



## Danger Zone: FireEye Inc. (FEYE)

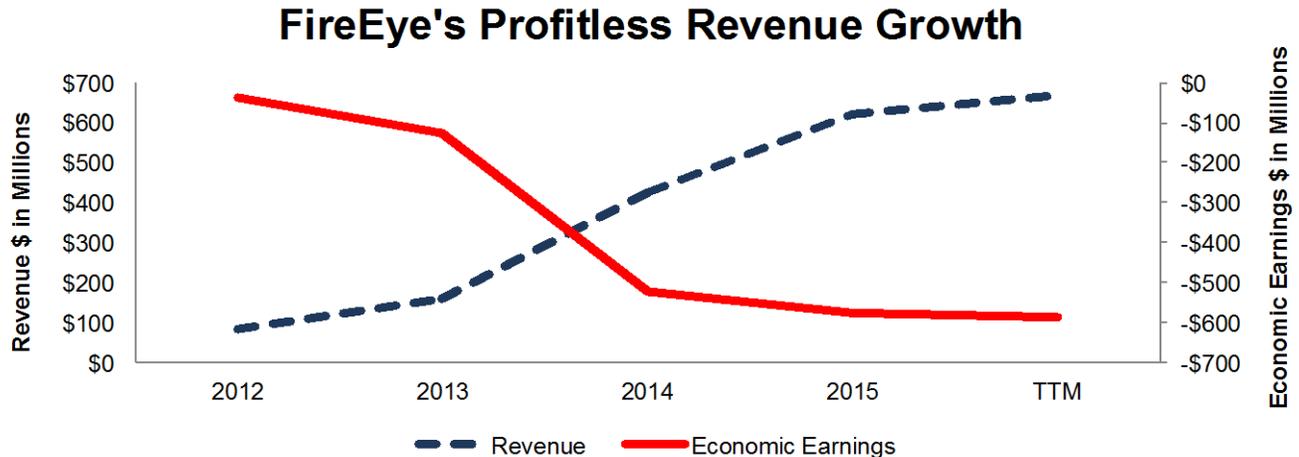
Check out this week's [Danger Zone interview](#) with Chuck Jaffe of [Money Life](#) and Marketwatch.com

Investors are always on the lookout for a bargain, particularly for quality companies. Just because a stock has seen a large price decline does not mean it has become a bargain. This week's Danger Zone pick is down over 50% in the past two years. Unfortunately, many investors saw this decline as a time to buy, and the stock is up 30% since mid-May. With shares now greatly overvalued plus large profit losses and strong competition, FireEye (FEYE: \$17/share) is this week's Danger Zone pick.

### Aggressive Spending Equates to Soaring Losses

FireEye's [economic earnings](#), the true cash flows of the business, have declined from -\$40 million in 2012 to -\$587 million over the trailing twelve months. Such large losses contrast FireEye's revenue, which, since 2012, has grown by 96% compounded annually to \$623 million in 2015 and \$666 million over the last twelve months. See Figure 1. See the reconciliation of FireEye's GAAP net income to economic earnings [here](#).

Figure 1: Disconnect Between Revenue and Economic Earnings



Sources: New Constructs, LLC and company filings

The aggressive revenue growth has hurt FireEye's margins and return on invested capital (ROIC). NOPAT margin is -62% and ROIC is a bottom-quintile -24% over the last twelve months.

### Misleading Non-GAAP Earnings Rise While Profits Fall

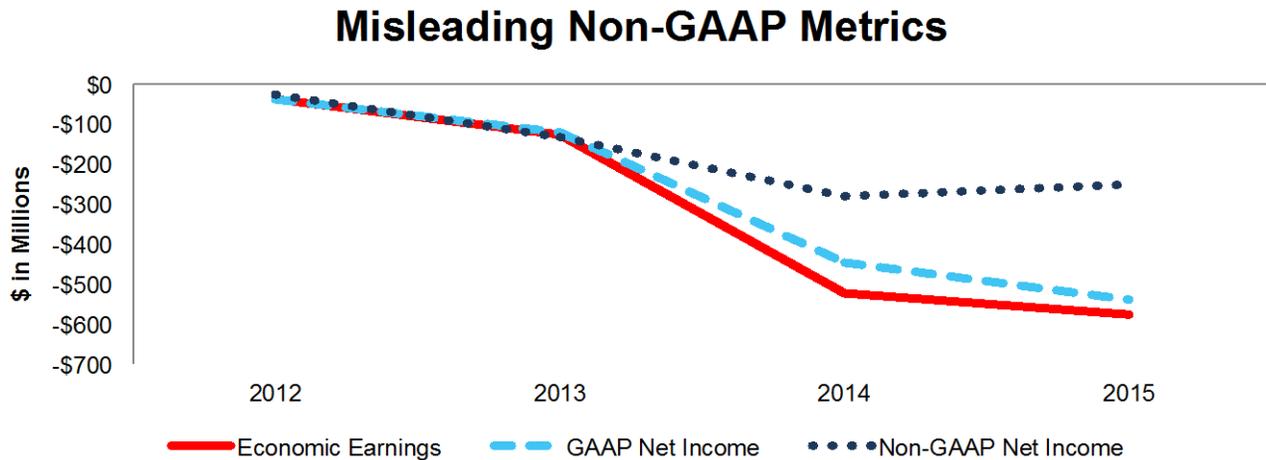
The [dangers of non-GAAP earnings](#) have been made clear. Companies routinely remove normal operating costs to create a more positive picture of business operations. Here are expenses FEYE has removed when calculating its non-GAAP metrics, including non-GAAP operating margin and non-GAAP net loss:

1. Stock based compensation expense
2. Amortization of intangible assets
3. Acquisition related expenses
4. Restructuring charges

These costs can be significant, particularly stock based compensation expense. In 2015, FireEye removed \$222 million (36% of revenue) in stock based compensation expense to calculate its non-GAAP net loss. By removing this cost, along with the others, FEYE is able to report non-GAAP results that, while not positive, are improving year-over-year while the true profits are declining. Non-GAAP net loss improved from -\$280 million in 2014 to -\$248 million in 2015. Meanwhile, GAAP net loss declined from -\$444 million to -\$539 million and economic

earnings declined from -\$521 million to -\$576 million over the same time. This discrepancy, dating back to 2012, can be seen in Figure 2.

**Figure 2: FireEye's Non-GAAP Overstates Profits**



Sources: New Constructs, LLC and company filings

### Negative Profitability Creates Competitive Disadvantages

The security industry is highly competitive and FEYE faces significant challenges from each of its competitors. As noted in the company's 10-K, competition comes from Cisco (CSCO), Juniper (JNPR), Intel (INTC), IBM (IBM), and Palo Alto Networks (PANW), among others. Figure 3 makes it clear that FEYE's competition have higher margins and ROICs. With such negative profitability, FireEye has competitive disadvantages in the form of less capacity to invest in product development and less pricing flexibility.

**Figure 3: FEYE's Profitability Well Below Competition**

Company	Ticker	Return On Invested Capital (ROIC)	NOPAT Margin
Cisco Systems	CSCO	17%	20%
Intel Corporation	INTC	15%	20%
International Business Machines	IBM	11%	15%
Juniper Networks	JNPR	12%	15%
Symantec	SYMC	4%	11%
Palo Alto Networks	PANW	-23%	-12%
FireEye	FEYE	-24%	-62%

Sources: New Constructs, LLC and company filings

### Bull Hopes Rest On Illusive Profitability or A Takeover

Just because FEYE trades below IPO price does not mean it is undervalued. Instead, it speaks to the over-optimism that FEYE received upon going public. As often occurs, the bull case for FEYE rests on the company continually growing revenues at a rapid clip, but "eventually" getting costs under control and becoming highly profitable. Unfortunately, FEYE has provided no signs that profits are near, and costs continue to grow nearly equal to or faster than revenue growth.

From 2012-2015, FireEye's research & development costs, sales & marketing costs, and general and administrative costs have grown 157%, 92%, and 110% compounded annually respectively. At the same time, cost of revenues has grown by 136% compounded annually. As noted earlier, revenue has grown 96% compounded annually over the same time.

More recently, in 1Q16, revenue grew by 34% year-over-year. However, cost of revenues grew 37%, R&D grew 31%, and general and administrative costs grew 30% year-over-year. In order to buy into the bull case, one must believe FEYE can significantly cut costs in order to improve margins, while simultaneously growing revenue to maintain the “growth story” initially sold to the market.

With growing losses, one has to wonder whether FireEye investors are hoping for a buyout offer from a larger firm or competitor. However, as we’ll show below, this opportunity may have already passed, and without hopes of acquisition, FEYE presents significant downside risk.

### FEYE May Have Missed Its Takeover Opportunity

The biggest risk to our thesis is that a larger competitor acquires FEYE at a value at or above today’s price. However, this risk may be minimized since, as [reported by Bloomberg](#), FireEye recently rejected several takeover offers, believing that the purchase price did not properly value the firm. Bloomberg notes that the sales process is no longer active. Unfortunately for investors, we’ll show below that FireEye may have been better off accepting a buyout because unless a competitor is willing to destroy shareholder value, an acquisition at current prices would be unwise.

To begin, FEYE has liabilities that investors may not be aware of that make it more expensive than the accounting numbers suggest.

1. \$91 million in [outstanding employee stock options](#) (3% of market cap)
2. 46 million in [off-balance-sheet operating leases](#) (2% of market cap)

After adjusting for these liabilities we can model multiple purchase price scenarios. Only in the most optimistic of scenarios is FEYE worth more than the current share price.

Figures 4 and 5 show what we think Cisco (CSCO) should pay for FEYE to ensure it does not destroy shareholder value. Cisco has been mentioned as a takeover candidate since the firm has been bulking up its security offerings in recent years and FEYE could round out Cisco’s offerings. However, there are limits on how much CSCO would pay for FEYE to earn a proper return, given the NOPAT or free cash flows being acquired.

Each implied price is based on a ‘goal ROIC’ assuming different levels of revenue growth; 25% and 30%. These revenue levels are equal to or higher than the consensus estimate for 2017 (25%). In each scenario, we conservatively assume that Cisco can grow FEYE’s revenue and NOPAT without spending on working capital or fixed assets. We also assume FEYE achieves a 10% NOPAT margin. This margin is below CSCO’s NOPAT margin (20%), which is boosted by Cisco’s numerous profitable business segments, but well above FEYE’s current NOPAT margin of -62%. For reference, FEYE expects 2016 operating margins to equal -22% to -24%.

**Figure 4: Implied Acquisition Prices For CSCO To Achieve 7% ROIC**

To Earn 7% ROIC On Acquisition			
Revenue Growth Scenario	FEYE’s Implied Stock Value	\$ Value Destroyed For CSCO	\$/ CSCO Share Destroyed
25% CAGR for 5 years	\$11	(\$1,798)	(\$0.36)
30% CAGR for 5 years	\$15	(\$1,209)	(\$0.24)

Sources: New Constructs, LLC and company filings. \$ values in millions except per share amounts. \$ value destroyed equals the difference between implied price and current market price plus net assets/liabilities.

Figure 4 shows the ‘goal ROIC’ for CSCO as its weighted average cost of capital ([WACC](#)) or 7%. Even if FireEye can grow revenue 30% compounded annually with a 10% NOPAT margin for the next five years, the firm is not worth more than its current price of \$17/share. For reference, consensus estimates expect FireEye’s revenue to grow 27% in 2016 and 25% in 2017. We include the 30% scenario to provide a best-case view. Note that any deal that only achieves a 7% ROIC would be only value neutral and not accretive, as the return on the deal would equal CSCO’s WACC.

**Figure 5: Implied Acquisition Prices For CSCO To Achieve 17% ROIC**

To Earn 17% ROIC on Acquisition			
Revenue Growth Scenario	FEYE's Implied Stock Value	\$ Value Destroyed For CSCO	\$/ CSCO Share Destroyed
25% CAGR for 5 years	\$2	(\$3,395)	(\$0.68)
30% CAGR for 5 years	\$3	(\$3,153)	(\$0.63)

Sources: New Constructs, LLC and company filings. \$ values in millions except per share amounts. \$ value destroyed equals the difference between implied price and current market price plus net liabilities.

Figure 5 shows the next 'goal ROIC' of 17%, which is Cisco's current ROIC. Acquisitions completed at these prices would be truly accretive to CSCO shareholders. Even in the best-case growth scenario, the most Cisco should pay for FEYE is \$3/share (82% downside). Any deal above \$3/share would lower CSCO's ROIC.

### Without Acquisition, Shares Remain Overvalued

As shown above, significant optimism is priced into FEYE. Without acquisition hopes, the expectations baked into the current stock price remain unrealistically high. Specifically, to justify the current price of \$17/share, FEYE must immediately achieve 5% pre-tax margins and [grow revenue by 30% compounded annually for the next 13 years](#). For reference, FEYE expects 2016 operating margins to equal -22% to -24%. Furthermore, in this scenario, FEYE would be generating \$18.8 billion in revenue 13 years from now, which is greater than Facebook's 2015 revenue.

Even if we assume FEYE can improve margins at the expense of some profit growth, the company is still overvalued. If FEYE can achieve 10% pre-tax margins (from -81% in 2015) and [grow revenue by 21% compounded annually for the next decade](#), the stock is worth only \$8.50/share today – a 50% downside. Each of these scenarios also assumes the company is able to grow revenue and NOPAT without spending on working capital or fixed assets, an assumption that is unlikely, but allows us to create a very optimistic scenario. For reference, in 2015, FEYE's [invested capital](#) increased \$589 million (94% of 2015 revenue). Longer-term, over the past three years, FEYE's invested capital has grown on average by \$648 million (104% of 2015 revenue) per year.

### Catalyst: Rejecting Buyout Means Company Must Perform

With the rejection of multiple buyout offers, FireEye is telling investors that it not only believes it's worth more than the offers, but that it can achieve a higher valuation as a standalone company. This message to the market puts pressure on management to meet or exceed all expectations. Any miss on consensus expectations or company set goals will be magnified given the firm could have accepted a buyout offer.

Investors should be on the lookout for any dramatic efforts to spur further top-line growth to beat expectations, such as value destructive acquisitions. As shown through the [high-low fallacy](#), management could show improving EPS and non-GAAP EPS with no regard to the underlying economics of the business, which are already in bad shape.

Lastly, FEYE jumped over 30% from its May lows after rumors of takeover negotiations surfaced. This price action has only propped up shares in the short-term. Long-term, the price movement sets up a situation where an earnings miss could cause a drastic crash in FEYE more damaging than would have occurred before acquisition talks began.

### Insider Sales and Short Interest Remains Low

Over the past 12 months 1.4 million shares have been purchased and 882 thousand have been sold for a net effect of ~500 thousand insider shares sold. These purchases represent <1% of shares outstanding. Additionally, there are 5.5 million shares sold short, or just over 3% of shares outstanding.

### Executives Aren't Aligned With Shareholder Value Creation

Apart from base salaries, executives at FireEye receive annual cash bonuses and long-term stock-based awards. The cash bonuses are paid out for meeting certain corporate goals, such as bookings, non-GAAP EBITDA, and new customers, and individual performance goals, which are all qualitative in nature. Stock-based awards are given based upon meeting target bookings and also have a time based vesting requirement. In either case, the metrics chosen to incent executives do very little to create true shareholder value. The best way to

create shareholder value, and align executives with the best interest of shareholders, is to tie performance bonuses to ROIC. ROIC is the best target metric because there is a [clear correlation between ROIC and shareholder value](#).

### **Impact of Footnotes Adjustments and Forensic Accounting**

In order to derive the true recurring cash flows, an accurate invested capital, and a real shareholder value, we made the following adjustments to FireEye's 2015 10-K:

Income Statement: we made \$153 million of adjustments with a net effect of removing \$147 million in non-operating expenses (24% of revenue). We removed \$150 million related to [non-operating expenses](#) and \$3 million related to [non-operating income](#). See all adjustments made to FEYE's income statement [here](#).

Balance Sheet: we made \$345 million of adjustments to calculate invested capital with a net decrease of \$244 million. The most notable adjustment was \$46 million (2% of net assets) related to operating leases. See all adjustments to FEYE's balance sheet [here](#).

Valuation: we made \$848 million of adjustments with a net effect of decreasing shareholder value by \$848 million. There were no adjustments that increased shareholder value. One of the largest adjustments, was the removal of \$762 million (27% of market cap) due to [total debt](#), which includes \$46 million in [off-balance sheet debt](#).

### **Dangerous Funds That Hold FEYE**

The following funds receive our Dangerous-or-worse rating and allocate significantly to FireEye.

1. ARK Web x.0 ETF (ARKW) – 3.7% allocation and Dangerous rating.
2. Baron Fifth Avenue Growth Fund (BFTUX) – 2.0% allocation and Dangerous rating.

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*Disclosure: David Trainer and Kyle Guske II receive no compensation to write about any specific stock, style, or theme.*



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