

Capital InFocus

Intel: The Biggest Loser

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By Don Yocham, CFA

The Biggest Loser

Throughout the commercial computer era, which began roughly in 1970, **Intel Corp. (NASDAQ: INTC)** remained a leader among chip makers.

You could say it made private computing possible with the introduction of the Intel 4004 chip in 1971, the company's first microprocessor.

I've personally never owned a PC without "Intel Inside." The processing speed of their Core processors was the only chip that could handle my Excel models.

For decades, Intel set the standard for CPUs.

It stumbled with the rise of mobile phones – Qualcomm owned that segment. Nvidia has dominated graphics since 2000.

But when it came to delivering sheer computing power, other chip makers found Intel hard to beat.

At least until AI hit the scene in late 2022.

From June 2022 to June 2023, revenue dropped to \$54 billion, down 26% from the \$73 billion for the prior twelve months, accelerating a decline from its revenue peak of \$79 billion in 2020.

Among the top twelve semiconductor stocks, its market share has fallen from the King of the Hill to third, with Nvidia now holding the crown.

The company will barely recover its revenue peak by the end of this decade, according to analyst estimates.

In the race to dominate AI, Intel looks to be The Biggest Loser.

Swimming Downstream While Digging a Hole

It's not often you see a company adopt a low-margin, capital-intensive, commodity business model. Especially when it has a history of consistently leading markets with innovative, high-value intellectual property.

But that's the direction Pat Gelsinger went when he took the reins of **Intel Corp (NASDAQ: INTC)** in early 2021 with his IDM 2.0 strategy.

IDM stands for Integrated Device Manufacturer.

It describes companies that design, manufacture, and sell their own semiconductor products rather than outsourcing the manufacturing. Intel's IDM 2.0 strategy specifically aims to expand Intel's capabilities by producing chips for other companies in addition to making its own, thus incorporating both integrated manufacturing and foundry services.

Note this is precisely the opposite of **Nvidia's (NASDAQ: NVDA)** business model.

Nvidia outsources essentially all manufacturing to Taiwan Semiconductor and other manufacturers. Nvidia creates value through chip design innovation. It leaves chip manufacturing, a low-value commodity business, to others.

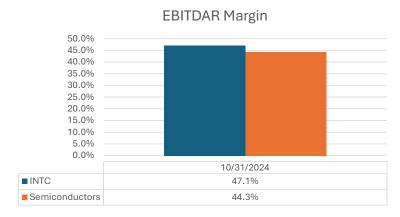
This outsourcing gives Nvidia a low capital-intensity business while Intel's move downstream to be an outsourced chip manufacturer takes the company in the opposite direction.

Higher Profits, Less Investment

Over the past four years, Intel's sales have dropped dramatically declining up to 30% year over year through April of 2023. Sales have recovered somewhat to roughly in line with the U.S. semi-conductor industry. But even with their recent increase, annual sales of \$54 billion are 26% below its \$73 billion peak.

Because of the dramatic shift downstream, operating profit margins have collapsed. Net operating profits after tax have fallen from 25% of sales to 0%. Where they once led the industry, they now lag dramatically.

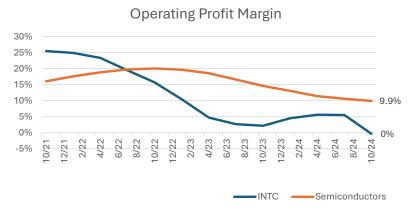
EBITAR margins, a proxy for cashflows which corrects for the failures of GAAP accounting to account for capital, remain slightly above the industry average, but that's before deducting Intel's significant capital costs.



Source: ISS EVA Express, The Capital List



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Value Add Profits and Growth

To add value and get a rising stock price over time, profits must exceed the cost of capital. That's the cost to compete. Capital costs apply to all companies, depending mostly on debt service costs and the riskiness of the company's stock.

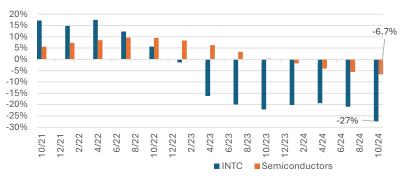
After deducting the cost of capital, which as a percent of sales have soared from 47% to over 84%, Intel's competitive profits as a percent of sales have collapsed from a very healthy 17% (the average S&P 500 company's margin is currently 5.5%) to a 27% loss—and those losses show no signs of bottoming out.

You can see the effect of the capital refocus to pursue IDM 2.0 below. As sales dropped and the company shifted capital into low-margin manufacturing, their capital as a percent of sales soared to 50%. That has slowed. Perhaps the company has recognized the error and stopped expanding into commoditized manufacturing.

Capital Growth per Sales 60.0% 50.0% 40.0% 18.0% 30.0% 20.0% 10.0% 0.0% -10.0% -20.0% -30.0% 10/23 12/22 Semiconductors Source: ISS EVA Express, The Capital List

Competitive Profit Margin

(Profits Net of Capital Charge as % of Sales)



Source: ISS EVA Express, The Capital List

Competitive Profit Growth Rate



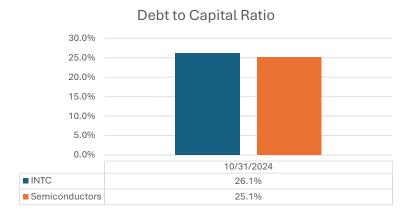
It's also important to gauge the quality of a company's competitive profits and cash flows.

Profits and cash flows are low quality when they are volatile, depend on leverage, or don't cover the capital needed to generate them.

Intel's profit volatility is higher than 70% of all semiconductor and equipment companies. A company that once delivered reliable profits designing high-margin chips now fights it out at the bottom. This profit volatility is another symptom of swimming downstream.

Another symptom of that is an inability to cover the capital base. Intel's free cash flow spread to capital is at -4% while semiconductor stocks generate a 5.3% spread on average.

Intel's debt isn't a concern, roughly in-line with similar companies. On balance, however, Intel's profitability has collapsed as has the quality of its profits.

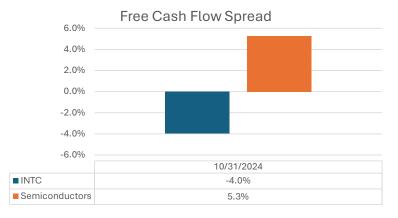


Source: ISS EVA Express, The Capital List

Low Quality Profits

Competitive Profit Volatility





Source: ISS EVA Express, The Capital List

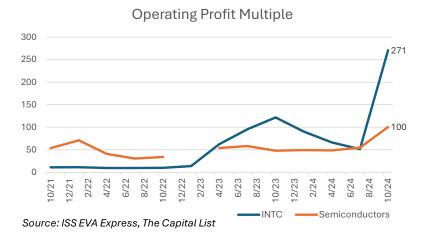
Up to this point, all of the data I have shown you have been strictly accounting measures. They involve corporate performance derived from income statements and balance sheets without any reference to the company's stock price.

Now we take a look how much you're paying to own these results.

At roughly \$25 per share, Intel must grow profits at 3% to justify its current stock price. This may seem like a discount compared to the average semiconductor stock, but keep in mind that Intel's profits declined at a rate of 25% last quarter with no signs of hitting rock bottom.

The present value of Intel's steeply negative competitive profits equals \$157 billion. This negates nearly all of Intel's \$163 billion capital base, meaning that virtually all -- 95.6% -- of Intel's \$140 billion market value depends on future profit growth. That's not too out of line with the industry but expensive given its collapsing profitability, pivot to low margin business, and poor profit quality.

Intel's significant overvaluation shows up more clearly with its incredibly high multiple to operating profits.



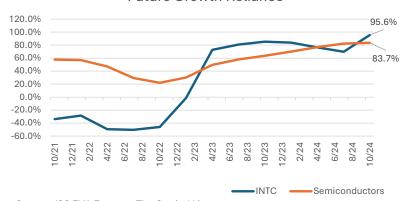
What You Pay For

Required Annual Profit Growth



Source: ISS EVA Express, The Capital List

Future Growth Reliance



Source: ISS EVA Express, The Capital List

Price Compared to Consensus

Consensus estimates have sales growing 19% per year over the next 5 years recovering its peak of \$73 billion by 2029. This still won't be enough to cover operating expenses, leaving profitability in still deep in the hole that Pat Gelsinger dug with his IDM 2.0 pivot.

While the stock will likely see pops on the back of general tech/AI euphoria, the stock is a solid sell.

\$18 per share is an easy target price for the stock, or down 40% from its current \$25 price, though I wouldn't be surprised to see the stock trade much lower.

Think Free, Be Free Don Yocham, CFA

