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INTERNATIONAL GOLD MOVEMENTS

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PREFACE

THE aim of the present book is to deal with international gold movements mainly from a practical point of view. It is the first book devoted exclusively to this subject, and the first attempt to go into its technical details, especially as regards gold points of the principal exchanges since the war. The information it contains has been collected by the author in the course of his six years' experience as Foreign Editor of *The Financial News*, by means of direct contact with bankers, foreign exchange dealers, and bullion brokers. The author wishes to express his gratitude to the great number of experts who have been of assistance to him, but the nature of a great part of the information published makes it impolitic for him to disclose its sources.

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P. E.

20 BISHOPSGATE, E.C.,
March 1929.

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APPENDIX I

GOLD POINTS OF THE PRINCIPAL EXCHANGES

THE calculation of gold points is, in theory, a matter of simple arithmetic. In practice, however, it presents a number of difficulties, many of which can only be overcome by means of direct experience gained through actual gold shipments. The changes in the factors that determine gold points and their instability, as well as the existence of unknown factors, have rendered the calculation of gold points rather difficult and unreliable. (While before the war the approximate figures of the gold points of currencies on a gold basis were a matter of general knowledge, at present the number of exchanges the gold points of which is known at least approximately, is very small.) Many countries which have returned to a gold basis have not announced the official buying price of gold. The selling price of gold has little practical meaning, from the point of view of international gold movements, in the case of countries which have adopted the gold exchange standard. As the only kinds of gold shipments made to and from these countries were either special transactions or purchases for industrial purposes, made without regard to gold points, arbitrageurs had no opportunity to ascertain all factors determining the gold points.

Freight rates are fairly definitely settled in certain relations, while in other relations in which there have not been many shipments since the war they are a matter of negotiations. The keen competition between air lines and shipping companies for gold shipments between London and continental centres results in frequent change of freight rates. (It is useless to ask transport enterprises for the quotation of freight rates for such relations unless and until there is an actual shipment.)

Insurance rates are also subject to frequent alterations. They largely depend on the quantity shipped on a single boat, which is not known in advance. Occasionally special arrangements are concluded ("floating policies") between banks and insurance companies for the insurance of a certain amount of gold if and when shipped, but in the majority of cases the rate is subject to fluctuation. The amount insured is also an item with regard to which there is no uniform rule. It is a popular habit to over-insure gold shipments to an extent of 5 to 10 per cent. While the approximate extent of over-insurance is comparatively settled for shipments to the East it varies widely according to firms as to shipments between London and New York or London and the Continent.

As to loss of interest, it was customary in pre-war textbooks to take the Bank Rate for basis (In normal circumstances, however, (if the shipment is financed in London,) the rate of interest is slightly under the Bank Rate, while in most other centres it is slightly over the Bank Rate.) For banks possessing liquid resources to finance the shipment, it is largely a matter of individual opinion how much they want to earn on their funds thus used. (It is becoming an increasingly popular method to leave out interest altogether from the calculation of the cost of shipment, and to express the profit on the transaction in terms of percentage representing the yield of the capital used for financing the shipment.) For shippers possessing no idle reserve, the item of interest is determined by the rate which they are able to obtain for their funds if they use them in the Money Market. If the shipment has to be financed with the aid of borrowed funds the rate of interest is determined, of course, by the rate at which the shippers are able to borrow. The time of shipments for which the loss of interest is calculated is a factor which leaves wide scope for the difference in the temperament of arbitrageurs. If they are speculative they take the minimum time without allowing for the possibility of adverse circumstances which may delay the transport. If they are conservative, they leave a safety margin for possible delay.

There are also incidental expenses, such as the cost of transport from the central banks to the boats where such costs are

not included in the freight rate quoted, or packing when it is not done by the central banks, gratuities, and other small outlays. They can only be estimated approximately, and even the most experienced cambists are exposed to surprises in this respect.

It may be seen from the foregoing that it is impossible to make calculations of gold points which can claim to be valid for any length of time. For this reason the calculations included in this Appendix are meant to be only formulae subject to adjustment when the factors determining the gold points change. To facilitate the adjustment of the gold points thus calculated, the extent to which they are modified by the changes of their factors is also indicated.

[In our calculation it is assumed that the shipment is made in the most favourable circumstances. Thus nothing is allowed for brokerage, as it is assumed that the transactions are carried out either by firms having offices in both centres, or by two firms working on joint account. The freight is calculated on the basis of the lowest quotation obtainable at the time of writing. The rate of insurance is the normal rate quoted for shipments involving no exceptional risk. The amount insured is the purchase price plus expenses, increased to the nearest round figure. The rate of interest is in every case 5 per cent (apart from the pre-war gold points of the dollar), but there are tables to indicate the modification of gold points with the change of the rate of interest. Nothing is allowed for possible abnormal delays. It is also assumed that the shipment is financed in the market where the rate of interest is lower, and that it is a genuine exchange transaction, so that there is no need for covering the exchange risk by forward exchange operations. It would be, indeed, impossible to allow for the cost of the forward exchange transaction, owing to the great variety of the possible forward rates.]

The most important gold points are, of course, those of the sterling-dollar exchange. Owing to the frequency of gold shipments between London and New York, these are the best known gold points. Freight rates are now stabilised at 3s. per £100. ^{1/2} Insurance rates are down at their pre-war figure of 9d. per £100. — The buying and selling price in the United States is identical! ^{1/2}

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at \$20-67183 per ounce of fine gold, while the Bank of England's buying price is 84s. 9-81818d. and its selling price is 84s. 11-45455d.

For the sake of comparison, we give below the calculation of the gold points of the dollar before the war and immediately after our return to the gold standard:

100,000 fine ounces of gold at 84s. 11-45455d.	£424,772 14 7
Freight, 3s. 9d. per £100 for £424,800	796 10 0
Insurance, 9d. per £100 for £428,000	160 10 0
Interest, 4 per cent for 8 days	372 8 4
Boxes and packing	16 0 0
	<hr/>
	£426,118 2 11

100,000 ounces fine at \$20-67183	\$2,067,183
Incidental charges in New York	150

found \$2,067,033

Gold export point of the dollar in 1913: \$4-8509.

100,000 fine ounces of gold at 84s. 11-45455d.	£424,772 14 7
Freight, 3s. 9d. per £100 for £424,800	796 10 0
Insurance, 1s. per £100 for £428,000	214 0 0
Interest, 5 per cent for 8 days	465 10 5
Boxes and packing	16 0 0
	<hr/>
	£424,264 15 0

100,000 fine ounces at \$20-67183	\$2,067,183
Incidental charges in New York	200

found \$2,066,983

Gold export point of the dollar in 1925: \$4-8491.

100,000 ounces of fine gold at \$20-67183	\$2,067,183-00
Freight, 3s. 9d. per £100 on \$2,068,000	3,877-50
Insurance, 9d. per £100 on \$2,075,000	778-15
Interest, 4 per cent for 8 days	1,812-16
Incidental expenses	150-00
	<hr/>
	<u>\$2,073,800-81</u>

100,000 ounces at 84s. 9-81818d.	£424,090 18 2
----------------------------------	---------------

found Gold import point of the dollar in 1913: 4-89.

APPENDIX I

100,000 ounces of fine gold at \$20-67183	\$2,067,183-00
Freight, 5s. per £100	5,170-00
Insurance, 1s. per £100	1,037-53
Interest, 5 per cent for 8 days	2,265-20
Incidental expenses	200-00
	<u>\$2,075,855-73</u>
100,000 ounces at 84s. 9-81818d.	<u>£24,090 18 2</u>
Gold import point of the ^{found} dollar in 1925: \$4-8949.	

As is seen, the margin between gold points was wider immediately after the return to the gold standard than previous to its suspension. Subsequently, however, it declined considerably, and (at present it is narrower than before the war.) The difference is particularly striking if, in accordance with the rule adopted by some banks, interest is left out of calculation.

The following figures compare the gold points of the dollar at the end of 1928 with and without the inclusion of interest charges:

	Including Interest.	Excluding Interest.
100,000 fine ounces at		
84s. 11-45455d.	£424,772 14 7	£424,772 14 7
Freight, 3s. per £100	637 0 0	637 0 0
Insurance, 9d. per £100	160 10 0	160 10 0
Interest, 5 per cent for		
8 days	465 10 5	..
Boxes and packing	16 0 0	16 0 0
	<u>£426,052 4 2</u>	<u>£425,586 8 7</u>
Gold export point	<u>\$4-8515</u>	<u>\$4-8564</u>
100,000 fine ounces at		
\$20-67183	\$2,067,183-00	\$2,067,183-00
Freight, 3s. per £100	3,100-50	3,100-50
Insurance, 9d. per £100	778-15	778-15
Interest, 5 per cent for		
8 days	2,046-00	..
	<u>\$2,073,107-65</u>	<u>\$2,071,071-65</u>
100,000 fine ounces at		
84s. 9-81818d.	£24,090 18 2	£24,090 18 2
Gold import point	<u>\$4-8884</u>	<u>\$4-8835</u>

(Incidental charges in New York have been omitted, as in 1928 the Federal Reserve Bank delivered the gold free on board in New York.)

(A difference of 1 per cent in the rate of interest for eight days results in a difference of about $\frac{3}{32}$ c. in the gold point.) The following table shows the yield of funds used for financing gold shipments, according to the exchange rate on the basis of which the shipment is made:

Gold Export.	Gold Import.	Yield.
\$	\$	Per cent.
$4.85\frac{4}{4}$	$4.88\frac{1}{2}$	Nil
$4.85\frac{3}{4}$	$4.88\frac{2}{8}$	1
$4.85\frac{1}{2}$	$4.88\frac{3}{8}$	2
$4.85\frac{3}{4}$	$4.88\frac{4}{4}$	3
$4.85\frac{1}{4}$	$4.88\frac{5}{4}$	4
$4.85\frac{3}{4}$	$4.88\frac{6}{8}$	5
$4.85\frac{1}{2}$	$4.88\frac{7}{8}$	6

A difference of one day in the time of transport on the basis of an interest of 5 per cent results in a difference of $\frac{1}{16}$ c. in the gold point. Thus if a day is saved by using the French liners which do not touch Cherbourg between Plymouth or Southampton and New York, the gold import point is $4.88\frac{2}{8}$ and the gold export point is $4.85\frac{3}{4}$, on a 5 per cent interest basis.

A difference of 1s. per £100 in the freight or insurance rate is equivalent to a difference of about $\frac{1}{8}$ c. in the gold point. There is no reason, however, to anticipate any material change in either of these items.

(The reichsmark comes next in importance to the dollar from the point of view of gold arbitrage.) The official selling price of the Reichsbank is 2792 reichsmarks per kilo of fine gold. As, however, the convertibility of the reichsmark remains suspended for the time being, the gold import point calculated on the basis of this selling price is purely theoretical. On the other hand, the buying price of 2784 reichsmarks fixed by the Reichsbank is actually operative, and the gold export point

calculated on the basis of it has had ample opportunity to be tested by actual shipments.

The following is the calculation of the theoretical gold import point of the reichsmark:

1000 kilos of fine gold at 2792	.	.	RM. 2,792,000
Transport, 1s. 9d. per £100	.	.	1,400
Insurance, 1s. per £100	.	.	800
Interest, 5 per cent for 3 days	.	.	1,148
Packing	.	.	100

RM. 2,795,448

32,150-725 ounces at 84s. 9-81818d. . . . £136,348 6 0½

Gold import point: RM. 20-5023.

(As is known, the Reichsbank accepts the delivery of gold either in Berlin or at its Bremen, Hamburg, or Cologne branches.) By this means the gold export point has been modified in favour of shipments to Germany. The extent of the difference is shown by the following calculation:

	Shipment to	
	Berlin.	Bremen.
32,150-725 ounces at 84s. 11-45455d.	£136,567 10 3	£136,567 10 3
Transport (1s. 9d. for Berlin, 1s. 4d. for Bremen)	119 10 6	91 1 3
Insurance (1s. for Berlin, 9d. for Bremen)	68 10 0	51 7 6
Interest, 5 per cent (3 days for Berlin, 2 days for Bremen)	56 3 6	37 8 10
Packing and boxes	5 0 0	5 0 0
	<u>£136,816 14 3</u>	<u>£136,752 7 10</u>

1000 kilos of fine gold at RM. 2784

RM. 2,784,000

Gold export point

RM. 20-3484

RM. 20-3580

Thus the difference is nearly one point, which is, in certain circumstances, capable of causing considerable gold shipments. The expenses of shipment to Cologne by air are about the same as for Bremen. Those for Hamburg are slightly higher.

A difference of 1 per cent in the rate of interest is equal to a difference of 0-0011 in the gold point for shipments to Bremen,

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requiring two days, and to 0-0017 for shipments to and from Berlin, which require three days. The following table indicates the yield of the funds employed for the financing of gold shipments according to the exchange rate on the basis of which the shipments were made:

Gold Export to Bremen.	Gold Export to Berlin.	Gold Import from Berlin.	Yield per cent.
20-36½	20-35½	20-49½	nil
20-36½	20-35½	20-49½	1
20-36½	20-35½	20-49½	2
20-36	20-35½	20-49½	3
20-35½	20-35	20-50	4
20-35½	20-34½	20-50½	5
20-35½	20-34½	20-50½	6

A difference of 1d. per £100 in the freight or insurance rate is equal to about 0-0008 in the rate. A difference of one day in the time of transport on the basis of an interest of 5 per cent is equal to 0-0027 in the rate.

The gold points of the (Amsterdam) exchange are also known with comparative accuracy, especially the gold export point, which played an important part soon after the restoration of the gold standard.

The following figures show the calculation of the gold export point:

32,150-725 ounces fine gold at 84s. 11-45455d.	£136,567 10 3
Transport, 2400 lbs. at 8d.	80 0 0
Insurance, 9d. per £100 on £137,000	51 7 6
Packing	5 0 0
Interest, 2 days, 5 per cent	37 8 10
Interest, 14 days, 5 per cent on one-tenth of the amount	26 3 10
	<u>£136,767 10 5</u>
1000 kilos at Fls. 1647-50	Fls. 1,647,500
80 assays at Fls. 3-50	280
	<u>Fls. 1,647,220</u>
<u>Gold export point: Fls. 12-0447.</u>	

The following is the calculation of the gold import point of the Amsterdam exchange:

1000 kilos at 1653-44	Fla. 1,653,440
Transport, 2400 lbs. at 8d. per lb.	969
Insurance, 8d. per £100	622
Interest, 2 days, 5 per cent	453

Fla. 1,655,484

22,150,725 ounces at 84s. 9-61818d. £136,348 6 0½

Gold import point: Fla. 12-1416.

Taking two days for the time of transport, a difference of 1 per cent in the rate of interest is equal to a difference of 0-0014 in the gold export point and 0-0008 in the gold import point. The following table shows the yield of funds used for the financing of gold shipments, according to the exchange rates on the basis of which the shipments were made:

Gold Export.	Gold Import.	Yield per cent.
12-06½	12-13½	Nil
12-06	12-13½	1
12-04½	12-13½	2
12-04½	12-14	3
12-04½	12-14½	4
12-04½	12-14½	5
12-04½	12-14½	6

On the basis of a rate of interest of 5 per cent, the difference of one day in the time of shipment is equal to a difference of 0-0020 in the gold points. A difference of £10 in the cost of shipment is equal to a difference of 0-0011 in the gold points.

There is an arrangement between the Java Bank and the Netherlands Bank which tended to bring about heavy gold shipments from London to Amsterdam towards the end of 1925. The Java Bank keeps a gold deposit with the Netherlands Bank, against which it is entitled to issue notes. If convenient, it accepts the delivery of gold at its Amsterdam deposit. At the

end of 1925, when the Batavia rate declined below 12, as a result of the rubber boom, gold was shipped from London to Amsterdam, though neither the Amsterdam nor the Batavia exchanges were under their gold points, which are 12.0432 and 11.96 respectively. As the Batavia exchange was, however, under the gold point of the Amsterdam exchange, it was profitable to take gold to Amsterdam and pay it into the Java Bank's deposit with the Netherlands Bank. Should the Batavia exchange depreciate beyond the gold import point of the Amsterdam exchange, then, in theory at least, it would be profitable to take gold for London from the Java Bank's Amsterdam deposit. In practice, however, the Java Bank may refuse to accept or pay out gold in Amsterdam, so that the arrangement would work in both directions only if it is convenient to the Java Bank. Thus if it does not wish to lose gold all it has to do is to refuse to sell gold from its Amsterdam reserve, in which case it would not lose gold until the Batavia rate has depreciated beyond its own gold import point, which is probably around 12.26.

Gold shipments for Canada are made in the shape of sovereigns, as these are accepted by the Receiver-General of the Dominion Treasury at their par value. Thus while bar gold would have to be delivered at the Ottawa Mint, sovereigns may be delivered in Montreal or at the port of St. John's.

There are two alternative routes by which sovereigns can be shipped to and from Canada, viz. direct to Montreal or via New York. Shipment via New York is quicker but more expensive. The saving of interest is usually more than counteracted by additional freight, insurance, and transshipment charges. The difference in the time of transport is no longer as great as before, as the direct mail-boat service between this country and Canada has improved considerably during the last few years. For shipment via New York 9 days have to be allowed, while it is safe to allow 10 days for direct shipments to and from Montreal. Commercial banks which finance the shipments out of their own reserves find it particularly advantageous to choose the direct route in spite of the loss of one day, whenever a good direct mail-boat is available. During the winter months, while

the St. Lawrence is frozen and Montreal is unapproachable by boat, the route via New York is cheaper for shipments from Canada, but it makes no difference for shipments to Canada, as the Receiver-General is prepared to accept delivery at the port of St. John's.

A point worth mentioning is that, though the Canadian dollar is equal to the United States dollar, the official parity of sterling in Canada is not 4·8665 but 4·86 $\frac{2}{3}$, which means that sovereigns are bought and sold at a nominal premium amounting to nearly \$170 for £1,000,000. On the other hand, sovereigns are bought according to their weight, which may result in a loss on worn coins. For this reason the shipment of sovereigns to Canada always involves a certain amount of risk which should be borne in mind.

The following is the calculation of the gold export point of the Canadian dollar:

500,000 sovereigns	£500,000	0	0
Freight, 3s. per £100		750	0
Insurance, 1s. per £100		250	0
Interest, 5 per cent for 10 days		685	5
Packing, 500 boxes		25	0
		<hr/>	
		£501,710	5
		<hr/>	
500,000 sovereigns at 4·86 $\frac{2}{3}$		\$2,433,333	33
Incidental charges			200·00
		<hr/>	
Gold export point, \$4·8497.		\$2,433,133	33
		<hr/>	

The following is the calculation of the gold import point of the Canadian exchange :

500,000 sovereigns at \$4·86 $\frac{2}{3}$	\$2,433,333	33
Freight, 3s. per £100		3,650·00
Insurance, 1s. per cent		1,216·66
Interest, 5 per cent for 10 days		3,336·07
Packing and incidental charges		325·00
		<hr/>
Gold import point : \$4·8837.		\$2,441,861
		<hr/>

A difference of 1 per cent in the rate of interest is equivalent to a difference of about $\frac{3}{2}$ c. in the gold point. The following table shows the yield of funds used for the financing of gold

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shipments according to the exchange rate on the basis of which the shipment was made:

Gold Export.	Gold Import.	Yield per cent.
$4\cdot85\frac{7}{16}$	$4\cdot87\frac{2}{3}\frac{9}{2}$	Nil
$4\cdot85\frac{1}{3}\frac{1}{2}$	4·88	1
$4\cdot85\frac{1}{4}$	$4\cdot88\frac{3}{3}\frac{2}{2}$	2
$4\cdot85\frac{5}{3}\frac{3}{3}$	$4\cdot88\frac{3}{1}\frac{3}{5}$	3
$4\cdot85\frac{1}{1}\frac{6}{6}$	$4\cdot88\frac{9}{3}\frac{2}{2}$	4
$4\cdot84\frac{3}{2}\frac{1}{2}$	$4\cdot88\frac{3}{8}$	5
$4\cdot84\frac{3}{8}$	$4\cdot88\frac{2}{3}\frac{7}{2}$	6

A difference of one day in the time of transport on the basis of an interest of 5 per cent results in a difference of $\frac{1}{16}$ c. in the gold point. If a mail-boat is available between Montreal and Liverpool it is not worth while to pay extra expenses of the New York route for the sake of saving one day's interest. If, however, only a slow boat is available and the difference is four days, then it is more profitable to send the gold via New York.

As in the case of the American dollar, a difference of 1s. per £100 in the freight and insurance rate is equivalent to a difference of $\frac{1}{6}\frac{1}{2}$ c. in the gold points.

(Since the stabilisation of the franc, no gold has been shipped to or from France through commercial transactions, apart from small amounts bought for industrial purposes.) The figures indicating the gold points of the franc are therefore purely hypothetical. The following is the calculation of the gold export point of the franc:

32,150·725 ounces fine gold at 84s. 11·45455d.	£136,567 10 0
Freight, 10½d. per £100	59 15 3
Insurance, 6d. per £100	34 3 0
Interest, 2 days, 5 per cent	37 8 6
Packing, 20 boxes	5 0 0
	<hr/>
	£136,703 13 9
	<hr/>
1000 kilos fine gold at 16,963·50	Frs. 16,963,500
Minting costs 2·20 per kilo of ·9 fineness	22,222
	<hr/>
<u>Gold export point: Frs. 123·93.</u>	<u>Frs. 16,941,278</u>

Originally the minting charge was 40 francs per kilo of .900 fine gold, but the Bank of France reduced it to 20 francs until further notice. The charge for assay is 50 francs per bar, but a certificate from a recognised refiner, or the guarantee of a recognised bank, is accepted in lieu of assay.

The following is the calculation of the gold import point of the franc:

1000 kilos of fine gold	Frs. 16,963,500
Freight, 10½d. per £100	7,382
Insurance, 6d. per £100	4,241
Interest, 3 days, 5 per cent	4,179
Incidental cost	400
	Frs. 16,979,702
32,150·725 ounces fine gold at 84s. 9·81818d.	£136,348 6 0½
Gold import point: Frs. 124·5541.	

A difference of 1 per cent in the rate of interest is equivalent to a difference of 0·0062 in the gold point. The following table shows the yield of funds used for the financing of gold shipments according to the rate of exchange:

Gold Export.	Gold Import.	Yield per cent.
123·06½	124·52½	Nil
123·08½	124·52½	1
123·04½	124·53½	2
123·04½	124·54½	3
123·03½	124·54½	4
123·03	124·55½	5
123·02½	124·56	6

A difference of one day in the time of transport is equal to a difference of 1½ c. in the gold points. A difference of £10 in the cost of the shipment is equal to a difference of ½ c. in the gold point.

Although Spain is not on a gold basis, gold has been shipped there through exchange transactions during the last few years,

as a result of the policy of the authorities to encourage the payment of customs duties in gold. The alternative method of payment is in paper pesetas, in which case a "surcharge" is added to the amount of gold pesetas payable. If the authorities want to encourage the influx of gold all they have to do is to fix the surcharge higher than the premium of gold pesetas against paper pesetas, in which case it is advantageous to discharge the payment by sovereigns, which are accepted at their par value.

The following is the calculation of the cost of the shipment of sovereigns taken by aeroplane to Paris and then by train to Irun (the frontier station) or to Barcelona:

	Irun.	Barcelona.
	£10,000 0 0	£10,000 0 0
10,000 sovereigns		
Transport (12s. 6d. for Irun, 14s. 6d. for Barcelona)	62 10 0	72 10 0
Insurance, 1s. 3d. per cent	6 5 0	6 5 0
Packing, incidental charges	1 5 0	1 5 0
Interest, 5 per cent (2 days for Irun, 3 days for Barcelona)	2 14 10	4 2 3
	£10,072 14 10	£10,084 2 3

If the premium of sterling against pesetas is lower than the official "surcharge", and if the difference exceeds 0·727 per cent, it is worth while to make the payments due at Irun for customs duties in sovereigns instead of paper pesetas. If the difference exceeds 0·841 per cent it is worth while to make also the payments due in Barcelona in sovereigns. The surcharge is altered at frequent intervals, and the peseta exchange is also subject to wide fluctuations. For this reason there is no fixed rate at which it becomes profitable to ship gold to Spain.

As was pointed out already, calculations of gold points are subject to frequent changes. The figures contained in this Appendix merely claim to serve as a guide in the calculation of the gold point which has to be made on every occasion before a shipment is undertaken. Commercial firms, and even banks desirous of shipping gold, may find it advantageous to avail themselves of the services of bullion brokers, who are in a better position than anyone else to follow closely the changes in the

factors that determine gold points. (It is true that the commission of bullion brokers lowers the gold export point and raises the gold import point, and prevents shipments which would otherwise appear profitable if undertaken without the middlemen.) (In spite of this, it is desirable that gold shipments should be made through bullion brokers.) Apart from the fact that the advice of specialised brokers tends to reduce the risk attached to gold shipments, it saves the shippers the inconvenience of having to attend to the details of the transaction.

APPENDIX II

OPEN MARKET GOLD'S IMPORT AND EXPORT POINTS

THE term gold points, as it is understood in everyday use, refers to the rates of exchange at which it becomes profitable to import or export gold to and from the central bank's gold reserve. (In every country on a gold basis, apart from Great Britain, the only buying and selling price of gold for arbitrage are those fixed by the central bank.) In this country, however, there is, in addition to the official buying and selling price of gold, also a market price which varies between (84s. 10d. and 84s. 11½d.) There is therefore (a scale of gold points) indicating the rates at which it becomes profitable to buy gold in the open market for export, or at which it becomes profitable to import gold with a view to selling it in the open market. These gold points are generally regarded as less important than those based on the Bank of England's buying and selling price, because of the limited market supply available, and because the demand at a price superior to the Bank of England's buying price is usually limited. Undoubtedly, the significance of the gold import points based on market prices is small. As there is (no forward market for gold,) the amount of demand in the open market and the market price is not known in advance, so that the importer runs the risk of having to sell his gold at the Bank of England's buying price. On the other hand, the (significance of the gold export points of open market gold should not be underestimated.) After all, it is these gold points that determine whether or not the South African gold arrivals find their way to the central institution. It is true that the amount that may be shipped to and from the Bank at any given moment is much larger than the amount that may be bought or sold in the open

APPENDIX II

market. In the long run, however, the Bank's reserve is determined to the same extent by its capacity of buying South African gold as by its capacity of defending its reserve and of attracting gold from foreign centres. For this reason, and also on account of the frequency of shipments of gold bought in the open market, we propose to give below the open market gold export points of the exchanges, the official export points of which have been indicated in Appendix I. The rate of interest is in every case 5 per cent.

Market Price.	New York.	Germany (Bremen).	Amsterdam.	Paris.	Montreal.
84s. 10d.	$4\cdot85\frac{2}{3}\frac{5}{8}$	20-38½	12-06½	124-11	$4\cdot85\frac{1}{3}\frac{9}{8}$
84s. 10½d.	$4\cdot85\frac{1}{6}\frac{1}{8}$	20-38½	12-06	124-07½	$4\cdot85\frac{1}{3}$
84s. 10¾d.	$4\cdot85\frac{5}{8}\frac{7}{8}$	20-37¾	12-05½	124-04	$4\cdot85\frac{1}{3}\frac{3}{8}$
84s. 10¾d.	$4\cdot85\frac{3}{4}\frac{1}{4}$	20-37½	12-05½	124-00	$4\cdot85\frac{1}{6}\frac{6}{4}$
84s. 11d.	$4\cdot85\frac{3}{4}$	20-36¾	12-05	123-96½	$4\cdot85\frac{3}{16}$
84s. 11¼d.	$4\cdot85\frac{1}{6}\frac{7}{4}$	20-36½	12-04½	123-93	$4\cdot85\frac{5}{8}\frac{1}{4}$
84s. 11½d.	$4\cdot85\frac{5}{8}\frac{3}{8}$	20-35½	12-04½	123-89½	$4\cdot84\frac{3}{8}\frac{1}{2}$

The effect of the changes in the rate of interest is the same as for the official gold points, as indicated in Appendix I. Any other changes in the calculation of the official gold points result in a corresponding modification of above table.

APPENDIX III

COST OF GOLD TRANSPORT BY AIR

As was pointed out in Chapter V., air lines proved fierce competitors of railway companies and shipping companies for gold transports to Continent. The advantage is particularly marked for small quantities, for which reason transport by air plays a comparatively more important part for gold bought by the trade.

The following figures compare the cost of gold transport by air with that of transport by sea and rail:

RATES PER LB. GROSS WEIGHT

	By Air.	By Sea and/or Rail (passenger service).	
	‡ 100 lbs. †	100 lbs.	200 lbs.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Amsterdam	0 8	0 10	0 9
Basle	1 3	2 0	1 9
Belgrade	2 4	5 0	4 4
Berlin	1 9	2 1	1 10
Berne	1 6	2 6	2 2
Brussels	0 6	1 4	1 0
Bucharest	2 9	4 6	3 9
Budapest	2 3	3 6	3 3
Copenhagen	1 7	3 3	3 0
Madrid	14 0	19 0	17 6
Marseilles	1 6	2 1	1 9
Paris	0 6	1 6	1 3
Prague	1 6	2 6	2 2
Rome	16 0	17 6	17 0
Vienna	2 0	3 0	2 9
Warsaw	2 9	4 6	3 6

APPENDIX IV

BANK OF ENGLAND'S GOLD TRANSACTIONS ON FOREIGN ACCOUNT

The following table shows the total purchases and sales of the Bank of England on foreign account:

Year.	Purchase.	Sale.	Difference.
1881	£4,175,000	£6,515,000	- £2,340,000
1882	7,407,000	4,968,000	+ 2,439,000
1883	4,418,000	3,394,000	+ 1,014,000
1884	5,170,000	5,436,000	- 266,000
1885	6,567,000	5,969,000	+ 598,000
1886	2,923,000	6,303,000	- 3,380,000
1887	3,832,000	3,028,300	+ 803,700
1888	6,291,000	6,352,000	- 61,000
1889	7,278,000	5,128,000	+ 2,152,000
1890	13,774,500	5,669,000	+ 8,105,500
1891	11,941,000	13,515,000	- 1,574,000
1892	5,051,000	5,483,000	- 432,000
1893	6,488,000	8,552,000	- 2,064,000
1894	14,504,500	5,798,000	+ 8,706,500
1895	17,266,000	3,034,000	+ 14,232,000
1896	5,758,000	13,127,000	- 7,369,000
1897	4,330,000	5,390,500	- 1,060,500
1898	10,549,000	8,602,000	+ 1,947,000
1899	13,274,000	6,150,000	+ 7,124,000
1900	12,330,000	7,794,000	+ 4,536,000
1901	7,985,000	5,216,000	+ 2,769,000
1902	6,023,000	6,417,000	- 396,000
1903	6,257,000	9,284,000	- 3,027,000
1904	9,742,000	6,925,500	+ 2,816,500
1905	9,774,000	8,800,000	+ 994,000

[Continued on next page.]

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APPENDIX IV.—*continued*

Year.	Purchase.	Sale.	Difference.
1906	20,206,500	15,535,000	+ 4,671,500
1907	19,288,000	12,926,000	+ 6,362,000
1908	3,682,000	7,661,000	- 3,979,000
1909	19,165,000	11,046,000	+ 8,119,000
1910	18,550,000	14,488,000	+ 4,062,000
1911	16,501,000	8,228,000	+ 8,273,000
1912	12,996,000	9,669,500	+ 3,326,500
1913	21,690,000	7,943,000	+13,747,000
1914	58,247,000	8,027,000	+50,220,000
1915	24,269,000	43,076,000	-18,807,000
1916 ¹	19,828,000	2,360,000	+17,468,000
1925 ²	15,362,000	26,957,000 ²	-11,595,000
1926	23,947,000	17,676,000	+ 6,271,000
1927	25,927,000	20,654,000	+ 5,273,000
1928	35,631,000	36,953,000	- 1,322,000

¹ Up to July 16.² From April 29.

APPENDIX V

GOLD IMPORTS AND EXPORTS

The following table shows the gold imports and exports of the United Kingdom since the establishment of Customs statistics:

Year.	Imports.	Exports.	Difference.
1852	..	£4,325,824	..
1853	..	12,751,778	..
1854	..	16,552,845	..
1855	..	11,847,213	..
1856	..	12,038,299	..
1857	..	15,061,500	..
1858	£22,793,126	12,567,040	+ £10,226,086
1859	22,297,698	18,081,139	+ 4,216,559
1860	12,584,684	15,641,578	- 3,056,894
1861	12,163,937	11,238,372	+ 925,565
1862	19,903,704	16,011,963	+ 3,891,741
1863	19,142,665	15,303,297	+ 3,839,368
1864	16,900,951	13,279,739	+ 3,621,212
1865	14,485,570	8,493,332	+ 5,992,238
1866	23,509,641	12,742,059	+ 10,767,582
1867	15,800,159	7,889,030	+ 7,911,129
1868	17,136,177	12,708,308	+ 4,427,869
1869	13,770,812	8,473,699	+ 5,297,113
1870	18,806,728	10,013,521	+ 8,793,203
1871	21,618,924	20,698,275	+ 920,649
1872	18,469,442	19,748,916	- 1,279,474
1873	20,611,165	19,071,220	+ 1,539,945
1874	18,081,019	10,641,636	+ 7,439,383
1875	23,140,834	18,648,296	+ 4,492,538
1876	23,475,975	16,515,748	+ 6,959,747
1877	15,441,985	20,373,886	- 4,931,901
1878	20,871,410	14,968,507	+ 5,902,903
1879	13,368,675	17,578,818	- 4,210,143
1880	9,454,861	11,828,822	- 2,373,961
1881	9,963,006	15,498,837	- 5,535,831
1882	14,376,559	12,023,804	+ 2,352,755
1883	7,755,800	7,091,365	+ 664,435
1884	10,744,408	12,012,839	- 1,268,431
1885	13,376,561	11,930,818	+ 1,445,743
1886	13,392,256	13,783,706	- 391,450

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APPENDIX V.—*continued*

Year.	Imports.	Exports.	Difference.
1887	9,955,326	9,323,614	+ 631,712
1888	15,787,588	14,944,143	+ 843,445
1889	17,914,039	14,455,318	+ 3,458,721
1890	23,568,049	14,306,688	+ 9,261,361
1891	30,275,620	24,167,925	+ 6,107,705
1892	21,583,232	14,832,122	+ 6,751,110
1893	24,834,727	19,502,273	+ 5,332,459
1894	27,572,347	15,647,551	+11,924,796
1895	36,009,329	21,369,323	+14,640,006
1896	24,468,580	30,123,925	- 5,655,343
1897	30,808,858	30,808,571	+ 287
1898	43,722,960	36,590,050	+ 7,793,910
1899	32,533,497	21,536,052	+10,997,445
1900	26,190,873	18,397,459	+ 7,793,414
1901	20,715,628	13,965,265	+ 6,750,363
1902	21,629,049	15,409,028	+ 6,220,021
1903	28,657,393	27,766,512	+ 890,881
1904	33,876,588	33,039,138	+ 839,450
1905	38,567,895	30,829,842	+ 7,738,053
1906	46,042,590	42,617,267	+ 3,425,323
1907	57,088,547	50,866,009	+ 6,222,538
1908	46,145,314	49,969,099	- 3,823,785
1909	54,691,829	47,249,536	+ 7,442,293
1910	57,321,767	50,898,445	+ 6,423,322
1911	48,693,753	40,100,540	+ 8,593,213
1912	52,688,881	46,538,469	+ 6,150,412
1913	59,533,549	46,087,359	+13,446,190
1914	58,642,211	30,599,050	+28,043,161
1915	10,828,366	39,218,113	-28,389,747
1916	17,790,302	38,338,912	-20,658,610
1917	..	..	..
1918	..	..	..
1919	..	..	..
1920	50,678,283	92,565,137	-41,886,854
1921	49,676,047	59,348,158	- 9,672,111
1922	34,542,167	44,838,292	-10,296,125
1923	43,986,655	57,434,355	-13,447,700
1924	35,791,664	49,419,607	-13,627,943
1925	41,460,892	49,674,766	- 8,213,874
1926	38,547,498	27,128,223	+11,419,275
1927	32,447,287	28,153,357	+ 4,293,930
1928	47,808,055	60,523,701	-12,714,646

APPENDIX VI

ORIGIN AND DESTINATION OF GOLD IMPORTS AND EXPORTS SINCE 1925

The following tables, compiled from official statistics, show the principal countries of consignment and destination of the gold shipments of the United Kingdom since 1925:

IMPORTS

Country.	1925.	1926.	1927.	1928.
Arabia . . .	..	..	£250,000	£281,000
Australia . . .	£1,068	£8,750	..	1,005,694
Austria . . .	..	238	..	..
Belgium . . .	..	595,736	18,591	37
British West Africa . .	1,236,813	1,293,108	966,903	695,293
Canada . . .	69,758	..	..	979,000
Denmark . . .	..	..	402,064	..
Dutch East Indies . .	..	22,828	..	..
Egypt . . .	..	..	..	269,035
France . . .	123,983	164,897	128,987	187,494
Germany . . .	..	5,811	39,112	52,946
Gibraltar . . .	..	54	..	..
Irish Free State . . .	..	..	..	693,364
Italy . . .	..	..	74	..
Kenya . . .	..	3,625	..	..
Netherlands . . .	5,094,795	241,405	475,268	29,727
Poland . . .	2,036,736	..	..	..
Rhodesia . . .	2,081,978	2,022,494	1,224,300	1,084,991
Roumania . . .	..	..	823,890	..
Russia . . .	4,277,385	2,537,492	215,566	3,818,397
South America . . .	10,660	..	414,421	239,695
Spain . . .	..	..	90	2,000,065
Straits Settlements . .	..	..	..	14,497
Sudan . . .	33,351	..	..	..
Switzerland . . .	..	..	308	..
Union of S. Africa . .	22,273,555	31,516,252	25,551,751	29,889,140
United States . . .	4,275,633	37,082	1,760,353	6,684,840

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EXPORTS

Country.	1925.	1926.	1927.	1928.
Arabia	£30,000	£10,000
Argentine, Uruguay, and Paraguay	£170,430	£262,000	1,425,000	..
Australia	105,278	1,055,960	817,800	1,270,124
Belgium	211,035	247,777	1,226,094	715,673
British West Africa	49,330	7,451	4,025	3,256
British India	12,976,925	2,633,961	2,560,872	2,213,090
Canada	930,000	450,000	..	1,000,000
Ceylon	390,000	544,950	28,850	..
China	32,814	44,050	..	..
Denmark . . . . .	..	..	5,775	..
Dutch East Indies	220,095	8,850	..	64,180
Egypt	647,970	246,400	780,705	284,435
France	530,866	1,696,603	969,404	19,968,833
Germany	5,849,346	12,554,569	5,170,379	21,046,590
Gibraltar	68,070	15,000	..	..
Italy	60,000	..	76,953	154,105
Kenya	46,553	45,975	55,845	58,149
Netherlands	9,741,280	3,021,518	1,332,685	715,673
Poland . . . . .	..	..	4,739,234	892,191
Roumania . . . . .	..	..	..	715,200
Russia	380,648	1,057,000	1,588,820	..
South America (apart from Argentine, Uru- guay, and Paraguay)	286,600	55,000	5,000	..
Spain	120,644	431,265	1,529,925	40,946
Straits Settlements	1,607,511	1,592,929	709,296	372,002
Sweden	200	..	53,376	500,848
Switzerland	5,053,760	871,599	1,276,657	2,772,716
United States	10,095,281	233,800	5,762,311	6,602,592

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