



Macro Overview

by Andrew Clifford, CIO

An important development that is not receiving the attention it deserves from global investors is the "supply side reform" that is under way in the Chinese economy. These reforms are important, because:

- They are bringing about a step change in profitability for the industries that are seeing capacity closures, not only within China, but also across the globe.
- The improving profitability in previously over-supplied industries in China will lead to a reduction in nonperforming loans¹ in the banking system and, with it, a significant reduction in the risk of a financial crisis in China.

The supply side reforms address a key weakness in the structure of China's economic system, namely, the coalition of local governments with local banks to develop and bankroll local state-owned enterprises (SOEs). This pattern of local development contributed to significant over-capacity in a wide range of fast growing "commodity-like" industries (such as steel, cement, glass and chemicals) and, with it, a growing burden of non-performing loans for the banking system. When the downturn came, the importance of employment for the sponsoring government meant a great reluctance on all three parties to close loss-making capacity.

As discussed in our March quarterly report, supply side reforms were initially focused on the steel and coal sectors. Redundancy funds were provided by the central government to compensate laid-off workers, easing local governments' reluctance to follow through. The State Council directed the closure of sub-scale plants as well as operations not adhering to environmental and safety standards. It should be noted that these directives related to SOEs, not private enterprises. Having said that, "unapproved" plants built by private firms, notably in the steel sector, were also targeted for closure. It is estimated that steel capacity has shrunk by 13% and coal by 10% since the start of 2016, resulting in significant improvements in the profitability of these industries. Prices for Australian coal exports are up nearly 100% since early 2016.

1 In this sense we are referring to "real" non-performing loans, not the declared numbers which most likely understate the problem and which we assume will continue to grow for the moment as they catch up with reality. Initially, there was much scepticism when the supply side measures were announced. Over the last 15 years Beijing had announced plans to close sub-scale and polluting plants on a number of occasions, with little effect. Even if some capacity was closed, it would reopen within weeks or months. Most observers therefore expected a similar outcome with this recent round of directives from the centre. However, this occasion does appear to be different. For plants to qualify for redundancy funds, they first had to be decommissioned.

Supply side measures have since been extended from steel and coal to other industries such as PVC and aluminium. What is probably more significant though is that anecdotal evidence shows that environmental regulations are being policed strictly, which is resulting in capacity closures across a broad range of industries. Another variable is that banks are simply not prepared to extend financing to industries where there is excess capacity, whether that be as a result of following central directives or for purely commercial reasons. The upshot is that small private operators that have closed for commercial reasons and were hamstrung in restarting capacity may now be viable with higher prices.

Another observable development is the consolidation that has started to occur, with significant transactions resulting in the merger of cement groups, or the merger between the country's largest coal producer with one of the large power generation companies. There is also clear evidence in government statistics (for what they are worth) and company accounts that investment in oversupplied industries has collapsed.

While Beijing has been successful to date with these supply side measures, we should consider why this "central" control over a large and disparate group of enterprises should hold. In the first place, there is an industrial logic that would be recognised by any Western businessperson. SOEs are "owned" by the government and consolidation makes more sense than fierce competition amongst what are essentially sister companies, and better profits mean higher taxes. In reality, the ability for Beijing to have created this outcome is most likely a resultant of the consolidation of power by China's current leadership. It is clear that local politicians, managers of the SOEs, government employees (particularly those with the responsibility of enforcing these reform measures) and bank executives understand that if they do not

comply with Beijing's policies, there is a real risk of loss of job and, for the more serious infringements, potentially time behind bars.

The reason that these changes deserve serious attention from global investors is that they have dealt with one of the key weaknesses in China's economic system. Together with the reforms in the financial system that have brought under control the rapid growth of the shadow banking sector, the supply side reform measures have substantially reduced one of the key risks for the Chinese economy and, indeed, the global economy. It also means that resources in the economy will progressively be applied to the more dynamic private sector where opportunities abound. The focus of investments in China today is clearly on those areas dominated by the private sector, such as electric vehicles, robotics, biotechnology, and e-commerce. The only SOEdominated area where we can observe significant investment is infrastructure, which is a result of the One Belt One Road initiatives and which we think will have significant benefits to the broader economy.

The main note of caution we have in regard to China is the shorter-term outlook for the next six to 12 months. The government has once again been broadening restrictions on residential property purchase and financing in cities where demand and prices have been strong. The result has been a slowdown in new property sales and, with that, the potential deferral of construction activity. Residential construction is a significant contributor to economic activity. Our view is that the Chinese residential market is fundamentally undersupplied (please refer to Kerr's article, *The Rise of Asia*, in this issue as well as our past quarterly reports for an outline of the key factors underlying China's demand for urban housing), and therefore this area of activity will remain robust for some time to come. Nevertheless, there may be some loss of momentum in economic growth in the months ahead.

Market Outlook

The world's other major economies appear to be in good health. European and Japanese economies are continuing on a path of steady improvement, and the US continues to grow strongly. This co-ordinated global growth is providing a strong backdrop for global markets. Indeed, returns for investors from global shares have compounded at over 10% p.a. for the last five years.² Returns of this magnitude should lead one to be cautious about the outlook for future returns. This view is, however, somewhat at odds with the opportunities that are presenting themselves at an individual stock level, where we continue to find companies to buy at

attractive valuations. Usually we would not associate the ready availability of interesting opportunities with markets that are at dangerous levels.

When we look around for risks in markets, our key concern is US interest rates. This is particularly worrisome because of the extraordinary crowding by investors in bond markets around the world, making this, in our view, the mostly likely scene of any accident in financial markets. We could see higher rates potentially disrupt the US economy and global markets in a number of ways.

The first is the traditional rate cycle of the US Federal Reserve. History tells us that as rates are increased, eventually the US economy will respond and slow down, and before that is even readily apparent, the US stock market will start to fall, taking with it most other global equity markets. Making assessments about the exact timing of such events is highly problematic. Currently, rising labour costs are the key concern for inflationary pressures and further rate rises. However, it is questionable whether companies are in a position to pass on any increased costs to consumers. For example, Target recently raised their minimum hourly wage to US\$11, with a commitment to raise it further to US\$15 by the end of 2020. But given the brutally competitive environment in retail as a result of e-commerce, price rises seem an unlikely prospect. However, one assumes that rates will at some point rise to a level where there is economic and market impact.

The other potential issue is a blow-out of the US budget deficit as a result of President Trump's proposed tax plans. If the proposed tax cuts come to fruition, the financing requirement could cause significant upward pressure on US bond yields. Given the lack of success of the Trump administration in its efforts to pass reform agenda to date, markets appear to be putting little weight on the prospects of these tax cuts being passed, at least as initially proposed. We can add little to this debate, but tend to favour the view that Trump's tax plans will need to be significantly watered down to have any chance of success. Clearly though, political events of the last two years suggest that one shouldn't be complacent, particularly given investors' current enthusiasm for debt securities of all types across most geographies.

² Based on the MSCI All Country World Net Index (US\$).

The Rise of Asia

by Kerr Neilson, CEO

This is an edited rendition of a presentation delivered by Kerr Neilson at the NAB Asia Development Congress in September 2017 in Shanghai.

Over these past 20 years, some Asian economies such as China and India have been growing physically by 6-7% a year. At that rate of growth, the nominal size of **an economy doubles every 10 years**, which makes these economies four times the size that they were in the days of the 1998 Asia financial crisis.

Asia has changed immeasurably over the last two decades. It is now less susceptible to shocks, far more self-sustaining, and has managed to side-step some developmental hurdles by leapfrogging with technology. The purpose of this paper is to try to convince you to see Asia from a new perspective. Without doing so, you may well miss one of the great paths of wealth creation over the coming 10 to 20 years.

To start with some context, China and India together have a population of 2.7 billion and a land mass of nearly 13 million square kilometres. This means that **these two countries alone** have a land mass slightly smaller than the European Union (EU) and the US combined, but a population three times larger. Importantly, when measuring economic output on purchasing power parity, their **combined GDP of US\$33 trillion is 50% larger than either the US or the EU!**

When official data claims that China is the world's second largest economy and that its GDP is about 60% that of the US, some tend to struggle with these statistics because of the physical presence of these economies. For example, how can these figures be meaningful when one considers that China produces eight times more steel than the US and 50% more automobiles, consumes nearly half the world's copper supply and similarly in stainless steel, aluminium and cement, and originates nearly 120 million high-spending overseas travellers each year?

	CHINA & INDIA	EUROPEAN UNION	USA
Population (million)	2,748	508	324
Land area (million km ²)	12.9	4.4	9.5
GDP PPP 2017 (US\$ trillion)	32.7	20.9	19.4

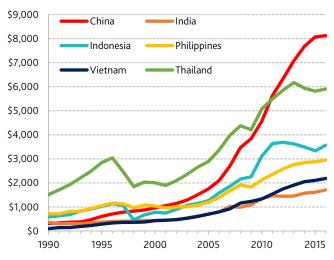
Source: UN, IMF

Income disparity is indeed a major issue for Asia. While household income in mega cities like Shanghai and Beijing can be US\$50,000–100,000 a year, rural income is only a fraction of that. The relevance of this lies in **social harmony**, but as with other economies that have gone through the traumas of industrialisation, this has proven less of a challenge during that period of helter skelter growth than in its aftermath. Either way, Asia's economies have been growing at a remarkable pace, as shown in the per capita GDP chart below. From an investment point of view, thinking about the rate of growth of these countries alongside that of the West adds important perspective.

COUNTRY	POPULATION (MILLION)	LAND AREA (000 KM ²)	GDP 2016 (US\$ BILLION)
China	1,379	9,388	\$11,199
India	1,324	2,973	\$2,264
Indonesia	261	1,812	\$932
Thailand	69	511	\$407
Philippines	103	298	\$305
Vietnam	93	310	\$203
Total	3,229	15,292	\$15,309
World	7,442	129,733	\$75,642
% of world	43%	12%	20%

Source: World Bank (World Development Indicators 2017)

GDP Per Capita 2016 (Current US\$)



Source: World Bank (World Development Indicators 2017)

One common complaint we hear about Asia is the **difficulty** of dealing with local regulatory and bureaucratic systems when it comes to matters such as the registration of a new business or the enforcement of contracts. There is no denying that most parts of Asia still lag the developed countries in the "ease of doing business", but there are clear signs of improvement. One measure of this is the Global Competitive Index (2017-18) compiled by the World Economic Forum. This index measures and compares the competitiveness of 137 economies based on 12 factors ranging from social institutions to physical infrastructure, labour market efficiency and technological readiness. Switzerland and the US take out the top two spots, followed by Singapore, while Hong Kong ranked 6th, Taiwan 15th, China 27th, Thailand 32nd, Indonesia 36th, and India 40th, ahead of Portugal (42nd) and Italy (43rd). (Germany ranked 5th and the UK 8th.) Is it not interesting that there are apparently 101 countries more difficult to do business in than, say, Indonesia?

The importance attached to education among Asian families and the improving quality of these countries' education systems are also promising signs of tomorrow's prosperity. The following table lists the average maths, science, and reading comprehension scores from the OECD's Program for International Student Assessment (PISA). Seven of the top 10 positions were filled by Asian contenders, while Australia has sunk from no. 9 in 2006 to no. 21 in 2015. While one may not identify any strong correlation between a country's economic or industrial might and its students' academic achievements, the changes in ranking nevertheless indicate an encouraging trend for the Asian region. It is worth observing that while public education spending in Asia (around 2-4% of GDP) lags that of Western countries (about 5%), around 80-90% of Asian families are willing to complement the school system with private tuition, compared to just 20-30% of households in the West.

While the percentage of the population achieving a university degree remains low in Asia by comparison to Western standards, the number of graduates from the so-called STEM disciplines (Science, Technology, Engineering and Maths) as a proportion of the total number of graduates is much higher. Today, China produces some 4.7 million STEM graduates each year and India about 2.6 million, versus around 560,000 STEM graduates from each of Russia and the US. The amount of talent coming through suggests that China

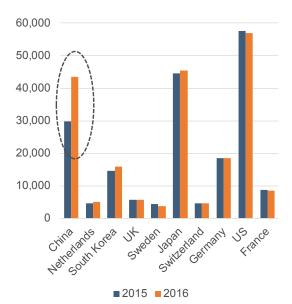
The amount of talent coming through suggests that China and India are far from being ill-placed in this technologically-driven age. As an aside, it is also encouraging that they can't all rush off to join high-paying jobs in Wall Street and, indeed, look how the Asian nations have scored in terms of patent registrations. Note that China is now levelling with Japan, and that Korea, with its relatively small population of 51 million, ranks well ahead of several European countries which led the first industrial revolution.

PISA - Average Maths, Science & Reading Scores

2015 RANK	COUNTRY	2015 AVERAGE SCORE	2006 AVERAGE SCORE	CHANGE IN RANK (2006-2015)
1	Singapore	552	543	+1
2	Hong Kong (China)	533	542	+1
3	Japan	529	517	+7
4	Macao (China)	527	509	+10
5	Estonia	524	516	+6
6	Chinese Taipei	524	526	0
7	Canada	523	529	-2
8	Finland	523	553	-7
9	Korea	519	542	-5
10	B-S-J-G (China)	514	-	-
11	Slovenia	509	506	+5
12	Ireland	509	509	+3
13	Germany	508	505	+4
14	Netherlands	508	521	-6
15	Switzerland	506	513	-3
16	New Zealand	506	524	-9
17	Norway	504	487	+11
18	Denmark	504	501	+4
19	Poland	504	500	+4
20	Belgium	503	511	-7
21	Australia	502	520	-12

Source: OECD (PISA)

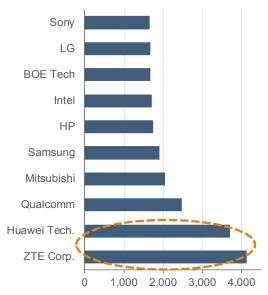
Number of Patents



Source: HSBC

There is little denying that there has been a great deal of purloining of Western technology by Asian companies, but that too is changing. A good indicator of the growing amount of original research being carried out in institutions in Asia is the number of cited publications in scientific journals. China and India have respectively moved up from the 9th and 13th positions in 1996 to the 2nd and 5th in 2016, a strong testament of the quality and quantity of their research efforts. These countries are now in the same league as the industrial powers of the US (1st), Britain (3rd), Germany (4th) and Japan (6th). All this data accords with what we have witnessed on the ground. Take the Pearl River Delta region in southern China for example. This used to be the manufacturing capital of the world for apparel, toys and plastic flowers, built on the back of cheap labour and imitation of others. Today, the region is motivated by technological innovation and higher value-added products how to become more competitive with less labour. The number of patent applications by companies such as Huawei and ZTE is double those by Sony and Intel, which is just one of the many manifestations of this powerful trend.

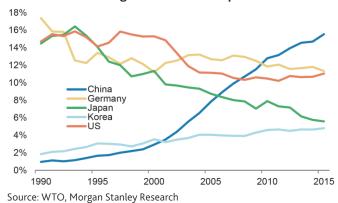
Number of Patent Applications



Source: HSBC

China's share of the world's **high value-added exports** has risen dramatically during the past two decades. As its state-owned enterprises (SOEs) shrunk relative to the economy in the late 1990s and early 2000s, a wave of foreign companies relocated parts of their production from Japan, Taiwan and many Western countries to set up base in China, bringing with them capital as well as technological knowhow. This was later reflected in a rising trend of elaborate manufactured goods such as laptops and smartphones. Incidentally, as the following chart shows, Korea has also been a winner of high value-added exports, while the share of

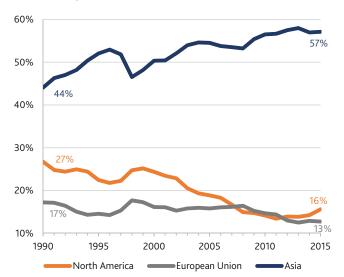
Share of World's High Value Added Exports



these products from the US, Japan and Germany has been in slow decline. In the coming decade it would not be surprising to see yet another shift with exports from China being led by companies winning orders on the basis of home-grown intellectual property.

Not only is Asia becoming less dependent on Western technology, it is also **becoming less dependent on trade** with the West. In the early 1990s, exports to North America and the EU together accounted for around 44% of Asia's total exports. This has now dropped to 29%, while the share of intra-regional trade amongst Asian countries has increased from 44% to 57%.

Share of Exports from Asia



Source: Asian Development Bank (Asian Economic Integration Report – December 2016)

Alongside this change as well as a **high propensity to save by Asian households** (typically 20-30% of income, versus 5-10% in the West), we find a region with enormous current account surpluses, China and Korea in particular, but also Thailand, Vietnam and the Philippines, with only India and Indonesia still reliant on foreign savings. However, one implication of this tendency is that should a larger portion of

the savings of these countries become absorbed at home, the cost of borrowing for deficit countries such as the UK, the US and Australia is doomed to rise. Please do not ignore this probability as greater social support in some Asian countries (pensions, healthcare and education) will reduce financial insecurity and the attendant precautionary savings bias.

The economies of the major Asian countries are not only expanding, they are also changing structurally. **China's service sector**, which used to be pitifully small in the pre-Reform era, now accounts for about **50% of the national GDP**. In India, the service sector has always been bigger, contributing some 60% of the economy. Combined, China and India now account for 8% of the global service trade. Last year, 117 million people boarded flights from China's airports to travel abroad, the largest tourist exodus anywhere in the world.

It was 20 years ago when we had the so-called Asian financial crisis where the world threw up its hands and the IMF instructed the use of harsh contractionary medicine to right their affairs in exchange for support packages.¹ Roaring growth, massive inward investment flows to complement current account deficits and fixed exchange rates led to misadventures of extrapolation. As the tide turned with rising interest rates and as flows began to reverse from deteriorating export earnings momentum, countries such as Thailand, Indonesia and Korea were caught in the vice of huge foreign denominated debt obligations and the shearing of their exchange rates. The crisis scarred these Asian nations' policy makers for a generation regarding currency mismatching and credit growth, and the mercantilism that followed allowed the accumulation of massive foreign reserves. Today, China has some US\$3 trillion in reserves while India has US\$350 billion and Thailand US\$175 billion. While the interventionist policies of these governments have been a source of friction with the West, they are a reflection of the lessons learned from the earlier mishap. Today, most Asian countries have an external debt-to-GDP ratio of less than 50%, compared to some Western nations at 300%. It is of course ironic that when the West experienced its financial crisis in 2008, the IMF's advice was to "spend your way out of this".

All of these facts point to an Asia that has changed beyond recognition. This is a group of countries that are surging ahead, growing quickly, and doing so mostly with internal funding. They have the wherewithal to continue to grow and prosper. Yet, they barely feature in many international portfolios. The MSCI AC World Index has a weighting of just 8.4% for Asia ex-Japan, an unjustifiable underrepresentation given that the region accounts for close to

40% of global economic activity. In our view, Asia is the world's growth driver, and investors cannot afford to miss it.

Apart from a path-dependent bias about Asia in general, investors may also have exaggerated concerns, in particular, regarding the problems facing China. We do not seek to argue that there are no problems, but rather, that these problems are not quite as simplistic as they are portrayed in the press, and it would be a costly mistake to **overlook the opportunities out of a misguided refuge in fear**.

First and foremost amongst these concerns is China's extravagant use of debt. However, unlike many doomsayers, we do not foresee any imminent collapse. One of the ways in which the Chinese government has sought to address the issue of bad debt in the banking system, and with evident success, has been a determined, if slow-coming, blitz to remove surplus and inefficient production capacity of commodities such as steel, coal, cement and chemical products like PVC. What had led to this over-building was the unbridled competition that originated from an unholy alliance among growth-targeting regional governments, regional banks and entrepreneurs. The central government has now reined them in, having despatched some 5000 inspectors to scour the country for polluting offenders. This simultaneously addresses environmental pollution and bad debts. The real significance of this reform is that commodity prices have risen sharply and, with them, so has the profitability of the remaining higher-quality producers. For example, with 120 million tons of capacity shut down, steel prices have more than doubled since November 2015. With improved profits and cash flows, commodity producers (coal and ferrous metals alone account for nearly a quarter of all SOE debt) are now either repaying their loans or building up a cash reserve after paying the banks their obligations on credit lines. The rationalisation of industrial capacity, the so-called "supply side reform", has been absolutely fundamental to the turnaround of China's financial system, and the results are already being felt. (For further details on China's supply side reform, I urge you to read Andrew's Macro Overview in this issue.)

Many investors we meet still think of **China as being dominated by inefficient SOEs**. The inefficiencies may remain, though there is change afoot regarding shared ownership and management profit participation. However, the **proportion of urban residents employed by SOEs is now about 20%**, having dropped progressively from 80% at the turn of the century. In 2000, the state was responsible for about 80% of China's industrial output, and the private sector 20%. That too has reversed, with the state now producing 20-25% of the physical output while the dominant share of output is coming from an increasingly robust private sector. While SOE debt (about 115% of GDP) remains a problem, the measures cited above and the preparedness to raise prices of important utility services like power, water and

¹ These structural adjustment packages (SAPs) required the recipients to reduce government spending, to allow insolvent financial institutions to fail and to raise interest rates sharply.

waste gives clear sight of remedies. In the meantime private enterprise that had been deleveraging since 2013 has started a capital spending cycle and is clearly the backbone of the economy.

Like its state-owned coal and steel plants, China's spending on infrastructure is often viewed as wasteful and excessive, and a problematic product of a credit binge and loose lending. Of course, the challenge lies in assessing need versus desire and the appropriate planning time horizon. Our own experience is that facilities like roads, rail and airports that seemed under-utilised several years ago now feel as though they are bursting at the seams. Without this prescience, which is being extended internationally with One Belt One Road (OBOR), bottlenecks would be common. For example, China now has the world's largest high speed rail network more than 22,000 km in total. Some might construe this as chest-beating. But consider the movement of people between Shanghai and Beijing: There are some 50 daily movements of aircraft each way between these cities, which are some 1300 km apart, and there are nearly the same number of express train movements. The aircraft are moving some 10 million people a year while the express trains are moving as many as 160 million a year and have recently raised their maximum speed to 350 km/hr to complete the 1318 km journey in under 4.5 hours. Booking in advance is advisable! A country of such a vast area and such a large population requires infrastructure of this scale to grow and develop. If it still feels like "over-building", one only needs to think back to the grand projects of New York or London more than 100 years ago.





China's property market is yet another area that raises concern. Western media love to mention the "ghost cities" and empty apartments. But if there really is oversupply, why do prices keep rising, and why do governments see a need for policy intervention to curb price increase? In each of the last seven years, authorities have increased the percentage of up-front payment required on purchase (typically a minimum deposit of 30% for first time home buyers, higher for subsequent purchases and also higher in top tier cities), and restrictions on mortgage lending have become ever more stringent (loan to value ratio is estimated to be about 50%).

An answer may be found if one looks more closely at the forces of demand. About 55% of China's population are now living in urban areas. Each year there is an influx of 20-25 million migrants leaving their rural villages to move to the cities. The government has been reforming the household registration (or hukou) system, which was put in place in the pre-Reform era to control the movement of residents. Under the hukou system, all forms of social welfare are tied to one's place of birth and residency. A rural resident moving to a city was not entitled to such benefits as health care, education and pensions as his or her rural hukou was not transferable. The rules have been incrementally relaxed and modified to facilitate urbanisation, and we are seeing more and more rural residents relocating to live in towns and mid-tier cities, and not merely as temporary migrant workers in mega cities like Beijing and Shanghai. This is the underlying driver for the sizeable housing demand in China. Some 140 million modern apartments have been built in China since the turn of the century, and around 8 to 9 million are currently being







Left: Shanghai, China – 1990 and 2010 Right: Shenzhen, China – 1980s and 2000s Source: http://weburbanist.com/2011/02/21/then-now-the-stunning-speed-of-urban-development/

added each year. But an estimated 150 million households are still living in communist era dwellings, ready to upgrade, or are leaving their traditional rural villages to settle in the cities. Our observation is that while there are some speculative developments, there is enormous inherent demand. This is partly evidenced in the fact that secondhand property prices are growing faster than new property prices and inventory levels are at a healthy level (less than 10% in tier 1 and tier 2 cities, and about 20% in tier 3 cities).

Last but not least is the **technological leapfrogging**. We have written extensively about the rise of e-commerce and digital payment systems in China. Far from being emulators of Western companies like Facebook and eBay, Chinese tech companies such as Tencent and Alibaba have been innovating relentlessly. Utilising the vast amounts of data from China's 1 billion netizens, they have been pushing the boundaries of technology and creating new business models with platforms like WeChat, Taobao and their associated e-payment services. It is not hard to find examples of remote rural villages being transformed by e-commerce. Farm produce that was previously land-locked has miraculously found markets long distances away and been rewarded with higher prices because of improved communications. E-commerce giant JD.com, for example, is expanding its logistics network with delivery drones on the one hand and despatching advisors on the other hand to provide online shopping assistance to villagers.

Far from slowing down, the pace of technological advancement will likely accelerate in the coming decades as the Chinese government turns its policy focus to boost investment and R&D in areas such as renewable energy, electrical vehicles, artificial intelligence and biotechnology. Unlike the sporadic ad hoc initiatives that one finds in some Western countries, China appears to have a more coherent policy framework with a longer-term outlook, from the push for more fundamental scientific research to providing both direct and indirect support for start-ups. By one recent estimate, China now has 89 unicorns (unlisted start-ups with a valuation of more than US\$1 billion) – about one-third of the world's total number, and they are said to be worth a combined US\$350 billion.

The enthusiasm for reform and development is not confined to China. In India, the Modi government has brought in a series of important policies with far-reaching impact. The goods and services tax (GST) is expected to expand the country's tax base, improve administration efficiency and ease compliance burdens for businesses over the long-term. The enactment of the new Insolvency and Bankruptcy Code is a long over-due legislative overhaul to reshape the country's dysfunctional banking system. It finally provides creditors with a legal recourse to recover debt and will prevent debtors from circumventing liability by obfuscating through the courts.

We have also seen a boost to infrastructure spending. When Modi was elected Prime Minister several years ago, India was building a few kilometres of highway each year. They have since been on a building spree, now laying **25 kilometres of highway a day** and the National Highways Authority is planning to construct 50,000 km by 2022. As we have seen with China, infrastructure can transform a nation and lay the foundation for India's development in the years to come.

Technology is another powerful factor in India's roadmap to economic prosperity. Its world-leading biometric identification system (Aadhaar) has now registered more than 1 billion Indian citizens with their fingerprints and iris scans. Together with the spread of mobile phones, the Aadhaar ID system has enabled hundreds of thousands of India's poor to open bank accounts and to directly receive government subsidies. Technology has allowed the government to bypass corrupt middlemen and reach the economically disadvantaged directly. In India's cities, we are seeing a similar wave of innovation in e-commerce and fintech as we are seeing in China, with companies like Amazon setting up operations to compete with indigenous start-ups like Flipkart.

To conclude, it is simply **meaningless** to discuss the world economy today **without properly understanding the tectonic transformation** that we are witnessing in Asia. It feels as though China and India are occupying the same space that America once occupied in the 1950s-70s, when its sense of purpose, scale and innovation left the staid structures of Europe gasping. There seems a high probability in Asia's future growth and prosperity, conscious as one is of such sweeping proclamations, given the scale, ingenuity, diligence and thrift that is characteristic of the region.

We are very optimistic about the opportunities on offer in Asia and have around 36% of the Platinum World Portfolios - International Fund invested in the companies of the region (not including Japan). Many of these companies are on a par with the best of the West in their respective fields, and are delivering excellent returns on capital.

¹ As at 30 September 2017.

Platinum World Portfolios - International Fund



Kerr NeilsonPortfolio Manager

Performance

(to 30 September 2017)

	QUARTER	6 MTHS	1 YEAR	SINCE INCEPTION P.A.
PWP Int'l Fund Class A USD	8.4%	15.1%	23.3%	20.1%
PWP Int'l Fund Class B USD	8.7%	15.8%	_	26.1%
PWP Int'l Fund Class D USD	8.7%	15.8%	23.5%	13.1%
PWP Int'l Fund Class F EUR	5.1%	_	_	4.5%
PWP Int'l Fund Class G GBP	5.4%	7.9%	19.5%	27.3%
PWP Int'l Fund Class H GBP	5.7%	8.5%	19.6%	22.3%
MSCI AC World Index (USD)	5.2%	9.7%	18.6%	13.2%

Refer to note 1, page 19.

Source: Platinum Investment Management Limited, RIMES Technologies. Historical performance is not a reliable indicator of future performance.

MSCI All Country World Sector Index Performance to 30 Sep 2017 (USD)

SECTOR	QUARTER	1 YEAR
Energy	9%	7%
Materials	9%	24%
Information Technology	9%	30%
Financials	6%	31%
Industrials	5%	21%
Telecommunication Services	4%	3%
Consumer Discretionary	4%	17%
Utilities	3%	10%
Health Care	2%	12%
Consumer Staples	0%	4%

Source: RIMES Technologies.

Glancing over our quarterly commentary, it feels as though there has been very little change in themes thus far in 2017. To recap, evidence of persistent and widespread economic expansion is undiminished. Raw material prices have continued to rise and, in the case of rare metals like cobalt, spectacularly.

While both mired in **important**, **yet protracted**, **legislative processes**, there is perhaps a brightening prospect in the US regarding the **tax bill** while the **Brexit** negotiations are revealing the horrors of an ill-prepared plaintiff.

In France, Macron's popularity is declining, while in Germany voters are voicing their fear of unrestricted migration through a strong showing of the right, which makes Chancellor Merkel's position more awkward as she engages with a coalition of disparate interests.

Following on from tighter lending measures, Chinese regulators have added **restrictions on the sale of second-hand property** in several cities as a further attempt to hold back rising property prices. Other measures have produced apparent stabilisation in the upward march in property prices, but strong income growth, continuing migration to the cities and high household savings suggest that these are merely palliatives.

MSCI Regional Index Performance to 30 Sep 2017 (USD)

REGION	QUARTER	1 YEAR
Developed Markets	5%	18%
Emerging Markets	8%	22%
United States	4%	18%
Europe	7%	22%
Germany	8%	26%
France	8%	31%
United Kingdom	5%	15%
Japan	4%	14%
Asia ex Japan	7%	23%
China	15%	33%
Hong Kong	5%	16%
India	3%	14%
Korea	3%	25%
Australia	3%	13%

Source: RIMES Technologies.

By contrast, China's 'supply side reform' initiatives to close obsolete polluting capacity in industries ranging from coal to steel, aluminium, basic chemicals and now power generation, are proving highly effective. As we emphasised in last quarter's report, the implication of these changes are far-reaching. Not only is pollution being mitigated, but the subsequent rise in the prices of these commodities is also placing these industries on a far stronger footing as revealed in significant profit surges. Some are choosing to pay back debt to the banks; others are building their cash reserves while maintaining the full use of these long-established credit lines from their banks. The key point here is that this is forcing investors to reconsider their bear case on China.

Among new developments from earlier in the year were the improbable exchanges between North Korea and the White House. Though obviously highly significant, investors have seemingly taken the view that a negotiated outcome is the most probable, as evidenced by the strength of the Korean won, which is close to its peak against the US dollar, and the Korean stock market, being only 3% short of its all-time high.

Another significant change has been a strong recovery of the oil price as pronouncements from shale producers suggested that increases in output at US\$50 a barrel will be more constrained than earlier believed. Strong global demand has also tightened the market.

Flows have matched these changing perceptions, with the US market being a source of funds as investors continued to

move more into Europe and the Emerging Markets. Once again, Emerging Markets led the rise with an increase of 7.6% in local currency, or 7.9% in USD terms. Japan and the US each achieved a little over 4% (in local currency) while Europe followed closely with a 3.6% gain.

We are delighted to witness a more normal distribution of performance across markets, as represented by the MSCI indices, with the action no longer being dominated by the US component. The Fund has clearly benefited from this as well as from the diminution of the 'duration-seeking' or cyclical aversion that characterised the period from 2011 to 2016. Most pleasing of all was that in each geographic area, the funds invested have achieved higher returns than the host market. Consequently, we have been able to add considerable value as a fund manager – ironically, just as the discussion around passive management seems to have reached a climax! For the quarter, the Fund (Class D) achieved 8.7% and for the last 12 months 23.5%. This contrasts with the MSCI AC World Index (US\$) achieving 5.2% and 18.6% over the same respective periods.

Shorting

Specific stock shorts are running at 3%, a slight increase from last quarter, while equity index shorts have been reduced to 5%. Otherwise there has not been much change this quarter and the short positions remain primarily against the US market.

Disposition of Assets

REGION	30 SEP 2017	30 JUN 2017
Asia	36%	33%
Europe	20%	19%
Japan	16%	16%
North America	12%	15%
Australia	1%	0%
Russia	1%	1%
South America	0%	<1%
Cash	14%	16%
Shorts	-8%	-11%

Refer to note 2, page 19.

Source: Platinum Investment Management Limited.

Top 10 Holdings

STOCK	COUNTRY	INDUSTRY	WEIGHT
Samsung Electronics	Korea	IT	3.3%
Alphabet Inc	USA	IT	2.8%
Inpex Corporation Ltd	Japan	Energy	2.5%
Royal Dutch Shell PLC	UK	Energy	2.3%
Lixil Group Corporation	Japan	Industrials	2.3%
Sina Corp	China PRC	IT	2.0%
Glencore PLC	Switzerland	Materials	1.9%
Sanofi SA	France	Health Care	1.9%
Jiangsu Yanghe Brewery	China	Consumer Staples	1.8%
Nexon	Japan	IT	1.8%

As at 30 September 2017. Refer to note 3, page 19. Source: Platinum Investment Management Limited.

For monthly updates of the Fund's invested positions, including country and industry breakdowns as well as currency exposure, please visit www.platinumworldportfolios.ie/Funds/InternationalMonthlyUpdates.

Currency

As shown in the table below, changes in currency holdings have been minor.

CURRENCY	30 SEP 2017	30 JUN 2017
US dollar (USD)	32%	37%
Hong Kong dollar (HKD)	13%	10%
Euro (EUR)	13%	16%
Japanese yen (JPY)	12%	9%
Korean won (KRW)	8%	6%
British pound (GBP)	5%	4%
Indian rupee (INR)	5%	5%
Australian dollar (AUD)	3%	3%
Norwegian krone (NOK)	3%	6%
Chinese yuan (CNY)	3%	2%
Chinese yuan offshore (CNH)	0%	-1%

Refer to note 4, page 19.

Source: Platinum Investment Management Limited.

Changes to the Portfolio

As we hinted in our last quarterly report, we have become quite excited about the prospects for what we term the 'electric metals'. We have been accumulating our exposure to these companies for some time, which continued this guarter. This decision comes from the work we have done on the changes taking place in the automobile industry regarding electric drives and autonomous vehicles. This is obviously a convoluted quest that is weighing heavily on the valuations of traditional auto companies which, as a group, are confoundingly cheap, even with the apparent hurdles they face been taken into account. By contrast, manufacturers of automobile electronic components, battery suppliers and their source suppliers have experienced some spectacular gains and in which we have to some extent participated. However, our field trips suggest that massive battery capacity is currently being built in anticipation of a Chinese-led blitz on traditional internal combustion engines (ICEs).

At present, it is a guessing game as to the number of electric and hybrid vehicles that will be sold in, say, 2020. There are many imponderables, including range anxiety, the higher initial cost of electric vehicles (EVs), the scarcity of charging facilities and the probable loss of generous state subsidies.1

What we do know is that all the large manufacturers will have EVs on offer by 2019 and need to sell a certain proportion, even if at low margins, in order to meet their fleet emission quotas in sophisticated markets.² (Daimler-Benz recently alluded to the cost of this in their investor day presentations, suggesting that they anticipate a reasonable, if smaller, contribution margin.)

From an investing standpoint, this raises a host of opportunities. From earlier work, we followed the battery component path and acquired positions. But from here, ironically, the most certain opportunity may lie in the simpler companies that provide the basic metals. Nickel, copper and cobalt are prospective. The problem with cobalt is its scarcity, with current mine production barely achieving 100,000 tons a year and 65% of which coming from the perilous Democratic Republic of the Congo!

We find **nickel the most interesting** from an investment perspective. There are still huge stocks, a consequence of the mining boom and subsequent oversupply. At the current price of under US\$5 per pound, perhaps 25% of world output is cash flow negative, and there is the added uncertainty around supplies of nickel-rich iron ore from Indonesia and the Philippines. However, we think such concerns are missing the more pertinent point that, of the annual supply of new material, which runs at 2.2 million tons, only about 950,000 tons are suitable for battery making. Considering that each 60 kWh Chevy Bolt NMC battery may contain as much as 23 kg of nickel, it does not take too many vehicles to start to tighten the refined nickel market.

Substitution is always a risk. As we are seeing with cobalt, which has seen the price triple in two years to US\$30 per pound, efforts at thrifting are already producing results. The new cathode blends are reducing the cobalt load in NMC batteries from one-third nickel, one-third manganese and one-third cobalt (1:1:1) to a ratio of 8:1:1. These are due to for release in 2020.

aluminium oxide (NCA) cathodes storing as much as 250 Wh per kg, twice that by the cheaper and more stable lithium phosphate (LFP) cathodes. Interestingly, the cost of the metal content of, say, a lithium nickel manganese cobalt oxide (NMC) 811 battery is around 20% to 25% of the cost of the entire battery pack, leaving lots of scope to reduce the packaging and related costs. At present, the Nissan Leaf is estimated to be acquiring battery packs from LG Chemical at close to US\$140 per kW. The general view is that once battery packs are available at US\$100 per kW or lower, EV manufacturers will be able to match the cost of an ICE driven car

2 In the US, for example, the Corporate Average Fuel Economy (CAFE) hurdle is currently 35.5 miles per gallon (MPG), which will rise to 54.5 MPG by 2025. On 28th September 2017, China's Ministry of Industry announced that by 2019 at least 1 in 10 cars sold in China must be so-called new-energy vehicles (NEV).

¹ These subsidies presently average around US\$5,000-7,000 per battery-powered electric vehicle (BEV), with the outliers being China, at around US\$10,000 per BEV, and Norway, at about US\$20,000 per BEV. The high initial cost of EVs may be the greatest impediment with current calculations suggesting a through-life payback of, say, seven to nine years. For example, the cost of the electric drive train is similar to that of an ICE, but the battery adds anything from US\$8,000 to US\$15,000 per vehicle. However, battery technology is bounding ahead with lithium nickel cobalt

The tightening of the nickel market may take time to play out, because stocks of the metal are still large, though off their peak levels. We have invested around 5% of the Fund in potential mining beneficiaries.

There is a further 8% of the Fund in hydrocarbon plays, representing an increase from earlier in the year. To fund these positions we have tended to reduce our bank exposure as well as trimming some of our high-flying internet and e-commerce holdings.

Outlook

The great puzzle is the preference investors are showing globally towards bonds (nominal assets) over equities (real assets). This tea party is all the more bewildering when one considers that earnings growth from the middle of last year has been accelerating while bond yields have been strengthening (i.e. bond prices have been falling), and in the face of that, equity withdrawals have sped up, as have bond purchases. We know that the central banks are insensitive buyers – together, the European Central Bank (ECB), the Bank of Japan (BoJ) and the Bank of England (BoE) are buying US\$175 billion of bonds per month, and that baby-boomers change their risk preferences as they age. But what is so interesting about bonds? The hole caused by central bank

purchases³ is being assiduously filled by the issue of corporate debt. Such is their excitement that bond investors have driven the yield of subprime European paper to below that of sovereign US paper. To put some numbers to the foregoing, corporate debt in the US has risen uninterruptedly from US\$1 trillion in 2011 to US\$1.54 trillion in 2016. At the same time equity ownership in the US has fallen by some US\$500 billion.

We have not discovered the secret to this phenomenon. If the world's finances are so perfect, as suggested by the current pricing of equities, why is there still such need for central banks to continue with quantitative easing? What we can observe is that as investment banks now play a minor role as market makers, the reach-for-yield is narrowing the rate differential between quality and trash dramatically, and bond managers appear to have reduced their portfolio hedging, such that when one wishes to reposition a portfolio, it is neither easy nor swift. All this points to fewer **stabilisers** in bond markets should there be that pause caused by the proverbial embarrassing question across the dinner table. In response to the popular question "where will the next eruption come from", we might proffer liquidity, and bond liquidity in particular, well ahead of the standard favourite, China.

³ Governments have commandeered their own bond markets: Of the US treasury market of US\$20 trillion, the US Fed owns 12% and a further 20% is owned by foreign governments. In the world's second largest bond market, Japan, the BoJ owns 45% of the US\$8 trillion on issue while the ECB and the BoE respectively own 20% and 30% of their government bonds in issue!

Platinum World Portfolios - Asia Fund



Joseph LaiPortfolio Manager

Performance

(to 30 September 2017)

				SINCE
	QUARTER	6 MTHS	1 YEAR	P.A.
PWP Asia Fund Class A USD	10.5%	19.6%	-	23.9%
PWP Asia Fund Class B USD	11.0%	-	-	18.3%
PWP Asia Fund Class D USD	11.0%	20.0%	26.4%	18.8%
PWP Asia Fund Class I USD	10.6%	19.9%	-	29.1%
MSCI AC Asia ex Jp Index (USD)	6.6%	15.5%	22.7%	18.9%

Refer to note 1, page 19.

Source: Platinum Investment Management Limited, RIMES Technologies. Historical performance is not a reliable indicator of future performance.

The Fund (Class D) rose 11.0% over the quarter, compared to 6.6% by the MSCI Asia ex-Japan Index (US\$).

Markets across Asia continued their positive performance from the last quarter. The Thai market was up 8% (in local currency), as the country's export sector strengthened with the global economic recovery. The Indian and the Philippines markets rose 4% and 3% respectively for the quarter (in local currency), as economic activity continued to pick up.

China, in particular, continued to surprise with the rigour of its reform. The evident recovery in corporate profitability and the resilience in consumer spending indicate that a rebalancing of the country's economy is well and truly under way. China's H-Share and domestic A-Share markets were up 6% and 5% respectively (in local currency). Chinese internet stocks were again the key contributors to the Fund's performance this quarter, with 58.com (online property and classifieds) up 43%, Alibaba (e-commerce platform) up 22%, and Sina and Weibo (social media) up 35% and 47% respectively. ZTE (telco equipment supplier) and Midea (white goods and robotics manufacturer) also contributed to performance, up 37% and 5% respectively.

Commentary

Several members of the investment team took a field trip to China this quarter, visiting dozens of companies in different cities and speaking with numerous industry participants. Apart from the general zeal and buzz felt in all parts of the economy, we witnessed many concrete examples of leaps in productivity improvement driven by infrastructure investment, automation, education and innovation. If productivity (in terms of output per time unit) is a key indicator and determinant of economic growth, China's massive productivity growth is what has strengthened our conviction about the country's long-term prospects. The last five years have been a bumpy period of transition for China, which gave investors cold feet. What most haven't realised is how much the country has adjusted through tough policy moves, serious investments in R&D and infrastructure, and real productivity gains, and as a result, how well it is positioning itself for the next wave of development.

First class infrastructure: We went on a journey on the high speed rail along the east coast of China, and found the service punctual, comfortable and efficient, notwithstanding the high passenger volume. China has the world's largest high speed rail network by distance – more than 22,000 km in total, and it is proving very effective in transporting large numbers of people around this populous country.

To put things in context, the Sydney-Melbourne air route is one of the busiest in the world. With a plane departing every 10-15 minutes, flights only manage 6 million passengers a year. The Beijing-Shanghai line has a high speed train departing in each direction every 20 minutes, moving nearly 160 million passengers a year! At 350 km/hr, the 1318 km journey takes as few as 4.5 hours and a second class ticket costs just CNY 553 (about US\$85). Commentators in the West like to remark on China's over-spending on infrastructure and the associated credit concerns, while overlooking the very tangible long-term benefits that these infrastructure investments bring. Transporting so many people around such a vast country would simply have been impossible without the high speed rail system.

In addition to upgrading its inter-state rail system, China is also busy putting in much-needed urban infrastructure to meet the needs of the ever-expanding urban population and improve the ease of doing business. Metropolitan subway

systems are being built for the first time in many cities, and China has more than 20 cities with a population of 5 million or more! Water and waste treatment plants are being added and upgraded to deal with the pollution problems. 4G telecommunication systems are being optimised continually, with the implementation of a 5G network scheduled to start in 2019.

When it comes to the debate about China's residential property market, we are of the view that it is simply not true that there is an over-supply. While there are inevitably some pockets of speculative developments, many cities are in fact seeing a shortage, so much so that local authorities have had to put in ever more stringent measures to suppress demand (such as forbidding owners to sell within two to five years post purchase). Indeed, what we are not seeing in many big cities in China are the mass of construction cranes that have been dominating the skylines of Australian cities!

Automation: Private Chinese companies are investing in

automation and robotics in earnest, as we have witnessed on our recent visits to several logistics and electrical appliances companies. E-commerce is propelling the growth of the logistics industry, accelerating the process towards increasing automation throughout warehouses and logistic centres. When we arrived at a logistic centre of a major e-commerce operator last month, we were astounded by how much things have changed since our last visit four years ago. The implementation of sorting machines has reduced the number of human workers in a line by some 80%! Instead of finding thousands of workers dashing around to pick up boxes and parcels, as we did last time, we now found the task almost entirely carried out by industrial robots. Rising labour costs, demand for superior and consistent quality in products and services, and the sheer scale of China's consumer demand, indeed, call for automation, and this process of upgradation is only just beginning. Despite all the talk in the press about the demographic cliff that China is facing, the country is adjusting well, and it will require fewer, not more, manual labourers.

Education and innovation: More than 7 million university graduates are minted each year in China (twice as many as in the US), and more than half of those graduates are from science and engineering disciplines. The number of tertiary students has grown explosively over the last 10 years as the government increased university intake. While manual workers are being incrementally replaced by machines, the country is both demanding and producing more skilled workers, and this highly skilled workforce is fuelling China's rapid technological advancement.

With the pace of technological innovation accelerating, more than one "innovation hub" has sprung up in China. Among

them, Shenzhen, a city of 12 million people and situated just north of Hong Kong, is probably the most worthy of the title "the Silicon Valley of China". It is a city which combines inexpensive engineering talents, a comprehensive supply chain and a dynamic ecosystem. A number of leading Chinese technology companies are headquartered in Shenzhen, some of which are already serious competitors, if not leaders, globally. These include, for example, Huawei and ZTE, two of the world's top four telecommunication equipment makers and well-positioned to lead in the next generation 5G wireless technologies, and drone maker DJI, which has a 75% market share in consumer drone market globally.

In addition to the government's direct and indirect support for research and development (e.g. increased R&D spending and generous tax incentives) and a vibrant venture capital scene, China's enormous consumer base and well-established supply chains in hubs like Shenzhen give its companies the advantage of being able to innovate more quickly through faster consumer feedback loop and product iteration. The scale of its market allows products to be produced in huge quantities and cheaply.

Supply side reform: This is a phrase now familiar to most China observers. The crux of this policy is the closure of unprofitable, excess production capacity of steel, coal, cement and other such commodities. These industries have been propped up by local banks, but oversupply has depressed prices and erased profitability for the entire industry, in turn threatening the stability of the banking system with non-performing loans. In some cases, the production plant is illegal and fails to meet safety and environmental standards. Governments used to turn a blind eye to these operations for the sake of saving jobs, but things have changed. The central government is enforcing environmental standards with rigour, demanding the closure of unlicensed plants and offending polluters, and holding local government officials to account. As a result of the extensive supply cuts, we are seeing commodity prices (steel, coal, aluminium) recover strongly, leading to significantly improved profits for the remaining producers, and this is gradually restoring health to banks' balance sheets. Most importantly, many Chinese cities are beginning to see blue sky again!

All of the above are very real drivers of improved productivity and they are taking place in China today. These productivity gains are in turn lifting income and boosting consumption. Consumption patterns of the Chinese population are also shifting. Innovative companies are starting to provide consumer loans to many who have hitherto not had access to credit. Car loans as a percentage of new car sales are only

around 30%, and lenders typically demand a minimum up-front payment of 30%. Considering that in countries like Australia and the US buyers are used to "drive-away with \$0 up-front payment", consumer lending in China is clearly in its nascency and has much potential to grow.

Changes to the Portfolio

We have been studying these secular trends intensely, and the Fund has exposure to all of the major themes, from automation to robotics, from fintech to consumer credit.

The Fund took advantage of some sectoral share price weakness this quarter and deployed some cash into the longer-term ideas, mostly in the Chinese financials sector.

Disposition of Assets

REGION	30 SEP 2017	30 JUN 2017
China (Ex PRC Listed)	49%	39%
China (PRC Listed)	8%	8%
Hong Kong	3%	1%
Taiwan	2%	3%
Korea	10%	11%
India	9%	13%
Philippines	4%	5%
Thailand	4%	6%
Vietnam	2%	2%
Singapore	1%	1%
Malaysia	1%	1%
Indonesia	1%	<1%
Cash	6%	9%

Refer to note 2, page 19.

Source: Platinum Investment Management Limited.

Outlook

It is difficult to convey in a few brief paragraphs the sense of energy and vibrancy that we experienced during our recent field trips to China, and the range and pace of activity that we observed taking place there. (I urge you to read Kerr's feature piece, *The Rise of Asia*, in this issue for a more extensive discussion on the country's transformation and ongoing reform. Andrew's *Macro Overview* provides a more detailed examination of the impact of the supply side adjustments.) We are confident that China's investments in education, infrastructure and innovation are driving real productivity growth which will translate into higher income and stronger consumption, sparking a virtuous cycle of growth for years to come.

The level of concern over China's debt problems has subsided, and investors have shown more enthusiasm. In the short-term, the market may consolidate around these current levels to digest the recent advances. Looking further afield, we are positioning the Fund's portfolio to be exposed to a wide range of private Chinese companies across industries that are swiftly climbing up the technological ladder.

Currency

CURRENCY	30 SEP 2017	30 JUN 2017
Hong Kong dollar (HKD)	41%	28%
US dollar (USD)	19%	35%
Korean won (KRW)	10%	11%
Indian rupee (INR)	9%	13%
Chinese yuan (CNY)	7%	8%
Thai baht (THB)	4%	5%
Philippine peso (PHP)	4%	5%
Chinese yuan offshore (CNH)	0%	-12%

Refer to note 4, page 19.

Source: Platinum Investment Management Limited.

For monthly updates of the Fund's invested positions, including country and industry breakdowns as well as currency exposure, please visit www.platinumworldportfolios.ie/Funds/AsiaMonthlyUpdates.

Top 10 Holdings

STOCK	COUNTRY	INDUSTRY	WEIGHT
Alibaba Group	China Ex PRC	IT	3.8%
Ayala Corp	Philippines	Financials	3.3%
CNOOC Ltd	China Ex PRC	Energy	3.1%
Midea Group	China	Consumer Disc	3.0%
Jiangsu Yanghe Brewery	China	Consumer Stap	3.0%
Ping An Insurance Group	China Ex PRC	Financials	2.9%
Kasikornbank PCL	Thailand	Financials	2.9%
Samsung Electronics	Korea	IT	2.8%
Axis Bank Ltd	India	Financials	2.8%
China Merchants Bank	China Ex PRC	Financials	2.6%

As at 30 September 2017. Refer to note 3, page 19. Source: Platinum Investment Management Limited.

Platinum World Portfolios - Japan Fund



Scott Gilchrist Portfolio Manager

Disposition of Assets

REGION	30 SEP 2017	30 JUN 2017
Japan	90%	96%
Korea	2%	1%
Cash	8%	3%
Shorts	-1%	-2%

Refer to note 2, page 19.

Source: Platinum Investment Management Limited.

Sector Breakdown

SECTOR	30 SEP 2017	30 JUN 2017
Information Technology	23%	25%
Industrials	20%	21%
Consumer Discretionary	16%	17%
Materials	12%	10%
Energy	8%	5%
Financials	7%	10%
Health Care	4%	4%
Telecommunication Services	3%	4%
Consumer Staples	-1%	-1%
TOTAL NET EXPOSURE	92%	95%

Refer to note 5, page 19.

Source: Platinum Investment Management Limited.

Currency Positions

CURRENCY	30 SEP 2017	30 JUN 2017
Japanese yen	70%	84%
US dollar	28%	15%
Korean won	2%	1%

Refer to note 4, page 19.

Source: Platinum Investment Management Limited.

For monthly updates of the Fund's invested positions, including country and industry breakdowns as well as currency exposure, please visit $\underline{www.platinumworldportfolios.ie/Funds/JapanMonthlyUpdates}.$

Performance

(to 30 September 2017)

			ı	SINCE NCEPTION
	QUARTER	6 MTHS	1 YEAR	P.A.
PWP Japan Fund Class A USD	9.0%	15.4%	23.5%	20.5%
PWP Japan Fund Class B USD	9.9%	17.1%	-	22.9%
PWP Japan Fund Class D USD	9.9%	17.1%	26.0%	19.4%
MSCI Japan Index (USD)	4.0%	9.4%	14.1%	9.0%

Refer to note 1, page 19.

Source: Platinum Investment Management Limited, RIMES Technologies. Historical performance is not a reliable indicator of future performance.

The Fund (Class D) rose 26% over the last twelve months and 10% for the quarter. Consistent across both periods was the excitement of the lithium ion automotive battery supply chain, the transitions underway in the computer gaming arena and strong demand across the industrial and materials sectors due to surprisingly widespread global economic growth.

The Japanese market recently approached 20 year highs. In combination with the strong Fund performance, this naturally raises concerns for both pragmatic noses and long term students of markets. This wariness permeates our daily actions, yet it is possible to argue that the medium to long term opportunity in the Japanese equity market is currently as attractive as any time in the last two decades. There are many signs that the beast is waking from decades of slumber. The Nikkei index remains half of the lofty heights it reached in 1989.

Top 10 Holdings

STOCK	COUNTRY	INDUSTRY	WEIGHT
Nintendo	Japan	IT	4.3%
Inpex Corporation	Japan	Energy	3.5%
Itochu Corporation	Japan	Industrials	3.5%
Japan Petroleum Exploration	Japan	Energy	3.2%
Nexon	Japan	IT	3.1%
Sumitomo Metal Mining	Japan	Materials	3.0%
Lixil Group	Japan	Industrials	3.0%
Mitsubishi UFJ Financial	Japan	Financials	2.6%
Ebara Corp	Japan	Industrials	2.5%
JSR Corp	Japan	Materials	2.5%

As at 30 September 2017. Refer to note 3, page 19. Source: Platinum Investment Management Limited.

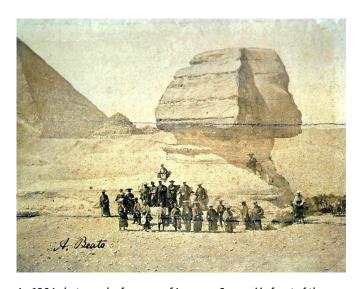
Changes to the Portfolio

The refinement of portfolio positioning continues as mentioned in prior reports. Opportunities continue to be identified in misunderstood growth areas and deep value cyclicals.

Commentary and Outlook

The Atlas of Economic Complexity attempts to identify the uniqueness and value added nature of a country's exports. It ranks Japan as number 1 in the world, ahead of Switzerland and Germany. Japan ranks highest in the world in patent families and ahead of all except Korea in R&D spending as a percentage of GDP. When visiting Japan, the high quality of many aspects of the country is in stark contrast to the decay seen in much of the world. It is too uncomfortable for most to accept that Japan's total factor productivity in recent years has been ahead of almost every other country. Both quantitative and qualitative analyses of the country are in stark contrast to much external perception and banter. In a world of increasing homogeneity, this is truly a country as unique as the image of the Samurai visiting Egypt en route to Europe in 1864. The majority of global investors should reflect on their biases and heuristics and reconsider their mental image of Japan and its economy, especially its financial markets, demographics, debt levels, fiscal deficit and capacity for change.

The dominant market rhetoric seems to be shifting from the "fear of missing the next crisis" to the "fear of missing out". Japan's valuation, profit growth and market sentiment are an interesting combination in this context.



An 1864 photograph of a group of Japanese Samurai in front of the Sphinx in Egypt. Source: Wikipedia

Hybrids

The Prius was launched by Toyota in 1997 following an intense five year research and engineering effort. It featured a four cylinder Atkinson cycle engine, a separate generator and a nickel metal hydride battery. This remains the fundamental configuration for their hybrid vehicles today, a testament to the rigour and foresight of the development team's ground-breaking achievement. Sales were only 123,000 units globally for this early model.

The global trend toward tighter emission standards and fuel efficiency is inexorable. One leading auto catalyst manufacturer estimates that demand for their mainstay product will increase over the next decade in most scenarios, even with the headwind of battery electric vehicles. Similarly, the auto industry is working on a wide range of material, engine efficiency, drivetrain and tyre improvements to meet the dramatic legislative requirement for improved fleet fuel efficiency. Some logos are pushing down the path of low margin electric vehicles in response. European marques had previously been focused on higher compression ratio and efficient diesel engines, but are adjusting course until consumers become more comfortable with *real world* tailpipe emissions.

Goldman Sachs estimates that, in 2010, slightly more than a decade after the birth of the first Prius, the payback period of its third generation model was three years. In effect, the fuel sipping drivetrain configuration paid for the slightly higher sticker cost within a very reasonable time frame, especially in an urban setting comprising many small trips. This real world financial metric has been the exponential demand tipping point for many new technologies and in this case led to a boom in hybrid vehicle sales. The Prius became profitable in 2007 and now has operating margins above the corporate average. It is possible to argue that Toyota is the world's leading electric vehicle company on the basis of the new Prius Prime, their cumulative sales of over 10 million hybrid vehicles and their leading hybrid technology and cost position. Their hybrid output also improves their fleet emissions level and fuel efficiency, which means that they will be able to easily meet global standards well into the future.

Japanese hybrid sales have reached 30% of new vehicles and an increasing percentage of the fleet. This has contributed to a reduction in oil consumption of 25% over the last two decades across the archipelago and particularly in the urban conurbations of Tokyo, Nagoya, Osaka and Yokohama. While the future of personal mobility is undoubtedly electric, the hybrid, of which Toyota produces 70% of the global output, is a more than adequate interim solution to many of the world's current environmental and geopolitical dilemmas.

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1. Fund returns are calculated using the Fund's net asset value per share attributable to the relevant share class (where a particular share class is not denominated in USD, the net asset value per share in USD, being the Fund's base currency, is converted into the denomination currency of that share class using the prevailing spot rate), and represent the combined income and capital return attributable to the relevant share class for the specified period. Fund returns are net of accrued fees and expenses attributable to the relevant share class (NB: the anti-dilution levy is not an expense of the Fund), are pre-tax, and assume the accumulation of net income and capital gains attributable to the relevant share class. The investment returns shown are historical and no warranty can be given for future performance. Historical performance is not a reliable indicator of future performance. Due to the volatility of the Fund's underlying assets and other risks associated with investing, investment returns can be negative, particularly in the short-term.

The benchmark index for the relevant Fund is as follows (each the "Index", as the context requires):

- Platinum World Portfolios International Fund MSCI All Country World Net Index (US\$)
- Platinum World Portfolios Asia Fund MSCI All Country Asia ex Japan Net Index (US\$)
- Platinum World Portfolios Japan Fund MSCI Japan Net Index (US\$)

Index data has been sourced from RIMES Technologies. Index returns are in US dollars and include dividends, but, unlike the Fund's returns, do not reflect fees or expenses. Platinum does not invest by reference to the weighting of the Index. The Fund's underlying assets are chosen through Platinum's individual stock selection process and, as a result, the Fund's holdings may vary considerably to the make-up of the Index. Index returns are provided as a reference only.

The portfolio inception dates for each active share class of the relevant Fund are as follows:

Platinum World Portfolios - International Fund:

Class A USD (Accumulating) (ISIN: IE00BYRGQX37): 27 April 2016

Class B USD (Accumulating) (ISIN: IE00BYRGR076): 2 December 2016

Class D USD (Accumulating) (ISIN: IE00BYRGQZ50): 16 November 2015

Class F EUR (Accumulating) (ISIN: IE00BYRGR183): 4 April 2017

Class G GBP (Accumulating) (ISIN: IE00BYRGR290): 27 April 2016

Class H GBP (Accumulating) (ISIN: IE00BYRGR308): 4 August 2016

• Platinum World Portfolios - Asia Fund:

Class A USD (Accumulating) (ISIN: IE00BYRGR522): 10 March 2017 Class B USD (Accumulating) (ISIN: IE00BYRGR639): 20 April 2017

Class D USD (Accumulating) (ISIN: IE00BYRGRD06): 16 November 2015

Class I USD (Accumulating) (ISIN: IE00BYMJ5524): 19 January 2017

• Platinum World Portfolios - Japan Fund:

Class A USD (Accumulating) (ISIN: IE00BYRGRF20): 11 January 2016

Class B USD (Accumulating) (ISIN: IE00BYRGRH44): 23 December 2016

Class D USD (Accumulating) (ISIN: IE00BYRGRJ67): 16 November 2015

For the purposes of calculating the "since inception" returns of the Index, the inception date of Class D of the Fund, being 16 November 2015, is used (as Class D was the first share class activated.

- 2. The geographic disposition of assets (i.e. the positions listed other than "cash" and "shorts") represents the Fund's exposure to physical holdings and long derivatives (of stocks and indices) as a percentage of the Fund's net asset value.
- 3. The table shows the Fund's top 10 long stock exposure (through physical holdings and long derivative positions) as a percentage of the Fund's net asset value.
- 4. The table shows the Fund's major net currency exposure as a percentage of the Fund's net asset value, taking into account any currency hedging.
- 5. Sector breakdown represents the Fund's net exposure to physical holdings and both long and short derivatives (of stocks and indices) as a percentage of the Fund's net asset value.

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