gold tax on coffee and sugar, which were handed over to the "Instituto de Fomento e Economia Agricola" entrusted with the improvement and development of agriculture.

The figures for the first six months of the current year were:—

Ordinary revenue	...	...	...	16,015 contos.
Expenditure	...	...	...	24,746 "

Foreign Debt on June 30th, 1929.—

		£	Contos.*
1912 loan (£3,000,000) 5%	...	191,560	7,662
Conversion loan (1927) 5½%	...	1,826,140	73,046
1927 loan 7%	...	1,891,000	75,640
		<u>£3,908,700</u>	<u>156,348</u>

Since then a loan of 6,000,000 dollars has been floated in New York. The bonds, which were issued at 91½, carry 6½ per cent. interest. They are redeemable within thirty years. The sterling loan of 1912 will be liquidated out of the proceeds of this loan and the balance will be applied to public works (sanitation and drainage works in different parts of the State, the construction of a canal between Cabo Frio and Maricá linking up the salt lagoons, etc.).

The service of foreign loans absorbed 18,101 contos in 1928 and 9,274 contos during the first half of 1929.

Internal Debt.—At the end of 1928 the internal debt amounted to 29,535 contos including the 12,000 contos of apolices issued during the year for the construction of the ports of Nictheroy and Angra dos Reis.

In June, 1929, the State of Rio de Janeiro was authorised to issue 25,000 apolices of one conto each, bearing 8 per cent. interest as from June 1st, 1929, and redeemable within twenty years. 9,150 of these apolices were issued at the end of June. The loan is for the purchase of the power station and plant of the "Companhia Brasileira de Tramways, Luz e Força," at Campos.

Floating Debt.—On the 1st July, 1929—16,802 contos.

STATE OF ESPIRITO SANTO.

This relatively small but prosperous and progressive State derives the greater part of its revenue from agriculture and the authorities are making every effort to improve the methods of cultivation and to foster production. Coffee is the principal crop, but cocoa, which was only introduced about ten years ago, is rapidly becoming an important source of wealth. Other products are rice, sugar-cane, beans, etc. Total exports during 1928 amounted to 208,003 contos, as against 198,206 contos in 1927.

The plantation of mulberry trees and the rearing of silk worms is being encouraged. Extensive areas, which are now lying idle, are admirably suited to this culture.

* At 6d. to the milreis.

The Government is devoting special attention to opening up the lower valley of the Rio Doce which is greatly handicapped by transport difficulties. At present the only means of communication are provided by a small steamer which carries the products of this fertile region to Collatina or Regencia. In order to remedy this situation a road is now being built from Serra to Linhares.

Another important road under construction is that from Collatina to Nova Venecia. This road is urgently required, as the north of the State, which comprises the valleys of the S. Matheus and Itaunas with a population of about 16,000, is completely isolated from the Rio Doce and the south by more than 100 kilometres of practically unknown country. At present the only outlet of this region is the small shallow port of Conceição da Barra.

Transport conditions in the southern and most productive part of the State are also being improved by the construction of a road from Victoria to Cachoeira da Itapemirim, the two principal towns in the State, and of a railway line (the Estrada de Ferro do Littoral) from Victoria in a southerly direction through Iconha and Rio Novo. The section Rio Novo—Paineiras is already completed and tenders were invited about a year ago for the construction of the section Victoria—Iconha (80 kms.). 1,282 contos were expended on this line during the year 1928.

Port of Victoria.—The harbour works at Victoria are being carried out by the "Société de Construction du Port de Bahia," which is one of the companies financed by the "Crédit Foncier du Brésil et de l'Amérique du Sud."

The work on the foundations of the 130 metres of the first section of quays which remain to be built was begun in March, 1929.

The second section of quays to be constructed will have a total length of 500 metres and a depth of 8.5 metres.

Two sheds equipped with nine electric cranes and eight swing bridges are ready and a third one is under construction. The total expenditure during 1928 was 1,445 contos.

The Florentino Avidos Bridge between Victoria and the mainland, which was inaugurated last year, cost 1,503 contos.

Finance.—The revenue for the period 1st July to 31st December, 1928, was 15,432 contos. The export tax yielded 12,364 contos.

The ordinary expenditure, which included an item of 3,370 contos for the service of loans, amounted to 13,799 contos. The surplus of 1,633 contos served to liquidate debts taken over from the previous administration.

The cost of unavoidable public works (harbour works and other improvements at Victoria, railways, construction and maintenance of roads and bridges, etc.), amounting to 6,797 contos, was met out of extraordinary resources.

Foreign Debt.—The redemption of the French loan of 1908 (30,000,000 francs) was continued in accordance with the agreement entered into with the "Association des Porteurs Français de Valeurs Mobilières." In his message of the 7th September, 1929, the President of the State of Espirito Santo stated that 4,760 bonds at 847 fcs. = 4,034,671 fcs. were still in circulation.

French loan of 1919 (24,960,000 francs):—

Bonds in circulation, 30th June, 1928	...	...	...	12,996
Redeemed up to 20th July, 1929	...	...	...	8,962
In circulation on 20th July, 1929	...	...	...	4,034

The bonds still in circulation have a value of 1,290,880 francs, besides 8,755 bonds (value 2,801,600 fcs.) whose holders have agreed to extend the period for redemption to 1943, the rate of interest being increased to 7 per cent.

The total foreign debt is therefore 8,127,151 francs.

Internal Debt.—Dollar loans contracted with the Banque Italo-Belge (2,500,000 dollars).

Total in circulation on March 31st, 1929—

		Contos.*
	1,755,000 dollars =	14,801
Nominal value of State Apolices in circulation	...	8,723
		<hr/> 23,524

Coffee Defence.—From September, 1927, to the end of May, 1929, the State of Espirito Santo spent 3,301 contos on the warehousing of coffee in Victoria and Rio. In order to reduce these expenses the proportion of coffee warehoused in Victoria, where the charges are much lower, has been increased.

Agricultural Credit.—The Government is encouraging the creation of small banks of the Luzatti type and of rural savings banks (Raiffeisen system). In June, 1929, the first "Luzatti" bank was inaugurated at Cachoeira de Itapemirim.

Paineiras Sugar Mill.—In February, 1929, the Paineiras sugar mill, which is State property, was leased out to the Banco Pelotense and Banco de Espirito Santo jointly, for 400 contos a year. The output is expected to reach sixty to seventy thousand bags this year and about one hundred thousand bags next year.

Immigration.—At the end of 1928 an agreement was signed whereby the State of Espirito Santo cedes an area of 50,000 hectares in the northern part of the State (south of the S. Matheus River) to the "Warsaw Colonisation Society," who have undertaken to settle 1,800 families on this land within eight years.

STATE OF MINAS GERAES.

Finance.—

	1926	1927	1928
	Contos.	Contos.	Contos.
Revenue	134,347	151,595	180,200
Expenditure	161,935	143,750	178,981
Balance	—27,588	+7,845	+1,219

As no new taxes were imposed in 1928, the increase of 19 per cent. in the revenue as compared with 1927 was due to the steady development of the productive powers of the State and greater efficiency in the collection of taxes.

Ordinary receipts amounted to 143,071 contos. The export tax yielded 57,739 contos as against 55,259 in 1927. The President stated in his message to Congress that it was the intention of the Government gradually to replace this tax by others "less prejudicial to the economy of the State." The land tax yielded 10,445 contos, the corresponding figure for the previous year being 6,340 contos; the tax on industries and professions 8,902 contos as against 5,698 in 1927, the transfer of property tax 7,939 contos (6,341 contos in 1927), while the receipts of the Sul Mineira Railway and of the Electric Works of Bello Horizonte (tramways, telephones and lighting), amounted to 17,684 and 4,523 contos respectively.

Extraordinary receipts totalling 37,129 contos included 15,646 contos derived from the gold export tax on coffee.

*At 8\$434 reis to the dollar.

The *Expenditure* for 1928 included the following items:—

- 51,071 contos towards the liquidation of the French loan, contracted before the war.
- 18,881 contos Sul Mineira Railway.
- 8,115 contos Paracatú Railway.
- 10,061 contos Electric Works at Bello Horizonte.
- 4,500 contos Water Works of Bello Horizonte.
- 3,074 contos Loans to municipalities.
- 12,206 contos Medical spas.

Foreign Debt.—(31st December, 1928):—

Minas Geraes Electric Light and Tramways (1923)	...	£82,000
Dollar loan, 1928	... ..	\$8,452,000
Sterling loan, 1928	... ..	£1,739,900

The interest and amortisation on these loans amounted to 10,885 contos.

The French loan is being amortised in accordance with an agreement signed in Paris in January, 1928, which was favourable to the State of Minas Geraes, the total amount required for its liquidation being 155,830 contos less than the gold value. There is a balance of 113,180,000 francs still outstanding.

Internal Debt (31st December, 1928)—79,550 contos (interest at 5 per cent.—3,978 contos).

The service of both debts has been regularly maintained.

Floating Debt (31st December, 1928)—23,264 contos.

In September, 1929, the President of the State of Minas Geraes issued a decree authorising the Government to raise a loan of 8,000,000 dollars at 6½ per cent., redeemable at par within 30 years, for all or any of the following objects:—

- (a) to complete the equipment of the Sul Mineira and Paracatú Railways;
- (b) to improve the electric services of Bello Horizonte;
- (c) to grant temporary loans to the municipalities of Bello Horizonte and other towns in the State;
- (d) for any other productive purposes.

This loan will be guaranteed by the *ad valorem* tax on coffee exported from the State.

The *Banco de Credito Real*, 24,012 of whose shares out of a total of 35,000 are held by the State Government, has increased its capital from 7,000 to 25,000 contos. At a general meeting of shareholders which was held at Juiz de Fora in December, 1928, the Bank was authorised to raise a foreign loan of £2,000,000, the proceeds of which are to be devoted to the development of agricultural credits, and to enter into an agreement with the Government for the purpose of extending the Agricultural Credits Department and organising a Rediscounting Department with a view to developing the activities of co-operative societies and regional credit institutions.

General Conditions.—Mr. William Pollard, British Vice-Consul at Morro Velho, reports that generally speaking the volume of business is out of all proportion to the capital employed, so that trade and industry are largely dependent on long credit and accommodation from the Banks. This was very apparent during the period under review when many failures due to over-trading occurred. The result was that the banks, who had been granting credits freely, were compelled to restrict their operations and for a time business was practically at a standstill. Mr. Pollard adds that the situation has improved slightly since July, but that there is still great nervousness among traders.

A large proportion of the population is illiterate. The average labourer is content to earn enough to keep himself and his family. They live on the simple foods of the country (principally rice, beans, maize meal and mandioca), and their clothing is of cheap cotton materials made in Brazil. But through

the opening up of the country by roads, increased travel and education, their outlook is gradually broadening and the standard of living is improving.

The present Government, which has been in office three years, has concentrated on education, hygiene and transport.

Imports.—Very little is imported direct into Minas Geraes. Most of the foreign articles are purchased in São Paulo for the south and in Rio de Janeiro for Juiz de Fora and the north. Bello Horizonte, the capital, is an important distributing centre.

Price and length of credit* are the ruling factors, quality being a secondary consideration. The demand for American and German goods is consequently larger than for high-class British goods.

Mr. Pollard reports that agricultural machinery is practically all American, electrical material American and German. British cotton piece goods of the better qualities can probably be sold so long as prices are not much higher than those of the best native manufacture, but the market is very limited. Cheaper qualities have to compete with the native production. Cotton machinery is mainly British. It is sold through representatives from Rio and São Paulo who visit the district. There is a market for chemicals, but increased German competition may be expected. The production of iron and steel is increasing and the quality is improving, so that imports tend to decline.

Exports.—

		Contos.	£†
1926	... ..	815,792	20,395,000
1927	... ..	964,172	24,104,000
1928	... ..	1,069,772	26,744,000

The State of Minas Geraes exports a great number of cattle (108,720 contos in 1928), and furnishes large quantities of dairy produce, poultry and eggs to the Federal Capital, but coffee, of which 3,383,858 bags left the State during the year, represents about 56 per cent. of the total value for 1928.

Coffee Defence.—The service for the defence of coffee, with offices in Bello Horizonte, Rio de Janeiro, São Paulo and Victoria, was created in September, 1928, in accordance with an arrangement arrived at with the other coffee-producing States, and the Coffee Institute for Minas Geraes was established in Rio in April last. The financing of the coffee warehoused in 1928 cost the State of Minas Geraes 25,385 contos (18,288 contos in discounting warrants and 7,097 contos advances against Bills of Lading).

Agriculture and Livestock.—The total production for 1928 is estimated at 2,624,000 contos, the principal items being :—

	Metric tons.	Contos.
Coffee	295,652	650,434
Maize	1,427	314,021
Beans	311,112	149,330
Rice	316,314	126,525
Sugar-cane	3,203	96,090
Mandioca	608,405	54,757
Fruit	—	53,986
Tobacco	15,602	39,006
Cotton	26,428	29,071
Poultry	27,385,000 (head)	43,816
Eggs	49,482,710 (doz.)	51,327
Oxen and milk cows	2,035,776 (head)	376,619
Pigs	1,918,700 „	345,366
Milk	27,385,000 (lits.)	108,570

*3 to 6 months at least and in the case of tenders for big contracts, competitors must sometimes be prepared to offer one or even two years credit for a proportion of the price.

†At 6d. to the milreis.

The State Government assists agriculture and cattle breeding in various ways: by the distribution of selected seeds, insecticides, vaccines, serum and artificial manure, the loan of agricultural machinery, the introduction of pedigree stock, etc. An agricultural and veterinary college has been established. The number of seed and seedling farms, trial grounds and demonstration centres has been increased and every assistance has been given in the replantation of sugar-cane damaged by "Mosaic."

The Government appointed experts to study the growing of wheat and oats in different parts of the State and at Ouro Preto experiments are being made for the cultivation of Assam and China tea.

The cultivation of oranges in the Matta district and of other fruits (pears, peaches, etc.) in the south is receiving special attention, and efforts are being made to develop the cultivation of the vine, especially in the districts of Caldas and Andradas.

Sericulture.—The State Government is encouraging the development of sericulture. The "Sociedade Mineira de Sericultura," which has undertaken to maintain the Sericultural Institute of Minas Geraes in Barbacena and to establish ten sericultural centres in the State, receive a subsidy of 500 contos.

Over a million mulberry trees have been planted and about 10,000 cuttings have been distributed.

Mining.—Production in 1928:—

Stone and sand	...	...	...	7,143,000 cub. metres	42,858
Precious and semi-precious stones	...	...	...	3,120,000 grs.	27,815
Gold	...	...	...	3,165,000 "	16,015
Manganese ore	...	...	...	246,000 tons	12,700
Lime	...	...	...	135,800 "	9,506
Mineral waters	...	...	...	251,000 cases	9,036

Iron.—Large bodies of iron ore exist in the State of Minas Geraes, principally in the highlands and in the vicinity of the Rio Doce. Mr. Vice-Consul Pollard states that "from the reports of geologists and engineers the deposits so far studied are said to contain over 10,000 million tons." Few of these deposits are being worked at present owing to the nature of the country in which they are situated and the difficulties and cost of transport.

Manganese.—Mr. Pollard reports that several deposits have been discovered in various parts of the State but, up to the present, few have been actively worked. During 1928, 243,735 tons were exported from the State by three companies who have deposits near Queluz (Lafayette), as against 232,000 tons in 1927.

Gold.—The principal mine is the Morro Velho Mine in the district of Nova Lima, which has been worked by the St. John Del Rey Mining Co., Ltd., since 1834, and is one of the deepest gold mines in the world, the present depth from the surface being 7,326 feet. It produces from £400,000 to £500,000 of gold per annum, which is sold to the Brazilian Government.

The Passagem Mine was worked for a period of 40 years (until 2 or 3 years ago) by the Ouro Preto Gold Mines of Brazil, Ltd.; and was then sold to a Brazilian Company who are producing about 22 kilos (£3,000) per month.

Alluvial gold is found in the district of Diamantina but the production is a negligible quantity.

Bauxite.—Bauxite is known to exist in the districts of Nova Lima, Ouro Preto and Prados, but so far it has not been exploited.

Platinum, Tungsten, Zinc, Bismuth, Lead and Copper.—These metals have been encountered in different parts of the State, but owing to the form in which they have been found or the small quantities they are not being exploited.

Silver.—A small quantity, about £2,000 per annum, is produced by the St. John Del Rey Mining Co., Ltd., in refining their gold.

Precious and semi-Precious Stones.—Aquamarines, diamonds, emeralds, topaz, tourmaline, etc., are found in various parts of the State, principally in the districts of Diamantina, Arrasuahy, Jequitinhonha, etc. The total value produced during 1928 is estimated at 27,815 contos.

Manufacturing Industries.—The principal industries in the State, with the estimated value of the production for 1928, are:—

		Contos.
Sugar and residue products (excluding dis-filled products for alcohol)	160,042 tons	108,823
Butter... ..	15,987 "	79,935
Cheese... ..	27,214 "	71,146
Alcoholic drinks	26,850,000 litres	45,645
Cotton goods	65,246,100 metres	86,777
Socks and stockings	12,427,640 pairs	14,913
Boots and shoes	1,610,000 "	25,760
Bricks and tiles	1,184 million	51,328
Soaps, etc.	29,910 tons	29,910
Saddlery	2,860 "	17,160
Iron in bars	43,160 "	8,626
Articles of iron and other metals	1,388 "	13,880
Furniture	4,210 "	12,630
Timber	267,300 cub. metres	26,730
Firewood	20,842,000 "	62,526

Iron and Steel.—Small furnaces for the smelting of iron-ore exist at Itabira do Matto Dentro in the Rio Doce district and at Queluz, Burnier, Esperança, Rio Acima, Sabará, Caeté and Morro Grande near the Central Railway.

The Companhia Siderurgica Belgo-Mineira (a Brazilian Company partly controlled from Belgium and Luxemburg), with works at Sabará, is one of the most important and progressive. In 1928, in addition to iron in its various forms, they produced 10,157 tons of steel by the Siemens Martin process, the plant for the production of this metal having a capacity of about 40 tons per day.

At Gagé, between Burnier and Queluz, a plant for the smelting of iron-ore and the manufacture of steel by an electric process is nearing completion. This plant, which has a capacity of 50 tons per day, is owned by the Companhia Nacional de Altos Fornos.

The Companhia Mineira de Metallurgia, with a capital of 1,000 contos, is putting up a plant near Caeté for the smelting of iron and the manufacture of iron pipes. It is said to have a capacity of 20 tons per day.

Another plant capable of producing iron pipes and 1,000 tons of pig iron per month is being constructed near Santa Barbara.

The Central Railway has a double track from Rio de Janeiro to Queluz (Lafayette), where it branches off through the Paraopeba valley to Bello Horizonte. From Queluz there is a single narrow gauge track through Burnier, Esperança, Rio Acima, Sabará to Bello Horizonte, with branch lines from Burnier to Ouro Preto and Marianna and from Sabará to Santa Barbara. This difference in gauge and the fact that there is only a single track for the greater part of the distance to the nearest port (Rio de Janeiro) makes the economical transport of ore in large quantities for export very difficult.

The *Itabira Iron Ore Company, Ltd.*, who hold a concession for 30 years to work the deposits at and near Itabira do Matto Dentro and export iron-ore, have undertaken:—

(1) to install a plant for a minimum annual production of 150,000 tons of rolled iron and steel. This will consist of a blast furnace with a daily capacity of 500 tons of pig-iron and a "double plant" capable of treating the whole of the pig-iron produced and provided with one mixer with a capacity of 600 tons, two Bessemer converters with a capacity of 15 tons each, and one open hearth

furnace of 100 tons or an electric furnace of 25 tons suitable for producing commercial and special steel, a rolling mill and a battery of 50 coke furnaces with a working capacity of 13 tons each ;

(2) to manufacture rails up to 40 kilos per metre with accessories ; telegraph poles, parts for the construction of bridges, buildings, etc. ;

(3) to convert into different kinds of iron and steel a tonnage equal to 5 per cent. of the ore exported, the Government having priority for the purchase of any of the above products ;

(4) to form a Brazilian Company giving preference to Brazilian capital in the initial subscription.

In return the Company obtain exemption from State taxes and a reduction of the tax on the ore exported, the free use of waterfalls, certain rights of expropriation, etc.

The Company are already building houses for workmen and erecting works at Aymorés on the border of Minas Geraes and Espirito Santo. It is stated that later fully 15,000 men will be employed.

Railways.—A party of twenty American engineers and surveyors arrived in July for the purpose of preparing a plan for the construction of a railway to transport the ore to the coast, probably by means of a branch line from a suitable point on the Victoria-Minas Railway to Santa Cruz which would shorten the distance to the coast by about 40 kilometres. This would involve the construction of a new port at Santa Cruz and the existing line from the mines to the junction would no doubt have to be strengthened.

The total length of railways in the State of Minas Geraes at the end of 1928 was 7,926·8 kilometres :—

	Kms.
Estrada de Ferro Oeste de Minas	2,123
Estrada de Ferro Central do Brazil	1,773·8
Estrada de Ferro Leopoldina	1,151·4
Rêde de Viação Sul-Mineira	1,129·3
Estrada de Ferro Mogyana	657·8
Estrada de Ferro Bahia e Minas	370
Estrada de Ferro Victoria e Minas	342·2
Estrada de Ferro Paracatú	156·4
Nine other lines	222·6

The State Government is devoting special attention to the equipment of the Sul Mineira and Paracatú Railways and to the connection between the Mogyana and Oeste de Minas systems (about 200 kms. from Passos to Formiga).

67,772 contos have been expended on the Sul Mineira Railway since it was taken over by the State in 1923 and the financial situation of this railway is improving :—

	1927	1928
	Contos.	Contos.
Receipts	16,573	17,684
Expenditure	24,219	20,998
Deficit	<u>7,646</u>	<u>3,314</u>

The working of the Paracatú Railway also shows a deficit, but it is helping to open up an extensive region which would otherwise be cut off from all commercial centres. The present administration spent 26,783 contos on this railway between September, 1926, and April, 1929.

The Oeste de Minas Railway are electrifying certain sections of their system. So far, only the section Barra Mansa—Augusto Pestana (73 kms.) is completed. The Vickers-Metropolitan Electrical Export Co., Ltd., are supplying part of the material.

A concession has been granted for the construction of a railway from Lavras, on the Oeste de Minas, in a north-westerly direction, to Jaguará on the Mogyana line (about 500 kms.), with a branch from Guapé to a convenient point on the Sul Mineira line.

The concession for the construction of a railway between Uberabinha, Porto Feliz and Ituyutuba (about 300 kms.), with a branch from the latter place to Fructal and Porto do Cemiterio on the Rio Grande, was renewed in March, 1929.

The extension from Raul Soares to Caratinga (98 kms.) is being proceeded with by the Leopoldina Railway Co. The first section of 10 kms. was completed in 1928.

Roads.—According to the President's message the total length of roads suitable for motor traffic was 12,410 kilometres at the end of 1928.

Since the beginning of 1923 the State of Minas has expended 52,541 contos on the construction and maintenance of roads :—

	Contos.
1923	181
1924	2,583
1925	6,018
1926	13,798
1927	12,848
1928	17,112
1929	36 (January to April)

The present cost of maintenance is about 2,500 contos a year.

The road from Bello Horizonte to Rio is nearing completion. Out of 375 kms. in the State of Minas Geraes, 316 kms. have been completed. The section from Bumier to Barbacena via Queluz and Carandahy remains to be constructed.

Another important motor road is that from Bello Horizonte to São Paulo, passing through Oliveira. Portions of it, including the stretch from Bello Horizonte to Bomfim, are already completed.

The number of motor vehicles registered in the State of Minas Geraes at the end of 1927 was :—

		Increase over 1926
Passenger cars	10,983	2,801
Lorries	4,308	1,338
Omnibuses	243	180
Motor cycles	310	29
	<hr/> 15,844	<hr/> 4,348

Since then their number has increased considerably.

Inland Waterways.—Parts of the River São Francisco are navigable and utilised for transport of passengers and goods. There is a regular line of five small steamers and three barges maintained by the Navegação Mineira de S. Francisco, who receive a subvention from the Federal Government of Rs.4\$000 per mile navigated. This amounted to 134 contos in 1928.

	Contos.
Total receipts in 1928 (including the above subsidy) ...	720
Expenditure	853
Deficit	<hr/> 133

The deficit was 182 contos in 1927.

Small portions of the Rio Grande and the Rio Sapucahy, a tributary of the Rio Grande, are navigable and utilised for regular transport, namely

between Fama and Carmo do Rio Claro and between a point near the station of Affonso Penna and the port of Cubatão.

Immigration and Colonisation.—The State of Minas Geraes has a total area of 593,810 square kilometres divided into 215 districts and an estimated population of 7,309,000 (3,594,000 in 1900 and 5,888,000 in 1920). The density of the population varies very considerably according to districts, many of which are distant from rapid means of communication.

The Government realise the necessity of increasing the population of this vast territory. In July 1929, a contract was signed by the Government for the introduction and settlement of four hundred families of German agriculturists who are to receive 20,000 hectares of good land on the left bank of the Rio Doce near its confluence with the Suassuhy Grande. The concession is for twenty years.

Steps are also being taken for the settlement of Japanese and Polish colonists in the valley of the Rio Doce.

STATE OF GOYAZ.

Finance.—The revenue of the State of Goyaz for the year 1928 amounted to 6,216 contos, which is the highest figure ever reached. The export tax yielded 3,196 contos.

The total expenditure was 5,199 contos, the principal items being 1,168 contos for the police force and 1,025 contos for public works.

The budget estimates for 1930 show a probable surplus of 983 contos :—

	Contos.			
Estimated revenue	5,985
Estimated expenditure	5,002

The State of Goyaz has no debt.

Exports.—The total value of exports during the year 1928 was 52,181 contos :—

		Contos.
Cattle—Oxen	142,229 head	28,446
" Cows	12,005 "	1,801
Rice—Polished	7,019,396 kilos	7,019
" in husk	4,188,523 "	1,675
Coffee	1,284,277 "	3,211
Jerked beef	2,205,656 "	1,765
Pigs	7,966 head	1,547
Salted hides	522,081 kilos	1,044
Tobacco	259,154 "	1,037
Butter	151,097 "	755
Cheese	59,777 "	179
Eggs	95,490 "	95
Tallow	512,858 "	667
Beans	866,104 "	433
Raw hides	176,739 "	442
Leather	69,962 "	280
Timber	1,964 sq. metres	267
Cotton seed	107,870 kilos	11
Cotton	111,772 "	224
Crystal	50,159 "	150
Tiles and bricks	2,433,005 "	36
Rubber	8,421 "	17

II.
SÃO PAULO.
1928-29.

By A. H. Marlow, Acting Consul-General, with additions by Arthur Abbott,
His Majesty's Consul-General, Santos.

Commercial Notes.

Population.—The population of the State of São Paulo on December 31st, 1928, was 6,815,825. The population of the City of São Paulo was 1,000,249. Increase in the State during the year—328,370. Increase in the City during the year—52,110.

<i>Principal Towns.</i>				<i>Population.</i>
São Paulo	...	...	...	1,000,249
Santos	...	...	...	153,647
Campinas	...	...	...	141,549
Ribeirão Preto	...	...	...	73,499

Vital Statistics.—That conditions are generally healthy is shown by the fact that the death rate throughout the State of São Paulo for 1928 was 14.34 per 1,000 as compared with 15.95 for the previous year. Sanitary conditions are being generally improved and as a result the death rate has steadily decreased, as shown below.

	Year.	Rate per 1,000.
	1928	14.54
	1927	15.95
Average	1922-26	16.10
"	1917-21	18.68

General Conditions of Business.—In view of the general discussion concerning industrial depression and financial crisis in São Paulo, the following statistics of bankruptcies and amicable arrangements made since 1927 are of interest:—

	1927	1928	1929 Jan.-March 31st.
Bankruptcies (petitioned) ...	714	533	173
Bankruptcies (decreed) ...	528	359	104
Concordatas (petitioned) ...	120	79	30
Concordatas in bankruptcy (petitioned)	134	138	24
Bankruptcies in liquidation	169	243	43

The value of bills protested during 1928 was 23,100 contos. The Associação Commercial calculates that the discount business done by the banks in São Paulo is more than one million contos a month or at least 12 million contos a year. Proportionately 23,000 contos appears almost insignificant.

Towards the end of 1928 and in the first few months of 1929 the importation of cotton textiles and yarns was unusually heavy, in anticipation of the revised tariff which came into effect on April 10th, 1929. As a result many firms found themselves overstocked and unable to liquidate their stocks.

Finances.—The financial position of the State appears to be satisfactory.

The total revenue collected in 1928 was 408,434 contos of reis as compared with 404,607 contos of reis in 1927.

As regards State debts the position is:—

	At Dec. 31st, 1927	At Dec. 31st, 1928
	Contos.	Contos.
Internal funded debt	349,394	349,189
External funded debt	416,411	665,128
Floating debt	218,640	263,760
	<hr/> 984,445	<hr/> 1,278,077

Thus the total debt increased by 293,632 contos, of which the greater part is intended to be spent on the construction of the Sorocabana Railway from Mayrink to Santos. The balance is being used in important water supply services and road improvements.

Foreign Trade.—

<i>Total imports.</i>		1927	1928
Value in Contos (paper)	...	1,282,285	1,480,144
„ Sterling	... ..	£31,197,562	£36,319,934

The principal articles imported are: Cotton and textiles, steel and iron and manufactures, machinery and apparatus, grain and foodstuffs. The following table gives an idea of the imports from the principal countries:—

Countries.	Values in £ sterling.			
	1925	1926	1927	1928
United States ...	7,811,000	9,000,000	9,850,000	11,150,000
United Kingdom ...	6,113,000	4,869,000	5,394,000	6,428,000
Argentina	4,038,000	3,391,000	3,799,000	4,269,000
Germany	4,238,000	2,909,000	2,780,000	4,129,000
Italy	2,288,000	2,157,000	2,069,000	2,480,000
France	1,471,000	1,776,000	1,847,000	2,106,000
Belgium	930,000	974,000	1,179,000	1,132,000
Portugal	455,000	587,000	620,000	725,000
Other countries ...	4,517,000	3,943,000	3,658,000	3,899,000
Totals ...	31,961,000	29,616,000	31,196,000	36,319,000

It will be seen that the United States has maintained her position at the head of the table. In fact the relative positions of the United States and the United Kingdom have changed but little during the last few years. The former have supplied rather more than 30 per cent. of the total imports compared with our 17 per cent.

It will be noted that imports from Germany increased to a considerable extent.

<i>Total exports.</i>		1927	1928
Value in contos (paper)	...	1,943,912	2,095,148
Equivalent in sterling	... ..	£47,304,450	£51,411,343

The following is a table of the principal articles exported:—

	Value in contos of reis.	
	1927	1928
Coffee	1,865,670	1,994,308
Chilled and frozen meat	31,745	49,499
Hides	14,596	17,127
Bananas	12,332	15,035
Cotton seed residues	2,440	3,415
Cotton	2,427	—
Oleaginous fruits	2,628	1,432

During 1928 coffee shipments were over a million bags less than in 1927 but average prices were higher. Shipments of meat, hides and bananas increased considerably.

Destination of Exports.

	Contos of reis.	
	1927	1928
United States	1,208,481	1,360,261
Germany	153,952	177,234
France	188,974	144,530
Holland	125,357	130,488
Sweden	52,296	66,599
Italy	63,896	58,776
Belgium	50,596	44,133
United Kingdom	14,149	28,069

Motor Cars.—The motor trade is almost entirely in the hands of Americans, and European cars or trucks are rarely seen.

The General Motors group is now erecting a large plant (to substitute the one they have had for some years past) near São Paulo for the assembly of imported parts, and there is keen competition between the various American suppliers.

According to the latest statistics of cars in the State of São Paulo there are 63,058 motor cars, of which 40,705 are passenger cars, and 22,353 transport cars.

British Trade Representation.—During the next few years it seems most probable that Brazil will become a very important market and our manufacturers and exporters ought not to expect immediate large returns on their investments; rather should they look to the future and remember that an agent who is not satisfied, in other words who is not well enough paid, will not put forth his best efforts. An agent working on a 2 per cent. commission basis with no allowance for office rent or travel or advertising expenses has a difficult task unless he is selling an article widely known and in general demand.

In the main, American representatives are well paid and provided with adequate advertising material or funds for that purpose. Care in the choice of sound representatives cannot be over-emphasized.

Manufactures.—Almost all manufactured articles are now produced locally. The values of the principal manufactures produced in the State in 1927 and 1928 are as follows:—

Articles.	1927	1928
	Contos.	Contos.
Textiles (various)	625,433	656,700
Textile goods	178,764	185,630
Boots and shoes	236,307	267,026
Hats, caps, etc.	63,503	69,803
Furniture	60,748	66,822
Pottery and glassware	8,646	7,800
Ironware	10,272	11,299
Tobacco, cigars and cigarettes	25,454	27,950
Matches	11,846	8,700
Beverages	89,575	107,480
Preserves and confectionery	28,632	31,495
Various	261,247	236,505
Total value	1,600,427	1,677,210

Paper Industry.—Paper manufacturing continues to develop and three new factories have been started, making a total of ten in the State. The combined capital is 48,171 contos and 2,867 hands are employed. 24,500 tons of paper and 7,000 tons of pasteboard were produced last year. As well

as old rags and papers, various kinds of skaws are used and one mill is experimenting with a certain kind of eucalyptus wood.

Cotton Industry.—After several years of a so-called textile crisis there was a temporary revival during the second half of 1928, but business slackened down again to such an extent that by September, 1929, all the mills, with hardly any exception, had reduced their working hours to four, and even three, days per week. It is probably the textile industry that has suffered most from the difficult economic situation through which the country is passing and for the time being no satisfactory way out of the deadlock can be foreseen. The few mills still in a good situation are quite able to supply the immediate requirements of the market.

Woollen Industry.—Production is increasing at a rapid rate, and manufacturers find it difficult to liquidate their stocks.

The quantities and values of woollen-textiles produced in São Paulo during the last few years are shown below :—

Year.				Metres.	Value. Contos.
1924	...	...	...	2,615,331	40,026
1925	...	...	...	3,505,960	58,293
1926	...	...	...	3,569,148	60,242
1927	...	...	...	4,841,054	88,012

Market for Cinema Films.—There is a large and increasing number of cinemas in São Paulo and the surrounding district. American films are the most popular; German films, which were often seen a few years ago, have not been much to the fore of late. Talking films have made a great hit, and the fact that the majority are in the English language does not appear to affect their popularity. Well-known pieces have all been given recently with great success, and illustrated songs in Italian, Spanish and Portuguese are frequently staged. Unfortunately the majority of the cinemas in São Paulo have poor acoustics, being often converted buildings originally intended for other purposes. British manufacturers should bear this in mind when supplying a talking film for exhibition in São Paulo, and should insist that it is shown at a theatre with proper acoustics.

The cinemas are practically the only places of amusement, and the low prices charged enable the public to flock to them in their thousands night after night.

New Manufacturing Developments.—A well-known British firm of screw manufacturers have acquired the São Paulo factory of Messrs. Schurig and will be shortly be manufacturing their products locally.

It is understood that certain gramophone companies are negotiating for sites for factories in São Paulo.

One gramophone company has already established a large factory in the vicinity of the city.

An American company is also contemplating the establishment of a corn products factory, and a British firm with world-wide ramifications is believed to be establishing itself for the manufacture of soap.

It is also reported that a large Italian concern is shortly opening a factory here, and it is probable that they will not stop at tyres—their main business.

Slaughter Houses.—There are four companies operating in the State of São Paulo, namely :—

The Continental Products Company; the Armour Company of Brazil; the Frigorífico "Anglo"; Companhia Frigorífico de Santos.

In 1928 they killed a total of 626,000 head of cattle, pigs, etc., and produced :—

27,549	tons of frozen meat.
73,233	„ fresh meat.
250	„ tinned meats.
40,525	„ other products.

Total ... 141,599 tons, valued at 181,732 contos.

Oranges.—The development of orange growing has been steady and rapid strides should be made in the next few years as the fruit is of excellent quality. The number of orange trees in the State of São Paulo is about 6 million. In 1928 the exports to England were 70,000 cases, as compared with 40,000 in 1927 and 10,000 in 1926. For the first four months of 1929 the number of cases sent to England was 68,000, while the exports for May, 1929, alone were 100,000.

Owing to the lack of experience of the packers and shippers, however, it is doubtful whether the new business has been a financial success. Much of the fruit has arrived at its destination ill sorted and spoiled. The State Government is aware of this and is organising a model packing house where appropriate instruction will be given.

Wheat.—In view of the large sums spent annually in importing wheat and wheat flour from Argentine it is interesting to note that experiments are being made in the interior of the State in order to ascertain whether the soil and climatic conditions are suitable for the production of wheat. The State Government is distributing seed and fostering the crop in other ways.

Cotton.—São Paulo should be an important grower of cotton, but the lack of united action on the part of various bodies concerned, and the insufficiency of financial support have led to disappointing results. Although São Paulo is the principal cotton manufacturing centre, the raw material, which could easily be grown close at hand, has to be brought from the Northern States. For the crop year 1928 the local production was 2,214,975 arrobas (110,748 tons) valued at some 35,440 contos of reis. The State Government is conducting experiments with the object of improving the selection of seed and generally developing the growth of cotton.

Oil.—A great deal has been made in the press of the possibilities of finding this mineral in the State of São Paulo and the Government appointed an American expert to examine the position in 1928, but up to the present nothing definite has been proved, and it seems extremely likely that there will be no useful production for some years to come.

Railways.—During 1928 some 104 kilometres of new railway lines were opened to traffic and the total in the State can now be taken as over 7,000 kilometres.

Work is being actively carried on in constructing the line from Mayrink on the Sorocabana line to Santos, utilising the old Southern São Paulo Railway mentioned in last year's report. It is hoped by this means to divert some of the traffic from the overburdened São Paulo Railway which is at present the only rail connection between Santos and the interior via the Capital. The idea is that coffee and other freight for export will be sent from certain districts to Santos without passing through São Paulo and similarly freight for certain parts of the State of São Paulo will be despatched from Santos without the necessity of re-loading at São Paulo or even passing through that city.

With the extraordinarily rapid growth of the State and City of São Paulo, Santos has become the busiest port in Brazil. Its resources and those of the only outlet, the São Paulo Railway, are always taxed to the utmost. Any unusual circumstance such as extraordinary rains damaging the permanent way of the railway cause a piling up of merchandise in the warehouses at Santos and consequent delay of shipping.

The State Government also has commissions studying and surveying the harbours at São Vicente, a suburb a few miles south of Santos, and at São

Sebastião, a small town about one-third of the way from Santos to Rio de Janeiro. But these measures do not appear to be very promising. To make a harbour and docks at São Vicente would be very costly, and it might be argued that for a less sum the São Paulo Railway Company could build another system connecting Santos with São Paulo.

There has been some talk of the establishment of a new national steamship line operating from Santos for coastal cargo service.

Aviation.—The Compagnie Générale Aéropostale have recently opened their own office in São Paulo for the reception of correspondence, a facility much appreciated by the business community. The minimum charge for a letter not exceeding five grammes is Rs.3\$000.

A new bi-weekly postal service between Rio de Janeiro and São Paulo was inaugurated in July, but does not appear to be running regularly.

Telephones.—Automatic telephones are gradually being installed in São Paulo. The long distance line from São Paulo to Rio is a subject of general complaint.

III.

BAHIA.

DATED JULY, 1929.

By J. Mitcheson, His Majesty's Consul, Bahia.

General.—Although during a large part of the year business conditions in Bahia were difficult and merchants complained of bad times, the year taken as a whole and viewed from an impartial standpoint can hardly be described as disappointing.

Imports (nearly 3 million sterling) were higher than ever before, both in local values and in terms of sterling.

Exports maintained the high figures (a record) of the previous year, exceeding 8 million sterling, in spite of the low prices of cocoa which is Bahia's principal export product.

Bank business increased again, while building and other town developments were particularly active.

No doubt importing agents and merchants are finding it increasingly difficult to make large profits owing to the keen competition among foreign firms. That the population benefits, however, by these conditions, is clear from the fact that prices in the retail shops are considerably lower than they were in previous years.

One of the greatest difficulties to traders here is the unstable nature of the finances of local firms. Firms classified at the beginning of the year as safe for credit, were in many cases in a very difficult position six months later. This condition of things has at the time of writing (July, 1929) become acute and a slowing down of business is very marked with money tight and discount rates almost prohibitive.

GENERAL EXPORT AND IMPORT STATISTICS.

			Imports.		Exports.	
			Contos.	£ sterling.	Contos.	£ sterling.
1917	...	...	36,287	1,814,350	102,599	5,129,950
1925	...	...	105,531	2,635,488	281,085	7,259,000
1926	...	...	87,459	2,569,000	250,529	6,796,000
1927	...	...	103,604	2,520,165	342,230	8,265,446
1928	...	...	117,020	2,925,500	335,700	8,392,500

The British share of the import figures is once more at the top of the list; a splendid achievement in view of the acute competition from other countries.

Imports and Exports.—The following statistics show the position of the principal competing countries.

	Exports to Bahia (in Contos).		Imports from Bahia (in Contos)	
	1927	1928	1927	1928
Great Britain	21,642	25,047	9,035	8,361
British Empire (rest of)	11,400	11,900	365	229
United States	27,557	30,633	130,777	102,827
Germany	14,108	17,411	61,646	55,707
France	5,608	5,870	34,031	54,196
Belgium	5,183	3,863	6,023	8,301
	33,042	36,947	9,400	8,590

N.B.—One Conto may be taken as equal to £25.

The principal products imported include the following (figures in sterling F.O.B. values).

Product.	Imported 1927.	Imported 1928.
Machinery	£ 211,976	£ 294,297
Iron and steel goods... ..	159,664	191,884
Dried codfish	169,144	204,528
Kerosene	138,943	116,601
Gasoline	55,895	60,167
Wheat flour	136,205	144,728
Grain unmilled	156,189	150,202
Cotton goods	71,383	81,506
Cement	42,626	49,402
Coal	41,956	24,604
Jute thread	34,603	50,938
Resin	31,489	28,905
Sewing thread	15,004	36,553

PRINCIPAL EXPORTS.

	Season 1927-28	Season 1928-29
Cocoa (in bags of 60 kilos)	1,297,040	1,193,729
Tobacco (tons)	30,109	26,772
Coffee (in bags of 60 kilos)	377,518	414,714
Piassava fibre	£80,000	£82,000 (approx.)
Diamonds and carbons (estimated value)	£315,000	£420,000

PRODUCTION OF SUGAR (mainly for local use).

Season 1926-27	703,000 bags (60 kilos)
Season 1927-28	407,000 bags (60 kilos)

Water Supply Question.—During 1928 the water supply of the City of Bahia continued as faulty as ever. Negotiations for a State loan to enable

new waterworks to be erected were not successful, but at the time of writing (July, 1929) an agreement appears to have been reached for the supply of pipes and material by a British firm.

Finances (State of Bahia).—

			Receipts (Milreis)	Expenditure (Milreis)
1926	...	...	50,257,589	58,270,621
1927	...	...	63,853,999	73,958,481
1928	...	...	70,722,049	74,567,042
1929	...	...	81,536,750	(estimated)

Floating Debt.—December, 1927— 7,466,138 milreis
 ,, 1928—10,998,903 ,,

Internal Consolidated Debt.—December 31st, 1927—61,682,250 milreis
 ,, 1928—63,833,550 ,,

Foreign Loans.—

			£	Fcs.
December 31st,	1927	...	3,267,438	48,230,500
,,	1928	...	3,176,395	48,215,500
Debt reductions	...	...	91,043	15,000

From the above figures it is evident that the reduction in the foreign debt is again only achieved by further internal indebtedness.

On the other hand the budget was more nearly balanced in 1928 than in any other year since 1924, and the steady increase in revenue shows that with a period of economical administration the finances of the State could be improved.

It must, however, be pointed out that the increased receipts are due not only to the growing volume of trade, but also very largely to the constant increase in taxation. Municipal taxation has been heavily increased as well as that of the State.

Municipal Finances.—The settlement at the beginning of 1929 of the old debt in respect of the Bahia Light and Power Company and the Compagnie d'Éclairage de Bahia has relieved the tension of the municipal finances. The debt, amounting nominally to £5,767,000, is to be cancelled by payments amounting to only £420,000, taken over by the State authorities.

IV.

PERNAMBUCO.

1929.

By W. R. Mackness, His Majesty's Consul, Pernambuco Consular District—States of Pernambuco, Alagoás, Ceará, Parahyba and Rio Grande do Norte.

Total area of district	...	...	165,830 square miles.
Total population of district	...	...	5,951,052

Commercial Situation.—During 1929 to date there has been a steadier tendency in the State of Pernambuco and Recife, the capital. There is reason to believe that people generally are becoming more economical and spending less on luxuries. This has had a somewhat bad effect on retailers who handle luxury articles, but the result of a certain economy has been beneficial on the whole.

Finances.—The Governor of the State of Pernambuco stated in his message to State Congress that receipts exceeded expenditure during 1928 by 1,286 contos, the figures being:—

	Contos.
Receipts	58,780
Expenditure	57,494

The excess of receipts over expenditure compares with a deficit for 1927 of 10,266 contos.

The internal consolidated debt of the State amounted in August, 1929, to 28,612 contos. Outstanding foreign loans were as follows:—

1905 Caisse Générale de Reports et Dépôts, Brussels	£589,200
1909 Banque Privée Lyon Marseille, Paris	Fcs, 26,385,000
1927 White, Weld & Co., New York	\$5,760,500

All foreign and internal indebtedness has been met.

Total exports of the State for 1928 amounted to 285,207 contos, of which 241,534 contos were sent to other States in Brazil and 43,673 contos to foreign countries. Great Britain was the largest customer with 11,605 contos, but these figures show a reduction of 6,569 compared with 1927.

In September, 1929, the Brasilianische Bank für Deutschland (Banco Brasileiro Allemão), a branch of the head establishment of that name in Rio de Janeiro, ceased to transact business in Pernambuco. Their clientèle and premises, together with certain members of the staff, were taken over by the Royal Bank of Canada, which opened a branch in Pernambuco the day following that on which the German bank discontinued operations.

Cotton.—Exports from Pernambuco during the twelve months ended July 31st, 1929, were 55,404 bales, of a total net weight of 10,007,725 kilos. 12,992 bales were shipped to Liverpool. During the year ended July 31st, 1929, local mills consumed 5,000,000 kilos. Prospects for the 1929-30 crop are excellent, both as regards size and quality, owing to abundant rainfall after three years with less than average rain.

Cottonseed Meal and Cake.—During the first eight months of 1929 the total exports abroad were 7,800 tons. Shipments went to Hamburg, Antwerp and Amsterdam, but transactions were arranged through the London market.

Sugar.—Production totalled 263,000 metric tons, as compared with 225,305 and 200,460 tons in 1927-28, and 1926-27 respectively, of which 18,835 tons were exported, mostly to the United Kingdom, and the balance consumed in the country.

The results of the Co-operative Association (*Co-operativa Assucareira*) were not so favourable as had been hoped, a large accumulation of stocks in Pernambuco leading to lower prices, which had to be accepted. The causes for this were two-fold. First as the logical result of maintaining high prices in recent years in the State of Pernambuco, which is Brazil's largest and oldest producer of sugar, producers in the Southern States were encouraged to increase their efforts, and the States of São Paulo and Rio de Janeiro (Campos) steadily augmented their outputs; the southern markets therefore, which are Pernambuco's chief buyers, were well supplied when the Pernambuco crop began, and the latter was forced to hold sugar for some time before the first sale was consummated in the middle of October. Secondly, the organisation as between the producing States was not wholly efficient, some of the latter being more independent than Pernambuco in their dealings with buyers, so that Pernambuco instead of really co-operating with her sister States was actually in competition with them. It is hoped to remedy this state of affairs this season by remodelling the Co-operative Association, but details are as yet unpublished.

Sugar Machinery.—It is worthy of note that the high prices obtained through the Convention ("Convenio") and co-operative associations of recent years has permitted many factories to place orders for new machinery and,

in some cases, even for entirely new factories, and the tendency is to increase the daily crushing capacity to 1,000 tons of cane. Although British manufacturers have secured some share in this new business, they do not enjoy to-day the almost exclusive position they held before the great war. Nowadays much machinery comes from the United States of America, France, and Belgium, while the latest competitor is Holland, whose representatives are supplying an entire factory of 1,000 tons of cane capacity per day. The competition among manufacturers of all nationalities is of course extremely keen, and the main factor in securing an order is generally the ability and willingness of the manufacturer to give long credit.

There are seventy sugar mills working in the State of Pernambuco.

Coffee.—The total crop for the crop year (July, 1928, to June, 1929) was approximately 59,253 sacks of 60 kilos each. Of this quantity 40,968 sacks of 60 kilos each were exported to foreign countries. Pernambuco coffee is in considerable demand in Europe for laboratory purposes, owing to the high percentage of caffeine which it contains, and France takes a large quantity for this purpose.

Imports.—*Cotton Piece Goods.*—As the result of large orders in anticipation of the tariff increase in April, 1929, importers find themselves heavily overstocked. To make matters worse wholesale firms in Rio de Janeiro are said to be offering Manchester goods in the State of Pernambuco at less than cost.

Port of Recife (Pernambuco).—The port possesses quays 1,800 metres long, and is furnished with modern appliances. All Atlantic liners are now berthed alongside. A powerful tug, a dredger, and a number of moveable cranes have been recently purchased from British firms. Two new warehouses have been completed.

The United Molasses Company, Limited, have acquired land in the port on which to erect tanks for storage purposes prior to shipment.

Shipping.—The following table shows the number of ships (steam or sail) entering the Port of Recife-Pernambuco during the years 1926-28.

	Flag.	Number.		Tonnage.	
		1927	1928	1927	1928
British	...	187	174	732,915	745,306
German	...	64	72	176,319	172,865
French	...	66	58	277,826	243,488
Dutch	...	63	63	311,807	322,899
United States	...	15	39	51,266	133,003
Swedish	...	9	20	11,708	29,020
Norwegian	...	13	15	20,141	33,754
Danish	...	1	5	1,923	2,229
Italian	...	—	3	—	5,779
Belgian	...	11	16	20,102	27,151
Argentine	...	5	3	866	1,133
Dantzic	...	1	—	5,026	—
Greek	...	11	9	25,975	22,974
Mexican	...	2	—	3,369	—
Portuguese	...	2	—	2,747	—
Spanish	...	1	—	2,560	—
Japanese	...	1	1	4,258	4,226
Czechoslovakian	...	2	—	7,120	—
Finland	...	—	1	—	3,437
Total foreign	...	454	479	1,655,928	1,747,264
Total Brazilian	...	59	90	224,326	278,231
Grand total	...	513	569	1,880,254	2,025,495

Great Western of Brazil Railway Co., Ltd.—Revised rates, applying to all services, came into operation on October 1st, 1928. It is anticipated that by the end of 1929 the Company will have placed in use during the year new rolling stock as follows:—10 locomotives, 21 passenger carriages, and 118 goods waggons. During the same period 50 kilometres of new line are due to be opened to traffic. Renewals of rails on extensive portions of the Company's system, as well as a remodelling and renovation of stations, are projected. A scheme for renewal of machinery in the Company's workshops is under consideration.

Tramways.—The financial control of the Pernambuco Tramways and Power Company, Limited (operating not only the tramway system but also furnishing electric light and power, as well as gas, to the city) passed some months ago from British control to that of the Electric Bond and Share Co., of New York. No extension of lines has been made during the year, but five new double-truck tramcars, of the closed "pay-as-you-enter" type, have been put into operation. The bodies have been constructed in the local works of the Company, and it is understood that the whole of the rolling stock will eventually be of this type.

Telephones.—The Telephone Company of Pernambuco Limited has also been taken over from the British Company by a New York Company.

Commercial Conditions in Ceará.—Mr. Vice-Consul William Studart reports as follows:—

Finances.—The revenue and expenditure of the State for the last three years was as follows:—

	Revenue.	Expenditure.
	(Milreis)	(Milreis)
1926	10,847,613	12,132,561
1927	11,686,237	11,682,845
1928	14,381,085	14,014,893

The State Government have on deposit in the United States sufficient funds for the total repayment of the French loan pending a settlement of the demand of the bondholders to be paid in gold. Interest on all loans has been paid to date by the State.

Shipping.—During 1928 86 vessels entered, and 96 left the port of Ceará. Of these 50 and 45 respectively were British.

Imports.—The principal articles imported in 1928, in order of importance were:—

	Kilos.
Flour	8,303,579
Kerosene	5,875,872
Sugar	3,307,677
Gasoline	2,679,539
Cement	2,587,440
Hardware	2,240,471
Textiles	1,957,623
Beer	1,362,946

The United States continued to dominate the market with flour, barbed wire, motor cars. Germany sent large quantities of cement and cheap cutlery. Total imports in 1928 amounted to 130,449,513 milreis.

Exports.—The principal commodities exported in 1928 were:—

	Kilos.	Value in milreis.
Cotton	8,740,434	26,365,000
Carnauba wax	3,647,080	13,133,000
Skins and hides	3,030,873	19,302,000

Commercial Conditions in Alagoas.—Mr. Vice-Consul Kenneth Macray reports that there has been a marked improvement in the financial position of the Municipality of Maceio. State finances are marked by a steady increase in taxation to meet greater expenditure. The Budget for 1930, passed by the State Congress, anticipates a revenue for that year of Rs.14,493:000\$000, compared with Rs.11,007:000\$000 for 1929, and Rs.3,673:000\$000 for 1920. Public funds are applied largely to roadmaking and to experimental agricultural stations. Liabilities in connection with foreign debt are being regularly met by the State Government. The internal debt has not been increased.

Imports.—Foreign imports at Maceio were 30,754 tons—1,200 tons more than in 1927. The comparatively small extent of this increase is probably due to the fact that imports from other parts of Brazil are steadily on the increase. Of imports from the United Kingdom 6,450 tons consisted of patent fuel for the local railway. Seventy-five per cent. of the imports from the United States consisted of flour, kerosene, petrol and oils.

Exports.—The chief item of export was sugar, the greater portion of which was sent to other parts of Brazil. 3,300 tons were shipped to the United Kingdom. The cotton crop was consumed almost entirely by local mills. The large maize crop of some 258,000 bags of 60 kilos each was shipped to other parts of Brazil. 19,000 bags of castor seed were shipped to Antwerp.

Transport.—The carrying of passengers and merchandise by motor vehicles shows a steady increase, favoured by many new roads. Some 20 motor omnibuses run between Maceio and towns in the interior, as well as about 60 lorries for goods. This form of competition is being felt by the railway, which has improved its services but simultaneously increased passenger and goods rates.

Cotton Industry.—There is considerable over-production by local mills and stocks are steadily accumulating, especially of coloured goods. The position is made more difficult by the necessity to pay interest on loans and instalments on account of machinery bought on long terms of credit. Some improvement in conditions may result from the increased Federal Customs Tariff on imported cotton piece goods, but this will not be felt for some time to come.

Cotton Growing.—The State Government are devoting considerable sums of money to experimental stations for cotton growing and the establishment of a Government Department in Maceio for classification purposes.

V.

PARÁ.

By F. G. Coultas, His Majesty's Consul.

1929.

Commercial Situation.—The dominating factor in the trade of the Amazon during the last eighteen months has been the fall in the price of rubber as a result of the abandonment of restriction by the British authorities. The average price for the best quality of rubber during the year 1927 was in the neighbourhood of Rs.4\$500 a kilo, while the average price fetched by the same rubber during the last twelve months has not exceeded Rs.3\$000 a kilo, a drop of 33½ per cent. For many months past large quantities of rubber have been withheld from the market in anticipation of a measure of recovery sufficient to obviate serious losses. Unfortunately, however, this advance still tarries, and many of the smaller houses are holding on to their stocks and paying ruinous rates of interest for accommodation, with the certain knowledge that they will have to compound with their creditors if forced to liquidate at current prices. Hitherto no serious failures have occurred, and it is not anticipated that any but a few of the weaklings will go to the wall. The situation, however, has developed into one of great difficulty for all.

The most interesting feature of the rubber situation is the steadily increasing proportion of rubber which is being washed and crêped before shipment. It seems certain that crêping plants will be increased or extended in future as the new product gains favour in foreign markets. As the crêped rubber is quoted at a price at least 100 per cent. higher than the crude rubber, from which it is produced, it is obviously very desirable from the economic standpoint that as much rubber should be treated locally as possible.

At the present time Pará and Manáos are producing rubber heels, soles and shoes, and other simple manufactures, while one venturesome but probably farsighted individual has already commenced the manufacture of tyres and inner tubes on a small scale. The result, so far as tyres are concerned, is not quite satisfactory, owing to difficulties, it is understood, in connection with the canvas employed; but the price at which these articles are sold is far below that of the imported article and, provided that sufficient financial backing is available, there seems to be no valid reason why existing obstacles should not be overcome and progress eventually be made.

It is noteworthy in this connection that the export of rubber from Pará to the southern industrial centres of Brazil rose from 471 tons in 1927 to over 1,000 tons in 1928.

Pará can claim, happily, to have "more than one string to her bow" and, if rubber has failed her again, Brazil nuts, timber, rice, cotton, mandioca and cocoa beans have stepped into the breach and are enabling commerce to pay its way—grim though the struggle may be.

In 1928 the value of rubber exported was only a little more than half that of Brazil nuts, while both timber and rice are also estimated to have exceeded rubber's contribution to the wealth of the community.

Finances—State and Municipal.—Pará forms no exception to the general rule in Brazil whereby the States of the Union draw the bulk of their ordinary revenue from export taxes, and in the case of Pará 60 per cent. of ordinary revenue is derived from this source. Any diminution of the quantity or value of her principal exports reacts therefore as seriously on State as on private economy. Owing to the increased duties yielded by Brazil nuts the ordinary revenue did not suffer as much in 1928 as would otherwise have been the case, but the gross income from all sources at approximately 13,357 contos of reis was about 900 contos less than in 1927, and resulted apparently in a deficit on the year's working of nearly 1,400 contos. The latest figures are not yet available, however, and it is believed that this deficit has since been substantially reduced.

The service of the foreign loans of the State continues to be met on the basis of the provisional arrangements. Arrears of dividends amounted on the 1st July, 1929, to a little over £1,000,000. In the meantime negotiations for a definite solution of this difficult problem are being continued with some hope of success, but not without the prospect of substantial sacrifices on the part of bondholders.

As regards municipal finances there is little to be said. Revenue for the current year is estimated at about 6,000 contos and expenditure at 5,437 contos, but no progress has been made towards meeting the claims of foreign bondholders, to whom arrears of dividends amounting to nearly £1,500,000 are now due. It seems unlikely indeed that any serious steps will be taken in this sense until the question of the State's indebtedness has been definitely settled.

Natural Resources—Exports.—The total value of exports, both inter-state and foreign, in 1927, originating in or previously imported into the State of Pará, including the value of rubber and other produce originating in the Federal Territory of the Acre, the States of Amazonas and Matto Grosso and shipped on account of Pará firms, is given as approximately 109,000 contos of reis, or £2,700,000. The value of the inter-state export trade for the same year is stated to have been 32,600 contos, or £800,000. The value of exports

to foreign countries must therefore be placed at about £1,900,000. The total value of exports from all sources of supply for the first six months of 1928 was rather more than 35,000 contos, or 4,000 contos less than in 1927.

The general nature and direction of exports to foreign countries in 1928 were not substantially different from those of 1927.

Brazil Nuts.—Next to rubber, and often its successful rival within recent years in its contribution to the wealth of the State, must be mentioned Brazil nuts, which are still an absolute monopoly of the Amazon Valley. In 1926 the revenue from Brazil nuts considerably exceeded that from rubber, and in 1928, although official figures are not available, it is estimated that Brazil nuts produced 75 per cent. more revenue than the former product. It has two drawbacks, however; one is the variation of the size of the crops, and the other the inelasticity of the demand for it abroad.

During the first six months of 1929 shipments abroad already exceeded 13,600 tons, though the bulk of the crop had then been received. Prices during the current season have ranged about 40 per cent. lower than those in force in 1928.

Timber.—This is third in importance among the exports made through the port of Pará. During the first six months of 1929 exports to foreign countries rose to 49,000 tons, as compared with 33,000 tons for the same period of 1928; and of this total Spain acquired 43,000 tons. The sale of fancy Brazilian woods for interior decoration or cabinet work in Europe and North America makes but slow progress, due to the general preference in those countries for woods of a more sober and restrained colouring.

Of the remaining products of this State cotton, cocoa beans, skins, oilseeds, mandioca flour, rice, dried fish and tobacco deserve individual mention.

Babassú Nut.—Keen interest has been aroused both in Europe and the United States in the economic possibilities of the babassú nut. So far as this Consular district is concerned, the bulk of the exports of babassú kernels, principally to continental destinations, is effected through the ports of Maranhão and Parnaíba, to a total of some 20,000 tons annually, the oil extracted from the kernels being utilised largely for the manufacture of margarine. Experiments recently carried out in France and elsewhere seem to indicate that the commercial value of the nut might be greatly enhanced were it possible to extract by distillation the by-products, such as acetic acid alcohol and tar contained in the husk, and to convert the residue into briquettes, which have been proved, it is claimed, to possess a heating value not inferior to 7,700 calories.

Enormous areas of babassú forest are available over a wide zone north and south of the Equator in Brazil and, if the process of collecting, assembling and cracking the nuts could be efficiently organised and the full utilisation of the husk and kernel carried out locally as a commercial proposition, assuming the almost fantastic claims of enthusiasts to be only partly true, a new and enormous source of wealth would have been tapped in Brazil. Two or three Belgian and French companies are actively engaged in preliminary operations in the State of Maranhão, but one of the two principal difficulties, that of providing an efficient power-driven machine for opening the nuts has only recently been met with any success and the machine has not yet been utilised on a commercial basis, though active steps are now being taken to carry out the necessary tests under ordinary working conditions. Hitherto nuts have been laboriously opened by hand, but it is claimed that the machine mentioned is at least 27 times as efficient as skilled manual labour.

The second, and probably greatest, difficulty is that of arranging the collection and transport of the nuts from where they lie at the foot of the

trees in the virgin forest, to the depôts, where it is proposed to set up the nut cracking and husk utilisation plants. A third consideration is the effect on selling price that any great increase of production would inevitably bring. On the whole those who know the Amazon best are very sceptical as to the claims made in regard to the utilisation of the husk on a paying basis, though a fairly mobile and efficient cracking machine must, it is admitted, bring immense advantage if it can be perfected.

If the whole process of exploitation could be carried out in the nut-producing areas, it is possible that the present care required in preventing the injury of the kernels could be eliminated by crushing and grinding the whole nut, and submitting the resultant mass to a series of processes which would first extract both the kernel oil and the coveted by-products of the husk, leaving the residue ready for briquetting.

Imports.—An examination of the statistics covering the gross weight of merchandise entering the port of Pará reveals the fact that in 1928 this total was not less than 240,000 metric tons from all sources. This figure is only 2,000 less than that recorded in the previous year, but whereas the imports from foreign countries in 1928 decreased by about 12,000 tons, as compared with 1927, imports from the southern ports of Brazil and from the Amazon Valley increased by 10,000 tons. On a basis of weight Great Britain led the way in 1928, as in 1927, followed in each case by the United States and Germany.

The outstanding feature in the imports from these countries is the preponderance held by Great Britain in the coal trade, by the United States in the supply of flour and of the petroleum derivatives, and by Germany in the sale of cement.

Although at the present time *British cement* is selling in Pará at a lower price than German cement, so firm a hold has the use of her cement obtained on the local and very conservative buyer, that much time and hard work will have to be expended before an appreciable impression can be made on her present strongly entrenched position in public favour, in spite of the slight fall which has already occurred in German exports in the first six months of this year.

Under the general heading of "*Food, Drink and Tobacco*," Great Britain holds her own well, but there seems to be no particular reason why an effort should not be made to capture some of the trade in tinned milk, at present shipped through the United States and European ports to the extent of about 170 tons in 1928.

In *firebricks and tiles* British goods enjoy a strong preference, as also in the finer grades of *chinaware*, but the most popular *glassware* appears to be of French origin, while Germany still supplies the bulk of the trade in cheap crockery.

Tin plates supplied to the market to the extent of over 400 tons were provided in equal proportions by Great Britain and the United States.

The weight of other *iron and steel manufactures* (not separately specified) amounted to over 1,600 tons from all sources, Great Britain and Belgium being credited with over 550 tons each, the United States with over 300 tons, and Germany with about 150 tons. It is understood that constructional iron and steel are at present largely of Belgian origin; the better class *hollow-ware* comes from Great Britain, and the cheaper and lighter grades of enamelled hollow-ware from Germany. The entries of aluminium hollow-ware have been eliminated by the high duties in favour of the Brazilian national product.

Cutlery and hardware are predominantly of United States and German origin, and there appears to be room for Great Britain to increase her share in this trade.

The United States and Germany appear to share the market in domestic *electrical apparatus*, but the supply of the telegraph, telephone and other electrical requirements of the cable and public utility companies under

British management—about 200 tons in all—is credited to Great Britain, though more might well be heard of British products in the trade in household articles.

The bulk of the *machinery* (not separately specified) entering the port in 1928 amounted to a little over 1,100 tons, of which the United States supplied about 600 tons,* the balance coming from Belgium, Germany, France and Great Britain, in order of weight. The *sewing machines* and *typewriters* are almost all of United States origin.

Apparently no British typewriter manufacturer has a local agent, though the Consulate and one or two British firms are the contented possessors of excellent British machines, which might well find a wider market if they were better known and are no dearer than foreign machinery.

As regards imported cotton, linen, silk and artificial silk and woollen *piece goods* in tropical weight, and also *thread*, Great Britain holds the leading position, though of a total entry of nearly 1,200 tons under the general heading of yarns, textiles and cordage, over 900 tons are accounted for by jute yarn from Great Britain for the local sacking and cordage factory; and over 100 tons by entries of cordage and twine, the latter principally for fishing nets, and both still almost entirely of American origin.

Great Britain holds her own well in *heavy chemicals*, and in *paints and colours*, but in fine chemicals, drugs and medicines Germany, followed by France, holds the advantage.

America supplies almost the entire requirements in *motor vehicles*, both touring and commercial. A well-known British manufacturer of commercial vehicles has recently appointed an agent in this area, and it will be interesting to see with what results.

The small but growing market for *bicycles* and *motor cycles* is shared by France, Great Britain, the United States, Belgium and Germany, in the order named.

Marine engines for light river craft, and also outboard motors, are almost entirely of American origin, and there seems no reason why British manufacturers should not cultivate this market more than they appear to do at present.

In a market of this nature there is probably no better form of propaganda or method of salesmanship than an active and intelligent agent, backed by a good range of samples and/or adequate supply of well-illustrated trade literature, printed in the language of the country. So far as catalogues are concerned there appears to be an increase in the number issued in Portuguese by British firms, but the fact that British trade and technical reviews are not published in Portuguese reduces severely their utility here.

Cases have recently come to my knowledge where orders have been taken by our rivals because their prices were definitely indicated, and British prices could only be obtained by cable.

A tendency has become manifest recently among many local agents to get into direct touch with the foreign manufacturer, instead of indenting through a commission house in the country of origin.

At the same time there is a tendency towards co-operative purchasing on the part of local wholesale and retail firms. The movement came into prominence lately through the insistence of the wholesale hardware houses that agents of foreign firms should only sell to them and not direct to the hardware merchants' clients, as occasionally occurred. Foreign firms had to decide, therefore, whether to accept the wholesaler's viewpoint, or to risk the

*Consisting as to 480 tons of a special entry of boring equipment to the order of the Federal Government for testing for oil.

loss of their custom and the possible entry of fresh competitors into the market in favour of other large clients outside the association of hardware firms. In reply to this the retailers formed a co-operative banking and trading society, through which members might purchase as a unit and so avoid the necessity of buying from the hardware middleman. The latter have also, in conjunction with other wholesale firms, founded an association of importers, with the object of bulk purchasing whenever such a course seems advantageous.

Local Industry.—A point worth consideration in connection with the industrial possibilities of this State is the fact that it enjoys the advantage, so far as immunity from competition is concerned, of being as far from the large Brazilian centres of manufacture as it is from American or European ports.

Among fairly recent developments may be mentioned the manufacture of simple rubber goods, the washing and crêping of rubber, and the crushing of oilseeds. Sawmills and tanneries are on the increase, and a wealthy local landowner has recently acquired the necessary machinery (principally British), for the erection of a cotton-spinning and weaving mill. Cotton, of course, is available locally, and female labour is cheap.

Concessions and Public Works.—The large areas of land granted on option to the Ford Company and to certain Japanese interests, the former ostensibly for rubber growing, and the latter for cotton, rice, and agriculture in general, have now been taken up.

The Ford Company has for some months past been employing between 1,000 and 1,500 labourers on building, clearing and planting operations, which have been delayed by difficulties in obtaining the best quality of rubber seeds. It is too early, of course, to offer any opinion as to the possible results of this undertaking.

A Japanese Company is undertaking the settlement of Japanese colonists on lands in the State of Pará. The total area of the concession is 1,030,000 hectares, and the conditions and privileges attaching to it are almost identical with those of the Ford Concession.

The Japanese representatives in Pará have set about preparing for the arrival of the immigrants from Japan in a thoroughly efficient and business-like manner. The first batch of colonists, consisting of 42 families and a few single men, is expected to reach Pará on the 17th September.

The central idea of the scheme is to be co-operation between the Company and colonists in the mass production and marketing of produce such as cotton, rice, cocoa beans, tobacco, etc., of a standard quality.

The recent visit of a boundary survey commission to the Brazilian-Dutch Guiana frontier has confirmed the existence, extent and quality of an area of savanna lands eminently suitable for cattle raising and about 250 miles north of the nearest point on the Amazon from where river transport would be available east or westwards to the principal centres of consumption, at Pará or Manaós. The absence of water communication with these lands would necessitate the construction of a road for the use of mechanical transport and for conveying cattle by easy stages to the Amazon.

Since 1925 test borings in search of oil have been made in the neighbourhood of Itaituba, close to the Ford Estates on the River Tapajós, and latterly in the neighbourhood of Monte Alegre, a point on the north bank of the Amazon about 100 kilometres north-east of Santarem, which lies at the mouth of the Tapajós.

Indications of oil, such as oil-impregnated rock and inflammable gas, have been encountered, but no disclosures as to any discovery of value have so far been made.

Three special sets of boring plant, imported last year from the United States, are being erected in the neighbourhood of Monte Alegre under the supervision of the Geological Section of the Department of Agriculture.

Shipping.—Out of a total net tonnage of 327,862 tons of shipping which cleared from the port of Pará in 1928, a little over 195,000 tons, or about 60 per cent., was British, 58,000 tons, or nearly 18 per cent., American, 26,000 tons, or 8 per cent., German, and 18,000 tons, or 5 per cent., Spanish.

Of the total outward cargo from Pará obtained by British, German, Brazilian and American vessels, and amounting to between 40,000 tons and 41,000 tons, approximately 75 per cent. was carried by British vessels, 12 per cent. by Brazilian, nearly 11 per cent. by German, and less than 4 per cent. by American vessels.

The navigation of the Amazon and its main tributaries is provided for principally by the Amazon River Steam Navigation Company (1911) Ltd., under contract with and subsidy by the Federal Government. A fleet of about 30 vessels is maintained, consisting of 3 main types suited to the various lines of navigation served.

Roads.—The total mileage of main roads maintained in the State of Pará outside the urban areas was given as approximately 400 kilometres in the year 1928. Fifty-five kilometres of road radiated from the city of Pará itself, about 250 kilometres linked up other small town, and a further 60 kilometres were then under construction.

Recent improvements in the local road surfaces, and particularly the possibility of driving in tolerable comfort outside the town, have led to a considerable increase of pleasure motor traffic, and to the purchase by both children and adults of a fair number of cycles, principally pedal cycles, although several motor cycles and one or two side car outfits are also owned locally.

Wireless.—Several wireless stations have been erected by the State and the construction of others is contemplated, in order to facilitate communication with the outlying centres of population, which have hitherto lived in considerable isolation.

With the exception of the wireless stations at Pará and Manáos, and three other places in the State of Amazonas, and a broadcasting station at Manáos, all of which are equipped with Marconi apparatus, the equipment of the other stations, including the broadcasting station at Pará and the various private receiving sets, are almost all of local manufacture.

Commercial situation in the State of Amazonas.—Mr. C. E. Timm, British Vice-Consul at Manáos, reports as under :—

Finance.—The expenditure of the State of Amazonas in 1928 was 11,691 contos (approximately £292,275), leaving a deficit for the year of 1,568 contos (approximately £39,200).

The projected loan of 45,000 contos (say £1,125,000), backed by the Federal Government in consideration of the State of Amazonas withdrawing its claims to the Acre Territory, has not materialised. This proposed loan incorporated a plan of settlement with the foreign creditors, who were to receive 20,000 contos, with a scheme of further annual payments from State revenue.

General Conditions.—With the termination of the Brazil nut crop, which has been an exceptionally good one for the year 1929, and with fine rubber at Rs.3\$000 per kilo, the prospects for the second half of this year are not at all bright. City maintenance and improvements are being steadily maintained and repairs to streets continue. The projected road towards Rio Branco was stopped at kilometre 42. A new road is being built in a down-river direction towards land suitable for agriculture, where a large tract of land has been cleared and planted with mandioca and cocoa, together with some thousands of Brazil nut seedlings. Wireless stations have been installed in various parts of the State, and much better communication with the interior is now assured.

A good service of wireless press news is being received by the State Manáos Stations, and published daily.

The results of overtrading in 1925 and 1926 have now been mainly eliminated, stocks having been absorbed and overdue bills for imports generally liquidated.

Exports.—The total exports in 1928 were 30,000 tons, mainly to the United States, Great Britain, and Germany. Exports of rubber decreased by 3,380 tons, the only notable increase of exports to foreign countries being in timber—1,081 tons. Exports to the south show a very marked increase all round. The nut crop for 1929 promises to be an exceptional one, probably amounting to well over 15,000 tons weight.

Imports.—Imports follow closely the same curve as exports, and when the value of exports is reduced, the quantity of imports immediately diminishes. Little alteration is noticeable in the origin of the imports. There is a general tendency to ship textiles from the south of Brazil, generally Rio de Janeiro, of foreign importation, instead of direct from England or France. This may be due to the large importers in Rio getting better terms from shippers, and perhaps lower import duties; also the small dealer is not worried by exchange and duty considerations, as when he imports direct and despatches the goods himself. However it is a factor which influences the foreign import statistics and should be allowed for when making comparisons over a number of years, as it is a modern phase of indirect imports, compared with the previous custom of shipments direct from country of origin. This applies more especially to fine goods, drugs, medicines, surgical appliances, etc.

Communications.—Small wireless stations have been put into operation in the interior, and wireless communications service throughout greatly improved. Radio messages to and from all parts are now received and sent with reasonable rapidity, and very accurately.

Commercial situation in Maranhão, 1929.—Mr. Vice-Consul J. G. Clissold reports as follows:—

Finance.—Revenue and expenditure in 1927-28 were as follows:—

Revenue (actual amount collected)	Contos.
Expenditure (amount actually disbursed)	11,451
	<hr/>
Deficit (on year's work)	Rs.1,838:837\$000

Maranhão has the following foreign loans:—

French Loan—1910.—Frs.18,000,000 divided into 36,000 bonds of Frs.500 each. The interest and amortisation of this loan is being paid regularly at the rate of approximately 40 contos monthly.

American Loan—1926.—The amount owing on this loan at the end of 1928 was \$134,824. Interest and amortisation are being paid regularly. This debt will be paid off by April, 1931.

American Loan—1928.—\$1,750,000. This new loan was contracted with Ulen & Co., of New York, on 1st November, 1928, type 87, interest of 7 per cent., amortisation 1 per cent., extended over a period of 30 years. The object of this loan was to pay off the 1923 American Loan (1½ million dollars) and the 1924 internal State loan. It is estimated that with the improved terms of new loan the State will have effected a saving of 44 contos monthly.

The financial prospects of this State appear to be rather poor, owing to the considerably reduced exportation verified during the latter part of 1928 and for the first six months of this year.

Exports.—The foreign exportation in 1928 was over 3,000 tons less than in the preceding year. Cottonseed shows a good increase, but shipments of

babassú kernels were considerably curtailed owing to the drop in price on the continent. It is stated that the plentiful supply of copra (there was a large crop in 1928) was responsible for killing the babassú market. 3,183 tons of cottonseed were exported to Great Britain during the year.

Imports.—Imports in 1927 and 1928 were as follows :—

	1927	1928
	Metric tons.	
Great Britain	2,795	2,378
United States	6,462	7,032
Germany	3,187	1,810
Other countries	1,683	2,872
Total foreign imports	14,127	14,092
	Contos.	
Value	6,106	3,193

German imports, which chiefly consist of cement, show a falling off of approximately 43 per cent. compared with the previous year.

Local Manufactures.—There are five cotton mills at Maranham, which produce cheap cotton cloth, and one jute mill, the yarn employed being imported direct from Dundee. There are three leather tanneries which are all producing excellent boot and shoe leather. The manufacture of medicated cotton wool is also carried on. There is a considerable demand for this article almost throughout Brazil.

Communications.—The Estrada de Ferro São Luiz á Therczina links up the capital of the State of Piauhly with that of Maranham, the mileage being approximately 500 kilometres. The present condition of the rolling stock is poor.

Sixty-four sea-going ships called at the port in 1928: 44 from Europe, 16 from the United States, and 4 from Mexico.

The present Government have expended 1,101 contos on road construction during their three years of office.

Aviation.—The Cie. Générale Aéropostale (French planes) called at Maranham in 1928, and again in May this year. The Tri-Motors Safety Airways (American planes) called at Maranham for the first time on 4th July this year. Their route is New York—Rio and Buenos Aires.

Commercial situation in Piauhly, 1929.—Mr. Acting Vice-Consul N. J. Smith in his report states that the State has no external debts.

Owing to trade at present being exceedingly dull money is scarce, and reports on all sides show the difficulty of collecting bills in the interior. The foreign export trade has not been so bad for a number of years. This is partly due to the decreased exports of babassú thus year owing to lack of demand and poor prices prevailing in Europe.

Exports.—There is very little difference in the total exports to foreign countries for 1927 and 1928. Exports to Great Britain are up over 50 per cent., which is accounted for by more cottonseed having gone forward. Exports to Germany are down 3,518 tons, due to babassú finding fresh markets. While none of this commodity was shipped to Denmark in 1927, 1,699 tons went forward in 1928. Exports to Holland are up 2,065 tons, mainly due to babassú.

Exports to Brazilian ports show an increase of 624 tons. The most notable differences between the two years are :—

	Tons.
Rice	Up 856
Babassú oil	" 233
Cotton	Down 508
Cottonseed	" 317

while a new export is soap, 253 tons having been shipped in 1928.

Imports.—

	From.	1927	1928
Great Britain	372	289
United States	2,312	2,904
Germany	419	510
Other foreign countries	533	277
Total	3,636	3,980

Imports from Great Britain are down 83 tons. This difference is not due to any particular article no longer coming forward. The figures for Germany show an increase of 91 tons. This country holds the market for cement and has a good share of the ironware trade. Imports of gasoline, kerosene, flour and motor cars are confined to the United States. The above-mentioned figures do not include foreign goods purchased at other Brazilian ports and imported by national steamers.

Local Manufactures.—A soap and babassú oil factory, which is situated at the Bocca do Igarassú, has been operating throughout the year. The factory has increased its exports to Southern Brazilian ports considerably. 233 more tons of babassú oil were exported in 1928 than in 1927, while 253 tons of soap were shipped.

Communications.—The Estrada de Ferro Central do Piauí is the only railway operating in the State and runs from Parnahyba to :—

Piracuruca	... ..	147 kilometres.
Amarração	... ..	13½ "
Bocca do Igarassú	... ..	7 "

There have been no extensions to the above lines. The line to the Bocca do Igarassú is no longer used, as there is constant communication by water between Parnahyba and the main Parnahyba River.

The following vessels, excluding Brazilian, called at the port of Tutuoya Bay during 1928 :—British 27, German 16, American 3.

On the 3rd August, 1928, the American Brazil Line steamer *Biboco* called at Tutuoya Bay, since when a regular service by that company has been maintained. Nine steamers have made the call since August, 1928, to date, with general cargoes from the United States, but they have lifted no cargo. Both the Booth Steamship Co., Ltd., and the Norddeutscher Lloyd of Bremen still maintain regular services to the continent of Europe, Hamburg being the terminal port. The two lines maintain the same rates of freight and arrange calls between them to prevent clashing.

Trade Outlook.—Owing to the poor demand and low prices prevailing in Europe for the chief product of the State, namely babassú, during the last few months very little of it has been collected. The new crop commences in August or September and is reported to be a plentiful one. There can be no prospects of large shipments to Europe, however, unless prices improve.

VI.

RIO GRANDE DO SUL.

JULY, 1929.

By R. D. Macrae, His Majesty's Consul at Porto Alegre.

Porto Alegre, the capital of Rio Grande do Sul, is at the time of writing an uncomfortable place of residence. All the main streets are torn up, not in places but everywhere as if by a series of earthquakes. Drains are open, the electric light and water are constantly failing. Transport is chaotic, hotel and restaurant accommodation are deficient. Domestic servants are unobtainable. The reason is that the city is exhibiting a passion for improvement, and is in process of demolition for rebuilding purposes.

The visible condition of the capital is symbolic of the political and economic situation of the State. Elected to the presidency in 1928, Dr. Getulio Vargas has shown great energy in introducing new schemes of development and reform. The result is that there are now great hopes for the future, but at the moment a certain confusion.

Experimental farms have been started in various localities, chosen as typical of the different regions, instruction has been disseminated by means of travelling lecturers and the distribution of literature. Exhibitions and fairs have been promoted and every effort has been made to encourage industry by gifts of free seed and the award of prizes, the latter consisting of agricultural machinery and labour-saving devices. Special attention has been paid to experiments in the production of wheat, with encouraging results.

A Department of Agriculture has been formed, under the Secretariat of Public Works, one of the functions of which is to superintend the purchase and hire of agricultural machinery. The floods of last winter and the drought of the summer have hindered the working of these schemes.

An ambitious scheme is also on foot to harness the water power of the State, beginning with Porto Alegre.

Realising that credit at a reasonable rate is one of the primary necessities for the development of the State's resources, the President created a Rural Credit and Mortgage Bank.

The chief and most immediate problem to be solved in the advancement of the State is undoubtedly that of transport. The State railways, which are of narrow gauge, are badly planned and in need of reorganisation and repair. Roads may be said to be non-existent.

The President has obtained wide powers from the Federal Government, enabling him to undertake extensive railway construction and improvement, and the problem of the roads will certainly receive attention before long.

The attention of the State Government has been largely devoted to a scheme for the opening of an ocean port on the northern seaboard of the State, and for this project the locality of Torres has been chosen. The site chosen is the best available, but it is not an ideal one.

Work has been done in both Rio Grande and Pelotas. In Pelotas a scheme is under way for extensive reconstruction. The channel to Porto Alegre has been further dredged and improved.

The new Government has been active in the introduction of reforms in matters of health and education. Steps have also been taken to improve the police service and to suppress crime. The latter remains, however, a problem of the first magnitude.

In my report of last year it was stated that labour here was plentiful, fairly satisfactory, and generally satisfied. This cannot be said now with the same assurance. Strikes of stevedores, bakers, textile workers and shop assistants have occurred, all seeking higher pay, but better conditions, shorter hours and the recognition of unions and the employment exclusively of union labour have been the chief demands, and although there have been few instances of violence, inflammatory speeches have grown in number and in bitterness. It must be admitted that wages have lagged far behind the cost of living, which has risen alarmingly.

One important fact has apparently been recognised, namely that the prosperity of the district depends upon agricultural and pastoral development and the exploitation of its natural resources rather than on manufactures. Manufacturing, except for a few lines using local raw material such as wood, is, in fact, entirely dependent upon fiscal protection for its profit. Meanwhile, it must be accepted that local manufacturers are gradually excluding foreign goods in a great many lines, at the expense of the people who find the cost of living increasing. The following table indicates the progress of local manufacturing industries.

Year.	Number of industrial establishments in the State.	Capital concerned (in contos of reis.)	Value of products (contos of reis.)	Number of employees.
1916 ...	9,477	119,801	265,963	38,488
1921 ...	12,288	284,913	476,600	66,000
1926 ...	16,284	339,094	547,942	76,800

There has been a sudden growth in every direction of "syndicates" due to the same causes which have given birth or fresh strength to the workmen's unions, and the stirring of new ambitions has been responsible for the formation of co-operative councils of almost every commercial interest. During the year no fewer than 21 syndicates have appeared or have been revived in Rio Grande do Sul. Much discussion has been aroused as to whether some of these syndicates are properly so called, or whether they are not in fact trusts, whose sole effort will be the raising of prices against the consumer.

The Government has shown itself whole-heartedly adherent to the policy of borrowing foreign capital for the development of the country's resources.

Unfortunately the State loan of May, 1928, has not been a complete success.

Connected with this policy of foreign loans is the sister policy of contracting out public services to foreign companies. Instances of this are the handing over to American firms of the electric light and power and telephone services in Porto Alegre. Actually the American companies operate here as national firms, but the capital and all the executives are American.

An important event has been the appearance in Porto Alegre of three British ships, the first for thirty years. These ships were cargo steamers of two to three thousand tons, chartered by Messrs. Wilson, Sons & Co. and bringing coal and general merchandise direct from the United Kingdom. The voyage was in each case made without difficulty, the ships drawing from thirteen to fifteen feet. Work on the channel is proceeding, and by August, 1929, a depth of eighteen feet may be relied upon. As regards warehouses and dock equipment the port is excellently furnished.

The State of Rio Grande do Sul comprises an area nearly as large as that of England, and the major part is very fertile. The population is about two and a half millions, of whom some 300,000 are Italians and a similar number Germans. At present cultivation is confined to the northern part of the State, which is exceedingly hilly and generally unsuited to the use of machinery. Recent experiments have shown that the huge plains of the south are capable of rendering a rich harvest, and it is probable that before long the monopoly of the cattle breeders over these plains will be broken down. Rio Grande will then become an immense producer of wheat and other cereals. The President of State in a recent speech emphasised the necessity for the better development of resources, stating that at present the owners of the best land were content to take the first and easier profit. The climate is hotter than might be supposed from the geographical position, the greater part of the State being excluded from the sea by an immense fresh water lagoon and extensive marshes. Health is also at present bad, particularly in the capital, where half the houses are built below the annual flood level. The health reforms of the new government and scientific drainage will effect a great change in the next few years. The future, and a future not distant by more than eight or ten years, is most bright.

It is certain that there are great opportunities for British trade. Firstly the development depends upon a large supply of agricultural and road-making

machinery and similar articles, as also of structural steel and ironware of various kinds. Secondly, the needs of the population, which will increase considerably, must be met for textiles, household utensils, sports goods, etc.

American and German business circles have obviously decided that the district is worth nursing, and are making every effort to do so. The one thing certain is that this "nursing" is the only way by which the opportunity can be secured. There is little hope for British firms to obtain business by sending catalogues to local houses describing their goods and stating their terms. American interests have sent representatives to reside and build up connections in machinery, steel, etc., realising that this is the only way to take advantage of the expanding market. As regards household utensils, sports goods, etc., there are two alternatives. One is to send travellers to open relations. The other is to employ local agents, paying expenses of advertisement and display. In the two latter cases the Consul can be of assistance in obtaining introductions and ascertaining *bona fides*.

In conclusion reference should again be made to the advantage possessed by British firms by the fact that British prestige stands high above that of all other nations, but American initiative is seen at its best in the efforts made to secure the market, and the taking over of public services and consequent influx into the capital of American business men have given them an advantage which must be met by better British advertisement. Unfortunately, at the moment, price seems to be the only consideration, but this is a fallacy which better advertising and better representation would remove, as the people are prosperous and not by nature miserly.

REPORTS by H.M. Trade Commissioners, Commercial Diplomatic and Consular Officers on commercial and financial conditions in the following countries, issued, or in course of preparation, by the Department of Overseas Trade:—

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Estonia	9d. (9½d.)	United States	1s. 6d. (1s. 7d.)
Finland	1s. 0d. (1s. 0½d.)		

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Argentina	3s. 6d. (3s. 8d.)	Morocco	2s. 6d. (2s. 8d.)
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