Effective use of capital

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The effective use of capital within a company is vitally important to its success. There will, of course, be differences of opinion voiced within a company about who can more effectively use the available capital, but it should be possible for people with various functional backgrounds such as sales, production, and accounting to reconcile their parochial viewpoints and to aim jointly for a common goal. It is important to recognize the cost of capital and to use it where it will produce the best return on the investment.

The use of the return-on-investment concept as an objective test of planning and as a measurement of performance has been given a substantial boost by the post-war trend toward diversification through merger and acquisition and the concurrent trend toward the centralization of profit responsibility. One of the reasons for its widespread application is that it translates financial objectives into more familiar terms, such as selling prices, profit margins, sales turnover, operating costs, and capital equipment which are more easily understood by sales and production personnel.

Where two businesses are operating independently, the earning statements of each will give a reasonable indication of the return on investment. When these entities become merged, however, and various administrative functions are shared jointly, it becomes more difficult to determine the contribution of each to the over-all profits of the company. The same is true when there are various divisions within a company or when various product groups are competing for the available capital resources.

Underlying Logic

The beauty of the return-on-investment concept lies in its pure simplicity of logical accounting analysis. It clearly relates the earnings per share to the manifold operations of the business. Step by step, it shows how the net return on equity can be affected not only by the amount of net profit but also by the amount of equity. It goes on to show that net profit can be influenced not only by the profit margin but also by the sales turnover. It also points up the leverage
factor inherent where a company has a high ratio of long-term debt to stockholders' equity or where leases may be used to obtain more economic capital.

There are many advantages to using this concept in planning the future performance of a company. Changes in any one of a number of factors can have an effect on the net earnings per share. By planning and measuring performance against these plans, it is possible for a company to increase its net earnings per share. This, then, offers those who produce and sell the nation's products a way in which they can plan and measure their performance in order to attract from financial investors the capital they require to finance their growth and expansion.

Those of you who have been following the interesting series of articles by Alfred P. Sloan, Jr., now being published in "Fortune," will have a good perspective of how this concept works out in practice. The return-on-investment approach was developed within General Motors Corporation by Donaldson Brown as a result of Mr. Sloan's desire to determine the effectiveness of the various operating segments of the corporation. It has been refined and contributed to by others, such as DuPont and Monsanto Chemical Company, to the point where it is a highly effective management tool.

Setting aside for the moment the complications that arise when applying the basic principles to financial and operating statements, the value of the return-on-investment concept is that it is simple, clear, and easy to understand. The concept reflects a basic responsibility that executive management has to its stockholders for an adequate return on the capital invested by them. That this responsibility is keenly felt is indicated by a survey conducted some years ago in which the executive officers of over 200 companies were asked what single financial indicator they regarded as most symptomatic of the basic present fortunes of their companies. To this question more than half replied, "Net return on equity."

If this, then, is accepted by a majority of these chief executives as the basic measurement of their performance, it would seem no more than reasonable to use this same criterion for planning operations on both a company-wide and a divisional basis, and also as a measurement of the performance of the divisional managers. It would follow from this that the same approach could also be used to analyze capital expenditures, to establish selling prices, and to improve the profitability of products.
CAPITAL EMPLOYED

There seems to be a fairly general feeling that the performance of management should be measured by the return on the total capital employed rather than on stockholder equity. There is less agreement, however, on just what should constitute capital employed for the purpose of this computation. For instance, should fixed assets be valued at original cost, at estimated replacement value, or at the depreciated book value. While a case can be made for the use of more realistic values in the computation of return on investment, there is the ever present danger that any departure from the asset values as reflected in the financial statements will encourage attacks on these values rather than improve the profit performance.

Questions can also be raised on the consideration to be given to items such as LIFO inventory values, current liabilities, interest on funded debt, and leased equipment in determining return on investment.

Money spent for buildings, equipment, research, or product development may not yet have begun to produce compensatory profits, but may ensure adequate profits in later years. Similarly, amounts spent for repairs and maintenance may reduce the present earnings but may, at the same time, ensure the anticipation of greater earnings in the future years. The need for adjustment in these areas does not invalidate the concept, but points out that it needs to be carefully applied to individual situations properly to reflect the various factors concerned.

MEASURING COMPANY PERFORMANCE

Bankers, financial analysts, or company treasurers, who are checking up on their own company's performance, are primarily concerned with the return on equity. They would work generally from the published financial statements or similar sources. They would be interested in such matters as debt service, cash flow, dividends paid, and the utilization of retained earnings.

Certain allowances would have to be made before the return on investment of one company could be compared to that of another company. An inventory price on a LIFO basis might be considerably below its present market value. Another company may have leased a considerable portion of its assets rather than burden its own capital structure by acquiring them. A company might hold in its portfolio undeveloped land, growth stocks, or other long-term investments on
which no ordinary income will be received. Depreciation policies, a factor that can vary considerably from one company to another, and unusual capital gains on non-recurring items may have to be considered in any comparison.

**WITHIN THE COMPANY**

When a company is measuring its performance against its own pre-determined standards, it may change any of the factors included to what is considered to be a realistic measure of operating performance. The emphasis is not only on the financial aspects of the situation, but on the comparative performance of various operating divisions of the company. While this operating performance will eventually be reflected in the financial statements, we can separate certain financial factors so that these statements may be more easily understood by operating personnel.

For instance, it is a fairly general practice for companies to use net income before taxes so as to avoid the effect of tax adjustments, such as carrybacks or carry-forwards. Some companies exclude depreciation from the income statement so as to point up the cash flow more clearly. Interest on funded debt or other long-term obligations may also be excluded from consideration, since operating management has little to do with such financial matters. Similarly, total assets rather than total equity is generally used for internal management purposes on the theory that divisional management is being provided with certain assets on which to earn profits, and that it is of no concern to them whether these are being financed by creditors, bond issues, or stock subscription.

This can be accomplished, in an accounting sense, by setting up a separate corporate division to carry the various investments and long-term liabilities, to receive interest, dividends or other income of a like nature, as well as to absorb interest expense and other miscellaneous expenses. Such a division might possibly rent buildings and equipment to the operating divisions. This would avoid a problem that may arise where some divisions are housed in leased buildings and others are quartered in company-owned buildings. This would take cognizance of the capital cost inherent in the lease and the fact that a lower return is usually expected from a low-risk investment in buildings than from an operating investment with a higher risk.

The question may well be raised on what is a reasonable rate of return for a company to adopt as a pre-determined standard. This
would depend, of course, on the nature of the business, the risk of capital encountered, the investment basis used, and many other factors, but several manufacturing companies have established a return of 20 per cent before taxes as a reasonable objective.

There seems to be a fairly general assumption that if a company is to earn 20 per cent before taxes over all, each division should likewise earn a 20 per cent return on the capital employed. This may be true where the operating divisions are similar in nature, but it is not always possible in a highly diversified organization. In the first place, a lower return should be expected where there is little risk entailed, and a higher return where the hazards of capital loss are greater. Furthermore, where a division leases its equipment, a higher return could normally be expected than from a division that owned a considerable amount of real property. Management should review each situation objectively and arrive at a rate of return for each division, which, on a composite basis, would give them the desired over-all company return.

Company management should also be sure to set standards for such things as preventive maintenance and the size of inventories. Once a plant manager understands the basis on which he is being measured, he may embark on a program of cost cutting or inventory reduction which could have a spectacular short-term effect on the return on investment while hastening the long-range decline of the division's operating efficiency. Where such reductions can be made wisely, however, everything possible should be done to encourage them.

CURRENT ASSET VALUES

Although a company would not want to write up its assets in the financial statements and show appraisal surplus, there may be justification for charging certain assets to an operating division at a current market value offset by unrealized capital gain in the corporate division. These entries would, of course, be eliminated in consolidation and would not appear in the published financial statements. Under present corporate philosophy, these assets will eventually have to be replaced, and at much higher prices. There needs to be some way, therefore, if the business is to survive, of injecting a higher return into the pricing formulas to provide sufficient capital for the eventual replacement of these assets. Too frequently this inflation-ridden replacement problem is overlooked.

There is also the situation where valuable land and nearly
depreciated buildings might perhaps be sold and a new plant with a greater depreciable value constructed elsewhere on less valuable land. There are many such operations that earn a fairly good return on the book value because the property was purchased many years ago but would earn a negligible return on the current market value.

Sometimes the total assets employed should be reduced by current liabilities. Inventories of certain businesses are almost entirely financed by their suppliers and for such businesses it does make a difference. This might be effected by reducing, for the purposes of this computation only, the value of the inventories included in the total assets. Similar questions may arise concerning tax liabilities, cash held for anticipated expansion, plant and equipment not yet in full production, real estate held for future growth, and other such items on which a satisfactory current return can not always be expected.

**CASH FLOW STATEMENTS**

To avoid obscuring operating results with entries which are made primarily for tax accounting purposes, such as LIFO valuation for inventories or accelerated depreciation, greater emphasis could be given in the operating reports to the cash flow. The operating return, before non-cash charges, might be measured on assets at their current market values to the extent that these can be determined. From an operating standpoint, there is considerably more value to cash in hand than to cash at the end of a long period.

By eliminating this type of accounting entry from the operating statements prepared for the divisions, it might enable the division managers to concentrate more heavily on other factors, such as sales volume, prices, and product mix which could materially improve the cash return on the asset values entrusted to them. It could also place increased emphasis on the subject of equipment replacement on an economic basis.

**EQUIPMENT REPLACEMENT**

The important part of capital planning is to determine those projects for which capital expenditures should be incurred and to secure an adequate return on the total investment. The historic approach to this problem was the pay-out method by which the number of years required to recoup the original investment was determined. More recently the discounted cash flow concept has been
advocated for ranking individual projects, and it has considerable merit for this purpose. The formula developed by Machinery and Allied Products Institute, which has come to be known as the MAPI formula, takes certain actuarial factors into consideration. A company may be able to increase its cash flow by using mathematical formulas to determine equipment to be replaced, such equipment having outlived its economic life but still appearing to have a useful physical life.

PRODUCT PROFITABILITY

Another valuable use of the return-on-investment concept lies in pricing individual products or product groups for a profit. The concept can be applied both to manufactured products and to retail products. Different approaches may be required in each case but some valuable conclusions can be drawn from such an application with a reasonable amount of effort. A significant thought added to product profit analysis by the return-on-investment concept is the effect of capital turnover. When products are turned over more rapidly, a somewhat lower percentage of profit on sales can be justified. This, in turn, may be effective in increasing the turnover. The capital investment in a particular product may be hard to define, but as long as the same basis is applied consistently to each product, the relative percentages of return on investment will tend to highlight the more profitable products.

Product profit analysis is an area where much can be done to increase the over-all profits of a company. The effect of turnover on profits is not too well understood by many company managers. In addition to sales volume and sales price, there are many other factors such as product design and mix, material and labor rates, administrative costs and equipment replacement that can have a considerable effect on the profitability of individual products or product groups.

SUMMARY

In summary, therefore, we have a number of ways in which the return-on-investment concept can be applied to assist company management in intelligent planning and performance measurement. It can be used to measure the performance of one company against a competitor or against predetermined standards. It can be used within a company to measure the performance of separate divisions.
or product groups. It can be used in planning for the use of capital, both for the total amount to be spent in any given period and for the way in which the total should be distributed between divisions or products. It can also be used to evaluate the use of capital for individual equipment purchase commitments or for the establishment of higher inventory levels.

In making these analyses it is not necessary to use the same bases for all these purposes. Both the bases and the definition of return can be adjusted to suit the individual circumstances. On external comparisons, it is desirable to stay fairly close to the published financial statements in defining both return and investment. For internal purposes, it may be desirable to eliminate certain items of a financial nature, and for divisional purposes it may be considered more logical to use operating profit rather than net profit, or gross assets rather than net assets. In product profit studies, gross profit might be used instead of operating profit, and certain assets might be eliminated from the investment base. Finally, in retail product profit studies, the investment might be reduced to a bare minimum of the inventory and accounts receivable applicable to each product.

The point to be learned from all this is that there are many ways in which the concept may be applied and that there are no hard and fast rules on exactly how it should be applied, particularly when the comparisons are used for internal purposes. Often these comparisons are relative, so that the results will be relative and useful regardless of the bases used. It is a very useful tool for relating profits to capital costs which will be used in many more companies and in many more applications by progressive company managers of the future.