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Tech, but not as
you know it

Cleaning up

Absolutely fables

VIEW FROM ABOVE

INVESTMENT INSIGHTS

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Tech, but not as you know it

At 13% of the MSCI Emerging Markets Index, Taiwan is a large constituent of our universe. Aided by political incentives, its economy came to be dominated by technology in the 1980s. Many investors still associate it with the industry – a view given some credence, at least, by its 45% weighting in the local Index.

While this legacy obviously survives today, the past couple of decades have not been easy. Cheap labour and ready access to global markets fuelled the early boom. But the rise of China as a low-cost rival changed everything, ultimately commoditising much of Taiwan's tech industry. Investors have long memories it seems, as these issues still colour perceptions today. Taiwan is frequently dismissed as a sweatshop for low value-add tech componentry. And this couldn't be more wrong.

What's gone largely unnoticed is that Taiwan has upped its game. Many firms are now at the cutting edge of technological developments, while others are catching up rapidly. Products are often still cheaper and yet, far from the image of price-takers at the mercy of aggressive customers, bargaining power is rising through customer diversification.

Investor indifference has left many attractive firms underappreciated, providing those prepared to look beyond generalisations with a rich seam of opportunity. In past Letters, my colleagues have urged investors to dig deeper, extolling the virtues of a bottom-up stock-picking approach to emerging markets. Taiwan is no different.

“Taiwan has upped its game”



Investment Insights

Cleaning up

Contrary to popular perceptions of the sector, I am always amazed at how many Taiwanese firms are driving key technological advances whenever I visit. Take clean technology, for example. While the economic reality has often disappointed investors, I see years of structural growth ahead in certain areas and expect Taiwanese companies to fully participate.

The declining cost of solar and LED lighting, for example, makes both technologies more affordable and large-scale production more viable. LED lighting is now nearing the commercial critical mass that will justify capital expenditure on the greater automation of production lines, creating a virtuous cycle as unit costs are further reduced. Consequently, I anticipate a significant ramp-up in demand for intelligent automation products, an area of expertise for various Taiwanese players. Chroma ATE is particularly well-placed to benefit from these trends. The company's technology has allowed it to build a fully automated solar module assembly line that gives it a 30% cost advantage relative to western peers and for the same quality. A less volatile play on the renewable theme, it is just the type of 'picks and shovels' company that I often find offers the most attractive risk-reward exposure to this type of growth trend.

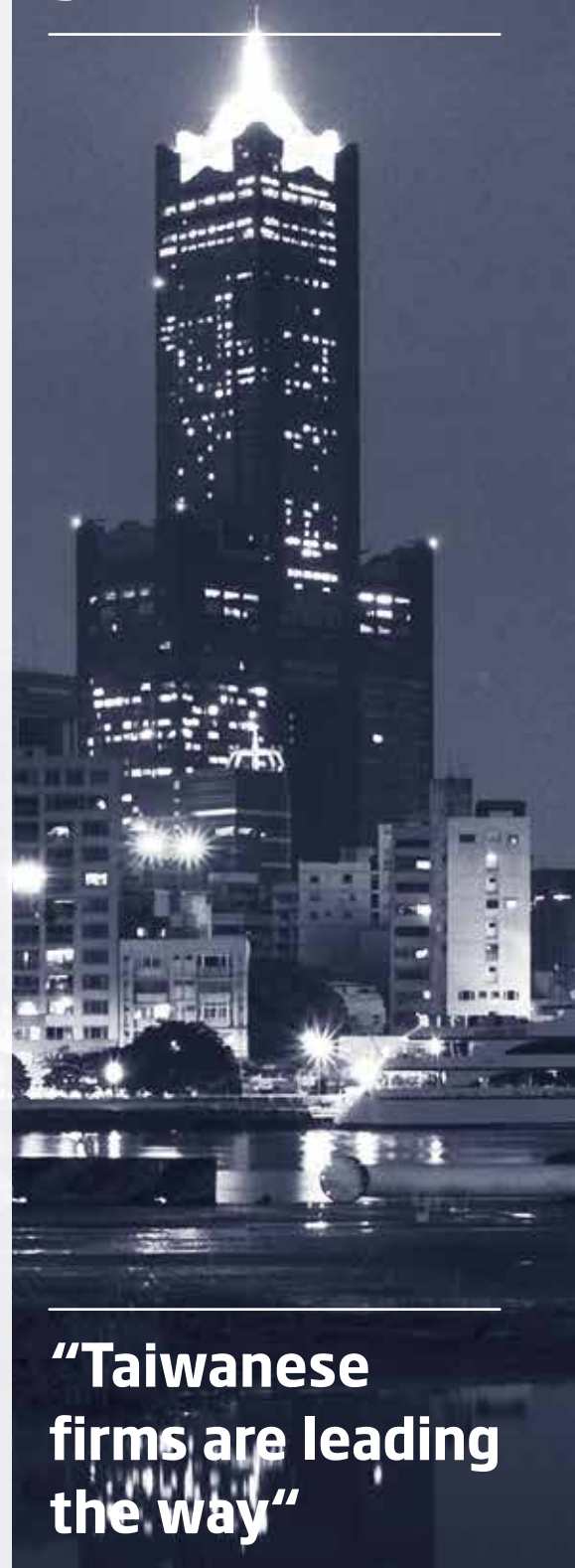
Absolutely fabless

Smartphones have arguably been the consumer technology soar-away success in recent years, leaving many wondering what possibly could come next. However, numerous other new technologies are approaching critical commercial mass, and Taiwanese firms are leading the way.

Wearable technology is just one potentially exciting new growth area. It has its sceptics but, judging by Apple's early forays, should not be written off yet. Depending on what the uptake for these products is, their need for ever-more sophisticated componentry could mean that designers and developers of integrated circuits see entirely new markets open up. These companies don't just depend on the prospects of items like smart watches, though. Developments in image sensors and touch-panel controllers are enabling greater consumer interaction with their devices and are creating further commercial opportunity. For example, eyewear developed by Microsoft is bringing 3D video gaming into the here and now, offering a more visually attractive and interactive experience. While we watch and wait to see how these new technologies pan out, advances in more established technologies are also boosting demand. Ultra-high-definition TVs and consumers' desire for larger screens, for instance, are reinvigorating a previously lacklustre television market and consequently are making the integrated circuits that allow higher-resolution advances much more valuable. These various trends should particularly benefit companies like Chipbond and Himax Technologies. Himax, is a 'fabless' semiconductor firm, a business which outsources the increasingly commoditised and low value-add manufacturing process to focus on the higher-value design of the integrated circuits that are critical to so many of these technologies.

**"I see years
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Smartphones also remain a key area of opportunity – 400 million were sold in China last year. Asian smartphone technological sophistication is also growing very rapidly, and 3G and 4G variants will be the norm by 2016. Significant investment by Taiwan’s component makers has supported this rapid technological convergence, allowing other fabless integrated-circuit designers like Mediatek to catch-up and even surpass western competitors like Qualcomm.

Power play

Taiwan’s tech sector continues to be tainted by its past over-reliance on key customers, as investors continue to believe that many firms remain in thrall to large customers extracting penal pricing concessions. Yet, political and economic rapprochement with China has strengthened trading relationships with Chinese businesses considerably, while I see many companies actively addressing bargaining power issues. Only in 2007, Himax was a single-product, single-customer company. Product expansion has allowed it to grow its customer list significantly. Outside its core flat-screen display driver business, it specifically targets a 5-10% market share from non-Apple and non-Samsung customers, while Chinese firms BOE and ChinaStar are now key large-panel customers alongside LG (South Korea) and AUO (Taiwan).

Chipbond also exemplifies Taiwan’s shift in bargaining power – significant product investment has elevated the company from also-ran to go-to supplier. For others, like Chroma ATE, cheaper local engineering support and shorter lead times have boosted demand from domestic players, lengthening the client list. As Asia catches up in areas like smartphones and demand continues to grow rapidly, customer exposure for firms like Mediatek should also diversify naturally over time.

Mind the gap

Despite leading many nascent, cutting-edge technologies Taiwan does still lag in certain areas. E-commerce, barely accounting for 5% of the retail market, is one. Inadequate logistics infrastructure has often tarnished the online retail experience, as customers wait lengthy periods to receive their goods. Payment options have also been limited due to restrictive third-party payment laws, although legislation addressing this is going through parliament. But the key impediment has been a limited product offering. Electronic goods dominate online sales, and a contracting PC market hit volumes hard.

However, higher-margin, non-electronic goods are growing in importance as more women shop online. Taiwan’s biggest e-commerce company is PCHome Online, whose US\$1 billion market cap highlights just how underdeveloped domestic e-tailing is. Its significant investment in enhanced logistics infrastructure could ensure it plays a leading role in closing Taiwan’s e-commerce gap to western levels.

Taiwan may still be a technology-dominated market but this doesn’t rule it out as a destination for attractive returns. Quite the opposite in fact: it’s no longer the low-value sweatshop many believe.



Matthew Williams
Fund Manager

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