



**A TECHNOLOGY SECTOR FOR THE LONG TERM INVESTOR
(10 years on)**

In opinion piece 16 back in January 2007 I wrote about investments I had made in two analog semiconductor companies, Linear Technology and Analog Devices. I stated that these were two companies I believed could be bought and held for the long term. Given that Analog Devices has just announced it is buying Linear Technology and seeing that it is now almost ten years later, I think that this is now a good time to review my original piece.

To summarise the original, I made the case that the main reasons for making the investments were as follows:

1. Designing analog semiconductors is really difficult. There are only a small number of people with the necessary skill and it takes a long time to perfect that skill.
2. The really good designers want to work in firms that already have the best talent. In other words it is difficult to compete against the existing leading players.
3. The overall market for analog semiconductors would grow over time.
4. Profitability at the leading firms would remain excellent.
5. The valuation of the companies was reasonable.
6. I had built up a high degree of confidence in the CFO of Linear Technology.

Here we are in 2016 and with regard to the case I made in 2007 I can say the following:

1. There is still a shortage of analog designers. China and India are not producing a glut of graduates with the necessary skills.
2. The really good designers still want to work at the top firms. No major new competitor has emerged to compete with the existing players.
3. The market has grown from around \$30bn to over \$45bn per year. (see appendix)
4. Profitability has remained high and Analog Devices has managed to become even more profitable.
5. Valuations remain at similar levels.
6. Paul Coghlan the Linear CFO retired in 2015 and at no stage did I ever feel that I needed to doubt anything he ever said.

This suggests that I did a reasonably good job with my analysis. Everything I said back then turned out to be reasonably accurate.

The next thing I need to do is show you how the share prices have done and assess whether the investments have been a success. (I judge success to be the following: did I make money and did I beat the market)

Linear Technology Price Chart



Analog Devices Price Chart



The answer is therefore yes. Both Analog Devices and Linear Technology have made me money and both have beaten the market. I don't have to eat humble pie, I can genuinely say that a buy and hold strategy worked. I ignored all the short term volatility, including the 2008 financial crisis and just stuck with these high quality companies.

Strange but true

There has been one big surprise for me, one important thing that I did not expect when I wrote that opinion piece and that surprise has been that a man from my home town has ended up as CEO of Analog Devices. In fact Vincent Roche grew up just around the corner from my grand-parent's house and I believe he still has a brother living in Wexford town.

I hope therefore that he does a great job because it will be great to brag about a fellow Slaneysider!



Vincent Roche

Current thinking

In the original piece I did not highlight the fact that the analog semiconductor market can be broken down into subsectors. Analog Devices is the leader in two subsectors, converters and amplifiers while Linear Technology is the market leader in power management. Combining the two companies therefore creates a company with a market leadership position in these three subsectors and therefore seems to make strategic sense. Management stated at the time the acquisition was announced that they intend to keep the Linear Technology brand because of it being recognised as a market leader. They also talked about the importance of corporate culture and as long as they retain the culture that made them a success I believe that Analog Devices has a good chance to make a success of the new larger company.

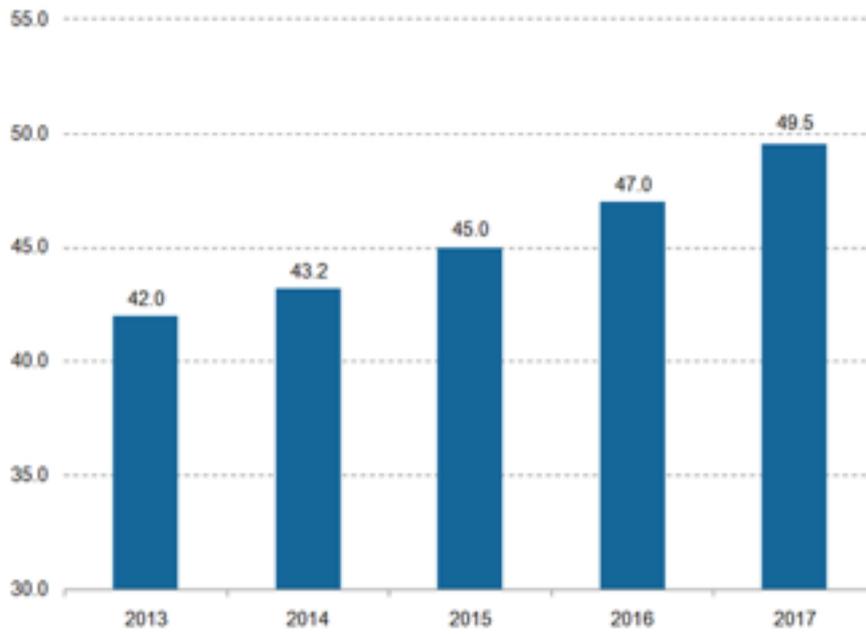
As far as I can tell, all the other factors I mentioned before are just as applicable today as they were 10 years ago. Analog designers are still in short supply and it is still as much an art form as a science with the leading companies managing to attract and retain the best talent. In other words the analog semiconductor market remains an attractive and highly profitable place to operate.

Conclusion

In 2017 I will get a mixture of cash and Analog Devices shares for my Linear Technology shares. I hope to hold on to these additional shares for the long term and if I'm lucky I might get to write another opinion piece in 2027!

APPENDIX

Analog Integrated Circuit (or IC) Market (\$ billions)



Market Realist[®]

Source: IC insights