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Foresight

Globalisation reset: which economies and markets stand to benefit?

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With the end of this global economic cycle, and regime shift, there is a theme which has increasingly captured the attention of markets and investors. “Nearshoring”, “reshoring”, “onshoring”, “supply-chain diversification”, “friendshoring”, “slowbalisation”, “de-globalisation”, even “re-globalisation” have been terms used to frame this theme. Whichever the term, these all encompass some form of potential disruption to the era of globalisation that began in earnest in the early 1990s.

Breaking down different stages of production, often locating them in different economies/geographies, provided benefits such as lower costs, economies of scale, specialisation, and higher efficiency. Globalisation saw a sea change in manufacturing production, with China becoming so dominant that it is often referred to as the factory of the world.

The global Covid-19 pandemic exposed some of the risks and vulnerabilities of this approach. The lockdowns in China in 2020 were the beginning of a multi-year period of global disruption, dislocation, and bottlenecks. Geopolitical tensions between the US and China, which pre-dated the pandemic, only re-emphasise these risks.

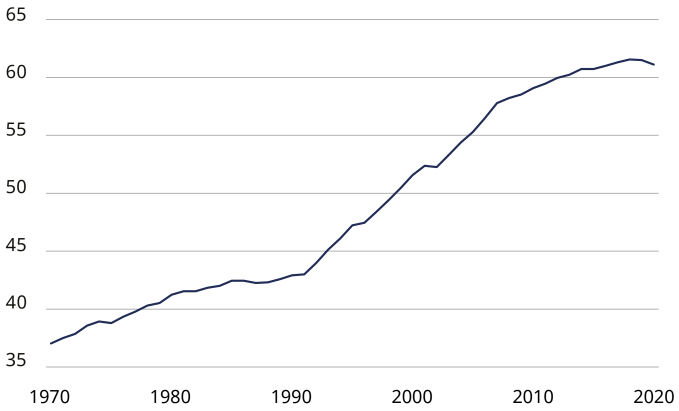
A natural response from multinational companies (MNCs) is to diversify and improve the security of their supply chains. In the initial era of globalisation, efficiency and cost were prioritised. Today, the focus is shifting to resilience and reliability. With China now at the heart of global manufacturing, the natural question for investors is to look at which economies and stock markets may benefit from potential disruption and re-wiring of globalisation. Ultimately, given China’s dominance, any changes are likely to involve a re-allocation of supply chains away from the country.

The era of globalisation and China’s meteoric rise in global manufacturing

Although the term had been identified earlier in the century, globalisation really took-off in the 1990s. Through this period, large international companies sought to boost productivity and reduce costs by moving their production operations to economies with large, low-cost pools of labour. Global trade changed, with supply chains stretching across borders, and the flow of goods becoming far more integrated. While the main thrust of the analysis in this paper is centred around manufacturing, it is important to note that globalisation is multi-faceted. Goods and products are/have been not only increasingly produced in a broader set of economies, but they are also sold there. In essence, the world became more interconnected, not only economically but also culturally and politically.

The KOF Globalization index (Figure 1) provides a good illustration of how globalisation gathered momentum through the 1990s and 2000s. This measures globalisation in terms of economic, social and political dimensions, with a score of 0-100 indicating least to most globalised. An important element of this shift is rooted in China.

Figure 1: KOF Globalization Index

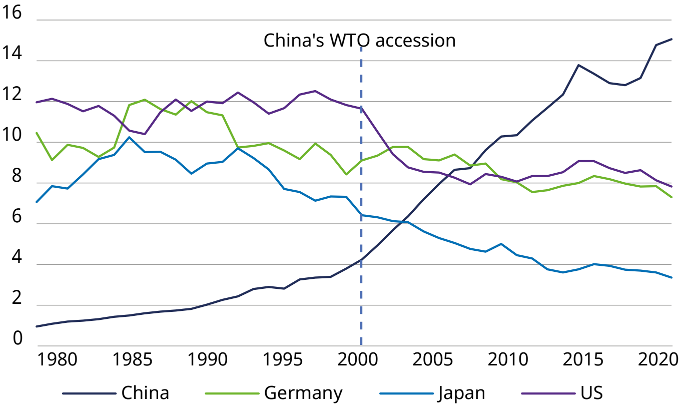


A measure of the economic, social and political dimensions of globalisation. Data 1970-2020.
Source: KOF Swiss Economic Institute, 2023. Dreher, Axel (2006): external page Does Globalization Affect Growth? Evidence from a new Index of Globalizationcall_ made, Applied Economics 38, 10: 1091-1110.

Schroders

Firms were attracted to China by a combination of deep structural reforms to open up the economy to the outside world, and an enormous pool of very cheap labour. As we noted in a recent report looking at China's impact on global inflation, in 1995 China's working-age population of 830 million people was almost double that of the G7. And according to Oxford Economics, Chinese workers in the manufacturing sector were paid an average of 40 cents per hour, equivalent to just 2% of the average hourly rate of US$17 paid across the G7. Accession to the World Trade Organisation (WTO) in the early-2000s – which incidentally was strongly supported by the US government – lowered trade barriers and proved to be the catalyst for a period of supercharged export-led industrialisation, as more and more firms relocated production to China. China's share of global good exports (See Figure 2) climbed from 4% to around 15%, at the expense of traditional manufacturing powerhouses such as Germany and Japan.

Figure 2: Share of world goods exports (%)



Source: IMF DoTS, Refinitiv, 29 March 2023.

China's success in attracting manufacturing and becoming the dominant global player is unrivalled. There is no question that China remains the world's leading manufacturing economy. Indeed, while many point to rising wages in China as a sign that it has become less competitive, it is important to note that higher wages have been justified by higher productivity meaning China has continued to increase market share even as labour costs have risen. However, there are now two factors driving MNCs to re-assess their global manufacturing footprint.

1) Manufacturing supply concentration in China

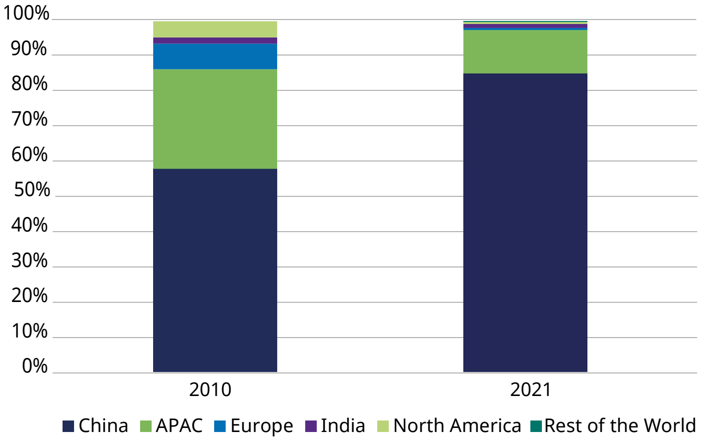
The Covid-19 pandemic raised questions over supply chain concentration. Lockdowns in China in 2020 marked the beginning of a multi-year period of supply chain disruption and bottlenecks which continue to unwind today.

Companies with all or the majority of their manufacturing in China had limited flexibility to shift manufacturing supply to other locations when restrictions impeded production and logistics. Questions were asked about the resilience of supply chains. This was not a question of quality or regulatory concerns, but one of supply concentration. In some respects, China had become a victim of its own success.

In general, companies reliant on one manufacturing location or economy for production are now re-assessing the resilience of their supply chains, whatever that country may be. But because China has become the dominant market for manufacturing it is now likely to be that country. This means that, in practice, diversification of supply chains is likely to mean diversifying at least partly away from China.

Take the production of photovoltaic, or solar, cells, for example. Data from the International Energy Association (IEA) shows that China's share in the various solar panel manufacturing stages now accounts for over 80% of global production (Figure 3). Meanwhile, China's share of global smartphone handset production was 67% in 2021, despite falling back from 74% in 2016, according to data from Counterpoint.

Figure 3: Photovoltaic cell manufacturing production by country/region



Source: IEA analysis based on BNEF (2022a), IEA PVPS, SPV Market Research, RTS Corporation and PV InfoLink.

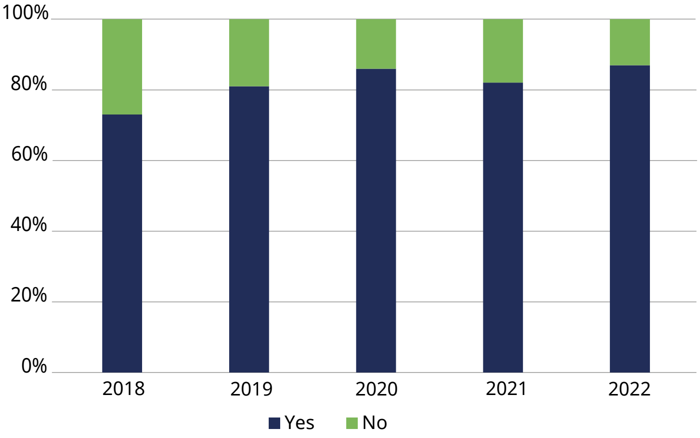
In response to the pandemic, many companies are asking this question, and evaluating whether to diversify their supply chains. So while in the past, cost and efficiency were prioritised, today resilience and reliability have moved up the pecking order.

2) Geopolitical tensions

Geopolitical tensions between the US and China predate the Covid pandemic. Relations between the two countries began to deteriorate under the Trump administration, when tariffs were imposed on imports from China. While there has been some engagement since President Biden came into office, long term strategic competition continues to manifest. This is particularly evident in the US approach to slow China's advance in technology.

The zero-Covid policy, and the impact on supply chains, had until more recently been one of the main concerns for MNCs. According to the 2022 US-China Business Council member survey, second on the list of concerns was deteriorating US-China relations. Notably, 87% of respondent companies had experienced impact from rising tensions between the US and China (Figure 4). And 78% of respondent companies have moved some segments of their supply chains out of China in the past 12 months. Covid-related shutdown and supply chain resilience were the top two reasons for the change. But around half of respondents cited higher costs or uncertainty stemming from geopolitical tensions.

Figure 4: Has your company's business with China been affected by US-China tensions



Source: US-China Business Council Member Survey 2022.

What are the supply chain priorities for multi-national companies today?

Predicting how firms will make decisions over the location of future supply chains is clearly complex and determined by a combination of factors. The lesson from the mass migration of production to China is that firms are attracted to countries that offer large pools of cheap labour. Structural reforms, tax incentives and trade deals to improve the business environment are clearly also attractive. Not only does this offer MNCs a chance to tap into an immediate source of low-cost workers, but it can also give access to long term growth markets. Destinations such as India clearly offer these opportunities in the same way that China did.

However, the rapidly changing global economic and political backdrop means that many other complex factors will also influence the decisions of MNCs. For example, in a more severe scenario, geopolitical concerns may encourage MNCs to exit Asia altogether. Or those producing goods considered crucial to national security may be forced to onshore facilities to reduce the risk of external interference in supply chains.

The energy transition is also a new consideration. Many emerging market (EM) economies suffer from power shortages that have the potential to curtail production, while the source of energy will also be an increasingly important consideration for firms in their supply chains. Developed markets have pressed ahead with carbon pricing, the cost of which is rising. In order to protect domestic firms from these additional costs, more countries are likely to follow the EU's lead of creating ways to tax goods produced in places that have high carbon emissions. As things stand, the Carbon Border Adjustment Mechanism (CBAM) is likely to severely penalise countries such as India that still rely heavily on fossil fuels to generate power.

The more that these additional factors drive the decision-making of firms rather than the basic inputs of cheap labour and friendly business environments, the less efficient supply chains will be. As we discuss in other work on the Regime Shift, one consequence of this is likely to be structurally higher long term inflation and interest rates.

Which economies might be beneficiaries of changes or diversification of supply chains?

Evaluating where to re-locate or diversify supply chains, regardless of the motivation, is extremely nuanced. Individual sectors and industries will have specific requirements pertinent responses to each. Some industries are more labour intensive, while others are becoming increasingly automated. Indeed, companies' responses to the economic regime shift are likely to be via investing in technology.

The scorecard below is an attempt to evaluate which economies have potential to be beneficiaries of this trend. It will not capture all of the nuance, but is a framework through which to assess the potential major beneficiaries.

We have used four factor inputs:

1) **Business Freedom**
– a gauge of the easing of doing business in an economy

2) **GDP per capita as a share of the US**
– a crude comparison of wage costs

3) **Five year average growth in total factory productivity**
– a measure of productivity. We used 2015-19 to remove the temporary impact of pandemic restrictions

4) **Five year ahead working age population**
– an indicator of the labour pool size

Across each factor, we rank for all 69 economies with equity market representation in the following indices. MSCI World Index, MSCI Emerging Markets Index, and the MSCI Frontier Index. We selected this universe because our focus is on the opportunities such as a shift may drive for stock market investors.

Table 1: The top 20 ranking economies

Rank	Country	Heritage Foundation: Business Freedom Ranking 2022	GDP per Capita as share US GDP	Growth of Total Factor Productivity 2015-19	Working Age Population 2028	Average
1	India	51	6	5	1	16
2	Vietnam	34	12	11	13	18
3	China	41	27	3	2	18
4	Poland	26	32	2	29	22
5	Thailand	52	19	6	16	23
6	South Korea	10	43	17	24	24
7	Bangladesh	64	7	15	8	24
8	Kenya	63	4	7	21	24
9	Germany	7	52	31	15	26
10	Romania	38	29	1	39	27
11	USA	5	63	36	3	27
12	Taiwan	13	46	18	32	27
13	Pakistan	67	3	34	5	27
14	Egypt	66	13	23	11	28
15	Czech Republic	22	38	9	45	29
16	Indonesia	46	15	49	4	29
17	Mexico	40	24	44	9	29
18	Lithuania	6	35	14	64	30
19	Kazakhstan	50	25	8	36	30
20	Hungary	28	31	13	48	30

Source: Schroders, Refinitv Datastream, Heritage Foundation, The Conference Board, as at 1 March 2023.

Perhaps not surprising, but it is worth acknowledging that the majority of the top 20 economies are EM economies. The scorecard suggests that India is the most attractive market for MNCs looking to diversify their manufacturing exposure. By 2028 it is forecast to offer the largest pool of working age labour. Other factors supporting its ranking are the relatively lower labour costs and relatively high productivity – albeit this is measured at the total economy level. Productivity for tradable sectors such as manufacturing is difficult to find, and likely to be weaker. However, India scores poorly on business freedom. The boxed section below includes a more detailed look at India.

Vietnam is the second ranked market. Relatively low wage costs, competitive productivity, and working-age population all make the economy an attractive destination, even if the business freedom ranking is less favourable. South Korea ranks well, underpinned by its business freedom ranking and productivity scores. Regional peers Thailand and Indonesia also feature, with wage costs and demographics supportive.

The frontier markets of Bangladesh, Kenya and Pakistan rank in the top 20 in large part due to their lower wage costs and favourable demographics.

Central and eastern European markets also feature in the top 20. These are led by Poland, but Germany, Romania, the Czech Republic, Lithuania and Hungary are also present. Productivity is an important driver of the ranking for most markets. Business freedom is also supportive.

Mexico, often cited in relation to nearshoring, ranks 17th. Competitive wages and demographics are its main supports.

Germany and the US also rank relatively highly, with high levels of business freedom making up for more expensive labour costs.

India: the top scorecard market

India has long offered promise for emerging market equity investors. It has particularly favourable demographics, and it is set to become the most populous country in the world this decade. Meanwhile, low investment in infrastructure means urbanisation has lagged both developed and many other emerging markets. Long term reforms aimed at changing this dynamic have potential to catalyse with the growing working age population to support relatively higher GDP growth for the coming decade or more.

Read more: [The case for a standalone allocation to India.]

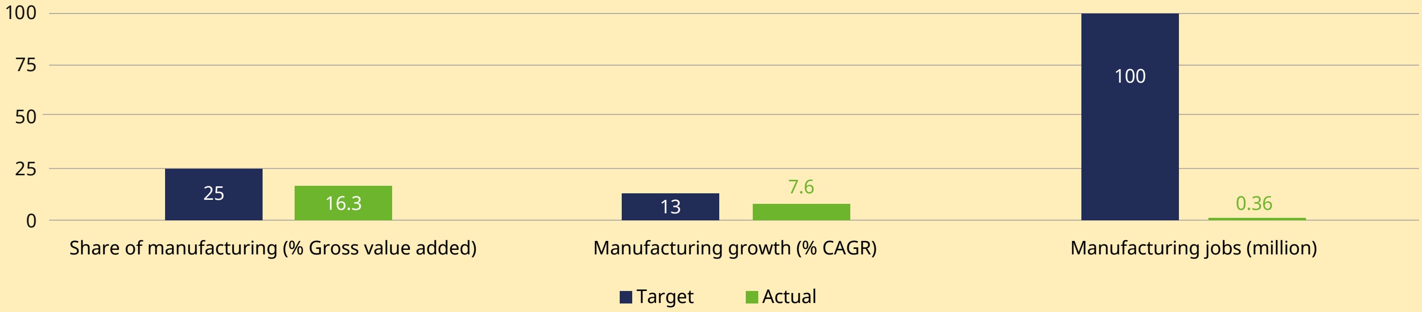
India ranks top of our scorecard, suggesting it may be one of the most attractive economies for MNCs to re-locate manufacturing to. The scorecard captures several of the factors discussed above. It ranks top for working-age population while labour costs are low. In fact, the only factor on which it falls down in the scorecard is business environment. Indeed, India is notable for bureaucracy at both a state and federal level. This is hardly a revelation though, and Prime Minister Modi's government has been a driving force for reform since his first election in 2014.

Close to a decade of policy reforms

The government has sought to address some of the challenges over the past nine years, such as through the Goods & Services Tax, introduced in 2017. The national Goods & Services Tax replaced a patchwork of state taxes for different goods, and indirect central government taxes, all of which would lead some supply chains to be taxed several times.

In terms of attracting manufacturing production though, the launch of the “Make in India” initiative in 2014 was perfectly aligned with such a goal. Its three main targets were to increase annual manufacturing sector growth to 12-14%, create 100 million manufacturing jobs by 2022, and to lift the manufacturing sector's contribution to GDP to 25% by 2022. Unfortunately, it has missed on all of its own objectives, and the deadline for the final goal has been extended to 2025.

Make in India – targets and achievements



Source: Make in India website; CEIC; SG Cross Asset Research/Economics. As at 15 February 2023.

This paints the quite a negative picture of what had, based on the scorecard rank, appeared promising. However, this is also a backward view and the world has changed significantly in the last few years.

Don't write India off as the next major global manufacturing hub

Various companies have been investing in manufacturing capabilities in India. Apple is among the most well known. Output from their Indian operations represents a tiny fraction of their production globally though and China continues to dominate. That said, the Indian share of iPhone assembly has tripled in the past year, now representing 7% of global iPhone production. It may take time for India to become a global manufacturing hub, but there are several good reasons why this has the potential to be achieved.

1) **MNCs new mindset** Covid has changed MNCs' mindsets, and logic to building a more diversified supply network appears to be more widely acknowledged.
2) **Geopolitics** If geopolitical tensions persist, or deteriorate, the need to diversify supply chains will become even more pressing.
3) **Pro-reform government** The government remains pro-reform and continues to deliver policy change that can improve the business environment, and serve to attract MNCs. For example, it has launched Production Linked Incentive (PLI) schemes in key sectors in an effort to create national manufacturing champions. Of course, this does not guarantee success, and tougher reforms such as land reform are yet to be achieved.

India's equity market prowess

In terms of investibility, India has a large equity market, comparable with South Korea in MSCI market cap terms. India is now the third largest market in the MSCI Emerging Markets Index, behind China and Taiwan. Accessibility is reasonable for foreign investors, and average daily liquidity ample for the large capitalisation companies in the MSCI India.

The domestic market is even larger, with a rich universe of small and medium-sized companies. Liquidity in larger companies is reasonable but deteriorates rapidly as you go down the size scale. Companies in MSCI indices are easily accessible to institutional investors although there are some caps in foreign ownership levels. The broader Indian market is harder to access independently but can be done so by investing with a local partner.

Any reference to stocks are for illustrative purposes only and not a recommendation to buy or sell any financial instrument/securities or adopt any investment strategy.

A comment on China's ranking

We've included China in the scorecard to compare its competitiveness with other countries. Its ranking of third highlights why it has proven so popular. Even though China may be set to lose its demographic crown for the largest population, and as its population begins to age, it will still have a very large working age population. And importantly, productivity remains extremely competitive.

GDP per capita as a share of the US has picked up from 12% in 2012 to over 19% in 2022. This is a function of China's high GDP growth rate over this period, more than offsetting the growth in population. As a proxy for wages, this illustrates that labour costs have increased, which is a drag on the scorecard rank. As we have already noted though, productivity has improved and China is one of the most competitive economies on this measure. The main drag on China's score is the business freedom rank.

Stepping back for a moment, both the scorecard output and economic theory serve as a reminder of China's dominant competitive position as a global manufacturing hub. Greater diversification of supply chains may make sense, even if it is not as economically efficient, but this is not a basis for MNCs to abandon China. Geopolitics is more complex and difficult to predict, but even so, and depending on the degree of any escalation in tensions, diversification may also be the solution for companies, rather than outright exit.

The impact could be more sector specific though, at least initially, with areas such as technology prioritised. A more severe scenario could see a shift to more regionalised supply chains. Further discussion on these scenarios can be found in this paper. What does US-China decoupling mean for emerging markets?

In summary, China is likely to remain the world's leading manufacturing hub for the foreseeable future, but if momentum in supply chain diversification builds, it may see its market share fall in the longer term.

The limitations of the scorecard approach

As we noted above, the priority factors will differ by company, sector, and industry. The scorecard takes a general approach and will not capture every variable that matters for every company. The scorecard uses forecast working-age population in five years' time. While this does capture the importance of demographics, it also builds in a natural bias towards economies with a larger population more generally.

The scorecard also mixes backward and forward looking data. While forecast working-age population, in the absence of war or a natural disaster, is reliable, there is no guarantee that backward looking trends persist. Past performance is not an indicator of future performance, which is applicable to total factor productivity, business ranking and GDP per capita as a share of the US.

As an example, we ran the scorecard as at 2013, and several markets which ranked in the top ten then have seen their ranking fall sharply. Take Nigeria, which ranked 4th in 2013. It has dropped to 40th in 2023. This is primarily due to a major deterioration in growth of total factor productivity, although it has also fallen down the rankings for business freedom and labour costs. Only on its demographics has it moved up the leader board. Another, Tunisia, which ranked 11th in 2013, has plummeted to 58th, amid a sharp decline in the business environment.

There are other obstacles to overcome, and which are not accounted for in the scorecard, such as a country's topography and geography, and favourable demographics alone are not sufficient. Take Mexico, for example, where its proximity to the US is not captured in its ranking.

On the other hand, some markets have seen their score improve quite significantly. Poland, which ranked 27th in 2013, has jumped to 4th. A dramatic improvement in the business environment, relatively better productivity and demographics have all contributed. Fellow Eastern European economies, the Czech Republic, Lithuania and Hungary have also seen significant improvement, with a better business environment and productivity also supportive.

Climate risk is another measure not captured by the scorecard. As XDI's **Gross Domestic Climate Risk research** illustrates, a number of markets highlighted by the scorecard also face high risk from climate change, particularly India.

One other market worth commenting on is Turkey, which ranks 34th. Demographics and wage costs are competitive, but these are more than offset by a poor business environment (which has deteriorated since 2013) and productivity scores. Economic policy in recent years has been unconventional at best and the country faces various macroeconomic challenges. A change in the policy approach could improve the outlook quite considerably. Turkey is geographically well positioned, located on the border of the large European market, and with a competitive manufacturing sector, and a range of well managed companies. Manufacturing value added as a share of GDP rose to 22% in 2021, its highest level since the 1990s, but still below the level seen in economies such as China (27%), South Korea (25%) or Vietnam (24%).

What approaches to supply chain re-orientation might MNCs take?

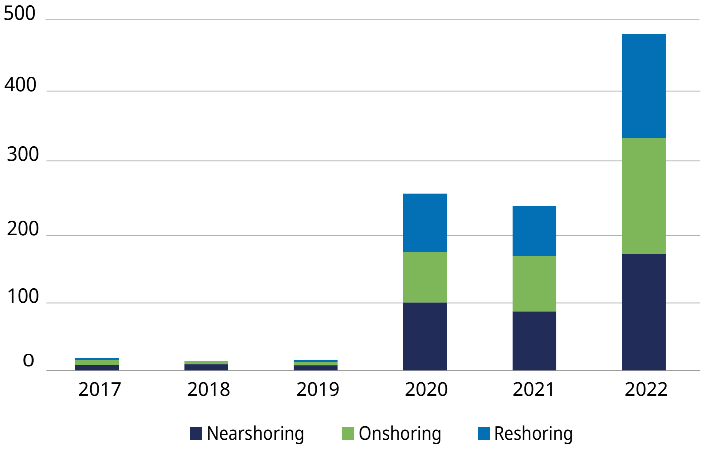
A further complication to the story is that MNCs will probably be reluctant to abandon operations in China altogether, for several reasons. For a start, as we have seen in the wake of aggressive sanctions on Russia, MNCs exiting China would have to write-off investments in productive capacity and increase spending in order to build new facilities elsewhere. China's highly efficient workforce and infrastructure suggests that new supply chains may be less cost-effective, eroding profit margins. Moreover, MNCs that announce a full withdrawal from China could face disruption to operations and lose access to the Chinese market in the long term.

As a result, MNCs may opt for a China+1 strategy, or to regionalise supply chains around major economic hubs of Asia, Europe and North America. Sectors such as the car industry are already highly regionalised, without any obvious impact on prices and more sectors are likely to follow. For example, semiconductor manufacturers have announced more regional production. However, not all industries are suited to regionalised supply chains, notably those that produce homogenous products which benefit most from economies of scale. As such, it seems likely that any subsequent reorganisation of supply chains will begin to unpick some of the gains of globalisation. That is, production is likely to become more costly, putting upward pressure on structural inflation and interest rates, while dragging on economic growth.

What is the evidence of supply chain re-wiring so far?

Supply chain re-orientation as a theme has been gathering momentum in recent years. Indeed, there are articles on nearshoring almost daily in the press. Companies' concerns over supply chains is evident in the number of mentions of related terms in corporate earnings reports. There are also more tangible signs of supply chain changes, even if these may only be small steps in a broader context.

Figure 5: Mentions of key terms in corporate reports



Source: Schroders IIU, 31 March 2023.

Company announcements provide evidence of changing supply chains. One of the most cited examples is Apple's move to diversify supply of its iPhones and iPads, reducing reliance on China. A proportion of iPad production now takes place in Vietnam while some iPhones are manufactured in India. However, this is only a small share of Apple's total global production of these products and China may well remain the key manufacturing market for the foreseeable future. Not least because of capacity constraints, but also as China remains the leading manufacturing market globally.

The technology sector, specifically semiconductors, is one area which is intrinsically linked to geopolitics. Long term strategic competition between the US and China is likely to persist and technology is one area in which this manifests most clearly. The US has increasingly taken steps to constrain China's access to leading edge technology, primarily through measures to limit certain technology exports to China. Another concern for the US is the concentration of semiconductor production in China and East Asia. As of 2019, analysis from BCG estimated that 75% of global wafer (the base onto which integrated circuits are implanted to make a chip) capacity was in the region. All of the advanced chips production capacity was located in Taiwan and South Korea. So while the US remains among the leading research and designers of chips, this is not reflected in manufacturing.

Given this strategic risk, the US, initially under the Trump administration and expanded under the Biden administration, encouraged the world's largest chip manufacturer, TSMC, to build a plant in the US. These plans now include two factories, with a total investment of $40 billion, with the first opening in 2024. Meanwhile, US policy via the Inflation Reduction Act is also attracting new manufacturing investment in some industries. For example, the act requires that 40% of electric vehicle (EV) battery components are sourced from the US or partners with which its has a free trade agreement. Mexico is a notable beneficiary here, with Tesla having recently announced plans to build a Gigafactory in Nuevo Leon, Mexico. Other EV manufacturers such as GM and BMW have also announced plans to invest in EV factories in Mexico. It is important to distinguish this new capital investment from existing production facilities. EV battery production is not leaving another economy, and once other investment plans are published, it may simply be a continuation of the regionalised production approach that the car industry already takes.

What to watch to monitor nearshoring?

It is clearly difficult to monitor the diversification of supply chains in real time, not least because it is likely to happen at glacial speeds over many years. However, it will be important for investors to try and gauge which markets will be the winners and losers. There is likely to be a sequence of events that begins with firms making public announcements of new production facilities, to making the investments and then bringing new production online. We can attempt to monitor these developments first through natural language processing of corporate communications coupled with anecdotal media reports. Investment flows can be tracked at the macroeconomic levels through quarterly FDI inflows. And the eventual increase in output can be tracked over time by studying monthly trends in country shares of the global goods export market and using the production breakdown of quarterly national accounts to track manufacturing as a share of GDP. Those economies benefitting from the reorganisation of supply chains should ultimately see manufacturing increase as a share of total output and gain market share at the expense of others – particularly China.

Why winning economies may not equal winning equity markets

There is a common belief that strong GDP growth in an economy will lead to strong growth in equity market returns. However, relatively stronger GDP growth is not guaranteed to flow through to earnings per share growth and equity market performance. The loose connection between GDP growth and earnings is a subject we have reviewed previously.

Firstly, valuations may already reflect future expectations. If investors anticipate stronger growth the share prices will rise as these better prospects become priced-in. If it's already in the price this won't lead to better returns in the future. Another reason, particularly relevant in emerging markets, may relate to data quality and issues with the measurement of GDP. Corporate profits as a share of GDP can differ over time. Importantly, the sector make-up of the economy and equity market can differ. Again, particularly relevant for emerging markets, is a greater volume of equity issuance can dilute earnings per share growth.

Having identified which markets may offer opportunities, which areas may these be in?

The top 20 economies capture an array of equity markets. These range from developed through to emerging and frontier. As such, the sector, industry and stock opportunities differ quite widely. Some are large markets while others only include a handful of companies. Dissecting these markets by sector (Figure 6) provides an illustration of the range of, or lack of, opportunities in each market.

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Figure 6: the top 20 markets by sector

	Energy	Materials	Industrials	Consumer discretionary	Consumer staples	Health care	Financials	IT	Communication services	Utilities	Real estate
India	12%	9%	5%	10%	10%	5%	26%	16%	3%	4%	1%
Vietnam	1%	14%	4%	0%	25%	0%	24%	0%	0%	3%	30%
China	3%	4%	6%	29%	6%	6%	16%	6%	20%	3%	3%
Poland	20%	9%	-	14%	9%	-	39%	-	6%	3%	-
Korea	1%	9%	10%	9%	3%	5%	9%	46%	7%	0%	-
Thailand	1%	9%	10%	9%	3%	5%	9%	46%	7%	0%	-
Bangladesh	0%	0%	20%	0%	16%	47%	0%	0%	13%	3%	0%
Kenya	0%	0%	0%	0%	16%	0%	29%	0%	55%	0%	0%
Germany	-	7%	19%	17%	3%	11%	18%	13%	6%	4%	2%
Romania	48%	0%	0%	0%	0%	0%	52%	0%	0%	0%	0%
USA	5%	3%	9%	11%	7%	14%	12%	28%	8%	3%	3%
Taiwan	0%	6%	3%	2%	2%	0%	14%	69%	2%	-	-
Pakistan	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Egypt	-	-	-	-	11%	-	89%	-	-	-	-
Czech Republic	-	-	-	-	-	-	34%	-	-	66%	-
Indonesia	5%	9%	-	7%	9%	2%	57%	-	11%	-	-
Mexico	-	15%	11%	-	35%	-	17%	-	19%	-	3%
Lithuania	0%	0%	0%	0%	0%	0%	0%	0%	24%	76%	0%
Kazakhstan	28%	0%	0%	0%	0%	0%	72%	0%	0%	0%	0%
Hungary	24%	-	-	-	-	23%	53%	-	-	-	-

Source: Refinitiv Datastream, Schroders Strategic Research Unit, 28 February 2023.

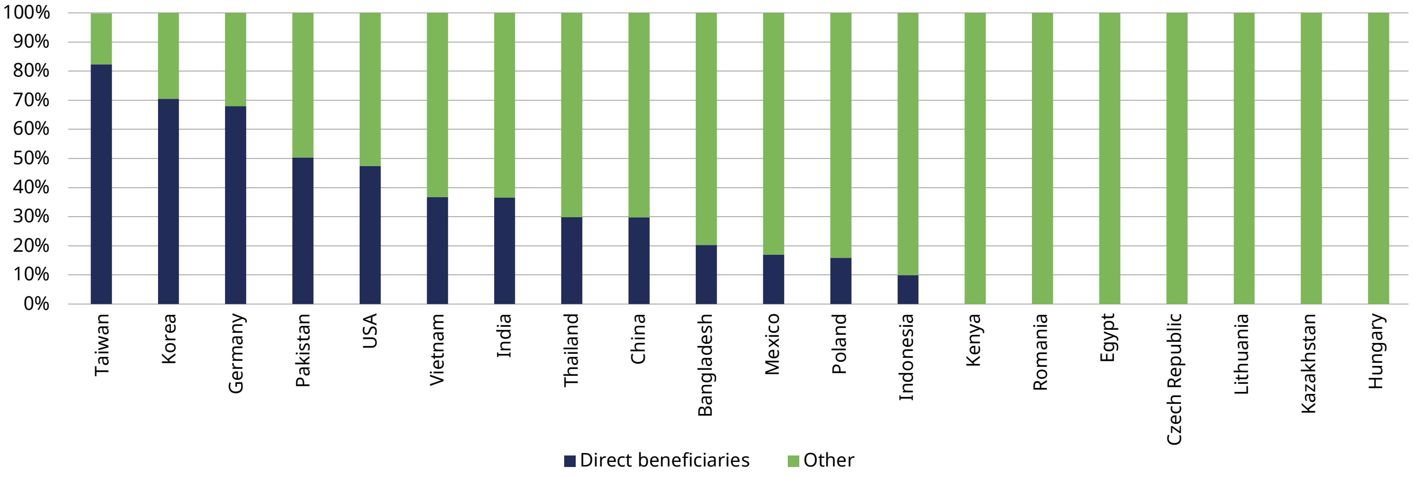
This next chart in Figure 7 shows the composition of the top 20 equity markets, as identified by the scorecard. Using MSCI GICS industry classifications, we have identified those which are likely to benefit most directly from supply chain re-wiring or de-globalisation. In a nutshell, these are industries which have potential to be direct beneficiaries of new manufacturing investment in their domestic economy.

For example, manufacturing companies have the potential to benefit from new export orders. Companies in the construction materials industry have a good chance of experiencing a rise in demand as new production plants are needed. Paper and forest product producers may see a rise in demand from the need for packaging for manufactured products.

Meanwhile, other companies in these equity markets should also benefit through second order or indirect effects. For example, new manufacturing has potential to provide greater employment for the local population, boosting incomes and spending power. This would support domestic consumption, including industries such as food & staples retailing or entertainment. Rising domestic wealth is of course an important medium term growth driver. Indeed, it is possible that the theme could form the basis of a multi-year growth story. After all, a key driver of the so called Asian Tiger economies in the 1990s (Singapore, Hong Kong, South Korea and Taiwan) was exports. While these companies may not be present in all of the equity markets in figure 6, other more domestic oriented stocks could form the 'picks and shovels' of this theme.

The best case outcome is that raising manufacturing as percentage of GDP transforms economies like India from being supply-constrained, meaning that interest rates and inflation are structurally lower, improved structural external positions mean structurally stronger currencies, tighter credit spreads etc.

Figure 7: Share of industries with potential to benefit directly in each of top 20 markets



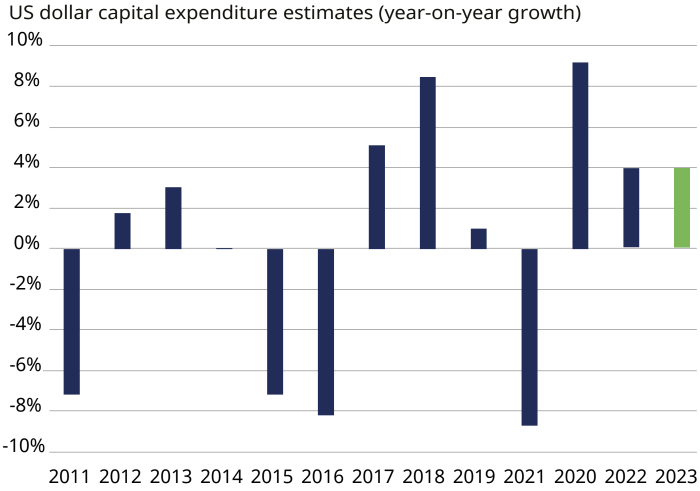
Source: Refinitiv Datastream, Schroders, as at 28 February 2023.
Based on market capitalisation using MSCI GICS industry classification.

As we noted earlier, this prospective re-wiring of global supply chains is likely to be long term, multi-year process. This could therefore provide scope for additional opportunities in the primary market, via initial public offerings (IPOs). Many of these markets have a deeper equity market than that represented in the large capitalisation focused MSCI indices which we have used. There is merit in this approach, as we explain below, given liquidity constraints etc. However, as economies benefit from supply chain diversification, small and midcaps could see changes in liquidity, accessibility, and size, potentially leading to their index inclusion. India is a notable example with a broader equity market than the MSCI India alone.

Of the markets in figure 7, Taiwan has the greatest equity market share of beneficiaries. But in practice, for MNCs changing supply chains due to geopolitical concerns, Taiwan will not be the solution for most. South Korea also has a large share of direct equity market beneficiaries, given its deep manufacturing base and with a reasonably sizeable representation in the equity market. It is a similar picture in the US and Germany.

The opportunities in developed markets (DM) will differ however, owing to economic specifics. While the business environment may be supportive, and productivity competitive, wages are higher. As a result, opportunities in these markets may be more likely to come in areas with potential for greater automation, as opposed more labour intensive manufacturing. This includes the use of data and analytics to improve productivity, and advanced robotics. There is some evidence that this may be coming through, as this proprietary capital expenditure tracker from Schroders' global equity team highlights (Figure 8). Despite the global downturn, corporate capital expenditure is holding up, with 4% growth forecast this year. This captures spend on physical assets such as plants, machinery and technology. The tracker consolidates individual company capital expenditure estimates for thousands of listed companies globally, across a variety of different sectors.

Figure 8: Global corporate capital expenditure



Source: Schroders, as at March 2023.

Which equity markets might benefit as a result?

When generating the scorecard, we selected economies which had equity market inclusion in the MSCI All Country World, MSCI Emerging Markets and MSCI Frontier Markets indices. This captures a broad set of economies with a recognised equity market for international investors.

The distinction between developed, emerging, and frontier markets is driven by MSCI's assessment of a market's degree of accessibility to foreign investors. For more granular detail, please see MSCI's Global Market Accessibility Review. In short, it covers i) openness of a market to foreign ownership, ii) ease of capital inflows and outflows, iii) operational framework efficiency, iv) availability of investment instruments, and v) institutional framework stability.

One could also consider the MSCI investable market indices. These cover 99% of the free-float market capitalisation for each market and so include all investable larger cap, mid cap and small cap stocks. This is in contrast to the standard indices which capture 85% of the free-float market capitalisation. It is possible that this could capture further beneficiaries of supply chain diversification. Smaller and medium sized domestic companies may form part of local supply chains and benefit from the MNC investment. However, liquidity (which we discuss later) typically tapers off the further into small cap and the further into frontier markets one moves. So caution is warranted.

Are these markets suitable for global investors to capture this theme?

For foreign investors there are a number of important factors to consider when assessing a market's suitability. Access restrictions, liquidity, size, and diversification potential.

Access restrictions

Firstly, and a key characteristic when investing in emerging and frontier markets in particular, is market access. Hurdles in market accessibility exist in various forms. In some cases these relate to currency conversion issues, differences in clearing and settlement structures, or simply the timely availability of company information in English. However, in this case we focus on foreign ownership restrictions.

Foreign investors face restrictions in certain stocks or sectors considered strategic in various global equity markets. The US for example prohibits foreign investors from holding more than 25% ownership in airlines. The impact is extremely limited though as passenger airlines represent a tiny proportion of the MSCI USA. For certain emerging and frontier markets though, this can limit investors ability to invest in some areas of the index when the foreign ownership limit has been reached.

The table below summarises foreign investor restrictions for the top 20 markets. As we noted above, some of these limits are stock or sector specific and the actual impact is small. For example, Thailand imposes a 49% foreign ownership limit on all industrial stocks, but foreign investors can access the market via non-voting depository receipts. In this scenario, we categorise foreign ownership restrictions as "soft". In certain cases, these pose more of an issue and are more difficult to overcome, and we deem these "hard" restrictions.

Vietnam is the most prominent market with foreign ownership restrictions. These affect over 10% of the market. In China, foreign ownership restrictions impact Hong Kong-listed Chinese companies, and mainland listed A-shares (which form 16% of the MSCI China index, as at 31 March 2023). In the latter, the foreign ownership limit is 30%. The proportion of the market affected is lower than in Vietnam, albeit the absolute number of stocks is higher given the market's size.

To be clear, foreign ownership restrictions do not prohibit investment in Vietnam or China. However, they remain a hurdle in terms of complicating decision making, and at times can limit access to certain areas of the market.

Table 2: Summary market access, liquidity and nearshoring beneficiaries

	Foreign Ownership restrictions		Weighted 6m Average Daily Volume ($ million)	Number of direct beneficiaries	% of constituents direct beneficaries	Number of stocks in index	MSCI market cap ($ million)
	Hard	Soft/none					
USA		x	2617.7	300	52%	626	35,271,533
China	x		334.1	352	47%	711	2,046,004
Germany		x	112.6	37	68%	59	1,276,794
Taiwan		x	280.2	62	82%	88	972,274
India		x	66.8	47	37%	114	845,847
South Korea		x	233.3	54	75%	103	749,435
Mexico		x	29.6	7	17%	23	168,344
Thailand		x	31.1	10	30%	42	133,678
Indonesia		x	30.6	4	10%	21	121,983
Poland		x	16.2	2	16%	14	46,852
Vietnam	x		7.6	9	37%	22	19,399
Hungary		x	9.0	0	0%	3	12,871
Czech Republic		x	9.3	0	0%	3	11,387
Kazakhstan		x	2.4	0	0%	3	6,506
Egypt		x	9.3	0	0%	3	5,520
Romania		x	1.2	0	0%	4	5,452
Kenya		x	0.8	0	0%	3	3,765
Bangladesh		x	1.1	1	20%	7	3,269
Lithuania		x	0.2	0	0%	2	610
Pakistan		x	1.1	1	50%	2	358

🟪 Developed market

🟩 Emerging market

🟨 Frontier market

MSCI market cap is float adjusted.
Source: Schroders, Refinitiv Datastream, as at 28 February 2023.

Liquidity

Liquidity addresses the ease with which investors can buy or sell stock, without driving a material change in the underlying price. We measure this in terms of six-month daily average volume for the market, weighted by stock market capitalisation. As we noted above, as a rule of thumb, liquidity tends to decrease as the market capitalisation falls, and as one moves from developed markets, into emerging markets and finally into frontiers.

Looking at the top 20 markets from the scorecard, it is clear how liquidity falls as the size of the market in terms of capitalisation decreases. The US is the largest and most liquid market, while liquidity in general falls as market capitalisation decreases. Developed markets are more liquid than emerging, which in general are more liquid than frontier. The markets with the lowest liquidity in the top 20 ranked economies are found in frontier, with Lithuania particularly low.

While this is an important factor to highlight, any prospective re-wiring of supply chains will be multi-year, and a long term theme from an investment perspective. So while a number of these markets may not lend themselves to tactical, or short term, positioning, it does not prohibit longer term holdings.

Size

As we note above, liquidity tends to decrease as market capitalisation falls. Size is an important factor to be aware of at the stock level, but also at the market level.

There are a number of economies which rank in the top 20 on a scorecard basis, but which have only a handful of individual stocks. This limits the ability of investors to build a diversified portfolio in a market. It does not preclude them as an investment opportunity as part of a broader allocation, such as that captured by emerging markets of frontier markets investments.

Correlations

A full correlation matrix covering the top 20 markets is provided in the appendix. This uses data from 30 December 2009 to 28 February 2023. At first glance, some of the smaller, less liquid markets such as Bangladesh and Pakistan stand out when compared to most other markets included in the analysis. Pakistan is a two stock market, and so heavily influenced by stock specifics, while both are among the least liquid equity markets in the top 20. Diversification potential comes with other baggage.

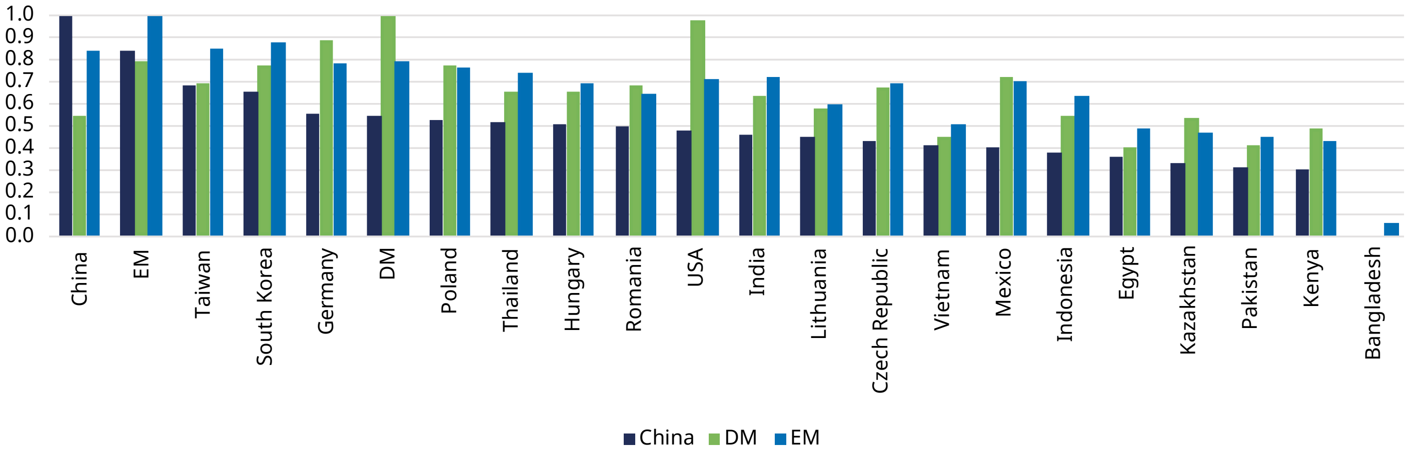
When compared with developed markets, Vietnam stands out with a correlation of 0.44. Other, generally smaller markets with a low correlation include Pakistan, Egypt and Bangladesh. When compared with emerging markets, it is a similar picture.

Looking at correlation versus China, the data is more nuanced. While other regional markets such as South Korea and Taiwan have a higher correlation, various others do not. Within Asia, Vietnam and Indonesia have low correlations with China. Elsewhere, Mexico, and to some extent India also have a low correlation with China.

It is important to acknowledge that since the global financial crisis, correlations of markets more broadly have increased.

Overall, correlation will be somewhat perspective dependent, in that the composition of an investor's wider portfolio is key. For example for investors who have added a standalone exposure to China in recent years, gaining exposure to markets which have a lower correlation to Chinese equities may be beneficial. These are the markets to the right side of Figure 9.

Figure 9: Top 20 market correlations versus China, and DM



Correlation from 30 December 2009.
Source: Refinitiv Datastream, Schroders, 28 February 2023.

Who are the potential winning markets?

The largest proportion of beneficiaries are in EM, as figure 10 shows. It is not all EM though, and the opportunities differ by market. In DM, opportunities may be more smart manufacturing related, centred around the intersection of manufacturing and technology. By contrast, opportunities in EM and Vietnam may be more labour intensive manufacturing.

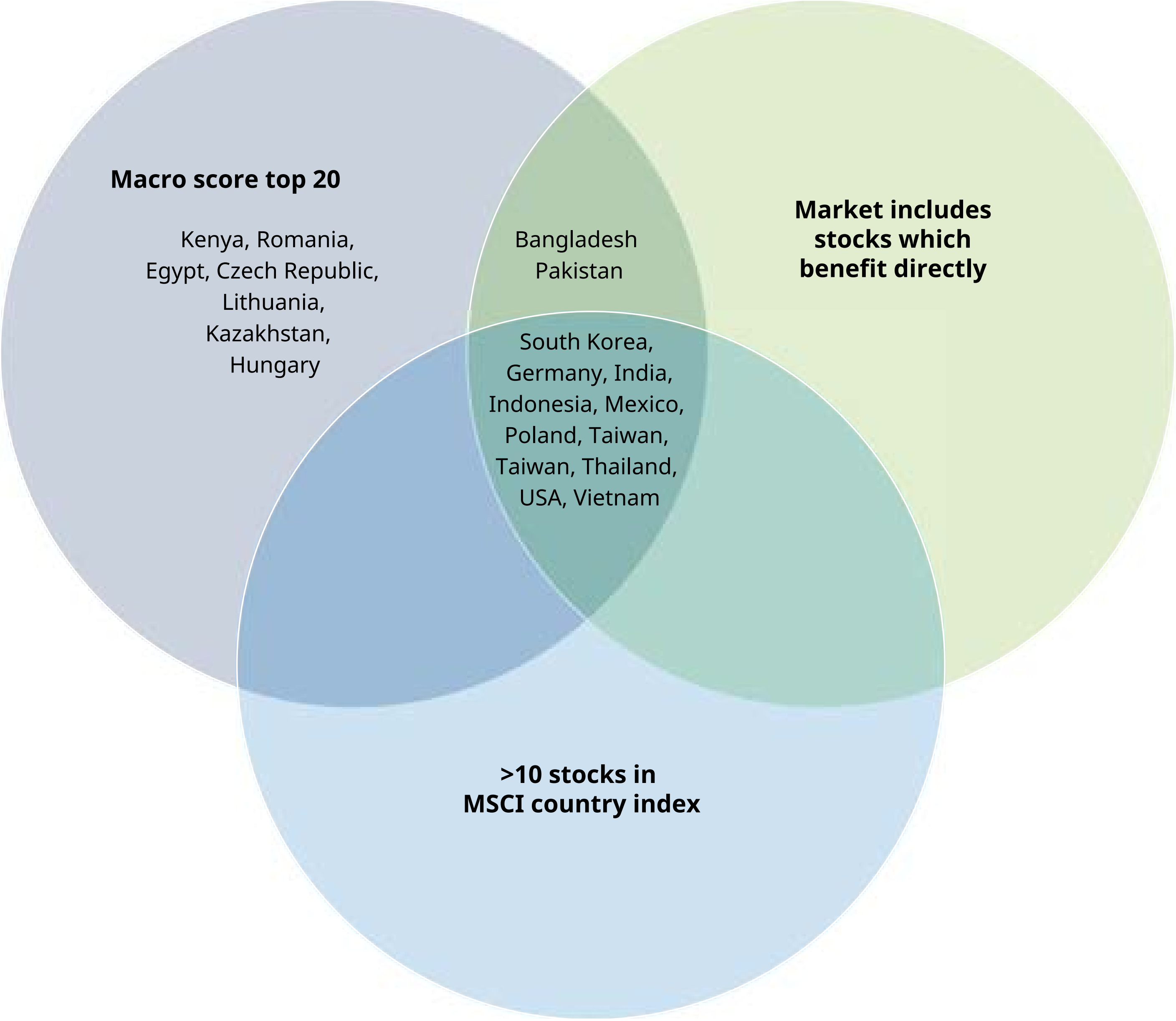
It should be noted that if China were included in this diagram, it would feature in that centre segment. This emphasises China's continued attractiveness as a manufacturing destination, even if some MNCs may be motivated to reduce their reliance on China.

Figure 10 highlights the stock markets which stand to benefit in terms of:

- a top 20 ranking in our economic assessment
- stocks which are potential beneficiaries
- ability to build a semi-diversified strategy: more than 10 stocks in an index

Those in the sweet spot are South Korea, Germany, India, Indonesia, Mexico, Poland, Taiwan, Thailand, USA and Vietnam.

Figure 10: The winning markets



Macro score top 20
Kenya, Romania, Egypt, Czech Republic, Lithuania, Kazakhstan, Hungary
Bangladesh Pakistan
Market includes stocks which benefit directly
South Korea, Germany, India, Indonesia, Mexico, Poland, Taiwan, Taiwan, Thailand, USA, Vietnam
>10 stocks in MSCI country index

Source: Schroders, April 2023.

How to capture these potential opportunities?

The re-wiring of globalisation is a theme which active managers within the EM space should be well placed to capture. The majority of markets flagged as winners are EM, and at least in theory, an active approach can be deployed to closely analyse and filter the stocks related to this theme. This also provides the ability to move off-benchmark within a country where opportunities outside of standard benchmark indices present. In addition, there is potential to move off-benchmark and add relevant exposure in frontier, in this case Vietnam. Whilst the industry mapping may make sense, there will be stock specific factors and valuations to be mindful of too. There has been some hype around this theme and the risk is that some stock prices already price-in the future opportunity.

Read more: **For more on valuations, read our latest EM Lens.**

This is one area in particular where active stock picking has potential to add value: assessing those companies with favourable prospects (based on but not limited to this trend) wherever they happen to be listed, and doing so in a well-diversified way that takes account of liquidity and access constraints. Appropriate flexibility to look beyond the benchmark will also be important, for example towards smaller and medium-sized companies, and also to frontier markets like Vietnam.

De-globalisation appears set to be a long term, multi-year theme. There will be significant nuance in terms of the impact on different countries, sectors, industries and stocks. Our research provides a framework starting point for investors to understand some of this detail, and further work is warranted. Importantly, it does not signal a peak in China's economy, as its ranking in our scorecard emphasises. What is clear though, is that regime shift heralds change in the global economy, and this will have ramifications for economies and markets.

Appendix

Full macroeconomic scorecard and country ranking

Rank	Country	Heritage Foundation: Business Freedom Ranking 2022	GDP per Capita as share US GDP	Growth of Total Factor Productivity 2015-19	Working Age Population 2028	Average
1	India	51	6	5	1	16
2	Vietnam	34	12	11	13	18
3	China	41	27	3	2	18
4	Poland	26	32	2	29	22
5	Thailand	52	19	6	16	23
6	Korea	10	43	17	24	24
7	Bangladesh	64	7	15	8	24
8	Kenya	63	4	7	21	24
9	Germany	7	52	31	15	26
10	Romania	38	29	1	39	27
11	USA	5	63	36	3	27
12	Taiwan	13	46	18	32	27
13	Pakistan	67	3	34	5	27
14	Egypt	66	13	23	11	28
15	Czech Republic	22	38	9	45	29
16	Indonesia	46	15	49	4	29
17	Mexico	40	24	44	9	29
18	Lithuania	6	35	14	64	30
19	Kazakhstan	50	25	8	36	30
20	Hungary	28	31	13	48	30
21	Morocco	49	11	33	27	30
22	Malaysia	45	26	22	28	30
23	Colombia	41	16	42	22	30
24	Philippines	55	9	48	10	31
25	Spain	31	40	27	25	31
26	Japan	27	45	41	12	31
27	United Kingdom	24	50	35	17	32
28	Turkey	52	23	37	14	32
29	Estonia	9	41	10	68	32
30	France	19	48	45	18	33
31	Chile	29	28	38	35	33
32	Slovenia	23	42	4	65	34
33	Italy	33	44	39	20	34
34	Croatia	36	30	12	62	35
35	Denmark	2	60	24	56	36
36	Portugal	29	36	30	47	36
37	Brazil	54	20	62	6	36
38	South Africa	47	17	60	19	36
39	Mauritius	37	21	20	67	36
40	Nigeria	69	5	64	7	36
41	Greece	39	33	28	46	37
42	New Zealand	20	49	25	53	37
43	United Arab Emirates	35	51	21	41	37
44	Peru	48	18	52	30	37
45	Netherlands	4	58	50	37	37
46	Australia	11	61	46	31	37

Rank	Country	Heritage Foundation: Business Freedom Ranking 2022	GDP per Capita as share US GDP	Growth of Total Factor Productivity 2015-19	Working Age Population 2028	Average
47	Finland	3	55	32	60	38
48	Jordan	57	14	40	42	38
49	Israel	21	57	26	49	38
50	Sweden	11	69	29	44	38
51	Canada	25	59	47	23	39
52	Senegal	61	2	55	38	39
53	Serbia	32	22	53	54	40
54	Burkina Faso	68	1	59	33	40
55	Sri Lanka	59	8	61	34	41
56	Hong Kong SAR	41	53	16	52	41
57	Iceland	15	62	19	69	41
58	Tunisia	62	10	54	40	42
59	Belgium	17	54	56	43	43
60	Switzerland	13	66	43	50	43
61	Saudi Arabia	44	37	65	26	43
62	Austria	18	56	51	51	44
63	Norway	1	67	58	57	46
64	Singapore	16	64	57	55	48
65	Ireland	7	68	67	58	50
66	Oman	60	34	66	59	55
67	Bahrain	56	39	63	66	56
68	Kuwait	65	47	68	61	60
69	Qatar	58	65	69	63	64

Source: Schroders, Refinitv Datastream, Heritage Foundation, The Conference Board, as at 1 March 2023.

Full correlation matrix for top 20 ranked markets

	India	Vietnam	China	Poland	Thailand	Korea	Bangladesh	Kenya	Germany	Romania	USA	Taiwan	Pakistan	Egypt	Czech Republic	Indonesia	Mexico	Lithuania	Kazakhstan	Hungary	DM	EM
India	1.00																					
Vietnam	0.46	1.00																				
China	0.45	0.40	1.00																			
Poland	0.60	0.32	0.52	1.00																		
Thailand	0.61	0.36	0.51	0.63	1.00																	
Korea	0.60	0.43	0.65	0.72	0.65	1.00																
Bangladesh	0.11	0.27	0.00	0.09	0.09	0.08	1.00															
Kenya	0.39	0.35	0.29	0.37	0.36	0.38	0.10	1.00														
Germany	0.63	0.41	0.55	0.81	0.64	0.77	0.00	0.42	1.00													
Romania	0.47	0.43	0.49	0.69	0.48	0.59	0.12	0.36	0.67	1.00												
USA	0.58	0.43	0.47	0.69	0.58	0.70	0.01	0.47	0.82	0.61	1.00											
Taiwan	0.61	0.43	0.68	0.63	0.58	0.81	0.04	0.35	0.67	0.54	0.64	1.00										
Pakistan	0.40	0.38	0.30	0.32	0.34	0.37	0.15	0.30	0.39	0.31	0.39	0.36	1.00									
Egypt	0.47	0.33	0.35	0.42	0.38	0.39	0.14	0.37	0.41	0.36	0.35	0.39	0.37	1.00								
Czech Republic	0.57	0.41	0.42	0.76	0.58	0.65	0.16	0.39	0.70	0.65	0.58	0.57	0.27	0.41	1.00							
Indonesia	0.62	0.35	0.37	0.48	0.67	0.52	0.09	0.33	0.49	0.31	0.51	0.47	0.36	0.37	0.53	1.00						
Mexico	0.59	0.39	0.39	0.68	0.64	0.67	0.01	0.37	0.71	0.53	0.67	0.57	0.30	0.36	0.64	0.53	1.00					
Lithuania	0.48	0.42	0.44	0.61	0.47	0.48	0.19	0.41	0.58	0.61	0.52	0.53	0.41	0.41	0.56	0.41	0.52	1.00				
Kazakhstan	0.36	0.33	0.32	0.41	0.34	0.41	0.06	0.35	0.47	0.43	0.53	0.41	0.27	0.30	0.36	0.35	0.38	0.37	1.00			
Hungary	0.57	0.35	0.50	0.76	0.51	0.60	-0.01	0.41	0.70	0.65	0.57	0.54	0.35	0.35	0.65	0.46	0.57	0.56	0.42	1.00		
DM	0.63	0.44	0.54	0.77	0.65	0.77	0.00	0.48	0.89	0.68	0.98	0.69	0.40	0.39	0.67	0.54	0.72	0.57	0.53	0.65	1.00	
EM	0.72	0.50	0.84	0.76	0.74	0.88	0.04	0.42	0.78	0.64	0.71	0.85	0.44	0.48	0.69	0.63	0.70	0.59	0.46	0.69	0.79	1.00

Correlation from 30 December 2009.Source: Refinitiv Datastream, Schroders, 28 February 2023.

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