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Dear Executive:

About fifteen years ago, we began our on-and-off campaign to wipe out depreciation as a cost measurement used by management accountants. In the early-1990s, my *Management Accounting* article “A Modest Proposal for Pricing Decisions” – which introduced our thoughts on the subject – generated a great deal of interest (accountants thought I was nuts, but everyone else loved the idea). Although it has never ceased to be one of my favorite topics at seminars and conferences (as well as one-on-one discussions), I have had a significant increase in the number of executives and managers asking me about the concept in recent months. As a consequence, I thought it might be worth revisiting the concepts in this quarter’s executive letter.

THE CAPITAL PRESERVATION ALLOWANCE (CPA)

“Money already spent is a ‘sunk cost,’ and it is utterly irrelevant to decision making”
– Shlomo Maital

“Sunk costs are irrelevant” is a principle stated in this quote from Shlomo Maital’s book *Executive Economics* and in almost every book on decision science ever written. Despite this well-accepted principle of decision science, most companies continue to include their biggest sunk cost as a major factor in determining their product and process costs. That cost is depreciation.

A capital intensive company’s greatest sunk cost is the money invested in its productive capacity. Instead of ignoring this sunk cost, however, such companies “pick a life” from the list of allowable asset lives, “pick a method” from the list of acceptable depreciation methods, calculate a depreciation expense, and then treat the result as if it is both an accurate and relevant measure of cost.

Once purchased, the cost of a capital asset is irrelevant. Up to the point of its purchase – before the cost becomes “sunk” – the cost is not only relevant, but critical. The benefits to be gained from its purchase should be sufficient to provide an adequate return on the funds being invested. Once purchased, however, the cost no longer matters. What does matter is how the asset can be used to “make money” for the organization.

There are only two ways an asset can “make money” for a business organization; it can be sold or it can be used. The money generated by selling an asset depends on its *market value* – not its original cost. The money that can be generated by using an asset depends on its *money making capability* – not its original cost. So why do companies make such elaborate calculations to take this original cost and assign it to products and services?

The answer is simple. Accountants – the historians of the business – make them do it. These well meaning scribes of history, always keeping a sharp lookout in the rear view mirror, want to monitor where the company has been – how good *were* its decisions. Their objective is not to look through the windshield and provide information to make sure future decisions are good. Management, however, needs to see where it is going. Only by looking forward can management make sure the company is headed towards a successful future. Managers cannot afford to incorporate irrelevant, sunk costs in their decision making processes. Instead they must look forward to future, relevant costs.

As a company sells its products and services, it must not only generate profits, it must also generate the funds necessary to preserve its current productive capabilities. Existing products and services should not be viewed as paying for *past* capital outlays, they must generate the funds for *future* capital outlays. This means that current operations should be generating the funds necessary to make principal payments on debt incurred to purchase capital assets and pay cash for those capital assets that are not financed. In the past, many assumed that including depreciation expense in product and service cost provided for these future expenditures. But the calculation of depreciation expense has nothing to do with the future – it focuses entirely on past actions! Companies with older assets are probably not accumulating enough capital funds to finance the future. Companies with newer assets may be providing more capital than needed and may be charging prices that put them into an uncompetitive position.

The answer is to develop what Bill Morrison, President of Rail Products & Fabrications, has called a “Capital Preservation Allowance.” This allowance is a forward looking view of capital requirements that replaces depreciation in the calculation of product and process cost and enables a company to effectively accumulate the funding required from current products and services to preserve existing productive capabilities.

As a company moves into the future, it must insure that the sale of its products and services generates the capital funds needed to preserve its productive capabilities. Depreciation expense, an amount based on irrelevant “sunk costs,” is not an accurate measure of these future requirements. A forward looking “Capital Preservation Allowance” (or “CPA” – not to be confused with a Certified Public Accountant) needs to be developed to accurately measure the ability of a company’s products and services to fund the preservation of its existing capital asset base.

A company whose capital assets form a system that is used to produce nearly all of its products or generate its services can develop a single CPA for all of its future capital requirements. A company with several lines of business, each with different levels of future capital needs, may need several CPAs – one for each line of business. In job shops, where different asset types have different future capital needs, a different CPA may be needed for each unique type of asset. Regardless of the situation, however, the CPA must look to the future, not the past.

The mechanics of a Capital Preservation Allowance are not complex. In principle, it is like establishing a “sinking fund” to provide for future capital outlays. The simplest approach is to forecast necessary capital outlays for a representative number of years. For CPA purposes, capital outlays mean principal payments on existing and future loans used to finance capital purchases and any capital assets purchased for cash. For example, one company anticipates the following expenditures to preserve its existing production capabilities over the next five years:

	<u>Projected Capital Outlays (\$000)</u>					<u>Total</u>
	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	
Payment of existing capital loans	\$ 100	\$ 100	\$ 50			\$ 250
Payment of loans for future purchases	\$ 25	\$ 50	\$ 100	\$ 125	\$ 150	\$ 350
Capital assets purchased for cash	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 250
Total capital outlays	\$ 175	\$ 200	\$ 200	\$ 175	\$ 200	\$ 850
Average annual capital outlays						\$ 170

The simplest way to incorporate this \$170,000 average annual amount into the company's cost structure is to establish a \$170,000 Capital Preservation Allowance and add it to product cost as a percentage of activity costs. The shortcoming of this approach is that, like depreciation expense, it assumes that the need to replace assets is based on chronological time, not usage.

An even better way would be to tie the CPA to usage of the assets. For example, if the existing group of assets, including those that will replace them, are expected to operate for 85,000 hours during the five-year period, a CPA of \$10.00 per machine hour could be established. This would eliminate variations in each year's CPA amount just because of volume swings. Without this long-term view, a year in which machine hours are 15,000 would generate a CPA of \$11.33 and a year in which they are 20,000 would generate a CPA of \$8.50. Such annual variations do not reflect the true long-term nature of funding capital expenditures.

The CPA is intended to cover the preservation of existing capabilities, not the expansion of those capabilities. Capital expenditures made to support growth are funded by the profits generated by the sale of current products and services; they are not a cost attributable them.

There are many refinements that can be made to more accurately include a CPA in the cost of products and services. The critical issue is to make sure you look to the future, not the past, in determining the capital expenditure costs to include in your company's products and processes.

UPDATE

The 85th Annual Conference of the Institute of Management Accountants took place June 17-22 in Boston. As I mentioned in last quarter's letter, I had the opportunity to be the Chairman and Lead Speaker of the Conference's Cost and Performance Methodologies and Maturity track. As part of the job I recruited two speakers who I believed would enable us to cover as much of the subject as possible in the three sessions allotted to us. I had never met either of the two gentlemen or heard them speak so I was venturing into the unknown when the first of our two days of sessions started. I am happy to report that these two guys were great!

Mike Hugos, who is the Chief Information Officer at Network Services, presented *The Supply Chain and Business Success*. Mike showed how a supply chain whose members are willing to share and act upon the right information can improve profitability all along the chain while providing a lower cost, higher quality product or service at the supply chain's end.

Mark Czerwonka, Director of Finance – Performance Measurement and Analysis at Best Buy, kept us all captivated with his story of how Best Buy has incorporated both activity-based and economic value-added concepts into a “customer centric” business model that is directing the company on the path to future success.

My article titled “Good Decisions Require Good Models: Developing Activity-Based Solutions that Work for Decision Makers” was published in the May/June issue of *Cost Management*. The article contains an overview of the development of activity-based concepts during the past two decades and describes how a change in perspective from the needs of accountants to the needs of decision makers can turn an accounting tool into a powerful, cost effective decision support tool for organizations of all types *and sizes*.

My old friend Gary Cokins, Strategist for SAS Institute, has been giving the D. T. Hicks & Co.’s White Paper *Accounting for the Lean Organization* a wide circulation among his contacts in the management accounting community. This paper, which explains the misconception among many in the “Lean” community that cost information, including activity-based cost information, is superfluous in a lean environment, has received nothing but positive reactions from those who have reacted to its contents. If you would like a copy of this white paper, send me an e-mail and I’ll be happy to send you one. For any of you that would like additional information (in addition to the “stuff” I pass along) on ABC and/or performance measurement, I would highly recommend any of Gary’s books on the subjects. You can find them, including reviews from those who’ve read them, on Amazon.com. You could also check out my most recent book while you’re there.

I’ll be presenting a Lunch & Learn session for the Michigan Association of CPAs in Troy, Michigan on August 19th. The mid-day session titled, “Improving Business Decisions with Activity-Based Concepts” is two hours long and can be attended by both MACPA members and non-members for a nominal fee. You can find out more about the session on MACPA’s web-site <http://www.michcpa.org/cpe/detail.asp?c=LNL4&y=05>

I’ll also be presenting a session at MACPA’s two Fall Accounting Conferences on September 20th in Lansing, Michigan and on October 18th in Troy, Michigan. My session will be entitled, “ABC – Because You Can’t Ignore the Laws of Economics.” In addition to these MACPA sessions, I’ll also be speaking in September for SAS Institute’s ABM Roadshow in Vancouver, British Columbia on the 21st and Edmonton, Alberta on the 22nd.

I hope you’re all having a great summer and look forward to hearing from any of you who have questions or comments regarding this month’s letter.

Very truly yours,

Doug

Douglas T. Hicks, CPA, CMC
President

P.S. How do you like that, I actually kept this thing to four pages this quarter.

DTH/jmh