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(Concluded)

By A. van Oss

DETERMINING THE CAPITAL LOSS OR GAIN

Under ordinary conditions, when head office takes over any and all profits or losses made by a subsidiary company during a certain period the latter's capital is at the close of each such period restored thereby to its original amount. If after such a transfer the actual gold capital is more or less, a capital gain or loss has resulted; that is, a gain or loss not the outcome of regular operations.

In the examples given,* where nothing but ordinary business transactions took place, such an increase or decrease must be of the nature of an exchange profit or loss. To determine its extent it is, of course, necessary to compare the balance-sheets in Dutch florins at the beginning and the end of the period, viz.:

	Dutch florins		
	A	B	Increase or Decrease†
Assets			
Fixed assets	900	1,357	457
Stocks—gold	....	600	600
" —currency	....	24	24
Other current assets—net	1,800	34.50	1,765.50†
	2,700	2,015.50	684.50†
Liabilities			
Capital	2,700	1,301.50	1,398.50†
Head office	....	714	714
	2,700	2,015.50	684.50†

The comparison shows an exchange loss incurred by the subsidiary company of f. 1,398.50. This loss must be written off at the head office and the investment account will then show:

Original investment	f. 2,700
Less: Exchange loss	1,398.50
Balance	f. 1,301.50

* See The Journal of Accountancy for November, 1928.

In addition to the loss suffered on its original investment, head office has to write off the loss on subsequent currency advances. The balance of advance account shows an amount of f. 1,125 receivable from the subsidiary company, or the original florin cost of Mk. 23,800 advanced. The subsidiary company's liability being a currency liability its gold value to head office will be at the day's exchange rate of .03 or f. 714. An exchange loss of f. 411 must therefore be written off the advance account so that the Mk. 23,800 receivable will be on the books at their present gold value. The loss is made up of:

Loss on Mk. 3,700 advanced for capital expenditure at .06 or 3,700×.03	f. 111
Loss on Mk. 10,000 advanced for raw materials at .06 or 10,000×.03	300
	f. 411

This adjustment is the same as is ordinarily made at the close of a period to any account kept in foreign currency: the currency balance is taken at the day's rate of exchange and the gold amount adjusted thereto.

It will not be amiss to consider once more the head-office advances which in the first instalment of this article were assumed to be made in marks. They could, of course, just as well have been made in guilders and, instead of as a currency liability, the subsidiary company might as well have recorded them as being payable to the head office in gold. In that case the liability to head office would have been f. 1,125 instead of f. 714 as in the balance-sheet "B." However, the remaining capital would have been correspondingly smaller, in this case f. 890.50 instead of f. 1,301.50, and the exchange loss on the capital would have been f. 1,809.50 or the same amount as now shown as the aggregate loss on investment and advance account together. It does not matter, therefore, whether head office stipulates that payment of its advances shall be made in gold or not. Exchange losses are neither caused nor prevented by such stipulations. They are caused by the investment of head-office funds in assets of which the real value goes down with the currency. It is not so much a question of what the subsidiary company owes head office, for this can be made a matter of exact book record, but whether or not it can pay it back. This may be determined by the method previously described, which, notwithstanding the length at which it has been discussed, consists merely of determining the net worth in gold as at a certain date.

ASCERTAINING THE EXCHANGE RISK

Examining balance-sheet "B" (page 426), it will be seen that fixed assets and stocks represent the stable gold values that will not be subject to fluctuation and that can not be the cause of exchange loss. The net current assets, however, by which are meant domestic accounts receivable, cash and bank balances and other currency assets less debts payable in currency, are subject to further reduction in value. To cover against the exchange risk involved in the current-asset position of the moment, it will be necessary in this case to sell for future delivery an amount of paper marks equal to the net current assets, or Mk. 1,150, paper. The general method of finding the currency amount to be covered has already been indicated. It consists of:

(1) Transferring profits or losses to head office.
(2) Separating the gold from the currency value.

The amount of currency which head office has to sell for future delivery will then be the total net currency assets. If the outside currency liabilities should exceed the currency assets, head office will have to buy instead.

SHOWING GOLD AND CURRENCY POSITION ON THE BOOKS

The head-office books will now show the investment in and advances to the subsidiary company as follows:

Investment account	f. 1,301.50
Advances	714
Together	f. 2,015.50

The aggregate is on the subsidiary company's books represented by (see gold balance-sheet "B"):

Gold assets	f. 1,981
Other assets	34.50
	f. 2,015.50

To permit head office to display its "gold" and "currency" position, or how much there is invested in gold and other values, the advance account may be divided into a gold and currency advance, and the books will then show:

Investment account	f. 1,301.50
Advances—gold	679.50
	f. 1,981
Advances—currency (Mk. 1,150)	34.50
Together	f. 2,015.50

The currency-advance account should be kept in marks and florins, the mark balance to agree with the corresponding balance on the subsidiary's books. On these books a like separation should be made in the head-office account (Mk. 23,800), and they will then show:

Head office—gold account (f. 679.50)	Mk. 22,650
Head office—currency account	1,150
Together	Mk. 23,800

The gold account should be kept both in florins and in marks, the florin balance to agree with the corresponding head-office balance.

This transfer permits a division of the subsidiary company's gold balance-sheet "B" into self-balancing gold and paper positions viz.:

C. Gold balance-sheet showing division into gold and currency sections

Assets	Gold	Currency
Fixed assets	1,357	....
Stocks	624	....
Other current assets	....	34.50
	1,981	34.50
Liabilities		
Capital	1,301.50	....
Head office—gold	679.50	....
Head office—currency	....	34.50
	1,981	34.50

As long as this division and agreement with the head-office books are adhered to, all exchange risk will be eliminated from the gold position, for the head-office investment plus gold advances will be represented by stable gold assets of the subsidiary company. Consequently the entire exchange risk will be found inherent in the currency position.

At the end of each book period and after the transfer of operating profits or losses to head office a balanced currency position will show the amount of currency that should have been sold for future delivery. Herein lies a simple method of controlling the actual advance purchases and sales of foreign currency made to cover against risk, and this advantage would by itself justify the separation.

It should here again be explicitly stated that the subsidiary company's books are as a rule kept in paper currency throughout the period of instability and will therefore not directly produce a balance-sheet of any practical significance. A serviceable statement of assets and liabilities in a stable currency therefore has to be prepared outside the books.

MAINTAINING A COVERED GOLD AND CURRENCY POSITION

On the date of balance-sheet "B" and as shown on balance-sheet "C" the gold as well as the currency position was balanced and covered. This condition will not endure and the state of equilibrium will be disturbed as soon as (a) assets of intrinsic gold value are acquired or disposed of for paper currency, or (b) are used in the manufacture of the product of which the proceeds are ultimately collected in paper, or (c) any other mutation between gold and paper currency values take place. Nor will the currency position remain covered unless steps are taken (d) to cover the profits or losses on the sale of the product as well.

It will be of interest to see by a few examples illustrating the foregoing cases how the balance may be upheld.

(a) *Capital expenditure*

If additions to the fixed assets are financed out of the current funds of the subsidiary company a gold asset is acquired for an outlay of paper money. To keep the gold and the paper section of the books in balance, apart from the usual entry recording the expenditure (1), a transfer (2) will have to be made between these sections as follows:

(1) Fixed assets	......	
To cash		......
(2) Head-office currency account	......	
To head-office gold account		......

On the head-office books a corresponding transfer must be made, viz.:

Advances to subsidiary company—gold	......	
To advances to subsidiary company—currency		......

These entries are in substance the same as if head office had advanced the gold wherewith the subsidiary company finances the addition and the subsidiary company had remitted to head office the equivalent in currency.

Head office has hereby created a paper liability to the subsidiary company and, to cover against the exchange risk, should purchase the amount in foreign currency for future delivery.

If the additions are financed by head office no cover will be necessary, for the mutation would be among gold assets only and the entries would be:

On the subsidiary's books

Fixed assets..............................	......	
To head office—gold account..............		......

On the head-office books

Advances to subsidiary company—gold.......	......	
To cash..............................		......

(b) *Depreciation*

In the case of charging the depreciation of fixed assets to the operations a portion of the gold assets is absorbed in an asset—the manufactured product—for which paper is ultimately realized. Depreciation must therefore be calculated on the gold value of the fixed assets. If conditions in the foreign country permit, the subsidiary may accordingly charge depreciation to the operations in gold, and entries opposite to the above will again make the two sections of the subsidiary company's books balance:

(1) Operations...........................	......	
To fixed assets......................		......
(2) Head office—gold account...............	......	
To head office—currency account........		......

The corresponding entry on the head-office books will be:

Advances to subsidiary company—currency ..	......	
To advances subsidiary company—gold...		......

In substance these entries show a gold remittance to head office equivalent to the value of the gold asset used, and the reimbursement by head office in paper.

Head office has hereby created a paper claim upon the subsidiary company and, to cover against the exchange risk, should sell the amount in foreign currency for future delivery.

Conditions in foreign countries did not, however, always permit this advance selling or buying. In several countries—Belgium, for instance—it was not permitted to give effect upon the books to any change in money values. Depreciation had to be calculated at the usual rates on the currency book values of the fixed assets and had to be written off in currency. The result was that the books showed profits higher than actual profits. As will be seen hereafter (d) the book profits were likewise subject to cover against exchange risk and the difference between gold and paper depreciation was thus automatically included in the amount of currency sold. However, the book profits were unreal to the extent of the difference between gold and paper depreciation and if they were taken up in their entirety the head-office books would have shown as a profit an amount that in fact should have been applied in reduction of the fixed assets. This again illustrates the difficulty of distinguishing between capital and income in times of fluctuating money values.

In case the subsidiary company for one reason or another must charge depreciation in paper currency, head office has to make the following correcting entry:

Profit and loss	......	
To reserve for depreciation—subsidiary company		......
To increase the subsidiary company's reserve for depreciation as follows:		
Gold depreciation required	......	
Less: Depreciation charged in currency at the rate at which estimated profits were covered	......	
	......	

In this manner the subsidiary company's book profits are corrected to the amount that will be realized and the head-office books will supply the missing portion of the depreciation reserve.

(c) *Raw materials and other stocks*

Raw materials and other stocks, whether bought in foreign or domestic markets, should be carried on the books of the subsidiary company as gold assets. Their treatment on the books upon purchase and use is identical with that of fixed assets and depreciation, and to cover the exchange risks arising from these transactions similar purchases and sales of currency for future delivery must be effected.

It should not be thought, however, that the simple device of carrying stocks as gold assets will prevent exchange losses thereon in all circumstances. This will be the case only as long as they remain in their original condition or when the manufactured product can be sold at an actual gold profit.

Raw materials and other stocks are certainly gold assets. As soon, however, as they enter into the manufactured product they assume a good deal of the nature of a currency asset. The domestic market price of the product does not immediately rise in proportion to the fall in the currency rates or vice versa, but lags behind in the movement of the exchanges. In an unstable exchange market this slow response makes the use of the stocks subject to certain risks even if they are carried and treated as gold assets.

It is, of course, quite feasible to charge the raw materials to the product at the currency equivalent of their gold value, but when the sales price depends upon domestic market conditions the original gold value can not always be recovered. The result will then appear as an operating loss which is directly, though perhaps not entirely, caused by the continuous fall of the exchange rate and the slow response thereto of domestic market prices. The fact that no exchange loss is shown should not lead to the belief that none exists.

Whether carried in gold or not, the fact that through manufacture into a product sold in the domestic market raw materials change from a gold into a currency asset makes their use subject to exchange risk.

(d) *Profits or losses*

The covering of the mutations between gold and currency assets would suffice to keep the paper as well as the gold position covered were it not that profits or losses of the subsidiary company are yet to be taken into account. They must be covered if it is desired to exclude exchange risks thereon—or rather on the currency assets or liabilities in which they will ultimately be expressed. They must be covered not at the time they are realized but in advance, i.e. at the time the expenditure on the basis of which the results are estimated is incurred. If they were covered later, the gold equivalent would, on account of intervening exchange fluctuations, be different from the amount expected. The only way to avoid this is by covering the estimated amount instead.

An estimate under unstable currency conditions is possible only if the ultimate proceeds and the operating expenses can be ascertained in advance. Under conditions prevailing in Germany in the latter half of 1923 they had to be determined almost daily, based upon a system of daily reports from outlying points concerning the factors determining the net proceeds, as will be mentioned later.

The expected profits will ultimately be collected in paper currency and to cover against exchange risks thereon head office must sell the amount of this currency for delivery at the expected date of collection. On the other hand, if a loss is expected, head office must buy for delivery at the time when the subsidiary company is to be reimbursed for its loss of capital.

By following the method of accounting and rules of covering outlined, a condition will be maintained where gold and currency assets are respectively offset by gold and currency liabilities. As long as this condition exists and the amount of the net currency assets is sold forward there can be neither exchange losses nor exchange profits, for both the gold and the currency position are then covered.

Failure to follow in substance this method of accounting, either at the head office or by the subsidiary, will result in great difficulty in judging the exchange position, i.e. the extent to which forward sales or purchases of domestic currency must take place.

On the other hand, failure to sell or purchase as the circumstances made evident by these accounting methods demand will mean failure to cover the risk and the admittance of an element of speculation which, according to the exchange position and the ups and downs of the market, may cause a profit or a loss.

As mentioned earlier in this article, the question whether the risk should be covered or not, and if so to what extent, is one for good judgment. The question whether or not the books should show the extent of the risk can be more definitely answered. Undoubtedly, in periods of pronounced inflation or deflation, or instability of the currency beyond the fluctuations of ordinary times, the books should readily furnish this information. The remaining portion of this article will show the means whereby this may be brought about after—as a necessary preliminary—any existing exchange risk has been determined.

THE POSITION RECORD

The principal purpose of this article has been to discuss the methods of ascertaining a holding company's exchange position and the more important facts and conditions that affect it. There now remains to be said something concerning the bookkeeping methods by which the exchange risks are ascertained and covered. Necessarily the examples given herein are limited in number and represent only the principal types of transactions that have to be considered in the actual practice of covering the risks. Within a large international concern a great many transactions of this kind continually take place and it is necessary to devise methods whereby the exchange risks may instantly be known in their aggregate. The financial head office, if situated in a country with a stable currency, is the logical center where the reports of these transactions will converge and where consequently the total risk in each foreign currency can be computed and covered. If not, it may be of great advantage to organize a financial center for this purpose in such a country. If for any reason the actual advance sales and purchases of exchange necessary to cover are made by other than the financial center, these sales and purchases should always be under its control. The computation of the exchange risks should, however, always take place at one central point.

The method of computing is very simple. It consists of listing —separately for each currency—the subsidiary companies' currency transactions with the head office. The record required, usually called the "position" record, should be in columnar form, two columns being required for each currency—one column for the transactions resulting in a debit and one for those resulting in a credit to the subsidiary company. The total debits of the day or period give the amount of currency that is to be sold; the total credits, what is to be bought for future delivery. The two will partly offset each other so that each day's cover will consist of the sale or the purchase of their balance.

Inasmuch as the currency transactions must be covered promptly they are usually entered first in the position record and afterward on the other books. As will be inferred from the preceding sections these transactions not only consist of the usual debits and credits passing between the offices but also of those that become necessary on account of the exchange conditions. They should, therefore, include those appertaining to additions to fixed assets paid out of the subsidiary company's current funds, depreciation of fixed assets, raw materials purchased in the domestic markets and estimated profits. Transactions of this kind, if originating with the subsidiary company, must be promptly reported to head office and the latter should also be furnished with all the information necessary to make a reasonably correct estimate of the profits.

It is quite evident that no gold transactions either internal or with outsiders need be covered as long as a gold debit offsets a gold credit on the subsidiary company's books, or, in other words, if self-balancing gold and paper currency positions are maintained. Nor is it then necessary to consider any of the subsidiary company's internal currency transactions, for they do not affect the exchange position of the head office except to the extent that they result in a profit or a loss, and this must be considered separately.

Strictly speaking, the position record should also indicate the approximate period for which each amount has to be covered, so that the record may show the foreign currency that must be sold or bought for delivery in say one, two or three months. The actual advance sales and purchases could then be made accordingly and the foreign currencies available for delivery would correspond better with the daily or periodical requirements.

Whenever a large number of transactions is continually involved this theoretically more correct procedure need not be followed and the shorter method will answer all practical requirements. This will be evident when it is observed that advance purchases or sales, equaling the difference between the currency to be bought and sold, are as a rule actually made from day to day.

In consequence every day definite sums of foreign money will have to be delivered or taken. If these sums do not correspond with the requirements, there is always the expedient of supplementing them by additional selling or buying for cash and at the same time buying or selling for future delivery, respectively. In this way the daily requirements are made available without disturbing the balanced position.

The position books are not self-balancing but are merely memorandum records and serve only to show daily or periodically the position with respect to each foreign currency, and thus the amount to be covered. This amount is for each currency controlled by the general books if all entries for capital expenditure, depreciation and profits or losses are periodically entered thereon, for it must then agree with the aggregate currency balances of the corresponding currency accounts. To avoid serious errors this agreement must from time to time be ascertained.

EXCHANGE PURCHASE AND SALES RECORD

The actual advance purchases and sales as well as the ultimate deliveries are of course recorded as they take place. The following entries will successively show the complete consummation of a purchase:

	Dr.	Cr.
(1) Currency bought	......	
To florins payable		......
Recording the obligation for future purchase of currency from ——— Bank.		
(2) Bank—currency account	......	
To bank—florin account		......
Florins paid for currency received.		
(3) Creditors		
To bank—currency account	......	......
Payment of currency debt.		
(4) Florins payable	......	
To currency bought		......
Recording the acquittal of the obligation for future purchase of currency from ——— Bank.		

The successive entries for a sale and the final realization of the proceeds are:

	Dr.	Cr.
(1) Florins receivable	......	
To currency sold		......
Recording the obligation for future delivery of currency to ——— Bank.		
(2) Currency in hand	......	
To subsidiary company—currency account		......
Currency received at head office.		
(3) Bank—florins account	......	
To currency in hand		......
Florins received for currency delivered.		
(4) Currency sold	......	
To florins receivable		......
Recording the acquittal of the obligation to deliver currency to ——— Bank.		

Entries (2) and (3) record the actual receipt or payment of the currency and the actual exchange of florins for currency or vice versa. They are made in the regular cash or bank registers and posted to the ledgers in the regular way so that no further comment is necessary.

Entries (1) and (4), however, record the assumption and the acquittal of the obligation to sell or buy foreign currency. It is, of course, quite feasible (a) actually to make these entries chronologically in exchange-purchase-and-sales registers; (b) to post the individual items to an exchange ledger wherein a purchase and a sales account is kept with each bank, banker or broker for each currency, and (c) to post the periodical totals of the two registers to the general ledger so as to control the exchange ledger.

An adequate control of the advance purchases and sales can, however, be instituted in a simpler way by the use of purchase-and-sales registers as memorandum records only and without posting to any ledger.

These registers might conveniently have the following columnar arrangement:

Purchase register	Sales register
(1) Date purchased	(1) Date sold
(2) Date of delivery	(2) Date of delivery
(3) Currency bought	(3) Currency sold
(4) Rate	(4) Rate
(5) Florins payable	(5) Florins receivable
(6) Date delivered	(6) Date delivered

In each register a separate page or section could be given to each bank for each currency, and the entries should be made directly from purchase or sales slips, bank notices or other original vouchers. The first five columns of each register would record the original advance purchase or sale and the notation of the delivery in the sixth column the acquittal of the obligation. The unsettled items could be verified by comparison with periodical statements from banks, bankers and brokers and also with the internal record of the maturities of the purchase and sales obligations. At any time the unsettled items could be drawn off, summarized by currencies, banks, maturities or in whatever way might be desired.

* * * * *

It is not pretended that in this article full justice is done to its subject and it is presented to the readers of the JOURNAL with apologies for evident shortcomings. The main object has been to show accountants how to deal with a situation that may confront them in their own professional or business careers.

Definite and approved ways of dealing with exchange problems in prolonged periods of great instability were not generally known before the war, and they developed only after the situation began to call for action and remedy. Enormous sums of money were lost through inaction and blundering effort, and suitable methods were only discovered when underlying principles became clearly understood.

The treatment of the subject has been kept as simple as possible and clearness in examples and argument has been the object. The writer hopes that he has been successful in freeing from encumbrances a topic that is unnecessarily surrounded with much mystery and that he has been able to show it quite susceptible of plain demonstration.

He also wants to acknowledge great indebtedness to his Dutch colleagues who did much to enlighten him on a difficult subject. They remedied to some extent an extreme ignorance possibly shared by other American accountants in whose practice such problems of foreign exchange and stabilization do not often present themselves.