Platinum
ASSET MANAGEMENT

A CHINA ANTHOLOGY

CONTENTS

DESIGNED AND PRODUCED BY:
3C CREATIVE AGENCY, 3C.COM.AU

It is simply meaningless to discuss the world economy today without properly understanding the tectonic transformation that we are witnessing in Asia and particularly China.

This collection of papers brings together our understanding of China's place in the world, the significance of its transition and the investment opportunities it presents. Through these articles, we hope to share with you the experience and insights from extensive research, travel and decades investing in China.

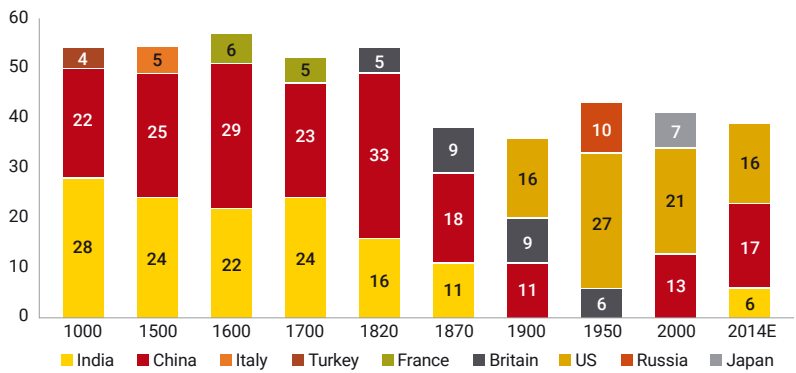
AN UNUSUAL COUPLE OF CENTURIES

BY JULIAN MCCORMACK, SEPTEMBER 2015

It should perhaps be no surprise that for much of recorded history the largest populations on Earth made the largest contribution to economic activity.

This has been the case for most of the last 1,000 years, as shown in a chart originally produced by quantitative economic historian Angus Maddison[1], which we saw in The Economist.

World's biggest three economies' GDP at PPP* as % of world total
(historical output within the boundaries of modern countries)



Source: Angus Maddison; IMF; The Economist, accessed 28 May 2015.
* Purchasing power parity

Clearly, the summation of 1,000 years of economic history in one chart is fraught with difficulty – we cannot speak to the veracity of the data nor the integrity of the methodology underlying these numbers. However, we find it an interesting thought experiment to consider what transpired over the last 1,000 years to cause the world's largest population centres to be relegated to minor players economically, which we think is broadly true.

THE DARK AGES WERE NOT DARK EVERYWHERE

Were a Martian to have visited our lovely blue planet in the year 1000CE (Common Era), it is unlikely she would have picked Europe as the region which would revolutionise economics, technology and human potential[2]. The glories of classical civilisation had well and truly faded. For instance Rome had slumped to the status of a minor town, with a population of perhaps 5,000[3]. 1,000 years ago, the Dark Ages were dark indeed in Europe, but elsewhere this was not the case.

By 1000CE the Abbasid Caliphate, centred in Al Mansur's beautiful and cosmopolitan city of Baghdad, had overseen an enormous translation effort of the great works of Greek and Roman scholarship. The Muslim world led humanity in mathematics, medicine and the sciences. From this period we derive the word 'algebra' from the title of a work '*Hidab al-jabr wal-muqubala*', written by Mohammed ibn-Musa al-Khowarizmi (from whose name we derive the word "algorithm")[4].

As early as 700CE the Chinese city of Chang'an (now Xi'an) was probably the world's largest and richest city. Merchants and visitors from West, South, Southeast, and East Asia arrived frequently, and Tang China functioned as the epicentre of an international culture reflected in the visual arts of Korea and Japan. By the 9th Century 'exchange notes,' negotiable certificates dubbed 'flying money,' were in circulation. They were the precursors of banknotes, widespread in China by the early eleventh century. The Chinese invented printing in the 9th Century, in the form of woodblock prints. Later innovations in China in the 11th and 12th centuries under the Sung Dynasty included gunpowder and the compass[5].

China was centuries ahead of the rest of the world in areas as diverse as steelmaking, armaments, transportation networks and finance.

The results included significant exports of manufactures thanks to the Sung Dynasty's expanded merchant marine and a prosperous consumer society. This in turn benefited India[6].

Around 1000CE the area of modern day India was a land of diverse empires and religions, from the Sunni Ghaznavid Dynasty in the north to the Hindu Chola Empire in the South[7]. The Chola in particular prospered by exporting products including manufactured textiles, spices, drugs, rhinoceros horn, amber, coral, aromatics and perfumes to China[8].

Europe, by contrast, was an almost entirely rural, unsophisticated backwater in the early medieval period. There were only a few towns across the entire continent of greater than 10,000 people, versus Sung China's largest city Hangzhou, whose inhabitants numbered approximately 1,000,000. Life was much less sophisticated in the West than in the East, in areas such as finance, literacy, diet, culture, art, commercial endeavour, trade and industrial specialisation[9].

But something changed.

THE EXPLOSION OF MODERNITY

It seems that economic output per head of population changed very little, if at all, for much of human history[10]. However, from some point in approximately the 18th century, the world changed quite dramatically. For perhaps the first time in human history, significant growth in per capita economic activity was achieved. And it appears that this per capita revolution occurred in Europe and its offshoot America well before it took hold in either Africa or Asia (see table from Piketty below).

The result is that you, your parents and your grandparents all grew up in a period in which one part of the world – Europe and America taken as a whole – had been growing much faster on a per capita basis than the rest of the world for perhaps two centuries.

Per capita output growth since the industrial revolution (average annual growth rate)

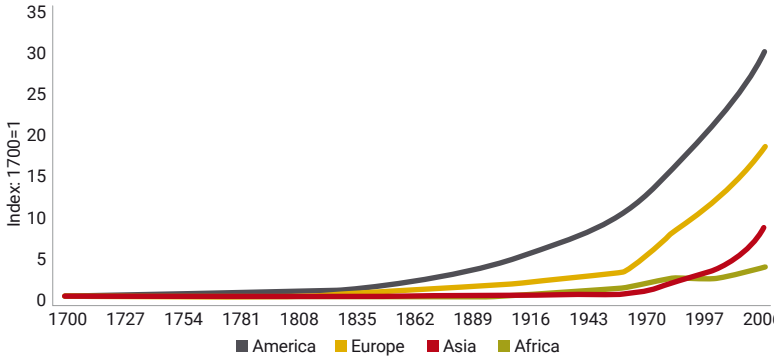
	Per capita world output (%)	Europe (%)	America(%)	Africa (%)	Asia (%)
0-1700	0.0	0.0	0.0	0.0	0.0
1700-2012	0.8	1.0	1.1	0.5	0.7
1700-1820	0.1	0.1	0.4	0.0	0.0
1820-1913	0.9	1.0	1.5	0.4	0.2
1913-2012	1.6	1.9	1.5	1.1	2.0
1913-1950	0.9	0.9	1.4	0.9	0.2
1950-1970	2.8	3.8	1.9	2.1	3.5
1970-1990	1.3	1.9	1.6	0.3	2.1
1990-2012	2.1	1.9	1.5	1.4	3.8
1950-1980	2.5	3.4	2.0	1.8	3.2
1980-2012	1.7	1.8	1.3	0.8	3.1

Source: "Capital in the Twenty-First Century", Thomas Piketty, Editions du Seuil, 2013, p94.

Note: Angus Maddison puts total per capita economic growth over the period 1000CE to 1820CE at 50% total, while Noell, Smith and Webb put it at 0.05% per annum for the same period – these are mathematically almost identical (see footnote 9 for references).

It is very difficult to get a sense of the power of compounding small numbers. To aid in conceptualising the importance of these different growth rates we have included a chart depicting an index, with all regions starting at 1 and compounding at the growth rates estimated by Piketty.

Index, applying per capita output growth since the industrial revolution according to Piketty



Source: "Capital in the Twenty-First Century", Thomas Piketty, Editions du Seuil, 2013, p94, Platinum analysis.

Note: This is indicative only and is designed merely to show the significant impact of small differences in growth rates over long periods of time.

WHY DID EUROPE LEAD THE EXPLOSION?

This is a big question[11].

A partial answer may lie in culture: Western culture is both the product of and the producer of highly sophisticated and rigid cultural institutions which may have been crucial in allowing for the kind of self-controlled, repetitive and long-term goal oriented behaviour necessary for endeavours such as formal education or scientific research[12].

Further, Western acculturation gave rise to changes in individual behaviour and changes in social power appropriate for the centralisation of state power and the power of capital[13].

Europe has an alphabetical form of writing, plus a cultural separation of Church and state, both of which may have helped the explosion of printing from 1500CE or so[14]. There was a strong tradition in Christianity of the subjugation of nature to man – very different to the animistic beliefs of some Asian religions[15]. For some the seeds of modernity are to be found in Christianity's emphasis on reason and free will[16] (at least relative to other religions).

Magna Carta's signing in 1215 established limited protections for a group of nobles versus the sovereign (or at least it attempted to – the parties fell to fighting shortly after its signing and ceased only upon King John's death in 1216). This was an early step along the path to the formation of the rule of law and respect for property rights[17]. This institutional curtailment of absolute power and respect for individual rights and property appear crucial, allowing for disruption to be tolerated (to a degree) and innovation to be rewarded (much of the time). This seems very different from China for example, which invented the blast furnace but killed off the private iron production in the 11th century as it was seen as a threat to Sung power[18].

Some see the increase in per capita economic activity late last millennium not as a social or economic phenomenon, but as a thermodynamic one.

Humanity, with the discovery of technologies to exploit fossil fuels, hit upon the means of physical liberation, by employing forms of energy with hitherto unimaginable energy return on investment[19].

SOME LESSONS FROM HISTORY

The causes of the explosion in per capita productive capacity were in part institutional, in part technological and clearly complex and multivariate.

One must not assume, however, that any of the causes of the per capita explosion are inherent, immutable or non-replicable. After centuries of lagging behind, Asia has grown faster than any other region since at least 1970 (again, see Piketty's table on page 5) and this continues to this day[20]. It appears that at least some of the lessons of history have been learnt.

Examination of why Europe led the world into the per capita explosion reminds us somewhat of an attempt to explain the exquisite set of variables required for life to exist in our universe. Everything seems so perfectly designed for life to exist, precisely because we exist in the universe in which life exists[21]! By extension, consider if you will that in 1000CE one may have been pondering exactly why Islam had swept all before it across much of the known world and within three centuries established a colossal empire and was extending the frontiers of human thought.

Over long periods of history, centres of economic and political power shift dramatically.

Recall our little green visitor in 1000CE. Such a visitor might be astounded upon returning to find that the agrarian, uneducated, backward region to the west of Asia had settled new continents, transformed science, driven technological innovation and created wealth unimaginable forty generations ago[22].

In viewing Asia's rapid growth, but unfamiliar social and political institutions, we believe many in the West feel not merely scepticism, which is appropriate, but outright disdain, which is ill-considered. Such disdain breeds neglect of investment opportunities on the part of global investors, a neglect we hope to exploit. ■

1 For more on Angus Maddison see: http://www.theworldeconomy.org/Angus_Maddison.html.

2 "*The Wealth and Poverty of Nations*", David Landes, WW Norton, New York, 1998, p29.

3 Note: this is an extreme estimate, but it seems certain that Rome's population was less than 100,000 in the early Medieval era. "*Housing in Early Medieval Rome, 500-1,000AD*", Robert Coates-Stephens, Papers of the British School at Rome, Vol. 64 (1996), pp. 239-259.

4 "*Pathfinders, The Golden Age of Arabic Science*", Jim Al Khalili, Penguin, London, 2012; see also http://www.und.edu/instruct/lgeller/algebra.html , accessed 28 August 2015.

5 Heilbrunn Timeline of Art History. New York: The Metropolitan Museum of Art, http://www.metmuseum.org/toah/ht/?period=07&region=eac#/Key-Events, accessed 28 August 2015.

6 "*India: The Ancient Past*", Burjor Avari, Routledge, London, 2007.

7 For instance see "*The History of the Chola Empire*", http://www.historydiscussion.net/empires/the-history-of-chola-empire-indian-history/718, accessed 31 August 2015; "*Medieval India; 1,000AD to 1756AD*", http://www.diehardindian.com/indian-and-world-history, accessed 31 August 2015.

8 "*India: The Ancient Past*", Burjor Avari, Routledge, London, 2007, p232.

9 "*The Uniqueness of Western Civilization*", Ricardo Duchesne, Brill, Leiden, 2011, pp151-2; "*India: The Ancient Past*", Burjor Avari, Routledge, London, p231; "Europe's decline from the first to tenth centuries", http://www.theworldeconomy.org/impact/Europe_s_decline_from_the_first_to_tenth_centuries_100_1000.html, accessed 31 August 2015.

10 "*Capital in the Twenty-First Century*", Thomas Piketty, Editions du Seuil, 2013, p94; "*Economic Growth: Unleashing the Potential of Human Flourishing*", Edd S. Noell, Stephen L. S. Smith, Bruce G. Webb, American Enterprise Institute for Public Policy, Washington, 2013, p5; "*The Contours of World Development*", http://www.theworldeconomy.org/index.htm, accessed 31 August 2015.

11 We do not intend to discuss the pre-conditions of European dominance, but rather to focus on the factors that differentiated Europe from the other large population centres globally, particularly in Asia, and only briefly at that. For discussion of the pre-conditions to industrialisation, see Jared Diamond's mind-blowingly good book, "*Guns, Germs and Steel*", WW Norton, New York, 1999. David Landes' "*Wealth and Poverty of Nations*" also has a good discussion of these pre-conditions. These include the relative warmth of the Gulf Stream at high latitudes, climate, level of forest cover, flora, fauna, relatively low labour intensity in agriculture, the longitudinal orientation of Eurasia and more. Note we include Europe and its offshoots, notably North America, when discussing Europe.

12 See for instance "*The Civilizing Process, Vol.I. The History of Manners*", Norbert Elias, Oxford, Blackwell, 1969 & "*The Civilizing Process, Vol.II. State Formation and Civilization*", Norbert Elias, Oxford, Blackwell, 1982. See also "*The Protestant Work Ethic and the Spirit of Capitalism*", Max Weber, Routledge, London 1992.

13 "*The Theory of the Civilising Process and its Discontents*", J Gouldsblom, http://www.norberteliasfoundation.nl/docs/pdf/GoudsblomDiscontents.pdf, accessed 2 September 2015.

14 Landes, pp50-52.

15 Landes, p58.

16 "*Book Review: 'How the West Won,' by Rodney Stark*", Henrik Bering, http://www.wsj.com/articles/SB10001424052702303802104579450133427942574, accessed 3 September 2015.

17 Landes, p220; see also "*Magna Carta: What is it – and why is it still important today?*", http://www.independent.co.uk/news/uk/magna-carta-what-is-it-and-why-is-it-still-important-today-10017258.html, accessed 3 September 2015.

18 Bering.

19 See for example: http://www.abc.net.au/radionational/programs/ockhamsrazor/energy-in-australia3a-peak-oil2c-solar-power-and-asia27s-eco/5598796#transcript, accessed 1 September 2015.

20 http://www.adb.org/news/developing-asia-fastest-growing-region-key-economies-advance-reforms, accessed 1 July 2015.

21 See Paul Davies "*The Goldilocks Enigma*", Mariner, London, 2006.

22 http://scienceblogs.com/gregladen/2011/03/01/how-long-is-a-generation/, accessed 1 September 2015.

THE RISE OF ASIA

BY KERR NEILSON, SEPTEMBER 2017

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!**

	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

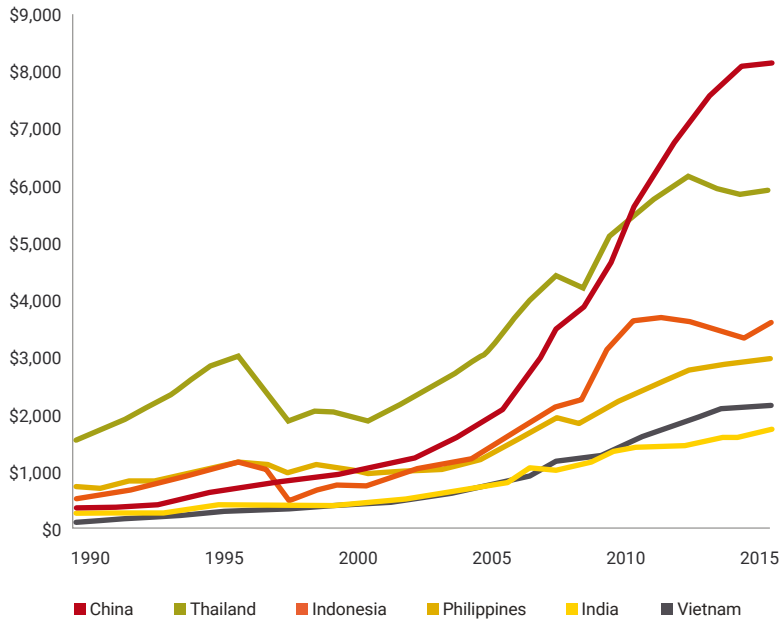
When official data claims that China is the world's second largest economy and that its GDP is about 60% that of the US, some tend to struggle with these statistics because of the physical presence of these economies. For example, how can these figures be meaningful when one considers that China produces 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?

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)

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.

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). Australia ranked 21st. 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 Mathematics) as a proportion of the total number of graduates is much higher.

PISA – Average maths, science & reading scores

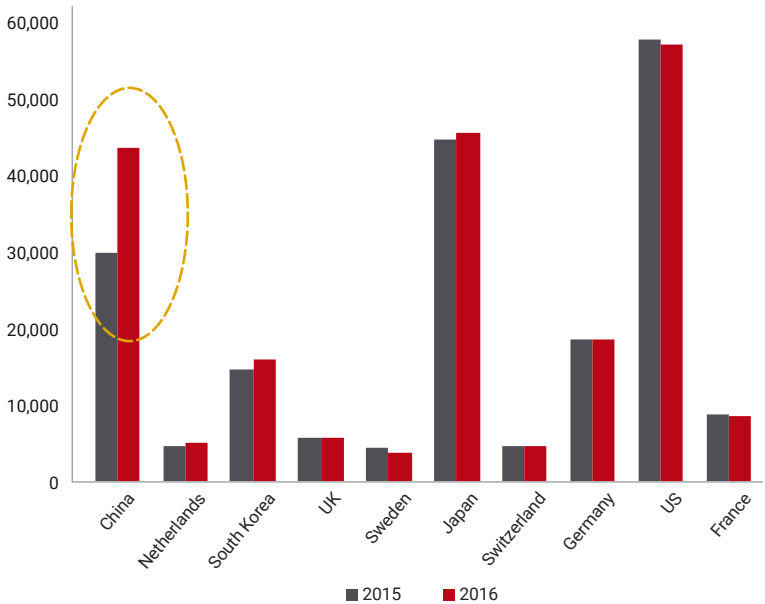
2015 rank	Country	2015 Average score	2006 Average score	Change in rank (2006-2015)
1	Singapore	552	543	+1
2	Hong Kong (China)	533	542	+1
3	Japan	529	517	+7
4	Macao (China)	527	509	+10
5	Estonia	524	516	+6
6	Chinese Taipei	524	526	0
7	Canada	523	529	-2
8	Finland	523	553	-7
9	Korea	519	542	-5
10	B-S-J-G (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)

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 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.

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**.

Number of patents

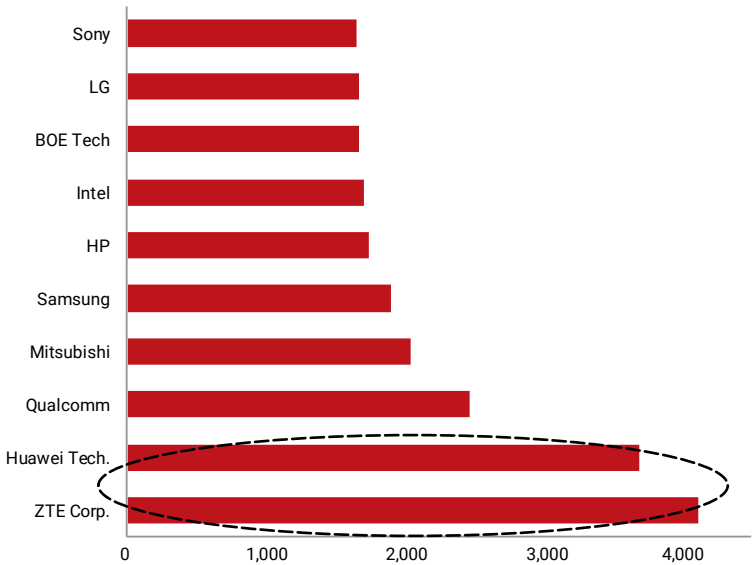


Source: HSBC

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

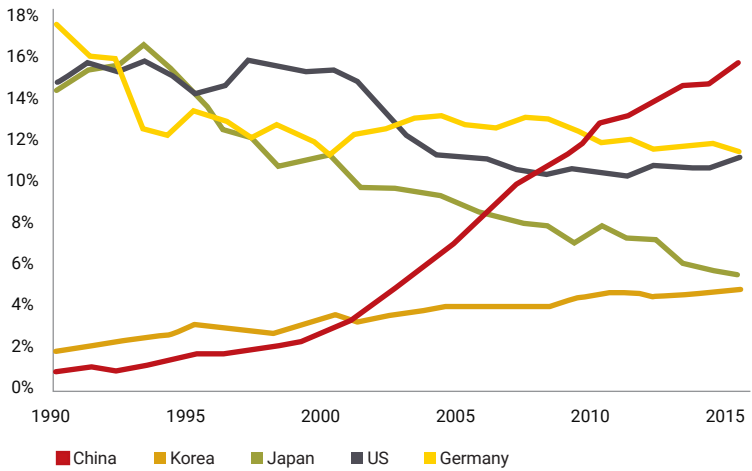


Source: HSBC

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 know-how. 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 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.

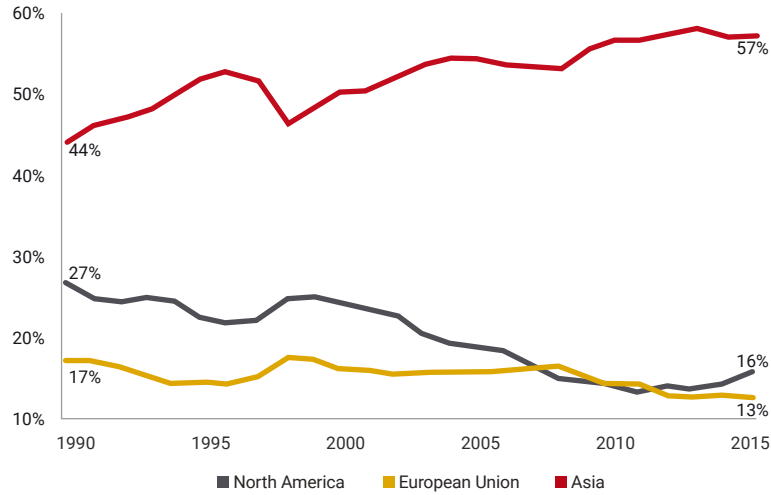
Share of world high value added exports



Source: WTO, Morgan Stanley Research

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 Australia, the UK and the US 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 under-representation 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.

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 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.

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

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

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

rail network – more than 22,000 km in total. 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 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 second-hand 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**. 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.

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 is now 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. ■

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.

CHINA'S MACRO LANDSCAPE

BY ANDREW CLIFFORD, APRIL 2017

At Platinum, it is our view that the very risks that investors become fixated on are often the source of the greatest opportunities. When it comes to evaluating global investment opportunities, it is worth reflecting on the key imbalances in the major global economies, which are not only driving investment outcomes, but also political outcomes.

INCOME DISPARITIES – THE REAL CAUSE OF GLOBAL TRADE IMBALANCES

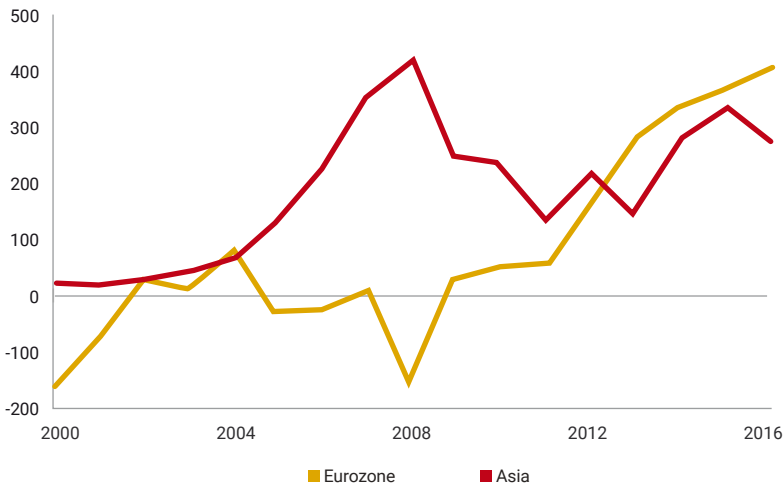
Most readers would be well aware of the massive trade and current account surpluses that China has produced over the last two decades as it became the unparalleled provider of low cost manufacturing of goods. Less well known is that China is not the only country currently running substantial surpluses. In the period post the Global Financial Crisis (GFC), the Eurozone has turned its current account deficit into a surplus in the order of US$403 billion, and South Korea's surplus has risen fivefold to some US$100 billion. **These provide a useful point of reference for China's surplus of US$271 billion in 2016.**

China's substantial surplus is often attributed to the country's advantages in terms of low labour cost as well as other variables such as cheap industrial land, weak environmental regulation, generous government subsidies, and an undervalued exchange rate. While all of these elements have certainly played a role in making Chinese exports competitive, the fact that the Eurozone and South Korea have substantial surpluses without the benefit of such advantages suggests that there is more to this story of trade imbalance.

At the core of the problem in the surplus economies is the distribution of income.

In China, the household share of GDP is unusually low, with household consumption expenditure accounting for only 38% of the economy. The other side of this equation is that businesses and government (more via state-owned enterprises than tax revenues) account for an unusually large share of GDP. This has served China well, as the corporate sector (whether privately-owned or state-owned) was behind the extraordinary investment boom that has driven China's growth to date. But herein lies the problem! **As the corporate sector exhausts its investment opportunities,** with some capital-heavy industries like steel now facing contracting capacity, **it will find its cash flows increasingly exceed its capital expenditure needs.**

China and Eurozone current accounts (USD, billion)

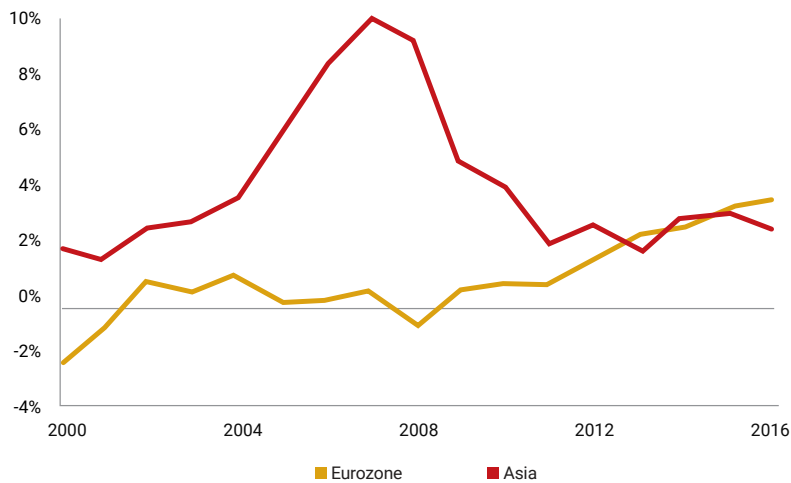


Source: IMF, Platinum.

These savings of the corporate sector are the source of China's trade surplus, as they remain in the hands of those who have no way of spending them. Imagine for a moment if these excess funds were instead in the hands of Chinese households rather than a narrow group of private and public shareholders. They would likely be spent on housing, autos, and a range of consumer goods from handbags and shoes to holidays. Moreover, while a good proportion of these goods and services would be domestically produced, there would also be a significant element of imports, such as aircraft, semiconductors, overseas travel and the like, which would drive down the trade and current account surplus. **Such a consumer boom would itself engender significant investment in a range of industries, not only in China, but globally.** It is for this reason that we focus intently on the Chinese consumer – this sector of the economy must prosper if China is to continue its rapid development and transformation.

The income inequality between China's corporate sector and households is also present in the developed world, but there the inequality is more evident in the distribution of income across households.

China and Eurozone current accounts (as a % of GDP)



Source: IMF, Platinum.

Between 1994 and 2014, the real income of the top 20% of households in the US grew by 16% while the bottom 20% experienced a 4% decline. The growth in income for the majority of US households initially resulted in a consumer boom which was reinforced by the draw-down in home equity via mortgage refinancing until 2008. However, this boom in consumption, together with the resulting debt burden, left the American consumer with little appetite for further spending. Indeed, since 2008, as income further accrued to middle income and wealthy households, debt repayments and savings have become the focus. As is in China, **income is accruing in the hands of those less likely to spend.** If this trend in income disparity were reversed, lower income households would likely display a much higher propensity to spend, not only boosting total consumption, but potentially creating new investment opportunities as well. The rise in income inequality experienced by the US can be observed across most of the developed countries, though the redistribution mechanisms of taxation and government spending have generally been more effective elsewhere, leading to less extreme outcomes.

Interestingly, though, while income inequality has resulted in substantial trade surpluses for China and, for that matter, Germany and South Korea, the United States saw the opposite outcome.

To examine this issue we need to consider two important relationships that exist in all economic systems. The first is that a current account surplus will always be exactly offset by a capital account deficit. When China, Germany and South Korea run current account surpluses, they are exporting their excess savings via the capital account to economies that run current account deficits, such as the US, the UK and Australia. The other key relationship to consider is that in a closed economy, all savings will be invested. Savings by definition always equal investment. Thus, in the global economy, which is most certainly a closed system, the excess savings of the surplus countries will be invested elsewhere.

The **export of excess savings by the surplus countries** has been a key to many of the boom-and-bust scenarios seen around the globe. In the years leading up to 2008, these excess savings found their way into the US housing market, in the first instance driving up investment in housing. The secondary effect, though, was to allow households to draw down on their home equity

to consume more of their income, thus balancing the investment and savings equation globally by reducing savings in the US. The next destination for the surplus countries' excess savings was investment in the resources sector, notably here in Australia and in unconventional energy resources in the US and beyond. In recent times we have seen these funds finding their way into residential apartments in Australian capital cities and other major cities around the world. The most notable destination, however, has been financial assets. US bonds, shares and property, seemingly attractive as a relatively "low" risk destination, have been key beneficiaries of these excess savings looking for a home.

It is in this context that one might see that **the trade surpluses President Trump rails against are a function of more than just export competitiveness and protectionism**. Excess savings in places like China enabled US households to increase their spending (via home equity draw-downs), thus creating the relative trade positions of the two countries. Had the Chinese been big spenders and their current account turned to deficit, there might perhaps have been a reversal of roles.

A POSSIBLE REBALANCING MAY BE UNDER WAY

The health of the Chinese consumer

Equipped with this understanding of the interplay between global trade imbalances and income disparities, we can now examine some of the forces that have been influencing markets and causing investors concern.

The one place where there is good news, and thus great opportunities for investors, is China. As explained above, one of the main causes for China's excess savings has been the income disparity between households and the rest of the economy. Ideally, one would hope to see household income growing faster than the economy as a whole and government policy generally favouring such an outcome.

It is not always easy to observe such changes from China's government statistics, but there are numerous signs showing that the Chinese consumer is doing well. Foremost amongst these is the ongoing strength of residential property sales.

While the volume of property sales has fluctuated over recent years, the downturns have primarily been in response to government initiatives to curb speculation. When restrictions are removed, sale volumes have typically rebounded strongly. 2016 saw sales of approximately 16 million apartments, compared with the previous peak of 13 million in 2013. While these volumes are enough to cause consternation amongst foreigners, the cumulative volume of apartments sold since 1999, when private ownership of residential property was first legalised, is in the order of 130 million. Essentially, this represents the entire modern housing stock of the country. For the 400 odd million households remaining in communist era housing, it remains a question of affordability. Nevertheless, considerable latent demand for new housing exists. It is also worth noting that mortgage debt, while now growing quickly, is only at about 36% of China's GDP, and that buyer surveys have continually estimated that owner-occupiers account for 85% to 90% of all apartments sold.

The auto market is another health indicator for the Chinese consumer. Throughout China's economic slowdown over the past few years, the passenger vehicle market has continued to grow.

Vehicle sales have grown steadily from 15.5 million in 2012 to 24.4 million. As auto finance is not broadly available, 80% to 90% of these purchases are paid for with cash. There is ample evidence that the Chinese consumer is in good health, which is all the more impressive given that millions of jobs have been lost in the construction and related sectors in recent years. Government policy is generally supportive of higher household incomes. In particular, we would note rural reforms and wage hikes for government workers as examples. The bigger driver, however, is likely to be the relatively fully employed workforce that continues to experience healthy income growth.

In the longer term **we could potentially be entering a period where a significant rebalancing of global current and capital accounts substantially changes the dynamics of global capital flows.** In China, this will in part be a natural consequence of the consumer economy taking hold, but likely

also requires reform that redistributes income towards the household and away from the state. In Europe and elsewhere, the surpluses may recede as cyclical recovery strengthens and the pressure builds for fiscal spending to redistribute income within these economies. Such a rebalancing would be a healthy outcome in aggregate for the global markets and economies; however, the removal of capital flows from areas that have unduly attracted capital may result in some dramatic adjustments.

China's debt problem

Few observers would likely challenge our view that the Chinese consumer is in good shape. The issue that concerns most is the ongoing growth of China's debt level, with the broadest measures growing by 14% in 2016, reaching 256% of GDP. An examination of the available data indicates that the growth in the use of credit is predominantly attributable to state-owned enterprises (SOEs), which raises the question of whether these funds are being applied productively. Some Chinese banks indicated at our recent meetings that the principal target for their lending to the SOEs is government sponsored infrastructure and related projects. However, fears remain that this credit is being used to prop up loss-making ventures in order to maintain employment. We think the truth is likely to be a combination of both.

To the extent that loss-making ventures are being supported, this ultimately is a form of fiscal spending by the government and one should treat any such loans as part of the budget deficit.

It is worth noting that the 2016 supply side reform in the coal and steel industries saw capacity closure, loss of jobs, and significant improvements in profitability – a signal that the government no longer readily accepts the status quo of loss-making SOEs. We would also add that many SOEs are profitable and, as such, are an asset on the government's balance sheet. Ultimately, without greater transparency, there can be no clear conclusion to this discussion. However, we would note that the overall position of government finances in China is extraordinarily strong, and the current debt level is likely to be sustainable for some time.

What all of this means for China is an economy where the consumer sector becomes more prosperous, an aggressive infrastructure building program provides another source of growth in activity, while heavy industry, dominated by SOE ownership, continues to muddle through. In this case, China will ultimately outgrow the problems caused by its investment boom, much as the US has done post its 2008 collapse. Of course, the banking system will continue to experience non-performing loans, but these are an accounting entry for losses that have already been incurred. However, this pattern of development will likely see China's trade and current account surpluses decline, a process that has already begun in 2016 when the surplus fell by almost 20%.

SUPPLY SIDE REFORM

The aforementioned supply side reforms are important and deserve closer examination because:

1. 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.
2. The improving profitability in previously over-supplied industries in China will lead to a reduction in non-performing loans[1] 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.

A directive from the State Council early in 2016 called for sub-scale plants and mines and those not meeting environmental or safety standards to be closed. This policy was directed at the state-owned enterprises (SOEs) and initially focused on the steel and coal sectors. Redundancy funds were provided by the central government to compensate laid-off workers, in cases allowing pay to laid off workers sums equal to two years wages and easing local governments' reluctance to follow through. "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.

Most importantly, many Chinese cities are beginning to see blue sky again!

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.

As the coal and steel industry returns to profitability, local governments see a rebound in taxation revenues, and presumably also benefits from being the owner of profitable entities.

As closures and production restrictions have created shortages, production restrictions have been removed. However, some provincial governments are considering making the limit on production a permanent measure, having seen the benefits of a profitable industry.

Similar benefits have been felt in the banking system. The coal and steel industries collectively account for around RMB 7 trillion in debt, and the unofficial view was that non-performing loans were running as high as 40% of the total loans. Post the supply side reform, the vast majority of these loans would be performing. This makes the cost of redundancies of RMB 100 billion look very attractive for the government who otherwise would have ultimately been on the hook for these non-performing loans.

Supply side measures have since been extended from steel and coal to other industries such as PVC and aluminium. Banks are also 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.

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 SOE-dominated 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. ■

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.

FOUNDATIONS FOR PRODUCTIVITY GROWTH

BY JOSEPH LAI, SEPTEMBER 2016

Several members of the investment team took a field trip to China in September 2017 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's high speed rail network of more than 22,000 km 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 A$105).

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, 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 upgrading 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.

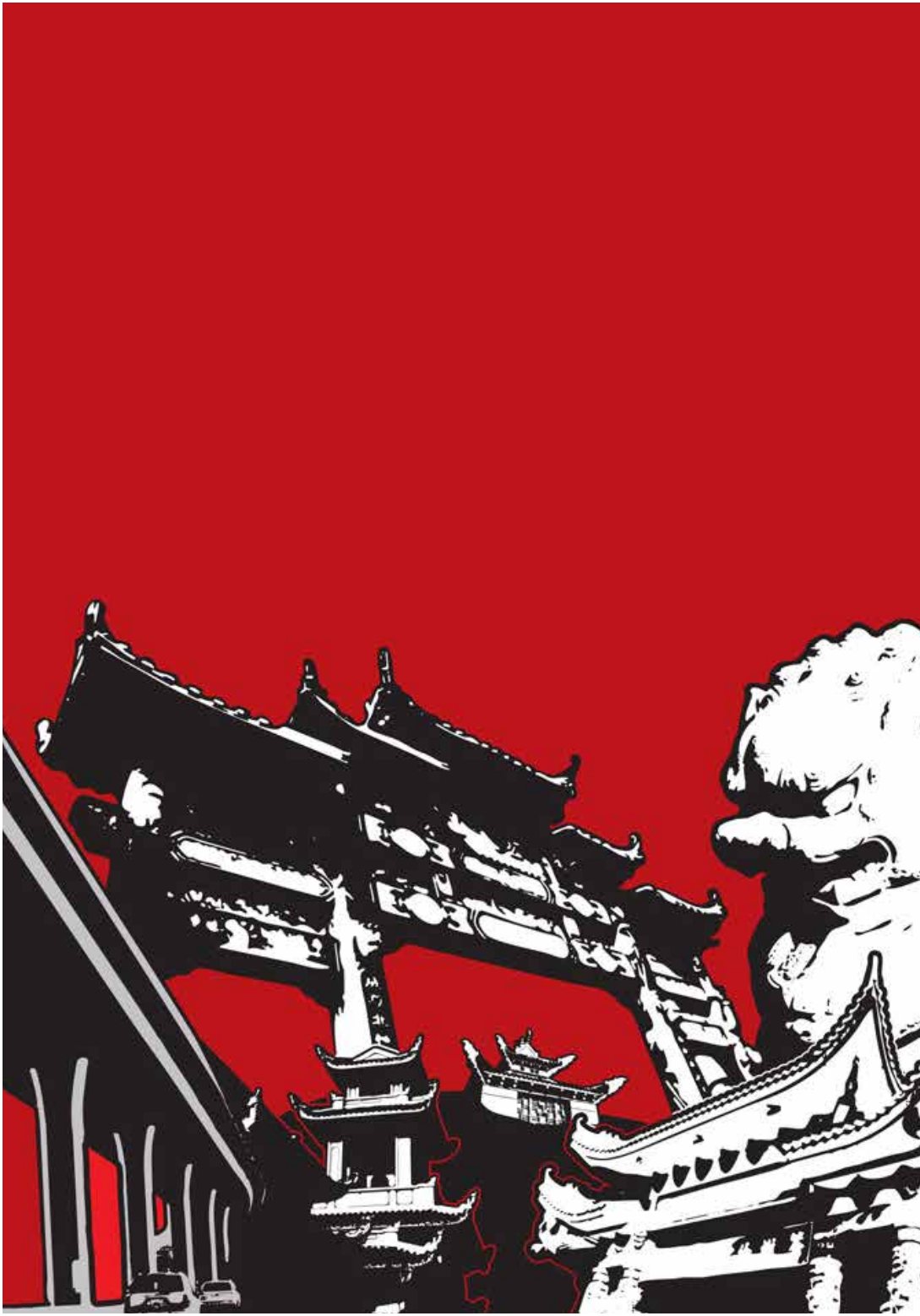
In addition to the government's direct and indirect support for research and development (e.g. increased R&D spending and generous tax incentives) and a vibrant venture capital scene, China's enormous consumer base and well-established supply chains in hubs like Shenzhen give its companies the advantage 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.

OUTLOOK

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.

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. 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. ■



CHINA'S GREAT LEAPFROGGING FORWARD

BY JACK CAO, AUGUST 2016

Reading the financial press these days, one cannot help but face a barrage of negative headlines on the impending doom facing China as the country undergoes an economic transition from a fixed asset investment-led economy to a consumer-led economy. What these doomsayers fail to mention is that there is a vibrant services sector that is playing an increasingly prominent role in driving the next leg of growth in China.

The services sector accounts for half of the country's total economic activity and almost 90% of its economic growth. What makes the internet companies interesting is that they are playing a pivotal role in supporting the development of the service sectors.

An important point to note here is that the successful internet companies are privately owned enterprises that are being run by commercially minded management. These are not state-owned enterprises which sometimes have multiple conflicting agendas and for whom earning a return for shareholders is sometimes subordinate to the priorities of national development.

THE SIZE OF CHINA'S INTERNET POPULATION

Let's start with some background numbers to set the scene on the scale of the opportunity that we are staring at: China currently has around 710 million internet users, or just over half of its total population. That's 30 times the size of the entire Australian population! In the more affluent coastal areas, internet penetration rate is considerably higher than 50%.

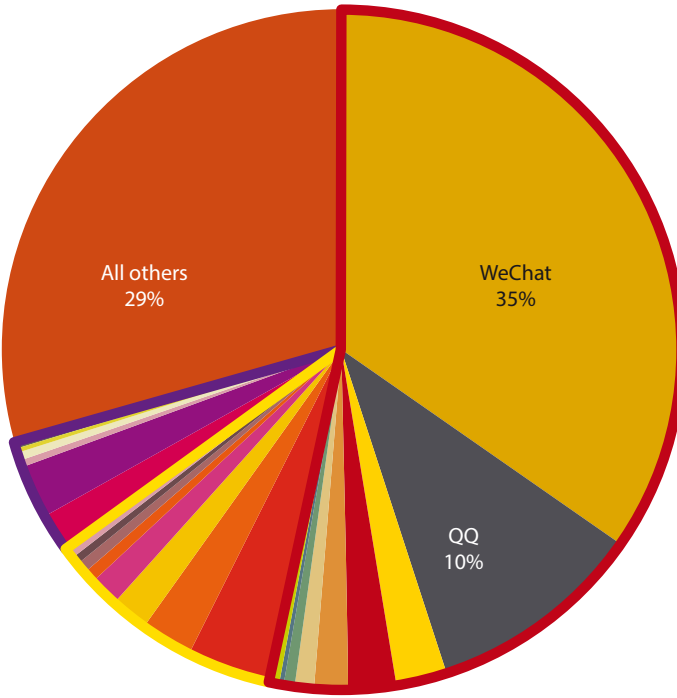
In China, because internet adoption had a late start (compared to the West) and is still ongoing, we are witnessing several forms of leapfrogging all occurring at the same time compared to patterns witnessed in developed countries. Users are bypassing PCs and keyboards, going straight to mobile handsets (90% of internet users in China access the internet through mobile). Why is this the case? Mobile internet provides greater accessibility and 24 hour connectivity. It is also cheaper to own – you can buy an entry level Android smartphone for under $100 while you need to pay $600 to own a PC.

The piece of metric that I think is most likely to surprise is the average daily time spent on mobile per user: 200 minutes! That's almost 3.5 hours on the phone each day browsing, shopping and playing games.

KNOW YOUR CUSTOMER

At Platinum we think that the Chinese internet landscape is still often misunderstood and misrepresented by the Western press. Over the years many Silicon Valley giants have tried, but failed, to crack the Chinese market, including Google, eBay and Yahoo. This has led some cynics to believe that the Chinese government blocks Western services in order to promote the development of home-grown companies, who are simply imitators of existing Western products. There is no shortage of people who naïvely believe that Chinese citizens are being obstructed by the Great Firewall of China and are desperately waiting for the arrival of Facebook and Google, when in fact they have got their own internet and it is just as good as what's available in the West.

Share of mobile time spent, April 2016
Daily mobile time spent = ~200 minutes per user, average



Baidu
- Mobile Baidu
- iQiyi / PPS Video
- Baidu Browser
- Baidu Tieba
- 91 Desktop
- Baidu Maps

All Other

Alibaba
- UCWeb Browser
- Taobao
- Weibo
- YouKu Video
- Momo
- Shuqi Novel
- AliPay
- AutoNavi

Tencent
- WeChat
- QQ
- QQ Browser
- Tencent Video
- Tencent News
- Tencent Games
- QQ Music
- JD.com
- QQ Reading

Source: KPCB

The reality is that when you have a country that has a radically different language and culture, it is difficult for foreign companies to understand the nuances of the local market quick enough to be able to compete with their local rivals.

Uber chose to exit China after 2.5 years of fruitless competition against local incumbent Didi. Uber had failed, not because it did not have access to the Chinese market, but because it did not understand the Chinese market and the Chinese consumer. This was evident in Uber's business practices that antagonised user experience for the locals, such as its use of Google Maps (even though it is notoriously inaccurate in China), the lack of integration between the Uber app and social messaging apps (which had become a key part of the daily life for the Chinese long before Uber's arrival), and requiring users to validate their credit card account details before they can open an account on Uber (even though only a fraction of China's population have credit cards).

MASTER INNOVATORS AT MASTER APPS

Not only do Chinese companies have a home ground advantage in understanding local user preference, but also, in many ways, China already leads the world when it comes to mobile tech and applications. Let's look at some concrete examples of this.

Those of us that are Facebook users would have noticed that Facebook introduced live streaming. Facebook has also reportedly been working on integrating taxi hailing and mobile payment services within Messenger. Meanwhile Snapchat users would have noticed the introduction of a QR code scanner in their Snapchat app which readily connects one user with another by scanning codes made up of misshaped checkerboards. All these features were first popularised in China.

Whereas Western tech companies emphasise simplicity in their app designs, Chinese companies compete to create master apps with as many functions as is practical.

This leads to better integration of services and a more frictionless mobile-first experience. The result is three dominant companies which together account for 70% of mobile time spent. And one company, in particular, single-handedly accounts for over half of all user time spent on mobile.

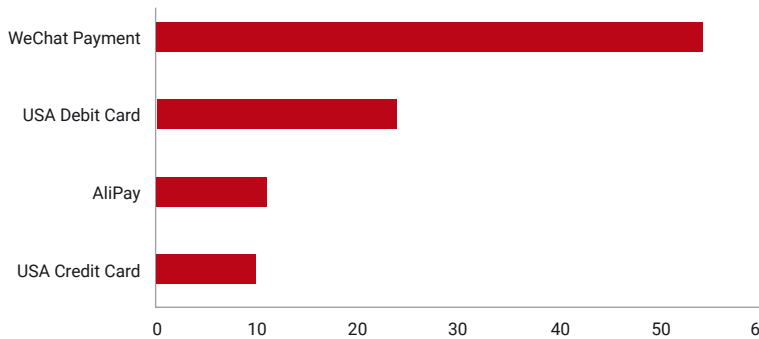
That company is Tencent, which owns the dominant mobile social network in China – WeChat, with over 700 million active users. Practically every internet user in China is a WeChat user, and 55% of users open the app more than 10 times a day.

What started out as an instant messenger in 2010 has now become a fully-fledged mobile operating system for a wide range of daily lifestyle services, so much so that users' daily lives now revolve around the app. Users use WeChat to order taxis, send money, order food from restaurants, follow celebrities, track companies and the list goes on. An important factor in WeChat's phenomenal success is that it has been able to layer on monetisation in ways that did not interfere with user experience.

Mobile payment

A key enabler of these services is the introduction of the WeChat Wallet mobile payment platform. In China, users are leapfrogging credit cards and moving straight to mobile wallet. The intensity of engagement is simply off the charts. Users on average make over 50 transactions per month. That's twice the usage level of all debit cards in the US and five times the level for credit cards.

Estimated monthly payment transactions per user



Source: KPCB

Estimated monthly payment transactions per user

The popularity of its payment platform is in turn enabling WeChat to challenge native apps and browsers as the default gateway for e-commerce. Almost one-third of WeChat users are now making purchases within WeChat. At 220 million users, that accounts for almost half of all e-commerce buyers. So we now see a virtuous cycle forming for Tencent – the more companies' official accounts and more merchants are set up on WeChat, the more likely it becomes for users to transact within the app.

E-COMMERCE

In e-commerce, online transaction value now accounts for 13% of China's national retail sales. That means for every $100 spent on retail, $13 is spent online, with the remaining $87 spent in brick and mortar stores. This is nearly double the 7% online retail penetration seen in the US. To get an idea of the scale of online retail activity in China, just picture the 50 million parcels delivered on a daily basis.

Why is e-commerce thriving in China? In developed countries, offline retailers have had a multi-decade head start over their online rivals in building out their supply chain.

Wal-Mart has been in operation since 1962 and generates over $300 billion in turnover. This volume gives Wal-Mart substantial sourcing advantages in terms of price and trade terms which the retailer in turn passes on to consumers in the form of lower prices. Note that despite the onslaught by Amazon in recent years, Wal-Mart's sales are still four times those of Amazon.

In China, offline retailers have not had sufficient time to build out this supply chain advantage before being disrupted by online retailers. Offline retail is not only fragmented, but retail infrastructure outside of big tier-1/2 cities is underdeveloped. Those who have travelled around China may have noticed that when you go to a small city or county, it is completely different to large cities. There you can't find a pharmacy or supermarket within driving distance.

Consequently, consumers are leapfrogging brick and mortar stores and going directly to e-commerce. Not only does online retail offer wider product selection, the convenience of fast delivery and more competitive prices, many of the daily necessities are simply not available at physical stores in small townships.

An important unique characteristic of the Chinese e-commerce market is that it is highly concentrated.

Rather than having retailers large and small operating their own independent sites, retailers instead open storefronts on one of Alibaba's platforms. This centralisation of shopping destination and standardisation of user interface and check-out process leads to less friction in user experience. Rather than having to remember a dozen sets of different login details, you have a single set of login and one online wallet. For every $100 spent online in China, $77 is spent via Alibaba's Tmall and Taobao platforms. In the US, Amazon has an estimated share of "only" 25% of online retail volume. ■

CASHING IN, WHILE CASH IS ON THE WAY OUT

BY CONSTANCE ZHANG, MAY 2017

More than 800 million Chinese consumers are carrying e-wallets on their phones, and mobile payments made via China's third-party platforms such as Alipay and Tenpay – some US$5.5 trillion – were 50 times the value of e-payments transacted in the US last year.

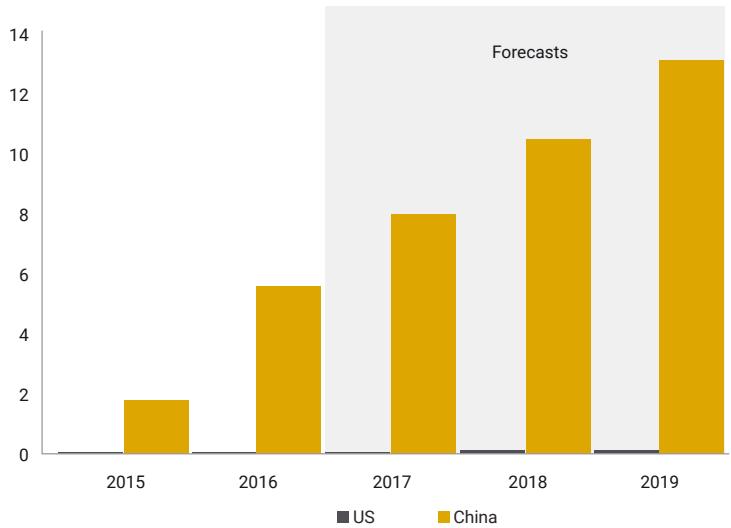
Browsing on Weibo, China's equivalent of Twitter, I was amused by a piece of local news:[1] Two brothers in their twenties went on a rampage in the eastern Chinese city of Hangzhou, robbing three 24/7 convenience stores at knifepoint, but walking away with a meagre RMB 2000 (~US$300) in total, not even enough to cover their travel expenses for getting to Hangzhou! The disappointed thieves reportedly grumbled to police that local residents no longer spent cash. Chinese netizens (internet citizens) were quick to respond that the brothers had chosen the wrong target – didn't they know that Hangzhou is Ma Yun's turf, and who still carries cash around when there is Alipay!

Ma Yun (aka Jack Ma), as you would know, is the founder of the Hangzhou-headquartered e-commerce giant, Alibaba Group, as well as the founder of Ant Financial, the company that owns the ubiquitous e-payment system, Alipay, an affiliate of Alibaba Group.

CHINA MOBILE PAYMENTS DWARF US

What is remarkable isn't that the use of non-traditional payment channels is on the rise in China, but the pace and scope at which it is happening. It has largely been propelled by Alipay and Tenpay, the digital payment platform owned by Tencent. In 2016, Chinese consumers made RMB 38 trillion (approximately US$5.5 trillion) worth of payments on their smartphones and tablets using such non-bank operated e-payment services (so-called "third party" mobile payments), a 215% increase from 2015.[2] This was 50 times the transaction value in the US, which saw US$112 billion worth of payments made last year via mobile payment platforms like PayPal, Apple Pay and Google Wallet, according to Forrester Research.

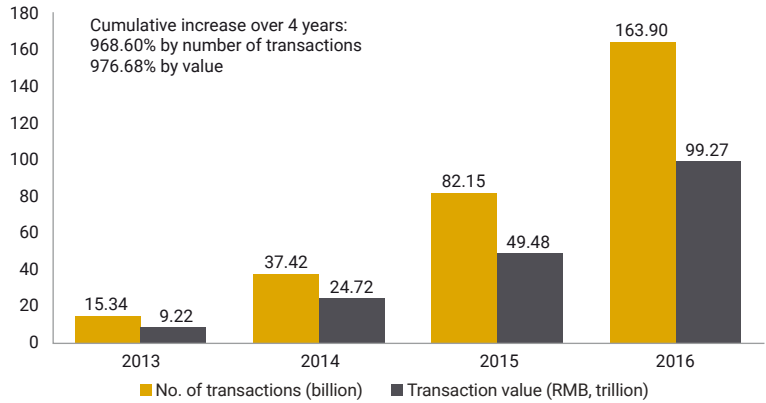
Transaction value of third-party payments ($tn)



Post-2015 figures are forecasts; renminbi values to US$ at current exchange rate
Source: Financial Times, based on data from Forrester Research (US) and iResearch (China)

When one looks at online payments more broadly to include all of internet, mobile, telephone and digital TV payments,[3] data from China's central bank shows that online transaction value via non-bank platforms nearly reached RMB 100 trillion (~US$14 trillion) in 2016, a 970% increase over four years by both transaction volume and value.[4]

Online payments via non-bank payment platforms



Source: People's Bank of China (PBoC), Payment & Clearing Association of China and Platinum

Driving this phenomenal growth are the innovative tech companies seeking to meet the needs of China's consumers and small businesses who had long been under-served by the country's banks.

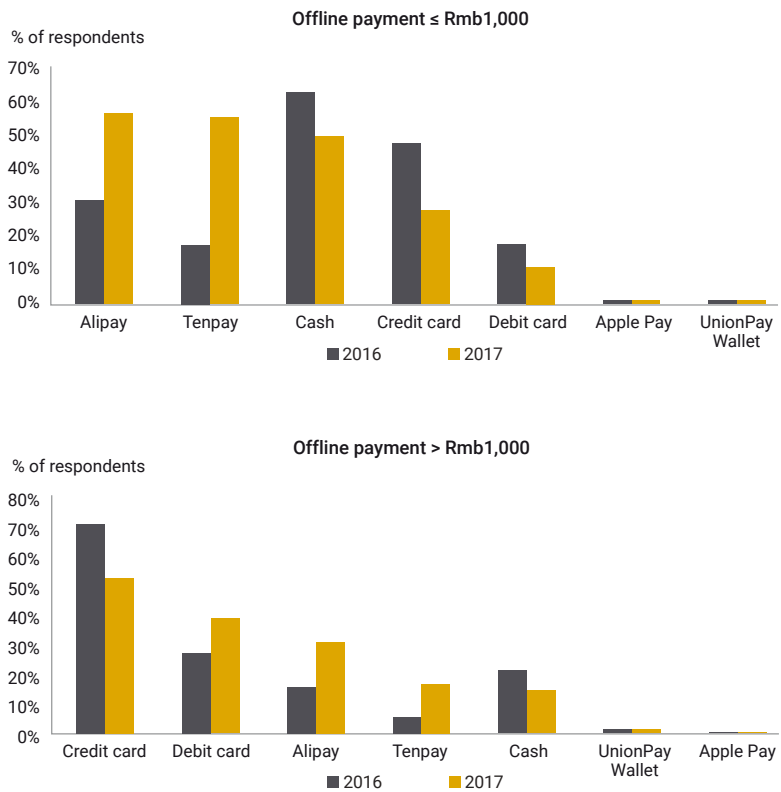
Alipay was first launched in 2003 as an online payment and escrow system to service Alibaba's e-commerce marketplace, Taobao, before it rapidly expanded into a standalone platform, facilitating third-party online transactions ranging from travel bookings to phone credit top-ups and utility bill payments. Its origin was not dissimilar to the way in which PayPal was born out of eBay, but its adoption grew more quickly as fewer alternative means of online payment were open to the Chinese consumer. There was no equivalent of BPAY, few possessed a debit card, and even fewer a credit card. To put things in context, by the time Alipay had accumulated 50 million users in 2007, there were only 30 million credit card users in the country with a 1.3 billion population.[5]

Today, credit card ownership in China averages 0.31 card per person (2016),[6] compared to 2.6 cards in the US (2014).[7] A public that has grown accustomed to the convenience of credit cards for over half a century in part explains the slower conversion to e-payments in countries like the US and Australia, and, conversely, one imagines the early adoption of e-payment in China may have somewhat handicapped the growth of traditional credit card businesses there.

Then came a second great leap. Enabled by the proliferation of affordable smartphones, Alipay and Tenpay began expanding from online to offline in 2013, making mobile payment increasingly the preferred method – or methods – of transacting at physical stores over both cards and cash.

One of the in-store e-payment methods effectively replaces plastic cards with digital barcodes. After logging onto his, say, Alipay mobile app, which requires a password, a fingerprint or another alternative means of authentication, the customer would generate a unique barcode from his phone at the press of a button.

Offline payment you mainly use at present?



Source: CLSA CRR

Then all it takes is a simple scan at check-out and the correct amount would be deducted from his Alipay account and paid into the merchant's account. If that is not convenient enough, an alternative system is available which does away with the scanner and point-of-sale terminal completely, making it particularly suited to street vendors, rideshare drivers and other small merchants. The merchant needs only to display its unique QR code, supplied by the e-payment platform, say, Tenpay. When the customer scans the QR code with her phone, a connection is established between her Tenpay account and the merchant's. She then enters the payment amount and her password, and the transaction is confirmed. The funds are transferred instantaneously and a notification is sent to the merchant's phone. There is no need to find the right change, and counterfeit notes are not a worry (of course, cybersecurity and identity fraud may over time emerge as a greater concern). Adding to the sheer simplicity of their service is the attraction of Alipay's and Tenpay's service charges, which are typically lower than the traditional merchant fees collected by banks and credit card companies. It is hard to think of a reason why merchants and customers would not forego the cumbersome cash and expensive plastic money for e-payment (unless, of course, you were one for tax evasion at the expense of lost custom).

Alipay

Source: Bloomberg, iFeng News and Platinum

As China's third-party mobile payment market grows, the competition is also becoming more intense. Tenpay, first launched in 2005, has had a slow start, as it lacked Alibaba's e-commerce merchant and customer base and struggled to expand its user base beyond Tencent's online gaming community. However, growth began to accelerate after Tenpay in 2014 became integrated with WeChat, Tencent's enormously popular "messaging + social networking + utility + enterprise" omni-functional app.

Leveraging off WeChat's 889 million users and its enormous network effect as the main digital tool the Chinese use to stay in touch with family and friends, Tenpay cleverly built up its consumer base by first promoting peer-to-peer transactions with a virtual rendition of the old tradition of gifting money in red envelopes. As of the fourth quarter last year, Tenpay had 838 million active users, well surpassed Alipay's 432 million.[8]

With this large user base, Tenpay naturally became increasingly attractive to merchants and businesses, more and more of whom are also using WeChat as a marketing tool – there are now more than 10 million commercial or "official" accounts on WeChat. These businesses are now taking advantage of Tenpay's integrated payment functionalities within the WeChat ecosystem in both online and offline settings.

As Chinese netizens use WeChat to hail taxis and order meals, whether inside a restaurant or online for take-out, they pay the drivers and split restaurant bills using Tenpay; as retailers put out promotional coupons on WeChat, their followers can redeem the coupons by making an in-app purchase or turning up at a brick-and-mortar store and scanning a QR code.

It is no wonder that Tenpay's share of the third-party mobile payment market is increasing fast, reaching 37% in the fourth quarter of 2016, while Alipay continues to command 54% of the market.[9]

With the huge user base and transaction volume come huge amounts of valuable data. Ant Financial has developed a credit rating business, Sesame Credit, whose data form the basis of the lending criteria for a host of lenders seeking to service small-to-medium sized enterprises and individual borrowers under-served by large banks. In 2013, the same year that Alipay expanded into offline payments, Ant Financial also ventured into offering innovative investment products. It first launched Yuebao (meaning "the treasure of account balance" in Mandarin), a platform that allows customers to use the excess funds in their Alipay accounts to invest in wealth management products with as little as RMB 1 and with the flexibility of withdrawing at any time. The returns offered by Yuebao were often on a par with bank deposit rates or better, making the product very attractive.

Today, with more than US$165 billion under management, Yuebao has become the world's biggest money market fund.[10]

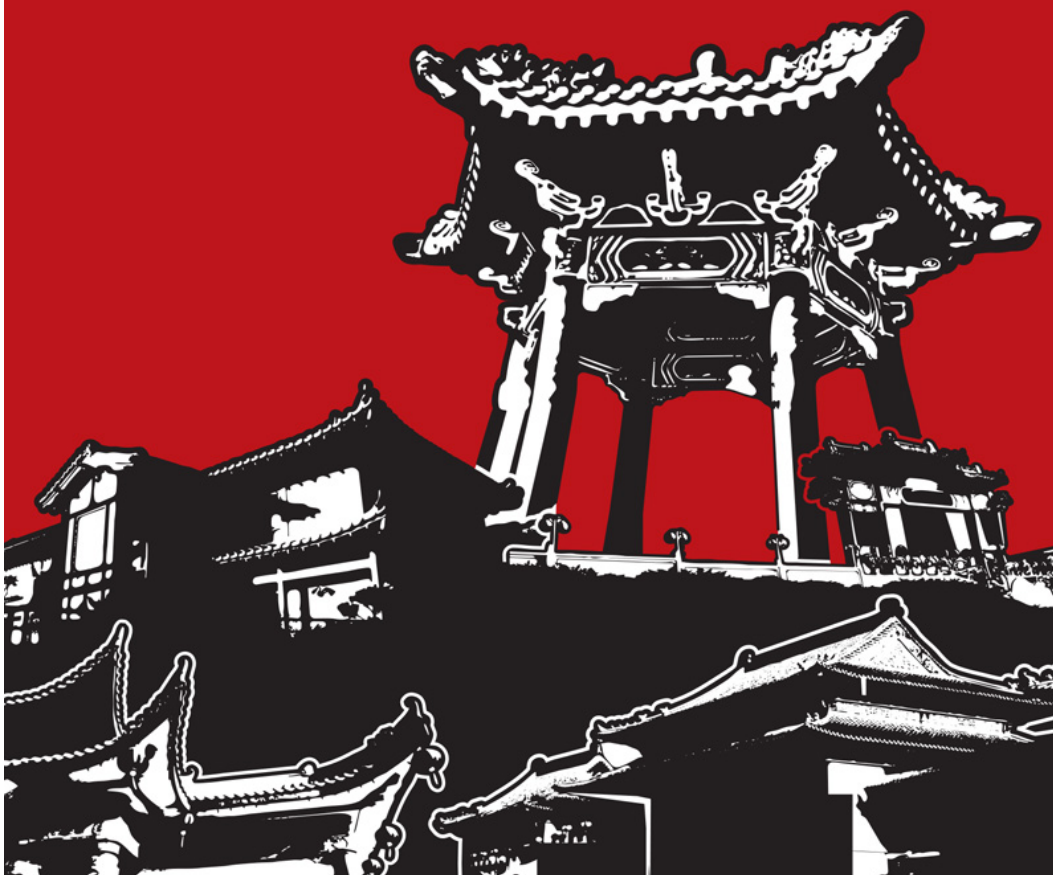
Building on the success of Yuebao, Ant Financial has since launched Zhaocaibao, an online distribution platform for financial products ranging from mutual funds and insurance policies to P2P lending, Cunjinbao, a gold ETF, Ant Fortune, a robo-advisory service, and Antsdaq, an equity crowdfunding platform. Alipay, the humble online payment tool, has ushered China into a fintech era.

As I laughed at the Weibo news post about the empty-handed robbers in Hangzhou, a voice message popped up on my WeChat. The message was from my mother, who had just arrived in Beijing to visit family, scolding me for neglecting to install Alipay and Tenpay on her phone. She was unable to make a purchase at the Beijing airport duty-free store as there was nowhere to exchange AUD for RMB. And when she stared in wonderment at her fellow passengers, who were either picking up goods without paying (because they had prepaid for them online) or simply waving their mobile phones about at check-out, she was told "I don't carry cash any more; I've Alipay on my phone". ■

1 http://t.people.com.cn/527612/164579976
2 http://www.iresearchchina.com/content/details7_30408.html
3 However, not including payments "for entertainment", such as the peer-to-peer exchange of electronic red envelopes between family and friends.
4 http://www.pcac.org.cn/index.php?optionid=713&auto_id=2480
5 https://www.antfin.com/
6 http://www.pcac.org.cn/file/File/1489700325.pdf
7 http://www.creditcards.com/credit-card-news/ownership-statistics-charts-1276.php#source1
8 https://www.analysys.cn/analysis/22/details?articleId=1000702
9 https://www.analysys.cn/analysis/22/details?articleId=1000702
10 https://www.ft.com/content/28d4e100-2a6d-11e7-bc4b-5528796fe35c

OBSERVATIONS FROM THE GROUND

BY ANDREW CLIFFORD, MARCH 2017



In March 2017 I visited China, meeting people from a wide range of different businesses and backgrounds. Many of the meetings were with representatives of unlisted businesses, which ranged from distributors of consumer products, commodity traders, Internet-based finance companies, to small state-owned coal miners and regional banks. This type of schedule differs from our usual meetings with management of listed companies, but over the years we have found that these trips provide a very different perspective on China from our traditional schedule and, as such, can offer valuable insights on what is always a rapidly changing landscape.

THE RISE OF LOCAL BRANDS

One meeting was with the distributor of fast-moving consumer products (shampoos, soap powder, etc.) that represented a very large and successful multinational company in a region within Guangdong province. He highlighted that one of the challenges for the business was the rise of new local brands. In the past, these start-ups had been kept out of the market because of the sheer cost of large scale advertising on TV and in print. The advent of digital advertising has opened a door for these companies and, what is more, it enables them to target very specific groups, such as 15 to 25 year old women. Interestingly, many of these new brands are having success with products priced at a premium to foreign brands. Together with digital marketing, e-commerce is a distribution channel that has also reduced the barriers for smaller local companies.

A meeting with a company that manages the online presence for some of the smaller multinationals in China highlighted that selling online is much more than just setting up an e-store on T-Mall (the Alibaba e-commerce platform) and sitting back and waiting for sales. There is an ongoing daily need to adjust the offering, put on promotions, bid for keywords and the like. According to the distributor we spoke to, this poses another challenge for his multinational principal who, while well aware of the need to respond to these challenges, simply cannot move fast enough.

The rise of local brands highlighted in these discussions comes as a direct contradiction to the often-heard mantra in the financial markets that the multinationals have a sustainable advantage in China due to concerns around product safety.

An amusing story, though, is that of one successful local company which had given itself a name and brand to create the impression as if it were a Korean company. This worked well until China's recent fall-out with Korea for facilitating the US anti-missile defence installation which led the Chinese government to direct its patriotic citizens to avoid all things Korean!

The other observation on local brands came from the auto market. An industry expert (an American who has had a long involvement in the Chinese market) reported that the difference in quality between good local Chinese carmakers and foreign brands is by and large imperceptible to the Chinese buyer. This may well be somewhat of an exaggeration, but the independent JD Power survey on product quality actually supports the claim with respondents citing only a minor difference between local and foreign makes in terms of product quality. Of course, more important than perceptions are sales, and numbers have spoken louder than words with the domestic producers' market share having risen from 30% in 2012 to over 40% in 2016. In this period, China's passenger vehicle market increased by approximately 10 million vehicles annually, of which 5.7 million were supplied by domestic brands in 2016.

THE UBIQUITY OF ALIPAY

Alipay is an electronic wallet or online payment system that grew out of Alibaba's e-commerce platform in much the same way that PayPal had developed hand in hand with eBay. In China, however, Alipay has evolved to be much more than a way of settling online payments and, in the absence of a deep network of credit card and EFTPOS terminals, has become the way of settling essentially any transaction. Payments can be made from the app on one's mobile phone directly to the recipient. Setting up an account is straightforward and funds are transferred into and out of one's Alipay account via one's Chinese bank account. The best news for merchants is that no fees are charged, making the system very attractive. What we were continually told by the locals is that there is simply no longer a need to carry cash, ATM cards or credit cards, as everyone from the street vendor of snacks to taxis and organised retailers accepts Alipay. This claim I suspect is somewhat exaggerated and was difficult to test, as, without a Chinese bank account,

I couldn't complete my own registration. Alipay claims to have 450 million active users and settles 200 million transactions daily. Annual transaction value is estimated at US$3 trillion. Needless to say, Alipay has many competitors, most notably, Tenpay, which is Tencent's e-payment platform and is integrated with the hugely popular WeChat app. It is once again an interesting example of how China has bypassed the developed world's approach and may well be moving to a cashless system faster than the West.

While the transfer of funds within Alipay attracts no fee, the platform hosts a universe of services by third parties from which Alipay does make money.

One company we met is in the business of providing small (RMB 1000, or A$200) short-term (30 days) loans to university students. The company is having great success and incurring only a trivial level of non-performing loans. The key lending criteria are based on the credit rating data provided by Alipay, which of course has quite a rich pool of data on the applicant's payment history. This is notable because a group of consumers are gaining access to credit they never had. Similar businesses operate in the field of small business loans. In these transactions Alipay makes money only from the sale of the credit rating data. Other products on the Alipay platform include managed funds and insurance.

If the Alipay model were replicated in developed markets, the implications for credit card issuers and merchant acquirers as well as others who make a living off the payment system could be quite dramatic. Of course, this may be easier said than done, but undoubtedly many will be trying to emulate Alipay's success. Ant Financial, the company that owns Alipay, is currently privately owned. But the listed Alibaba Group has a right to purchase 33% of Ant Financial's shares when it becomes listed.

THE PEARL RIVER DELTA

In Taiyuan, the capital of Shanxi province, we met with managers of the local Foxconn plant. Foxconn is part of the Hon Hai group, the world's largest contract manufacturer for electronics and best known for manufacturing iPhones for Apple. This Foxconn plant is a producer of components for the Hon Hai group. Taiyuan is coal mining territory and some 500 km from the coast, not quite the typical location for this type of endeavour.

The Taiyuan operation, however, has an impressive 75,000 person workforce, up from 50,000 a year earlier. When one thinks of the challenges of hiring and training 25,000 workers in a year, the idea of moving this type of operation to the US becomes difficult to imagine.

Another meeting in Guangzhou later in the week with an expert in the design and manufacture of IT products made it even more apparent that President Trump's plans of moving this type of activity back to the US, to any significant degree, has little chance of success.

In the Pearl River Delta at the south-eastern end of China, there is an entire ecosystem of service providers, from design, manufacturing and packaging to logistics and transportation, that deliver goods to the rest of the world at extraordinarily low cost.

For the individual with a product idea simply sketched out on a piece of paper, there are service providers who will turn the sketch into CAD drawings and create working prototypes using 3D printers, all at a trivial cost. Or, more questionably, if you would just like to copy someone else's products, there are providers who will reverse-engineer the product right down to the semiconductor and printed circuit board level. Of course, custom packaging can readily be created for your "new" product. All of this can be done in a matter of weeks, and from your desk anywhere in the world. Once you are ready to produce, there are traders who can provide standard components, and who, because of the extraordinary volumes they handle, will supply to you well below list prices. And then, of course, there are plenty of contract manufacturers.

Then comes the logistics side of the equation. If, for example, you wanted to sell your new widget on eBay, you can have the whole fulfilment and shipping run out of China. Assuming you earn at least US$0.75 on your product, you would, we were told, in most cases be able to afford to offer your customers free shipping to anywhere in the US! The one downside to this is that the delivery time is measured in weeks. The most telling story is that many apparel and footwear manufacturers who have moved production to places such as Vietnam and Bangladesh are shipping their products to Shenzhen prior to shipping to the US or Europe, in order to hook into the logistics and fulfilment supply chain of the Pearl River Delta. ■

Level 8, 7 Macquarie Place
Sydney NSW 2000

GPO Box 2724
Sydney NSW 2001

Telephone
1300 726 700 or +61 2 9255 7500
0800 700 726 (New Zealand only)

Facsimile
+61 2 9254 5590

Email
invest@platinum.com.au

Website
www.platinum.com.au