

BRAZILIAN EXCHANGE

THE STUDY OF AN INCONVERTIBLE CURRENCY

BY

J. P. WILEMAN, C.E.

DEDICATED

TO

Dr. FERNANDO ABBOTT

Minister Plenipotentiary of Brazil in the Argentine Republic

to whose sympathy and encouragement the author

is deeply indebted.

ALL RIGHTS RESERVED

GOVERNAMENTO NACIONAL DO CAFÉ
SEÇÃO DE ESTATÍSTICA

OUT 4 1939

BIBLIOTECA

2.015

BUENOS AIRES

Printed by GALLI BROS., Calle San Martin, corner of Piedad

1896

332.45
WGA

Jua

CONTENTS.

Page

INTRODUCTION : The dual nature of Exchange	5
● PART I.	
International Exchange	
THE NATURE AND FACTORS OF INTERNATIONAL EXCHANGE, 6. The balance of trade favourable to Brazil, 7. The mechanical readjustment of international exchange, 8 Oscillations of international exchange the consequence of alterations of the demand for exportable commodities. The rise and fall of prices of bullion and exports simultaneous. Indispensable conditions for regaining the equilibrium of international exchange, 9. Division of the 35 years comprised between 1861 and 1894 into six distinct periods of alternately rising and falling exchange. <i>Par</i> value of the currency.	10
THE INFLUENCE OF THE VALUE OF THE CURRENCY ON THAT OF EXPORTS. Table showing the movement of exports for each period, 11. The value of exports has been always greater during periods of rising than falling exchange. <i>Rationale</i> of this phenomenon, 12. The increase in the value of exports when exchange falls depends on the origin of the depreciation. The advantage conferred on exports by a fall of exchange is limited to local depreciation, 13. Differential rise of prices consequent on a fall of exchange.	14
THE INFLUENCE OF THE CURRENCY ON THAT OF IMPORTS. Table showing the movement of imports for each period, 15. The value of imports <i>increases</i> as exchange falls; 16. <i>Rationale</i> of this phenomenon, 17. The increase of imports is at the expense of profits.	18
THE INFLUENCE OF EXPORT DUTIES ON INTERNATIONAL EXCHANGE. A duty on exports raises their cost, and weakens exchange and tends to diminish both exports and imports. The variations of export duties have been insignificant and exercised no perceptible influence on exchange.	19
THE INFLUENCE OF IMPORT DUTIES ON INTERNATIONAL EXCHANGE. A duty on imports raises their cost. Tendency of a duty on imports is to improve international exchange. Rule that determines the improvement. It also causes simultaneous reduction in the value of exports, 20. The reason why the movement of imports does not always correspond to the increase or decrease of duties. The influence of import duties on the value of exports explains the failure of protective or prohibitory tariffs, 21. Examples of the results of protection in France and Spain, 23. Doubtful result of a similar policy in Brazil. If adopted the revenue must suffer unless defended by excise duties Concrete example of the influence of a protective duty on lard. Demonstration that every increase of foreign charges must be accompanied by an increase of exports, 25. Statistics prove that this has not actually occurred. Only conclusion possible that the increased foreign charges have been liquidated by means of foreign capital. A limit exists to the contraction of foreign charges, when importation becomes impossible. The	

advantage of foreign trade, 26. The increase of foreign burdens must tend to lower international exchange, 27. The equilibrium of international exchange has been realized without assistance from foreign capital. The use of foreign capital is not indispensable in order to raise Exchange.

20

THE INFLUENCE OF FOREIGN LOANS ON INTERNATIONAL EXCHANGE.

The effect varies according to methods employed. The tendency of foreign loans is to depreciate international exchange. If imported as bullion the tendency will be to lower exchange more than if drawn-for, 31. If productively employed the advantages may compensate the increase of foreign charges and neutralize the tendency of exchange to fall. General tendency of foreign loans is to first raise and then to depreciate international exchange, 32. Tables showing the movement of the foreign debt for each period and the value of its annual service, 33. Loss on foreign loans often apparent, Advantage gained by low quotations of Brazilian bonds abroad.

35

THE INFLUENCE OF INTERNAL LOANS ON INTERNATIONAL EXCHANGE IS indirect but more pernicious than that of foreign loans. Internal loans reduce capital when unproductively applied and cause a transfer if productively employed.

36

INTERNAL LOANS PAYABLE IN GOLD. First emission 1869. Tables showing the movement of the debt for each period 37, and the cost of its annual service, 39. The disadvantages of this class of loans. Loans payable in gold unsuited to the oscillating nature of the currency. The injury inflicted on Creditors by a depreciation of the currency is in great part apparent.

39

TOTAL NATIONAL INDEBTEDNESS INTERNAL AND FOREIGN. Table showing same for each period, 41. How the real indebtedness should be reckoned when part is payable in depreciated currency, 42. Total federal liability for 1895. Comparison of the total actual indebtedness with that of other countries. Credit does not depend only on relative indebtedness but also on the employment given to the debt. Value of State railways in Brazil. A great part of the debt has been applied to liquidation of ordinary deficits. This is the real cause of the depreciation of the currency and periodic necessity of borrowing. If exchange rose to *par* the coefficient of indebtedness would be raised and then compare unfavourably with other countries. The real value of the debt varies with the value of the currency. The total amount of the debt as estimated by the parliamentary commission in 1895 is incorrect.

49

ANNUAL SERVICE OF THE TOTAL FEDERAL DEBT. Table showing same for each period, 50. The annual charges have increased much less than the debt itself. Total annual charges in 1895, including guarantees to foreign capital, 51. Comparison with the annual charges of other countries, 52. The coefficient only more than Germany. The change of position due to great part of the debt bearing no interest. A rise in the rate of exchange must increase the real value of annual charges and of taxation. 53. The coefficient of real value has positively fallen since 1861 in spite of the increase of the debt. Government issues of paper-money are forced loans, and the depreciation consequent on excessive emission injures creditors to benefit debtors. On moral grounds this system of raising money is indefensible.

56

FOREIGN CAPITAL GUARANTEED BY THE STATE. Constitutes an obligation but not a debt. Development of this policy. Expenditure in guaranteed railways greater with a low rate of exchange 57. The increased rate of expenditure is a financial and not an economical disadvantage 58. Table showing movement of expenditure and receipts of Santos and San Paulo Ry for each period, 59. Remarkable increase of expenditure on all lines in 1889, 60. Total foreign guaranteed capital employed. Annuity paid on account of guarantees on nominal realized capital of the companies: The average rate of profits. Actual market value of the guaranteed capital 61. Quotations of guaranteed stock depends chiefly on the state of the National credit. Dividends distributed by the foreign guaranteed railways from 1888 to 1894. Average dividend for each year 62. The average dividend for 1894 is positively greater than that of 1888 despite depreciation. Average surplus on working expenses of all guaranteed railways in 1893. Loss to the exchequer. Table showing the movement of Receipts and Expenditure for each period 63. Summing-up of advantages of guarantees to foreign capital. The necessity of re-establishing the financial equilibrium exacts the reconsideration of tariffs. The profits of guaranteed capital equivalent to a tax of 3 per cent. on the value of exports 64. The alternatives to raise tariffs or increase taxation, the latter preferable to high tariffs. Only 50 per cent. of the nominal capital of guaranteed companies has been considered as actually imported 65. Table showing the guaranteed capital imported for each period. - - - - -

66

INDEPENDENT OR UNGUARANTEED FOREIGN CAPITAL is likewise an obligation but not a debt. Foreign capital of this kind employed in the country in 1861 and in 1894, 67. Table showing movement for each period, 68. Importance of this class of capital. Difficulty of obtaining precise profits, 69. Actual market value of the capital employed. - - - - -

70

FOREIGN CAPITAL EMPLOYED IN COMMERCE is impossible to estimate. Such capital is productively employed. Confusion of ideas as regards the profits of foreign capital employed in the country. Extraordinary opinion of Dr. Ruy Barbosa. 71. The pretence that such profits are realized at the cost of the country illogical 72. Injustice of taxing such profits 73. The remittance of these profits abroad must disturb the equilibrium of exchange if other foreign expenditure has encroached on the moiety of exports that rightly corresponds to its productive employment. Opinion of Sr. Rabello. 74. A fall of exchange retains capital in the country. Curious argument of Mr. Kendall, - - -

75

TOTAL VALUE OF FOREIGN CAPITAL EMPLOYED IN THE COUNTRY; Table showing the movement for each period, 76. The importation was greatest during periods of low exchange. The amount of foreign capital employed in Brazil generally much exaggerated. Its importation cannot affect exchange except temporarily unless in cooperation with other real causes. 77. Ratios in which the different kind of capital has increased. - - -

78

TOTAL ANNUAL CHARGES OF FOREIGN CAPITAL. Table showing their movement for each period, 79. Increase since 1861 must represent a corresponding increase of taxation, unless exports have similarly increased. Proportion of exports demanded by

foreign charges in 1861 and 1893. In spite of increase of foreign burdens the profits of production have increased, 80. Individual prosperity largely independent of the financial situation.

IMPORTATION AND EXPORTATION OF MERCHANDISE constitute a debt payable and receivable respectively. Importance of determining the true value of imports and exports. Little confidence reposed in the local statistics of foreign trade. Dr. Ruy Barbosa's opinion, 82. Necessity of correcting all official valuations and of reducing them to an uniform standard. Illustration of the errors that otherwise ensue, 83. The valuations of foreign customs' are likewise untrustworthy unless properly corrected. Illustration by a statement of Dr. Ruy Barbosa, 84 - - - - - 86

TRADE WITH GREAT BRITAIN. System of valuation adopted in Great Britain, 87. Table showing the British customs' valuation of imports from G. Britain since 1889. This increase common to all the foreign trade of Brazil, 88. Table showing the British customs' valuation of exports to G. Britain for each period. The value of exports has regularly declined since 1876. Heavy duty on coffee. Consumption of coffee in different countries, 89. Consumption of sugar greatest in England. Probably the shrinkage of reexportations of Brazilian produce to Germany and Austria etc. accounts for part the of decrease of exports. British valuations of coffee imported since 1883. - - - - - 91

IMPORTS AND EXPORTS MERCHANDISE: FRANCE. Statistics only reliable since 1880. System of valuation followed in France. Table showing French customs' valuation of Imports from France for each period, 92. In 1889 increase exceeded even that of Great Britain. Table showing French customs' valuations of Exports to France for each period, 93. Comparison of French valuations of coffee with Rio Prices. French valuation excessive - - - - - 94

EXPORTS AND IMPORTS. Germany: unsatisfactory nature of the statistics. Only reliable since 1886, 95. System of valuation used in Germany. German customs' valuation of trade with Brazil, 96. Comparison of German valuation of coffee with Rio prices. - - - - - 97

BELGIAN TRADE WITH BRAZIL. Statistics only reliable since 1879. Belgian customs' valuations of exports and imports. Comparison of Belgian valuation of coffee with Rio prices - - - - - 99

PORTUGAL. System of valuation. Portuguese customs' valuations of trade with Brazil. Imports increased and exports decreased, 100. Consumption of coffee in Portugal - - - - - 101

AUSTRIA. Valuation by Austrian customs of trade with Brazil - - - - - 102

URUGUAYAN REPUBLIC. Valuation of the Uruguayan customs' of the trade with Brazil. Immense increase of imports from Uruguay and decrease of exports to that country. Cause of the want of reciprocity, 103. Table showing the values of different articles exported by Uruguay to Brazil in 1892 and 1893, 104. Three of the most important branches of exports absolutely dependent on Brazil for a market. Part of this importation of Uruguayan products might be substituted by national produce. Injury to Rio Grande. Importance of the Xarque industry to Rio Grande, 105. Table showing total value of exports from Rio Grande and proportion of the value of Saladero produce 1893 to 1899. The prosperity of this State dependent on the Saladero industry, 106. An increase of the duty on Xarque would not raise the price of Xarque. The loss would fall on foreign products. A greater

degree of reciprocity would be secured by increasing the duty on Xarque, 107. Table showing the value of exports to Uruguay in 1892 and 1893, 108. Exports that are capable of expansion	100
ARGENTINE REPUBLIC. Valuation of trade with Brazil by the Argentine customs. Similar causes have produced similar results as in Uruguay, 110. Comparison of trade with Argentina in 1890 and 1894. Immense increase of imports from Argentina, 111. Decline of exports to Argentina since 1889. Importance of the Brazilian markets to Argentina. The necessity of insisting on greater reciprocity	112
UNITED STATES the best customer for Brazilian exports. The system of valuation of imports and exports followed in the U. S. 113. Valuations in the U. S. do not present the true 'balance of trade.' Serious error on the U. S. valuations of trade with Brazil since 1889, 114. Corrections necessary to rectify same, 115. Enormous discrepancy. Corrected U. S. Customs' valuations of trade with Brazil for each period, 116. Imports have increased regularly. The increase from 1890-1892 cannot be attributed solely to the effects of 'reciprocity.' Enormous increase of exports to U. S., 117. Comparison of U. S. Custom's valuation of coffee with Rio prices, 118. Greater reciprocity desirable	119
EXPORTS AND IMPORTS OF ALL OTHER COUNTRIES, which comprise Russia, Holland, Scandinavia, Denmark, Spain, Asia, Africa, and South America exclusive of Chile, Uruguay and Republic Argentina. Value of exports estimated from returns of Rio Customs	121
SUMMARY OF THE FOREIGN CUSTOMS' VALUATIONS OF TRADE WITH BRAZIL. From 1860 to 1879 considerable use has been made of averages. Statistics only reliable posterior to that date	123
LOCAL VALUATIONS OF EXPORTS AND IMPORTS must be reduced to gold standard. Corrections necessary for this reduction, 124. The comparability of trade statistics, 125. Recommendation of the Statistical Institute. Discrepancies between local and foreign valuations for each period, 127. Local valuations seem more correct, 128. Importance of accurate trade statistics	129
IMPORTATION AND EXPORTATION OF BULLION. No statistics obtainable. These factors of international payments excluded from calculations	131
GOVERNMENT EXPENDITURE ABROAD ON ACCOUNT OF PURCHASES OF STORES etc. Estimates of annual expenditure based on that of 1890 and 1891	133
TOTAL ANNUAL INTERNATIONAL DEBIT AND CREDIT—ACTIVO AND PASSIVO: how constituted, 134. Specie point, 135. Balance of payments for each period, 136. Discrepancies between balances obtained by use of local and foreign customs' valuations of trade. Reasons for giving the preference to the former	138

PART II.

Nominal Exchange or the Local Depreciation of the Currency.

PRINCIPLE OF P. ECONOMY connected with the value of currencies, 139. How a convertible currency becomes inconvertible, 140. The failure to recognize the important influence of international exchange on the value of the currency the cause of grave errors, 141. Theory of Sr. Albuquerque. The value of the cur-
--

- rency is not determined by the price of gold but by the ratio of demand and supply of the circulating medium. The price of gold determined in the same way as that of other commodities, 144. Oscillations of foreign exchange and of the value of the currency in Buenos Aires in 1895, 145; and in Italy. The circulating medium of any country is the sole standard of value - 146
- THE THEORY OF EXCHANGE OR OF THE VALUE OF INCONVERTIBLE CURRENCIES. Theory of S. Mill, 148. Issues of convertible notes cannot be excessive, 149. Different factors of the demand for the circulating medium, 150. Quantities of money current in different countries, 151. The total demand when exchange is below or at par corresponds to the real value of the currency, 152. Difficulty of determining the different factors of the demand, 153. Table reducing the demand to its different factors for each period, 154. Analysis of the table on the preceding page 156 INFLUENCE OF SPECULATION on the demand for currency - - 158
- THE CURRENCY. Depreciation of Brazilian and Argentine currencies, 159. History of the Brazilian currency, 160. Table showing the quantity of currency in circulation for each period, 161. The depreciation of the currency is the effect, not the cause of excessive emission, 162. Diagram showing the annual average market rate and the rate that corresponds to a constant demand since 1860. Opinions of Dr. Ruy Barbosa and V. de Ouro Preto, 163. The danger of drawing conclusions from isolated phenomena, 166. The general rise in prices consequent on the depreciation of the currency affects all commodities but not simultaneously or uniformly. Influence of the differential rise of prices on the cost of Production; this explains the advantage to countries using depreciated currencies. Explanation of the phenomenon. The only prices that do not rise are those of fixed charges, 166. Injury that an improvement of exchange must inflict on production. Wages do not rise in proportion to the price of bullion and exports. This is not capricious but follows regular rules, 167. Explanation of the phenomenon, 169. For the same reason rents and local produce neither imported nor exported do not rise in same proportion as bullion, 169. Table showing the prices of sundry imports, exports, and produce of purely local consumption in 1888 and 1895. The price of some imports have positively fallen, 170. Those of certain local products not exported nor imported have risen more than the price of bullion. These exceptions are explained by alterations of the rates of supply and demand, 171. Wages have not risen in proportion to the depreciation of the currency since 1889. There is settled maximum depreciation of wages for each district and class of labour that cannot be exceeded 172. Analysis of the operations of the *Companhia Fabril & Pastoral* of Rio Grande. Correct method of estimating the real value of capital employed and of the real percentage of profits. Actual profits earned since 1884, 173. Danger from the constant oscillation of the value of wages. Necessity of arriving at some stability in regard to the value of wages. 174. The depreciation of the currency injures creditors and benefits debtors, but not in proportion to the depreciation. Moral obligation of Debtors to indemnify creditors for loss from depreciation reciprocal when the value of the currency increases. Loss

to the State if *Apolicies* were redeemed at *par*. Illogical nature of the pretension, 175. The injury inflicted on *Apolicies* holders is more a depreciation of price than of value. Loss to the State if the currency were redeemed at *par*, 176. The holders of internal gold bonds will suffer no depreciation, but if resident in the country will realize an increment of value, 177. Necessity of taxing such profits. Official salaries sure to suffer depreciation. All other National Expenditure will increase and deficits ensue - - - - -

178

DEFICITS. No deficit no debt. What is Progress? 180. Table showing the federal Expenditure, Revenue, and Deficits since 1860, 181. Injustice to Posterity of accumulating debt. Wasteful nature of the system an advantage to no one, 182. Ordinary expenditure should be met by taxation, 183. Large proportion of the debt incurred to liquidate deficits, 184. Increase of expenditure since 1860, 185. The fall of exchange equivalent to a reduction of taxation. The real value of taxation in 1891 lower than that of any year since the Paraguayan war excepting 1886. This reduction is the effect of the differential rise of prices. Comparison of expenditure in 1889 and 1893, 187. Certain expenditure admits of no reduction, 189. Economy of Administrative expenditure is necessarily limited by the general rise of prices, 190. Only one year since 1860 that does not show a deficit. The origin of deficits is chiefly due to the depreciation of revenue derived from import duties, 192. Report of a Parliamentary Commission on the subject, 193. Misappreciations of this Commission, 195. The loss of revenue originating in the depreciation of import duties, 197. The necessity of recovering part of the duties on a gold basis, 198. Waste entailed in recovery of duties in specie. Opinions of Dr. F. Freire. General misappreciation of the effects of obliging importers to pay duties in coin, 199. Gold cannot remain in the country unless the balance of international payments is realized, 200. Speculation an injury to Revenue, that can be easily counteracted in other ways, 201. The alternative proposal to recover duties in bills of exchange unnecessary and inoperative. The law that rules the distribution of the precious metals. The recovery of duties on a gold basis inevitable - - - - -

202

THE INFLUENCE OF SPECULATION ON THE VALUE OF THE CURRENCY. Speculation can alone only exercise a transitory influence, 203. Speculation in exchange inevitable so long as wide margin of profit exist. Speculation and gambling. Society is constituted on the basis of the legitimacy of speculative profits, 204. A socialistic view of the subject, 205. Unless society accept the theories of Socialism denunciations of speculation are insincere, 206. Speculation cannot affect exchange permanently except in harmony with real causes, 207. Speculation cannot control results and therefore causes no permanent injury - - - - -

208

NATIONAL INDUSTRIES. The present system of recovery of duties in paper-money at its nominal value is injurious both to national industries and revenue; table showing the loss thus inflicted on revenue, 214. The present rate of duties shows a positive reduction of value since 1889, 215. Examples, 216. The remedy to recover the duties in gold; this would be equivalent to an increase of duties on imports. Such an increase is unnecessary,

217. Letter from a manufacturer. Profits of the Fabril and Pastoral Co., Rio Grande, 218. Duties on cotton goods in 1889, 1890, and 1894, 219. Dividends of sundry textile companies. Textile industry requires no further protection. Necessity of imposing excise duties if the duties on imports are again raised, 220. Report of the Rio Janeiro Customs' Inspector	222
FOREIGN AND INTERNAL LOANS AND REDEMPTION OF THE CURRENCY. Resumption from page 31 of the analysis of their effect on exchange. Illustration of the effects of the importation of bullion on the value of the currency, 222. Redemption of the currency by means of a foreign loan compared with an internal loan. The advantage is in favor of foreign loans	230
Recapitulation	232

PART III.

The Dynamics of Exchange

<i>Analysis of the financial and Economical Movement of</i>	
The first period 1861-1864	384
The second period 1865-1869	238
The third period 1870-1875	241
The fourth period 1876-1885	245
The fifth period 1886-1889	251
The sixth period 1890-1892	258
Comparison of the financial and Economical situations in 1861-64 1866-89, with that of 1893.	262
Conclusion	265
Errata	267