The Russell Group Global Ranking of Countries: Risks and Opportunities in the $74 Trillion Global Economy

29th March 2018

Russell

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According to the latest data on Global GDP released by the World Bank this February, the USA is still the world's biggest economy – by far. The United States (24.3%) generates almost a quarter of global GDP and is almost 10 percentage points ahead of China (14.8%), in second place.

A visualization from *HowMuch.net* breaks the figures down to show the relative share of the global economy for each country. The full circle, known as a Voronoi Diagram, represents the entirety of the $74 trillion global economy in nominal terms. Meanwhile, each country's segment is sized accordingly to their percentage of global GDP output.

The movement of goods and services, finance, and people has reached previously unimagined levels. Global flows are creating new degrees of connectedness among economies—and playing an ever-larger role in determining the fate of nations, companies, and individuals. To be unconnected is to fall behind.

Global Goods Flow

According to the *McKinsey Global Institute* (MGI) report, *Digital Globalization: The new era of Global Flows*: "The world is more connected than ever, but the nature of its connections has changed in a fundamental way. The amount of cross-border bandwidth that is used has grown 45 times larger since 2005. It is projected to increase by an additional nine times over the next five years as flows of information, searches, communication, video, transactions, and intra-company traffic continue to surge. Approximately 12 per cent of the global goods trade is conducted via international e-commerce. Even the smallest enterprises can be born global: 86 per cent of tech-based start-ups surveyed by MGI report some type of cross-border activity. Today, even the smallest firms can compete with the largest multinationals."

In this white paper, we pose the question: which nation states and regions in our top ten GDP ranking of countries are exposed to different risk across different sectors? The US, a post-Brexit UK, China or India to highlight just a few potential examples? We also cross-reference each individual country against their ranking in the most recent (2016) MGI Connectedness Index.

Top Ten Ranking (GDP in brackets)

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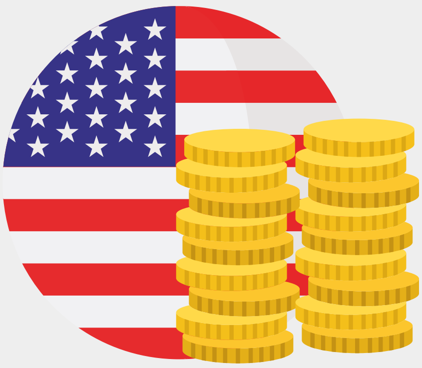
1. United States ($18.03 trillion)
2. China ($11 trillion)
3. Japan ($4.38 trillion)
4. Germany ($3.36 trillion)
5. UK ($2.86 trillion)
6. France ($2.42 trillion)
7. India ($2,09 trillion)
8. Italy ($1.82 trillion)
9. Brazil ($1.77 trillion)
10. Canada ($1.55 trillion

Risks by Country

Taking the list above of top ten global economic powers we have analysed each one individually to present our findings on their top risk and opportunity in 2018.



1. United States ($18.03 trillion)

MGI Connectedness Index Rank 3 Score 52.7

Risk: Protectionism

A group of 11 nations — including major United States allies like Japan, Canada and Australia — recently signed a broad trade deal in Chile's capital, Santiago, that challenges the current U.S. protectionist thinking as a zero-sum game filled with winners and losers.

Covering 500 million people on either side of the Pacific Ocean, the pact represents a new vision for global trade as the United States imposes steel and aluminium tariffs on even some of its closest friends.

Mr Trump withdrew the United States from an earlier version of the agreement, then known as the Trans-Pacific Partnership, a year ago as one of his first acts in office. The resuscitated deal is undeniably weaker without the participation of the world's biggest economy, but it serves as a powerful sign of how countries that have previously counted on American leadership are now forging ahead without it.

In its original incarnation as the TPP, the accord was conceived as a counterweight to China, whose vast economy was drawing other Asian countries closer despite its state-driven model and steep trade barriers. Not only does the pact lower trade barriers, it could also prod Beijing to make changes to enjoy the same benefits. The question for the U.S is this: will China fill the void?

Opportunity: Inward Investment Across the States

Iowa is now considered the overall best state in America, according to the *U.S. News & World Report*'s second annual "Best States" rankings. Iowa tops the list thanks to its strong performance in the categories of infrastructure, opportunity and access to high-quality health care, data from *U.S. News & World Report and McKinsey & Company* found.

"All of the top 10 states rank among the top half for health care and education, two areas that are most important for people across the country," Brian Kelly, editor and chief content officer at *U.S. News & World Report*, told *CNBC*'s *Make It* in a statement.

Most of the states that crack the top 10 rank highly in education and are considered geographically and politically diverse, spanning most regions of the country. The "Best States" rankings are based on 77 metrics across the following eight categories: health care, education, economy, opportunity, infrastructure, crime & corrections, fiscal stability and quality of life.

Despite the global headlines made by President Trump, the local economic prospects for the US are bright. For a third year in a row, global business leaders rate the United States as their most important market for overseas investment and growth in *PwC's 20th Annual Global CEO Survey*.

A recent *LinkedIn Emerging Jobs Report* catalogued the top 20 emerging jobs in the United States. The skills associated with these quickly growing roles include data mining, business development and relationship management, and sales. New types of jobs mean new potential opportunities for workers at all levels, especially for those looking to change careers. Overall, job growth in the next decade is expected to outstrip growth during the previous decade, creating 11.5 million jobs by 2026, according to the *U.S. Bureau of Labour Statistics*. Even further, it's estimated that 65% of children entering primary school today will ultimately hold jobs that don't yet exist.

A widely-cited March 2017 report by the US think tank, *Progressive Policy Institute, "How the Start-up Economy is Spreading Across the Country—and How It Can Be Accelerated"* demonstrated that the start-up mentality could be found in many regions. And a new report (*The Next Ten Million Jobs*) finds that tech and tech-related jobs grew by 51% in the "Heartland" states from 2007 to 2016, only slightly slower than the nation as a whole. In Iowa, tech and tech-related jobs grew by 83% over the same period, accounting for almost one quarter of private-sector nonfarm job growth

According the to State of Iowa website, Governor Kimberly Reynolds is committed to Building a Better Iowa by focusing on the following priorities:

- Developing the most innovative energy policy in the country
- Educating its children for a knowledge economy
- Training Iowans for the jobs of tomorrow

Technology jobs, and App/Gig Economy jobs in particular, are part of the future of Iowa. As tech gets applied to the physical industries, apps will become an essential interface for both customers and workers in areas such as manufacturing, agriculture, and healthcare. If the Iowa example is replicated across the US we will start to see high productivity, a stronger economy and a resultant uplift in GDP.

2. China ($11 trillion)

MGI Connectedness Index Rank 7 Score 34.2

Risk: Geo-Political Volatility

China has 20 Neighbouring Countries and is the world's third largest country in terms of area (if we count Antarctica). This location (next to many small countries) and the 13,954 miles (22,457 kilometres) of border bring it to the top of the list as having the most neighbours in the world.

In total, China borders 20 other countries:

- On the northern border, China borders (west to east) Kazakhstan, Mongolia, and Russia.
- To the west, China shares boundaries with (north to south) Kyrgyzstan, Tajikistan, Afghanistan, and Pakistan.
- The southern border of China is shared with (west to east) India, Indonesia, Nepal, Bhutan, Brunei, Myanmar (Burma), Laos, Malaysia, Philippines and Vietnam.
- On the eastern border, China's neighbour is Japan, North Korea (and, again, Russia).

China is facing increased geographical competition. Other countries in the region are offering quality manufacturing at a cheaper price. In fact, China's manufacturing wages have gone up 284% over the past 10 years. Even Chinese companies are looking outside their own borders when it comes to investing in factories.

A question for China as it grows economically and looks to exploit its status as a fast-emerging superpower is this: can it achieve a sustainable balance between economic growth without triggering geo-political conflict with its neighbours?

Yet, the crucial determinante in China's Geopolitical status is Premier Xi Jiping who has been in power since 2012. Premier Xi Jiping has openly talked about reviving China, which he called the 'Chinese Dream'. This dream has allowed Xi Jiping to cement his powerbase over recent years. In 2017, the new Chinese Politburo committee did not have a single member under the age of 60. Similarly, in March 2018, Xi Jiping removed term limits on his leadership, marking him as the most powerful Chinese leader since Mao Zedong.

Power concentrated in the hands of one man can be intoxicating. If a crisis springs up between China and neighbouring rivals, such as Japan over the Senkaku Islands or with the USA over North Korea, there is plenty to keep military chiefs awake at night.

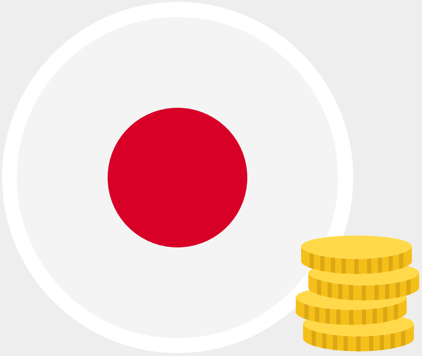
Opportunity: Consumer Economy

The Chinese economy has reached a new point in its maturity, and as a result, is poised for healthy economic growth over the coming year. Underscoring this growth is the stabilization of China's economy that has occurred as a result of its maturation from a manufacturing-based economy to a consumer-based economy. Post-Industrial Revolution, China's economy was largely manufacturing-based. However, beginning in 2010, we began to see a manufacturing exodus in China, which will continue to accelerate in 2018 as a result of three coalescing forces: changes in government policy, softening Dollar and increased geographical competition.

While manufacturing may be on the decline, the Chinese economy experienced accelerated growth in 2017 for the first time since the manufacturing exodus began six years ago. This indicates that the economy has matured to the point where consumers are able to support it even as manufacturing continues its deceleration.

Consumer sentiment in China continues to rise. With confidence high, Chinese consumers are more likely to spend. The Yuan has strengthened and the dollar is weakening, so the Chinese consumer will be able to afford American products. Wage increases: the manufacturing exodus has paved the way for higher-paying jobs in China, resulting in Chinese consumers having more disposable income. A stable cost of living has also led to more disposable income as wages have grown.

Generation wage growth: Millennials have better access to education than the previous generation and securing higher-paying white-collar jobs. They have more disposable income, and have similar traits to American millennials, such as an affinity for "experience" over product.



3. Japan ($4.38 trillion)

MGI Connectedness Index Rank 24 Score 10.5

Risk: Sovereign Debt

Some analysts have expressed concern that by continuing to pursue its expansionary monetary policy, the *Bank of Japan* could cause the markets to overheat and create another bubble.

Economist Takeo Hoshi, chair of the board of the *Tokyo Foundation* says: "The current quantitative easing policy is on a different scale from anything seen previously. The BOJ has been increasing its holdings of Japanese government bonds at a rate of some 80 trillion yen annually, and this can't go on indefinitely. The government has probably reached a limit on what it can accomplish through fiscal policy. Japan's public debt has continued to balloon each year; they can't keep up this level of deficit spending much longer.

Opportunity: Expansionary Fiscal and Monetary Policies

By 2025, Japan's baby-boomers will be over 75, which will put them in the category of the "advanced elderly." This is bound to have a huge impact on the budget. There's no denying, however, that the Japanese economy is growing. Hiring is up, and the labour market is getting tight, as evidenced by the high ratio of job openings to applicants. This could signal the start of a virtuous circle in which higher wages will lead to growth in disposable income and eventually boost consumer spending to fuel further growth.

According to Hoshi: "The Japanese economy is looking healthier, and I think it's fair to attribute that to the expansionary fiscal and monetary policies of "Abenomics." The *Bank of Japan*'s quantitative easing policy has finally succeeded at least in putting the brakes on deflation. But monetary policy can only stimulate demand, and that doesn't necessarily translate into a commensurate increase in economic growth.

4. Germany ($3.36 trillion)

MGI Connectedness Index Rank 4 Score 51.9

Risk: Increasing Global Competition on The Manufacturing Sector

The German automotive industry will change tremendously in near future due to new technology. This carries the risk that Germany loses its competitive advantage. However, Germany seems to have kept its innovative environment: most patents relating to autonomous driving filed globally are still filed by German companies.

German news magazine *Spiegel* reported in July 2017 that German chancellor Angela Merkel is concerned about the future of the automotive industry, in particular because Chinese investors are systematically acquiring promising German start-ups in the high-technology sector. This is one reason for the EU's proposal on Foreign Direct Investment [FDI] and the call for a tightening of foreign investment control until German companies are allowed to make similar investments in China.

Opportunity: Autonomous Vehicles

The German automotive industry is by far the most important industrial sector in Germany with a turnover of around €405 billion and more than 800,000 employees in 2016. In September 2015 already, the German government announced its strategy for automated and connected driving focusing on infrastructure, law, innovation, IT security and data protection. The aim of the strategy was to allow Germany to become the leading supplier for automated and connected vehicles and the leading market in this field.

Currently, all over Germany subsidized testing fields are set up that allow enterprises to test their systems for autonomous driving. In 2017, a cross-border testing field was agreed between Germany, France and Luxembourg. In spring 2018, an additional testing field for autonomous driving shall become operational in the state of Baden-Württemberg including all different types of roads to test the autonomous vehicles on.

5. UK ($2.86 trillion)

MGI Connectedness Index Rank 6 Score 40.8

Risk: Brexit

A recent *Deloitte* report, examined how companies have disclosed the risks and opportunities of Brexit in their annual reports and includes examples of disclosure. Uncertainty dominated risk concerns of the *FTSE 100* companies in the sample, be it more general economic or political uncertainties or specific concerns such as the restriction of movement or access to the single market. 62% of the companies had changed their principal risk disclosures in response to the Brexit vote. However, none of them provide much in the way of potential and actual impacts, assumption or sensitivities around Brexit.

Many companies mentioned political uncertainty or (non-specific) market volatility as a consequence of Brexit, which may have an impact on economic activity, creating economic slowdown or even downturn.

Companies talk about "a reduction in economic activity" (*Convatec*) and "dampened demand from business in certain regions" (*Informa*), which could result in lower sales. Certain services companies disclose a risk of a potential reduction in UK public spending, including on outsourcing contracts, due to uncertainty.

But it is not all about risks. Seven of the companies identified opportunity on the horizon. Whilst these varied by company, the types of opportunity mentioned included faster take up of automation to meet a potential skills shortage, and incentivised inward investment with the depreciation of sterling.

Opportunity: Digital Tech Investment and the Knowledge Economy

In 2016, UK digital tech investment reached £6.8 billion, that's 50% higher than any other European country. Over the past five years London has attracted more investment than Paris, Berlin and Amsterdam combined. The UK is home to 8 of Europe's top 20 universities. Universities are essential building blocks of digital ecosystems. They generate skills and innovation while attracting investment and talent. In 2016, London hosted 22,000 tech related Meetup events – nearly three times as many as Berlin, Amsterdam or Paris. Interpersonal networking is critical to the UK's success and the face-to-face networking that these Meetups enable is hugely important to the growth and success of digital businesses. In London, a new tech business is formed every hour. There are now 1.64 million digital-tech jobs in the UK, and the digital sector is creating jobs twice more than the non-digital sector.

The *United Nations International Telecommunication Union*

(ITU) recently released their Seventh Annual *Measuring the Information Society Report*, ranking countries based on their information and communication development. ITU collects ICT statistics for 200 economies and over 100 indicators. The report showed that almost 7.1 billion people- over 95 per cent of the global population- is covered by a mobile-cellular signal. This report revealed a few perhaps surprising measures as South Korea sat on top of the most connected countries, while the UK did very well being ranked 4th.

The top 20 most connected countries are the following:
(1) South Korea
(2) Denmark
(3) Iceland
(4) United Kingdom
(5) Sweden
(6) Luxembourg
(7) Switzerland
(8) The Netherlands
(9) Hong Kong
(10) Norway
(11) Japan
(12) Finland
(13) Australia
(14) Germany
(15) United States
(16) New Zealand
(17) France
(18) Monaco
(19) Singapore
(20) Estonia

The U.K. also ranked 4th in another recent survey of the Top 10 best countries for: cultural influence, entrepreneurship, power, starting a business, most forward-looking, most influential, transparency, education, and starting a career.

6. France ($2.42 trillion)

MGI Connectedness Index Rank 8 Score 30.1

Risk: Insolvencies

By the end of 2016, business insolvencies in France were still +24% above 2008 pre-crisis levels. Looking only at corporates, the gap stood at a staggering +49% above 2008 levels, according to a report by *Euler Hermes.*

Not only are the insolvencies levels in France very high, the average two-year period required to resolve bankruptcy cases is far longer than in other European economies (one year in the UK, 1.2 in Germany). The outlook for the construction sector is of critical importance, as it accounts for about a quarter of insolvencies. In the agricultural sector, the number of companies going bust is lower but is the highest on record (1480 in 2016).

The 2016 trade balance deficit – roughly -3% of GDP in volumes – is the worst on record. In the 1990s, growth recovered after a decisive rebalancing of the economy. That was not the case this time. Labour costs deteriorated for a long period, implying a trend of deindustrialization. Subdued innovation and low productivity gains also explain why potential growth suffered.

Opportunity: Technology Revolution

2018 is shaping up to be a great year for technology start-ups around the world, most especially the French start-ups. For the first time at *Consumer Electronic Show* (CES), French start-ups represented more than half of all the international companies that showcased their products. At the same time, more than 360 French tech start-ups unveiled their innovative products at CES 2018.

France also has a new president, Emmanuel Macron. He is a young, charismatic Kennedy-esque leader who is pushing France's move into tech domination. He is a former investment banker, whose previous political job was Minister of Economy, Industry and Digital Affairs so he understands the tech sector and its importance in growing a digital economy of the future.

Macron wants to scrap the wealth tax on investments and reduce capital gains tax, which will fuel further investments. To help fuel the supply of talent, he has relaxed immigration with a new French Tech Visa for 3 groups: start-up founders; employees; and investors. Best of all, the average cost for this workforce is far below that of Silicon Valley or other major US tech centres and even lower than the UK, Germany, the Netherlands and Japan for some positions.

7. India ($2,09 trillion)

MGI Connectedness Index Rank 30 Score 8.5

Risk: SME Financing

More than 50 million small and medium sized businesses (SMEs) currently exist in India and over the last five decades, the SME sector has grown dynamically and makes up 40% of India's exports, creating millions of jobs annually. The SME sector has a lot of potential for growth in the coming years with respect to job creation, entrepreneurial spirit, and innovation. However, the SME sector faces a number of challenges in 2018.

SMEs in India score low marks for marketing their products, which is constraining the sector. SMEs are also constrained by the scarcity of budget, which in turn has limited their growth ambitions. Although technology has advanced in the recent years, thanks to the proliferation of mobile phones and Internet, the continuance of low technology use by SMEs has always resulted in low productivity, rendering them uncompetitive in the ever-widening global market. The most significant constraint to the growth of SMEs in India relates to inadequate capital and credit facilities. Difficulty in obtaining an easy and timely credit is reportedly a crucial factor hampering SME growth.

The regulatory practices that oversee construction permits, resolving insolvency, collateral securities/guarantees, and taxation will also continue to be constraining factors for many SMEs in 2018.

Opportunity: Technology Capability and E-commerce

Leveraging the e-commerce trend: SMEs now can make their presence in the online world by going digital. For many years, the SME sector was struggling with the intense competition, but going digital can give them the required edge. Adoption of technology: embedding the social and cloud platform will open up vast opportunities for revenue growth and operational efficiency. Taking advantage of Government schemes: initiatives such as 'Make in India', 'Start-up India' and 'Skill India' are schemes introduced by the government designed to promote an entrepreneurial culture.

8. Italy ($1.82 trillion)

MGI Connectedness Index Rank 17 Score 13.4

Risk: Stability of The Banking Sector

The weakness of the country's banking sector and its huge debt pile has been a drag on Italy's economic growth over the past decade. However, the banking sector has made progress in dealing with the mountain of non-performing loans (NPLs) and raising capital to strengthen balance sheets. But the sector is still recovering. While private and public capital has resulted in a reduction in NPLs, the job is not finished yet. Italian banks still account for around a quarter of the Eurozone's NPLs – the largest in the EU.

However, the latest data from the *Bank of Italy* showed that the stock of NPLs fell 5.5% in November 2017 to €173bn, compared to the previous month. Although NPLs have weighed on banks' P&L through increasing loan loss provisions, negative rates (i.e. Euribor) have proved more painful to banks' profitability. Last year, the Italian government committed €17bn to wind down two Veneto-region lenders and nationalised *Banca Monte dei Paschi di Siena*, which were considered by many as the biggest sources of systemic risk facing the industry. But more steps need to be taken by the new government to ensure the banking sector's recovery continues.

Opportunity: Economic Growth

ECD Acting Chief Economist Alvaro Pereira has said that the organization has a positive outlook for Italy, adding that the inconclusive outcome to the March 2018 general election "did not have an impact on our growth forecasts". "We are quite positive about Italy. It is the first time it has a growth rate of 1.5% since the euro was introduced," Pereira said. "The markets have reacted well to the elections. The labour market is recovering thanks to the reforms that have been made." He added that Italy "will benefit" from the good performance of the European economy.

9. Brazil ($1.77 trillion)

MGI Connectedness Index Rank 44 Score 4.5

Risk: Sustainable Growth

Although Brazil has become the world's seventh-largest economy, it ranks 95th in the world for GDP per Capita. A new *McKinsey Global Institute* (MGI) report, *Connecting Brazil to the World: A Path to Inclusive Growth*, argues that to raise incomes and living standards, the country must accelerate its productivity growth—and building new connections with the global economy could provide the opening to do just that. According to the report: "The blueprint Brazil has already established by successfully opening its agriculture sector and building the competitive aerospace firm *Embraer* demonstrates the value of harnessing global competition and supply chains. Deeper integration with global markets can offer greater rewards than ever before, and nations that do not participate in these expanding networks risk being left behind."

Over the next two decades, Brazil needs to average 4.2 per cent annual GDP growth to lift half of the still vulnerable population solidly into middle class. Using an assessment of how global networks influence economic growth it is estimated that Brazil has an opportunity to add as much as 1.25 percentage points to its average annual GDP growth in the years ahead by deepening its ties to the rest of the world. In other words, global connectedness could get the country about a third of the way toward its goal of raising living standards.

Opportunity: Moving Up the Value Chain with Skilled Manufacturing

Brazil today ranks only 44th in the *MGI Connectedness Index*, and that indicates ample room for deeper engagement in all types of cross-border exchanges. While the country's exports have grown since the turn of the century, they have become more concentrated in resources. From 2005 to 2012, commodities exports increased to $64 billion, from $11 billion—but over the same period, a trade surplus of $20 billion in manufactured goods evaporated and turned into a trade deficit of $45 billion.

Brazil also has an opportunity to move up the value chain by exporting more sophisticated, skill-intensive products, but this calls for reconsidering its traditional approach to protecting local industries. In the heavily protected automotive industry, for example, high tariffs have encouraged foreign carmakers to create local jobs by establishing production within Brazil, but this hasn't helped the country integrate into global value chains. Mexican auto plants now produce twice as many vehicles per worker as Brazilian ones, even though factories in Mexico produce a much higher share of midsize and large vehicles. This experience stands in sharp contrast to Brazil's success in the aerospace and agriculture sectors, which have flourished since trade restrictions were lifted.

10. Canada ($1.55 trillion)

MGI Connectedness Index Rank 13 Score 7.3

Risk: Credit Risks

Canada is among the economies most at risk of a banking crisis, according to early-warning indicators compiled by the Bank for International Settlements, according to the *Financial Post*. Canada — whose economy grew in 2017 at the fastest pace since 2011 — was flagged thanks to its households' maxed-out credit cards and high debt levels in the wider economy. A key warning indicator known as the credit-to-gross domestic product "gap" flagged Canada. The gap is the difference between the credit-to-GDP ratio and its long-term trend. A blowout in the number can signal that credit growth is excessive and a financial bust may be looming.

Canada is the 12th largest exporter in the world. In 2017, it exported $433 billion. Three-fourths of this goes to the United States, which is another single point of failure it has to contend with given, given the protectionist rhetoric from the Trump Administration. Trade with the United States and Mexico has tripled since 1994, thanks to *NAFTA*. Canada is America's largest supplier of energy, including oil, gas, uranium and electric power. Canada struggles to overcome another geographic handicap: it only borders the

United States. This makes shipments of goods to other markets more expensive.

Opportunity: Arctic Shipping Routes

Canada benefited by the discovery of oil sands in Alberta. That gave it the third largest oil reserves in the world (173.1 billion barrels), behind Saudi Arabia and Venezuela. It ranks ninth in the world in recoverable shale oil. It's fifth in shale gas, according to the *U.S. Energy Information Administration*. Canada is now the fifth largest oil exporter. It ships 1.576 million barrels at day, recently surpassing Mexico. Canada's Prime Minister, Justin Trudeau, however, has agreed to cut greenhouse gas emissions at the expense of a reduction in oil sands production. The risk is that would trigger lawsuits from companies that invested billions in development. The opportunity, however, is that over the next forty years, global warming might benefit Canada. Between 1906 and 1982, the area of ice shelves fell 90 per cent. That's because arctic winter temperatures increased 1.8 degrees Fahrenheit every ten years for the last six decades. As a result, the Northern Sea Route and the Northwest Passage may open to commercial traffic. That could compete with the Panama Canal by 2050.

Conclusion

The risks and opportunities revealed by our analysis are not confined to these 10 countries alone, but are applicable globally. Common themes include the challenges of protectionism and the opportunities provided by new technology, the challenge of over-leveraged banks and the value of e-commerce opportunities. Of the top ten countries by GDP value, half of them features in the top ten of the *MGI Connectedness Index:* the U.S. (No.3). China (No.7), Germany (No.4), UK (No.6), and France (No.8). It is a surprise to the authors of this report that Japan ranked only 24 in the *MGI Connectedness Index*, however, broadly speaking there is a correlation between openness/integration and a successful economy.

Possibly in the connected world, have some economies become too successful and integrated for their own good? Superfast broadband connectivity raises productivity, access to foreign talent helps to drive innovation, policies that increase ease of access to capital and Foreign Direct Investment are recipes for success but also risk. All the countries in this report share overlapping silos of connected risk that expose their networks and areas of national self interest.

This point is well summed up in a 2015 white paper *Interconnected Risks, Cascading Disasters and Disaster Management Policy: A Gap Analysis*, which provides an excellent description of connected risk:

"Today it is increasingly recognized that disasters are "cascading" in nature i.e. the impact within one network/ area of a disaster may impact several related networks resulting in what is a "network of networks" disaster. For the near future, the world will need to consider an even more complex and interconnected next generation of disasters i.e. "global network" disasters resulting from the coupling of different kinds of systems."

To date, public and private sector organisations have made relatively little progress in preparing disaster scenarios that can help to mitigate such connected risks despite evidence that geophysical, meteorological, biological, technological and human induced disasters are increasing in intensity, frequency, complexity (interconnected, synergistic and cascading) and uncertainty (future new events).

According to the report: "Further, these multiplying risk factors are interacting with an ever more complex set of physical, social, economic and environmental vulnerabilities and at rates that nations, societies and commerce are ill-prepared to deal with in terms of "gaps" in existing governance and institutional capacities."

This is a concept that we will explore in detail across further white papers in 2018.

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Russell Group is a leading risk management software and service company that provides a truly integrated risk management platform for corporate risk managers and (re)insurance clients operating in an increasingly connected world.

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