

January 2020

It's plain sailing...

Artificial Intelligence: Beast, or Beast of Burden

Artificial Intelligence, that ubiquitous phrase heard for years, from 50's sci-fi to the prophetic proclamations of the world's leading software and robotics developers. This science continues to progress leading us to accept almost blindly that whilst in its infancy, the day will come when machines will mimic men.

From email spam filters, weather & Google predictions, to the millions of applications on our smartphones, it's true to say we take for granted this interactive form of logical, artificial intelligence that appears to behave without human intervention.

In the world of science however, there are two little known concepts - "Narrow AI" and "General AI" - and these distinctives are in fact very important when it comes to defining their particular lines of development and application.

Within "Narrow AI" (also known as "weak AI" or "special purpose AI") we have the very familiar software applications and machines that are part of our daily life in leisure, work, hospitals, factories and socially. These are forms of Al that have limited, low level roles, which very much reflect the commands and program parameters established by human minds. While some of these "Narrow AI" applications are perceived as incredibly clever or efficient, the intelligence is still entirely that of the developer, with every response pre-established and prescribed. Far different from the creations we appear to believe in, ie free thinking machines that will mimic human nature, equalling and even exceeding, the greatest minds that have ever lived. This is the complication when we come to the second concept of Al called "General Al".

The belief has been, due to Moores law (scientist and CEO of Intel) that his proven observation of computing power doubling every two years, will lead to programmed super brains capable of accessing the colossal repository of information stored on global servers. With the speed to cross reference all this knowledge, this will somehow "evolve" into independent thinking and reasoning machines; yet this has one major flaw. It is still programmed by human minds, and is, put simply, the organisation and retrieval

of information, albeit a feat of incredible human engineering.

As we have seen or experienced on our many devices and machines, crashes do occur, that are anywhere from minor irritations to catastrophes. Developers have generated a term that reflects the "dead ends" often hit in creating truly progressive artificial minds that are truly "intelligent", which is known as "Al Winters".

This term came from the situation where programmers find themselves in these figurative blizzards or "whiteouts", with no direction, or ability to see a way forward and progress. From the earliest experiments in the 60's, where it was believed true artificial intelligence was merely a small number of years away, language translation for example, took decades rather than years, to become functional and usefully applied. This could not now be described as independent and reasoning intelligence, but simply reverted to a more accurate "Narrow Al" function

You would trust your smartphone app to help with simple voice recognition, or withdraw your cash from a dispenser, but would you allow your car to be driven for you by software only, or board a passenger flight that had no pilots?

Satya Nadella, Executive Vice President of the Cloud and Enterprise group of Microsoft, and developer of one of the largest cloud infrastructures in the world, declares undeniably that "humans and machines will work with one another - not against each other". Remember that the more Al becomes a component of our daily life, the number of occurring unintended, unwanted and destructive behaviours, will also increase at a similar rate. This therefore diminishes our belief and core trust in Al machines so they become just tools, although incredibly useful ones.

Will companies continue to embrace the responsible innovations and successes of Al technology? Without a doubt - as previously stated, humans and machines must work together. What needs consideration is human

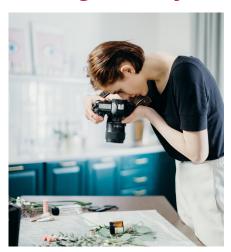
interfacing, human empathy, human focus, emotion, lateral creativity, a smile and the social interactions. As the Al Winters pronounce, we are still exceedingly far away from replacing person to person trust, professionally, personally, and even in the simplest of human services, care and heart, with warmth - not a cold machine.

Many areas of our lives with regard to our finances, are handled in the software Narrow Al domain, but would you approach a cash machine and discuss pension investments, stocks and shares, financial strategies, your age, your lifestyle, your family, dreams, business ideas, equity options for your family, funeral services, wills and gifts? Highly unlikely.

No automations will replace human interaction and feeling you are in safe professional care. Financial advisors provide that essential link between the faceless but efficient tools of technology, and being understood as a unique human being, who has their own personal story. Where there is someone with whom you can communicate, the trust accrues, as does the sensible choices with your money, and you know you are in safe hands.



Saving when you're self-employed



It seems that more and more of us are shunning the perceived shackles of employment and deciding to be our own bosses and become self-employed. Around 4.8 million of us doing just this in the UK currently, which make up 15% of this country's workforce, however only 31% of those are saving into a pension, let alone the other insurances and "securities" that come with the "corporate life."

As an employee we're entitled (where eligible) to auto-enrolment where we pay a monthly

contribution into a pension fund agreed by our employer, who then contributes an additional amount on top. As a sole trader or owner of a limited company, this option is currently unavailable (although there are questions being asked of the Government to consider some form of auto-enrolment options for those self-employed, even if simply to encourage saving as part of the tax return process) and it is down to you to ensure you're saving for your future.

When income can fluctuate month to month, it can seem daunting to try and fix a monthly contribution however it's important to remember you will still need an income in retirement and the current state pension of £168.60 per week (2019-20) is unlikely to afford you the standard of living in which you are comfortable.

There are also tax breaks you should not miss out on, including tax relief on your contributions up to $\pounds40,000$ a year, therefore if you pay $\pounds100$ into your pension the Government will add an extra $\pounds25$. If you pay tax at the higher rate of 40% you can also claim back an additional $\pounds25$ through your tax return for that $\pounds100$ pension contribution (in Scotland the rules are slightly different).

The type of pension you choose will vary between an ordinary personal pension, offered

by most providers, a stakeholder pension (an individual contract between you, the member and provider with capped maximum charges) or self-invested personal pension (SIPP) which has a wider range of investments but normally the charges are higher. Many providers will also allow you to stop, start or amend your payments to suit your circumstances or you can top up a lower monthly premium when funds allow.

As well as a pension there are also key insurances the self-employed should consider. Health insurance is widely offered as an employee benefit but if as a sole trader, you become suddenly ill how would this affect your income? It's widely reported that we should all have a financial nest egg put away incase of emergencies, but this is truly important for those without a regular monthly pay check. Health insurance will assist in gaining quicker access to necessary treatment to enable you to get back on your feet faster than potentially relying on the NHS, as vital as they are.

Life insurance to protect your loved ones should be another box that is ticked and consideration should also be given to income protection, however it's important to note that you should prepare to fund yourself from savings for a reasonable length of time, ie a minimum of 3 months, in order to avoid expensive premiums.

Teaching our children the value of money



We regularly teach our children right from wrong from reading fairy tales, watching the magic of animated movies and show us a parent who hasn't been exasperated as the principle of "sharing" falls on deaf ears between siblings. But when it comes to money, parents don't tend to broach this subject until pocket money rears its head, or we have to "gently" explain why mummy can't easily spend three figures on the latest "must have" toy as advertised on TV.

So by the time children start getting enticed by "brands" through those clever marketers, they simply can't understand why an unbranded pair of trainers that look exactly the same as a premium brand that they simply have to have, is acceptable in the eyes of their parents

who work tirelessly to provide for their family. Research shows that financial behaviours start to develop from the age of 7 years* so the younger we start becoming comfortable talking to our children about money the better, whilst teaching them the value of money and saving towards something they really want. We live in a generation of "have credit, will spend" as the last global recession painfully pointed out, so it's crucial that children learn to understand how money comes into their family, how money is earned and the household priorities that are necessary before disposable income can be spent.

Critically, these conversations need to be positive so children are brought up to have a healthy relationship with money. As parents we need to be mindful of our own relationship with money so children do not become unduly worried or stressed, but learn that if they undertake a chore, or task asked of them by their elders, this is an opportunity for them too to earn their pocket money.

Involving children in household decisions is also useful and being honest when situations occur such as a decrease in salary or redundancy. These topics need to be handled with care but children need to feel both trusted and aware that situations change. Allowing them to handle their own money responsibly, also enables them

to start making decisions about purchases. Being on hand to discuss items they may want to purchase and why, can help children realise the importance of "things", to stop and think, reflect and shop around for less expensive items. Similarly, when something breaks, it should not simply be replaced, but worked for, so children start to realise the significant role and responsibility they have to value items that are bought for them and how that purchase was enabled in the first place. This leads to a stronger work ethic in later life, as parents become role models in their children's lives, leading to a higher level of independence and not wishing to rely on help or hand-outs from others to achieve specific goals; however where this is gladly given (ie university fees), a gratitude and respect is born.

More practical conversations should also be had around the dangers of credit cards, payday loans, and the difference between positive borrowing, ie a mortgage, and more negative debt that can affect not only their day to day lives but their future ability to obtain credit should they get into trouble. As parents we need to nurture our children and support them, but make it clear that as they get older, their own responsibility grows and the Bank of Mum & Dad is not to be taken for granted.....as long as we have given them the tools from an early age.

January 2020

Market Report

Global Review



After failing to gain ground over the summer, global equity markets had a strong finish to the year pushing the benchmark MSCI World index to a return of over 27% in 2019.

Developed markets led the way with the S&P 500, an index of leading US companies, returning over 30% in the last 12 months following the easing of trade tensions between the US and China. Central banks also played their part by providing further stimulus in the form of interest rate cuts and continued quantitative easing.

Trade wars have been blamed for slowing economic growth with global activity now the slowest it has been since the financial crisis. US economic growth slowed to 1.9% in the third quarter whilst China GDP dipped to 6.0%, the weakest for nearly 30 years.

The three remaining largest economies of Japan, Germany and the UK have also been flirting with recession as central banks continue to assume responsibility in the face of political instability.

UK



After failing to deliver Brexit by the 31 October deadline Prime Minister Boris Johnson was finally granted his general election wish by parliament in an attempt to force a resolution.

The resulting landslide victory for the Conservative Party returned Johnson as Prime Minister with a working majority of 80 seats, the largest Tory victory for 30 years. The Scottish National Party were also big winners north of the border, winning 48 of 59 seats and again raising the question of Scottish independence.

The size of the conservative victory surprised many and resulted in a bounce in both the value of the pound and UK equity markets, particularly the stocks of domestically facing companies, as well as a fall in government bond prices.

However, Johnson subsequently promised there would be no extension to the Brexit transition period beyond 2020, leaving little time to agree a trade deal with the European Union and raising the chances of a hard Brexit.

US



The easing of trade tensions between the US and China has driven US stock markets to new all-time highs.

The "Phase One" deal to be signed in January halts the introduction of new US tariffs and halves existing tariffs on \$125bn of China imports in exchange for China committing to purchase more agricultural products from the US.

A more constructive narrative between the two superpowers is welcome relief but ongoing negotiations are set to remain the key theme for financial markets in 2020.

President Trump will be keen to keep the US economy on track during an election year and a trade deal with China provides a strong tailwind to extend what is already the longest period of US economic expansion in history.

The recent impeachment of the President is unlikely to lead to his removal from office with a two-thirds Supermajority required within the Republican controlled senate for the vote to succeed.

Europe



Mario Draghi ended his tenure as ECB president after eight years in office and became the first head of the central bank never to have raised interest rates. One of his final acts as President was to cut interest rates and re-introduce quantitative easing in an attempt to stimulate a further slowing of the eurozone economy in the face of global challenges.

Many of the ECB governors voted against the relaunching of a quantitative easing programme to purchase €20bn worth of debt securities on a monthly basis.

Germany, the Eurozone's largest economy, narrowly avoided a technical recession in 2019 with expansion of 0.1% in the third quarter. Growth in the second quarter was revised down to -0.2%.

Despite incoming ECB President Christine Lagarde urging euro area governments to support bank policy with fiscal measures, there appears little appetite with the head of the German central bank openly criticizing the latest stimulus measures from the ECB.

Japan



The Bank of Japan are more optimistic on the latest stimulus measures launched by Prime Minister Shinzo Abe. A ¥13 trillion package is being prepared for a supplementary budget in the new year that is expected to boost economic forecasts.

This has allowed the Bank to leave policy untouched at its December

meeting with news of progress in trade talks between the US and China coupled with the nascent recovery in global economic activity.

The stimulus package announced in the wake of an increase in sales tax that preceded a 7% fall in retail sales in October. The government has also responded to typhoon Hagibis that hit the country in the same month and is set to be one of the country's costliest natural disasters in its history. This followed typhoon Faxai that hit in September. Unsurprisingly, factory activity fell to its lowest level in three years in October as 500,000 homes were left without power and many without water according to official figures.

Asia



Whilst export companies in China have struggled due to the ongoing trade disputes, leading indicators suggest the domestic economy remains sound.

The gradual decline in economic activity over the last 12 months has resulted in the slowest growth numbers since 1992. The 6.0% growth recorded in the third quarter was at the bottom of the government's target range and jeopardizes the administrations target of doubling the size of the economy over the 10 years to the end of 2020.

The Indian economy grew at 4.5% in the third quarter, the slowest pace of expansion in six years. The domestic economy has stalled with declining consumer demand whilst exports continue to weaken. The country is in the midst of a banking crisis with the government forced to prop up lenders burdened with bad debt. Many smaller businesses have also struggled following the introduction of a new Goods and Services Tax.

Investing in Structured Products

Structured Products are one of the more complex and less well-known types of investments but we believe they can play a useful role within a broad investment strategy for our clients.

In simple terms, a Structured Product is a prepackaged finance product offering a given return, or coupon, over a specific period of time linked to the performance of a financial instrument, for example the FTSE 100 Index. The main attractions of investing in structured products are that the potential annual returns can be quantifiable at the outset, albeit they are not guaranteed, and they provide useful diversification from other more traditional investments such as equities and fixed interest. Although capital invested can be tied up for up to eight years, most plans offer the potential for early maturity on any investment anniversary, usually from the second year but sometimes after one year, subject to the performance of the underlying index.

There is a wide range of structured products available at any point in time, covering the full width of the risk spectrum, from lower risk products to high risk. We carry out extensive research into the various structured products available to retail investors, and maintain a panel of approved products which can be offered to clients.

There are two types of product available; Structured Deposits and Structured Investments, and each product will target capital growth or income. Structured Deposits are plans with a given rate of interest, which is payable subject to the performance of, for example, the FTSE 100 Index over the period of the plan, with each plan having specific conditions. If the underlying index underperforms, investors may not receive any interest at all, but the capital invested is secure, while the products have the same protection of £85,000 under the Financial Services Compensation Scheme (FSCS), as with any other savings account.

Returns from Structured Investments usually depend on how a stock market index performs, and we only recommend plans linked to the FTSE 100 Index, rather than more than one index or individual stocks, which may offer higher returns but are higher risk. We often favour more defensive plans, which can pay out even if the FTSE 100 Index falls, even by as much as 35% during the full term of the plan. Some plans offer a "step-down", whereby on each anniversary the measurement level of the FTSE 100 Index falls, so the plan can mature early even if the market has fallen since the start of the plan. However, there is a risk that capital may be lost if the underlying index falls significantly, typically by more than 35% on maturity. Another risk is that the provider purchases underlying financial instruments from one or more banks, known as counterparties, and if these institutions fail or become insolvent during the term of the investment, investors may lose their full investment as they are not covered

under the FSCS. Understanding the financial strength of counterparties is essential and a key part of our research process, and we will only invest in products where we are completely comfortable with the counterparty, or in some cases multiple counterparties, involved in that product.

In times when the FTSE 100 Index has fallen, investing in structured products arguably becomes more attractive, as the likelihood of loss of capital reduces, simply on historical levels of the Index. Furthermore, the returns offered from structured products are often higher during periods of stock market volatility. From a tax perspective, returns from growth plans are usually subject to Capital Gains Tax, providing the opportunity for investors to utilise their annual CGT exemption of £12,000.

In conclusion, due to the wide range of products available, their complexity and associated risks, we believe it is essential to obtain financial advice when investing in structured products. Investing in a portfolio of carefully selected products, perhaps at different times to provide diversification between counterparties and a range of maturity dates and returns, can be an appropriate strategy to adopt alongside a broader investment portfolio. Returns can be attractive relative to other investments, but it is essential to fully understand the risks involved, and due to their complex nature structured products are not suitable for all investors.

End of the Tax Year Considerations

Maximising your finances before the end of the tax year is always recommended and having now completed your tax return, it's a good time to get prepared and look at your financial options. It's an opportunity to top up your pensions, utilise your Capital Gains allowances, consider ISA options and potentially gift cash or assets to your loved ones.

With regards to pensions, UK taxpayers are entitled to tax relief on contributions of up to 100% of their earnings, or the £40,000 annual allowance, whichever is lower. However, if you start drawing an income from a Pension Drawdown scheme, the amount you can pay into a pension to still get tax relief diminishes; this is known as the Money Purchase Annual Allowance (MPAA) which has a limit in 2019-20 of £4000.

The maximum tax-free amount you can pay into an ISA is still held at Ω 20,000 each year which can be split between a cash ISA or a stocks & shares investment ISA, depending on your needs. Income and capital gains are also tax-free and available to any UK resident over the age of 16 years, and parents can choose to invest up to Ω 4,368 per annum into a Junior ISA fund for children under 18.

Taxpayers only have to pay CGT (capital gains tax) on their overall gains/profits above the tax-free allowance of £12,000 when they dispose of assets, which is 10% for basic rate taxpayers and 20% for higher rate taxpayers (18% or 28% on disposal of property). If you are married or in a civil partnership, you can also transfer assets to each other without paying CGT, which in essence doubles the amount you can make before CGT is charged. Examples of

investments for which you'll need to pay CGT, include a second property/buy to let, shares and funds, selling a business or valuables such as jewellery, art or antiques. By utilising your CGT allowance, you can reinvest the profits into an ISA (depending on allowance already used).

Making a gift to your family and friends while you're alive is an effective way to reduce the value of your estate for IHT (inheritance tax) purposes. However, even with your annual allowance you can only give away assets or cash up to a total of £3,000 without incurring IHT. Any gift over £3,000 allowance is subject to IHT and the amount you will need to pay will depend on whether the person giving the gift lived seven years afterwards. There are several gifts that are not liable for IHT, including charity donations so it is recommended to contact your financial adviser to help you discuss options.

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