<u>Investing in Serendipity</u>

In recent days, a news item caught my attention.

> **TSMC Lands Big Orders For Mining ASICS from Bitmain (Digitimes)**
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> "…as Taiwan Semiconductor Manufacturing Company (TSMC) has landed sizable orders from Bitmain, China's leading Bitcoin ASIC designer, for fabricating mining chips……Bitmain's orders are enough to occupy 90% of TSMC's ASIC foundry capacity during off-peak season, with the remaining 10% booked by Canaan Creative. Bitmain's orders amount to 100,000 wafers monthly at TSMC, serving as a significant driver for the foundry house's revenue growth in 2018, the sources indicated."
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> http://www.digitimes.com/news/a20180130PD208.html

Reflecting on this, I realised that TSMC probably never had a bitcoin roadmap. I don't think they anticipated the rise of cryptocurrencies 5-10 years ago and strategically positioned themselves to capture this hot trend by making chips for the industry. It simply landed on their lap.

The reason TSMC is a beneficiary of the bitcoin craze is more because it has consistently focused on being the most advanced (and biggest) logic semiconductor foundry on the planet. In other words, the science and engineering of making logic chips. Because of this, whenever trends that require advanced logic chips arise, TSMC will automatically be on the radar.

So, why do we in the investment world continue to obsess about being able to predict the future prospects of companies and model their future growth and financials? Being able to articulate the future prospects and model it on a spreadsheet merely creates a false sense of "knowing". In reality, we just don't know anything about the future and we should not pretend we do. More importantly, we should not make young analysts and fund managers fool themselves into thinking they can.

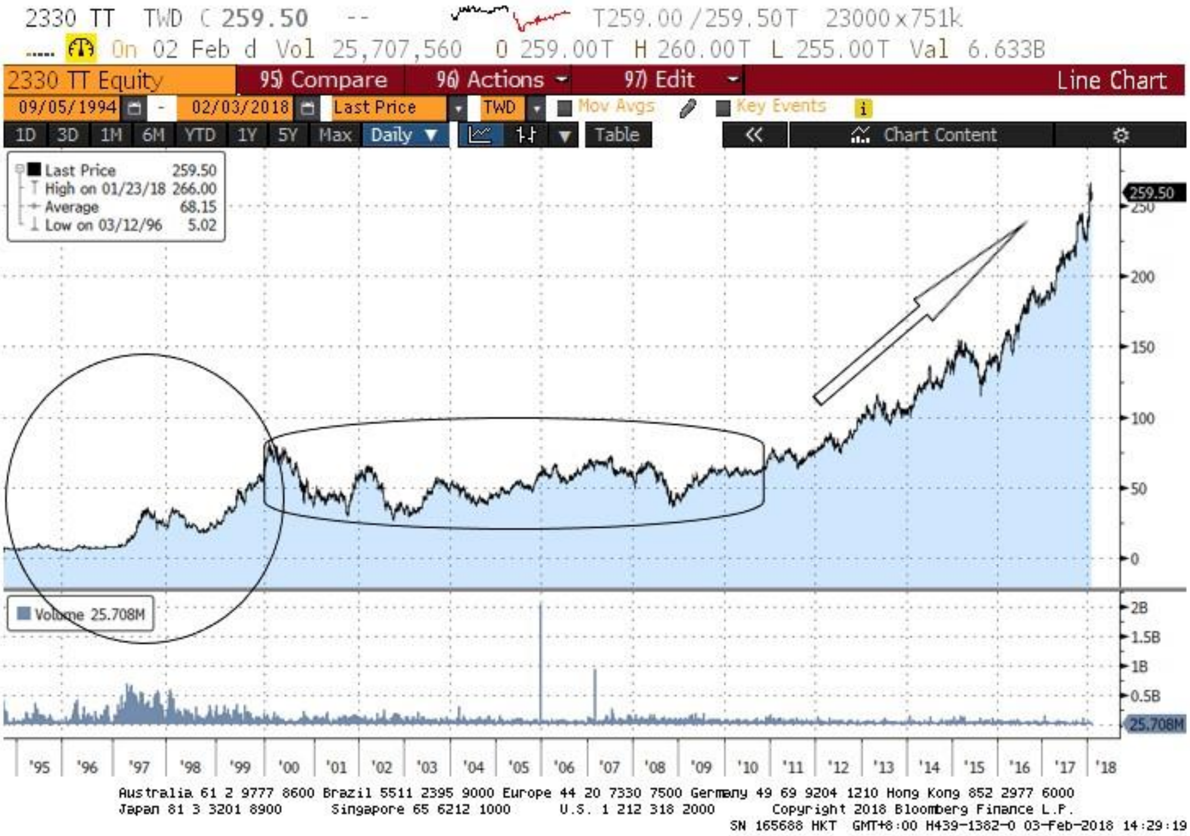
TSMC's story is really simple. Work super hard on being the best (and the biggest). Understand that Intellectual Property (fancy way of saying science and engineering) is cumulative – the longer you beaver away at IP, the stronger you become. Although you obviously have to secure enough business to feed your troops, the fact is when waves of demand from new trends arise, they will wash on your shores, provided you are the best at what you do. You don't have to predict the future of everything.

The lesson – <u>**The Engineering Dept's roadmap is more critical in the long run than the one from Sales & Marketing**</u> although the typical pressure from the Wall Street community will be to focus on the roadmap coming from Sales & Marketing.

This lesson dovetails with my previous essay dated 5 Oct 2017 : **How To Diversify Your Portfolio and Transfer Wealth Across Generations Without Financial Advisory.**

A look back at TSMC's stock price history further illustrates this point.

The stock price did very well from 1997 to early 2000. Thereafter, it underwent a long period of consolidation from 2000 to 2010. The current surge is already 7 years old!



What happened during that decade of "stagnation"? TSMC's revenue went from US$5.3bn to US$13.3bn. It went from being 1.4x bigger than its closest rival in Taiwan, UMC, to 3.3x. It went from being an excellent way for fabless semiconductor companies to launch and grow their business to being the only choice if you wanted state of the art semiconductor manufacturing technology and you didn't have your own production technology/facility. In fact, in terms of manufacturing technology, TSMC is now a couple of nodes AHEAD of Intel!

TSMC raced away so fast and far from its foundry competitors that the Singapore government gave up in 2009 and sold Chartered Semiconductor to a Middle East funded organisation.

Obviously, the smartphone revolution played a huge part in driving TSMC from 2008 onwards. However, does anyone believe that TSMC in 2000 or even 2005, foresaw or planned for a global smartphone revolution.

Simply by being the best, from a science and engineering standpoint, when the world decides it needs you, you get to rule the world.

But by conventional wisdom, we investors are expected to forecast, model and foresee events. We are supposed to project how business and industry trends are supposed to pan out. We are supposed to pick the players that will ride on these trends. After 25 years in the game, I can honestly say that this is impossible to do with any meaningful consistency.

Perhaps we should invert. Just find the companies that are truly dedicated to developing and deploying the best technology, the ones that invest most relentlessly in R&D, make sure the entry price/valuation is reasonable and let serendipity guide our portfolio performance.