
FAS#52-Measuring

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the Performance of Foreign Operations

Introduction

During 1981, a British company purchased a business in the United States. The exchange rate was £1 = \$2.50. The business made a low return during its first year—at least according to the dollar measurements. The value of the pound, however, fell to \$2.00. Did the corresponding increase in the value of the dollar make the British company better off? Should the increase be reflected in the measurement of the income of the British company? How should the effect be measured and reported?

These questions seem to have been the most controversial considered in recent years by the bodies that set accounting standards in the United States and the United Kingdom. Other current issues such as accounting for the effects of changing prices, for leases, and for pension costs all present significant challenges. But none of them has provoked a level of concern in business comparable to that kindled by foreign currency translation.

No doubt this concern is attributable partly to the difficulty of the issues. Two methods of foreign currency translation have emerged as rivals, and neither has been acknowledged to have clear-cut superiority. A more important reason for corporate concern, however, is the magnitude of what is at stake. Many businesses now have large overseas operations; and exchange rates between different currencies can fluctuate with extreme volatility. Consequently, the choice of translation method can have a big impact on reported results.

Foreign currency translation also has an importance beyond its impact on financial statements published for shareholders and others. It is essential to the management functions of performance evaluation and control within the multinational company. Managers need to decide where changes should be made in their operations, where invest-

ment should be increased and where it should be cut back. And, in evaluating the success of such investment, multinationals need to be able to distinguish the performance of managers of overseas operations from the performance of the company as a whole.

The performance of overseas managers should be assessed mainly by comparing their performance with standards that reflect conditions in the local operating environment (i.e., local rates of interest and inflation). Finally, however, the success of a multinational's overseas investment policy must be evaluated according to the returns it generates for shareholders in the home country. Reported results should be consistent with investment policy in the sense that if the policy serves the interests of shareholders, and if actual results are as expected, then the reports should signal success.

Perhaps this aim of consistency is the most important consideration in formulating an approach to the translation of foreign currency. After translation, the reported results should reflect "economic reality"—insofar as this is possible, given the fallibility of accounting conventions—as perceived by everyone concerned. *The ultimate goal of overseas investment is to earn a satisfactory rate of return as translated into and measured in the home currency.* Many intermediate objectives like expanding market share, increasing profit margins, and minimizing political and economic risk will feature in management's decisions. But the translated rate of return is the "bottom line." Thus, earning a satisfactory rate of return in the overseas currency is neither necessary nor sufficient in itself. A return of 5 percent per year in a currency that is appreciating by 20 percent against the home currency will produce an effective return of over 25 percent per year, which may well be satisfactory. A return of 40 percent in a currency depreciating by 50 percent is not satisfactory.

The best way to assess whether an overseas investment has been satisfactory is to measure the net *cash flows* generated by the investment, translate them into terms of the home currency, and discount them at the appropriate cost of capital to obtain a net present value. This computation, however, can only be performed at the *end* of an investment's life. The challenge for accounting, of course, is to give good indications of the progress of the investment at *interim* stages — annually, or perhaps more frequently. In this routine accounting, future benefits have to be represented by asset measurements rather than estimates of cash flows. Because asset measurements often serve only as a rough indicator of future cash flows, accounting reports must inevitably remain an imperfect guide to the success of an investment. Nevertheless, as we shall see, some accounting methods are better than others.

Let us now consider a simple example which serves to illustrate the issues involved in choosing between the two main alternative methods of foreign currency translation. We shall consider again a company owned in Britain and operating in the United States, and we shall further assume that the exchange rate moved from exactly £1 = \$2.50 at the start of the year to £1 = \$2.00 at the end of the

year. This means that the dollar effectively gained 25 percent against the pound: \$100 increased in value from £40 to £50. The income statement and balance sheet (in dollars) of this hypothetical American subsidiary are shown in Table 1 and the income computation is shown in Table 2.

Our company has earned \$700 during the year, a return of 10 percent on the \$7,000 of equity capital employed. When results are translated into pounds, and if the accounting measure is to be consistent with economic reality, the outcome should be a rate of return of about 35 percent—the dollar return of 10 percent combined with the effect of the appreciation of the dollar at 25 percent. (Strictly, the return should be 37.5 percent, the product of 1.10 times 1.25 less 1.00.)

The Temporal Method

The two most frequently advocated methods of foreign currency translation are known as the "temporal" method and the "current" method. The temporal method was the basis for FAS 8, the U.S. standard on foreign currency translation issued by the Financial Accounting Standards Board in 1975. The temporal method takes the view that each compo-

	At Start	At End
Fixed Assets		
Cost	\$20,000	\$20,000
Depreciation	8,000	9,000
Cash	\$12,000	\$11,000
	—	1,700
Less Debt	\$12,000	\$12,700
	5,000	5,000
Equity	\$ 7,000	\$ 7,700

Sales		\$29,000
Depreciation Expense	\$1,000	
Interest Expense	400	
Other Expenses	26,900	28,300
Income		\$ 700

nent of the financial statements should be translated at the exchange rate that matches the timing of the accounting measurement of that component. For example, fixed assets and the related depreciation are measured at historical cost in conventional accounting. Under the temporal method, accordingly, they are translated at an historical exchange rate (the rate at the date of acquisition). Debt, however, is normally carried in the balance sheet at an amount that represents the current extent of the obligation. Consequently, under the temporal method, debt is translated at the current exchange rate.

To obtain the results of applying the temporal method to our numerical example, we need to know the exchange rate at the date of acquisition of the fixed assets. Let us truncate history and assume a historical rate of \$4 to £1. The computations are set out in Tables 3 and 4.

The first step is to convert net assets at the start of the year into pounds. Fixed assets in dollars are divided by four to obtain the number in pounds;

debt is divided by 2.5. Next, net assets at the end of the year are converted into pounds. We then can see that net assets (equity) increased from £1,000 to £1,100. Since no dividends were paid and no new equity capital was raised, income is equal to the increase in net assets, i.e., £100.

Direct translation of sales and expenses gives income of £600; this is reduced to £100 by the loss of £500 on translation. The loss arises because the translation rate for the loan is changed from 2.5 to 2, causing the amount of the loan in pounds to increase from £2,000 to £2,500. The computations are recognizing, in effect, that repayment of the loan will be more expensive if it is made in pounds.

The main shortcomings of the temporal method are apparent from our example. First, the method seems to produce a significant distortion in the ratio of debt to total capital employed. The ratio is 41.6 percent in the dollar report at the start of the year. In the corresponding statements in pounds, the ratio is 66.6 percent. This distortion results from the use of different rates for the translation of fixed

	At Start			At End		
	\$	\$/£	£	\$	\$/£	£
Fixed Assets						
Cost	\$20,000	4.00	£ 5,000	\$20,000	4.00	£ 5,000
Depreciation	8,000	4.00	2,000	9,000	4.00	2,250
	\$12,000		£ 3,000	\$11,000		£ 2,750
Cash	—		—	1,700	2.00	850
	\$12,000		£ 3,000	\$12,700		£ 3,600
Debt	5,000	2.50	2,000	5,000	2.00	2,500
Equity	\$ 7,000		£ 1,000	\$ 7,700		£ 1,100

	\$	\$/£	£	£	
Sales			\$29,000	2.00	£14,500
Depreciation Expense	1,000		400	4.00	250
Interest Expense	400		200	2.00	200
Other Expenses	26,900		28,300	2.00	13,450
Operating Income			\$ 700		£ 600
Translation Adjustment (Loss)			—		(500)
Total Income			\$ 700		£ 100

When exchange rates fluctuate sharply around a trend, the measurement of income can come to seem like the result of a lottery.

assets and debt. A similar problem afflicts the computation of income. A loss is recognized on the debt but no offsetting gain is claimed on the fixed assets as a result of the appreciation of the dollar. The rate of return on equity, far from being the 37.5 percent we expected, is shown as 10 percent (£100/£1,000).

The disparate treatment of fixed assets and debt has been the main reason for criticism of the temporal method. As businessmen have been quick to point out, loans are usually raised to finance purchase of the fixed assets, and such loans are likely to be repaid in the foreign currency rather than in home currency. Assets and loans effectively hedge each other, at least to some extent, and any translation method that treats the two items differently fails to reflect economic reality.¹

The difficulties described are bad enough

when currency exchange rates move steadily in the anticipated direction. When the rates fluctuate sharply around a trend, however, the effects on income can be dramatic. Indeed, the measurement of income can come to seem like the result of a lottery. Criticism directed at these arbitrary effects, and at the resulting distortions of real overseas operating performance, caused the Financial Accounting Standards Board to reconsider FAS 8 and the problem of foreign currency translation.

The Current Method

The idea that assets and loans should be translated at the same rate led naturally to the consideration of the current method. This method calls for translation of *all assets and liabilities at the exchange*

TABLE 5
Net worth converted into
£—Current Method

	At Start			At End		
	\$	\$/£	£	\$	\$/£	£
Fixed Assets						
Cost	\$20,000	2.50	£8,000	\$20,000	2.00	£10,000
Depreciation	8,000	2.50	3,200	9,000	2.00	4,500
	\$12,000		£4,800	\$11,000		£ 5,500
Cash	—		—	1,700	2.00	850
	\$12,000		£4,800	\$12,700		£ 6,350
Less Debt	5,000	2.50	2,000	5,000	2.00	2,500
Equity	\$ 7,000		£2,800	\$ 7,700		£ 3,850

TABLE 6
Income Measured in £—
Current Method

	\$	\$/£	£	£	
Sales			\$29,000	2.00	£14,500
Depreciation Expense	1,000			2.00	500
Interest Expense	400			2.00	200
Other Expenses	26,900		28,300	2.00	13,450
Operating Income		\$ 700			£ 350
Translation Adjustment (Gain)		—			700
Total Income		\$ 700			£ 1,050

1. If borrowing is at a fixed rate of interest while cash flows generated by fixed assets are variable, unexpected price changes can detract from the hedging to some extent. The best hope for dealing with such a situation is not in retaining the temporal method, but in using current measurements of both assets and liabilities.

rate prevailing at the balance sheet date. The results of applying this method to our example are shown in Tables 5 and 6. The computations follow the same process as before with one exception: net assets are translated at \$2.50 at the start of the period, but at \$2.00 at the end.

A comparison of net asset numbers shows that net income for the period is £1,050. The income statement shows this to be made up of operating income of £350 plus a translation gain of £700. In effect, the current rate method recognizes a gain on translation of the fixed assets. At the start of the year, the fixed assets are measured at £4,800, and £500 is deducted for depreciation during the year to leave £4,300; however, with the fall in the exchange rate, end-of-year assets are measured at £5,500 and a gain of £1,200 results. The gain of £1,200 less the loss (which still arises) of £500 on the loan gives net translation gain of £700.

The current rate method thus gives us a rate of return measured at 37.5 percent (£1,050/£2,800), which accords with the economic reality as identified above.

To the extent that we can generalize from this example, the current method is a major improvement over the temporal method. However, the users of accounts need to keep in mind that the usefulness of both methods is limited by the accounting convention of valuing assets at historical cost. Furthermore, if assets are measured at historical acquisition costs, translation of fixed assets at the current exchange rate will produce a number that is hard to interpret. Historical cost multiplied by the historical exchange rate produces a number that at least can be recognized as the sacrifice of funds of the "home currency" required to pay for the asset at the date of acquisition. Historical cost multiplied by the current exchange rate, however, produces a number that lacks any economic significance.

TABLE 7
Net worth converted into
£; Revised Case—Current
Method

	At Start			At End		
	\$	\$/£	£	\$	\$/£	£
Fixed Assets						
Cost	\$20,000	2.50	£8,000	\$20,000	2.00	£10,000
Depreciation	8,000	2.50	3,200	9,000	2.00	4,500
	\$12,000		£4,800	\$11,000		£ 5,500
Cash	—		—	1,000	2.00	500
	\$12,000		£4,800	\$12,000		£ 6,000
Less Debt	5,000	2.50	2,000	5,000	2.00	2,500
Equity	\$ 7,000		£2,800	\$ 7,000		£ 3,500

TABLE 8
Income Measured in £;
Revised Case—Current
Method

	\$	\$/£	£	£	
Sales			\$28,300	2.00	£14,150
Depreciation Expense	1,000			2.00	500
Interest Expense	400			2.00	200
Other Expenses	26,900		28,300	2.00	13,450
Operating Income		\$ 0			£ 0
Translation Adjustment (Gain)		—			700
Total Income		\$ 0			£ 700

A preference for the current rate method rests on a belief in the desirability of eliminating one cause of the divergence of accounting reports from economic reality.

The implications of this situation can be illustrated by modifying slightly our above example. The result is a case that is less favourable to the current rate method. Suppose that the effective return in dollars remains at 10 percent but that, during the year under review, the return is earned partly in an increase in fixed asset values, reflecting an expected increase in future cash flows: the current cost of fixed assets (net of depreciation) is \$11,700 compared to the historical cost of \$11,000 in our previous illustration, but sales are only \$28,300 and cash at the end of the year only \$1,000 (a decrease of \$700). The accounts based on historical cost measurements (see Tables 7 and 8) show income of zero in dollars, and £700 in sterling.

The return of 25 percent (£700/£2,800) now shown by the current method fails to match the "real" return of 37.5 percent; and the fixed asset measurement, still \$5,500, now is simply historical

cost times the current exchange rate and fails to represent any real economic magnitude.

In this same case, however, use of the temporal method of translation would actually show a loss (see Tables 9 and 10).

Thus, even though the current method is inadequate here, it still represents an improvement over the temporal alternative.

To strengthen further the correspondence between accounting and economic "reality," it would be necessary to use current cost measurements of all assets and liabilities. In that event, both the current and the temporal method would call for translation at the current exchange rate.

In practice, when accounting measurements reflect historic costs, we cannot generalise about the relationship between the choice of translation method and the usefulness of the accounting rate of return as an indicator of economic performance. In

TABLE 9
Net worth converted into £; Revised Case—Temporal Method

	At Start			At End		
	\$	\$/£	£	\$	\$/£	£
Fixed Assets						
Cost	\$20,000	4.00	£5,000	\$20,000	4.00	£5,000
Depreciation	8,000	4.00	2,000	9,000	4.00	2,250
	\$12,000		£3,000	\$11,000		£2,750
Cash	—		—	1,000	2.00	500
	\$12,000		£3,000	\$12,000		£3,250
Less Debt	5,000	2.50	2,000	5,000	2.00	2,500
Equity	\$ 7,000		£1,000	\$ 7,000		£ 750

TABLE 10
Income Measured in £; Revised Case—Temporal Method

	\$	\$/£	£
Sales	\$28,300	2.00	£14,150
Depreciation Expense	1,000	4.00	250
Interest Expense	400	2.00	200
Other Expenses	26,900	28,300	13,450
Operating Income	\$ 0		£ 250
Translation Adjustment (Gain)		—	(500)
Total Income	\$ 0		£ (250)

Management's main responsibility should be to provide investors with the fullest possible disclosure of their international operations, and leave interpretation to the markets.

some cases, the temporal method may produce a better approximation of the actual return than the current rate method. For example, an unrecorded increase in the current cost of fixed assets may be offset by the failure, under the temporal method, to recognise the effect on the value of the assets of a fall in the value of the foreign currency. We do not know the average effect, based on empirical data. A preference for the current rate method rests on a belief in the desirability of eliminating one cause of the divergence of accounting reports from economic reality. Further improvement requires the adoption of current measurements for assets and liabilities.

It is difficult to say what effect the distortions caused by accounting currency translations have on the stock prices of multinationals. The stock market, under the guidance of sophisticated investment analysts, may see through most of these distortions. Investors, after all, use information about the company's past mainly as a basis for predictions of future performance. They may use a variety of disclosures to draw inferences about the real value of a multinational's foreign assets. If such is the case, the choice of method of currency translation would have little importance for investors — though use of a poor method may increase their costs of analysis. In a reasonably sophisticated market, however, management's main responsibility should be to provide investors with the fullest possible disclosure (of accounting methods as well as results) of their international operations, and leave interpretation to the markets.

Failure to use the best accounting methods may be more important for other uses, such as government economic policy decisions. For corporate purposes, however, greatest importance attaches to the application of these accounting methods to internal evaluation of overseas performance, which may in turn affect management compensation and capital investment decisions. Part of the problem of evaluating overseas managers can be dealt with by using local rates of interest and inflation as standards for assessing the adequacy of rates of return measured in the local currency. For the purpose of capital allocation, however, the home country financial management must attempt to estimate the effects of currency changes on the long-run profitability of proposed international investments; and control procedures will need to focus on a comparison of actual and estimated returns in the home currency. Management thus would benefit from knowing the current value of net assets employed, trans-

lated at the current exchange rate. This measure the amount in a way that gives a useful basis for assessing home currency rates of return.

Consequently, we find that the foreign currency translation problem cannot be resolved in a satisfactory manner until we have dealt with the logical prior deficiency of historical cost measurements. To the extent that fixed assets are valued at or near the current values on the balance sheet, translation at the current exchange rate will provide a useful picture of profitability. The fact that large multinationals like Phillips N.V., TRW, and GE have chosen to make current measurements, at least for internal purposes, suggests that recognition of their usefulness may be spreading. If such adjustments are not practicable, or cost too much to produce, then historical cost measurements may offer the most reliable, cost-effective estimate of the current worth of resources within the conventions of accounting (which place heavy store on the use of reliable measurements). Under these conditions, the translation of our best measurement of current worth — dollars at our best estimate of the value of the dollar — i.e., the current exchange rate — then seems quite reasonable.

Such, at any rate, was the thinking of the Financial Accounting Standards Board when they chose to adopt the current rate method in Statement No. 5 *Foreign Currency Translation*, issued in December 1981 as a revision to Statement No. 8. The U.K. Accounting Standards Committee has issued a statement in the last few months. It is the first U.K. standard on foreign currency translation and it also adopts the current rate method.

The Measurement of Income

Apart from the limitations of historical cost conventions, can we conclude that the difficult problem of foreign currency translation has not been solved in a satisfactory manner and that the issue can be allowed to rest? The answer, unfortunately, is "No." One small provision, included both the US and the UK standard, means that translated income statements still fail to capture the essence of overseas operations: "Translation adjustments shall not be included in determining net income but shall be reported separately and accumulated in a separate component of equity (FASB Statement No. 52, paragraph 13). As a result of this provision, reported income in our basic numerical example would be determined under the cu-

The foreign currency translation problem cannot be resolved until we have dealt with the logically prior deficiency of historical cost measurements.

rent rate method to be only £350, a rate of return of 12.5 percent (See Tables 5 and 6).

The standard setters were probably led to exclude the translation adjustment from the income statement because of a wish to preserve, as far as possible in the translation process, all financial ratios at their levels in foreign currency statements. The observed distortion in the debt-to-equity ratio had helped to discredit the temporal method, and it was no doubt felt that distortion should be similarly avoided in the income statement. Also, the recognition of the gain on translating fixed assets may have been seen as akin to the recognition of an unrealized profit.

Both of these concerns, however, seem unrelated to the main purpose of financial reporting. Gains and losses on foreign currency are intrinsic parts of the reality of overseas investment, and that reality should be reflected in financial reports. This point may be illuminated by considering the likely cause of changes in exchange rates. A depreciation of the £ against the dollar is likely, over long periods of time, to reflect the existence of a higher rate of inflation in the U.K. than in the U.S. For example, a depreciation of 25 percent would be expected if the rate of inflation were zero in the U.S., but 25 percent in the U.K. This change in the exchange rate would keep the relative prices of goods in the two countries constant.

Suppose those circumstances actually held, and the rate of return net of inflation was 10 percent (as in our illustration) according to the dollar measurements. If the translation gain were excluded from income, the rate of return would be represented as 12.5 percent in sterling (as computed above), and the return net of inflation would appear to be negative. Inclusion of the translation adjustment in income would give a return of 37.5 percent in sterling, high enough to show that the investment overseas is worthwhile in spite of the high rate of inflation in the U.K.

From this perspective, the translation process can be seen in part as an adjustment of income numbers to reflect operating rates of return in the home country currency *gross of any adjustment for inflation*. Such a process effectively takes account of differences between the inflation rates of the countries concerned. Or so it would, if changes in exchange rates always perfectly reflected changes in relative rates of inflation.

Foreign currency exchange rates, however, do not perfectly reflect differences in rates of inflation, particularly over short periods of time. Short-term capital flows associated with differences in interest rates and other factors can cause significant changes in exchange rates independently of prices. Only over the long run can it be said that exchange rate changes are determined largely by differences in inflation rates.

Most importantly for our purposes, however, changes in exchange rates do make businesses better or worse off. They are prices that determine the ultimate worth, in the home country, of cash flows generated by the overseas business. An income computation should reflect, as far as possible, all factors that make a business more or less profitable.

The performance of an overseas manager may best be judged in terms of the results measured in overseas currency, and set against standards of performance in the country concerned. The performance of the whole business—that is, its contribution to the value of the parent company and stockholders' investment—must be measured in the home currency. For that purpose exchange gains and losses are a part of the performance. It may be reasonable to recognize the volatility of exchange rates by showing gains and losses on translation in a special section of the income statement, perhaps grouped with extraordinary items. If the intent is to measure real economic performance, however, it is not fitting to exclude them from income altogether.

A Proposal for Measuring International Performance

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Introduction

In principle, there should be no difference between the evaluation of foreign and domestic operations. The central issues are the same: Has the operation added to the value of our shareholders' investment? To what extent is local operating management responsible for the unit's success or lack of it? Can additional capital be invested profitably?

Resolving these issues for foreign operations is more difficult, however, for several reasons. First, inflation rates overseas often are orders of magnitude higher than those in the United States. This renders conventional, historical-cost accounting statements nearly meaningless. When inflation is high, profits are overstated due to illusory holding gains, while assets, and thus the capital base, are carried at values well below current replacement cost.

Of course, this problem is not unique to foreign operations, just more pronounced. While the tendency has been for management to ignore the effects of inflation when evaluating performance in dollar terms (witness the general lack of interest in FAS #33 inflation-adjusted figures), this oversight becomes critical when evaluating foreign performance. For, differences in rates of inflation between countries are the primary reason—at least over the long run—why currencies change in value relative to each other. Currency translation and inflation accounting are thus inextricably linked. To measure performance properly, the effect of inflation must be built into local financial statements *before* it can be offset by currency translation.

The second problem is caused by exchange rate fluctuations that distort the income from, and thus the value of, foreign investments when translated into dollar terms. While local management may believe it is performing quite well, a sudden realignment of currency values can produce an entirely different impression for home country management. At other times, local performance may be exaggerated by translation gains that are unlikely to recur.

Corporate managers are understandably concerned that investors will penalize their company with a lower stock price because of the earnings volatility caused by currency fluctuations. The natural reaction is thus to hedge accounting exposure, and to shy away from foreign investments where there is a great likelihood of currency instability. Such a reaction, however, is clearly not always in the best economic interest of the firm, or its stockholders. In order to explain why this concern with accounting exposure is misplaced—whether under FAS #8 or the newly adopted FAS #52—we need to begin with an understanding of (1) what causes exchange rates to fluctuate and (2) how influential investors really appraise the performance and value of foreign operations.

Exchange rates tend to fluctuate around an "intrinsic" value. They may be overvalued for a period of time, and then experience a dramatic devaluation that merely offsets the accumulation of past inflation. At other times exchange rates can move in *anticipation* of coming changes in economic condi-