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# Cisco

**BUY**

**CSCO**

Market Price: $15.14

Fair value: 23$-27$


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| | 09 | 10 | E11 | E12 |
|---|---|---|---|---|
| Rev ($b) | 36.1 | 40.0 | 41.0 | 42.7 |
| *Growth* | *-8.7%* | *10.9%* | *2.5%* | *4.0%* |
| EBITDA M. | 25.3% | 28.0% | 24.5% | 27.5% |
| NI ($b) | 6.1 | 7.8 | 6.8 | 8.2 |
| *Growth* | *-24%* | *27%* | *-13%* | *21%* |
| EPS | 1.36 | 1.17 | 1.28 | 1.63 |

## Worst case scenario priced in, 50% potential upside

Cisco's stock has been in a steady decline since the summer of 2010. It's now available at a very attractive valuation. At a price of $15.14, I find that the market assumes a 7% yearly decline of revenue for the next 5 years, which seems like an unlikely event.

## Understanding today's price

1. Loss of market share in their core business due to competitors launching superior products (high-end market)
2. Cisco's bureaucratization has lead it away from its customers, giving competitors the opportunity to attack Cisco's weaker product lines.
3. CEO John Chambers is disliked by many investors as he is considered responsible for a wave of bad investments

## Why buy Cisco now ?

1. Successful UCS launch shows that Cisco hasn't lost its ability to innovate and execute.
2. Cisco's core market is expected to grow 9% a year for the next 5 years. Therefore, the market's expectation of a 7% yearly decline of Cisco's sales is tantamount to a collapse of the company, a clear overreaction.
3. Cisco's fair value – considering a reasonable loss of market share – is estimated at $23 to $27 per share,
4. Current price of $15.14 discounts Cisco's failure to maintain its competitive position. If Cisco fails to execute, fair value will be around $13 per share, allowing acquiring the stock at a very interesting risk / reward ratio.

**DCF Sensitivity analysis**

Exit EV/EBITDA

| g | 3 | 5 | 7 | 10 | 15 | 20 | 30 |
|---|---|---|---|---|---|---|---|
| *-10%* | 10 | 11 | 11 | 11 | 12 | 12 | 13 |
| *-5%* | 13 | 13 | 13 | 14 | 15 | 16 | 18 |
| *0%* | 16 | 17 | 17 | 19 | 21 | 23 | 27 |
| *2%* | 18 | 19 | 20 | 21 | 24 | 27 | 32 |
| *5%* | 21 | 23 | 24 | 27 | 31 | 35 | 43 |
| *8%* | 26 | 28 | 30 | 34 | 40 | 46 | 59 |
| *11%* | 31 | 34 | 38 | 44 | 53 | 63 | 81 |
| *15%* | 42 | 48 | 54 | 63 | 79 | 95 | 127 |
| *20%* | 64 | 73 | 85 | 103 | 133 | 164 | 224 |

*Sensitivity analysis details:*

g: constant revenue growth rate for the 2012-2025 period

EV/EBITDA estimated valuation multiple in 2026

**Valuation**

*Sensitivity analysis model*

A conservative 3 stage DCF model is used

*Stage 1: 5 years*

Company keeps a stable competitive advantage (EBITDA margin, tax rate)

*Stage 2: 10 years*

Competitive advantage slowly reverts to the mean, defined as average of 5y EBITDA margin of industry and sector.

Tax rate is set to 33%.

*Stage 3:*

Terminal value estimated by EV/EBITDA multiple.

# Business review

### Positives

*Strong structural growth in core markets*

The switches and routers market is expected to grow strongly in the 2011-2015 period, due to the growth of video, network-based businesses, network-attached devices, cloud computing, and virtualization in datacenters. These will fuel the ongoing replacement of Fast Ethernet by Gigabit Ethernet and 10GbE technologies. Infonetics expects the high speed network port market (1G, 10G, 40G, 100G) to hit $52 billion in 2015 from $33 billion in 2010, a 9.5% CAGR.

*Success with the UCS line of blade servers shows that Cisco has maintained its ability to innovate and execute, despite disappointing on its current range of routers / switches*

Cisco's foray into blade servers, the UCS line, is a clear success. In one year of operations, they went from nothing to the 3rd market player, with 10% of market share. A 700% yoy growth is not sustainable, but points to a successful product. The blades server is a $6.6 bn market, growing 4 times faster than the rest of the servers market.
Though the revenues are still pretty small relative to Cisco's size, this success is relevant in that it shows that Cisco has not lost the ability to innovate and to deliver. It strongly suggests that the next generation of high-end routers will have the ability to compete efficiently.

Cisco shows that it takes cloud computing seriously by supporting OpenStack, a project that pushes an open cloud computing platform. NewScale's acquisition and Cisco's partnership with VMware are also going in that direction. Today the revenues are not significant, but this dedication ensures that Cisco will not be made irrelevant by the growth of cloud computing.

*$1bn reduction of payroll, rationalization of organization, CEO John Chambers giving up part of this power, and divesting from*

After years of complacency, Cisco is finally reacting against its bureaucratization and 1$ bn will be cut from the payroll by 2012. Another overlooked fact is the creation of a COO position, a tacit admission by CEO John Chambers that he can't run the show anymore.

Cisco is already showing some willingness to change: according to industry observers, one of its products under development (codenamed "Jawbreaker") will use non-Cisco chips for the first time.

Finally, Cisco is divesting from consumer markets, such as the Flip video camera and the Umi home video conferencing. While unconfirmed, Cisco is likely to divest from Linksys and Webex soon.

## Negatives

*Major issue:*

*Is the recent acceleration in Cisco's market share decline a new trend?*

According to market research firm IDC, Cisco has seen its market share in routers drop 11 percent and 2 percent in switches in the past five years. At 64%, Cisco's market share stands at its 2009 levels, but has lost almost 5 points yoy, a worrying trend. Juniper, Huawei and HP are attacking Cisco's main product lines (routers & switches). Smaller competitors are specializing in niches: F5 in load balancing & application acceleration, Aruba in WLAN, Riverbed in WAN optimization, and Brocade in storage networking. In the past two years, it has proved difficult for Cisco to answer efficiently to these very specialized competitors, mostly due to their slower product cycle, a consequence of Cisco's bureaucracy.

Cisco is especially suffering in the IP edge market, losing 8.5% market share yoy to Alcatel Lucent & Juniper (down to 34.6%). Moreover, intense competition from Juniper & Hewlett Packard is reducing ASP in the router market (while volume increased 2.5 percent over the last quarter, total end-user revenue dropped 12.3 percent).

Three alliances are being created by competitors (IBM - Juniper, Dell - Juniper, Juniper - Polycom); apparently as a reaction to Cisco's entrance in the server market. While it might become a threat, it is not necessarily dangerous, as alliances are traditionally not easy to sustain. Moreover, they also reveal that the "allies" do not feel as strong as they appear to be. Another striking fact is that these alliances have Juniper as a central point, potentially a point of contention.

*Slashed government budgets hurt Cisco's more than competition, overstating its market share decline*

Cisco has an extremely strong position in public markets (> 70% in switching, >80% in routers). Their market share is safe, and should continue to be as public administrations are attracted by Cisco's very secure products as well as their architecture approach. Revenues from this market are hurt by reduced public budgets in the entire developed world, and will continue to be so for the next 2-3 years. However, this is not a structural issue, so Cisco reported revenue growth understates their private markets performance.

## Business Analysis

*Cisco's loss of market share is the consequence of its supremacy in an industry with little barriers to entry*

Cisco has recently lost a significant part of its market share, and its revenue growth has flattened. The core reasons for these problems are the emergence of strong competing products, and the bureaucratization of Cisco. Those two trends are not new: the first one was already strong in 2008, and the bureaucratization of Cisco started earlier, around 2005.

In its core markets, Cisco has been losing on average 1pt of market share a year over the past 5 year. Given the dominance of Cisco in its industry, and the fact that barriers to entry are rather limited, this is not a worrying fact, but rather the natural adjustment of an industry to the supremacy of a single player.

Indeed, losing 5 points of market share in 2010 is impressive, but this is simply bringing back to the 2009 level. Given Cisco's exceptionally strong position in the public sector, part of this increase and decline is simply due to the public spending by most governments, and the decrease from austerity programs.

The major risk for Cisco is to descend into a series of reorganizations, keeping them from focusing on the issues at hand. The end result would be a continued erosion of their market share. However, the following five points show that Cisco has the potential to continue dominating this industry:

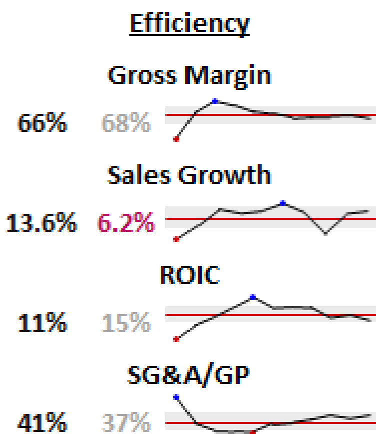
*Here are the major reasons why Cisco is not entering a protracted series of reorganizations, and will keep its leadership*

1. Cisco's culture shows ability to adapt, change and deliver (successful UCS line, Jawbreaker using non-Cisco chips)
2. Presence in markets of future growth (Cloud & Virtualization)
3. CEO John Chambers taking a back seat
4. Divesting and headcount reduction
5. Track record at maintaining margins, and limiting market share erosion

For these reasons, I think that the most likely outcome of Cisco's current situation is a successful reorganization, after a difficult year 2011, leading to a 2012-2015 period with slowly eroding market shares and margins. Given the strength of its core markets, this means 5% to 6% of yearly sales growth in the next 5 five years. As Cisco's current market price assumes -7% sales growth for the same timeframe, this comforts us in our assessment that Cisco is currently greatly undervalued.

## Business Internals

*Charts represent the past 10 years of data, last data point being TTM. Red line is the median and the grey zone is one standard deviation.*




Cisco has had very stable margins for the past 5 years. Recent competition did put a dent into its gross margins, slightly down 66% against a 10 year median of 68%, but Cisco shows a good ability to protect its margins.

Cisco sales have grown by a 6.2% CAGR over the past 10 years – a pretty difficult business environment which includes the tech crash and the financial crisis. Looking forward, we expect Cisco to average 5% growth for the next 5 years. Note that CEO John Chambers guidance of 12-17% topline growth was not easy to believe based on historical information.

The ROIC of Cisco has been in a steady decrease since 2005. I believe this is one of the major elements behind Cisco's flat return in the past 5 years, highlighting that management hasn't been able to invest assets wisely. Cisco's divesting from consumer business and layoff plan should stop this decline for the next 2 or 3 years.

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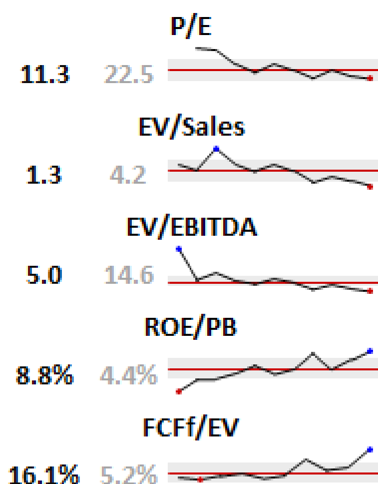



SG&A as a percentage of gross profit shows the bureaucratization of the company, starting in 2005. The cost cutting plan should bring this ratio to 36% for 2012, below the historical median.

Cisco's balance sheet is very solid: 14.5x interest coverage, $4.7/share of excess cash, and a very reasonable leverage ratio of 0.36.

# Multiples & Industry Comparison

Unsurprisingly, Cisco's valuation multiples are very inexpensive, both compared to historical median and to its competitors. Besides, Cisco yields 8.8% on an ROE/PB basis, and 16.1% on a FCFf/EV basis.

It is quite unlikely that Cisco will return to its historical multiples (22 P/E or 15 EV/EBITDA), however, if they manage to show that they can handle their competitors, going back to the sector average seem like a very likely event, **this would mean a P/E of 17 and EV/EBITDA of 10 in 2012.**

Finally, these ratios suggest that Cisco was not cheap during the 2004-2007 periods: 4-5% yields, EV/EBITDA of 15 are expensive for a company that is a clear market leader – and by definition won't grow much faster than the market

Networking : Industry roundup **6/22/2011**

| Ticker | Cap (B) | 1 year chart | 200MA | 5yr Sales | GM | ROA | ROIC | PE | EV/S | EV/EBITDA | EV/IC | ROE/PB | FCFf/ EV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CSCO** | **85.3** | | **-21.8%** | **10%** | **66%** | **8%** | **15%** | **11.7** | **1.3** | **5.3** | **1.5** | **8.5%** | **14.7%** |
| JNPR | 16.1 | | -18.6% | 15% | 71% | 6% | 10% | 27.6 | 3.2 | 14.4 | 4.8 | 3.6% | 4.7% |
| APKT | 4.2 | | 2.9% | 45% | 87% | 11% | 19% | 87.6 | 15.5 | 46.2 | 12.8 | 1.1% | 1.6% |
| ALU | 12.2 | | 22.4% | 7% | 42% | 2% | 2% | 24.8 | 0.5 | 4.3 | 3.2 | 4.0% | 13.7% |
| ARUN | 2.8 | | -5.0% | 86% | 73% | -1% | 0% | Neg | 7.1 | 262.2 | 12.8 | -0.1% | -1.5% |
| RVBD | 5.2 | | -5.5% | 89% | 79% | 6% | 13% | 112.4 | 7.8 | 50.2 | 11.1 | 0.9% | 1.2% |
| FNSR | 1.4 | | -41.7% | 18% | 36% | 10% | 10% | 15.9 | 1.2 | 7.8 | 2.0 | 6.3% | 7.7% |
| FFIV | 8.4 | | -12.7% | 26% | 84% | 13% | 29% | 41.7 | 7.6 | 24.4 | 22.5 | 2.4% | 3.4% |
| HPQ | 73.2 | | -15.8% | 8% | 27% | 7% | 18% | 7.9 | 0.6 | 4.1 | 15.9 | 12.6% | 21.6% |
| **Sector Average** | | | -10.7% | 14% | 53% | 8% | 15% | 17.5 | 2.0 | 11.6 | 8.3 | 8.6% | 15.0% |
| **Sector Average (without HP & Cisco)** | | | -8.3% | 29% | 67% | 6% | 12% | 41.2 | 5.0 | 33.5 | 9.0 | 2.9% | 5.8% |

*Averages are market cap weighted*

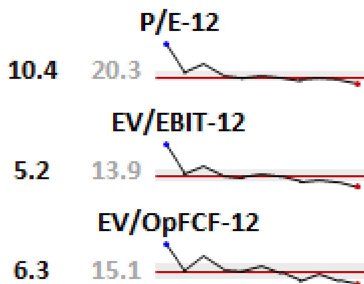
## Supply & Demand

Cisco's stock is still in a phase of decline, with no clear sign of accumulation
We are getting close to the 2008/2009 lows, which is the $13.6 to $14.2 zone. Even though current price is offering an excellent opportunity, a patient buyer could wait for the stock to come in this area to start accumulating.

The recent major sellers appear to be generalist mutual funds. New positions have been opened in Q1 2011 by investors with a good track record, such as Robert Rodriguez of First Pacific Advisors, David Dreman of Dreman value management, Arnie Van Den Berg of Century Management, Tweedy Browne and Bruce Berkowitz of Fairholme Capital Management.

## Estimating Fair Value

*Charts represent the past 10 years of data, last data point being TTM. Red line is the median and the grey zone is one standard deviation.*




### Most likely outcome

*1. Forward Multiples*
The target P/E of 17 for 2012 gives an estimated share price of $26.1
The target EV/EBITDA of 10 for 2012 gives an estimated share price of $27.5

*2. DCF based*
We modeled the most likely outcome, using the following assumptions:

- 5.3% average growth rate for the 2011-2015 period, and then a growth of 3% a year until 2025
- Decaying competitive advantage (EBITDA margin) starting in 2012
- Losing its tax rate advantage in 2016
- Final exit EV/EBITDA of 7

Gives a price point of $22.6

Combining the two methods, we have a fair value range of $23 to $27

### Worst case scenario

In case Cisco does fails to execute and lose its competitive advantage, we estimate that the worst outcome would be a loss of 5% of revenue per year (until 2025), and an exit EV/EBITDA multiple of 3 – extremely negative assumptions. They give a fair value of $13, barely below the current price.

# Risks to the thesis

The major risk to our thesis is of course a failure from Cisco to roll out products that compete efficiently with the contenders. As explained above, fair value in that case would be $13, a limited capital loss to today's price (cf. sensitivity analysis on the first page).

The second risk is the investment to become a 'value trap'. This is a possibility (as there is a large class of investors that has been 'burned' by holding Cisco for too long), however it is a limited risk for two reasons:

1. Sector is followed and generates a lot of excitement (Cloud, virtualization)
2. Catalysts are well defined : if the market doesn't react to them, it will be a sign to exit the position

# Catalysts

The major catalyst will be the industry's reaction to Cisco's next lines of routers/ switches. Cisco is not very talkative about the release dates, but various industry observers indicate that new products will be rolled out during the first and second half of 2012.

Smaller catalyst will be:

- Continued success in the UCS line
- Evolution of revenue growth of the cloud/virtualization lines
- Divesting of other divisions (Linksys, Webex).

*Numbers:*

*Bold: TTM,*
*Grey: 10yrs median,*
*Red: 10 yrs CAGR.*

# Cisco: valuation summary

CSCO -- Cisco Systems Inc --

Sector : Technology

Mkt Cap $85 bn 21-Jun-11

Industry : Communication Equipment

**I] Valuation Estimates**

| | | | | | | |
|---|---|---|---|---|---|---|
| Market | **$ 15.1** | $ 20.1 | DCF [EV/EBITDA] | $22.6 | F - PE 2012 | $26.1 |
| Rev. DCF (keeps moat) | -7.6% *revenue growth* | | | | F - EV/EBITDA 2012 | $27.5 |
| Rev. DCF (loses moat) | -7.4% *revenue growth* | | | | | |
| Cash per share | $4.7 | | Average Estimated Value | $25.4 | | |

**II] Profitability / Efficiency**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Gross Margin | **66%** | 68% | SG&A/GP | **41%** | 37% | Rcv / Sales | **10%** | 9% |
| EBITDA Margin | **26%** | 28% | D&A/GP | **7%** | 7% | Cap. Intensity | **9%** | 12% |
| Profit Margin | **17%** | 19% | ROE | **15%** | 17% | CROIC | **14%** | 18% |
| FCFf/Sales | **21%** | 21% | ROA | **8%** | 10% | ROIC | **11%** | 15% |

**III] Growth**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Top Line | **13.6%** | 6.2% | SG&A | **13.1%** | 6.0% | Bottom Line | **4.1%** | 16.4% |
| This Year | **-2.0%** | [1.29 - 1.37 - 1.42] | Next Year | **10.8%** | [1.31 - 1.52 - 1.63] | CAPEX/Sales | **2.9%** | 2.9% |

**IV] Multiples**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| P/B | **1.8** | 4.8 | EV/IC | **0.9** | 4.0 | | | |
| P/E | **11.9** | 22.5 | P/OCF | **8.5** | 17.3 | P/E-12 | **10.5** | 20.3 |
| EV/EBIT | **6.2** | 14.2 | EV/EBITDA | **5.3** | 14.6 | EV/EBIT-12 | **5.2** | 13.9 |
| EV/Sales | **1.4** | 4.2 | EV/OpFCF | **5.8** | 16.1 | EV/OpFCF-12 | **6.4** | 15.1 |

**V] Return**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ROE/PB | **8.4%** | 4.4% | FCFf/P | **14.8%** | 6.2% | ROIC/EVIC | **12.4%** | 3.8% |
| Div Yield | **1.5%** | 0.0% | Dps Growth | **0.0%** | 0% | Div/FCF | **15%** | 0% |
| | | | 10y DY | **1.5%** | | | | |

**VI] Liquidity & Debt**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Fin. Leverage | **0.4** | 0.2 | Quick Ratio | **3.0** | 1.9 | CCC | **53** | 55 |
| Capitalization | **26%** | 16% | Int. Coverage | **14.5** | 14.0 | ND/EBITDA | **-2.4** | -1.7 |
| Op. Leverage | **0.8** | 0.8 | | | | Z-Score | **2.9** | 6.8 |

*Charts represent the past 10 years of data, last data point being TTM. Red line is the median and the grey zone is one standard deviation.*