

THE WHOLE STORY

Scott Nisbet, Partner. First Quarter 2019



RISK FACTORS

The views expressed in this article are those of Scott Nisbet and should not be considered as advice or a recommendation to buy, sell or hold a particular investment. They reflect personal opinion and should not be taken as statements of fact nor should any reliance be placed on them when making investment decisions.

Potential for Profit and Loss

All investment strategies have the potential for profit and loss, your or your clients' capital may be at risk. Past performance is not a guide to future returns.

Stock Examples

Any stock examples and images used in this article are not intended to represent recommendations to buy or sell, neither is it implied that they will prove profitable in the future. It is not known whether they will feature in any future portfolio produced by us. Any individual examples will represent only a small part of the overall portfolio and are inserted purely to help illustrate our investment style.

This article contains information on investments which does not constitute independent research. Accordingly, it is not subject to the protections afforded to independent research and Baillie Gifford and its staff may have dealt in the investments concerned.

All information is sourced from Baillie Gifford & Co and is current unless otherwise stated.

The images used in this article are for illustrative purposes only.



Calton Square, 1 Greenside Row, Edinburgh EH1 3AN
Telephone +44 (0)131 275 2000 www.bailliegifford.com

THE WHOLE STORY

OMG. You're walking along a side street when suddenly a skinhead in a bomber jacket breaks into a sprint, coming straight at you. This is it. I'm being attacked.

But he sprints past you. Turning around you see his real target – a businessman in a suit; panicking in last second defence the businessman raises his briefcase as the skinhead jumps him. What is the world coming to? The streets aren't safe anymore!

Then you sense a falling shadow from above. You look up. Down comes crashing a hoisted ton of bricks onto the pavement where the businessman was standing a second ago.

The skinhead risked his own life to save a stranger.

If this sequence of images rings a bell, you probably witnessed it three decades ago when it was first screened on British TV. For those in the milieu, it is still regarded as one of the smartest TV adverts ever made; 30 seconds of genius on behalf of the British newspaper *The Guardian*, the first of two award-winning ads, 26 years apart, designed to promote the paper's longstanding commitment to reporting the 'whole picture' (i.e. you had better read *The Guardian* if you want to understand the different angles of an event).

As each year goes by, our interpretation of events within Baillie Gifford diverges more than ever from the familiar angles of the Anglo-Saxon media. The news, after all, naturally plays on our primal fears. Its underlying theme is: 'Watch out! This bad thing happened over here, and it might happen to you.' Look out for those skinheads.

This prism, through which we naturally view events, is the classic, primal fight-or-flight. To be fair, our threat-tuned antennae once helped us survive in the Serengeti 10,000 years ago. But today? Today, fight-or-flight keeps journalists in a job. Today, it turns analysts, fund managers, and pension fund boards into doom-dominated timorous beasts, perpetually convinced that the storm clouds are gathering (does anyone remember a year in which they weren't?) and that the next crash is overdue. Today, it stops us seeing the whole story.

In Baillie Gifford we have a very different perspective on 2018, and hence the future, than the one you will be used to reading about. Allowing for some variance of course, but let's take the central narrative of the last year – the look-out-for-the-skinheads-version – and set about dismantling it. The news has gone something like this:



Anti-Brexit protesters demonstrate outside the Houses of Parliament in London, UK.

© REUTERS/Henry Nicholls



U.S. President Donald Trump hugs American flag at the Conservative Political Action Conference (CPAC) annual meeting at National Harbor near Washington, U.S.

© REUTERS/Yuri Gripas

A disturbing rise in retrograde nationalism has taken root far and wide. Trump and trade wars; Brexit and bickering; Russian hit men running amok in English cathedral towns, French Gilets Jaunes looting the streets of Paris. O tempora, O mores! (NB: there is usually a ramping up of the clarion calls towards year end as commentators seek to grab attention with ever more frightening states-of-the-nation).

Brexit is a disaster from which everyone (Leavers, Remainers, Europe, Ireland, mainland Great Britain) will emerge angry and



Flowers are left where former Russian intelligence officer Sergei Skripal and his daughter Yulia were found poisoned in Salisbury, UK.

© REUTERS/Peter Nicholls



A woman dressed as Justice and French republic symbol "Marianne" poses during a demonstration by the "yellow vests" movement on the Champs Elysees near the Arc de Triomphe in Paris, France.

© REUTERS/Christian Hartmann

disappointed. GDP growth will surely suffer across Europe. British politics are in meltdown but look across the Atlantic and it's possibly even worse. There is a mercurial incumbent in The Whitehouse who thinks trade wars are a good idea, that climate change is a hoax, and that he is above the law. America the Nation is in a state of unprecedented internal dividedness. Relations between the West and Russia are back to the Brezhnev era; the US has picked a fight with China which no one can win and no sane economist thinks is anything other than idiocy. France is paralysed again – a major European economy that is simply impossible to reform. Yes, the high-vis sporting skinheads charged at President Macron, who spun round faster than a *Strictly Come Dancing* professional to perform a brisk volte-face. In the meantime, the Fed is

increasing interest rates, so this period of returns that we never really trusted is at an end, and economic growth rates are heading one way only.

We could go on, but you get the gist. In Baillie Gifford, we spend about an hour a year on politics and economics, 50 minutes of which is probably wasted. The reason is perhaps our own shortcoming, but even if we could have *known* with certainty that, say, Trump would win the 2016 election, or the UK would vote for Brexit, or anything else of that nature, it beats us what conclusion you could then draw to make money for our clients. These are not useful signals for long-term stock pickers. Most market participants are wasting their time poring over them.

SO WHAT IS USEFUL THEN?

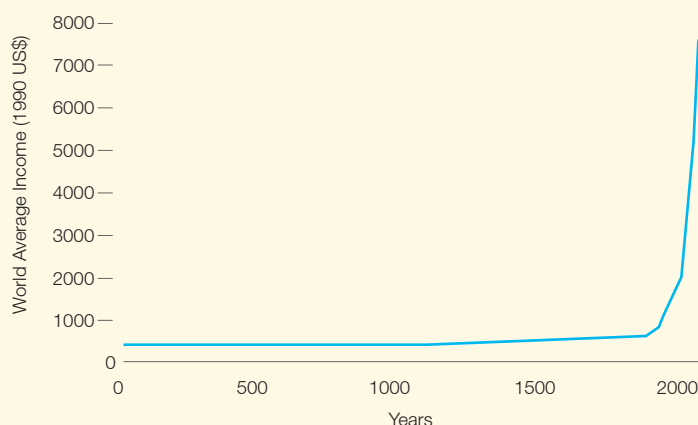
Thinking differently is useful. Let's have our camera pan up from street level, way, way up – to quite a different perspective, one that almost no other investors, and certainly no purveyors of news flow, ever entertain.

The graph opposite shows world GDP per capita growth over the last 2,000 years. You read that correctly – 2,000 years. It is taken from Ian Morris' excellent *Why the West Rules for Now*.

In the context of today, there is a very, very important question that this graph should lead us to ask. Can you tell what that question is?

If you look at the last two millennia, not a lot happened in the first 1,500 years. We are patient investors at Baillie Gifford, but 0.1% growth per century is not what we'd call a big move. From 1,500 years on it gets slightly more interesting – growth ticks up with the advent of printing presses and the spread of learning via the Renaissance. And then in the mid-19th century, starting in Britain and then across the world, the Industrial Revolution transforms the rate and depth of economic growth entirely, and 150 years later *it is still accelerating*.

2,000 years of GDP per capita growth

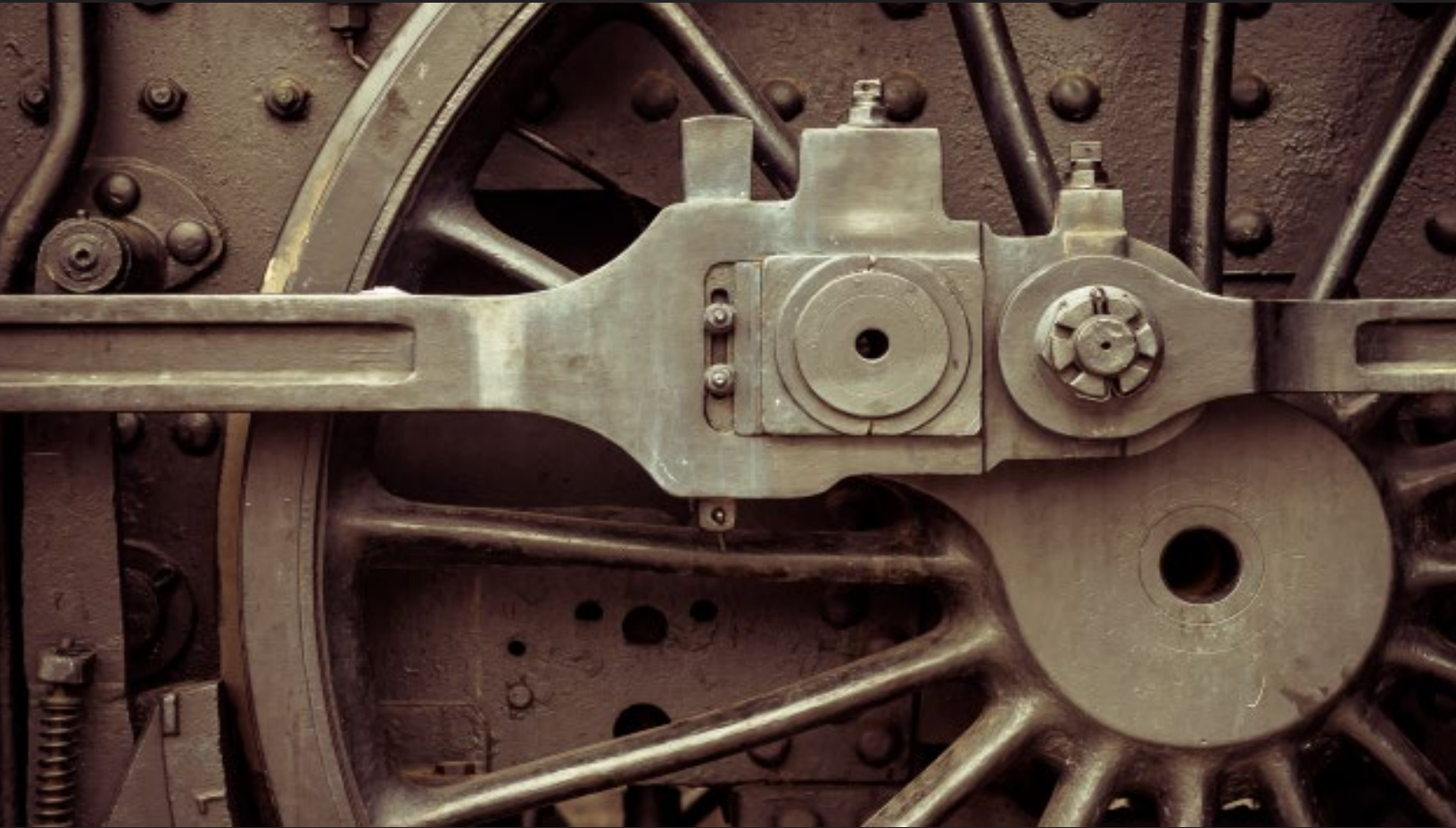


Source: Maddison, Angus (2007): 'Contours of the World Economy, 1–2030 AD. Essays in Macro-Economic History'.

What the graph also tells us is that we are currently going back to the future. We are used to western economic leadership but this is only a recent phenomenon, thanks to the industrial revolution starting in Britain first; for hundreds of years prior to that world economic leadership was 'Oriental', which is the direction we are heading back to. This in some part explains the aghast commentary of normal sources – or the real motivation to start a trade war – as we feel deeply unsettled about being overtaken. In fact, we should celebrate it – would you rather a couple of billion human beings were

lifted out of poverty and into good health, or instead that a fraction of that number in the West got even more obese? There's a reason 39 countries enjoy a higher life expectancy than the US.

So the big, big picture question to pose for all recent dire news flow is this: will the 2018 events as depicted in our paragraph of doom actually change the trajectory of the 2,000 year GDP per capita graph? We think not. Indeed, human progress is accelerating faster than ever.



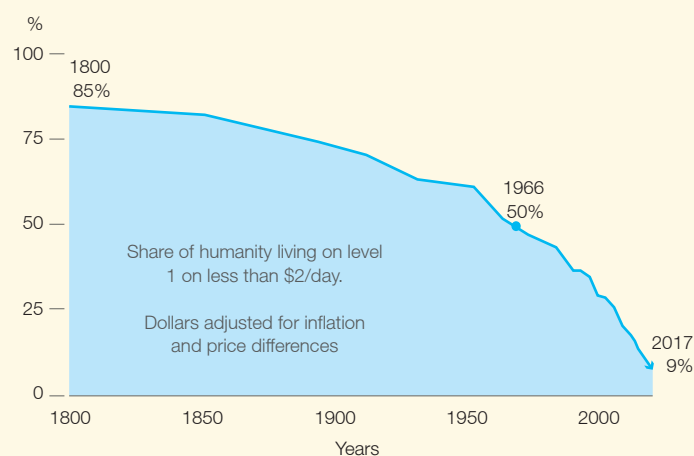
*...the Industrial Revolution transforms the rate
and depth of economic growth entirely, and
150 years later it is still accelerating.*

Now some of you may feel that 2,000 years is too long a horizon for perspective, no matter how enlightening. So let's be more short term, and take just the last 109 years, i.e. the brief period of human history that this unlimited liability partnership has been investing in global equities. To repeat the italicised observation from a couple of paragraphs ago – the most amazing feature of the graph is that during the 20th century – a period encompassing two world wars, a great depression, and numerous stock market and economic crises – the rate of GDP growth per capita has *continued to rise*. This is the true story, the whole story, the most important story for long-term investors. Those wallowing in the marshlands of current news flow miss it entirely. No wonder we need to go around cheering up our clients.

Two books which cover this phenomenal century of progress very well are Steven Pinker's *Enlightenment Now* and Hans Rosling's *Factfulness*. Both chart how much safer, healthier, less volatile, more prosperous the world is now than at any point in the past. The books depict the true narrative – the life-saving narrative of the 'Points of View' advert – a narrative we never hear about since it is gradual, positive, and therefore not of relevance to fight-or-flight. Here, as snippets, are two century-defining graphs: extreme poverty from 1800 to today:

Note that in the last 20 years the percentage of humans living in extreme poverty is falling faster than ever before. Much of this is thanks to the economic miracle ascent of China (of which more in a second).

Extreme poverty rate from 1800 to today



Source: Based on free material from gapminder.org, cc-by licence.

Even more emotively, here is the graph of worldwide infant mortality over the past half century. In 2015 worldwide infant mortality had fallen to 4.3%, from 19% as recently as 1960, and a hard to contemplate 36% in 1900.

As Rosling and Pinker both note, there is nothing that causes more heartbreak than infant mortality; if you knew nothing else of the last century it hardly matters – this improvement alone takes precedence over all else.

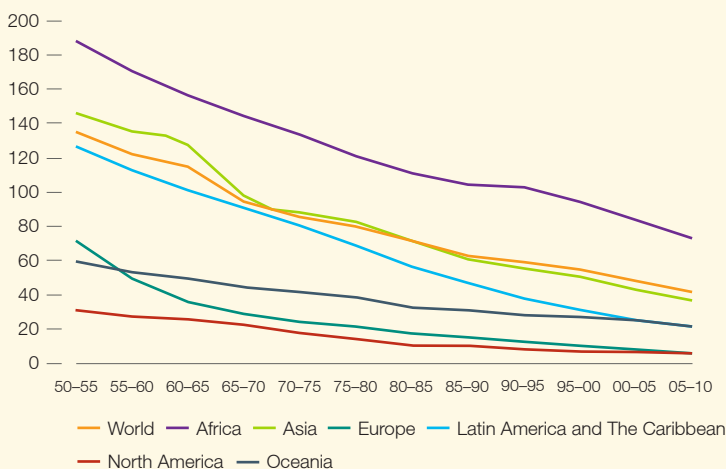
The same question, then, tilted at 2018: does anything in the paragraph of doom really risk changing the sweeping, life-affirming progress of the last two graphs? No.

Now we have entertained a different perspective, we can circle back to the salient narrative moments from our perch of the last 12 months. To signals that we find useful, signals that inform our view of the future – like the cost of sequencing a gene falling to \$1,000 in 2014; this is from \$2.7 billion to sequence a gene in 2003, thanks to the San Diego based gene sequencing company, Illumina. Having brought the costs down to \$1,000 in 2014, it now believes its current generation DNA sequencer will allow \$100 sequencing soon. Underpinning the likes of Illumina are the signals from ASML, the Dutch semiconductor

group, that they believe Moore's Law can continue for at least another 10 years thanks to their newest extreme lithography machines that started shipping in 2018. (Remember Gordon Moore first wrote about this in 1965; Moore's Law has been going for over 50 years already, defying generation after generation of it-can't-continue naysayers).

As Rosling and Pinker both note, there is nothing that causes more heartbreak than infant mortality ...

Infant mortality rates 1950-2010



Deaths per 1,000 live births.

Source: UN World Population Prospects, 2012 Revision.





In the same vein, my colleague Mark Urquhart came back from China (one of many trips there in the last 12 months) in awe of the continuing progress by companies there, and of the gulf between our doom-mongering about China and the on-the-ground evidence of rapid progress and increasing confidence shared among the many. The future, as the saying goes, is here already, it's just not evenly distributed – and China is where you find much of the future today. Who ever heard of apartment buildings being built with no kitchens and a lift specifically for online food delivery? Hence Meituan Dianping – an online delivery company that didn't exist four years ago and now has 300 million customers.

And, perhaps hard for us to believe, the conversations in Chinese board rooms of high growth companies are not dominated by Brexit or *Gilets Jaunes*. They don't merit a mention. Partly for this reason we are establishing a permanent research office in Shanghai in 2019. We want to be there absorbing the alternative narrative year round, and furthering the many connections we have made from our big, long-term investments in Baidu, Tencent and Alibaba. The next generation of innovative Chinese

companies is looking for the right shareholders and our name keeps coming up – this is great news for our edge in investing in unlisted companies for some clients, and all our clients will benefit from this as these companies in turn go public.

Our polar-opposite narrative doesn't stop in China. Take Tesla. Surely 2018 was when those short sellers saw their persistent malevolence pay off? Pan that camera up again. When we first bought Tesla (six years ago) the company had made under 5,000 cars in the previous 12 months. They made more than 80,000 cars in the last quarter. No car company – since Ford's Model T – has even got close to such a ramp up. It's a feat little short of astounding. The production level means that Tesla are unlikely to need more capital despite the huge investment it's been putting in. We've believed this – mainly in splendid isolation – for quite a while. And as for Elon Musk's sometimes wayward behaviour? Well, the outcome – increased independent challenge on the board and a tweet checker – is a good one. We'd admit the path to get there was occasionally uncomfortable, but readers of Robert Frost's *The Road Not Taken* already know this.

Of course, we are not totally Panglossian. We do have some questions that (almost) keep us up at night – but they centre around the long-term growth trajectory of our companies, in particular the role of regulation for the ones that have become massive dominant players in their industries. Facebook and Google dominate online advertising, but can the former implement the right amount of content policing and editorial responsibility to assuage the authorities? Will the latter come a cropper with its arrogant attitude to Washington? How much will regulation of gaming impact Tencent's growth rate, or has the story moved on from gaming already? Will Baidu's search function be increasingly bypassed? Illumina has doubled in just over two years – is there still enough upside from here? And so on. There is no complacency, just musing from a different perspective.

At Baillie Gifford we have gone to great lengths to find different sources of information to embrace different narratives from the ones trotted out in the *Financial Times* or *The Wall Street Journal*. We ask of events: "Will this change the 2,000 year GDP per capita graph? Will this slowdown the rate of technological progress of the last 150 years?"

One moment from the last 18 months encapsulates the strands of our current narrative rather superlatively. Imagine not that you are in a side street being

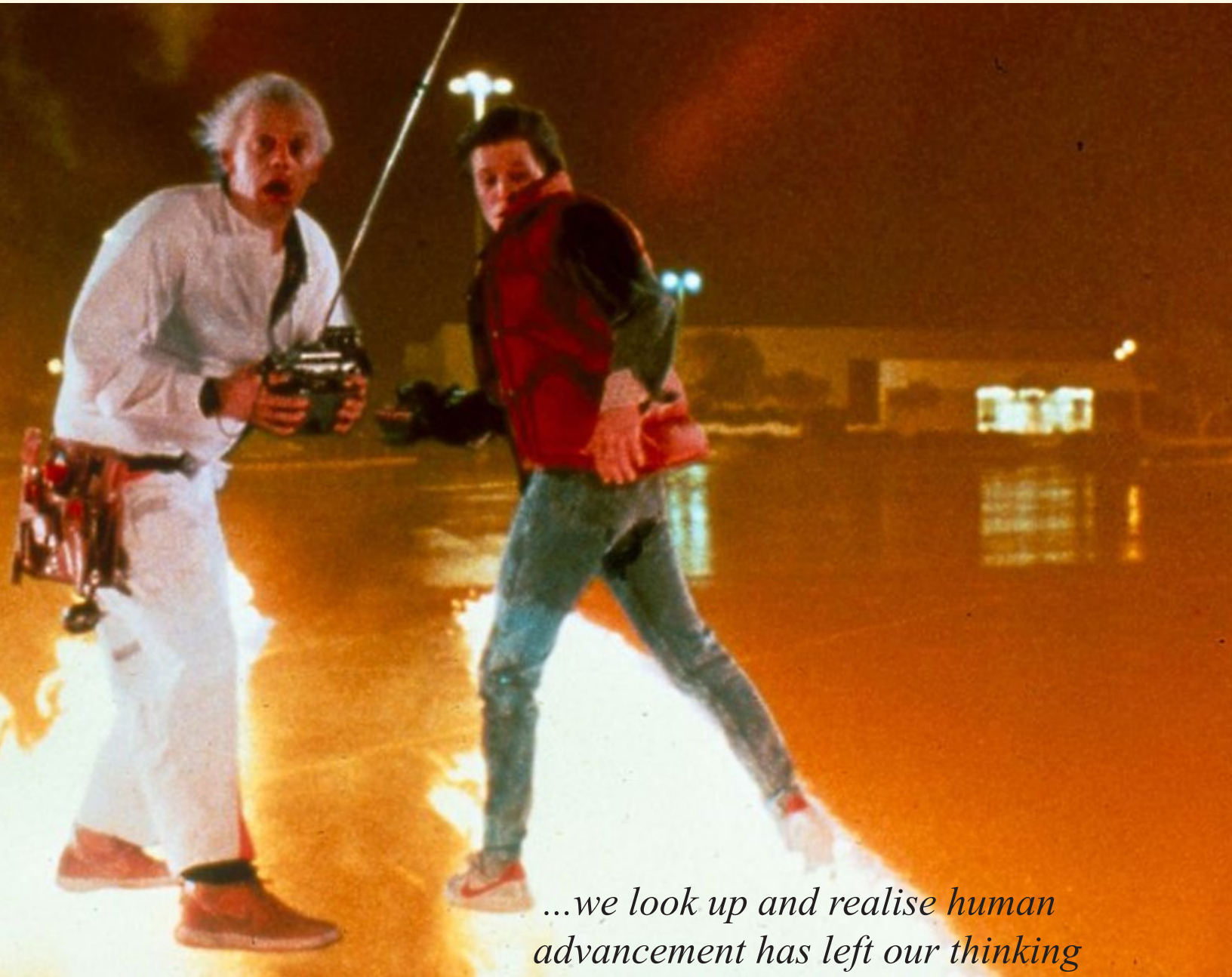
charged by a skinhead, but that you are at the side of another road entirely. It's a very flat, smooth, serpentine stretch of bitumen, lined with barriers for 12.9 miles, in Rhineland, Germany. And it's called The Nurburgring. At 10.03am, on May 17th, 2017, you blink disbelievingly as a cobalt-blue car shoots off silently as though *Back to the Future's* Doc Brown's flux capacitor has disrupted the space-time continuum – 6 minutes 45 seconds later cobalt-blue flickers past the finish post, decelerates effortlessly, and eases towards a gaggle of iPad clutching, hushed-tones-chattering, white-coated engineers.

The all-time Nurburgring record – a magical title fought over the decades by Porsche, or Ferrari, or McLaren or any number of glory hunting, afterburner engaging, ear muff requiring, Formula One piloted, jet-fighters-on-wheels – was whisked off by a silent electric vehicle, made by a Chinese company (NIO) that didn't exist three years ago, and had never sold a car. It's a back-to-the-future moment, a symbolic return to leadership from the East.

And that's the problem with following our normal news narratives: preoccupied by skinhead scare-mongering, we look up and realise human advancement has left our thinking way, way, behind.

Welcome to the future, McFly.





*...we look up and realise human
advancement has left our thinking
way, way, behind.*

Welcome to the future, McFly.

IMPORTANT INFORMATION

Baillie Gifford & Co and Baillie Gifford & Co Limited are authorised and regulated by the Financial Conduct Authority (FCA). Baillie Gifford & Co Limited is an Authorised Corporate Director of OEICs.

Baillie Gifford Overseas Limited provides investment management and advisory services to non-UK Professional/Institutional clients only. Baillie Gifford Overseas Limited is wholly owned by Baillie Gifford & Co. Baillie Gifford & Co and Baillie Gifford Overseas Limited are authorised and regulated by the FCA in the UK.

Baillie Gifford Investment Management (Europe) Limited provides investment management and advisory services to European (excluding UK) clients. It was incorporated in Ireland in May 2018 and is authorised by the Central Bank of Ireland. Through its MiFID passport, it has established Baillie Gifford Investment Management (Europe) Limited (Frankfurt Branch) to market its investment management and advisory services and distribute Baillie Gifford Worldwide Funds plc in Germany. Baillie Gifford Investment Management (Europe) Limited is a wholly owned subsidiary of Baillie Gifford Overseas Limited, which is wholly owned by Baillie Gifford & Co.

Persons resident or domiciled outwith the UK should consult with their professional advisers as to whether they require any governmental or other consents in order to enable them to invest, and with their tax advisers for advice relevant to their own particular circumstances.

Important Information Hong Kong

Baillie Gifford Asia (Hong Kong) Limited 百利亞洲(香港)有限公司 is wholly owned by Baillie Gifford Overseas Limited and holds a Type 1 licence from the Securities & Futures Commission of Hong Kong to market and distribute Baillie Gifford's range of UCITS funds to professional investors in Hong Kong. Baillie Gifford Asia (Hong Kong) Limited 百利亞洲(香港)有限公司 can be contacted at 30/F, One International Finance Centre, 1 Harbour View Street, Central, Hong Kong. Telephone +852 3756 5700.

Important Information South Korea

Baillie Gifford Overseas Limited is licensed with the Financial Services Commission in South Korea as a cross border Discretionary Investment Manager and Non-discretionary Investment Adviser.

Important Information Japan

Mitsubishi UFJ Baillie Gifford Asset Management Limited ('MUBGAM') is a joint venture company between Mitsubishi UFJ Trust & Banking Corporation and Baillie Gifford Overseas Limited. MUBGAM is authorised and regulated by the Financial Conduct Authority.

Important Information Australia

This material is provided on the basis that you are a wholesale client as defined within s761G of the Corporations Act 2001 (Cth). Baillie Gifford Overseas Limited (ARBN 118 567 178) is registered as a foreign company under the Corporations Act 2001 (Cth). It is exempt from the requirement to hold an Australian Financial Services License under the Corporations Act 2001 (Cth) in respect of these financial services provided to Australian wholesale clients. Baillie Gifford Overseas Limited is authorised and regulated by the Financial Conduct Authority under UK laws which differ from those applicable in Australia.

Important Information South Africa

Baillie Gifford Overseas Limited is registered as a Foreign Financial Services Provider with the Financial Sector Conduct Authority in South Africa.

Important Information North America

Baillie Gifford International LLC is wholly owned by Baillie Gifford Overseas Limited; it was formed in Delaware in 2005. It is the legal entity through which Baillie Gifford Overseas Limited provides client service and marketing functions in America as well as some marketing functions in Canada. Baillie Gifford Overseas Limited is registered as an Investment Adviser with the Securities & Exchange Commission in the United States of America.

ABOUT THE AUTHOR



SCOTT NISBET

Partner

Scott graduated MA in English Literature and French from the University of Edinburgh and gained a Post Graduate Diploma in Translation from University of Paris. He joined Baillie Gifford in 1996 and worked in the North American and UK investment teams until 2003, when he moved to the Clients Department as a Director with responsibility for overseas clients. Scott became a Partner in 2007 and is a member of our CDMG (Clients Department Management Group). He is also a member of the Strategic Leadership Group.

CURIOUS ABOUT THE WORLD

bailliegifford.com/thinking