SIR JOHN TEMPLETON INVESTMENT ROUNDTABLE 2019

London | 16th May

JOHN TEMPLETON FOUNDATION

OXFORD METRICA

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Our advisory services are anchored on evidence-based research in risk and financial performance.
Our work includes statistical analysis and index construction for banks and insurers, risk and performance analytics for asset managers, due diligence support in mergers and highly customised services for corporate boards.

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FOREWORD

Dr Rory Knight, is Chairman of Oxford Metrica and a member of the Board of the John Templeton Foundations where he chairs the Investment Advisory Committee.
He was formerly Dean of Templeton, Oxford University's business college. Prior to that Dr Knight was the vize-direktor at the Schweizerische Nationalbank (SNB) the Swiss central bank.

TROUBLE IS OPPORTUNITY

I am pleased to present the proceedings of the 2019 Sir John Templeton Investment Roundtable, the annual forum in which investment managers from around the world, invited by the Templeton Foundations, debate future threats and opportunities in financial markets.

Opening the event, Mark Mobius, the former head of the Franklin-Templeton Fund, took participants through a fascinating life journey in the world of emerging markets and his career-defining first encounter with Sir John Templeton who encouraged him to direct his energies in those directions. This was followed by sessions exploring the geopolitical horizon, the prospects for the global economy, the future for big tech and the worldwide investment outlook.

Two overriding and interconnected themes ran through all of the sessions: on the one hand, the power of existing scale and dominance and, on the other, the eruptive force of disruptive change. Who will come out on top in the battle between America and China, the established and the emerging giant, participants asked, and will their trade wars inevitably result in real ones. Will the massive overhang of sovereign debt and the tsunami of easy money it unleashed continue to inflate markets or will there be a day of reckoning? Will new technologies continue to be dominated by a handful of massive companies – the internet and social media behemoths as well as less visible manufacturers, seven of whom, it astoundingly emerged, are responsible for *all* the world's microchip production? In investing, will big inevitably mean beautiful, should investors always go for growth or seek out other pockets of value?

Throughout, the spirit of Sir John's guiding philosophy cast its continuing light on thinking: be agile but not sudden, seek out sources of creative long-term value in the fissures opened by tensions, always keeping in mind his dictum that 'trouble means opportunity'.

While emphasizing that the views expressed in the discussions are those of the attendees alone and do not necessarily reflect those of the Templeton Foundations and its trustees and officers, I am certain you will find much of common interest and shared value in these deliberations.
I wish to thank all those who participated, particularly Mark Mobius, the keynote speaker.

Dr Rory Knight
Moderator

KEYNOTE ADDRESS BY DR MARK MOBIUS

MY LIFE IN THE EMERGING WORLD

I have always been an explorer and a learner, driven by a desire to discover what life is like on the other side of the hill and to find out whether the grass – and the returns – really are greener there.

Foreign connections and the broader world, were in my blood from my earliest moments, along with a deep love of learning and creativity and of the thrill of making and pursuing new discoveries. I was the child of immigrant parents, from Germany and Puerto Rico, who had first met in New York back in the 1920s. My childhood I remember as being very happy although, as I grew up, there were some difficult times in World War II with my father being of German extraction. I attended a primary school nearby in Bellmore in New York, followed by Mepham High School also in Bellmore.

Sadly, my father died while I was there, and my brother had to leave Cornell University because there was not enough money to support his studies. Despite that, I was keen to go to university and, luckily, I received a Methodist scholarship to study art at Boston University. I was deeply interested not only in painting but also in theatre and music. Oddly that has proved a valuable foundation for what I do now because I am firmly of the opinion that creativity is one of the keys to successful investing. Confronted with the rise of artificial intelligence, it will be the creativity of the manager that makes the difference.

PERENNIAL STUDENT?

Next, my interests led me into psychology – another key factor in understanding investment behavior. I went to graduate school at Boston University School of Communications where I studied mass psychology and survey research. I was now well on the way to becoming a perennial student! Then one day when I was doing further studies at the University of Wisconsin, at that time a leader in the study of mass communications, I noticed a poster, *Study in Japan*. That sounds interesting, I thought to myself. I'll apply.

I was lucky enough to obtain a scholarship for the Syracuse University Overseas Training Program where we learned a little bit about Japan and its language. Then we were dispatched to live in Japanese homes. I found myself living in the house of an insurance company executive's family in Kyoto, a most beautiful and historic city. It was all a tremendous shock to me having never been outside America before! But I was deeply impressed with Japanese culture and self-discipline even though at that time, they were still recovering from the war. I'm going come back one day and work here, I decided, or if not here, somewhere else in Asia.

On my return to the US, still playing the perpetual student, I drifted to the University of New Mexico to study experimental psychology and then I got accepted by MIT's economic and political science department. That was where my connection with emerging markets really began. The emphasis at MIT at that time was very much on economic development. The Agency for International Development was extremely active, and the US government was dishing out loads of money to countries around the world to help them develop. The trouble was it wasn't working. Nobody knew exactly why. Some said it was because there weren't enough factories or sufficient infrastructure or because of wrong child development or the lack of a protestant work ethic. It was only much later that we came up with the right answer.

DR. MARK MOBIUS is the founder of Mobius Capital Partners.
He is seen by many as the founder of the emerging markets asset class.
He has a reputation as one of the most successful and influential managers over the last 30 years.
In May 2018, with two ex-colleagues, he launched Mobius Capital Partners.
The firm utilises a specialised active investment approach with an emphasis on improving governance standards in emerging and frontier market companies.

Prior to this, Dr. Mobius was employed at Franklin Templeton Investments for more than 30 years, most recently as Executive Chairman of the Templeton Emerging Markets Group.
During his tenure, the group expanded AUM from USD 100m to over USD 40bn and launched a number of emerging market and frontier funds focusing on Asia, Latin America, Africa and Eastern Europe.

Dr. Mobius has also been a key figure in developing international policy for emerging markets. In 1999, he was selected to serve on the World Bank's Global Corporate Governance Forum as a member of the Private Sector Advisory Group and as co-chairman of its Investor Responsibility Task Force.

He is a member of the Economic Advisory Board of the International Finance Corporation (IFC) and a has been a supervisory board member of OMV Petrom in Romania since 2010. Previously, he served as a Director on the Board of Lukoil, the Russian oil company.

Dr. Mobius' career and influence has earned him numerous industry awards, most recently including the Life Time Achievement Award in Asset Management (2017) Global Investor Magazine; 50 Most Influential People (2011) Bloomberg Markets Magazine; Africa Investor Index Series Awards (2010) African Investor; and the Top 100 Most Powerful and Influential People (2006) Asiamoney.

He has authored several books including The Little Book of Emerging Markets (2012); Bonds - An Introduction to the Core Concepts (2012); Passport to Profits (1999/2012); Mobius on Emerging Markets (1996); The Investor's Guide to Emerging Markets (1994).

Dr. Mobius received his Ph.D. at the Massachusetts Institute of Technology (MIT) and has studied at Boston University, University of Wisconsin, Syracuse University, Kyoto University and the University of New Mexico.

In 2007 he was featured in the comic book: Mark Mobius - An Illustrated Biography.

After I got my PhD at MIT I sat myself down to try to figure out what I was going to do with the rest of my life? I even consulted a consultant and together we concluded what I already knew: that I was basically a perpetual student who throughout his life wanted to go on learning about different things. Okay, I said, if that's the case, that's what I'll do.

POINTS EAST

With my love of Japan, and my yearning to work in Asia, I got a job with International Research Associates, a sort of association of survey research firms doing consumer research around the world. I got a job in Japan with a certain Dr. George Hodel, a medical doctor and a psychiatrist, one of whose projects was to find out whether Avon Cosmetics could do their kind of selling in Asia. The answer we found was - yes, and Avon began to open up offices, starting in Taiwan. Next I got sent to Korea - another big culture shock. You might think all Asians are more or less the same but you couldn't be more wrong! Korea was completely different again. Then I got sent to Thailand – yet another culture shock.

Along came Monsanto. At that time, there was much concern about malnourishment in poor countries. The idea was to come up with a popular drink like Coca Cola but one high in protein. Monsanto tied up with Hong Kong Soybean, which was the biggest selling soft drink manufacturer in Hong Kong at that time. They produced an awful sort of a flowery smelling drink. But the bigger problem was that in order to be distributed easily around the world it had to be in concentrated form. Simply pour on water anywhere in the world was the idea and, boom, you've got a soft drinks empire. But a powerful thickening agent was needed and it ended up as a very dense drink indeed. I was assigned to test it. I poured the whole thing down the throat of an unfortunate 14-year-old in Singapore in the interests of completeness and he was sick to his stomach as were the other victims I tried. Now there's a lesson here: if you want to survive in life, don't always tell the truth. Innocently I did, the whole project got canned and I found myself out of a job.

FIRST STEPS IN INVESTING

They wanted me back in St. Louis but I said, no, I want to stay on in Hong Kong. I started up my own consulting company there mainly - but not entirely - doing industrial research. Among the other things we developed markets in Asia for colouring a series of books based on the Peanuts character and other toy products. So instead of a research company we ended up as a toy distribution company.

More seriously in view of my later career one of my other projects was to do a report on the Hong Kong stock market. And at that time, I knew very little about stocks but I did know something about technical analysis. What I identified was a classic phenomenon, the so-called 'head, and shoulders' syndrome. If your share price 'shoulders' are no longer producing heads, it is time to sell and get out. I informed the client who was grateful – and duly got out. On the heels of this earth-shaking discovery I got interested in investigating this field more closely and in due course I was approached by a British stockbroker, Vickers Da Costa, who wanted a sell-side analyst in Taiwan. Vickers Da Costa had formed a company called International Investment and their idea was to start the first Taiwanese fund management company, called the Taiwan ROC Fund, listed on the New York Stock Exchange.

ENTER SIR JOHN

Anyway I ended up heading this firm, which was a great opportunity for me to learn about investment management. More importantly, it brought me into contact for the first time with Sir John Templeton.
I was invited to make a presentation to him and flew to Nassau and told him what stocks we represented. Then, one day in late 1986, he asked me if I would be interested in running an emerging markets fund. This idea of emerging markets was completely new to me at the time. (Incidentally, the history of that term is itself very interesting. Antoine Vanaken, who at that time was working in the World Bank's International Finance Corporation (IFC), was in his shower in Washington one morning and thought why do we have all these terrible names for poor countries - the underdeveloped, the Third World and so on? Why don't we think of something better? He came up with the term 'emerging countries' which caught on, and the IFC decided to set up an institutional fund for emerging markets.)

EMERGING, EMERGING

But it was John Templeton who decided to establish one for the general public called the Templeton Emerging Markets Fund. In 1987 we listed it on the New York Stock Exchange and raised $100 million in capital. Merrill Lynch said they could raise even more but Sir John said, no, we don't want more, because it's not going to be easy anyway to invest a sum of that size. I told Sir John that if we are going run an emerging markets fund, we've got to actually be present in emerging markets. Why don't we open a small office in Hong Kong? Sir John was of course notoriously frugal, but I assured him that it was not going to cost too much, and he gave his reluctant consent.

So I opened up a small office in Hong Kong along with two Chinese analysts, Tom Woo, and Alan Lam (who when I left Franklin-Templeton were still with me) and $100 million to invest. We tried to figure out where to put our money because, in those days, there were only six countries in which you could invest: Hong Kong, Philippines, Singapore, Malaysia, Mexico, and Thailand. Latin America was all closed - either they were socialists or dictatorships and they didn't allow foreign investors in. Mexico was only there because we could buy Telmex in New York. Communist China and Russia and most of the rest of Asia were closed. A few like Chile had stock exchanges but for the most part we had we had to find out a way to open up these countries

AN ANSWER AT LAST

Finally, thanks to the World Bank, an answer had emerged to the question what makes developing economies grow best. The answer wasn't factories or the right child development or the presence of a protestant work ethic: it was having a market economy, and the quickest and most efficient way to create a market economy is to open a stock market, and to privatise state-owned enterprises. Gradually stock exchanges started to open up around the world, where it was our job was to go in and invest. One problem, though, was that this was way before the electronic delivery of stocks. You had to have physical delivery and hard copy stock certificates. In addition, most of the big banks at that time felt uneasy about keeping securities in emerging countries.

Thank God for the helping hand of Templeton! We had billions of dollars under management and we could use these to force people to go into these countries. A further factor in our favour was that we began in 1987 when the markets were down, giving us a good head start in buying. We built up very quickly, and as the markets began to rise we began to accumulate more assets and look at starting other funds such as the Templeton Asia Fund. Our assets spiraled dramatically from $100 million at the start up to - at one point - $70 billion. We opened up offices in emerging countries, finally sixteen of them all told, employing well over sixty analysts – among them Chinese, Mexicans, Argentinians, Brazilians. It became a sort of extended family, and to this day we still keep in touch with one other.

It has all been the most exciting adventure, and I largely owe it to Sir John Templeton's global vision. He was the first to say if you want to invest successfully, you just can't think in terms of one country. I remember we once drew up a table to try to show the best performing market in a particular year. What we discovered was there was no one country that performed best for two years in a row over a twenty year period. Which powerfully underlined the importance of being globally diversified. Of course, our success has been copied time and again, and now there are at least one hundred other emerging market funds in operation.

CLOSET INDEXERS

Things change – and not always for the better. We have now reached the point in the investment world where exchange-traded funds and index funds are beginning to dominate. We were anyway always looking too much over our shoulders when investing – trying to work out how we were doing against this or that index. We were in danger of becoming 'closet indexers' and losing sight of the basic principles that John Templeton had laid down. So we decided that it was time to make a change and look not only at non-index investing, but also at the importance of other factors - environmental, social, and governance (ESG) factors. We decided that governance was the key one, because with good governance in place you can set about tackling other social and environmental issues. We had already had some experience, incidentally, in influencing managements because among the various funds we had started was a private equity division which really got us into companies at a deep level.

Probably the most important case was when we were appointed by the Romanian government to run a fund established to compensate Romanians who had lost property during the communist period. By the way, it is highly unusual for a country to turn over a fund, basically a sovereign wealth fund, to a single manager and a foreign one to boot. But they had tried it themselves, and it wasn't working, so they asked us to come in. It turned out to be a roller-coater experience. 20% of all the major state-owned enterprises were put into this fund, and the corruption was simply incredible. We had no option but to get in there and start reforming.

One of the companies was Hidroelectrica, one of the largest hydroelectric companies in Europe, and they were losing money. But how could this be? We looked into it and found companies were buying power from Hidroelectrica and selling it to distribution companies at a huge profit. So we started going after these companies. We had to put the parent company into receivership in order to break their contracts that they enjoyed. At one point we had over a hundred outstanding lawsuits. But after one year the company went into profit - enormous profit. OMV, the Austrian oil company, is now the majority shareholder and controls the company. But I'm still on the board of OMV Petrom, the Romanian oil company, and it is a real eye-opener to see how that company has been transformed.

That brings me to the present day. After I retired from Franklin-Templeton I and two other colleagues decided to start up Mobius Capital Partners: a non-index orientated emerging markets fund which would emphasize corporate governance. That is where we will get better returns, we believe, but also have beneficial impact on environmental and social issues.
We started an investment trust listed in London with assets of £100 million. And we have a similar SICAV in Luxemburg, an open-ended fund, doing the same principles. So that's where we stand now. Looking back, it has been the most fascinating life journey, and, as I say, I remain deeply indebted for its success and interest to Sir John Templeton and to his family.

Q&A WITH DR MARK MOBIUS

WHERE ARE TODAY'S EMERGING MARKET OPPORTUNITIES AND HOW SHOULD THEY BE HANDLED?
It is true that emerging markets, at least in the last five years, have not done very well compared in particular to the US market which has been outstanding. But if you take the long-long view starting in 1987 or even 1990, emerging markets have outperformed by a wide margin against the world index.

So it stands to reason, in our view, that emerging markets will continue to do very well. For the simple reason that the growth rate of these countries is double that of the developed countries. In 2010 China grew by 10%. Last year, China grew by 6%. But that is far greater than 2010's, in dollar terms, because the base of the economy is that much bigger. China will probably head down to 3% growth in the five years or so.
For the US to achieve its current 3% growth rate is quite phenomenal. But many other countries are growing at a far greater rate such as India at 7%. The weighted average of emerging markets growth is double that of the developed countries - about 4.5% for emerging countries and 2% for developed markets.

Therefore, the emerging markets index will do well. But you have got to be careful because slowing in China (which represents 30% of the index) is will drag down the index. China will still be important but we should not depend too much on China. Seek out faster-growing countries.
But if you look at countries that are growing more than 6%, you find only India, Vietnam, Ivory Coast, Ghana, and a few other countries. So growth is still highly concentrated in emerging market countries. However, going forward, more emerging countries will reform. Brazil is not really growing at all now. But with the reforms taking place and with more and more state-owned enterprises being privatised, Brazil could achieve 3-5% growth.

So the journey that the World Bank, IMF, IFC started in 1987 still continues. There are still so many state-owned enterprises that are losing money that would have to be privatised before you'll see more growth. It is going to be very exciting from now on in my view.

IS ELIMINATING CORRUPTION ESSENTIAL TO ACHIEVE GROWTH?

That is a very important question. We confront corruption on all sides in developing countries and also in developed countries as well. However, when you privatise companies, a lot of corruption goes out the window because they have to start producing and making money if they are in private hands.

Unfortunately even private companies get dragged down because being corrupt is the only way they can do business. The main source of corruption in Brazil was Petrobras, the state-owned oil company, and it infected private enterprises. It is an issue that we are constantly grappling with, because simply to get things done, many companies have to engage in corruption, for instance to get their licenses from the government.

Corruption is one of the key factors we look at when we are assessing companies. I tell our analysts, it is all well and good to do your spreadsheets and your models with the price-earnings and price-to-book ratios, EBITDA and so on. But look also who is running the company and what is their background. If they have been engaged in malpractice you simply should not get involved.

REGARDING CORRUPTION, SINGLE OWNERSHIP MAY BE MORE STRAIGHTFORWARD BUT DOESN'T MAJORITY OWNERSHIP BRING GREY AREAS?

We sit down with the management to discuss the problem. For example, recently we were talking to a Brazilian company specialising in automobile wheels, a global company with good expertise. They were listed but family-controlled and didn't have any independent directors. The managing director had a problem with that because he said many of these family members had been there for twenty years, and it would have been difficult for him to ask them to leave. So, rather than change the composition of the Board we worked out a programme to deal with specific issues. You may not have to change the board members to open up avenues for change and greater profitability. One common issue concerns dividends. Very often, companies do not want to increase dividends because they are used to reinvesting the money in the company. But we point out that you have shareholders depending on dividends. But you are right, it is a matter of shades of grey and you have to encourage compromises. By the way, we have found excellent family-controlled companies that are. Very often they take a longer-term view than minority shareholders.

HOW DID YOU HANDLE THE MANAGEMENT CHALLENGES POSED BY SUCH A LARGE FUND?

It was not easy. I tried to create a family atmosphere. Every six months we would get together, have dinner and discuss companies. The idea was to get people to participate and investment ideas for the various funds.
We adopted geographic leadership, assigning management responsibility for each of the regional portfolios to individuals, with oversight from Hong

Kong, our administrative and trading center. The Latin American fund was run by our people in Brazil and Argentina and Mexico as a team. Asia was run by a Chinese in Hong Kong. So that's what we did was assign the analysts in that region to manage the fund, with oversight from Hong Kong.

Overall it worked well, it was pretty good. The biggest stumbling block was the desire to beat the index. It is really difficult to outperform if you are shadowing the index.

BUT, AS YOU GREW, DIDN'T YOU FIND YOU APPROXIMATED TO THE INDEXES ANYWAY?

It is true that as you get bigger, you include bigger, more liquid names in the portfolio which tend to be heavily weighted in the index, And that's another challenge that you have. But even so you can find enough out there that stands out from the index.

One misconception is that if you are running an open-ended fund with daily liquidity you can be caught with no liquidity when redemptions come in. In our experience, even in the biggest crises, the redemption rate was not that big. When the index was falling, people were not selling that much. Only 15% of the portfolio was redeemed at that time. Of course, once recovery begins, you begin to get more redemptions, but then it is also easier to acquire liquidity.

HOW DO YOU THINK US-CHINA RELATIONS WILL PLAY OUT?

It is about more than Trump. In part it reflects changes that are taking place as a result of the internet. People are better informed globally, including about trade issues. There is a quite horrific $300 billion trade deficit between the US and China. In the past people did not focus on that so much, because they did not have the information. Now the information is out and Trump, of course broadcasts the message. Something similar is happening in Brazil. Bolsonaro is compared to Trump, now, because of his outspokenness on issues about which people are getting more informed. In a way it is a good thing, because investment will be much more transparent. That will make our job both easier and more complicated.

BUT HAS THERE NOT BEEN A CORRESPONDING INCREASE IN DAMAGING VOLATILITY?

We consider volatility a friend rather than an enemy. Often, you can buy stocks more cheaply because of the emotionality prevalent in the market. Sir John Templeton always said buy when others are selling and hold off when others are buying too greedily. So the 'animal sprits' propelling the market can be your friend so long as your clients can stay with you while you hold back. Trouble, as Sir John also often said, is opportunity.

AMERICA AND CHINA: THE THUCYDIDES TRAP?

Is conflict between the US and China inevitable, asked Dr Knight. He cited *The Thucydides Trap,* Graham Allison's book likening the rivalry between the US and China to the escalating tensions between ancient Athens and Sparta when Sparta's resentment of the rise of Athens eventually led to war.

'That book scared the heck out of me,' one participant admitted. 'The author points out there have been some sixteen such cases in the course of history which led to armed conflict in twelve of them. History doesn't repeat itself, but sometimes it rhymes, and we should bear that in mind. Markets had been assuming the US would negotiate a favourable trade agreement with China but that has not been the case. Even if the US and China had negotiated a successful bilateral agreement, I do not think it would have stood the test of time. That is an aspect of the investment environment which we should not underestimate and which has serious implications for the choices we make as investors.'

A HUNDRED YEAR RACE

In its race with the US, China enjoys a range of comparative advantages, many participants agreed. 'The US is ahead right now,' said one, 'but almost certainly won't be as time passes given the sheer difference in investment in human and physical capital between China and the US. China has five times America's human capital, and is increasingly effective in exploiting that resource, whereas American institutions of higher learning are progressively deteriorating in the quality of their output, especially with regard to technological attainment.

'In capital formation the Chinese are far higher savers and investors than we are. State capitalism can misdirect capital, but the choices China has made so far look increasingly constructive. Moreover, in the private sector they have some of the most vibrant venture capital communities in the world today, easily rivaling those of Silicon Valley, not only in terms of capital raised but the level of innovation being financed. Extrapolate that, and they win!'

But does that result in domination by the winner, asked Dr Knight. Not necessarily, was the view of one participant: 'The US could be said to have beaten Britain economically but life still goes on over here. It can result in beneficial coexistence.'

China's comparative advantage is rooted both in long-termism and centralized control, said another participant. 'I have been reading a book *The Hundred-Year Marathon* based on Mao Zedong's statement that China had embarked on a 100-year marathon to overtake America. China's current leadership is running the same marathon. But they maintain they will achieve it by adopting the West's market economy but not its political system. In other words, they separate the two. The Chinese Communist Party will control the politics but it will privatise and use a market economy to overtake America, because a market economy is what has made America successful.

'Centralized control means that they can do things impossible in a free political economy. For example, if they decide to build a road from Beijing to Shanghai, they can do it immediately. In America, one from Boston to New York would involve lawsuits, environmental problems, and so forth. So you have a situation where the political environment in China is monolithic but they are applying pluralist market strategies to grow their economy at a very fast pace.'

'It is a challenge felt right round the world. I was recently in Argentina talking to a telecoms company. I noticed that on their balance sheet their capital expenditure was decreasing. And I said, "Wait a minute, you've just been telling me you're going expand your 4G network. Why are your capital expenditures going down?" He said, "That's due to Huawei. Huawei came in with a quotation that was half of Ericsson's." I said, "Well, what about service?" No problem,' he came back. "In the next building, there are a hundred Chinese engineers working to support us." This is the sort of global challenge the US is facing.'

NO BOAT TO CHINA

At this point another participant broke in: 'You know, I'm actually a contrarian about all this. I don't deny there's nothing to compare China to in terms of its success. It is amazing even compared to post-war Japan or Germany. But I am cynical about China's not having to change its body politic for this to continue to work. Just look at the level of flight capital that is happening in China. It is positively gushing out.'

'Look, there aren't that many people wanting to move from America to China,' chimed another participant. 'The movement is all the other way. There is something about our society and our rights that appeals to them. But they cannot reproduce it. We all thought that the internet was going to open things up in China. But it's been so set up in China that the authorities can shut it down at any time. Now Chinese citizens are even going to be handed a social score every day. If they jaywalk and get caught camera, that will earn them a demerit. Amass enough demerits and you won't be allowed to move around freely – Xi said as much in a recent speech.'

'I had the opportunity to talk to the leaders of some major Chinese companies,' the previous speaker added, 'and they all harbour serious concerns about the lack of ethics among the ruling elites. China does not have an encouraging history regarding leaders. Its history is littered with toppled dynasties. So, if there is going to be a surprise or a crisis worldwide, China looks like the number one candidate.

'Then again there is China's debt problem. China's actual growth rate is probably in very low single digits, not the claimed 6% or 7%. China's debt-to-GDP is probably close to 350% and if it keeps increasing it will have a knock-on effect. You cannot keep putting out that level of money to boost growth. Even on a generous estimate the productivity of the marginal dollar in China is currently only about 25%. So if they owe 5% they are not earning anything like 5% margin and are going into the hole by 3% on every single dollar every single year. And it is getting worse.

That is why they are shamelessly stealing intellectual property. They have to just to keep going. That is why Xi is clamping down, because he sees the size of problem heading down the road. What is more, the leaders of the world are cheering us on. They don't dare do it openly, but they welcome the fact that somebody is pushing back, because they are suffering the same problems with China over stolen intellectual property.'

OLD BEFORE THEY GET RICH

'Real GDP is a function of two things: growth in the workforce and growth in productivity,' commented another participant. 'The key question in China is: will they grow old before they get rich? And the ageing demographics there are such that the workforce really isn't growing much right now. Also productivity is less than claimed. Real GDP is 3% or 4%. Plus there is a problem of mal-investment that hasn't really been tackled yet.'

'You need to see the problem in context. Profit margins were pretty steady for almost thirty years but after 1989 they doubled. Meanwhile China and others began to enter our world. They brought people but no money or technology. The availability of labour roughly doubled in the world. As a result, there was a positive reciprocal relationship between capital and technology on the one hand and an increase in the availability of labour on the other. That big labour arbitrage that went on for a long time and resulted in some very sophisticated supply chains. We wound up enjoying lower tax rates and lower interest rates. That situation of mutual comparative advantage is now breaking down.'

'Now we have certain beliefs in the West - democratic beliefs, human rights, the pursuit of life, liberty and happiness and so on. If those are what we truly believe in, then we may have no choice but to get into conflict with China. But it doesn't necessarily mean a shooting war. Trump's strategy has been to impose tariffs but, make no mistake, it is the American consumer who will pay the ultimate price. A tariff war is a lose-lose scenario. No-one wins. I don't believe Trump understands any of this. If he did, he would have realised the danger of falling into a Thucydides Trap and tackled the problem differently.

SHARP LEFT IN THE US?

'There is quite a high probability of a Corbyn socialist victory in the next UK general election,' commented Dr Knight. 'What would be the outcome in the US of a similar win by his ideological twin, Bernie Sanders?'

'Utter disaster,' riposted a participant. 'If any of the far left Democratic candidates somehow managed to win and gained enough congressional support to enact their policies, it would result in higher marginal tax rates on personal income and capital, a vast increase in federal spending for healthcare and other forms of economic intervention and the introduction of regulatory regimes, especially regarding carbon emissions, that would knock the bottom out of the rapidly growing energy sector and reverse the energy independence so far achieved by the US. And that would just be the beginning.'

'The results would be scary,' another participant agreed. 'Now we are very bottom-up people, and we spend a lot of time trying to understand risk in our businesses. And one of the reasons that we are valued as investors is that we demand a margin of safety because there are certain things that we cannot control. Bad things happen, and you cannot always predict when. Globalisation has produced mixed results, and there are a lot of people who feel that it has not worked out too well for them while it has worked out inordinately well for a few others. As a result they are questioning the basic tenets of free enterprise. There seems to be an increasing shift away from the things that the people in this room would agree have worked and a desperate urge to try something different.

'Mark spoke about what worked in the emerging countries. Free enterprise and markets work. But given the rhetoric that's coming out of the developed world in the United States - whether Trumpian populism, Democratic anti-market policies, or some of the things that Jeremy

Corbyn is touting – we are going to need that margin of safety. You can almost predict the resultant erosion of value. It is a very real risk.

'In equity market returns the US has out-performed the rest of the world,' commented Dr Knight. 'As a foundation that invests all over the world Templeton has been affected by that. Is this trend likely to continue?'

'As a function of the polarisation of politics in the US, the outcomes are unpredictable,' a participant replied. 'As are the economic implications. But if a left-leaning Democrat got elected, that would slam the brakes on a lot of economically productive areas. The US is one of the major growth engines in the world - combine that with a loss of the benefits of comparative advantage and globalisation - and global growth would dramatically decelerate. That in turn would have grave implications for investing. It is a worry we should all bear in mind when we think about the next three to five years.

'What also matters what gets priced in. Among the factors making negotiations between China and America difficult are not only respective differences in time-scales but the fact that saving face is a Chinese obsession. China's debt markets problems are not priced in. Spreads are very narrow and rates are incredibly low. But if things are only partially priced in in China, they are not priced in at all in the US. And that includes the Thucydides Trap!'

MELTDOWN OR MELT-UP? THE GLOBAL ECONOMY

'We have had a period of very low interest rates,' said Dr Knight. 'Will that continue and, if so, what will be the outcome? Are we looking at a meltdown or a melt-up.'

'Something I struggle with,' a participant responded, 'is the short-term availability of credit, and the low cost of money. Basically, money is free everywhere. A lot of the liquidity has gone into financial markets, not the real economy, because it's not really needed in the real economy. The liquidity from monetary policy has buoyed asset prices. Long-term, this free capital is going to bring down margins and returns on capital for businesses, because if you can raise money, you can attack competitors with good margins and returns, so long as money is free. So, in the very short-term, you've got massive liquidity pushing stock prices up but over the long-term, returns and margins are going to go down, because money is so cheap.'

DEBT THE ACHILLES' HEEL

'Short-term versus long-term - I struggle with that! And I really worry about melt-ups too. No price seems to be too high now for a lot of so-called growth stocks. We've seen a narrowing of markets, particularly in the US. My favourite example is Beyond Meat. A $4.8 billion capitalisation in return for $88 million in revenues - it just makes no sense to me. Yes, the future might involve eating less meat, but that's a valuation gap that will take forever to close. So, we have pockets of speculation driven by easy money and passive investing, which could create a melt-up. But what then? We haven't had a rainy day for a while, but there are always rainy days, so I'm not sure how it will end.'

'The Achilles' heel in the great financial crisis was the banking system,' Dr Knight commented. 'This time, might it be corporate debt?'

'A lot of the excesses have definitely gone into corporate debt,' said a participant. 'Global debt has been growing by about 12% a year since 2001 while corporate debt has gone up from 77% to 96%. A lot of that has been in the BBB sector which has exploded in the US in the last five years. Non-financial corporate debt in the US has almost doubled over the last ten years. About half of that BBB will go into junk, if there is a transfer out of so-called 'investment grade' into junk during a recession. It will swamp the bond market - about $1.5 trillion, of investment grade going into the junk bond market! From our perspective, the excess in the system is definitely in the debt market, and particularly the US corporate debt market, not the banking system like last time. It is a serious issue.' 'It will be in the fixed income market that these leveraged loans, these BBBs, will be downgraded,' agreed a participant. 'There's an incredible issue around protection for lenders.'

The explosion in listed securities round the world was highlighted by another participant. 'When I started in in the business in 1980, there were a few thousand companies around the world you could look at, almost all in the developed world. There weren't many publicly traded emerging market stocks. Since 2000, when there were about 15,000 publicly traded in the world, our figure today is close to 42,000, and is growing by the day. Two-thirds of those are in emerging markets, and almost 90% are below $2 billion in market cap. So, the choice of where to put money is amazingly difficult.

'Not only is the number of companies exploding but the market caps of the companies are rising. We started a small cap fund ten years ago, and the stocks we bought back then for $2 billion now cost as much as $10 billion. Meanwhile, China and Russia have morphed into market economies, and a clash has broken out between different brands of capitalism – state-sponsored or free enterprise. That is what this trade war is all about. This explosion of companies is very exciting, but I am not sure where the point of equilibrium will eventually be found.'

YIELD CURVES IN TWIST

'We have experienced a inversion in the yield curve that now offers no premium for time,' commented Dr Knight. 'Is this the new normal, and is it sustainable?'

'This is the overriding question of the day facing us,' stated a participant, 'because all long duration assets, whatever their character or cash flows, are now priced off the sovereign curve. This presents a competitive alternative in long-term assets that is paltry, while elevating the value of everything else. Personally, I do not think that this is sustainable.' Others agreed. 'There's an unsustainable asymmetry here,' said one. 'We have a rate regime right now which likely can't go much lower. Meanwhile long-term assets are priced off the curve. Both history and logic tell us it has to go the other way. Is it reasonable to expect people to lend money for long periods for no return? There's no precedent for this in history. When this asymmetry corrects itself we are going to face a headwind in the pricing of long-term assets, whether equities, fixed income bonds or real estate.'

‘But there’s another issue facing us,’ the previous speaker added. ‘Over the last thirty years we’ve empowered about a billion new educated workers mainly from Eastern Europe and China, who have entered the world workforce. They have gained access to Western know-how and technology in the course of direct investment by Western companies, much of which has subsequently been co-opted by local competitors. So, the labour pool has both grown enormously in scale but depressed in value. It has resulted in a progressive reduction in wages and a loss of national income share around the world - all to the benefit of capital. The overall effect has been deflationary, which helps explain why for some thirty years, despite some intermittent volatility, there has been an overall down-trend in reported inflation around the globe and why real interest rates are as low as they are. We once thought central bank intervention was the cause. But they’re not really intervening anymore, and the rates are still low. There is an excess of savings, and people have lost their fear of inflation.

The question is: is this sustainable? Personally, I think it’s over. The next thirty years will see the opposite. No new giant workforce is about to emerge. The labour pool will flatten out, even turn down, as a function of aging in all the developed economies. Conversely, the dependency ratio will go up. That will drive the savings rate down, because the only people who save will be those in work while the retirees will be drawing down the savings pool. So, this labour resource, which is now in surplus, will progressively tighten. There will be a demand pull on it, and its price will inevitably rise.’

BLACK SWANS ON THE SKYLINE

‘What else could come out of the woodwork?’ asked Dr Knight. ‘Although Black Swans are by definition not predictable, what shocks could disrupt markets?’

A growth investment manager gave a somewhat downbeat response. ‘Two bad things can happen if you look at companies from our perspective. Either the earnings and cash flow won’t be there or the discount rate will go up suddenly and reduce the long-term value of assets. We find ourselves worrying about a lot of things: global growth falling back to its secular norm, more volatility and discontinuity, more geopolitical tension. Personally, I can’t get my head around negative interest rates. One has to assume they will rise to some degree. So, what to do? Perhaps the answer lies in the old adage: hope for the best but prepare for the worst.’

TECHNOLOGY: DISRUPTION THROUGH CONCENTRATION

'In 1943 Tom Watson at IBM said the market for computers would be five at the most,' commented Dr Knight. 'Was he being excessively optimistic or prescient?'

'There's a profound change underway in technology,' replied an expert, 'the concentration of computing resources. Its scale is staggering. We will likely wind up with the bulk of computing power in the hands of only seven companies – three in China and four in the US. It is possible because they can offer customers, who traditionally had their own in-house facilities, a compelling alternative in cost, flexibility, reliability, security and in access to leading-edge hardware and uniquely designed software. Intellectual capital in computing is, today, concentrated in these seven companies at levels that cannot possibly be matched in-house.

MOORE'S LAW THE PACEMAKER

Such concentration is highly disruptive, because it transforms the entire supply dynamic. Customers can become competitors to their former suppliers, given their enhanced abilities to develop computing resources. Moreover, concentration is reaching beyond the point where computing takes place. It's also underway in the fabrication of components. It's becoming increasingly hard for manufacturers to progress in line with Moore's law, achieving ever finer geometries in semiconductors. Indeed, competition has been so fierce that in the last twenty years, we've gone from twenty-five leading-edge competitors down to three. Indeed, one alone, Taiwan Semiconductor, controls 60% of the market, and its share is constantly increasing.

In the production of memory chips, there were more than twenty DRAM producers fifteen years ago. Now there are only three, one of which controls nearly half the market, and two of which, both in Korea, control 70%. There is similar concentration in the capital equipment used to make semiconductors. In the case of the most crucial technologies, Extreme Ultraviolet Lithography, (EUV) one Dutch company, ASML, supplies the whole world.

There's a geopolitical challenge here. The concentration of technology is in the hands of the US and China. Apart from ASML, it doesn't exist at all in the EU or Japan. It's an obstacle to innovation. Similar concentration has occurred in the internet in social networks, searching and messaging. Without regulatory intervention it will be largely irreversible. Concentration is happening too in internet commerce, with advantages of scale, particularly in logistics, making it very difficult for smaller companies to compete. It's a situation like the trusts in the beginning of the twentieth century.

LOSERS AND WINNERS

Intel is a leading example of a company vulnerable to disruption. Formerly it enjoyed a monopoly in the manufacture of CPUs. It sold to tens, if not hundreds of thousands of customers who had their own in-house facilities. Increasingly, however, it will only be able to sell to the seven companies already mentioned. Because of the scale of the computing workloads that those companies process and the know-how they amass, they are compartmentalising computing. Instead of producing general purpose CPUs, they are developing specialised chips for specific tasks catering to a market that in aggregate is large enough to warrant these unique forms of design and manufacture. Intel's monopoly rested on being at the leading edge of fabrication. No longer. The Taiwan Semiconductor Manufacturing Company (TSMC) has dislodged it. Thanks to TSMCs X86 architecture, competitors can use TSMC fabricators to compete directly with Intel.

The investment opportunity is there now or possibly in Samsung.' 'Is that reflected in prices?' asked Dr Knight.

'TSMC still sells at a discount to the market on the back of its underlying earnings power. So, to a value investor, it's still accessible. Samsung is very inexpensive, because it is at a lower point in its memory chip production cycle.' 'You mentioned the trusts,' said Dr Knight. 'Are the social media technology giants, like the trusts, ripe for regulation?'

Another speaker broke in to point out that the leading AI firm in the world, DeepMind, is in London. 'I visited them and asked why they had sold out to Google. Their explanation was that "Google is the only company in the world that can provide the computing power we need to do what we need to do." Their latest success, Alphago Zero, the leading AI chess player, took four hours of running 5,000 machines to develop.'

'They were able to harness Google,' commented the expert, 'because Google is financing a 200-person engineering team that has no revenue-earning prospects for the foreseeable future. The know-how DeepMind is providing software for Google's self-driving car, Waymo. It is probably two years head of any competitor in what could be one of the largest markets for AI applications.'

'We see concentration also in protein folding,' continued the second speaker, 'a technology which has huge applications in healthcare. But, to answer the regulatory question, value creation by the big companies affects the whole ecosystem. Amazon will spend $24 billion on R&D this year and Google about $19 billion. These companies therefore have to hold themselves accountable at a much higher level. They need to look through the regulators' eyes and say, "How can we make your job easier and so contribute to society?" Some of the social media companies have a sorry record in that regard while others have done better.'

'Where do you see the investment value at the moment?' asked Dr Knight. 'Both these companies offer exciting growth opportunities. Google is generating a lot of products across its eight platforms. 95% of all searching in the world is done using Google Search. Soon there'll be two billion Android users. The two-thirds of consumers in the world who don't yet have a mobile device will also end up using an Android platform. Google's enterprise value today is $745 billion. It has $850 billion in market cap and $112 billion in cash. If you look at Google's eight platforms, search being the only one actually generating earnings so far, but there's great capacity for value creation in the others. It's underestimated because Google doesn't run its business very well. It's not doing enough to maximise and monetise. In future I think we'll see Google shifting between creating new products and monetising and being more shareholder-oriented.'

THE ASSET-LITE FUTURE

'I'd like to add another point,' said a third speaker. 'I believe interest rates will stay low because technology is highly deflationary. I sent a paper to Dr Knight, "Bits Versus Atoms", pointing out that information, unlike objects, has three unique characteristics: it is free, reproducible and does not degrade. Compare the traditional return model for equities with asset-lite model. If you replace labour and physical assets with technology, the supply curve falls away and margins shoot up. Look at Uber and Netflix. There isn't a company in the world that isn't aiming to move to the asset-lite model.'

The expert endorsed this: 'I support the proposition that technology is deflationary. Actually it's been happening for some time and AI can only accelerate it. It will need to, because the labour pool simply won't be here.'

VALUE POCKETS AND VALUE TRAPS: THE INVESTMENT OUTLOOK

'Where there's tension, there's opportunity,' asserted a participant. 'So we look for creative tension. The best businesses we've been involved with were those where there was competition between two players which resulted in both their businesses becoming stronger. An example is Mastercard and Visa, where the tension between the two sharpens both. So we look for global duopolies where there are mis-pricings to exploit. Opportunities can also be found through scaling and compounding businesses across borders, building on the benefits of better governance in the US. An example is the hotel booking firm, Bridge the World. Facilitated by the internet, 85% of their revenue now comes from outside the US.'

THE DRAGON OUT OF FIRE

'Given that a lot of the Foundation's managers have invested in China, do you still consider it a prime target for investment?' asked Dr Knight. 'And are there ways of investing in China without buying Chinese securities?'

'I've spent most of this week talking to European industrial companies that are active in China, and from what I heard there's absolutely no prospect of real growth in China for these companies. That said, there are some good growth opportunities at the lower end of the consumption market. An example is Yum China, which sells Kentucky Fried Chicken and pizza. With 8,500 stores already, it opened 800 new ones last year and believes it can triple that number in future. By the way, one experienced Chinese contact of mine warned: don't franchise businesses in China because the Chinese don't observe franchise agreements!

There are a lot of companies doing business in China that are now pricing-in expectations of poor growth, the European auto sector among them. Up to 40 % of the profitability of these companies in that sector has come from China. It came forward at the right time for these companies, because when the US and Europe enter a down cycle, Chinese business often picks up. But now even these companies foresee problems.'

'Where else in Asia might Sir John be looking for prospects now? asked Dr Knight.'One of the things Sir John always said is: go with the rule of law,' replied a participant. 'The rule of law as we understand it does not apply in China. A contract can be written, but neither party feels bound by it. So I don't think Sir John would be keen to invest in China right now. He might be thinking more about Taiwan, because China needs Taiwan. One of China's weaknesses is its lack of effective middle managers, and Taiwan is very strong in those. Opening borders and giving Taiwan Hong Kong-like status would provide a much-needed infusion of middle management into China.

He might also be looking at Vietnam, one of the more exciting prospects among the emerging markets. I'm sure, despite its many problems, he'd also be looking at Indonesia, with its vast population and great internal market, its established rule of law and its ability to invest abroad. And of course, he would also be very interested in India, although concerned about corruption and its impact on business there.'

'We only wish we could find more in Taiwan to invest in,' complained another speaker. 'Taiwan's strong legal regime, its shareholder-friendly culture and its profit-sharing incentive practices - all the employees get 20% of their salary according to profits – are attractive but unfortunately it's a rather narrow market and very real estate-dependent.'

BEWARE VALUE TRAPS

'Are there any value traps out there to beware of?' asked Dr Knight.

'As value investors we have to be sceptical about the standard financial metrics,' a participant replied. 'While superficially compelling, they are static measures. Many companies, especially outside the US, are selling below book value with P/Es under 10 and cash yields in high single digits. Opportunities or value traps? The answer largely depends on interest rate developments. Even if rates in those countries continue at low or zero boundaries, their business models are vulnerable. Although people might be prepared to go on lending money for long periods with no chance of real return, or indeed are prepared to pay for the privilege of lending money, these companies have little future.'

'It is ever harder to find companies that are sustainable growth businesses in the world today,' another participant commented. 'Yes, it's been a wonderful ride, owning the companies already mentioned, which sit on top of all those computer cycles and, because of network effects, control the e-commerce and social media platforms. They get a lot of attention but they will face limits to growth and obstacles in future. You have to be careful about going forward with them in my view.

We look for opportunities in small pockets. You've got to be selective, and it helps to know who and what you are and what you want. You have to come into work every morning poised to take advantage of surprise opportunities. More and more it's going to be about responding adroitly to unique and unexpected opportunities. Right now, for instance, there might be opportunities spinning out the somewhat controversial US healthcare sector.'

'Like others we worry about rates and earnings growth, but we view these through the prism of each of our companies. Perhaps it's going to be more difficult in future to find sustainable growth businesses, but we certainly haven't got to the point where we're keeping out of the market. We're still fully invested, as indeed we have to be under our mandate as a long-term firm working on behalf of large institutions.'

VALUE INVESTING: A BUSTED FLUSH?

'Value investing hasn't done all that well in the last five years or so,' observed Dr Knight. 'Is it going anywhere? Does it need to be redefined?'

'Warren Buffett used to say that when people talk about value as opposed growth investing, it showed that they didn't know much about investing,' joked a participant. 'Ultimately it's all about real discounted cash flows. When people talk about value, they're usually talking about metrics like price-to-book, or price-to-earnings. These are cited most often in respect of capital-intensive businesses not subject to great disruption. More interesting opportunities can be found in businesses confronted with violent change, especially in their supply and their demand curves. That's when it can get really interesting.'

'Take fertilizers, for years a very boring sector. The demand curve went up when people wanted more protein, then went flat again. Suddenly Potash Corp went up thirty times in the space of five years. We have been discussing memory chips and bits. Over the course of three different decades we shorted Micron Technology. During last December's traditional fall, it went down to $28 plus change - which net-of-cash meant it was selling at twice its previous four quarters of earnings.'

'So, clearly there are value opportunities. Take AI and virtual and augmented reality – their prospects are staggering and unknowable. The key factor will be discipline. All of which is to say deep structural things are transforming a lot of industries where supply and demand begin to demonstrate opportunities. For instance, US airlines have probably never been cheaper than at present. If something changes in the environment – through technology or consolidation, say - the opportunities can be very interesting even for stocks with an awful record.'

'The recent disparity in performance between value and growth investing may give rise to opportunities; is this likely to continue?' asked Dr Knight.

'I see both opportunities and value traps,' responded a participant. 'Traditional value approaches might lead you toward buying safely today. But that would be a poor option especially in Europe. Buying to achieve big name slow growth companies is cheap there, but presents lots of problems. One big issue with the traditional value-type names, is that they don't make up large parts of people's portfolios nowadays. That said, a lot of people have been able and willing, to pay for growth without profitability because they can borrow for free.'

INTEREST RATES THE THREAT

'So on this issue of value versus growth I distinguish between growth without profitability and growth with profitability. There are a lot of companies today that sell at ridiculous multiples because of the low cost of capital. Going forward, interest rates will be the key. If they rise, that's going to have a big impact. The key question is: will earnings and cash flows be sustainable if rates rise? But there are ways to protect yourself. You can short corporate bonds, particularly investment-grade bonds and those with high proportions of BBB stocks. They're not very expensive to short.'

'Actually I think this is a wonderful time for investors whether going down either value or growth routes, in view of the great opportunities created by the mis-pricing in the market unsoundly based on growth without profitability.'

'On the value-growth issue,' agreed another speaker, 'a lot of it has to do with the ability of companies to grow their cash flows in real terms. Deflation driven by technology is going to be a huge factor in the global economy, whether the sector is paper, iron ore, services or now even taxis. When we assess companies we see a lot of value traps among those companies that won't be able to raise their prices in real terms. The companies that can are primarily driven by innovation.

DEBTORS' PRISON?

'The larger issue today is that central banks' policies can flout Moore's Law only up to a certain point. Much as central banks try to generate a steady 2% rate of inflation, it's impossible when technology is driving deflation. By the way, the biggest debtors in the world today are not companies but governments. If government debt carries on increasing year on year because of interest on that debt at the same time as revenues are challenged by the deflation in wages and the eroding of GDP, they will themselves be in a quandary. It's almost as if central bank policies are aiming to reduce the nominal value of government debt, because the real value of government cash flows cannot keep up with the servicing of debt. Over a third of the US Consumer Price Index relates to housing, healthcare, and university education, all of which involve heavy government borrowing. This creates a circular social problem. Deflating nominal government debt while continuing to borrow heavily pushes up the cost of housing for the very poor people that government is supposed to be helping in the first place!'

'Finally, what do you think about the dollar's value in light of all that?' Dr Knight asked. 'We've been expecting the dollar to weaken for a long time but it hasn't happened. What are the prospects?'

A SHRINKING PLANET?

'The real question is: who will deflation hit the hardest? The US is fortunate in having a fairly innovative economy, which will help to some degree. But looking ahead also has to take into account demographics. I've just finished *Empty Planet*, one of the most important books I've come across in years. It questions the prevalent assumption that the global population is going to increase. In fact, it predicts it will fall. China's population growth is not going to increase to two billion as predicted. If anything, it's probably going to drop below a billion, due in part to China's one-child policy. But China is not alone. In almost all countries in the world population will shrink. Given that population growth is one of the key drivers of GDP growth, that presents a crucial challenge to economies and businesses and to all of those who, like us, invest in them.

STOCK SELECTIONS

Dr Knight concluded by inviting managers to identify stocks that they judged to be particularly promising in the coming year. The selections are slightly weighted towards the US with only four being outside the US, however there was much diversity by sector, ranging from aerospace to healthcare. Noticeably, none of the non-US stocks are listed as DRs in the US. Only one BRIC country is represented and no Asian stocks were selected.

STOCK	MARKET: SYMBOL	SECTOR: COUNTRY
AIRBUS	EURONEXT: AIR.PA (UADR)	AEROSPACE: FRANCE
AO WORLD	LSE: AO.L (UADR)	ON LINE RETAIL: UK
BMW	FRANKFURT: BMW (ADR)	AUTOMOTIVE: GERMANY
BORGWARNER	NYSE: BWA	AUTOMOTIVE: US
L BRANDS	NYSE: LB	RETAIL: US
LOJAS AMERICANAS	BOVESPA: LAME4	RETAIL: BRAZIL
MEDPACE	NASDAQ: MEDP	MEDICAL: US
REGENIX BIO	NASDAQ: REGNX	BIOTECH US
SALESFORCE	NASDAQ: CRM	SOFTWARE: US
SKYWORKS SOLUTIONS	NASDAQ: SWKS	TELECOMMUNICATIONS: US
UNITED HEALTH	NYSE: UNH	HEALTHCARE: US

TABLE 1. Stock selections

OXFORD METRICA CLIENTS

BANKING
BNY Mellon
Credit Suisse
Deutsche Bank
Invesco
Schroders
Templeton & Phillips
UBS

ENERGY & MINING
BP
De Beers
Exxon Mobil
Gazprom
Gold Fields
Royal Dutch Shell

FOOD
DongA One
General Mills
Nestlé

FOUNDATIONS
John Templeton Foundation
TWCF

HEALTH CARE
Baxter
Bristol-Myers Squibb
Johnson & Johnson
Merck Serono
Natura
Novartis
Novo Nordisk
Solvay

INDUSTRIAL
ABB
Aker Solutions
BAA
BAE Systems
General Electric
INI
Jardine Matheson
Kone

INSURANCE
AIG
Aviva
FM Global
If
ING Group
Munich Re
OIL
RSA
SCOR
Swiss Life
Swiss Re
Zurich Insurance Group

PROFESSIONAL SERVICES
Accenture
Aon
Ashurst
Blue Rubicon
Deloitte
Edelman
EY
Freehills
Hill & Knowlton
Ince & Co
KBC Peel Hunt
Kenyon International
Marsh
Ogilvy PR
OTC Markets Group
Porter Novelli
PriceWaterhouse Coopers

PUBLISHING
Reed Elsevier

RETAIL
Huhtamaki
Tesco

TECHNOLOGY
Cisco Systems
Green ICN
Hitachi
IBM
ICN Telecom
Infosys
Intel
KNTV
Oracle
Tencent
Xilinx

TRANSPORT
P&O Ferries

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