The Trouble with P/E

The humble price-to-earnings ratio (PE) has become the most widely referenced valuation metric amongst equity investment commentators. In its most common form it equates the price of a share with the earnings per share (EPS) of the most recent fiscal year. Variations include the use of anticipated future EPS or the EPS averaged over multiple prior years. Ultimately asset values, and thus stock prices, are determined by unencumbered economic profits. However, unencumbered economic profits and an earnings number produced by an accountant can be very different things. Furthermore the PE ratio is static and in its most common form is backward-looking. It is for these reasons that the PE ratio can be dangerous if misapplied.

In an attempt to appraise and value a business the analyst should consider establishing the answer to the following question: how much profit is attributable to the shareholder *after* the company has incurred all costs and made all of the necessary investments required to sustain and/or grow the business? These profits could be described as unencumbered economic profits. Reported earnings are often not representative of this measure. Firstly, reported earnings are calculated using accruals-based accounting. This means that income and expenses are recorded when the transactions are deemed to occur, rather than when cash is exchanged. Consequently movements in working capital are absent in the earnings calculation. This is important as most companies will need to increase the investment in receivables and inventory as the business grows. This will require the business to retain a portion of the earnings to produce subsequent growth. This may well be a worthy investment but it is usually inaccurate for the analysts to discount the full value of the earnings *and* the growth; this is double counting. In most cases the growth cannot be fostered unless management confiscates a portion of the earnings for the investment in working capital. We often encounter statements along the lines of: "the stock is valued at only 15 times earnings and it is growing at 15% per year". Such statements can lead to poor decision-making if the full economic implications of the growth are not appreciated, i.e. these are probably not free unencumbered profits that shareholders can claim in full *and* still expect the business to grow. Usually shareholders can have all of the profits and no growth or some of the profits and some growth.

Depreciation is another item to be wary of. Does this expense adequately reflect the true cost of replacing deteriorating assets? Depreciation expenses are recognised based on the rate of decline in the economic worth of the fixed assets assumed by the accountants. If these assumptions are inaccurate, and they frequently are, the earnings produced will not reflect the true economic cost of maintaining the productive capacity of the company's capital. We have encountered various companies that appear to be incurring capital expenditure in excess of the rate of depreciation just to maintain the productivity of the corporation. As it takes time for the depreciation charge to catch up with the capital outlay

(it eventually will), earnings in the interim will overstate the economic profit being created by such companies. Of course in some cases the depreciation expense may in fact be excessive and earnings may thus understate the true profit of the business.

Acquisitions create further headaches. Goodwill is the price paid to acquire a business in excess of the assumed value of all other identifiable assets. Under most accounting standards Goodwill is no longer amortised, but is subject to annual impairment tests (i.e. it is written-down if deemed to have declined in value). This treatment leaves the accounts open to abuse. Even if not abused, accountants can be poor judges of the true value of Goodwill and hence the extent of any degradation in its value. While other intangible assets are usually amortised, the accountants have quite possibly not calculated the rate of degradation correctly. As such earnings may not reflect adequately the cost of maintaining goodwill and other intangible assets – assets that may be vital to the continuance of some businesses.

Things get even trickier when we consider matters such as business transitions. Consider a company with a hit product that is producing a tidy profit each year. Over a ten year period the company produces consistently handsome profit but pays no dividend to shareholders. Rather, management retains all of the profit and lodges it in the bank, perhaps fearful of potential competition for the hit product. In year eleven a major competitor arrives with a superior product that consumes the entire profit of our company. Our company is no longer profitable. Not to worry, our company has a war chest and uses it in full to acquire another business thereby restoring profit to its prior level. With hindsight, the earnings produced in the first ten years do not count for valuation purposes. These were retained in full and subsequently transferred to a third party in exchange for an asset that merely preserves the previous level of profit. In other words, with hindsight the profits reported in years one to ten were illusory as they failed to incorporate the cost of maintaining the economic productivity of the corporation. PE's used in this period could have led investors down a dark alley.

"Adjusted Earnings" are unaudited and exclude supposed one-off items. These are usually claimed to represent a truer version of "profit" than the audited reported earnings number. Occasionally this representation can be accurate. More often than not however, in our experience at least, these adjusted earnings inflate the earnings power of the business. If a company incurs a "one-off" restructuring charge designed to achieve recurring cost savings in the future, it might seem fair to ignore the restructuring charge and treat it as a non-recurring expense. However we believe that for many businesses these charges represent a normal way of life – a necessary expense incurred every so often merely to remain competitive in challenging businesses. Therefore, for such businesses it might make sense to incorporate some recurring or amortised restructuring expense as part of the earnings assessment. Unfortunately stock-broking analysts will almost always use the flattering, adjusted earnings figures when quoting stock PEs, so be aware.

The above represent a variety of reasons as to why reported earnings may be significantly different from the true economic profit that investors should be concerned with when assessing and valuing a business. There are others. Remember that management is usually incentivised to increase reported earnings (or shudder-to-think, "adjusted earnings").

Therefore, there are clear incentives to window-dress. We consistently worry that "independent" auditors may not perform adequately in supervising this activity. It pays to be skeptical. When in doubt, it is probably best to assume the worst.

There are other reasons why earnings-based valuations may be dangerous if misunderstood. Excessive use of financial leverage is one. With interest rates currently at historically low levels, employment of significant debt is one easy way for many companies to inflate earnings. For example one company can buy another for a price that delivers a rather paltry 5% post-tax return on capital, fully-funded with short-term debt that costs a mere 4% post-tax. Earnings have increased, but at what cost? The new creditor now has a superior claim on the cash flows and assets of the business, and may demand a vastly higher rate of return when the debt is eventually refinanced. This transaction has made the shareholders' income stream and equity capital potentially far more risky. If this company is trading on a PE of "only" 12, is it really better value than a similar company that has not resorted to raising such debt but is trading on a PE of 15? Perhaps not.

So if the PE can be a hazardous valuation tool, are there superior alternatives? Unfortunately all valuation metrics have flaws. The PE may ultimately be no better or worse than any other in most situations. If there is a similar but superior metric, it might be a free cash flow equivalent. To be clear, there are various potential flaws with cash-based metrics too, but as free cash flow tracks actual cash flows, it can offer a superior alternative in some circumstances. That there is no "silver bullet" should be no surprise. Markets should probably be sufficiently efficient to have eliminated any edge that could be gained by exclusively employing one-dimensional, static, accounting-based valuation metrics. In our opinion the most successful investment strategy will involve gaining an adequate understanding of the business characteristics so as to properly appraise its economics. What profit level can the company achieve for shareholders after incurring all costs and making all necessary investments for its future sustainability? If the business then retains some of this profit, can it achieve an adequate return on this capital? Is the company taking excessive financial and/or operational risks to achieve these profits? Because we cannot credibly claim the skill to precisely forecast any of these, we should attempt to compensate for this uncertainty by being somewhat conservative in our analysis and by paying a price that is deemed low or, at most, fair for the investment.

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