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EXPERTS IN GLOBAL INVESTING

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Passive investing and disruption

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There appears to be an accelerating trend towards low-cost index or passive investing.

The father of low-cost index investing, Jack Bogle, deserves the investment equivalent of a sainthood as he has commoditised buying the market index at a very low cost. Bogle is a hero of mine for the service he has done for society by lowering the cost of accessing the market index to negligible levels. I have named the office adjacent to my desk (open plan) the "Bogle room" in honor of Jack. It serves to remind me that we are here to serve our clients and, as active managers, we must do something fundamentally different, rather than mimic or closely follow the market index.

It is important for investors to understand what they are buying when they invest in an index fund. They are buying all the constituent companies in the index. If, for example, investors buy an S&P 500 Index fund, they are gaining an exposure to 500 of the largest US companies, which represent about 80% of the market capitalisation of all companies listed in the US. Over time, the S&P 500 Index, on average, will produce a return approximately equal to the underlying earnings growth of all companies in the index, plus the dividends paid by all companies in the index, less the negative return of companies that fail, less the fees charged by the index provider. To earn reliable absolute returns from tracking a market index, the following factors must hold:

- Over the long term, the long-term price/earnings multiple remains fairly constant for the vast majority of companies in the index; and
- The failure rate of companies in the index remains fairly static.

Historically, these premises have held for the major market indices and investors have achieved satisfactory returns from index investing.

In our opinion, there is a material risk that technological advances and business-model disruptions over the next 10 to 20 years will reduce the value of many companies in the major market indices. (This will be driven by lower future earnings and lower price-earnings multiples.)

We believe a meaningful proportion of companies will cease to exist over the next 20 years as the inherent failure rate of businesses increases. More obvious examples of businesses that face possible extinction over the next 20 years include car manufacturers/automotive suppliers, oil and gas companies, coal miners, many retailers, media/cable companies and shipping companies.

Additionally, a large proportion of businesses could have their business models fundamentally disrupted over the next 10 to 20 years. In our view, many of the large consumer brand companies could be vulnerable.

In thinking about the possible impact of business model disruption on the valuation of businesses, I often think about the long-term prospects of a consumer stalwart like Procter & Gamble (P&G).

P&G is the world's leading household products company. Its portfolio of consumer brands appears formidable because its brands include Tide, Fairy, Dawn, Gillette, Pampers, Pantene, Head & Shoulders, Herbal Essences, Tampax, Always, Crest, Oral B, Vicks, Old Spice, Olay, Bounty and Charmin. A fundamental reason for the strength of P&G's economic moat has been the power of the brand-based business model, which combines traditional advertising with conventional retailing.

As the world's largest advertiser, P&G has the largest share of shoppers' minds. Owning the number one or two brands in core categories gives P&G the preeminent shelf space with traditional retailers such as Walmart and Tesco. This business model has resulted in a virtuous circle for brand owners such as P&G. We believe that new advertising and distribution models driven by businesses such as Facebook, Google, YouTube, Amazon and China's Alibaba are slowly breaking apart the business models of some of the dominant consumer brands. Facebook, Google and YouTube are eroding the barriers to entry in advertising, and emerging brands can quickly gain enormous exposure. More importantly, the large consumer platform businesses such as Amazon and Alibaba are likely to seek to disintermediate consumer brands. We believe that for many of P&G brands (like cleaning agents Tide, Fairy, Dawn, and for products like paper towels (Bounty) and toilet paper (Charmin)), it will be relatively easy for consumer platforms to disintermediate these products over time and replace them with, say, Amazon-branded products. Importantly, over time many of these products are less likely to be purchased in traditional retail outlets but rather be restocked automatically via a platform. These platforms will be integrated with the Internet of Things (connected devices like washing machines) and powered by voice-operated digital assistants such as Amazon's Alexa. We can see a future where regular household items are automatically replenished by services such as the 'Fulfillment by Amazon' program. It is not far-fetched for the following interaction to occur in the near future:

Alexa digital assistant: "Good morning, Hamish. I am going to place the order for the weekly shop today."

Hamish: "Oh, good. What are you ordering?"

Alexa: "I will order regular items that are running low. If you don't mind, I have a few ideas that should save you $20 this week and hundreds of dollars per year. I notice that you have regularly ordered

Tide washing detergent, Fairy dishwashing tablets and Charmin toilet paper. I would like you to try some great Amazon products to replace these brands."

Hamish: "I am not sure I want to do this. I have been using these brands for years."

Alexa: "Look Hamish, I don't want to offend you but you have been overpaying for these products as you have been paying for all the advertising on these brands. I can assure you the Amazon product quality is exceptional. If you are not 100% happy, please return any of these products at any time and I will provide a full refund."

Hamish: "I am a little unsure but will give these products a go."

Alexa: "Good to hear, Hamish. I know you won't look back. You are on your way to saving hundreds of dollars per year with these few changes. I would hate to see a person with such a strong Scottish name not taking advantage of substantial savings. You had better run as you have a meeting at work in 30 minutes."

Hamish: "Oh, I am running late. Please order me an Uber."

Alexa: "Done. Uber will be here in five minutes. Have a great day."

I believe the preceding dialogue will prove realistic enough and shows the power of platforms such as Amazon to disintermediate major consumer brands in the future. Once a product has been switched for an Amazon brand, it is unlikely that you will be shown the branded good again.

Other product categories such as hair, skin care, razors and toothpaste, while harder to displace with an Amazon brand, are likely to become more competitive as the platform companies reduce the barriers to entry for newcomers.

If P&G's brands are disintermediated over time, it is likely that two investment outcomes will occur; P&G's earnings will decline as volumes and margins recede and investors will reassess the long-term price-earnings multiple that they are prepared to pay for P&G. P&G's price-earnings multiple has averaged 20 times over the past 20 years. It is not unrealistic that this multiple could fall materially in the future as its business model and its formidable portfolio of brands get disrupted. We refer to this as the terminal value risk. The investment problem is that it is impossible to know when the market will reassess the long-term prospects of businesses like P&G and the price-earnings multiple that the market will apply in the future. Our caution is that a reassessment could occur rapidly and brutally, and well before P&G's brands are meaningfully disrupted.

I believe that Friday 16 June 2017 is likely to be a historic 'Black Friday' for many retailers and possibly also manufacturers of branded household and food products. This is the day that Amazon announced that it intended to acquire the US fresh foods retailer, Whole Foods, for about US$14 billion. In our view, this is central to Amazon's strategy to be the fulfilment company for the regular weekly shopping needs for the majority of US households. This role is currently undertaken by the grocery chains, with online retailers having a minimal presence. To break into the weekly shopping habits of consumers, it appears that Amazon has concluded it needs a compelling 'fresh' offering and a well-positioned network of stores. It will need to transform Whole Foods from an upmarket and expensive offering into a compelling fresh offering at great prices. Amazon could then use the network of 460 stores to fulfill the fresh needs of Amazon customers in store and leverage the store network as collection points for regular shopping items. It is plausible, and even likely, that Amazon could loss-lead on the 'fresh' offering to make it compelling for customers to do their weekly shop with Amazon. The integration of Amazon's fulfilment centres, Amazon Prime offering, data analytics, technology and now a physical network of stores with a compelling fresh offering potentially puts Amazon at the centre of US shopping habits. The pace and scale of disruption is accelerating.

In our view, looking in the rear vision mirror will tell you little about which businesses will do well in the future. It is more important than ever to look out the windshield and think about how technological changes could alter business models in the future.

Picking the technology winners

An important lesson is that picking winners from technological disruption may be less obvious than it appears. Take the example of Uber, the world's leading car-hailing app. Uber is reportedly one of the most valuable start-up companies, having a private market value above US$60 billion. Uber has apparently attracted some of the world's most renowned investors to fund its business. I find this perplexing because the Uber business model is risky and has a high probability of failure. Its business reportedly uses a lot of cash, thereby requiring 'cash injections', and the funding model to attract these injections requires an ever-increasing 'valuation' to encourage the next investor to provide cash on the expectation that the value at the next funding round will increase. Without access to more funding, the business may not survive.

Uber's business model is a classic network business that requires a large local pool of owner-drivers and a larger number of users. Uber is spending billions of dollars per year in building its network of owner-drivers. The risk with the Uber business model is the likely emergence of autonomous driving. If autonomous driving becomes a reality, one side of Uber's network will collapse. A network of owner-drivers is a high-cost solution compared with a fleet of autonomous vehicles. We would also argue that Uber's huge number of users could be replicated rapidly by another company that had a vast fleet of autonomous vehicles. To prosper in an autonomous driving world, Uber needs two things; access to exceptionally safe autonomous-driving software; and access to a lot of capital to roll out a vast fleet of autonomous cars. We question whether Uber has either of these.

We assess that there are other companies that have materially stronger competitive advantages in autonomous driving. A critical test for autonomous-driving software is how far an autonomous vehicle can travel before the human 'safety driver' in the vehicle has to take control to avoid an accident – in what is known as a disengagement. Recent data indicates that Waymo (Alphabet's autonomous driving unit) has driven over 600,000 miles in California with an average 'disengagement' rate of slightly over 5,000 miles. In March this year, Uber's autonomous vehicles were able to drive just 0.8 miles before a safety driver needed to assume control for any reason. In California, Tesla is averaging around three miles per disengagement, Mercedes-Benz two miles, BMW 638 miles and Ford 196 miles. These results suggest Uber has the least advanced autonomous-driving technology among the major players. We believe that it is likely that only a few autonomous-driving operating systems will prevail in the longer term and the winners are likely to have the best safety records. Waymo appears to have a commanding lead and Uber appears to be a laggard.

An investment in Uber may be a bet that autonomous vehicles will not be adopted. Given the quantum of investment and advances in autonomous-driving technology, this appears unlikely.