WINTER HAS COME TO FINANCE

BUT A FOCUS ON DEVELOPING ECONOMIES MAY BRING SOME WARMTH

BY SONY KAPOOR

A RE-DEFINE REPORT FOR NORFUND

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ABOUT THE AUTHOR

Sony Kapoor is the Managing Director of the international think tank RE-DEFINE, which works with European and emerging market governments, multilateral institutions and investors on economic policy, financial markets and sustainability. An economist, financial sector expert and development practitioner, Sony is also the CEO of Court Jesters Consulting, through which he advises companies, governments and investors on strategy, policy and long-term trends. Sony has had a multidisciplinary role at the London School of Economics as a Senior Visiting Fellow in the Development, European and Government Departments and as Strategy Adviser to the Systemic Risk Centre. He has also been a special adviser to the UN on green finance, and has worked with the OECD, IMF, World Bank, European Commission and Parliament on economic policy, the Eurocrisis and financial reforms. He was a strategy adviser to the Norwegian government and has served on several high-level expert commissions. An ex-investment banker, Mr. Kapoor was elected the first chairman of the Banking Stakeholder Group at the European Banking Authority. His contributions to reforming finance and sustainability have been recognised by the World Economic Forum, which has honoured him as Young Global Leader. He was also elected a Young European Leader and a Fellow by the Royal Society of Arts, Commerce and Manufacturers. Sony now lives between Oslo and London working on the global, European and Nordic economy and with many institutional investors. He also serves on the board of Friends of Europe, the pan-EU think tank, and of Circular Norway.

Email: sony.kapoor@re-define.org

RE-DEFINE

ABOUT RE-DEFINE

RE-DEFINE is an international think tank dedicated to improving public policy and business decisions around the world. We are change-makers driven by a core belief in the power of evidence, argument and communication to deliver on our belief in the greatest good for the most people. Our work is underpinned by four core values: sustainability, equity, dynamism and integrity. We are a non-partisan, non-profit organisation dedicated to using research and expertise to deliver change. We focus on informing the public debate and challenging groupthink, while at the same time offering creative and pragmatic solutions to the most pressing public policy challenges of our times. We pride ourselves on our decade-long track record of shaping public and private sector policy in fields as diverse as international development, sustainable finance, crisis management, financial reform, long-term investing and harnessing technology for impact.

Website: www.re-define.org

Norfund ABOUT NORFUND

Norfund - The Norwegian Investment Fund for Developing Countries, is owned by the Norwegian Government and serves as an instrument in Norwegian development policy. Norfund contributes to poverty reduction and economic development in the poorest countries through investments in profitable businesses and transfer of knowledge and technology. Norfund invests equity and/or debt capital, always as a financial minority together with partners, international or Norwegian. The main sector for investment is clean energy, both through the hydro-power company SN Power and through direct investments. Norfund is Norway's biggest investor in microfinance through the Norwegian Microfinance Initiative (NMI) and is also a prominent investor in small and medium sized businesses through regional funds and direct investments. Norfund's geographical focus is on Sub-Sahara Africa, where the fund has three regional offices (Accra, Nairobi and Maputo).

Website: www.norfund.no

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EXECUTIVE SUMMARY

This report, the first in a new series of RE-DEFINE White Papers on the Future of Finance and Economy, takes stock of the current state of the financial system. As the first part of the title, "Winter has Come", suggests, the system is ill. While the symptoms are alarming, the prognosis is not fatal, as the second part of the title indicates: investing in developing economies can aid recovery.

This report shows that the financial system will need to make some deep and fundamental changes, the biggest of which is to focus on intermediating developed economy savings, where investment opportunities are limited, towards promising opportunities in developing economies which are short of investible savings. Due to their unique characteristics and expertise, Development Finance Institutions can and should play an important role as catalysers and intermediaries in this process.

While the report touches upon many parts of the financial system, its main focus is on the more than $80 trillion or so of long-term savings held in pension funds, insurance firms, sovereign wealth funds, endowments, family offices and others. Some of this money, most of which is held in rich OECD economies, is managed in-house by the asset owning institutional investors themselves, and the rest is handed over to a multitude of asset managers to invest. The analysis, insights, conclusions and recommendations of this report apply to both.

The gilded age of finance has ended

The report starts by showing how the past few decades have been a golden age for institutional investors, many of which have seen year after year of 6%-8% returns, more than double the rate of economic growth. So much so that the majority of the corpus of many such investors today comes not from pension contributions or oil revenue, but from accumulated financial returns. For Norway's USD 1 trillion Oil Fund, the figure is 60%. For many US public pension funds, it is closer to 70%. Furthermore, more of these returns have come in the form of capital gains, instead of dividend and interest income. But this golden age has now ended, and winter has come.

Decades of an absolute increase in the number of workers in the rich world and a steady rise in productivity delivered sound GDP growth in the rich world, until the financial crisis in 2008. It is easier to make money in faster growing economies, but the number of workers is now shrinking and productivity growth has stagnated. This means that long-term prospects for GDP growth, and financial returns have fallen substantially.

China's entry into the WTO and its integration into the global economy was a positive shock that, by introducing several hundred million new workers, increased the share of revenues going to capital, further boosting returns. The benefits of this are now starting to peter out, and India is no China. A steady secular decline in corporate tax rates and interest rates of about 20% and 7% respectively since the 1980s further boosted profitability and increased valuations. But little further reductions in either are possible. Any increase in either corporate tax rates or any normalisation of interest rates would potentially reverse some of the valuation gains and inflict capital losses.

The last decade saw a decoupling between anaemic growth and bullish financial returns boosted by more than USD 10 trillion of new demand for financial assets generated by quantitative easing, even as the supply of new bonds and shares did not keep pace, inflating valuations. New QE is likely to have a much smaller effect.

And winter has come to the world of institutional investors

Take all of these together, and long-term returns on the kinds of portfolios that most institutional investors maintain are expected to shrink by 3%-4% annually.

With more than 80% of the investments made within the rich world itself, these portfolios are subject to highly correlated risks, given the high degree of financial and economic interconnectedness of OECD economies. Also, these risks are now rising. With shrinking political centres and the rise of populists, the rich world has now become the main source of political risk. Trade and currency wars, possible Brexit and recurrence of the Eurocrisis, both at heart a failure of politics, all increase the risks posed to these investments.

Even as these risks have risen, the fiscal and monetary policy space that rich countries have to enact sensible countercyclical policies in the event of a downturn have shrunk. Much less fiscal and monetary headroom is available now than in 2008[i]. National and international political polarisation makes any sensible and co-ordinated response far more difficult. As things stand, institutional investors appear to have locked in low and falling returns for high and rising risks, the exact opposite of what finance theory advises.

To boost returns, they need to shift their focus to the developing world

Even as rich economies have entered demographic decline and seen productivity growth stagnate, many economies in the developing world offer a mirror image. More than ten million new workers enter the workforce in India and Africa every year, and their demographic profiles look set to improve for many years to come. This is boosting prospects for growth. Given how far they are from the technological frontier in comparison to OECD economies, the prospect for fast productivity gains and turbocharged catch-up growth is real.

Already half of global GDP, 2/3 of all global growth, and half of middle-class demand underpinning prosperity comes from the developing world, and its share is expected only to rise. There are millions of enthusiastic, budding entrepreneurs in developing economies, providing many potential opportunities for investment. What is less plentiful, is savings. Even where they exist, they may not be appropriate for funding new businesses. One difference between those developing economies that are growing fast and those that are not meeting their potential, is the amount of capital deployed to allow workers to get access to the tools, technology and training that allows them to become more productive. The quality of infrastructure, which is capital intensive, also makes a difference.

Despite this enormous potential for growth and need for capital in the developing world, capital flows in the form of bank loans, foreign direct investment and official development assistance have actually fallen as a percentage of GDP, resulting in lower than potential growth. Developing country share of stock markets is one fourth, of bond markets it is one sixth, and for private equity only one tenth and for foreign direct investment it is a half.

We show how even increasing the small 6% or so present weight given to developing country assets in rich country investor portfolios will both raise returns and reduce risks through diversification. But to really boost returns and fund the best investment opportunities, which boosts global growth, the financial system will have to change its focus on intermediating western savings to developing economy opportunities at scale.

But given shallow financial systems in developing countries, this will not be easy

However, this will not be easy. The total stock market capitalisation of 60 countries in Africa and South Asia, where poverty is concentrated, is just a third bigger than that of the Oslo Stock Exchange, once India and South Africa are removed. Most countries in Africa do not even have functioning stock and bond markets. This means investors cannot simply reallocate their investments in stocks and bonds to Africa. While investments in the listed markets of dynamic, larger emerging economies such as India need to rise, this alone will not solve the intermediation challenge.

As important as developing and deepening the banking and financial markets in developing countries is, there is an urgent need to build a whole ecosystem of venture funds, private equity firms, credit providers and incubators to fund entrepreneurs who might be several decades away from a stock market listing, or who may never reach that scale. With the private sector delivering 90% of jobs in developing economies, job creation is a pre-condition and a driver of development. And funding entrepreneurs and projects is the driver for job creation.

Even as the emerging economies prioritize expanding and developing markets for listed assets that can attract large amounts of foreign capital quickly, they also need to reform and expand their banking systems and develop an ecosystem of venture funds, infrastructure financiers, SME specialists and private equity firms to fund entrepreneurs operating at a much smaller scale, or at an earlier stage of the cycle.

Development Finance Institutions can play a small, but catalytic role

Here the role of Development Finance Institutions (DFIs) such as Norfund, CDC Group and IFC, which have a dual mandate to catalyse the development of the private sector and be profitable, has been crucial. The latter two were especially instrumental in helping catalyse the development of a now thriving private equity ecosystem in places such as India and China. Africa, which has an economy almost the size of India's, is the new priority region, especially for Norfund.

These DFIs have deep intimate knowledge of developing economies, a sound track record of profitability and know leading investors and businesses. They invest USD 40 to USD 60 billion annually. While their capital should be increased dramatically, especially if they are to focus on the less sophisticated and more difficult least developed countries and fragile and conflict states, that still will not deliver the trillions needed to fund job creation, renewable energy generation and the SDGs.

In addition to deploying their own expanded capital base, DFIs should mainly focus on catalytic effects, such as helping reduce the information asymmetry and excessive risk perception about the developing world, building local financial and entrepreneurial expertise and capacity by seeding new funds and running training programmes, and facilitating investments by striking partnerships with large institutional investors and businesses to help them deploy more capital in the region.

Partnerships with large institutional investors with a dual objective of educating them on the dynamic realities of emerging and frontier economies and helping reduce their misperceptions of high risks, can unlock not just co-investments with DFIs but also further large direct investments by the institutional investors themselves, for example in infrastructure in emerging markets.

Partnerships with businesses, particularly dynamic businesses from neighbouring countries may be more suitable for frontier economies, where DFIs can help them expand into regions and countries they may otherwise have not gone to. The judicious use of blending, using grants or other subsidies to help develop project pipelines, train entrepreneurs and run education modules for investors will also help.

DFIs can play a small, but catalytic role in helping the global financial system do its job, which is to deliver savings to parts of the world where the best opportunities are.

INTRODUCTION

There are five fundamental principles of finance that are most important for the financial system to adhere to, and these are:

- Finance seeks to maximise return while minimising risk.
- Finance seeks not to put all of one's eggs in one basket, but to diversify.
- Finance is a market for information and new information is money.
- Finance channels excessive savings to where investment opportunities lie.
- The profitability of the financial system, in the long term, is linked to growth.

We will return to these, showing that as things stand today, large parts of the financial system are violating these principles. This is contributing to the parlous state of finance and the economic situation that we face, and hence cannot be sustained.

From its heyday as the colossus of the developed world corporate landscape, the financial system, comprised of banks, asset managers, institutional investors, hedge funds and a whole host of other financial intermediaries, has fallen a long way. At peak, the financial system in the US was responsible for an eye-watering 40% of all US corporate profits[ii]. If that seemed too good to last, it was.

Today European banks trade a price to book ratio of only around 0.6[iii]. US banks trade at a better but far from promising ratio, barely above 1. The markets are telling iconic Wall Street giants such as Goldman Sachs, now trading at 0.9[iv] or less than half of pre-crisis levels, that they are destroying value, being worth more if they are wound up and assets sold than if they continue to operate as they are. The plight of its once mighty European rival Deutsche Bank, which trades at 0.2[v], is little consolation when the S&P500 index, of which Goldman is a part, trades at around 3[vi]. Investment banks have already announced more than 30,000 layoffs in the first half of this year, with many more to come[vii]. The fact that Silicon Valley, in the words of Jamie Diamond, the CEO of JP Morgan, "is coming to eat the bank's lunch[viii]" only adds to their many woes.

Goldman and Deutsche are not unique in their fall from grace, with the only financial firms once considered even shinier than these, hedge funds, also in long-term decline. This would be the fourth year in a row that more hedge funds shut down than new ones start launched. Once known for their outsized profits and swashbuckling ways, returns on the average hedge fund have shrunk from 18.3% in the run up to the dotcom era to a paltry 3.4% since the crisis[ix]. "The general trends of the industry are shocking", says Raoul Pal, a former hedge fund manager at GLG partners[x].

As banks were slow to recover post crisis, a less fashionable part of the financial industry, asset managers, were in the ascendant. The bull market in equities and the lower for longer interest rate environment boosted assets under management and inflated fees and margins, but that era is set to end, and abruptly. The more than 300% rise in the value of S&P since the crisis and the inflation in the value of other financial assets has driven more than half of the increase in Assets Under Management (AUM) and allowed for operating margins as high as 40%. But the huge structural shift from active to passive management, rising costs, and, as this report will lay out, the very real prospect for the end, and even reversal of the bull market is already shrinking margins and forcing consolidation and about a third of the asset managers today are likely to close or be taken over by 2025[xi].

The industry, which invests more than $74 trillion of assets on behalf of owners including pension funds, insurance giants and sovereign wealth funds, is in the midst of a brutal price war and consolidation[xii] which may have only just begun. Talking about the many challenges facing the industry, Ben Philips of Deloitte Consulting simply admits: "the entire industry has been caught flat-footed. Nobody saw it coming[xiii]." As at investment banks, large-scale layoffs are also expected in asset management[xiv].

Amidst all this gloom, one corner of the financial industry is still flourishing, namely private equity (PE). The five largest PE funds have USD 1.3 trillion of assets between them and are continuing to grow, but they have evolved beyond their core business of leveraged buyouts. They now invest across a whole range of "alternative assets", or assets that fall outside the traditional listed stocks and bonds and include private credit, venture capital, infrastructure and much else that is not listed on public markets. Leverage ratios have risen to unsustainable levels, finding deals is becoming a challenge, fees may soon come under pressure and unfavourable regulatory and tax changes may be coming.

In the words of Stephen Schwarzman, the boss of Blackstone: "The old model of buying a slow-growth company, adding leverage and selling assets is dead[xv]."

Many of the once mighty sector's problems were self-inflicted. Investment bankers pushed for value destroying mergers[xvi], engaged in widespread product mis-selling, put their interests ahead of their clients', and took on too many risks[xvii] - all in an effort to generate profits for themselves[xviii]. Despite charging large fees to asset owners such as pension funds, the vast majority of large active managers underperform a cheap strategy of simply tracking the index, with close to 90% falling behind the S&P 500 index in the past decade and a half[xix]. Despite charging a far higher fee than active asset managers, the performance of the average hedge fund has been equally dismal[xx], lagging the index in most years in the past decade[xxi]. Private equity may also soon have its day of reckoning.

It is one thing not to feel too sorry for the financial intermediaries, who earned huge rewards while doing a poor job. But most long-term assets, pooled in pension funds, insurance firms and sovereign wealth funds belong to ordinary citizens, as do savings at banks. On top of having paid excessive fees year after year, many of these asset owners had a bad year in 2018 and lost money. On one measure, 2018 was one of the worst years to be an asset owner, because 90% of 70 asset classes, which such owners invest in, lost money[xxii], and to make matters worse, more and more banks are now starting to charge savers interest for the privilege of having a bank deposit[xxiii]. Yes 2019 is much better, but unlikely to last long[xxiv], with fears of an imminent recession now widespread[xxv] and enough to have become self-fulfilling[xxvi], and Trump's trade war showing little signs of abating[xxvii].

To those who have read "Winter is Coming", the first RE-DEFINE report for Norfund from late 2016 warning of imminent falling returns in traditional asset classes used by institutional investors, 2018 would not have come as a big surprise[xxviii]. But what matters more than the state of finance, is the state of the economy and how the two relate to each other, given the financial sector's critical role as the "brain" of modern-day market economy, which is supposed to allocate resources to where they can be productively deployed.

The Western financial system has had a good run over the last several decades, but its failings have come back to haunt it and winter has arrived. This report will seek to focus narrowly on the roughly USD 80 trillion of institutional investors comprising pension funds, insurers, endowments, sovereign wealth funds and their ilk, and the army of investment professionals they employ in-house or, more likely, at one of the many asset managers to invest on behalf of the asset owners. 70%-80% of this managed wealth is in rich OECD economies, with the US, EU and Japan all having a significant proportion of these assets[xxix].

Many institutional investors have reported fantastical returns over the past few decades, at 7%-8%, or double or more of growth rates in the economy. The first part of the report shows how outsized returns have been driven by a number of factors, some of which are now in danger of reversing, and others that were a one-off and are unlikely to be repeated. This means that future expected returns are likely to be 3%-4% lower. We may also see a re-pricing and correction that inflicts capital losses in the near to medium term.

Given the degree of home bias (more than 90% of funds from OECD institutions are invested within other OECD economies and roughly 80% in their own country or region), these institutional investors appear to have locked in guaranteed lower future growth rates. Worse, given the high degree of financial and economic connectivity between OECD economies and the high degree of home bias, these investments are not well diversified. Even worse, the risks they face may be rising, as political support for the centre in rich economies shrinks. This raises political risk that could manifest as currency and trade wars, amongst other developments, Fiscal and Monetary policy space to counteract the next downturn is far more constrained than in 2008.

The principles of returns being related to GDP growth, finance needing to diversify, and locking in high returns for limited risk all appear to have been violated.

The biggest failing of the sector, however, has been its abject failure to intermediate properly. Rich economies have so many savings that savers are getting penalised for saving, while lenders are made to pay to lend. Instead of investing this money to expand productive capacity, it is being used to buy back securities and increase measly returns through leverage.

At the same time, developing economies, many of which have a deficit of savings but a plethora of investment opportunities for expanding productive capacity, are being starved of much needed capital. Foreign direct investment, bank lending and official development assistance, have all fallen as a proportion of developing economy GDP. The financial system is failing in its job to intermediate the excessive savings of the West to where they can be productively deployed in the developing world.

There is also a steady move towards passive investing and indexing, with the vast majority of analytical capacity (even amongst active managers in the financial system) being dedicated to listed markets. This means less of an active search for new opportunities outside of the listed space, resulting in finance badly fulfilling its role for search and discovery of new information. The vast majority of the financial system remains strikingly ignorant not just of the countless investment opportunities in developing economies, but even of basic facts about these economies. Even emerging and frontier market specialists at large investment firms routinely do worse than pure chance at Hans Rosling's quizzes[xxx] that test basic knowledge and perception about the developing world. Many fund managers report having a "Eureka" moment the first time they undertake a field trip to Africa and see the energy, entrepreneurial talent and potential of the continent first hand.

The overarching theme of the report is to explore how redirecting more long-term institutional capital towards developing economies can help both asset owners achieve their goals of increasing returns and reducing risk, while also helping catalyse growth through expanding productive capacity in host economies. This, as the report will show, is also imperative for meeting the Sustainable Development Goals and financing the energy transition to tackle climate change.

It discusses the role that Development Finance Institutions, specialised publicly funded banks and investment funds focused on supporting the private sector in developing economies, can play in helping refocus institutional investors towards opportunities the developing world.

After making the financial case for this strategic push by institutional investors in Part I and Part II, the report will dwell in some detail on what DFIs do, the challenges they faces and how they can maximise the development of a dynamic and productive private sector in developing economies through catalysing institutional capital towards such investments.

PART I: The recent past, present and expected future of the financial system

The unhappy state of institutional investors today

As we showed in "Winter is Coming"[xxxi], the world has more than $80 trillion of Assets Under Management (AUM) of potentially long-term institutional investors. These include entities such as pension funds, insurance firms, sovereign wealth funds, endowments and foundations.

Willis Tower Watson uses a different methodology in tabulating the largest asset owners, where it does not count insurance firms. It comes up with a smaller but still huge number of more than $55 trillion, with the top one hundred owning more than a third of these assets. The table below shows the biggest 25, which have assets of $12 trillion between them.

AO 100 ranking
(in US$ million)

Rank	Organisation	Country	Total Assets	Primary Category
1.	Government Pension Investment	Japan	$1,443,554	Pension fund
2.	Government Pension Fund	Norway	$1,063,456	Pension fund
3.	China Investment Corporation	China	$900,000	SWF [5]
4.	Abu Dhabi Investment Authority	UAE	$828,000	SWF [5]
5.	National Pension	South Korea	$582,938	Pension fund
6.	APG	Netherlands	$564,508	Pension fund
7.	Federal Retirement Thrift	U.S.	$531,489	Pension fund
8.	Kuwait Investment Authority	Kuwait	$524,000	SWF
9.	SAMA Foreign Holdings	Saudi Arabia	$514,000	SWF [3]
10.	Hong Kong Monetary Authority Investment Portfolio	Hong Kong	$456,600	SWF [5]
11.	SAFE Investment Company	China	$441,000	SWF [5]
12.	GIC Private Limited	Singapore	$359,000	SWF [5]
13.	National Social Security	China	$341,361	Pension fund
14.	California Public Employees	U.S.	$336,684	Pension fund
15.	Qatar Investment Authority	Qatar	$335,000	SWF
16.	Canada Pension	Canada	$283,454	Pension fund [1]
17.	Central Provident Fund	Singapore	$269,133	Pension fund
18.	PGGM	Netherlands	$262,290	Pension fund
19.	Temasek Holdings	Singapore	$230,310	SWF [1]
20.	Public Investment Fund/Sanabil Investments	Saudi Arabia	$230,000	SWF [3]
21.	California State Teachers	U.S.	$216,193	Pension fund
22.	Investment Corporation of Dubai	UAE	$214,200	SWF [3]
23.	Mercer	U.S.	$211,971	OCIO & Master Trust [1]
24.	Local Government Officials	Japan	$209,880	Pension fund
25.	New York State Common	U.S.	$201,263	Pension fund

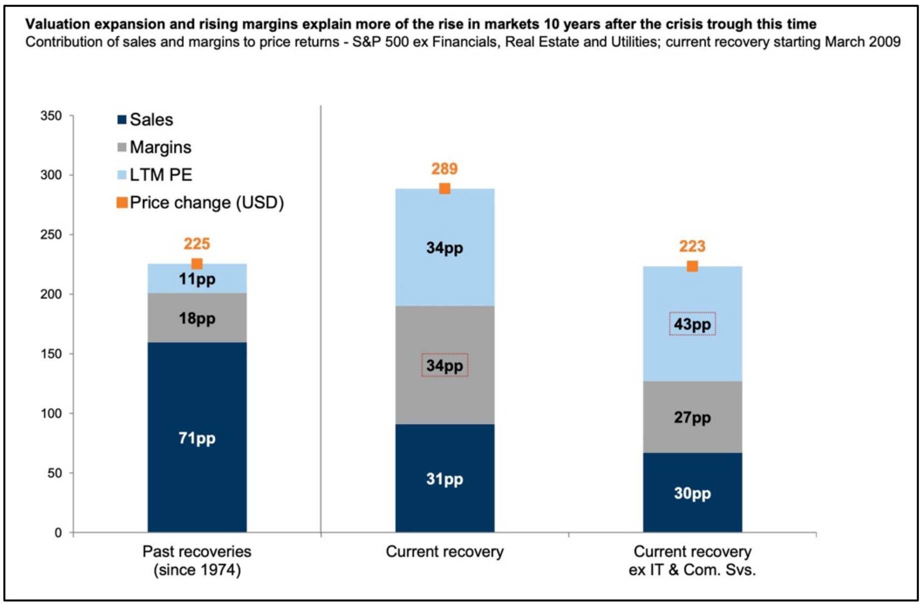
Source: Willis Tower Watson[xxxii]

Institutional investors now manage an increasing share of global wealth and have grown from strength to strength, particularly from the 1970s onwards, when funded pension plans became fashionable. Simultaneously, we also saw the rise of insurance firms, particularly life insurers, both in the United States and in Europe that also offered savings products that mirrored some of the characteristics of pension plans. Sovereign wealth funds that saved natural resource revenues and the accumulation of foreign exchange revenues from export surpluses have added to this corpus.

Investors have enjoyed a fantastic run of returns, mostly capital gains

The large size of these asset owners derives from two sources: new inflows of funds and accumulated financial market returns from investments. The inflows take the form of pension contributions, insurance premiums, oil revenues or export surpluses. A very important point to note here is that in most cases, the larger share of the present corpus of these funds of about $80 trillion comes not from accumulated inflows, but from accumulated financial returns. In the case of the nearly trillion-dollar Government Pension Fund of Norway, for example, financial returns account for almost 60% of the current value, with oil revenues accounting for the balance[xxxiii]. Of the more than $5.9 trillion of revenues of American public sector pension funds since 1984, for example, two-thirds came from financial market returns[xxxiv]. For some others, such as the Yale endowment, which has generated more than 12% annual return since the mid 1980s, that ratio is much bigger[xxxv].

Within this second category of financial returns, the biggest contribution has come in the form of capital gains, rather than income in the form of interest payments or dividends. The S&P 500, the index of the largest American listed firms, has more than tripled in value in the ten years since March 2009. It means that a dollar invested in 2009 would be worth more than three dollars now. This makes it easier to understand how large the contribution from capital gains has been. As the following chart shows, in this on-going recovery, valuation gains not linked to revenue or profitability have been responsible for more than a third of the rise in value, triple of the experience in previous recoveries.



Source: Goldman Sachs

Most large US public pension plans had five years of double-digit returns and averaged a 10-year annualized return of 9.7% in this decade[xxxvi]. Smaller funds did worse on average. Texas Teachers has delivered a three-decade run of an average return of more than 9%[xxxvii].

Despite this, pension fund deficits remain high

Despite this fantastic run, state and local pension plans are running on a nearly 50% deficit worth $4.2 trillion. This is because pensioners are living longer, governments have not paid enough into the plans and because the funds have made unrealistic assumptions about high financial returns that they cannot deliver on[xxxviii]. Calpers and Calstrs, for example, have assumed that they will be able to deliver a long-term portfolio return of 7%, but as we dig deeper into the factors that drove high historical returns in the next section, we will see that the good times will not last.

Before we move on to the next section, it is also worthwhile looking at how these institutional investors deploy their money and where they are based. According to the Willis Tower Watson report, Asia Pacific, Europe and the Middle East and North America all have about a third each of the assets of the largest 100 asset owners[xxxix], but more than three quarters of these are based in OECD economies, a club of mostly rich and developed economies[xl].

The average owner invests around 80% of their portfolio in OECD bonds & stocks

Different funds within the list invest using very different styles, across different geographies in different asset classes, but it is illustrative to look at some. The portfolios of large American pension funds are dominated by equity, which accounts for more than 55%, often higher, allocations. Bonds sit between 20%-30% with alternatives such as private equity accounting for an average of 12%, and real estate about 4%[xli]. In contrast, UK pension schemes hold 54% of their portfolios in bonds[xlii].

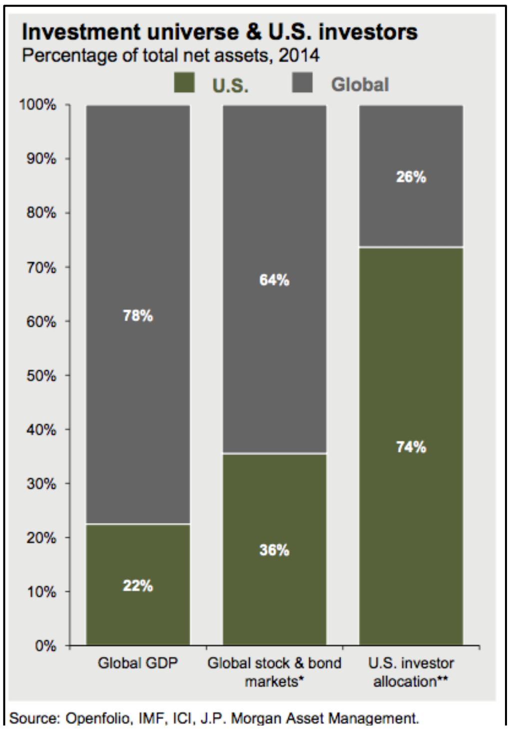
NBIM (or GPF), Norway's Sovereign Wealth Fund (SWF) has 70% in listed equities, 3% in real estate and the balance in bonds, with almost 90% in OECD economies[xliii]. Most other SWF's have much larger allocations to both to illiquid asset classes such as private equity and infrastructure[xliv] and to developing economies[xlv].

Broadly speaking, it is fair to say that the two largest asset classes that account for more than three-quarters of all of the investments of institutional investors are in listed liquid stocks and bonds of OECD economies, with some having significantly larger allocations to illiquid assets and/or developing country assets[xlvi].

Asset owners invest as much as 80% of their portfolio in their own country/region

Given that diversification is one of the core tenets of finance, one would expect that the institutional investors look for the best opportunities in the world to deploy their capital. But as a subsequent section will show, this is simply not the case. In fact, investors both large and small exhibit a large "home bias", investing a disproportionately large amount of their capital in their home country or region. For North America, this figure is 70%-80%[xlvii], for Europe and the Middle East around two thirds, and for Asia even larger than North America[xlviii]. For example, 70% of the assets of the half a trillion-dollar Korean National Pension Service fund are invested at home in Korea[xlix], though this is now set to change.

The following graph illustrates the absurdity of this home bias. The US accounts only for about a fifth of global GDP and about a third of market capitalisation of stocks and bonds, but investors invest three quarters of their money at home. There is a false notion that the large US Stock Market consists of globalised firms, so investing at home gets one exposure to the global economy. Only between a third to 40% of the revenues of S&P 500 firms come from abroad, and not in proportion to economic output. Only 14% come from emerging markets which are responsible for almost half of global GDP[l].



Source: JP Morgan Asset Management[li]

Most use indices as benchmarks, using them to measure relative performance [lii]

The vast majority of institutional investors use standard stock and bond indices as benchmarks and judge the performance of both internal and external asset managers against these indices. Many, such as the Norwegian SWF, are effectively index trackers, investing mostly in listed liquid assets. Others, such as GIC, the Canadian CCPIB and Texas Teachers have much higher allocations to private equity and other unlisted asset classes. Benchmarking against indexes often leads to index hugging and the rise of passive investing, which is set to overtake active investing in the US by 2021. This means that a majority of the assets of these institutional investors are deployed in line with the major stock and bond indexes.

With notable exceptions such as GIC, many asset owners still use volatility as the main benchmark for risk, despite having long-term perspectives. If the main benchmark for risk is the short-term fluctuation of the price of securities, it can distort investment behaviour.

While many asset owners have been building in-house asset management capacity, they remain big users of external asset management firms. While some have more informed and advanced policies on compensation, most still pay for annual outperformance, often against the benchmark index.

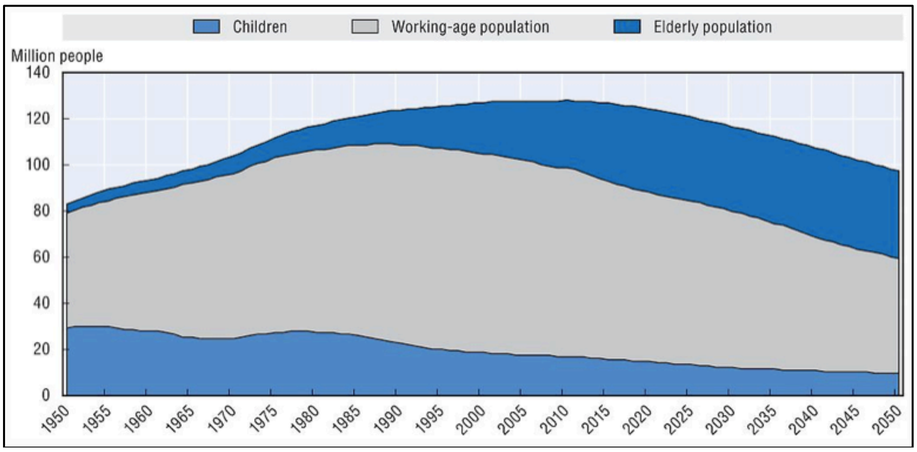
This combination of benchmarking against an index, using volatility as a proxy for risk, and having an annual performance bonus creates big distortions in investing that are well-documented and discussed in great detail in the sister paper to this report, "Winter is Coming". Together, they lead to sub-optimal investment strategies.

The drivers of past outsized financial returns are melting away

As hinted in the last section, the drivers of outsized financial returns for institutional investors in OECD economies over the past few decades, which resulted in a golden age for asset management, are melting away. Let us consider them one by one.

Favourable demographics have started to go into reverse

After the end of the world war, most OECD economies saw several decades of favourable demographics where the absolute number, and relative share of workers in the population kept rising as illustrated by the following graph of Japan as an example.

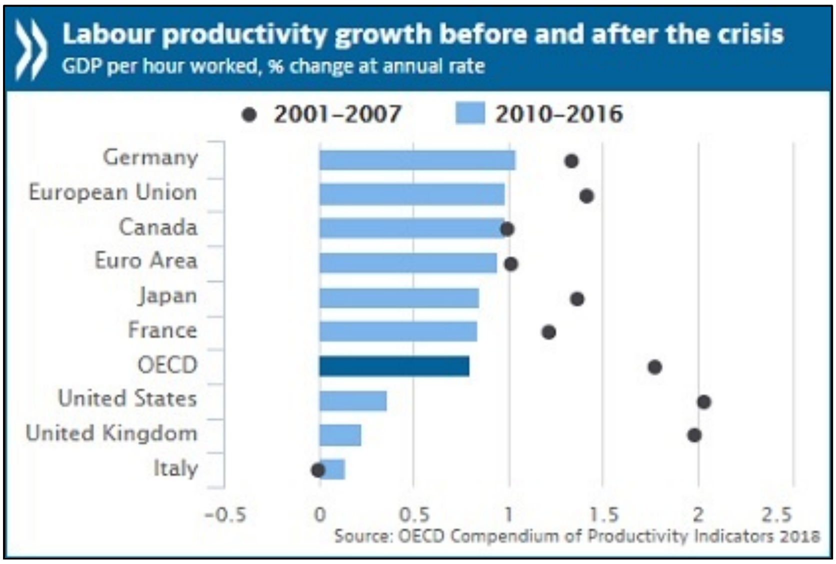


Source: OECD[liii]

This absolute rise in the number of workers accounts for about half of the GDP growth observed in the past few decades. But, as most OECD country populations have started ageing -with Germany, Italy and Japan having some of the biggest problems - the demographic dividend that provided tailwinds for growth has turned into headwinds and will drag GDP growth in the OECD down for decades to come. A lower growth rate translates into lower financial returns, over the long term.

Productivity growth has slowed down

As OECD countries recovered from the war, and new technologies were scaled up, they saw a large annual increase in productivity that accounted for the other half of the high growth rates seen in the OECD economies over the past few decades. However, as the following chart shows, productivity growth in the OECD has slowed down dramatically in recent years, particularly after the financial crisis.



Source: OECD[liv]

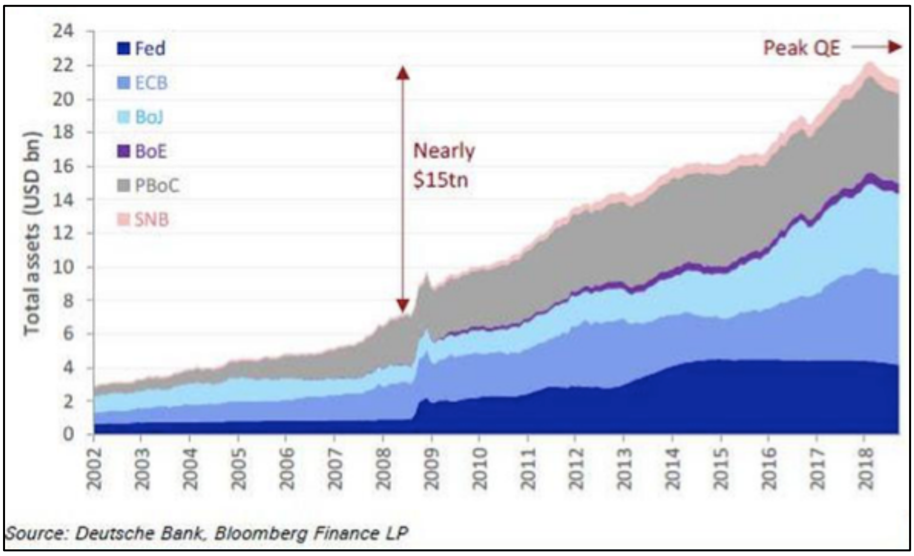
Unlike demographics, productivity does not have a negative pull on growth in any OECD economy yet. However, the slowdown in productivity growth, combined with the decline in demographics, means that OECD country growth has declined to about 1%-2%, which bodes ill for financial returns.

A secular decline in interest rates is hitting its limits, and QE has slowed down

The discount rates for future financial income, such as from interest and dividend, are derived from prevailing interest rates. The present value of such future income is higher the lower the interest rate, which means that low interest rates raise the prices of assets. Lower interest rates also enable higher leverage as more debt can be serviced with the same income. Both of these contribute to rising asset prices.

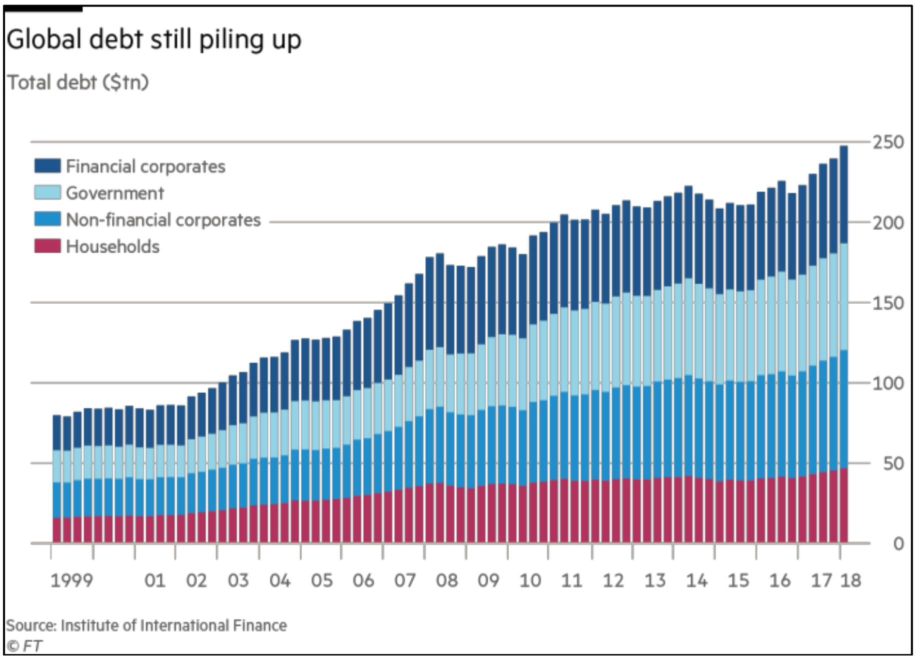
Source: Financial Times[lv]

As the chart above shows, interest rates in the world have been in secular decline, with the real effective rate now being below zero. This decline in interest rates, most clearly observable in bonds, has been accompanied and abetted by near record low interest rates (often negative) from central banks and about $15 trillion worth of asset purchases by central banks with newly created money. All of which has pushed up all asset prices.



Source: Deutsche Bank[lvi]

The related accompanying rise in global debt as seen below, a proxy for leverage, has added further fuel to the fire.

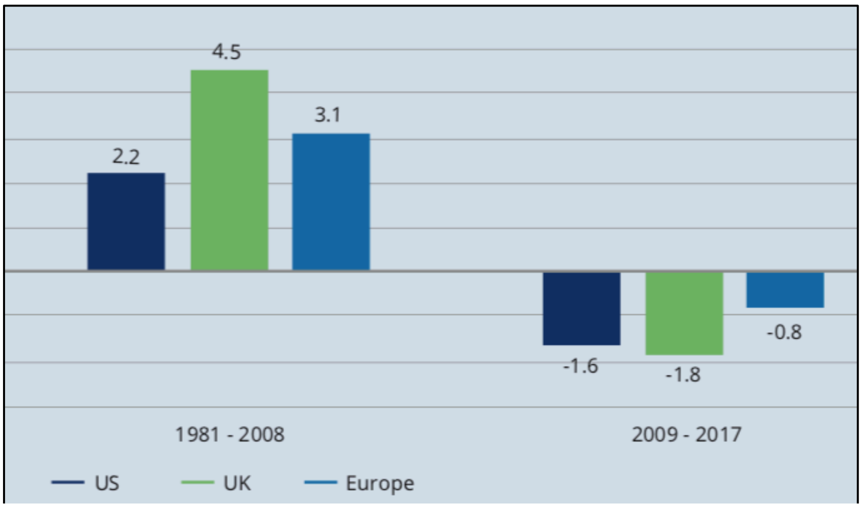


Source: Financial Times[lvii]

Most OECD countries are at or close to historically lowest interest rates, with limited, if any, room to cut interest rates further in the event of an economic downturn.

Source: Financial Times[lviii]

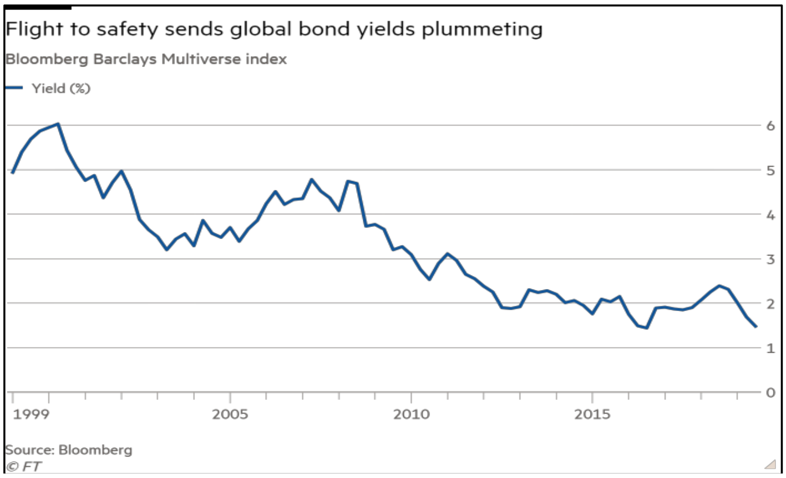
Even where the nominal rates are positive, the real rates have been negative in much of the developed world in the decade since the financial crisis as the following chart shows.



Source: Schoders[lix]

Even if they go lower, interest rates are never going to fall by 4%-5% from present levels as they did after the last financial crisis, so their effect on asset valuations will be limited. If and when monetary policy does start to normalise, these asset prices will fall. As a previous chart shows, QE, the purchase of securities by newly minted central bank money, is starting to fall, which may put pressure on asset prices. Even if, as expected, QE programs are expanded again, their capacity to raise asset prices is limited by diminishing returns and free float limits. For example, it has been estimated that only 15% of the outstanding German sovereign bonds are in private hands. For US treasuries, the comparable figure is 50%. In other words, central banks are starting to hit limits on how many assets it is possible to buy[lx].

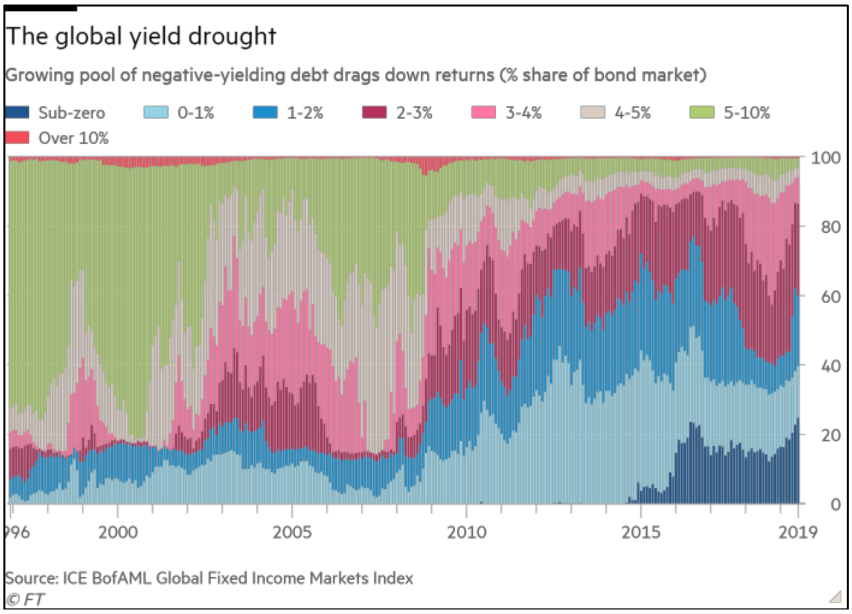
Even as this new lower for longer (ever?) interest rate regime is starting to hit the limit on how much it can inflate the prices of existing financial assets, it also reduces the prospects for high future returns by limiting how much interest investors earn on their bond holdings, that constitute as much as 30%-50% of the total holdings of most large institutional investors.



Source: Financial Times[lxi]

As the graph above shows, average yields on the broadest benchmark for bonds have fallen to just above 1%. Meanwhile, the chart below shows that only 3% of bonds outstanding in the world yield 5% or more, down from more than half two decades back and 16% a decade ago. More than $16 trillion of outstanding bonds today, more than a quarter of the total outstanding, only offer only negative yields, so investors will lose money holding them to maturity[lxii].

It is not just sovereigns, including those such as Spain and Portugal, that only recently flirted with possible bankruptcy. It also includes over $1 trillion of corporate bonds. In fact, LVMH and Sanofi issued zero coupon bonds (with no interest), where investors paid them more money than they will need to pay back[lxiii].



Source: Financial Times[lxiv]

Corporate tax rates have declined sharply but the limit is nigh

The value of company shares depends not just on how much profit companies are expected to earn, but also on how much of it will make its way to an investor in the form of a dividend income. Since dividends are paid after corporate tax has been paid off, a cut to corporate tax will directly increase money in an investor's pocket, thus making the company share more valuable and consequently raising its price.

As the following chart shows, corporate taxes across the world have declined sharply since the 1980s, and with each tax cut there has been a boost to the price of shares. The most recent corporate tax cut in the US had a similar effect. But with the US tax rate already at 21%, and with that in most other OECD economies not much higher, the scope for further cuts is very limited.

Given rising inequality in many countries in the OECD[lxv], and the populist backlash against this, an increase in corporate tax rates is as likely or even more likely than further tax cuts. In the US the corporate tax cuts have directly contributed to the US fiscal deficit ballooning to more than $1 trillion two years earlier than expected[lxvi]. The next administration may have to reverse the tax cut to bring the deficit under control.

Source: Tax Foundation[lxvii]

China's entry into the WTO redistributed income from labour towards capital

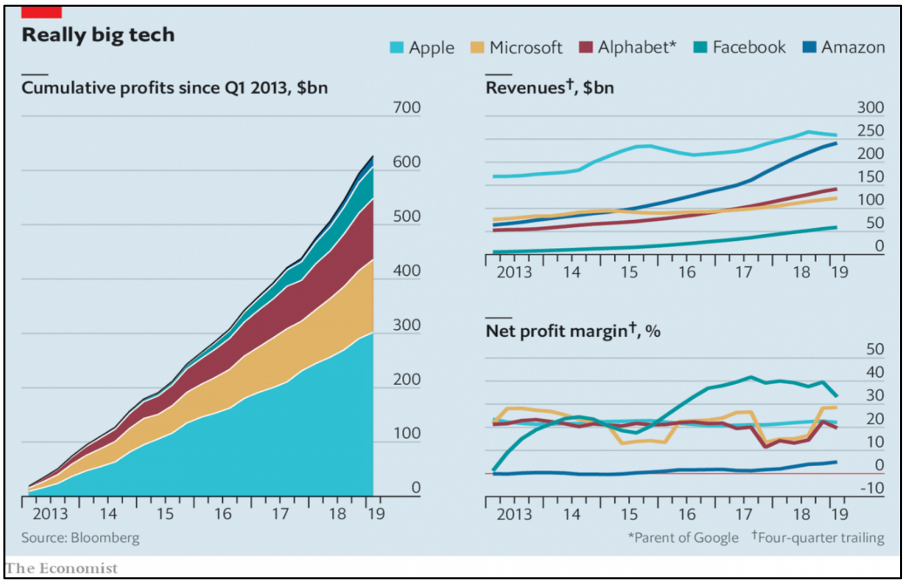
China's entry into the WTO in 2001 allowed for a rapid integration of hundreds of millions of its workers into global supply chains. This sudden influx of workers limited the bargaining power of workers elsewhere, including the OECD economies that China exported to, and was partly responsible for stagnating real wages for blue-collar workers.

This caused a one-off but large and significant redistribution of income away from workers towards capital and helped inflate asset prices. While India is sometimes thought of as the new China, fact is that it is following a very different trajectory of development and is not entering global manufacturing supply chains in the way that China did.

India's effect on the relative supply of labour and capital and the bargaining power of workers will be far more modest.

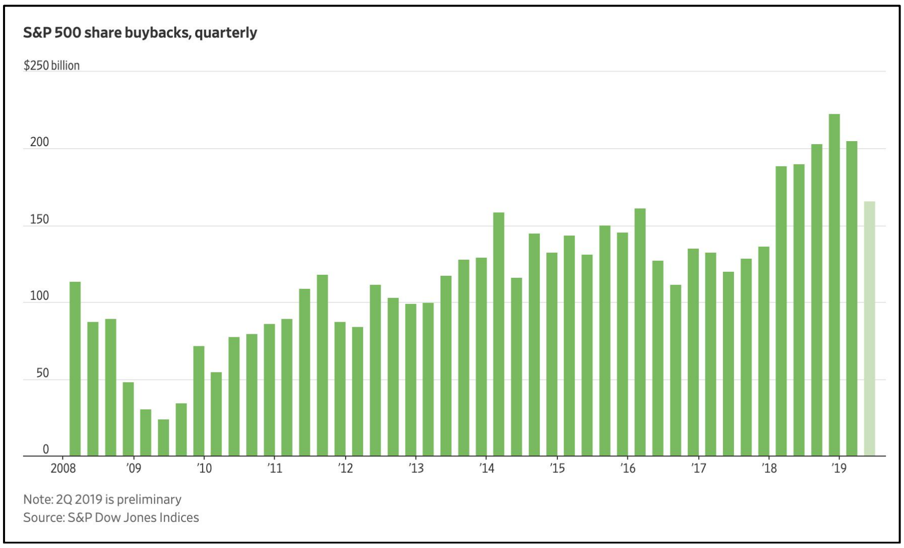
Other benign factors, which are unlikely to last

Besides these factors, others such as the prevalence of a sound and stable post world war world order, the absence of major conflicts and wars in the OECD, the rise of the US Tech Giants also known as FAANGs[lxviii], that now constitute fully 10% of the Stock Index (see chart below) are important.



Source: The Economist[lxix]

As significant has been the general rise in corporate leverage, record share buybacks of more than $800 billion last year[lxx] alone, and of more than $4.2 trillion since 2013[lxxi] (see chart below). Also, up until recently, the absence of populism[lxxii] have all created benign conditions that generated capital gains. Such benign conditions are unlikely to last.



Source: WSJ[lxxiii]

Another very important, but neglected factor is the large unpaid cost of environmental externalities, which has enabled firms to make outsized profits, even as they released carbon dioxide and other pollutants into the environment. With the glaring effects of global warming becoming more evident, and the consequences of pollution better understood, the sustainability movement is gaining momentum. The scope for making huge profits at the cost of the environment is considerably narrower and shrinking.

Prospects for future returns are grim, even as risks and fragility in the OECD rise

Now that it is clear how the tailwinds that drove outsized financial returns in OECD assets are either falling off, or worse, turning into headwinds, it is clear that the future will look very different from the past in terms of the potential returns on offer from investing in OECD assets, especially stocks and bonds.

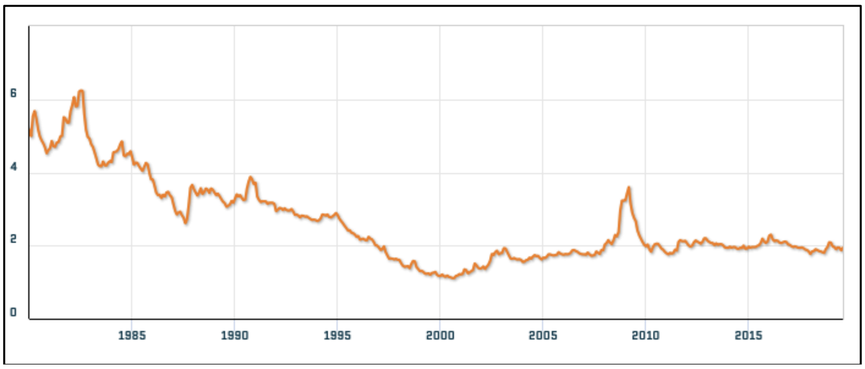
Unless interest rates rise from the near record levels, a prospect that looks unlikely anytime in the foreseeable future, bond portfolios will generate paltry, perhaps even negative returns. While falling interest rates may deliver some capital gains on existing bonds, these will peter out soon, given the five-year or so average maturity of most sovereign and corporate bonds.

The table below shows the long-term expected rate of a balanced portfolio of mostly OECD country stocks and bonds. These paltry (real) returns are fully 3%-4% lower than what institutional investors have achieved over the golden era that is now in its death throes. Winter has arrived in the world of finance.

LT expected return on OECD portfolios	
SocGen	1%
LBS	2%-2.5%
AQR	2.4%
Norway's SWF	3%

Source: Various[lxxiv]

Marc Lansonneur of DBS has warned that risk free rates are probably not going to generate sufficient returns over the long term, even as these have already been used in valuing risky assets such as stocks and real estate. This, he says, will lead to balanced portfolios generating low returns for the next 10-20 years[lxxv], posing challenges for investors. It is not just the yield on bonds that is problematic, but the yields on stocks too. As the following chart shows, particularly in the US, which is the largest market in the world, yields are also below 2% now[lxxvi].



Source: Quandl[lxxvii]

With corporate profits slowing down[lxxviii], this means that investors can expect only less than a 2% return on stocks or bonds, unless capital gains continue which, as we showed above, is highly unlikely. In fact, capital losses are a real risk.

The situation for fixed income investors in particular is now is so absurd that Norway's SWF now holds almost USD 70 billion of negative yielding securities on its balance sheet[lxxix]. Germany just sold a nearly a billion dollars of a 30-year zero coupon bond (that does not pay an interest) at a yield of -0.11%, which means that 30 years from now, investors will get less money back than they paid the German government this week, with no interest payments until then[lxxx]. Despite this, the first half of 2019 saw an inflow of $487 billion into bond funds[lxxxi].

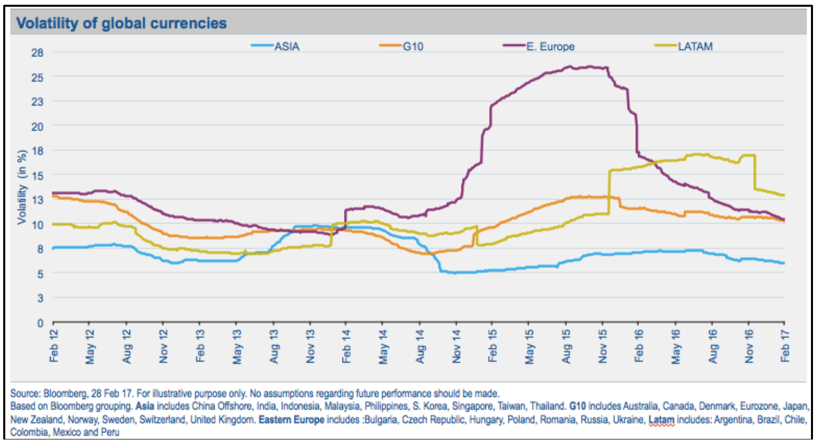
Denmark's Jyske Bank just issued a 10-year mortgage bond at an interest rate of minus 0.5 per cent, which means that homeowners are being paid to borrow, while Swiss banks such as UBS are planning to charge their rich clients to hold cash in their accounts[lxxxii].

To add more misery to the financial sector, OECD country risks are on the rise, even as returns fall. Unless institutional investors change tack soon, they risk being caught in a vicious trap where they are locked into investments that are likely to generate only very modest returns, even as risks are high and rising. Given the present degree of home bias in most portfolios, and the fact that OECD economies have high levels of economic and financial inter-linkages with each other, the scope for contagion is high should any of the risks materialise. Let us look at a few of these risks.

Historically, political risk was something out there in developing economies. But especially since the financial crisis, it is OECD economies that have become the biggest sources of political risk. From Trump and his trade wars, to Brexit and the Eurocrisis, all of these risks loom large in OECD countries, affecting the global economy. All of them originate in rich developed economies. In fact, OECD countries regularly occupy the top slots in the WEF and the Eurasia Group annual rankings of the biggest sources of risk facing the world. With populism here to stay, inequality on the rise, and a hollowing out of the political centre that continues, OECD economies are likely to retain their newly found place at the top of political risk rankings.

Currency wars are also back on everyone's mind, and a wave of unexpected interest rate cuts by a few developed and developing country central banks have increased the risk of further competitive devaluations. This has not helped an already volatile period in the fluctuation of major G-10 currencies against each other. The British Pound, Swedish Kroner, Swiss Franc, and Japanese Yen have all swung wildly against each other and it may get worse, before it gets better.

In fact, on some measures, as the chart below shows, developing country currencies, from Asia in particular, have exhibited lower currency risks than those of OECD economies.



Source: Aberdeen Asset Management[lxxxiii]

Even as the risk of a trade, currency, recessionary, political or a credit shock to OECD economies has increased, the fiscal, monetary and political capacity of the OECD to be able to respond to these has shrunk[lxxxiv], making the OECD particularly fragile.

With US Debt/GDP up from around 60% to 104%[lxxxv], EU Debt/GDP up from less than 60% to more than 80%[lxxxvi], and Japan's ratio having gone up by 50% of GDP since before Lehman's crash, all three have less fiscal space than they had when the last crisis began.

The ECB's interest rate at the crash was 4.25%[lxxxvii], the Fed's at 5.25%, the Bank of England's at 5.75%[lxxxviii] and the Bank of Japan's at 0.5%[lxxxix], with all but the BoJ having ample room to cut interest rates. And QE had not started yet. This time round, monetary policy space is much tighter, with trillions of dollars of outstanding QE assets still on the balance sheets of these banks and the present rates of - 0.5% for the ECB, -0.1% for the BoJ, 0.75% for the Bank of England and 2.25% for the Fed leaving far less scope for cuts. The Danish, Swedish and Swiss central banks have also gone into negative interest rate territory. For comparison, the US fed has cut interest rates by 5% or more to fight each other last three recessions.

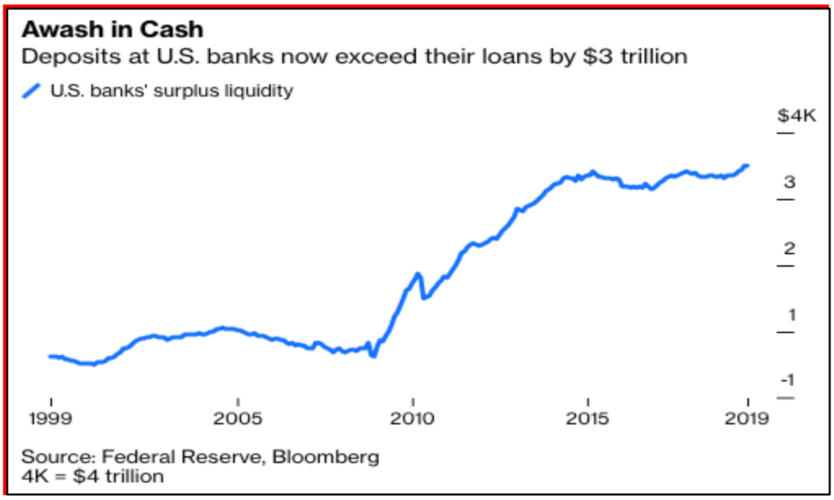
Most of all, with a level of partisan divisiveness within the UK and the US not seen in recent decades, and fragmented parliaments forming fragile coalitions in many European economies, the political space to enact a sensible response to a shock may be the most binding political constraint. The clear trend towards depopulation of the political centre can be seen in the chart below.

Source: Barclays[xc]

Investors appear not to know what to do with their money

The discussion in the last section on record low interest rates, being paid to borrow, record buybacks of shares all appeared to illustrate a point, which is that there is an excess amount of savings and liquidity in OECD economies now, and not enough opportunities or appetite to invest these productively. There is ample more evidence that this is exactly what is happening, and we will consider some here.

First bank deposits in both the US and the EU have risen sharply, even though these offer meagre and in some cases, as we discussed above, negative returns. US banks, as the chart below shows, now have deposits much in excess of loans, despite record low borrowing costs. In surveys, when asked if a full percentage point reduction in interest rates would make them borrow, only 12% said yes and over 60% said no or that they do not plan to borrow. Bank deposits in Germany have nearly doubled and now stand at a record Euro 2.3 trillion despite banks starting to charge depositors.

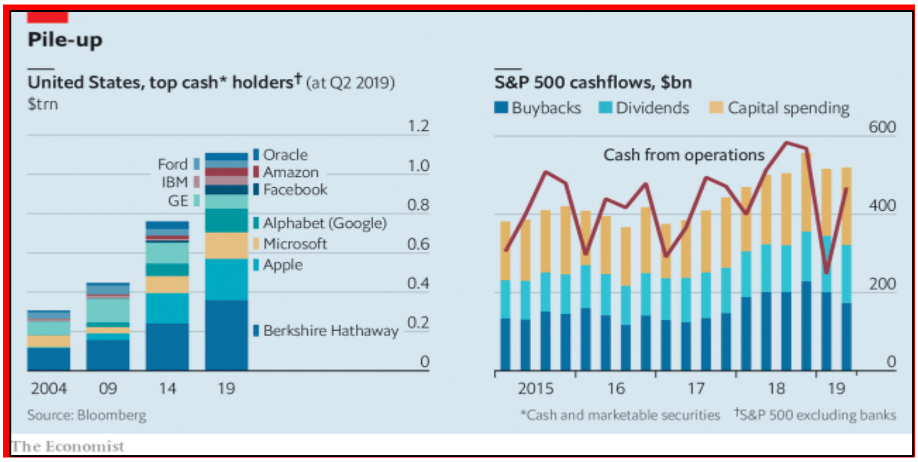


Source: Bloomberg[xci]

Source: Bloomberg[xcii]

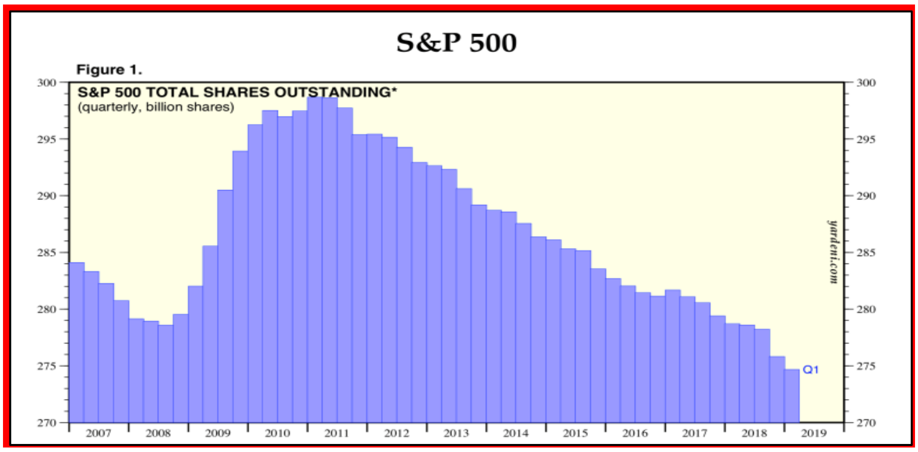
In the US, instead of investing, firms having been engaging in record buybacks soon to total more than $5 trillion since 2013, and still sit atop more than $1 trillion cash pile (see chart)[xciii]. These buybacks, analysts have argued, have been critical in inflating the value of the S&P 500. But many criticise firms for diverting money away from capital expenditures that could have added to the productive capacity in the economy through spending on long-term investment projects, such as building new factories or on research that would generate growth [xciv].

These buybacks have combined with another problem, the fall in the number of listed firms and new IPOs to the point of seriously shrinking the possible investible universe for those looking to invest in the stock market. The number of shares outstanding in the US stock market has shrunk to the lowest point in a decade and continues to fall (see chart).



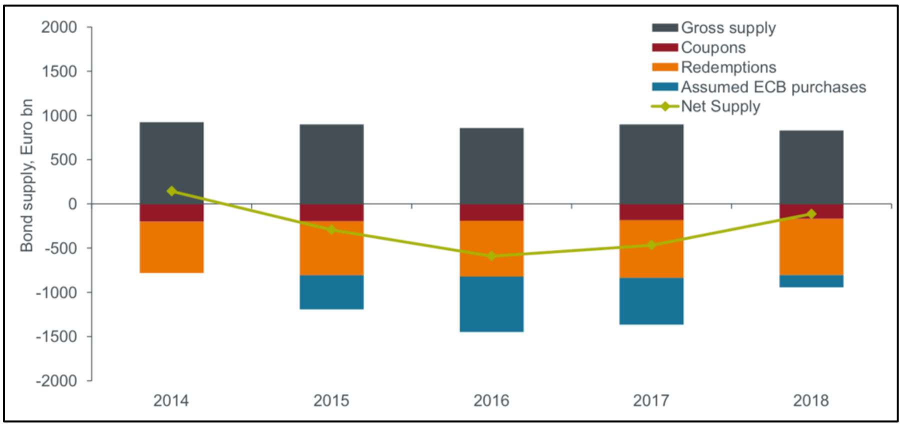
Source: The Economist[xcv]

The number of listed firms in the US has fallen to below 5,000 from their 1996 peak of more than 8,000, as more and more firms go private or merge. New firms either delay coming to the market because of funding from venture capital and private equity firms flush with cash, or choose to remain private. This gap between new shares being brought to the market and those being bought back or delisted is called net-issuance, and stands at the lowest level in a decade in the US and is also unprecedentedly negative in the EU and Japan. The stock of listed markets in the developed world is being rapidly shrunk[xcvi], both making investing less accessible and making the stock market less representative of the broader economy.



Source: MarketWatch[xcvii]

As we alluded to earlier, a similar shrinkage of free float listed assets is also happening in the bond market, with the free float of many European sovereign bonds, available for private investors to hold is now significantly less than half and only 15% for German government bonds. This shrinkage of bonds available for purchase by the private sector can be clearly seen in the chart below.



Source: ECB

The overall impression that comes through is that investors do not quite know what to do with the record savings and liquidity they have access to, particularly with the number and representativeness of listed securities they have access to shrinking. This forces them to either hold their funds as cash, or plough ever more money into a shrinking market for OECD listed securities that is less and less representative of the broader economy. Fewer and fewer of their investments go into adding new productive capacity that will generate long-term growth. Instead, more and more of it is going into adding leverage or indulging in buybacks that simply help inflate asset prices, while doing little for the real economy.

As we showed in the previous section, this state of affairs is both financially untenable and carries high and rising risk. To try and mitigate this dual challenge of falling yields and rising risks, investors need to find opportunities beyond the listed OECD stocks and bonds they deploy most of their capital in.

As the Financial Times reports, this search for yield has pushed investors “into the riskier corners of the bond market, such as fragile countries, heavily indebted companies and exotic, financially engineered instruments[xcviii].” Inflows from funds seeking yield have already depressed corporate bond yields in the Eurozone and pushed the bonds of non-Eurozone economies such Poland and Hungary below zero[xcix].

Another big trend has been an increase in allocations to illiquid assets such as private equity, real estate and infrastructure, which are now as high as 25% for some pension funds[c]. As important as the search for yield is, given the high degree of home bias, and the concentration of exposure to OECD economies, the search for diversification is equally important.

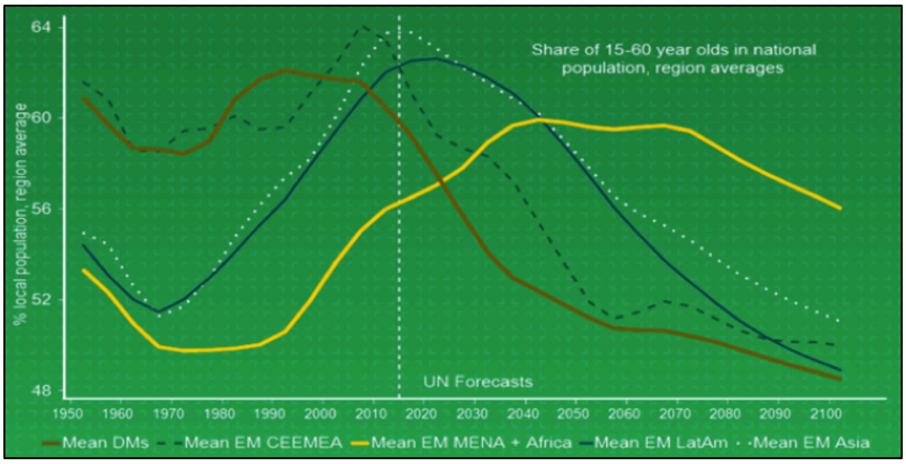
Even as institutional investors “search for yield” and “search for diversification”, another big and important driver has become important. It is a “search for reputation”. Ever since the universal adoption of the Paris Accord and the Sustainable Development goals in 2015, pressure has been mounting on asset owners and asset managers to contribute more towards these goals. Owners and managers with several trillions of dollars of AUM have signed on the Principles for Responsible Investing and in other ways signalled their commitment to the goals. In previous Re-Define publications available here[ci] and here[cii], we have shown how these drivers can be mutually reinforcing.

In the next section, we show how a pivot to developing economies can simultaneously help institutional investors in their search for yield, search for diversification and finally, their search for reputation.

PART II: The case for a pivot to developing economies

Favourable demographics and faster potential productivity growth

Growth in economies has been driven by two main factors – increasing the number of workers and increasing their productivity. On both measures, the fundamental prospects for developing economies look promising, but as we will see in this section, can't be taken for granted.

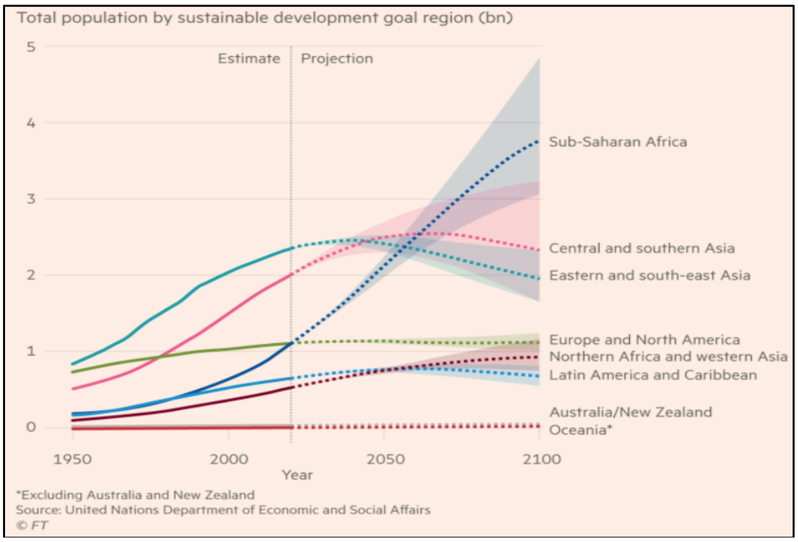


Source: LGIM[ciii]

As the chart above nearly sums up, demographic decline, the fall in the percentage of working age population, has already started in many OECD economies and is poised to accelerate dragging growth rates down. For example, fewer babies are now born in Italy than at any time since its creation in 1861[civ], and its working age population has already started falling in absolute terms. This is even more pronounced in Japan, where the workforce is on track to shrink from 65.3 million in 2017 to 52.5 million in 2040, a fall of 22%[cv].

On the other hand, as the chart shows, most developing economies are in the phase where favourable demographics will continue to provide tailwinds for faster growth as the absolute and relative number of workers in these economies is poised to rise for many years to come. Within developing economies there is a large amount of divergence, but south Asia and Africa (see table chart) have the most favourable demographics. Africa's share of the world's working age population is on track to rise from 10% in 2010 to more than 40% by 2100[cvi].

Even after the peak, the pace of decline in developing economies is expected to be slower than for OECD economies with old age dependency in the former expected to rise from 10% now to 22% by 2050 and in the latter from 28% now to 45% in 2050[cvii].



Source: Financial Times[cviii]

The other big driver of growth is productivity per worker. This in turn depends on the kinds of opportunities workers are given, their ability to do their job, and the tools and enabling infrastructure they have access to, in order to be more productive.

As important as the number of jobs, is the quality of jobs. The job of a street vendor is different from the job of a factory worker. The role of education and training is critical in developing human capital, so workers can be effective. Workers with relevant advanced education can do jobs that an illiterate causal labourer cannot. The tools and technology workers have access to play a central to their ability to be efficient. Workers with the computers and machinery to assist them will be more efficient than those without access to technology. And last but not the least is the supportive role that good public infrastructure plays. If a worker loses three hours in commuting time, if shipping goods is expensive because of poor ports and if access to telecom services is unreliable, workers will of course be less productive.

Given the poorer quality of jobs, less education, poor access to technology, a lack of capital for sufficient investment in machinery and tools and poorer infrastructure than in developed economies, most jobs in developing economies are not as productive as their counterparts in the rich world. But what matters for growth is not the current level of productivity, but improvements in productivity instead.

This means that developing countries can increase growth through the following:
1) creating jobs,
2) improving the quality of jobs,
3) increasing human capital,
4) investing capital to improve technology and
5) building enabling infrastructure.

These map neatly on to the Sustainable Development Goals (SDGs) that all countries in the world signed up to in 2015[cix] (see Box).

Box[cx]: The Sustainable Development Goals and Business Opportunities

The Sustainable Development Goals have received an unprecedented level of global buy-in. All 193 member countries of the United Nations have signed on to the 2030 Agenda for Sustainable Development that announced the SDGs. Subsequently, 13,000 companies signed the Global Compact, committing to adopting sustainable and socially responsible practices. Additionally, 373 asset owners with $19 trillion in assets under management (AUM), have signed the Principles for Responsible Investment (PRI), as well as asset managers with $82 trillion in total AUM.

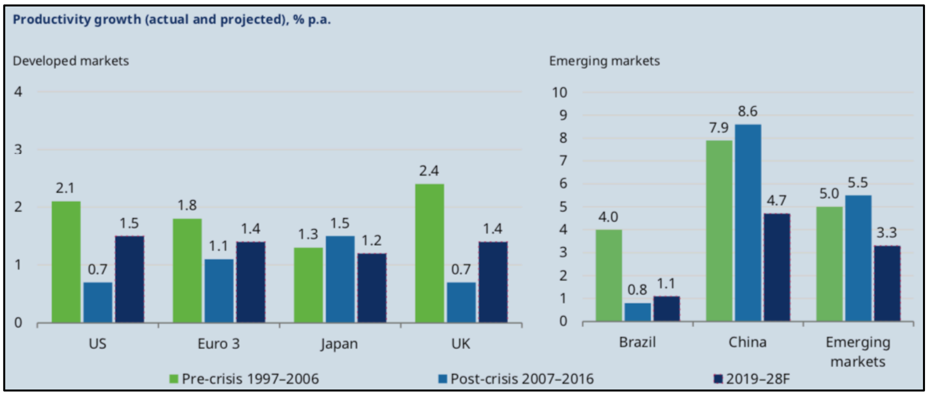
The IFC has estimated $71 billion is currently invested in private impact funds that have a dual mandate to create impact and generate returns, but says that the potential is huge. It estimates that demand for impact investing could be as much as $21 trillion in public markets, with another $5 trillion in private equity, debt and venture capital.[cxi]

One main reason behind this large scale of asset owner commitment is the tremendous business opportunity posed by the SDGs. If the SDGs can be achieved by the United Nations' target date of 2030, the global economy will gain an estimated minimum of $12 trillion, with the potential for 2-3 times more. The achievement of the SDGs by 2030 will also mean the creation of more than 380 million jobs, with almost 90 percent of them in developing countries.

High unemployment, poor jobs, illiteracy, low investment and poor infrastructure can be seen to be offering many more opportunities to improve. It is cheaper and easier, for example, to offer basic education than advanced degrees, improve the quality of jobs if the present job is simply subsistence agriculture, import existing technology than create it anew and buy cheap phones rather than the latest model of the iPhone. This means that raising productivity from this lower starting point should be easier than continuing to raise productivity in rich economies where education is better, infrastructure good and the latest tools and technology are already being used.

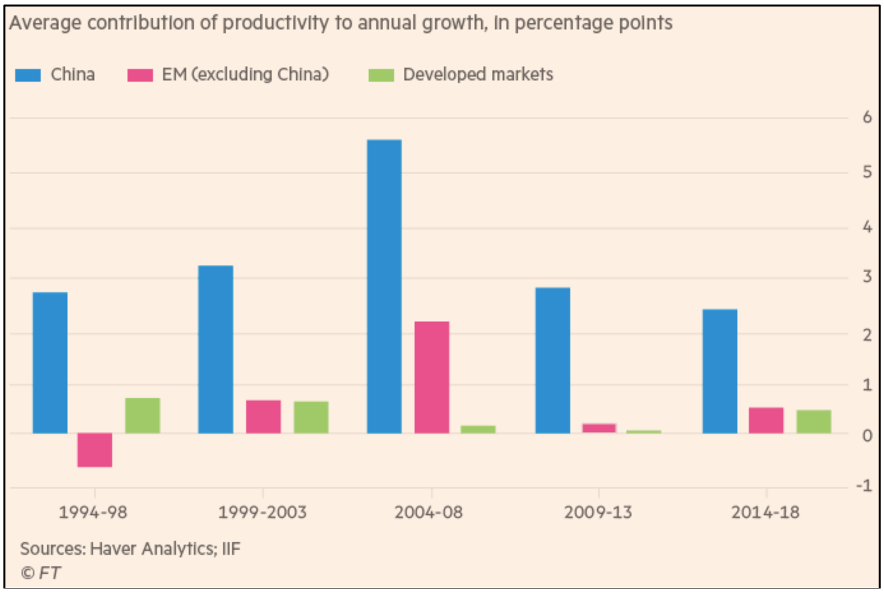
In short, this is the concept of catch-up growth, which says that productivity growth can be faster in developing economies, so GDP/capita can start converging with the rich world. This is also the developmental pathway that China, which reaped a huge growth dividend as it created better job opportunities for the hundreds of millions of Chinese engaged in unproductive subsistence agriculture, has followed.

This means that adding generating capacity in a place such as Malawi, where only 10% of the citizens have access to electricity, building roads in Sierra Leone, which has one of the worst infrastructures in the world, setting up a food processing business in Uganda to improve its low agriculture productivity, or creating a cold storage network in India where a large chunk of the food decays in the heat, can all deliver a massive boost to productivity and increase growth. It should thus be easier to boost productivity in developing economies than by an equivalent amount in rich economies, which means that potential growth in developing economies is much higher because there is so much room for improvement. This point is reinforced by the forecast for productivity growth as captured in the chart by Schroders below.



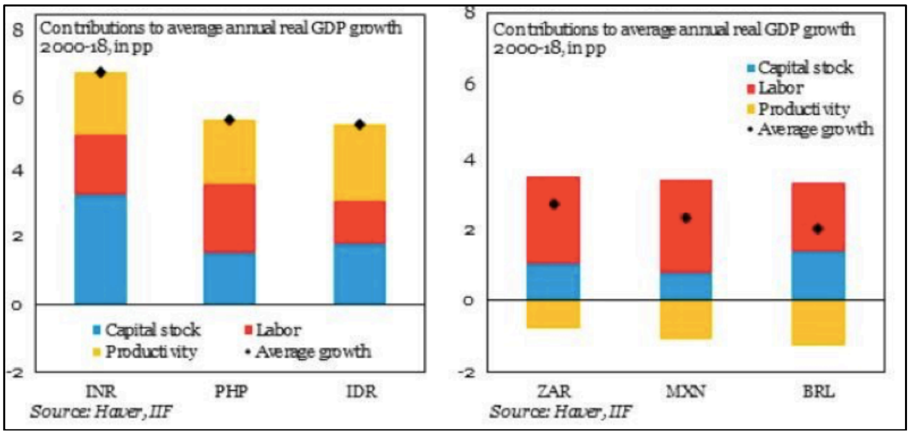
Source: Schroders[cxii]

As the chart below shows, China has shown how impressive productivity improvements can be, but it also shows how other emerging economies need to do better. Brian Coultron, who is the Chief Economist at Fitch Ratings, attributes China's success to investment, also saying that this is the biggest challenge for other emerging markets[cxiii]. As The Economist puts it, poor countries catch up "when productivity rates and the amount of capital per worker rise towards levels in the rich world. Increasing productivity is partly about moving workers from sectors where it is low to those where it is high (from subsistence farming to textile manufacturing, say), and partly about achieving steady growth in productivity within sectors[cxiv]."



Source: Financial Times[cxv]

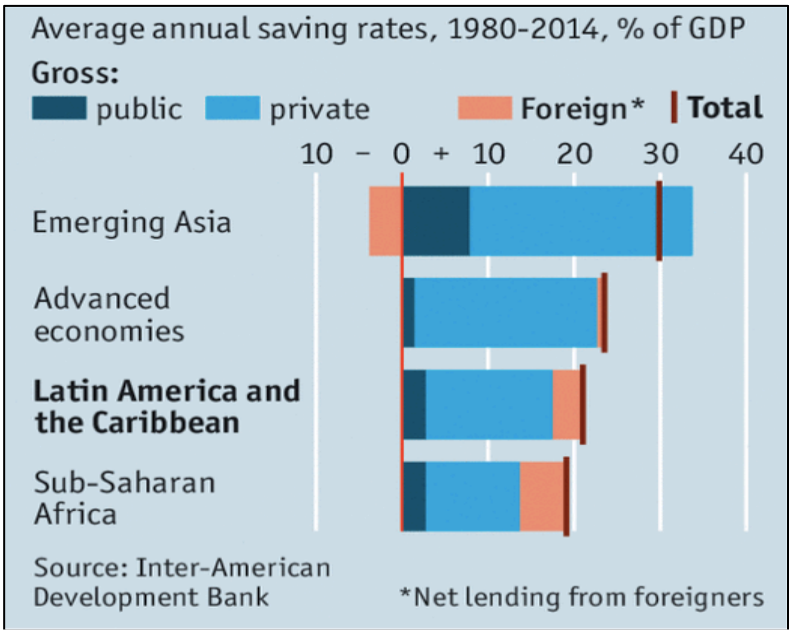
The chart below shows how much diversity there is within developing economies on boosting productivity, and the important role that capital and investment play in achieving this. This is intuitive as improving infrastructure, delivering education, improving access to electricity and phones all takes investment. A clear distinction that distinguishes fast growing developing economies from their slower growing counterparts is higher levels of investment that help build capital stock, that in turn helps boost productivity throughout the economy. Clearly, investment is central for developing countries to deliver on their promise of faster catch-up growth.



Source: IIF[cxvi]

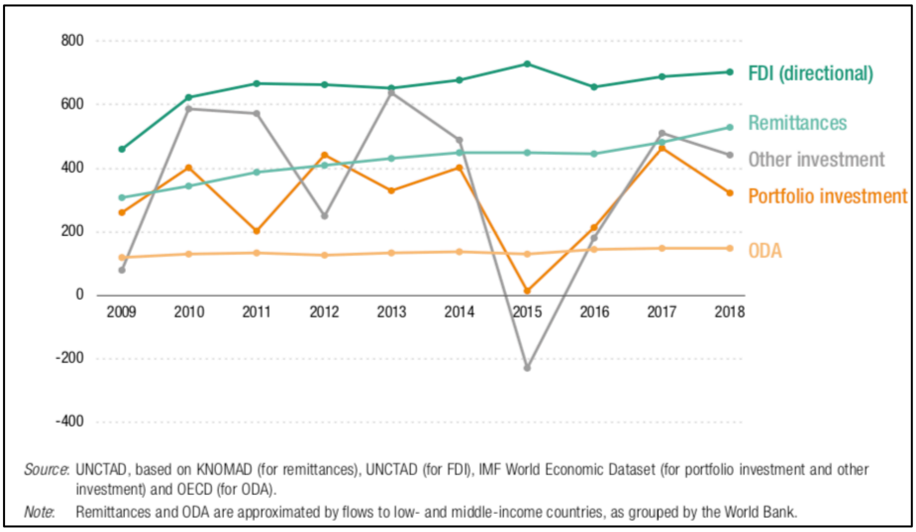
More domestic savings and foreign capital will enable more investment

The case for more investment is clear, but the money needs to come from both domestic savings and foreign capital. As the following chart shows, there is a big difference in savings rates across different parts of the developing world, with Sub-Saharan Africa being the bottom. China is the outlier at the other end, with its savings being as big as that of the US and the EU combined[cxvii]. But most developing economies face a shortage of savings.



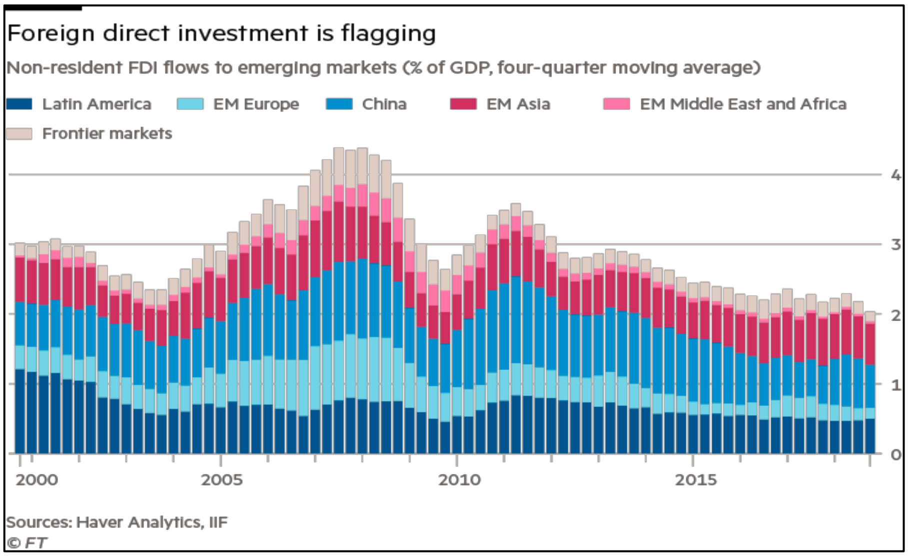
Source: The Economist[cxviii]

Even as developing economies try and improve savings by giving access to banking services and financial products, they need to supplement the low savings and finance the high investment needs from foreign sources. Foreign direct investments (FDI), migrant remittances, Official Development Assistance (ODA), portfolio flows and bank loans are all important sources of capital to help plug the savings-investment gap. As the following graph shows, FDI has been the most important source of external finance, but for low-income countries (LICs) and the Least Developed Countries (LDCs) ODA remains more important. Portfolio and bank loans are both volatile and the latter have fallen precipitously and are yet to recover the previous levels.



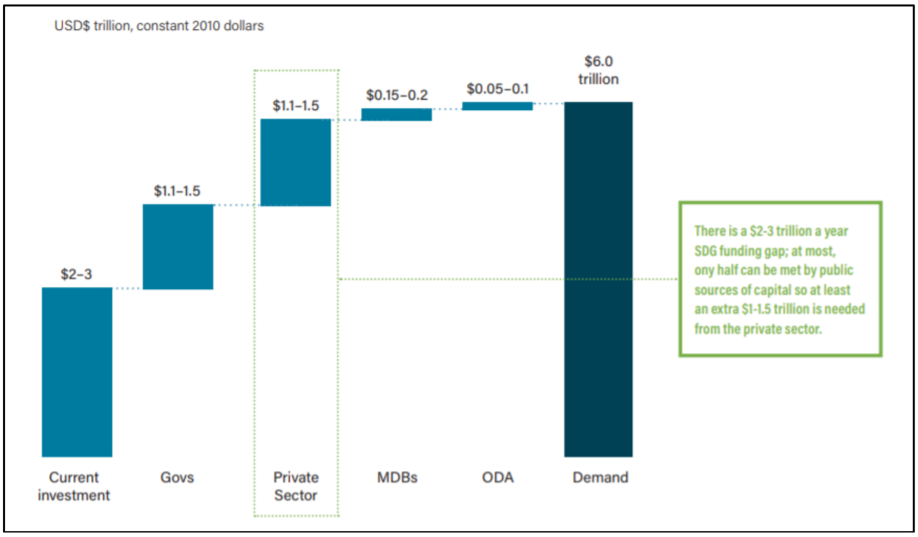
Source: UNCTAD[cxix]

Even though the absolute level of FDI to developing economies has been relatively stable at around $700 billion, as these economies continue to grow, it's share as a percentage of GDP has started to shrink, as captured by the chart below.



Source: Financial Times[cxx]

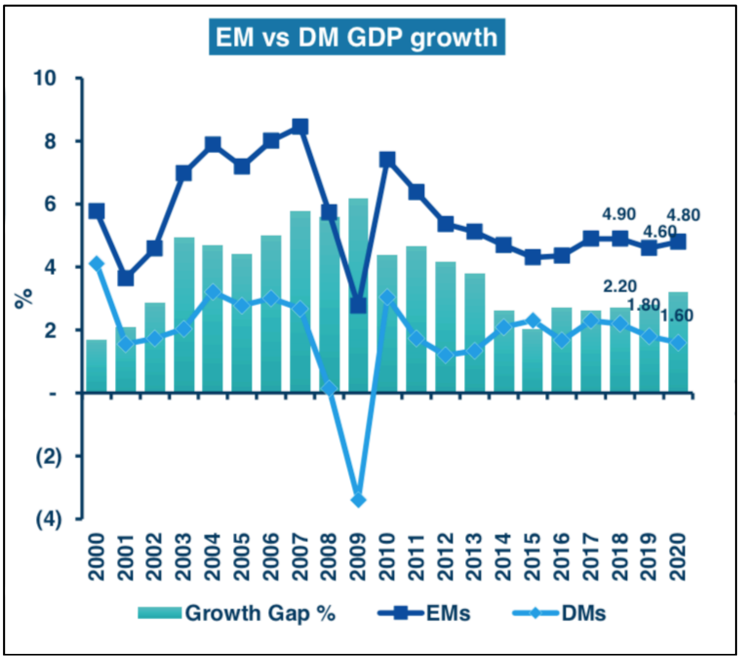
This means that developing economies need more investments to help boost productivity and growth. As discussed earlier, the measures needed to boost productivity map neatly on to some of the SDGs. The chart below shows that developing economies need an additional $2-$3 trillion every year to meet the SDGs, of which roughly half can come through improving tax revenues and public savings leaving $1-$1.5 trillion, that has to be funded by the private sector.



Source: Blended Finance Task Force[cxxi]

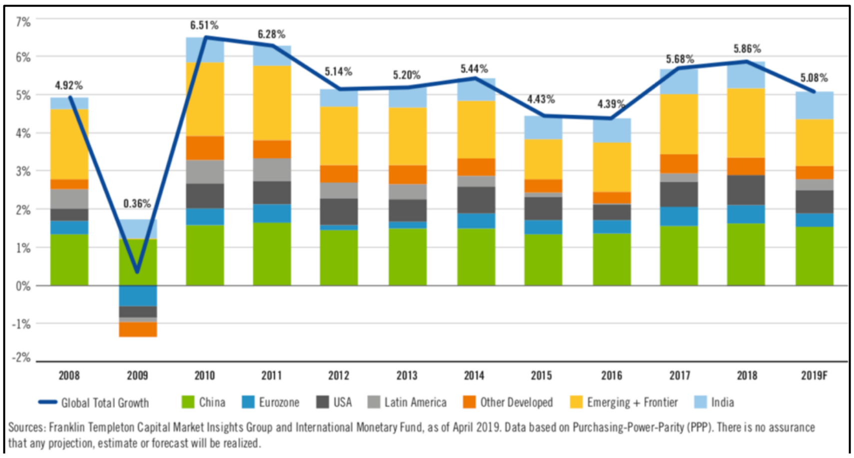
The size of the opportunity is huge and rising

Thus far, we have established that first, developing economies have a high potential for growth and second, that in order to meet that potential they need more investments. The same amount of money invested in countries with potential for catch-up growth will go further and deliver a bigger boost to growth and productivity than if it is invested in countries with lower growth potential. This phenomenon has already transformed the global economy, as the following charts show. But the potential to boost developing economy and hence global growth much more remains mostly unexploited.



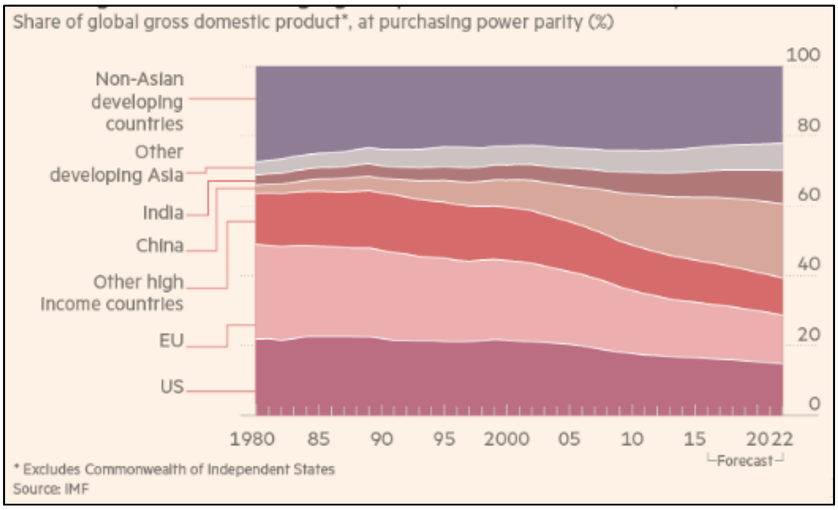
Source: Franklin Templeton Investments[cxxii]

As the chart shows, developing economies (EM or emerging economies in the chart) have been growing and continue to grow much faster than developed markets (DM in the chart).



Source: Franklin Templeton Investments[cxxiii]

In fact, as the chart above shows, developing economies have been driving growth for the past decade (and longer), having been responsible for two-thirds of all global growth.



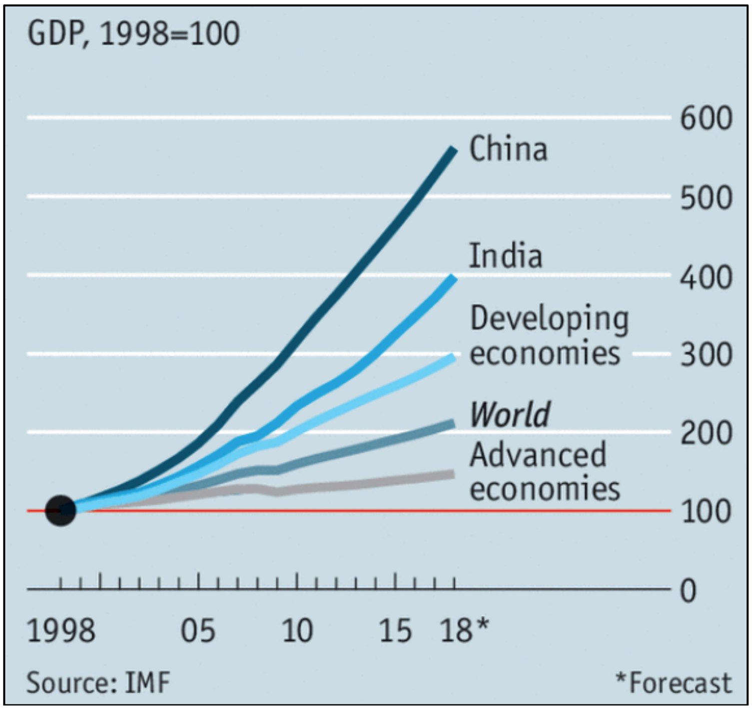
Source: Financial Times[cxxiv]

Also, as the chart above shows, developing countries already account for the majority of world GDP (at Purchasing Power Parity, or PPP), and their share of world GDP is only expected to grow. Even at market exchange rates, which do not adjust for prices in developing countries being cheaper, they are soon set to overtake developed economies in GDP.

Another chart helps illustrate how quickly the GDP of developing economies has grown relative to the developed world. Whereas the developed world economy today is 150% of its size two decades back, China's economy has expanded by 550% in these two decades. For India, the number is smaller but still remarkable 400%, and for the rest of the developing world it is 300%, twice that of the OECD.

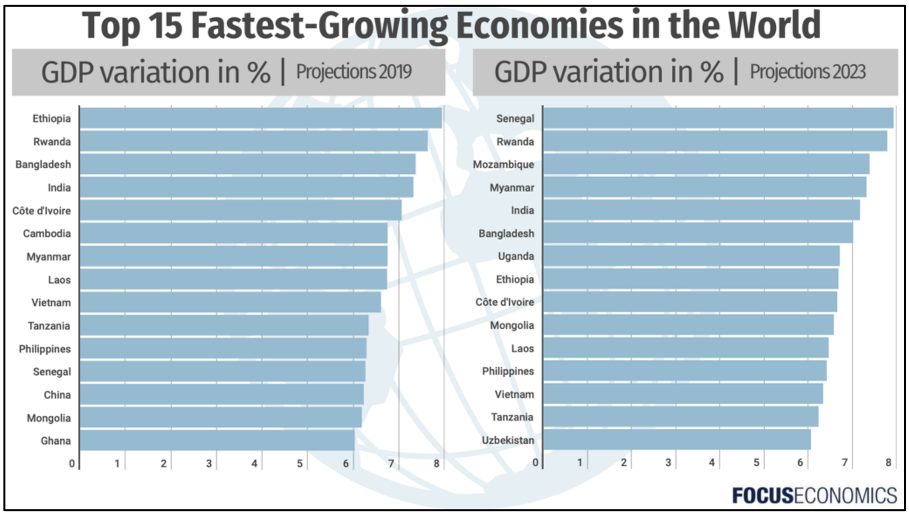
These faster growth rates are critical, because while it is possible for a small part of the financial sector, such as a hedge fund, to generate outsized financial returns that are multiple of GDP growth, the financial sector as a whole cannot do that over the long term. In that sense, higher growth rates are a good proxy for the ability to generate high returns on financial investments over the long term.

The faster GDP growth rates in the developing world offer great opportunities for large institutional investors to increase the financial returns they can generate from investments. As the next section will show, such investments can also help diversify risks and contribute to meeting the SDGs and helping fight climate change.



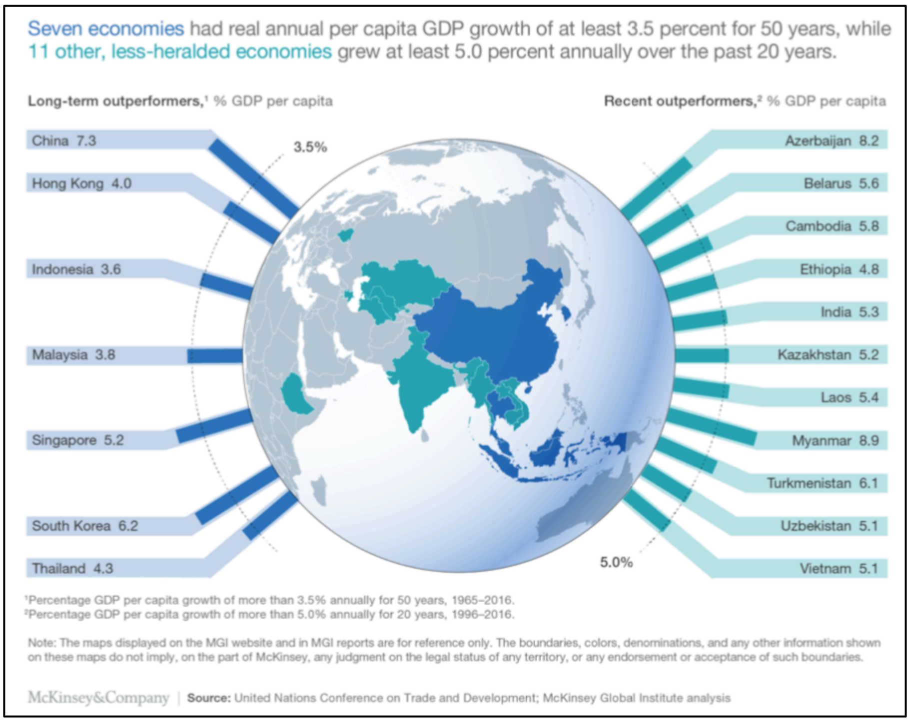
Source: The Economist[cxxv]

It is not just in the past that developing economies have grown much faster than developed ones, but this is expected to be the case for the foreseeable future. For example, the following chart that lists the 15 economies expected to have the fastest growth in the world both in 2019 and in 2023 only has developing economies on the list.



Source: Focus Economics[cxxvi]

The chart above that looks at historical performance to find seven economies that real annual per capita GDP growth of at least 3.5% for 50 years, and another 11 that have registered an even faster growth of per capita real GDP of at least 5% for 20 years. Again, all the economies on the list are developing countries.



Source: McKinsey&Company[cxxvii]

A search for yield, for diversification and for reputation is on

In this section we show how investing in developing economies can both generate higher returns and help institutional investors diversify risks. It can also help meet the SDGs and tackle climate change.

Thus far in this report, we have shown that

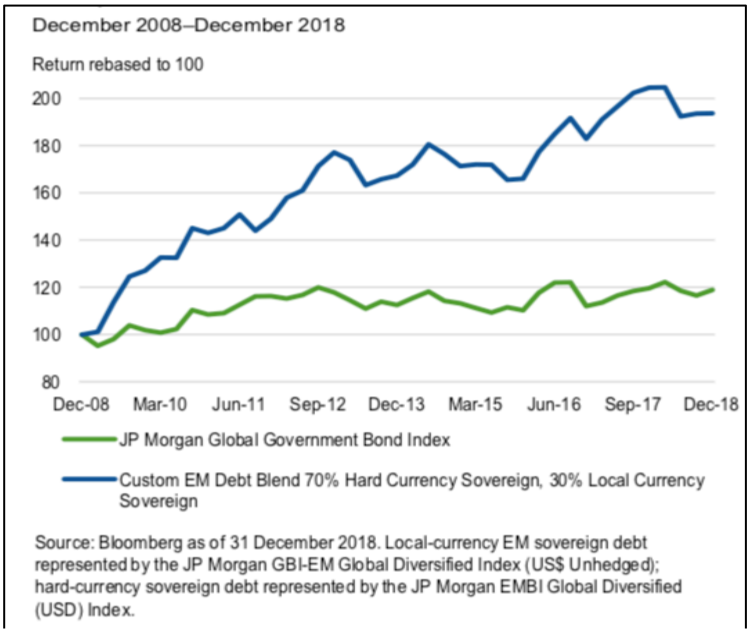
- there are a lot of savings concentrated in OECD economies in the hands of both banks and institutional investors;
- these are facing unprecedented challenges and appear to have run into serious problems finding good investment opportunities within the developed world;
- this means that the era of outsized financial returns has come to an end;
- and worse, that the present investment strategy of institutional investors with the majority of savings concentrated in listed OECD country assets means that they are subject to lare, highly correlated downside risks;
- the OECD economies have too many savings and not enough lucrative investment opportunities, which means the institutional investors have a need to both “search for yield” and “search for diversification”.

At the same time, we have also shown that

- developing countries have a tremendous potential for fast growth owing both to favourable demographics and the potential to boost productivity;

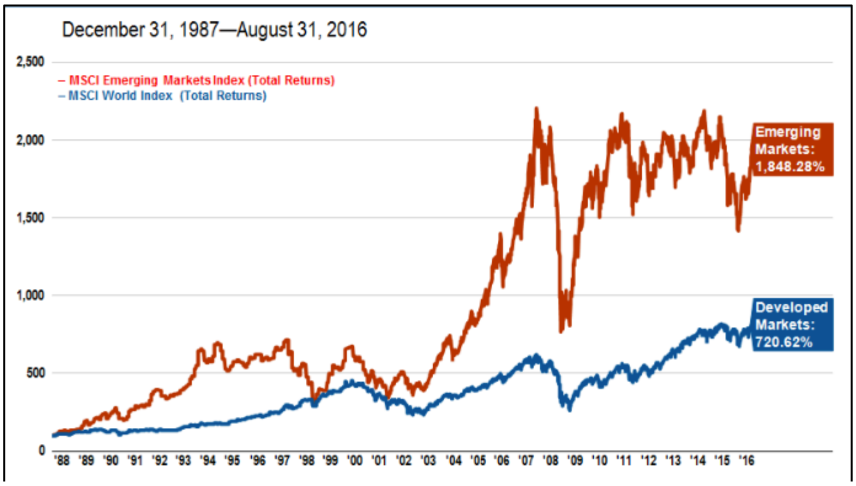
- but they have insufficient savings to invest enough to fully meet the huge potential they have to boost growth;
- meaning that they have they have the opposite problem that OECD economies do – they have many investment opportunities but not enough savings;
- they already drive 2/3 of all global economic growth and now contribute more to global GDP than rich economies do;
- but with more investments this can be boosted greatly as the true potential of catch-up growth is unleashed.

As the following charts shows, developing economy bonds and equities have outperformed those of their developed counterparts over the long term.



Source: JP Morgan[cxxviii]

Stock market indices also show similar outperformance over a long period, as captured by the chart below.



Source: MSCI[cxxix]

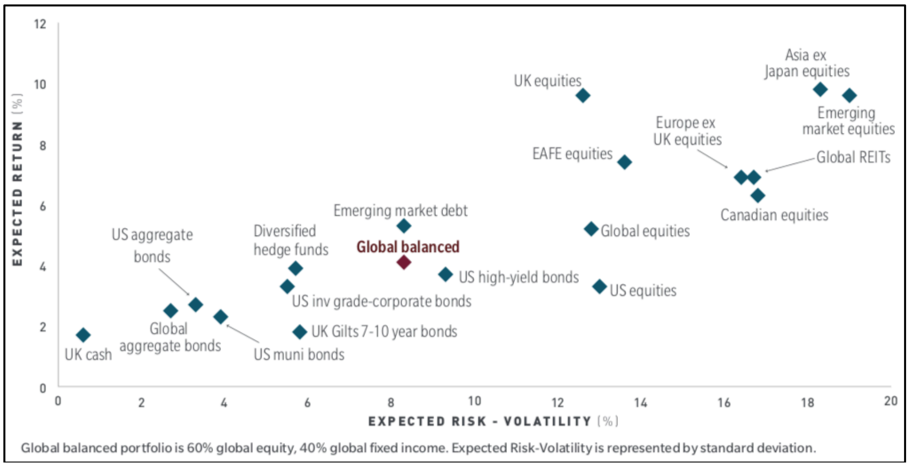
This expected future outperformance of both emerging market stocks and bonds is also captured in the next three charts that project expected returns on different asset classes. `These forecasts are from BNP Paribas, DWS, MFS, Amundi and Pictet Asset Management, but other financial forecasters also broadly agree with this prognosis.

	Equities - US	Equities - Europe	Equities - Japan	Equities - Pacific ex Japan	Equities - global emerging
Expected total return	4.75	3.5	4	5.75	7

Source: BNP Paribas Asset Management, as of 30 September 2018

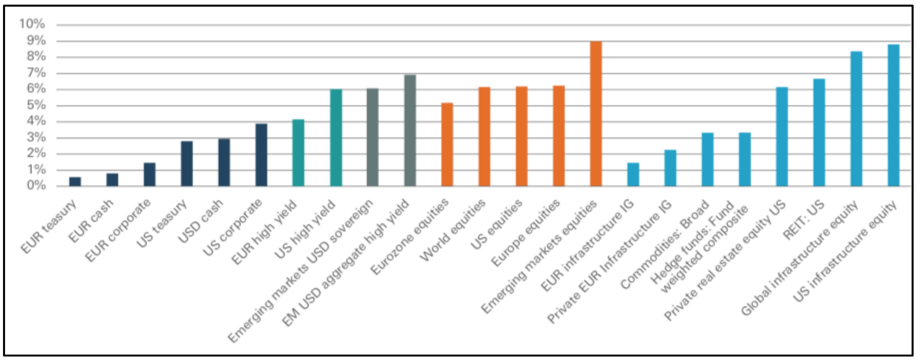
Source: BNP Paribas

BNP projects developing economy equities to generate an annual return of 7% over the next decade, significantly higher than the estimate for developed economies.



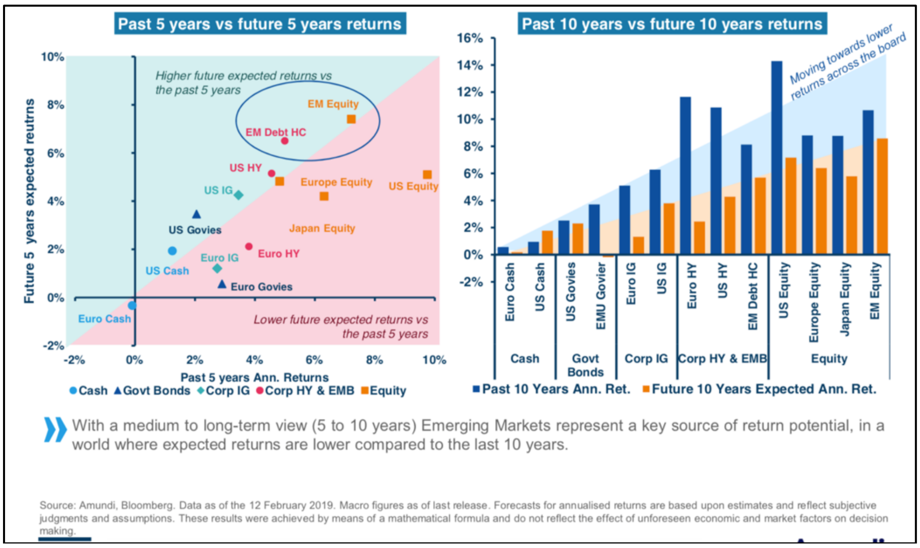
Source: MFS Long Term Market Expectation[cxxx]

MFS expect developing economy equities to generate around 10%, and bonds around 5.5%, the second highest returns in equities and bonds respectively.



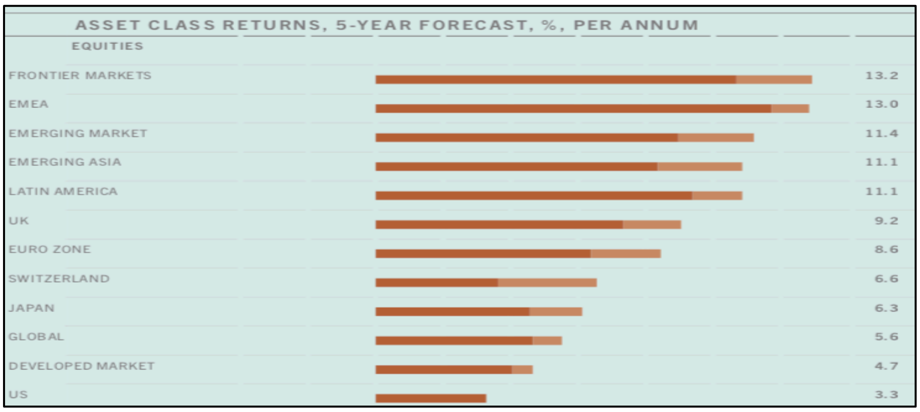
Source: DWS long term expected return on asset classes[cxxxi]

DWS, the asset management arm of Deutsche Bank, expects 9% from developing country equities and 7% from bonds over the next decade, the highest in each asset class. Interestingly, it also expects infrastructure equity to generate returns of 8% plus, a point we will come back to later. According to Amundi Asset Management, developing country equities and bond are the best in class for profitability over the next 5-10 years yielding just under 8% and just over 6%.

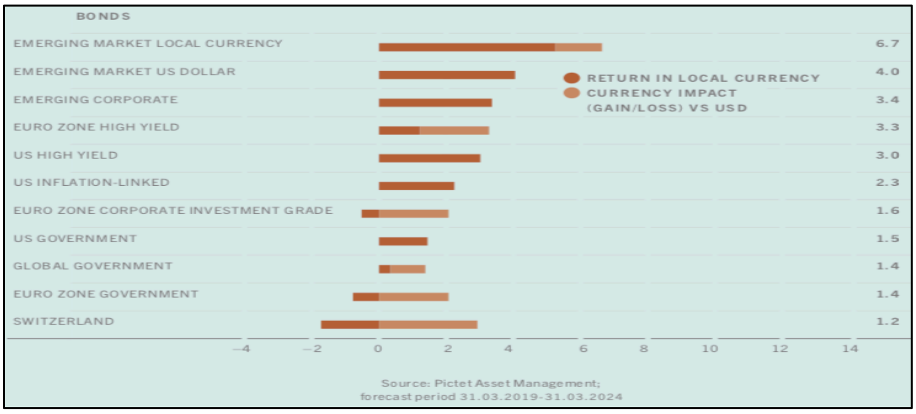


Source: Amundi Asset Management[cxxxii]

Pictet Asset Management have disaggregated developing economies into four categories with frontier economies expected to deliver 13.2% over the next five years, and emerging Asia coming in at 11.1%, with the others somewhere in between. The top three yielding categories in bonds are also all from developing countries ranging between 6.7% and 3.4%.

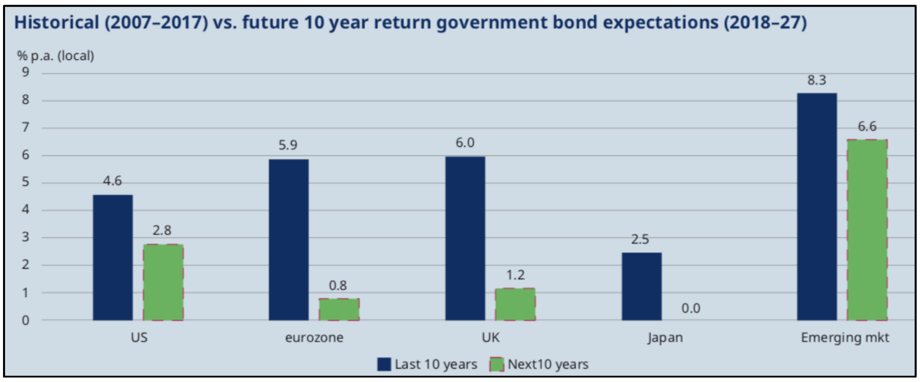


Source: Pictet Asset Management[cxxxiii]



Source: Pictet Asset Management[cxxxiv]

Schroders, as the following charts show, expect both developing economies equities and government bonds to significantly outperform their developed country counterparts with expected annualised returns of 9.5% and 6.6% over the next ten years, as the following charts show.



Source: Schroders[cxxxv]

Source: Schroders[cxxxvi]

It is not just that developing country equity and bond markets are expected to deliver superior returns to those in OECD economies, but also that they exhibit a lower correlation with developed market indices meaning that they can help diversify the portfolios of institutional investors. Within developed markets, frontier economies, which are on average smaller, poorer and less well developed than emerging economies, have an even weaker correlation with the rest of the index as the following table shows. This can be intuitively understood by the fact that while developed economies have very high levels of financial and economic interlinks with each other and are facing similar issues of rising populism, poor demographics and stagnating growth in productivity, developing economies have weaker links with developed economies and face different challenges.

Correlation Deflation: Small Caps and Frontier Markets Are Less Correlated to Developed Markets Stocks than the Broad EM Index

Description	MSCI World Index	S&P 500 Index	MSCI EM Index	MSCI EM Small Cap Index	MSCI Frontier EM Index	MSCI Frontier Markets Index
MSCI World Index	1.00	–	–	–	–	–
S&P 500 Index	0.96	1.00	–	–	–	–
MSCI EM Index	0.79	0.69	1.00	–	–	–
MSCI EM Small Cap Index	0.74	0.64	0.92	1.00	–	–
MSCI Frontier EM Index	0.63	0.56	0.73	0.72	1.00	–
MSCI Frontier Markets Index	0.44	0.40	0.45	0.48	0.83	1.00

As of 30 June 2019
Source: Lazard, MSCI, Standard & Poor's

Source: Lazard[cxxxvii]

As the next chart shows, because of this weaker correlation and higher expected returns, adding developing economies to portfolios of developed country assets helps both boost yields and reduce risk, despite the fact that developing country securities have higher levels of volatility compared to developed country stocks.

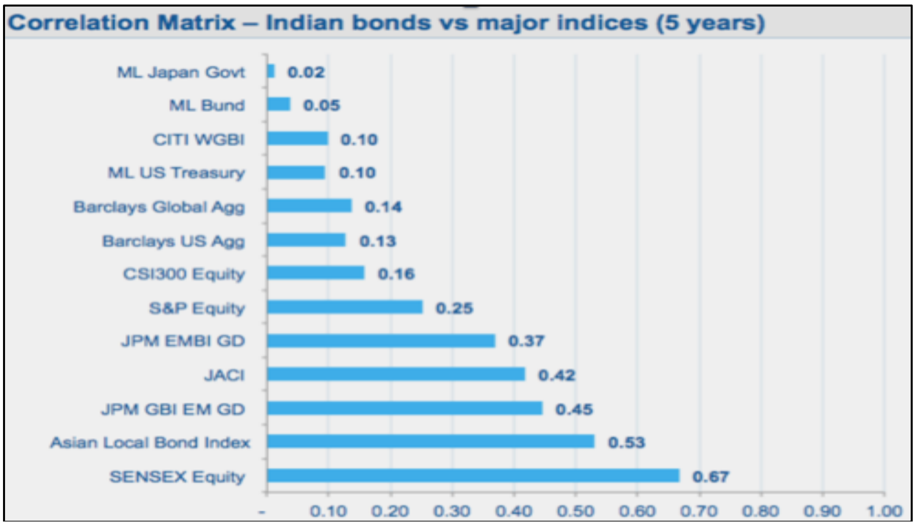
Ruurd Brouwer, CEO of TCX, has summed the situation well by saying that "if investors can choose between -0,5% return in euro or yen, or maybe 5% on a currency of a *frontier market,* then many may think that a little bit of diversification is justified[cxxxviii]."

Potentially Higher Income		Growth Potential						Potentially Lower Volatility		
	Yield (%)	Total Return (%)			Sharpe Ratio			Volatility (%)		
Strategy/Index	Current	EM Bull Cycle	EM Bull Cycle	16yr	EM Bull Cycle	EM Bear Cycle	16yr	EM Bull Cycle	EM Bear Cycle	16yr
EM Equity/Debt Blend	5.12	15.21	2.09	8.39	1.05	0.20	0.66	14.45	10.50	12.74
S&P 500	2.15	6.67	11.32	8.97	0.44	1.00	0.67	15.17	11.37	13.39
Difference (EM Blend vs S&P 500)	**2.97**	**8.54**	-9.23	-0.58	**0.74**	-0.80	-0.01	**-0.72**	**-0.87**	**-0.65**
Ratios (EM Blend vs S&P 500)	**238%**	**228%**	18%	94%	**268%**	20%	99%	**95%**	**92%**	**95%**

Source: GSAM, Bloomberg, data as of 31-Dec-2018. EM Equity/Debt Blend = 40% MSCI EM Index, 20% JPM EMBI GD, 20% JPM GBI-EM GD and 20% CEMBI BD. EM bull cycle: 2003-2010; EM bear cycle: 2011-2018. Volatility as measured by standard deviation. Sharpe Ratio is calculated by taking the excess return of the fund versus the risk-free rate and dividing that result by the standard deviation of the fund over that same period. A drawdown is the maximum peak-to-trough decline between high-water marks (the highest peak in value that an investment reaches). Period of EM bull cycle: 2003 – 2010. Period of EM bear cycle: 2011 – 2018. **Past performance does not guarantee future results, which may vary.**

Source: Goldman Sachs Asset Management[cxxxix]

As the next chart on Indian bonds shows, the low correlation and hence potential to benefit from diversification also applies to investments in individual countries, not just indexes.



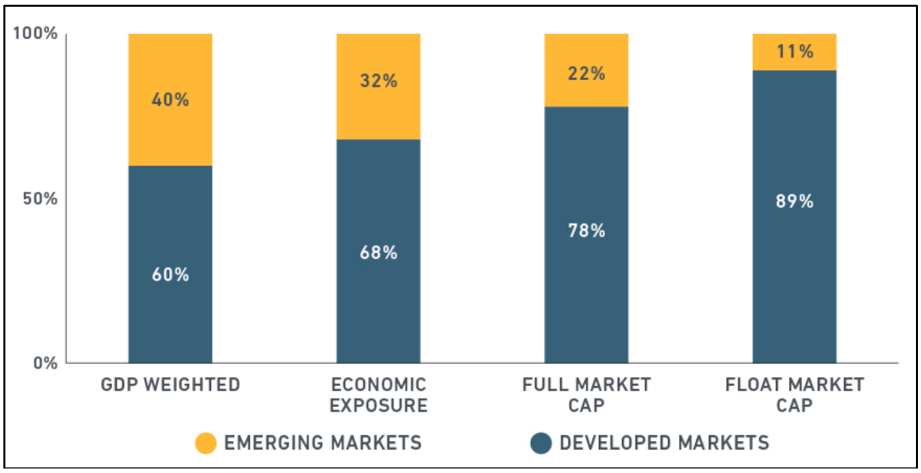
Source: Aberdeen Asset Management

Allocating investments to developing economies can thus both help improve yields and reduce risks through diversification. At the same time, because these investments would go towards generating growth, creating jobs and in some cases, financing renewable infrastructure, they also help the search for reputation through helping plug the SDG funding gap, fund climate mitigation and creating impact.

Given how logical and compelling the case for investing in developing economies is, it is disappointing that investors do not allocate enough to these economies. They need to significantly expand their investments in a whole range of developing economies and across a whole range of asset classes.

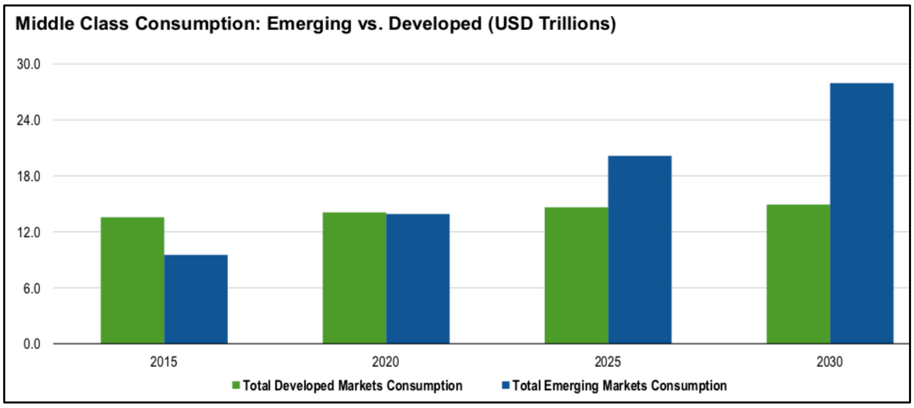
As the following chart shows, there are different ways of calculating what a fair share of developing country weight in a portfolio would be. But even using the criteria of free float market cap of 11%, institutional investors in the OECD which allocate only roughly around 5% of their equity portfolios to developing country equities, have allocated too little. In any case, free float does not represent the underlying economic reality as of today that is better captured by market exchange rate GDP, which is 40%.

Goldman Sachs believes that many investors have a structural under-exposure to developing economies. It believes that adding such exposure gives both potential diversification and a growth premium relative to the developed world. It has estimated that the average investor only has a 6.3% allocation to developing economies and recommends almost tripling that exposure to 15%[cxl]. Furthermore, it believes that the developing world will drive global growth, being responsible for ¾ of all global growth in the next decade, and that the growth differential with the developed world will increase again and also deliver superior financial returns[cxli].



Source: MSCI[cxlii]

The longer the investment horizon of an institutional investor, the more they should allocate to developing economy assets, since the relative weight of these countries in the global economy is set to keep rising for the foreseeable future. Such investments would, as per the faster expected growth rates and forecasts, also generate higher returns over the medium to long term. As the following chart shows, middle class consumption, the most important driver of growth and profitability in the long-term in the developing world, will exceed that of what we see in the developed world next year and continue to rise further.



Source: Schoders[cxliii]

As a rule of thumb, more long-term oriented and more sophisticated investors do indeed deploy a larger share of their investments in developing economies. Given the poor prospects for returns in traditional listed asset classes in OECD economies, such investors also typically have larger allocations to more illiquid and unlisted asset classes. Being long-term oriented means they have limited need for liquidity, so can easily look beyond the liquid asset classes. While ultra-high net worth individuals and insurers allocate 1%-5% to non-traditional assets, the share rises to 10% for pension funds, 15% for sovereign wealth funds and 25% for endowments[cxliv].

In the chart below is the asset allocation of GIC, the Singaporean sovereign wealth fund, widely regarded to be one of the world's most sophisticated investors. Two things stand out from this. First, that at 18% of the portfolio, GIC's allocation to developing economies equities is almost 4 times higher than that of the average OECD institutional investor. Second, that at 12%, its allocation to private equity in particular, and adding 7% of real estate, unlisted assets in general is again far higher than most other institutional investors. GIC stands out even in comparison to other long-term investors in its peer group, such as the Norwegian Oil Fund, which allocates only 7% of its portfolio to developing country equities, 3% to real estate and 0% to private equity.

Asset Mix	31 March 2019 (%)
Developed Market Equities	19
Emerging Market Equities	18
Nominal Bonds and Cash	39
Inflation-Linked Bonds	5
Real Estate	7
Private Equity	12
Total	100

Source: GIC[cxlv]

The limitations of listed equities and bonds, and the need to look beyond

This far in this report, we have tried not to make a distinction between developing countries, and for a good reason. While in reality there is a huge distinction between China, soon to be the world's largest economy, and a country like Malawi, where only 10% of the population have access to electricity, much of the analysis in this report applies across the developing world.

In financial markets, a distinction is made between emerging markets, often fast-growing larger developing economies and frontier markets, or often smaller and at an earlier stage of development. But many developing economies do not fit under either of these labels by virtue of either being even smaller, at an earlier stage of development or simply by not offering the kinds of financial instruments most investors seek. That having been said, what is clear is that the investible universe of developing economies is expanding in both size and share.

In the decade since 2008, for example, the market capitalisation of all stocks in the world has grown from $32 trillion to 85 trillion, with the developing country share rising from 20% to 27%. Over the same period, bond markets have grown from 74 trillion in 2008 to a 100 trillion now, and the share of developing economies has almost tripled from 5% in 2008 to 14% now[cxlvi].

Different actors in the financial markets use different definitions, different indices and have different universes of investments, so the various charts showing historical and future expected outperformance may not all be strictly comparable. The more important point, however, is that with the exception of China and a small number of other developing economies that are already ageing, the analysis on demographic dividend and potential for catch-up productivity growth apply across the board.

In fact, for some of the smaller, less well-integrated economies such as those in various frontier economy indices, which are mostly concentrated in Africa and South Asia, the diversification argument is even stronger, as shown by the lower correlation with developed market indices and more tenuous connections with the global economy and financial system.

As the consultancy McKinsey has pointed out, many of these smaller, poorer economies are simply at a point that larger more dynamic economies such as China and India were a few decades back. What matters for potential financial market return, as we have discussed in the report, is future growth potential, rather than the current state of affairs. The upside potential for countries with large populations moving up the economic ladder and the possibility of political and economic reforms that can unlock growth is huge.

McKinsey also expects the fastest growth of consumers in the world to come from Africa, which is also richly endowed with natural resources. Furthermore, many of these economies are experiencing rising macroeconomic and political stability and in fact six of the ten fastest growing economies today are in Africa[cxlvii].

Box[cxlviii]: Developing economies do not have many listed stocks and bonds

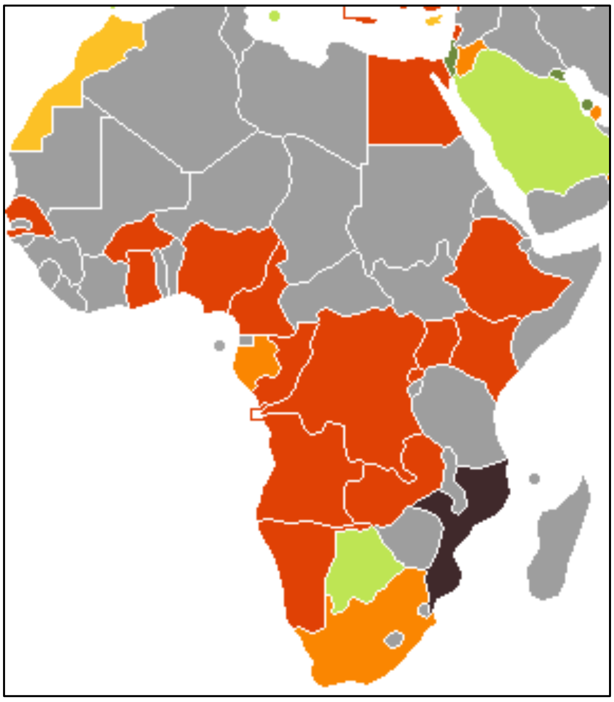
Typically, the listed markets for bonds and stocks in developing economies are much smaller both on an absolute basis and relative to the GDP when compared to their counterparts in developed markets. The problem is most acute in poor economies that are classified as Lower Middle Income Countries (LMICs) or Low Income Countries (LICs). Within these groups, the geographic regions of South Asia and Sub-Saharan Africa are the ones with the largest number of poor people and the biggest SDG funding gaps, so we look into these countries in some detail.

Once one excludes India and South Africa, the regional giants that have relatively sophisticated financial markets, the total market capitalisation of the stock markets for all of the remaining 61 countries combined is less than USD 400 billion. This is the same size as the Mexican stock exchange and only a third bigger than the Oslo stock exchange[cxlix]. Moreover, most of the listed stocks on these exchanges hardly trade with less than 50 stocks in just seven countries that generate more than USD 1 million in turnover on a daily basis. This is a small fraction of the total number of liquid stocks on the London Stock Exchange alone, which lists over 2,000 shares, a large proportion of which have more than USD 1 million of daily trading. Nor are these stock markets growing fast through new IPOs. In 2017, for example, all of Africa saw just 28 IPOs or less than a third of what the UK alone had.

The picture is not much better for bonds, with these countries accounting for only about 3% of the almost 300,000 corporate bond issues in the world, with an even smaller proportion of volume. As is to be expected, only a very small proportion of these, less than 2% show any liquidity even over a 3-6 month horizon.

The box above highlights the limitations of focusing only on the listed and liquid segment of the financial market, while trying to benefit from growth opportunities in developing economies. A significant number, the majority of the countries in Africa, for example, simply do not yet have the kinds of listed stocks or bonds that institutional investors could buy.

Most countries in Africa do not even have a credit rating from ratings agencies (shaded grey) and of those that do, the majority are rated B, below investment grade (red), with only two rated BB (dark orange), one B (light orange) and one A (green). Of the 8 South Asian countries considered in the box besides India, only five are rated. This makes their bonds ineligible for purchase by a number of institutional investors who can only buy investment grade bonds or higher.



Source: Wikipedia[cl]

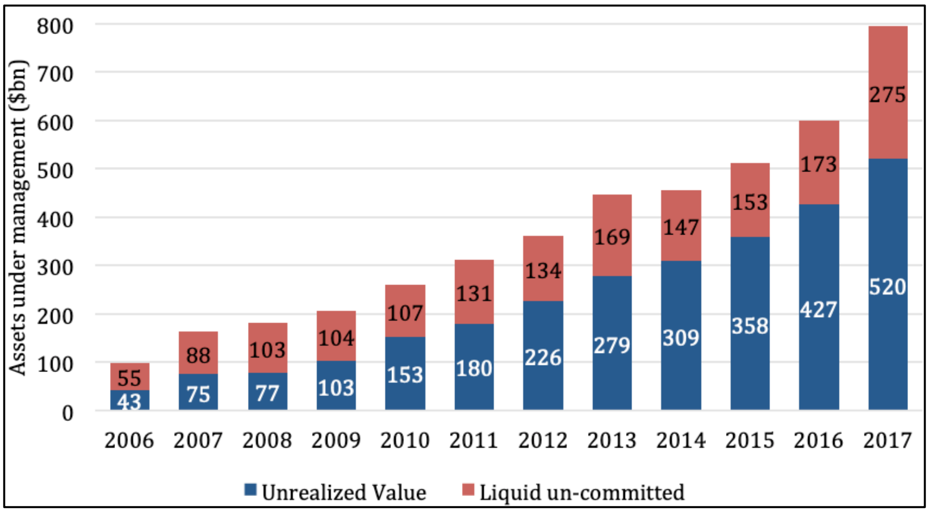
Even the most sophisticated developing countries have financial systems that are more shallow, less liquid and smaller than those in developed markets. This means fewer firms are listed on stock exchanges, they have a greater dependence on bank loans over bonds, that markets may be more fragmented and firms smaller, that there are likely to be more family owned firms and that many may still operate in the informal sector.

This means that the listed security universe of stocks and bonds is less likely to be representative of the productive capacity and growth opportunities in that economy, compared to the situation in developed markets. For example, while buying the stock index in the United States may give an investor exposure to a large swathe of the economy, buying the stock index in India is likely to offer less exposure to the whole economy.

Therefore, in order to truly capitalise on the promising opportunities offered both by more sophisticated developing economies such as India and the less sophisticated mostly African economies discussed in the box above, investors have to look beyond the listed space. This is where private equity and infrastructure provide the most promising opportunities for investors to get exposure to the fastest growing economies in the world, and for the economies to be able to attract capital from foreign investors.

The promise of private equity and infrastructure

As Kjell Roland, the former head of Norfund, has written, "liquid markets in the developed world are largely delinked from illiquid markets in infrastructure and manufacturing in the developing world[cli]." In his experience, what has effectively worked in channelling capital from OECD economies to productive capacity in the developing world, is private equity (PE) through investment funds. The large and vibrant private equity industry, which has developed has proven itself to be able to tap both into development capital from public sources as well as from private investors.



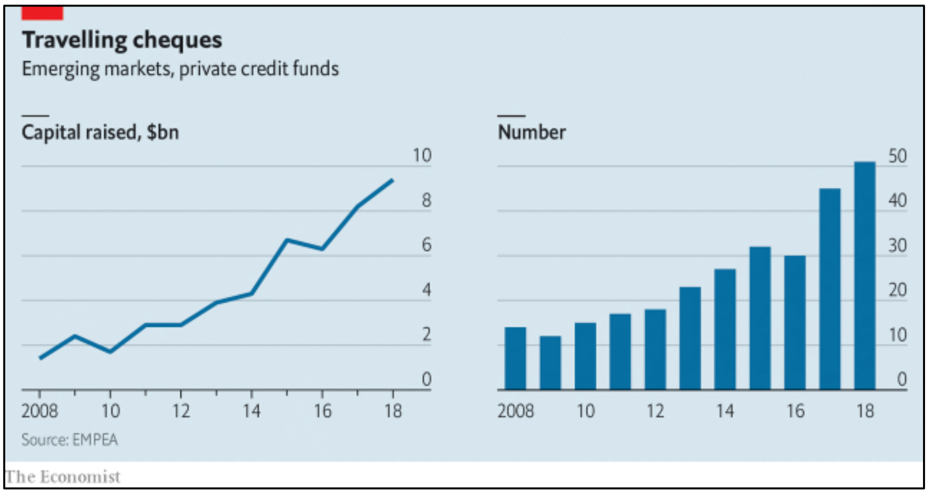
Source: Preqin[clii]

He is correct to point out that this sophisticated and growing industry, worth almost a trillion dollars now, "was largely created by, and later funded by, Development Finance Institutions (DFIs)", which are the subject of the next chapter. Over time, "the industry matured and managed to attract a whole range of different private investors". However, even today, "DFIs are desperately needed in the poorest countries, in early stage, in high risk sectors, and for smaller investments[cliii]."

Private equity in developed markets is associated with leveraged buy-outs, though that is changing as they start to venture into areas as diverse as providing credit to venture funding[cliv]. But at least historically, the mainstay of the private equity business in the developed world consisted of using borrowed money to buy, often listed, firms, take them private and sell them off in a few years as a whole or in parts at a profit.

But as we discussed earlier in this report, developing countries have been characterised by a paucity of listed firms, so the traditional private equity model was never going to work in developing countries. Instead, in developing economies, PE firms often provide growth capital to firms, both in the form of equity and debt and are crucial to the process of small and medium sized family owned firms professionalising and scaling up. Some of them may then go on and list at the stock market, but that is neither the precondition nor definition of success; increasing productivity is.

In an article on the subject, The Economist magazine talks about how private equity firms work differently in developing economies. "In emerging markets, a new breed of lenders has begun acting as credit supermarkets, offering anything from working capital to multi-year debt. They look and quack like banks but are in fact buy-out firms investing mostly rich-world money. As demand for financing surges in fast-growing countries, they will proliferate[clv]." The number of emerging-market private-debt funds closing every year has reached 50, three times the number of a decade ago, and they are now raising ten times as much. They are trying to fill the gaps left by the withdrawal of Western banks, as local banks are often too small[clvi]. As the article says, the twenty largest banks in Sub-Saharan Africa have less capital than one of Europe's big lenders.



Source: The Economist[clvii]

As we wrote in "Winter is Coming" in 2016, while banks provide the lion's share of funding for unlisted firms and SMEs, private equity firms are an increasingly important provider of equity, particularly in fast growing emerging markets such as India. The most promising opportunities for private equity, in fact, lie exactly in capital constrained fast growing economies where the banking system and financial markets are not fully developed. It also means that, unlike in developed economies where private equity firms have often taken listed firms off-market, in developing economies private equity firms are actually expanding the investible space for institutional investors. This has the potential to both diversify risks and increase returns, while contributing to productive capacity[clviii].

The other promising area in the unlisted space in developing economies is infrastructure[clix], an asset class particularly suited to long-term institutional investors such as sovereign wealth funds and pension funds and the biggest infrastructure funding gaps lie in the developing world.

The decades-long profiles for such investments, while problematic for short-term investors, are well suited for funds with inter-generational objectives. While 'liquidity is generally a cause for concern among short-term infrastructure investors, it is not a concern for a fund that can hold an investment for the life of the asset[clx].

In making the case for why it should be allowed to invest in infrastructure, NBIM, the asset manager of the Norwegian Oil Fund, says "investor can also expect to receive a liquidity premium over time. It goes on to say that "the combination of considerable future investment needs, pressure on public budgets and attractive portfolio characteristics make it reasonable to assume that private venture capital will play a growing role in the funding of infrastructure investments in the future[clxi]."

No wonder then that the infrastructure asset class is very popular amongst institutional investors. According to Preqin, the data provider, fully 86 % of institutional funds now invest in infrastructure, and are likely or very likely to increase their participation in the sector[clxii].

It was this suitability of SWFs to make infrastructure investments that prompted the Indian Prime Minister Narendra Modi to invite Norway's prime minister, Erna Solberg, at the 2017 G20 summit in Hamburg to ask Norway's Oil Fund to invest in the National Investment and Infrastructure Fund of India (NIIF)[clxiii]. Others took the opportunity that Norway turned down and just recently AustralianSuper, Australia's largest pension fund, and leading Canadian fund the Ontario Teachers' Pension Plan, announced plans to invest $250 million apiece in NIIF Fund, with the potential of increasing that to up to $1 billion each in the future[clxiv]. Commenting on the investment Ontario Teachers said that this allowed them to "be well-positioned in a large market with significant expected growth".

One of the biggest and most important areas of growth in the infrastructure market is the funding of new renewable capacity, particularly in developing economies. It achieves three goals at once: first, delivering access to electricity. Second, helping fight climate change by shifting the energy mix away from fossil fuels generation[clxv] and third, making profits for investors.

Allianz, the German insurance giant agrees that this offers one of the best investment opportunities for long-term investors stating, "investments in Renewable Energy Infrastructure offer strong long-term growth potential with low correlation to other asset classes, while also providing stable cash flows and meaningful dividend yields[clxvi]".

Other long-term investors are also getting into the game. GIC, the Singaporean SWF, has partnered with the Abu Dhabi Investment Authority (ADIA) to tap into the vast renewable markets of India. Together, the two SWFs funded Greenko, an Indian renewable energy firm. This comes on the back of the Indian government's push to increase renewable energy capacity to 175 Gigawatts by 2022. Together the two SWF's have invested $2.3 billion in Greenko providing capital to fund its expansion[clxvii].

Another RE-DEFINE paper from 2018 makes a detailed case for institutional investors significantly ramping up investments in renewable infrastructure in the developing world[clxviii].

In order to get true economic exposure to the growth opportunities in the developing world, institutional investors will need to look beyond just listed stocks and bonds. Growth equity, private credit and infrastructure investments, particularly in renewable energy, provide the most promising opportunities both for investors to generate returns and for host countries to raise their productivity and growth rates.

At the same time, developing countries are recognising the limits of focussing too narrowly on growth, helped on by the rise of the more holistic SDGs. Economic development, as Wellington Asset Management have correctly identified, is the new lens through which investors should look at opportunities in developing economies, not just economic growth. It is broader, "as it considers a range of variables and higher-value-added outcomes within an economy. These outcomes allow new industries and services to grow, foster cooperation between the public sector and private enterprises, and broaden societal participation in economic prosperity, all without being detrimental to future generations[clxix]."

It is worthwhile fully repeating Wellington, reinforcing what we have repeatedly said: that the listed markets do not accurately capture the present shape of developing economies and are even worse at identifying future opportunities.

"Divergences between the beneficiaries of economic development and current market capitalization have grown substantially over time and represent a differentiated opportunity for investors willing to take an unconstrained approach to building EM equity exposure.
Interestingly, over the past decade, capital flows from private equity have been much more closely aligned with the sectors where we see the most compelling development opportunities (e.g., health care, consumer services and software and media). On the other hand, public equity markets continue to be composed with sector weights biased to many of the winners of the past: technology hardware, financials, materials, energy and exporters[clxx]."

An additional benefit of concentrating more on development sectors is the potential for greater diversification. As EM indexes have evolved over the last 30 years, their correlation to developed markets has more than doubled. This is driven in part by the dominance in risk terms of more globally oriented sectors like those we have mentioned (energy, materials and financials), which we believe are less attractive when viewed through the lens of economic development[clxxi]."

It is hard to state the case for investing in private equity in developing economies more eloquently. This new paradigm of economic development is far more directly aligned with the SDGs than the narrower focus on growth alone. As we will see in the next chapter, this is also the approach taken by the Development Finance Institutions.

Summary

To sum this chapter up, we borrow from "Winter is Coming" again[clxxii]. It is true that most investible assets and productive capacity still lies in OECD economies, but what is also true across all asset classes is that by far the biggest potential for the expansion of the investible universe lies outside the OECD. It is here that one finds the fastest growing firms, the greatest expansion of domestic demand, the biggest rise in export-oriented manufacturing, the fastest pace of urbanisation and construction of new real estate and, of course, the biggest need for new infrastructure.

At the same time, the developing world remains very heterogeneous, suffers from a higher level of political risk, has poorly developed financial markets and legal frameworks and offers investors, particularly those from rich economies, high levels of information asymmetry.

Intermediating between these tens of trillions of dollars of savings seeking structural risk diversification and higher yields and these messy, heterogeneous, often hard to access investment opportunities will not be simple or easy, but is critical for the global economy. Not only is the fate of individual institutional investors and developing economies dependent on the success of this intermediation, but also the growth potential of the global economy.

Most institutional investors lack the human capacity to be able to suitably access and invest in these asset classes, so the correct way forward lies in the development of far more extensive partnerships between institutional investors, between investors and domestic financial institutions embedded in the economy with local expertise, between investors and destination country governments, and between investors and development finance institutions.

This would allow for the quickest scaling up of human capacity and the most efficient use of existing expertise across all of these actors in order to successfully intermediate trillions of dollars from institutional investors towards the most productive opportunities in economies that lack long-term risk capital.

Success will mean a rapid expansion of global productive capacity, the creation of tens of millions of urgently needed jobs, the improvement of the life prospects of citizens of the developing world and a shot at being able to limit the rise in global temperature. This will translate into a higher aggregate global growth rate that can help pull OECD economies out of their post crisis slump and will deliver a far better quality of life and retirement for tens of millions of retiring citizens. New opportunities in emerging growth markets and a rapid diffusion of technology would undoubtedly have the potential to give the global economy a big boost and act as an antidote to the rising backlash against globalization seen in many rich economies.

Failure to do so will hit hard, as sclerotic growth will continue to drive protectionism, and de-globalisation may begin in earnest. Tens of millions will suffer from penury in retirement in OECD economies, even as the young populations in the developing world find it hard to find productive employment. This, in turn, will likely drive political conflict in the developing world too. It also risks the world settling into a bad equilibrium, where everyone is poorer and unrest and conflict loom large. In addition, we would have failed in our effort to limit global warming or deliver on the SDGs.

PART III: The role of Development Finance Institutions

The compelling logic and history of the DFI model

This report has presented four compelling narratives thus far. First, that there is an excess of savings in OECD economies, often held by large institutional investors that are in search of good investment opportunities, not enough of which can be found at home. Second, that developing economies face the opposite problem - having many opportunities for investing to increase productive capacity, but not enough domestic savings. Third, that the solution to both of these problems, and the related issues of meeting the SDGs and delivering on the Climate Agenda, lies in a much larger allocation of savings from OECD institutional investors to fund investments in developing economies. Fourth, that this intermediation challenge will not be an easy one to solve as the best, most promising opportunities in the developing world lie outside the listed space and may not be easy to find. This is particularly the case for countries in Sub-Saharan Africa and South Asia that most need capital.

We have also spoken about the large funding gap for meeting the SDGs and delivering on the Paris climate goals that also requires more investments from OECD economies into developing countries, both agreed at summits in 2015. To complete the context, a third 2015 summit, on financing for development, zeroed in on catalysing the development of the private sector in developing economies as a priority area. Given that the private sector is typically responsible for 90% or more of the jobs in developing economies, the logic and link to both growth and the SDGs is clear[clxxiii].

As discussed before, the private sector in a number of developing economies is often short of finance, does not have access to the latest technology or business models. Also, it has to operate with a poorly qualified work force and in an uncertain business environment with poor infrastructure. The creation of not just a large quantity but also of quality jobs is central to the process of growth and development, and long-term development comes from steady improvements in the productivity within sectors, not just one a one-off move of workers from agriculture to manufacturing.

This need to expand the size of the private sector and improve its productivity has been long recognized and was behind the creation of Development Finance Institutions (DFIs). As a unique set of financial institutions, they are seeded through aid money and given a dual mandate to be both profitable and have a positive development impact through catalysing the development of the private sector.

Even as this report makes a robust case for scaling up investments in developing economies massively, the sad reality we have identified is that external capital flows, both foreign direct investments and bank loans have fallen, the latter more dramatically. Levels of ODA have also stagnated, which means they too are shrinking as a percentage of developing country GDP. The world is also failing to fulfil its commitments on providing developing countries with USD 100 billion annually in financing to help support climate mitigation and adaptation, putting countries at risk of getting stuck in a doom loop, wherein countries most exposed to climate change face higher costs of capital[clxxiv].

As this report has shown, this stagnation is paradoxically happening at the same time that the world is flush with savings, with more than USD 80 trillion in long-term savings in OECD countries alone in the form of pension funds, insurance assets and sovereign wealth funds. These funds, as the report has shown, are mostly invested in OECD economies, often in listed liquid stocks and bonds with limited allocations to developing countries and illiquid assets.

This was the context in which the idea of using DFIs and their private sector expertise, plus additional ODA funds, crystallised in order to try and catalyse large amounts of private investor capital. The new agenda was launched and called the Billions to Trillions Agenda (B2T) – using the billions in DFI investments with the support of billions of ODA allocations to unlock trillions of dollars of private sector funds.

This chapter focuses on the workings of DFIs, which are central actors in donor ambitions to deliver on the B2T agenda and discusses the challenges and opportunities this represents for the DFIs and the important trade-offs they may be forced to make in responding to the B2T agenda.

Traditionally reticent DFIs have been thrust into the limelight and will increasingly come under pressure from donors and other stakeholders in the development community to bear the heaviest burden in mobilising private capital for the SDGs and to tackle climate change. DFIs are ODA funded, but self-funding beyond the initial capital injection, as they have a dual mandate to both be profitable and to catalyse private sector development. This has meant that despite steady new increases in capital for many of the DFIs through new allocations from ODA money, the biggest rise in their capital base in recent years has come from accumulated profits.

Under the DFI model, ODA money is not spent but merely invested, so can be perpetually recycled, and a DFI's raison d'être of mobilising funds for private sector investments means that a small amount of ODA can be recycled and generate much larger amounts of private investments over time.

Their very business model captures the essence of the B2T idea. DFIs help fund local businesses and seed local fund managers in developing economies using their own balance sheet. They also focus on mobilising additional private sector funding from both domestic and foreign sources for productive investments in the countries of their operation. They use the influence they have as funders to help improve the financial, development and sustainability outcomes of the projects they invest in, by introducing better practices, new business models, technology where necessary and promoting good governance.

It is worth recalling here that DFIs effectively seeded and funded the launch of private equity funds in developing economies that were extensively discussed in the last chapter. These now have a corpus approaching USD 1 trillion and present the most successful example of the catalytic role of DFIs in action helping mobilise large

With decades of profitable track records behind them, a deep knowledge of their countries of operation, and demonstrable development impact in the form of job creation, increased tax revenues and raising productivity and their seat at the intersection of commercial capital and concessional development capital, it is natural for DFIs to take the lead in helping mobilise private institutional capital.

The strategic challenges and opportunities

Scaling up

It is worthwhile to start by looking at the present scale of DFI investments. The world has several DFIs, which can be broadly classified into bilateral or multilateral. At the multilateral level, the IFC, the private sector arm of the World Bank, is the biggest and most influential DFI. Regional lenders such as the African Development Bank, the Asian Development Bank and the Inter-American

Development Bank have their own specialised windows or vehicles that invest in the private sector as DFIs. The biggest group of bilateral DFIs, of which Norfund is a member, is the European Development Finance Institution (EDFI) umbrella.

EDFI members and the IFC are comparable in size, with the other DFIs being smaller. In 2018, for example, the IFC invested EUR 10.4 billion on its own account and EDFI members EUR 8 billion, and their portfolios stood at EUR 51 billion and EUR 41.3 billion respectively. Private co-finance mobilisation by EDFI members in 2018 stood at roughly 125% of their own account and 150% by the IFC.

The IFC has a big geographic footprint, with more than 20 country offices in Africa alone, whereas EDFI members have more than 47 overseas offices between them in more than 20 developing economies spread across Africa, Asia and Latin America. Different DFIs have different geographic areas of focus, different priority sectors and different investment strategies, sometimes with substantial overlaps with each other.

What sets EDFI members apart from all other DFIs is their heavy focus on equity and equity-like instruments, in contrast to the predominance of debt in the investment portfolios of most other DFIs. OPIC, the US DFI, for example, is not allowed to make equity investments, something that is finally changing. For the same amount, equity provides more risk absorbing capacity compared to debt. In terms of the regional focus, about 14% of the IFC’s portfolio is in Sub-Saharan Africa, compared with 33% of the EDFI portfolio. Norfund is an outlier investing almost half its portfolio in the most challenging least developed countries, mostly in Africa. Together with CDC Group, Norfund is also unique in almost always making equity investments, which constitute 80%-85% of its portfolio[clxxv].

When, taken together, the own account investments of all DFIs amount to less than $60 billion, a small fraction of the SDG funding gap. Add in private capital that DFIs mobilise alongside, and the number less than doubles and remains stubbornly below even the USD 100 billion mark. At 6%-7%, this is a very small, although significant contribution to plugging the USD 1 trillion - USD1.5 trillion annual SDG funding gap that needs to be addressed annually between now and 2030.

The impressive growth in DFI investments over the past decade and a half has come from an increase in retained profits, which have been in the mid to high single digits, recapitalisations from owner aid agencies and an increase in leverage for those DFI members that are set up as banks and can borrow in the markets.

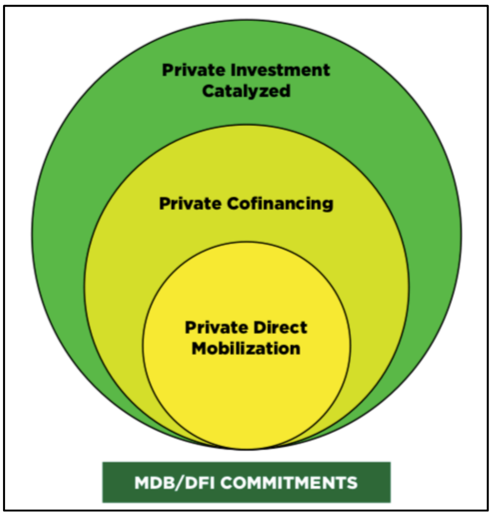
In order to make a dent in helping to plug the funding gap for the SDGs, the DFIs will need to increase their annual investments by at least an order of magnitude. Retained earnings from profits will not be enough to achieve this level of scaling up. The room for increasing leverage is also limited. This points to a need to inject more especially into those DFIs that have a successful track record, particularly in the low income countries and least developed economies where private capital is less likely to invest at this time. The other is to try and mobilise more private capital. In 2018, for example, both the IFC and EDFI members managed to mobilise more capital than they invested on their own account.

In one interpretation of what DFIs do, mobilising private capital is in fact their raison d'être. They seek to promote the long-term development of the private sector in developing economies, which requires these to be eventually fully funded by private investors, with DFIs only playing a temporary bridging role. For this mission to be successful, DFIs must mobilise private investors. Even before the present focus on mobilisation, DFIs have always invested sought to invest alongside private investors.

Mobilisation can be measured in many different ways and counts as direct when the private investors have a contractual relationship with DFIs, for example, when DFIs syndicate loans made to the private sector in developing economies out to private banks and other investors. It counts as indirect when DFIs and private investors co-invest alongside each other, for example, in private equity (PE) funds, but without a formal contractual relationship with each other.

Beyond these relatively narrow concepts, DFIs can help mobilise private investment in many different ways. This catalytic mobilisation, is much broader in scope and captures many other aspects, such as:

- "Demo Mobilisation" - describing how a DFI-funded demo project leads to further private investment in similar projects;
- "Information Mobilisation - when the private sector invests on the basis of information provided by DFIs, such as the low default rates on DFI investments as captured by the GEMS database;
- "Reputation Mobilisation" - when DFIs help improve the reputation of a market that leads to further investments;
- "Capacity Mobilisation" - where the market capacity in the form of talented professionals, new instruments and new business models that DFIs have helped cultivate leads to follow on mobilisation;
- "Reform Mobilisation - where DFIs have contributed to reforms in market policy and practice, which make it more attractive for the private sector to invest.



Source: EDFI

Given that donors are putting a lot of emphasis on quantifiable mobilization targets, this creates a risk that DFIs will focus on narrow direct mobilization that can be measured and attributed, while neglecting the broader larger catalytic aspects of mobilization that are much harder, if not impossible, to attribute.

For example, given that the CDC Group played an important role in establishing the private equity industry in India, should all capital raised in Indian private equity from the private sector be attributed, at least in part, to having been mobilised by the CDC Group? A DFI's mere presence in a country or a sector may be interpreted to be a sign of confidence and may make the marginal investor more likely to invest, even without direct involvement of the DFI. Should those funds be attributed to having been mobilised by the DFI? What about projects in a sector where a DFI-funded demonstration project got things started a decade earlier - should those be attributed in any way to the DFI, even if it no longer works in that sector in that country? If a DFI runs an investor education service that successfully reduces the incorrect high level of perceived risk, it can unlock the door to more private investors. How should the DFI's contribution to mobilization be measured in this case?

Another way of thinking about catalytic mobilisation is that it captures the public service function of DFIs, generating large public benefits and positive externalities in a manner that the management of the DFI cannot take credit for. Maximising catalytic mobilisation thus requires a public service mind-set that DFIs as public institutions should have.

In trying to maximise mobilisation donors might inadvertently reduce the total mobilisation and development footprint of DFIs, if they shift too many resources away from hard to attribute catalytic actions towards those they can measure, attribute and hold DFIs accountable for.

In addition to this critical "catalytic" aspect of mobilisation that is not given the importance it deserves, there is yet another aspect of mobilisation that gets even less attention. And that is "Exit Mobilisation[clxxvi]". It is worthwhile discussing this in some detail.

While debt is self-extinguishing, in the sense that it is paid back, it is often refinanced particularly by companies that need capital to grow. DFIs typically give out loans to firms for 5-7 years, sometimes for longer durations, and face a very low default rate. This means that most of the time DFI loans are paid back, and normally that is where the matter ends, at least from a DFI's point of view. But that is not the end of the matter. Where the cash to pay this loan back comes from does matter. It could be that the company is so profitable that it can pay the loan back from cash flows. In this case, no new private capital has been "mobilised" but the investment turned out to be very successful in any case. More common, DFI loans are paid back, at least in part, by new loans taken on by the investee company. In most cases, these lenders would be domestic, and occasionally international private banks. In other words, the private sector has taken over, and "Exit Mobilisation" has taken place.

There is no reason to treat this differently from mobilisation at the point of investment, which is the only aspect of mobilisation being discussed today. What matters over the longer term is that DFIs help catalyse private sector investment, which is exactly what happens whether the private sector is mobilised at the point of investment or at the point of exit.

Equity investments are almost never self-extinguishing in the same way that loans are, unless the company winds down, or engages in a buyback of its own shares. Both instances are infrequent, particularly for companies DFIs invest in. In this case, as with debt refinancing, a new entity has to buy the equity stake from the DFI on exit. If this is a private entity, whether domestic or foreign, private capital has been mobilised on exit.

DFIs face pressures to scale up their operations, only part of which they can do with their own capital. Bigger opportunities lie in mobilising private capital alongside. However, in order to achieve the biggest impact, DFIs must take a comprehensive approach to the question of mobilisation and focus not just on direct and indirect mobilisation, which are easy to measure and attribute, but also focus on broader and potentially much larger catalytic mobilisation. In fact, when faced with a choice between smaller attributable mobilisation and larger catalytic mobilisation, that they cannot get credit for, DFIs must always choose the latter. And DFIs must also think of maximising mobilisation across the lifetime of an investment, including mobilisation on exit, something that has been left out of the present debate.

DFIs need to find a sensible way of gradually changing their fundamental identity. They need to move away from being mere providers of capital towards also being intermediaries, as the relative share of private capital mobilised rises. If DFIs get credit for mobilisation at exit, it also makes it more likely that they will exit successful projects at an earlier, more optimal time, rather than staying invested well past the time where they may be needed.

Another thing donors should be mindful of is the trade-off between the quantity and quality of capital. Finding commercial risk-absorbing equity investors for off-grid solar power in fragile and conflict states is hard. Syndicating loans or issuing guarantees for a telecom project in a middle-income country is much easier. A dollar of each is very different in quality. Too much emphasis on the amounts mobilised could distort DFI priorities away from the former, high development impact project towards the latter.

Given the huge latent pool of capital, DFIs should focus less on who they can get to invest alongside them, but more on maximising investments per se, whether they are themselves involved or not. And this means promoting the investment landscape, sharing information, active outreach to promising investors, and supporting the investment process.

Stretching Out

As DFIs expand their own operations and mobilise more private capital, the question of where they operate and what investments they prioritise, becomes even more important. It is true that with more of their own money, and more funds available from the private sector, DFIs can expand the scope of their operations more, but how far should this expansion go?

In every country there will always be some projects so lucrative that the private sector will fund them completely, even in face of large risks. At the other end of the spectrum, there will be projects that are so unprofitable, that no profit-seeking actor should fund them. DFIs have traditionally operated somewhere between these two extremes, where they fund worthy and profitable projects that the private sector alone cannot or does not fund. They seek to fund cash-flow positive projects that may not deliver the kinds of returns expected by purely private actors, or those that pose larger risks than such actors would be comfortable with[clxxvii].

However, the new reality faced by DFIs is that they are expected to expand their scope of operations on both sides of this spectrum. On the one hand, as discussed in the previous section, they are expected to mobilise more private capital, which increases the pressure to finance projects that the private sector would find investible. On the other hand, they are also now expected to expand operations in poorer and riskier countries, where the biggest SDG funding gaps lie and SDG-relevant social sectors such as health and education, which may be less commercially lucrative.

DFIs are essentially being expected to perform a “Dumbbell Stretch”: increasing the share of projects on both ends of the spectrum of their normal operations. Put differently, this means that DFIs will be pushed towards funding more projects that:

- the private sector should find quite attractive, and
- those the private sector will find unappetising,
- while maintaining present level of activity for those the private sector finds somewhat attractive.

DFIs will need more capital to perform this dumbbell stretch, but capital is not the only constraint to such an expansion of scope. Organizational capacity and may prove to be more binding so they will need to increase headcount and adapt organisation culture to the expanded mandate.

Subsidies Need to Be Limited

Donors are aware of the stresses their ambitious expectations may put on DFIs, so they have simultaneously expanded the offer of subsidies to ameliorate the problems DFIs might face from the pressures to scale up and expand scope.

These take the form of blending, the use of subsidies from concessional development capital to attract additional capital to developing economies and can be controversial. The risks of offering excessive public subsidies, eroding the scarce ODA budget that has many competing demands on it, and distorting markets are well known.

However, there is a strong case for a sensible and proportionate deployment of subsidies to promote the development of the private sector in developing economies. Where underinvestment is a result of a misperception of risk by private investors, subsidies can help increase investor appetite at no cost to the taxpayers. Where temporary subsidies can help expand the pipeline of potential projects, help improve the profitability of marginal projects, increase the development footprint of otherwise profitable projects, or be used to crowd investors into a new country or sector till the point they are comfortable investing on their own accord, blending can help deliver private sector development, at a modest cost to taxpayers.

At one end of the dumbbell discussed in the previous section, donors are offering blending facilities such as risk-mitigation to get the private sector to invest in projects they may otherwise find too risky, thus mobilising additional private finance. One way of thinking about this is that donors are subsidizing private finance to invest alongside DFIs on terms they would otherwise not be comfortable with. At the other end of the dumbbell, donors are offering technical assistance, grants or cheap guarantees to DFIs themselves to get them to invest their own capital in project in countries and sectors that normally lie outside their comfort zone. Blending facilities can play a critical role in the development of a larger and longer project pipeline.

One of the reasons blending is controversial is that it is misunderstood as being a new approach that uses public subsidies to fund private actors. While it is true that blending has become newly fashionable in the development jargon, there is, in fact, a long history of subsidizing private sector development.

For example, DFI capital itself is a form of soft subsidy that does not erode ODA, as DFIs accept mid-single digit returns on portfolios where private actors are likely to demand more. This "soft-subsidy" has an opportunity cost in the sense that the same capital could be deployed differently to earn a higher return.

What is new, however, is a willingness on the part of donors to offer "hard-subsidies", where losses are expected and tolerated, in order to catalyse the development of the private sector. This is risky and additional safeguards will be needed in the form of only using subsidies where they are temporary in nature, where there is an arm's length relationship between those funding a project and those deciding on subsidies, where decisions on the level and pricing of subsidies is taken by people with appropriate expertise, and where subsidies are not used a tool for outcompeting peers. More of these recommendations can be found in another RE-DEFINE paper, "Billions to Trillions: A Reality Check"[clxxviii].

Searching Harder

It is clear from the discussion above that more capital from three sources will become increasingly available for private sector investments in developing countries. The first is from the large pool of long-term capital chasing diversification, yield or reputational gains investing directly, or being mobilised by DFIs and MDBs. The second, smaller but more risk tolerant, source is DFI capital itself, which is also expanding. The third is even more risk tolerant concessional capital from the various blending windows that are being set up.

It is common for project developers and entrepreneurs to complain about there not being enough funding available even for good projects, and for those with money to complaint about there not being enough bankable projects. The truth lies somewhere in between. But no matter the present state of play, what is clear is that with more money coming in from these three sources, the risks of too much money chasing too few projects will rise sharply, unless the project pipeline is also expanded.

Traditionally, DFIs have not invested heavily in the search and sourcing functions, relying mostly on deals that are brought to them. They do conduct active outreach, sponsor industry events and maintain a network of useful contacts and sponsors with good reputations, but that is often the sum total of their investment in the search and sourcing functions.

For there to be an expansion of deal flow to match the increased flow of money coming into private sector investments in countries of DFI operation, DFIs will need to invest more heavily in searching for and sourcing new deals and bankable projects. But even that may not be enough, particularly as DFIs are expected to expand operations significantly at both ends of the dumbbell, which have their own special characteristics.

At the commercial end of the spectrum, for large infrastructure projects where DFIs are hoping to mobilise large multiples of private sector investments, it may be necessary for DFIs to take the lead on such projects, since domestic sponsors may not always have the capacity to initiate large complex projects. In these cases, DFIs will also need to involve private partners from an early stage to make sure that the project design compatible with mobilisation of the private sector. If blending is envisaged to crowd in the private sector, those manning the blending windows will also have to be involved from an early stage.

At the riskier, less commercial end of the spectrum, particularly in fragile and conflict states with a highly underdeveloped private sector, DFIs may have to step in at earlier stages, including even having to potentially initiate projects themselves. After all, their mandate is to help catalyse the creation of a viable and dynamic private sector, which would include initiating entrepreneurial ventures where not enough of them exist. It is here that the portfolio of expanded blending tools now being made available can be truly useful, from Technical Assistance to Project Grants to Development Grants and Venture–like funding before the traditional DFI tools of loans and private equity investment become deployable in later stages of the project.

IDFIs will have to expand their traditional role of being funders of projects to a more hands on and active search and sourcing function, and where needed, they will also need to be ready to initiate and originate new deals and projects themselves. In other cases too, DFIs will need to start getting involved in projects at earlier stages and will also need to engage more deeply with entrepreneurs, financial and non-financial partners, blending facilities and private co-investors. What matters most in the end is that the productive private sector in developing economies is expanded and funded, rather than who funds it.

If DFIs are better placed to fund the origination and early stages of new projects, then that is where they should concentrate their efforts. Once a project has been successfully initiated and launched, private sector funding can be brought in at a later stage. In short, a new focus on early stage funding and deal sourcing will go well with the focus of the mobilisation effort moving away from the narrow present focus on co-mobilisation at the point of investment to also include mobilisation at the point of exit.

Maximising DFI mobilisation and contribution to the SDGs

Maximising mobilisation

It is useful to look at the various roles that DFIs can play in a market that can contribute to maximising catalytic mobilisation, the most important kind.

Catalytic mobilisation, intuitively for the DFI business model, will be much larger than direct mobilisation, so should not be not ignored at the cost of an additional focus on direct mobilisation. In fact, it may even make sense to give it a preferential treatment. Given both its larger potential impact and larger positive externalities, resources dedicated to catalytic mobilisation may have a bigger development impact than the same resources used to focus on direct mobilisation. It is important to point out though that these two aspects of mobilisation can, and often do, go hand in hand. Direct mobilisation towards a demonstration project, for example, can also generate a large amount of catalytic mobilisation.

Many DFI markets, particularly in Fragile and Conflict States (FCS), are stuck in a low reputation-low investment trap. Risks are high, and poverty means that profits may also be harder to come by. But the absence of competition, first-mover advantages and low costs also bring many business opportunities. It is fair to say that the reputation of many FCS is worse than the reality. DFIs can help reduce this gap. Correcting this misperception of risk can have a large positive impact on private capital flows.

DFIs have the capacity to introduce new knowledge, business models, business practices and tools, including financial instruments, into markets. This role, and its effect on promoting mobilisation of private capital can be particularly important in FCS.

Similarly, demonstration of the feasibility of a type of a business or a new technology in a new market often generates copycat investments, leading both to a lot of mobilisation of capital and new investments, as well as healthy competition that can help make goods and services affordable in developing economies. This role for DFIs can have a large developmental impact particularly in low-income countries.

The IFC and other MDBs, such as the EBRD, doing private sector finance have a direct opportunity to influence policy in the countries of their operations through the policy dialogues that all MDBs conduct with countries of operations. Their feedback from the ground up on what policy environments can help stimulate private investment, based on their experience, can be invaluable and indirectly catalyse a lot of private investments.

Last but not the least is the DFIs important role in building up market capacity, which can drive large amounts of catalytic mobilisation in the long term. This catch-all term includes everything from new innovations introduced by DFIs and their investments, to market completion through helping finance upstream and downstream investments that help complete supply chains, to helping build managerial talent and much more.

Maximising the development footprint of DFIs

How DFIs can maximise their Development Footprint
Myth Busting
Information Service
Systematic Market Development
Demonstration
Policy Experience and Engagement
Focus on Talent Development
A Strategic Use of Blending
Partnerships with Financial Firms
Partnerships with non Financial Firms

Myth-busting

Even amongst sophisticated institutional investors, there is a lot of ignorance of developing economies, particularly those in Africa. An excessively negative perception dominates the psyche of most educated individuals, including investors in the West, as aptly demonstrated by Hans Rosling[clxxix]. A more proactive DFI approach to selling the market opportunities, tackling negative biases and developing a Rosling-style investor myth-buster would go a long way in attracting more commercial capital to developing economies.

Information Service

DFIs should, preferably in collaboration with each other, run an information service, that offers a step by step “how to” investment guide for those who may be interested in bringing commercial private capital to developing markets. Case studies, a more proactive use of media and communications to disseminate success stories would also help.

Systematic Market Development

A core part of the DFI business model is to develop markets by introducing better standards, new financial instruments, new business models and promoting better upstream and downstream linkages. Often this is done in an ad hoc manner, as dictated by the deal flow. A more systematic and proactive approach to market development, using blending windows and concessional capital where necessary, particularly in fragile and conflict states, may expand their development footprint. While DFI capital cannot go far in large emerging economies, it can make a far bigger difference in FCS, most of which have tiny economies. In a FCS, DFIs, particularly if they pool their resources, can make a systemic intervention rather than just follow the bottom-up deal-by-deal approach that is central to the DFI model.

Demonstration

A special focus on demonstration, seeking appropriate private partners from the venture capital space, and an active promotion of successful demonstration projects may open up even larger opportunities for new investments in emergent areas, such as off-grid solar, which are crucial for fighting climate change.

Policy expertise and engagement

Not only should DFIs contribute to the improvement of market practices and standards through their active promotion in their own investments, they should also develop policy capacity that is able to influence the shape of regulations and investment climate with sensible feedback from the investment frontier. Too many entities, including the IMF, which promote regulatory reform and offer policy advice, have staff with limited experience of making private sector investments themselves. The DFIs have this relevant experience and expertise.

Focus on talent development

DFIs should expand their use of secondments, training programs and workshops to help build talent and address capacity gaps in the markets they operate in. Encouraging secondments from institutional investors is also a good way of introducing key individuals to new markets. This was a very important aspect of DFIs contribution to the development of the private equity market in emerging economies.

A strategic use of blending

Also, there will be a lot of new capital available for blending. A poor implementation can distort markets and waste scarce public resources. But DFIs should build capacity and engage with donors proactively to ensure that blending is used in a sensible and proportionate manner, in order to enable marginal projects with a high development impact to be taken to profitability. Using blending to provide public goods of the kind that can lead to catalytic mobilisation would be a good use of such funds.

Partnerships with financial firms

Not only should DFIs use their whole capital toolkit to help get transactions and funds to a close, but they should actively seek to strike partnerships with institutional investors, insurance firms and, in particular, local pension funds to co-invest alongside them. This would free up DFI capital to do more transactions, attract and introduce commercial investors to new markets, ramp up mobilisation and get DFIs to think of themselves also as intermediaries, not just providers of capital. Partnerships that allow for a pooling of assets across DFIs for better diversification, and an incentive to offload successful investments to commercial investors sooner rather than later would also help the mobilisation effort.

Successful examples of DFIs partnering with institutional investors

The IFC, for example, has set up a partnership with the German insurer Allianz, to invest alongside it in infrastructure through its MCPP-Infra program[clxxx]. A total of 8 institutional investors, including Axa, Munich Re and Swiss Re have also joined, as has the Hong Kong Monetary Authority. Together they have committed a total of $7 billion.

In 2009, the IFC set up an Asset Management Company has full access to IFC’s deal-flow and has the right, but not the obligation, to co-invest on any deal covered by the relevant thematic or geographic fund PE or debt fund. The IFC has mobilized 7.8 billion excluding the IFC’s share) across its 13 regional, sector focused and fund of fund offerings from as many as 55 different investors[clxxxi]. Some of these are:

- Development ministries and agencies from countries such as Japan, the UK, Canada and Norway: JICA, DfID, CIDA, MFA respectively;

- MDBs and DFIs such as AfDB, EIB, OFID, ADFD, JBIC;
- Sovereign Wealth Funds from Singapore, Azerbaijan, Korea and the Middle East amongst others including GIC, SOFAZ, KIC, ADIA;
- Pension funds such as PGGM from the Netherlands, the TfL Pension Fund, the UN Joint Staff Pension Fund and GPIF from Japan;
- Insurance firms such as Dai-ichi Life of Japan.

Other DFIs have also struck partnerships with different institutional investors. The Dutch FMO with Alecta, the Swedish pension fund, Norfund with KLP and EBRD with SOFAZ and SAFE, from Ajerbijan and China respectively.

The Danish IFU has partnered with a number of Danish pension funds including PKA, PensionDanmark, PFA, ATP, JØP/DIP and PenSam to set up the Danish SDG investment fund[clxxxii].

These are exactly the kinds of partnerships that institutional investors can use to access unlisted opportunities in developing economies in private equity and infrastructure, as discussed in the last chapter. They benefit from the deep expertise and local knowledge of the DFIs, and the DFIs in turn can aim for bigger and more ambitious deals they may otherwise not attempt to execute knowing they have large investment partners in place. It also increases the pressure to focus more resources on generating deal flow and frees up DFI own capital to make even more investments.

Partnerships with non-financial firms

DFIs have rightly begun to partner not just with financial firms, but also with non-financial firms across a whole range of areas such as agricultural processing, energy generation, health services and food and nutrition. This development should be accelerated not only because it helps bring in more commercial capital, but also because it brings much needed expertise across business lines and helps develop integrated supply chains. Up to date, too many DFIs still have too narrow a focus on partnerships with the financial sector. This bias needs to be proactively addressed. The rising number of firms making SDG commitments has significantly expanded the scope for such partnerships.

Norfund's partnership with Scatec solar is one such example of a very successful partnership where Norfund's support has allowed Scatec solar to expand the size and scope of its operations to places it may not otherwise have invested. For Norfund, this enabled expanding its own development footprint and delivering on a key priority.

Together, CDC Group and Norfund own Globeleq, which invests in expanding generating capacity in Africa. The two have ambitions to add up to 5,000 MW of new capacity[clxxxiii].

One of the biggest challenges in Africa, a priority area for donors, is the fragmentation of the market. It is an encouraging sign then that two-thirds of African firms surveyed by McKinsey, a consultancy, in 2017 planned to enter new countries in the region. The number for foreign multi-national companies was only half. Another encouraging statistic comes from BCG, another consultancy that shows that the number of African countries the region's 30 biggest companies operate in has doubled to 16 from 8 in 2008[clxxxiv].

Partnerships with some of these, in order to support them or to expand faster and improve their SDG footprint, would be a good idea - if it could be made to work.

CONCLUSION

The world of high finance, where trillions of dollars are invested, and where top performers take millions home in bonus payments, and that of development finance, where the talk is of millions and where deals as small as a few hundred thousand dollars are common, appear to have little in common.

In Norway, for example, the former is the world inhabited by NBIM, Norway's trillion dollar plus sovereign wealth fund, while the latter is the world of Norfund, Norway's $1.8 billion development finance institution. Norfund is less than a fiftieth the size of NBIM, invests only in illiquid assets that NBIM is not allowed to touch. It also invests only in the poorest economies, most of which NBIM is not allowed to operate in and has fewer than a tenth of the employees that NBIM does.

It is true that the two institutions are fully owned by the Norwegian government, have been in existence for roughly two decades each, and each have generated an annual profit of about 6%. But these similarities appear to be superficial and the differences highlighted above fundamental.

This report is about how these two seemingly completely different and unrelated parts of the financial world are, in fact, intimately related. Even as NBIM has roughly $70 billion invested in bonds that have negative yields, the entrepreneurs that Norfund helps finance have to pay double digit yields to mobilize money.

The issue is that the two institutions lie at different ends of the financial system that exists to connect entrepreneurs with good ideas but not enough money to savers with money but with no opportunities or energy to invest it themselves. The entrepreneurs get money to invest and grow their businesses, which create jobs and growth, hopefully at a profit. The savers get returns on the investments they make, helping them accumulate wealth, for example, for retirement.

The report shows how the financial system, as it stands, is failing in this basic core function with too many savings and not enough opportunities at one end of the spectrum, and many opportunities but not enough money at the other end. The channels of financial intermediation that should normally connect deep-pocketed institutions such as NBIM with the most energetic entrepreneurs with the best ideas in the fastest growing parts of the world are blocked.

This report shows how both ends of the financial system will benefit from unblocking the channels and from making sure that the kind of world that NBIM inhabits is more intimately linked to the one inhabited by Norfund. It shows how making the channels function properly will not only increase profitability and reduce risks for most of the financial actors in the chain, but also help increase global growth and deliver on the Sustainable Development Goals.

Even as Norfund rightly seeks to go deeper into countries far away and unlock finance for the remotest of entrepreneurs in the most difficult of contexts, strengthening the formal links between the two ends of the financial pipeline would help everyone concerned. While NBIM has too much money and not the mandate, manpower or motivation as a passive investor to seek investments that are both profitable and impactful, Norfund actively seeks more opportunities for profitable and impactful investments, is an active manager and could always use more money. Recreating the kind of partnership it has with KLP, one of Norway's biggest pension funds, with NBIM and other large investors is a win-win for all parties involved, and will help resolve the problems within the financial intermediation chain.

Such partnerships between DFIs, which have local expertise in developing countries but limited capital and large institutional investors, who have capital, but little expertise in the fastest growing economies of the world, must be replicated and scaled up. The time and cost for institutional capital finding its way to entrepreneurs in Asia, Africa and Latin America must be reduced, and the size and speed of capital flowing downhill must be increased.

It is only then that finance will abide by the principles of seeking the highest return, diversifying risk, intermediating savings to where they can be usefully deployed and expanding productive capacity to stimulate growth and earn higher long-term returns sustainably rather than simply by pumping up the leverage, as now.

The days of large institutional investors making outsized returns, such as NBIM's 12% annualized return in the second quarter of 2019, by simply tracking indexes are soon over. Hedge funds and private equity firms, as well as more active fund managers investing in listed securities will all have a hard time making large profits, given limited possibilities to increase leverage further and stagnating or even falling stock prices.

From now on the financial sector will have to work hard to create real economic value in order to generate sustainable profits. This means less sitting in luxury offices tracking indexes and fewer fancy lunches to negotiate leveraged buyouts. It means more going out into the field, in developing economies to seek out investment opportunities, originate deals and even create new opportunities. It will not be easy, but it is how the financial sector can really add value to the economy.

Blackrock, the world's largest asset manager, manages USD 7 trillion, with around 15,000 employees. Almost all of Blackrock's staff is based in the developed world. The IFC manages only $55 billion, with more than 3,000 staff, more than half based in the developing world. Seeking new investment opportunities, scouting for entrepreneurial talent, and deploying small amounts of money to make a big difference is manpower intensive and requires people on the ground. But it genuinely creates new information for the financial markets, and information is value.

The financial system, as it is presently set up, needs fewer bankers and asset managers in the rich economies, one reason why so many are now losing their jobs. It needs many more bankers, venture capitalists, private equity professionals, asset managers, project developers and entrepreneurs out in the field in developing economies to help exploit the full potential of the investment opportunities that exist there.

As many experts testified in the aftermath of the financial crisis, the West has too many bankers. The developing world, not quite enough. Relocation anyone?

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