David Walker's 6 big investing themes for the rest of 2015 in **WEALTH on TUESDAY**

Are coal investments terminal? Read **WEALTH on TUESDAY**

Investing with a beautiful mind

The lessons of John Nash will live on long after his death

STIRLING LARKIN
GLOBAL INVESTOR

When most people heard the news this week that Nobel laureate John Nash and his remarkable wife, Alicia, died in a car accident, their first thoughts went to Russell Crowe's standout performance of the enigmatic character in the biographical Hollywood film portrayal of Nash in *A Beautiful Mind* (2001).

As masterful a portrayal as that was, Nash's contribution went so much further than most have yet to even realise.

His truly original contributions changed the sciences of mathematics and economics and the ways that financial participants like us go equally about the simplest and most complex of investment and risk management decisions, every single day.

Comparable to Einstein, Newton and Descartes, Nash's eloquently simple propositions married the relationship between real-world decision-making and algorithmic probabilities.

Whether you are an Ultra High Net Worth (UHNW) professional investor or a salaried working employee deciding where best to direct your superannuation, the pathways Nash showed us have become invaluable.

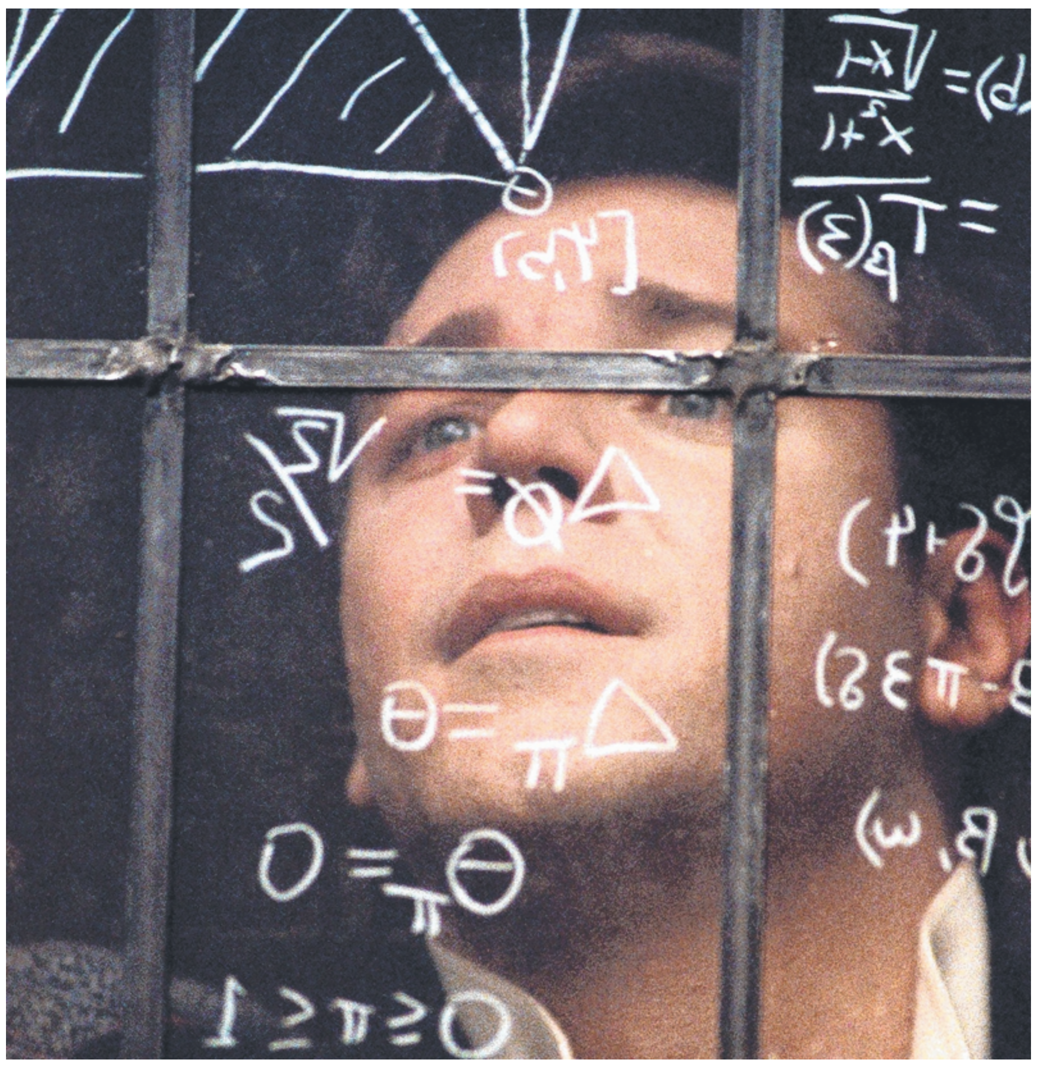
Nash equilibria and specifically the Prisoner's Dilemma formula are regularly employed at the Larkin Group to help us find what is referred to as the Minimax decision rule — minimising the possible loss for a worst-case, maximum-loss scenario.

Sometimes mistaken for the misnomer of a "zero sum" game equation, this application of game theory allows us to determine how best to make long, short and defensive investment decisions in the presence of uncertainty.

Before Nash's 1951 Non-Cooperative Games paper, which defined the Nash Equilibrium solution, decision-making in finance and more broadly in other spheres of life were narrowly broken down into two categories — zero sum games, where one wins/one loses, and supposed optimality theories, which, frankly, just never made any sense at all.

Beyond any esoteric value, this revolution in decision-making allows us in wholesale wealth advisory to decide how best to allocate or defend the marginally higher levels of allocable investment capital that UHNW global investors inherently enjoy.

A pragmatic example might be applying Nash's principles to the land use of a gold mine tenement — it will guide us to the risk factors in a decision on whether or not to develop a mine at the location (see graph). This may be the epitome of "First World problems" but it's a problem for UHNW global investors all the same.



Russell Crowe in A Beautiful Mind as John Nash pictured with his wife, Alicia, top right , AP

Nash's cornerstone work on game theory helped us make choices in other parts of our lives.

Nash regularly seconded Friedrich Hayek's thinking regarding money and advocacy for a non-typical viewpoint on the function of the authorities; in other words, the role of central banks and the position they have no right to tinker with interest rates.

Beyond game theory, Nash developed important works on the role of money in society. This work mounted a very plausible argument that proposed people can be so controlled and motivated by money that they may not be able to reason rationally about it.

Nash criticised interest groups that promote quasi-doctrines based on Keynesian economics that permit manipulative short-term inflation and debt tactics that ultimately undermine currencies (as is seen right now in 2015). Nash suggested a global "industrial consumption price index" system that would support the development of more "ideal money" that people could trust rather than more unstable "bad money".

Where such thinking becomes enlightening for Australian investment communities today is that it reminds us to determine where inflation lies in our real economy and markets.

Doing so allows us to determine our own confidences about what our relative Australian dollar purchasing power should be.

"Fair dinkum" real inflation in Australia is not the official RBA's CPI level. It just is not.

When celebrating the life and contributions of Nash, it would be remiss not to briefly include mention of his significant battles with mental illness and, specifically, paranoid schizophrenia.

Nash once explained this battle in simple economic terms: he compared not thinking in an acceptable manner, or being "insane" and not fitting into a usual social function, to being "on strike" from an economic point of view. Accepting this proposition, one could agree that he really had a beautiful and unique mind.

With volatility spikes being seen recently in German bund (bond) markets, select commodities futures contracts and some specific stockmarkets, the Prisoner's Dilemma formula and the Minimax decision rule become more pertinent than ever.

This is because what many of us learned first-hand during the nadir of the GFC, that when an entire herd of investors sprints for the exit doors, not all of us can fit through at the same time.

Minimax provides us a brutally genuine expectation of what we could expect if such a doomsday scenario repeats itself.

Respecting and incorporating the principles within game theory, which lean heavily upon the lesson garnished from the Prisoner's Dilemma formula, also allows us to make pre-emptive moves today that, hopefully, best position us if such a scenario materialised.

What little I personally understand about life, I do know that everything happens for a reason and maybe, just maybe, the reason greats like Nash have been taken from us today is to remind us to celebrate their lives but also go back and take the time to respect the simple, yet powerful lessons that they so graciously taught us.

Larkin Group is a wholesale wealth adviser focusing on high yielding global investments. www.larkingroup.com.au

Small screen winners might surprise you

ROGER MONTGOMERY

Entrepreneurs are naturally optimists. And so, despite the "pit of despair" talk of our economists and political leaders, all I can see is opportunity when I look at the companies that have done well and expanded beyond our shores and are now taking advantage of global growth themes that transcend a market of 23 million people who call Australia home.

Taking the next step — investing in global businesses themselves — is a logical progression. And globally, there are businesses so large and businesses so enmeshed in our daily habits that you are paying for their services and products even though you've probably never heard of them.

If you are older than 44, there is a 70 per cent chance you have impaired vision. The company I am about to mention, you've probably never heard of and yet you've probably contributed something to the cash in its bank account.

Globally there are more than 4.3 billion people who require corrective eyewear but 60 per cent are still waiting for access. That means there are 1.7 billion people who have corrected their eyesight either by wearing glasses, contact lenses or through surgery. That's a lot of customers for a company called Essilor, whose 40 per cent market share in the manufacturing, research and development of lenses for eyeglasses, sunglasses and protective eyewear makes it a global leader. And consider more than half of the world's population remains a potential customer for Essilor.

Now consider a US-listed company called Qualcomm with $US29 billion of cash in the bank. What do they do? You've paid them too. They own the patents for the 3G and 4G wireless communication network. And when you sip coffee at a cafe offering free WiFi? They own WiFi! Every time a mobile device is manufactured that offers access to 3G or 4G and or WiFi, Qualcomm receives a royalty.

Think about that — it's like owning the rights to the English language and receiving a fee every time someone learns to speak English. Qualcomm generates enormous returns on its equity, has virtually no debt and the internet consumption highlighted below should ensure a long period of prosperity.

Of course, keep in mind the Montgomery Global fund may, now or in the future, own these securities, so be sure to seek and take personal professional advice before undertaking any securities transaction.

Way back in 2012, video consumed 57 per cent of internet traffic; in 2014, it amounted to 64 per cent. In the US, 5.6 hours is spent on the internet, per person a day. What is really interesting is that those 5.6 hours are split between 2.8 hours on mobile, 2.4 hours on desktop/laptop and 0.4 hours on another connected device. In other words, almost 3 hours a day for every US resident is taken up on the internet on their mobile device. Despite 24 per cent of all time spent on a mobile device, just 8 per cent of total advertising spending is allocated to mobile. This is in contrast to the 18 per cent of ad spending allocated to print, where only 4 per cent of the day is spent.

> All I can see is opportunity when I look at the companies that have expanded beyond our shores

Just three years ago in 2012, people spent 7.6 hours a day on screens, with 4.4 hours on TV, 2.4 hours in front of the desktop or laptop computer and just 24 minutes on mobile screens. Today, the real growth has all been in mobile screen time. Now 9.9 hours a day are spent in front of a screen, with TV virtually unchanged at 4.3 hours, desktop/laptop unchanged at 2.4 hours but mobile now 4.8 hours!

Many millennials won't own a TV and as more and more screen time is spent watching videos on smaller mobile devices, both Qualcomm and Essilor must be winners.

Roger Montgomery is founder and CIO of the Montgomery Fund.

Quality earnings becoming extremely rare in a very busy IPO market

RICHARD HEMMING
UNDER THE RADAR

After a lull for much of the year so far, brokers are out in force, spruiking IPOs like never before.

But are fund managers listening? After speaking with a number of them, the evidence is that they're paying less and less attention, and one way of determining that the quality is declining in the market is for the majority of the free float on offer being held by mums and dads. (The free float is the stock not held by founders that gets listed on the public market.)

"We use brokers for ideas generation and then we do the work to ensure that it meets our eight commandments," says UBS Small Company Funds director Stephen Wood.

Woods's team has an abundance of investment banking experience and he claims that only three companies of the 40 that have come across his desk have met these commandments — media intelligence company iSentia, auto-parts distributor Burson and New Zealand vocational education provider Intueri.

There is no doubt there was quality in the IPO offerings last year, which also included organic baby formula producer Bellamy's and patent lawyers IPH, but a quick viewing of the latest offerings requires a sceptical stance since many are seeking to raise money at PE multiples in the high teens, which compares unfavourably with the 10-year average of close to 12 times, and that's at the so-called quality end.

It's definitely the stuff of bull markets. Take, for example, AirXpanders, which is trying to raise more than $39 million to commercialise its breast reconstruction technology for a planned ASX listing on June 22. From what we can see, it's on track to be an idea with a listing — it doesn't even have regulatory approval, let alone sales. There are literally hundreds of these "idea companies" on the ASX from the last boom period.

In contrast, one stock that has caught my eye because there is a "disruptive element" in its composition is Greenstone. The company hopes to raise close to $1 billion, more than half of which will go to its current owner, Hollard Insurance.

Greenstone was not an insurance broker but an "agent", Hollard's chief executive Richard Enthoven assured us. The group develops and sells specialty insurance products, which are then underwritten by three big insurance groups, including Hollard itself. It makes the difference between the premiums it receives and its costs, which include the underwriting.

If all is a success, it should trade on a PE of about 17 times, and what's not to like? Let's leave aside for a minute the risk that accounting-based earnings done on an accrual basis can overstate an insurance broker's cash flow — think iSelect! The shares of that one-time IPO hopeful are still well below its mid-2013 issue price. On a positive front, Greenstone's products include pet insurance and funeral insurance, which are aimed directly at baby boomers.

This generation is retiring and is increasingly attached to its pets, plus the children don't want the embarrassment of not being able to give them a good send off. You can't get much more emotional pull than that.

Richard Hemming (r.hemming@undertheradarreport.com.au) is an independent analyst who edits www.undertheradarreport.com.au, which provides investment opportunities in Small Caps you won't get anywhere else.