

# *III Komentarze i komunikaty* Strategic Equity Investments

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I take a closer look at recent investment results of two major corporations in the technology sector, Microsoft and Cisco. I try to explain their asset structure and consider some valuation issues presented by their strategies.

## 1. Investment Results: Microsoft and Cisco

### A. Microsoft

Microsoft's traditionally elevated operating cash flow increased even more rapidly starting from 1998, reaching the level of more than ten billion dollars. As basic capital expenditures did not exceed one billion the company faced the problem of investing this cash. Departing more significantly from the previous practice Microsoft began massive equity investments in cable and telecommunications businesses with a view to the strategic expansion of its products and services through new platforms.

In 1999 the balance sheet nearly doubled from the previous year to over \$37bn, equity and other investment assets more than tripled to over \$14bn and cash expanded to \$17bn. In 2000 investments grew to over \$17bn, cash to \$23bn and balance sheet to \$52bn. Investments included the \$5bn purchase of AT&T convertibles and several purchases valued at a few hundred million dollars each of the shares of telecommunications companies. In 2001 the balance sheet increased further to \$59bn, cash amounted to almost \$32bn while investments contracted to \$14bn, reflecting losses in investment value, more risk-averse asset management policy and, perhaps, a decrease in the availability of attractive opportunities.

Investment income equalled about 10% of operational income in 1997 and 1998. It advanced to more than 20% in 1999 and to over 30% in 2000, reflecting both the increase in the scale of investments and changes in the overall market value of equities in that period. Some more insight into these gains is provided by their decomposition into interest and dividend income and realized investment gain/loss. In 1997 and 1998 equity profits dominated, in 1999 interest and dividends provided more than half of investment income, while in

2000 recognized gains on the equity portfolio exceeded substantially interest income.

In 2001 a minor net investment loss resulted from interest income of \$1.8bn and dividend income of almost \$400 million which did offset recognized losses on investments of \$2.2bn. These losses, in turn, arose from the write-down of \$4.8bn of impaired investments, a portion of unrealized derivative losses of \$600 million and realized equity investment gains of \$3bn.

Microsoft continued to write down investment losses in the first quarter of 2002. It recorded a net loss of almost \$1bn, including almost half a billion in interest income and \$1.5bn in recognized net loss made up of the \$1.8bn equity investment impairment, equity gains of \$400 million and some derivative losses. In 2Q02 the company had over half a billion in investment gains, mainly interest, with equity gains of over \$100 million offset with further impairments. In 3Q02 it had further three-quarter billion of gains, over a half of which interest, bringing net investment gains in the nine months of 2002 into positive territory, though still barely a 3% of operating income. There were \$1.2bn of recognized portfolio impairments in that quarter balanced with the gain in similar amount from the sale of Expedia, an online travel agency.

Due to the broad nature of its operating and investment activity Microsoft hedges some portion of its risk: short-term fixed income portfolio interest rate risk, foreign receivables and translation risk as well as risk derived from its investment portfolio. Options are the main hedging vehicle. Microsoft did not provide financial risks section in its 2001 and 2002 reports. In 1999 and 2000 the notional amount of interest rate options outstanding was \$4 and \$3.6 billion, currency options totalled about \$3bn and equity-hedging options \$2.1 and \$4bn. Due to the substantial scale of derivative operations, gains and losses attributed to these instruments are, not surprisingly, of the order of several hundred million dollars. Microsoft discloses its own calculation of the value-at-risk of its portfolio. The estimate of the 20-day period 97.5% confidence level loss is of a one billion dollar order, the main contribution coming from the VAR of the equity portfolio.

The company repurchased vigorously its own shares. During the 1997–1999 period share repurchases amounted to \$2.5–3bn per year. Nor did the scale of such operations decrease in 2000 and 2001 when Microsoft bought back \$4.9 and \$6.1bn of its own stock. The need for such transactions resulted from large-scale stock-option plans and the desire to avoid dilution. Microsoft was also involved in some derivative operations involving its own stock which influenced cash flow appreciably at times.

## **B. Cisco**

Cisco's cash flow from operations tripled in two years 1997–9 reaching the annual level of \$4.4bn. Net profit doubled to over two billion dollars with investment income a modest 10% of operating income. Faced with rapidly growing cash flow the management expanded its investment activity. In these

three years Cisco was purchasing a few companies per year usually assuming stock and options and only rarely paying with cash.

In 2000 operating cash flow expanded further to over \$6bn. Cisco increased its pace of acquisitions buying twenty companies and more than doubling its balance sheet to \$33bn. The company was paying usually with its then very expensive stock. The value of stock issued for purchase acquisitions was over \$4bn from just half a billion a year earlier. Due to the rise in the overall market the value of corporate equities in its investment portfolio gained \$5bn in value that year bringing investments to over \$16bn. The considerable size of investments was mirrored in the realized investment gain and income equal to one third of operating income.

In 2001 operating cash flow increased slightly but in the cooling business climate the company decreased its pace of acquisitions, doubling instead its investments in the fixed-income portfolio to \$11bn. This strategy brought in almost one billion of net interest and other income, a one-third of its proforma income for that year. On the reported basis Cisco had net loss of one billion dollars. Unrealized losses, brought about by changes in market valuation of its highly sensitive equity portfolio totalled \$5.7bn.

In the first six months of 2002 Cisco generated \$3.3bn cash from operations, and, for the first time, bought back \$600 million stock after it approved a \$3 billion repurchase plan. The company had one billion in operating income and half a billion in investment losses due to a write-down of impaired investments of \$850 million. Cisco continued to invest in some development stage technology companies where it held options to exchange their stock into its own. These companies held in turn put options requiring Cisco to purchase them provided they met some technology objectives.

Cisco is hedging some of its foreign exchange risk with forwards and options but the amount of these instruments does not seem to be substantial.

### **C. A Comparison**

There were some broad similarities in the situation of Microsoft and Cisco in recent years. Both companies were undisputable leaders in their respective fields: software and networking equipment. Both profited handsomely from buoyant technology spending and suffered from its reversal. Both were the world's most highly valued companies during the height of the internet boom, with capitalization of each in excess of \$500 billion. They followed similar capital structure strategies with no material debt and no dividend payments. They both enjoyed very strong cash flow from operations and as a consequence faced frequent multi-billion dollar capital budgeting choices.

But otherwise their strategies differed considerably.

Microsoft decided to enter new fields of activity with a view, probably, to leveraging in this way its software expertise. Further, it invested heavily in shares of service providers, telecommunications and cable companies to gain privileged access to distribution channels and sell more of its products. While

doing this it expanded substantially its equity portfolio. It also increased its cash position and implemented a heavy repurchase program. Many of its major investments employed cash and were valued at elevated prices which soon collapsed. Cash was used extensively to buy back its own highly priced shares. Microsoft built up large derivative positions ostensibly to hedge various operating risks. But there was also some cash used on derivative operations involving stockholders' equity.

Cisco managed its cash flow and strategic investments in another way. It extended its balance sheet in a twofold way. First, it conserved a lot of cash from operations and increased its fixed-income portfolio, mitigating earnings vulnerability. It embarked also on a wide program of acquisitions, to some extent strengthening thus its technology preeminence. Most of these acquisitions were executed with its own highly valued shares which enhanced incentive-compatibility of the transactions. Cisco purchased both stock and options of development stage companies, linking some steps of a purchase to the achievement of specified technology milestones, and then sometimes spun-in these companies by buying all outstanding stock and options it did not own. Cisco did not repurchase its shares until very recently and the fixed income portfolio cushioned its operational results. It also did not use derivatives extensively.

For Cisco acquisitions seem to have been a way to build and sustain dominant technology position rather than to develop a marketing vision and an extension for the already dominant franchise as in the case of Microsoft.

Yet the outcome of both strategies did not vary meaningfully in terms of broad results. The dramatic balance sheet expansion was not matched by operating gains. Revenue per dollar of assets declined in the case of Cisco from 94 cent in 1998 to 82, 57 and 63 in 1999, 2000 and 2001, and in the case of Microsoft from 68 cent to 53, 44 and 42 respectively. Microsoft's operating income per dollar of assets narrowed from 29 cent to 27, 21 and 20, and net income before taxes, a measure including investment income, from 32 cent in 1998 to 19 cent in 2001. Cisco's operational efficiency, gauged with the pro forma income, by which the management of Cisco preferred to be evaluated and which excluded some charges and expense items, dropped from 21 cent per dollar of assets in 1998 to 17, 12 and 9 cent in the following years. Both companies wrote down large quantities of impaired investments.

## 2. Valuation Issues

How should this ample and varied investment activity affect the share valuation? How to explain the cash-rich asset structure?

In theory share values should be determined by the degree of riskiness of company operations as well as its ability to generate above-normal profits. On that basis market multiples of many high-tech companies, as is well known, can be justified only by assuming negative risk premia and profit growth rate which has little chance to be registered in the future.

This standard valuation approach may be modified by a number of observations.

First, in contrast to more traditional companies, research and capital expenditures of Cisco and Microsoft, although substantial seem not to be the only funds directed to these purposes. Equity investment and acquisitions appear to supplement them not insignificantly. In computing free cash flow it must be judged to what extent they contribute to R&D and capex, and as such are necessary to sustain operations, if and how would it be possible to achieve similar expansion results in-house and if yes at what cost. Disentangling possible organic growth and the growth contribution of strategic investments is bound to be a quite difficult though necessary part of their assessment.

Second, the cash positions of both Cisco and Microsoft are sizeable. Consequently, a large part of their assets does not seem to be employed in profit generation. After deducting cash items and some government securities, only roughly half of Microsoft's assets is invested in operations, and about two-third of Cisco's. This improves obviously performance metrics calculated above. Yet such large cash appropriations seem not to be entirely contrary to basic portfolio choice calculations, where cash position rises with volatility of the risky part of a portfolio. Here, the risky portion of the portfolio generates an outstanding premium over risk-free rate due to the elevated profit margins of both companies. This agreement with rational portfolio choice seems to justify what appears at first sight as an inefficient use of capital and provides a valuable signal to investors. The ability to seize attractive investment opportunities quickly may provide further signalling value to cash.

Third, the process of constant embrace and development of new technologies enhanced importantly by strategic equity investments and acquisitions mandates the evaluation of growth and market dominance options embedded in such activity. Market dominance option could be defined as an opportunity to make an investment in the future to gain an important market share as well as extract extraordinary rent coupled with such a share. There may be value in such options both with regard to market positioning and to possible thwarting of competitor access to some new technology or distribution platform. Given technological complexity and uncertainty of the adoption and spread rate of new products and services, how much such options are worth is not always easy to establish with sufficient degree of precision. Even so, the management must form a hopefully adequately informed judgement about their value while making an investment, frequently within a limited time frame in which most of such opportunities present themselves, relying on estimates of probabilities of various future scenarios. And yet, some of these options may initially appear more valuable than they really are; may be purchased at too high an implied cost; may lose their value fairly quickly; may contribute to increased earnings volatility; and sometimes may not be even exercised at all. As some part of company value resides in such options, changes in their appraisal may result in large swings in the market value of shares. To be sure, it

is not easy to determine short-term as opposed to long-term value of such options, the more so as it is sometimes impossible over a brief period of time to distinguish between changes in revenue due to the overall business-cycle and to the failure of critical R&D policies. It would be, however, unreasonable to suggest that acquiring such options is a mistake.

Fourth, management investment decisions reflect choices to win and protect future business opportunities. Large impairments of investments may signal management's excessive risk-taking, price or timing misjudgements or both, possibly implying the need for an upward adjustment of the risk premium. Although higher gains require higher risks the successful implementation of investment strategies and prudence with which they are planned ultimately determines the odds for a future increase in profits.

Equity investments and acquisitions augment organic research and capital expenditures extending the portfolio of growth and market dominance options of each company and adjusting its free cash flow. As an answer to the increased risk a larger cash position is built up and maintained in agreement with standard portfolio choice. As a result a share in each company studied above could be viewed as a share in the complex portfolio of cash and risky investments including real and financial options. In addition, the quality of investment strategy execution may influence the risk premium required by investors.

### **Note**

Data are from quarterly and annual reports of Microsoft and Cisco. References are to fiscal years.