Value Investing in the Age of Artificial Intelligence

This article is authored by MOI Global instructor Jean Pierre Verster, portfolio manager at Fairtree Capital in South Africa, where he manages the "Protea" range of equity long/short hedge funds. Jean Pierre is an instructor at Best Ideas 2018, the fully online conference featuring more than one hundred expert instructors from the MOI Global membership community.

The 4th Industrial Revolution seems to be taking its toll on the active investment management industry, with many high-profile funds underperforming in the last few years, and some even closing down completely. The increased use of Artificial Intelligence (AI), Machine Learning and Big Data Analytics is seeing a seismic shift in assets away from traditional asset managers towards passive and quantitative strategies. One could rightly ask: Is active investing, and by extension value investing, dead?

The practical definition of 'Value Investing' has morphed over the years, away from Benjamin Graham's classic methods of statistically computing intrinsic value with reference to historical financial metrics such as tangible book value and a public company's long-run P/E ratio. Investors have since expanded their cognitive toolbox to include mental models such as moats, brand value, growth (i.e. the underappreciated power of long-term compounding), lollapalooza effects, reflexivity, alternative leverage (e.g. float), concentration/focus, the advantages of permanent capital, cognizance of macro-economic influences and a host of behavioural finance concepts.

Today, the value investing community is a broad church of investment styles and less dogmatic in nature. What binds us together is the application of an intelligent process which identifies opportunities to purchase an asset at a significant discount to intrinsic value, thereby ensuring a margin of safety in the process. This principle won't go out of fashion, but we need to acknowledge that certain applications thereof are under threat.

The wide availability of easily searchable financial databases has rendered statistically attractive opportunities like net-nets just about non-existent. Smart Beta funds have industrialised the systematic process of identifying value investing attributes that outperform. Natural language processing algorithms immediately account for justified prices adjustments on the back of major company announcements and macro changes. Big data analytics is leading the race for informational edge, and AI is identifying causations we weren't even aware of. Not only do computers have a speed advantage, but the unemotional and accurately probabilistic use of these techniques are clear advantages when compares to human decision-making. Traditional value investing is under threat, but the increased use of technology is also an opportunity for those value investors who decide to utilise it to their advantage.

Our own experience in embracing technology to assist with our value-based investment process might be instructive: Over the course of the last decade we have, through abductive reasoning, developed an automated analytical process whereby we utilise algorithms to forecast a company's individual accounting line items, leading to a probabilistic forecast of the next 4 years' full financial statements. We then utilise the Du Pont and Gordon Growth models to translate those future financial statements into fair value, which we can then compare to the current share price in order to identify shares trading at a significant discount to intrinsic value. This is combined with significant human judgment to consider whether future financial statements based on past patterns in fundamental data is indeed realistic. It is not a pure quantitative process nor just our subjective assessment of the company's future fundamentals, but rather a ‘quantamental’ process which combines the ingenuity of the human brain with the scale of computer power.

The approach has been applied successfully in our local South African equity market (a sophisticated market, comparable to developed markets rather than emerging markets from a regulatory and functional perspective) since February 2011, with real money, in an equity long/short strategy. We have significantly outperformed the broad market index over this time, and in September 2017 we launched a global fund to apply the same process across developed equity markets globally, after prior testing with internal capital and extensive travelling and reading to inform the qualitative part of our analysis. Our ‘quantamental’ process is by no means the holy grail, but it has been very useful and profitable to us, abductively identifying investment opportunities hiding in plain sight in public markets. We are harnessing technology in a forward-looking way whilst staying true to the core principles of value investing, a natural evolution given the current disruption to our industry.

Value investing is dead. Long live value investing!