October 28, 2016

Hamilton and The Democratization of Technology: The Secular Case for Emerging Markets

The rally in emerging markets has been one of the big stories of 2016. Despite strong performance, however, sentiment is still wary that the recent move is a cyclical story, lacking fundamental support in the low growth world. However, despite the lack of fundamental support, there is another story centered around a structural transition in the global order that will benefit the developing world like the Industrial Revolution impacted the now developed world in the 19th and 20th centuries. This transition is built upon the foundation laid by the democratization of technology and information within the growing digital revolution. This will alter the way we view and measure growth moving forward and will force investors to think differently about emerging markets and the opportunities it presents in the coming years as 85% of the global population shifts the economic power of the world.

By September, the long wait was over. In November of 2015, my wife purchased tickets to Hamilton and showtime had finally arrived. When she first mentioned it to me last year, the play had not reached the level of hype that it has hit over the course of 2016. As we drove into New York for the show, I had to admit, despite all the good reviews from critics and friends, I was skeptical and ready to be disappointed. Some of the fear was based on the hype but also, to be perfectly honest, just like a millennial, I get bored very easily at events over two hours so the odds were stacked against it. All my fears were put to rest in the first 15 minutes. The show is absolutely brilliant and was worth the wait. It combines the historical multi-media teaching of Schoolhouse Rock with the story telling passion of Les Miserables and showcases a lyrical artistry similar to the rap battles in the movie, 8 Mile. For me, the pure genius of Hamilton is how its creativity and artwork messes with your thoughts and beliefs. It takes a piece of history that we have learned over the course of our lives from school, documentaries and books and makes you question what you think you know. We think of history as being about facts and answers. Hamilton is all art and it ends with your curiosity questioning things that your brain has programmed as facts. I cannot recommend it more.



While watching it, I could not help but think about how this show connected many of the macro themes that have been in my thoughts throughout 2016. The play provided a lens into what the world was like in the late 1700s at the birth of America and made me think about the macro trends which began with that birth. For me, this year has been spent questioning the current state of global trade, central banking, immigration, population growth, the Industrial Revolution, populism, capitalism, the democratization of information and emerging markets. Those questions have led me to think about how they fit into the macro mosaic built around a large inflection point and what that would mean for investors' decision making on what the future will be like. 2016 has also been a year of traveling the country discussing these views and listening to investors describe how they are handling the psychological difficulties of this low rate/low growth world.

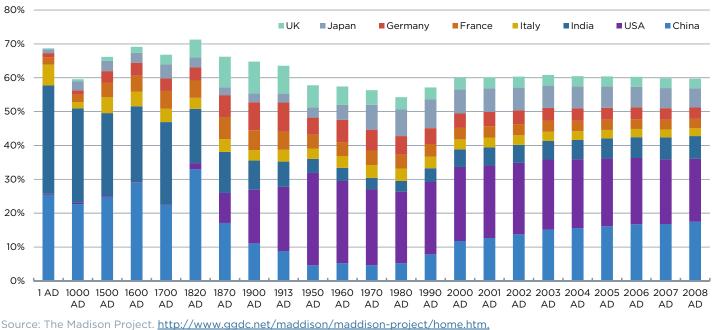
Hamilton helped me connect the dots from these questions and discussions. In 1776, it would have been a good bet to invest a lot of money in America when it was an emerging market. Exhibit 1 highlights the growing economic importance of the U.S. over the last 200 years. The late 1700s were a major inflection point for the world driven by the beginning of the Industrial Revolution. Over the next 200 years, many of those macro themes I mentioned above became critical to how we think today about the relationship between growth and investing. Hamilton takes you back in time and forces you to think about how much the world has changed due to the Industrial Revolution and the growth of what are now called the developed markets. current confusion that exists today is another inflection point, investors will continue to have trouble accepting the reality of a future very different than the past. In thinking about this confusion, I am reminded of when I first became interested in money management back in the late '80s. One of the first books I read on markets was *Market Wizards* in 1989. In the interview with Paul Tudor Jones, I learned the importance of looking for inflection points. He specifically credited a book called the Elliott Wave Principle in helping him see turns like the one before the crash in 1987. Since that day, I always included *The Elliott Wave Principle* in the way I think about markets because of its focus on connecting investor psychology to patterns. The start of a new trend is defined as being in Wave 1. Below is what to look for in Wave 1 of a new bull market:

> Wave 1: Wave one is rarely obvious at its inception. When the first wave of a new bull market begins, the fundamental news is almost universally negative. The previous trend is considered still strongly in force. Fundamental analysts continue to revise their earnings estimates lower; the economy probably does not look strong. Sentiment surveys are decidedly bearish, put options are in vogue, and implied volatility in the options market is high.

As this definition describes, inflection points end trends and it takes time for people to forget the prior trend and accept the new direction. Because of the amount of data available today and the drive for people to look for historical similarities, building a reason for anything is easy. I will continue to argue that success in predicting the future today must involve forgetting what we think we know about the past. In the same way that America in the late 1700s was part of a global trend change, this paper will explain in detail how I believe the world today is going through a similar inflection point driven by two secular forces which began around the same time as the Great Recession. The two secular forces are the aging baby boomers of the developed world and the democratization of information and technology to the developing world. The first



baby boomer turned 65 in 2011 and the iPhone was launched in 2007 which accelerated the democratization of technology. The timing of these two events, along with the beginning of China's transition to a service based economy in the years around the Great Recession, has left people focusing on the trends that coincided with America's rise, when they should be focusing on a regime shift. This regime shift involves irreversible trends which will accelerate the rebalancing of economic power across the world. In the same way that Alexander Hamilton came to America as an immigrant looking for opportunities in a new world, over the coming decade I believe investors in the late cycle developed markets will go to emerging markets searching for early cycle returns in a world where over 85% of the earth's population is just beginning to have impact.



W E I S S

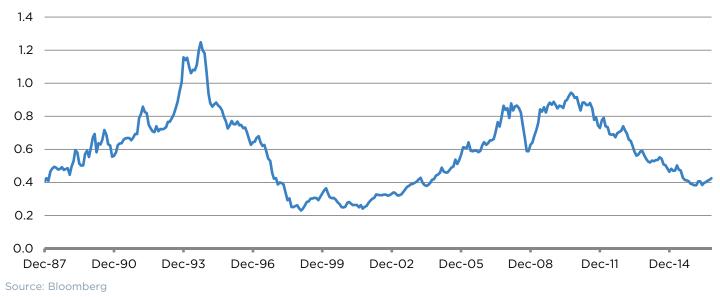


History of World GDP-Percent of Total GDP

Exhibit 1

Exhibit 2

MSCI EM Index / S&P 500 Ratio



The Inflection Point Trigger: Remembering the Plankton

If you look at **Exhibit 2**, you can see the history of MSCI EM Index relative to the S&P 500. Given the faster economic growth and higher risk premium, it is amazing to see that for almost 30 years, emerging markets have not outperformed the S&P 500. Back in early February, I started writing about my interest in emerging markets. At that time, it was more of a cyclical thought rather than secular. However, something I had been waiting for occurred later that month that made me believe that this is the first inning of a new long-term trend into EM. At the G20 meeting in Shanghai, I believe the central banks of the world, who have the printing presses, realized they were repeating the mistakes of the 1930s and engaging in a form of beggar thy neighbor. In the two months leading up to the G20 meeting, you had negative rate decisions from the BOJ and ECB, an accelerated weakening of the Chinese Yuan and a Fed rate hike. This was like the ending to a monetary policy fireworks show with everything left in the arsenal being fired at the same time. In the modern day globalized world, they realized by the reaction of global markets that their unilateral decisions were making things worse, in particular they were forgetting about the importance of the "plankton."

"The Plankton Theory, like life itself, begins and ends in the ocean. Plankton, of course, are almost microscopic organisms that serve as food for higher life forms. Without plankton almost every fish and mammal in the sea could not survive, since most species depend upon other fish for their existence and plankton are the initial building blocks of the entire process. Logic would suggest, therefore, that in attempting to forecast the well being of the Great White Whale, Jaws, or even Jaws II, that one of the factors to consider would be the status and future outlook of the plankton. That, in one hundred words or less is the Plankton Theory."



This is an excerpt from an article written by Paul McCulley in 2007 titled, The Plankton Theory Meets Minsky where McCulley highlighted the importance of subprime to the entire ecosystem of the housing market. In this case, the developed markets are the larger fish and the emerging markets are the smaller fish. February and March were the beginning of an unconscious recognition of the future dependence on the growth of the emerging world at a time when demographics, debt, and monetary and fiscal limitations had neutered their ability to create Due to globalization and technology, the world is interconnected and the global growth. contagion transmission mechanism is much faster than in the past so leaving the emerging world to fend for itself was not an option. I say unconscious decision because if you go back and think about the negative feedback loop from markets in January, it is clear that central banks were not coordinated and markets had become disorderly, so something had to be done. Janet Yellen's speech in late March spurred recognition that the Fed must include the global economy and the world reserve currency, the dollar, in its decision making. At the same time, at the recent IMF meetings which I attended, all countries have recognized that worsening demographics and the associated liabilities will continue to put a strain on future growth. Although the view of some global coordination in February is still contested by many, I see Q1 of this year as a major change in global monetary policy which benefits emerging markets significantly.

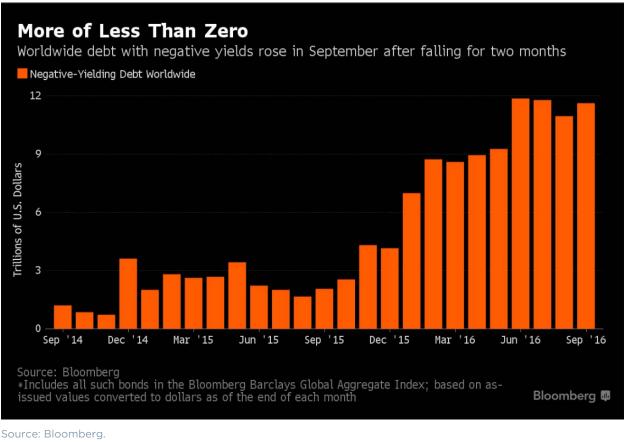
The Acceptance of the New Normal, Lower for Longer, Secular Stagnation and the New Mediocre

Once the central banks became friendlier, we saw the impact on emerging market asset prices. At first, most thought this was just short covering. But for me, there is a bigger structural shift occurring in asset decisions that will benefit emerging markets due to another reality that is finally gaining acceptance. At the IMF meetings, investors, economists and politicians all seem to embrace one theme which, until recently, was not commonly thought. In 2009, this thought was called the "new normal". I realized at these meetings that it's now also defined as "lower for longer", "secular stagnation" and the "new mediocre". Having four names for the same thought has got to be defined as acceptance, right? For me, this is recognition that a large important regime shift is in place. However, although there is acceptance now, that is likely more of a reflection of giving up the fight rather than believing. This will assuredly lead to many bouts of aftershock volatility along the way but as more time passes in the coming years, I do think more and more people will get to acceptance. One of the triggers for acceptance this year can be seen in Exhibit 3 showing the amount of worldwide debt with negative yields. At the same time that we are losing bonds with yields, BlackRock, on their earnings call in October, said that investors were holding over \$50 trillion in cash. Acceptance is often inferred by actions. As people are forced out on the risk curve, psychologically they have skin in the game and they will inevitably build a narrative to support it. The need for yield increases daily due to demographics and there is a large supply and demand issue that benefits the higher yielding emerging markets. Look no further than Argentina and Saudi Arabia's record bond issues for an indication of this. When you combine the global yield situation and depressed emerging market currencies, which had fallen for five years and purely from a value perspective the situation for EM assets becomes combustible.



Exhibit 3

The Rise of Negative Yielding Debt



http://www.bloomberg.com/news/articles/2016-10-02/negative-yield-debt-resumes-surge-to-almost-12-trillion-chart

Sentiment remains skeptical

Despite the strong performance for EM this year the sentiment at both the IMF meetings as well as from the many investors to which I have presented this year still view this move as little more than a cyclical story driven by an underweight rebalancing. The reason behind the disbelief is similar to the overall skepticism towards all asset prices; other than EM being relatively cheap and an underweight position, it is difficult to find a solid fundamental story to support the moves. At the same time, although structural reforms are moving forward there is a lack of true evidence to support a future impact. Many of the countries still have dysfunctional government situations making the future reform commitment uncertain. I was shocked also at how many emerging countries described their own demographic problems and a need for pension reform. In addition, if we remain in the "new normal" lower rate environment, we can assume that these countries can no longer depend on commodity strength, global trade or China's industrial growth for the revenue side of their budgets. Global trade growth is currently near zero and just now many people are starting to wonder if this is part of the "new normal" as it has, in recent years, broken from its historical correlation with global nominal GDP. Without exports, where can there be a positive story to suggest a long term outperformance of EM relative to the DM? The rest of this paper will begin the story of the building blocks for the inflection point which I believe is the



future story for EM. Like if you were Alexander Hamilton 200+ years ago taking a bet on America and the Industrial Revolution, this will take forgetting some of what you know and focus on what things will look like in 10 years all while remembering that investing is not about extrapolating the past. Rather, at the end of the day, we have to predict the future to be successful. As I mentioned in my last paper, connecting dots looking forward is what I believe alpha is all about in a portfolio. These following excerpts from a 2012 McKinsey paper titled *Winning the \$30 Trillion Decathlon: Going for Gold in Emerging Markets*, and Exhibit 4 connect Hamilton's time period to today in order to define the inflection point.

The Advent of a New Consuming Class: Knowledge is Power

The Industrial Revolution is widely recognized as one of the most important events in economic history. Yet by many measures, the significance of that transformation pales in comparison with the defining megatrend of our age: the advent of a new consuming class in emerging countries long relegated to the periphery of the global economy.

The two shifts bear comparison. The original Industrial Revolution, hatched in the mid-1700s, took two centuries to gain full force. Britain, the revolution's birthplace, required 150 years to double its economic output per person; in the United States, locus of the revolution's second stage, doubling GDP per capita took more than 50 years. A century later, when China and India industrialized, the two nations doubled their GDP per capita in 12 and 16 years, respectively. Moreover, Britain and the United States began industrialization with populations of about ten million, whereas China and India began their economic takeoffs with populations of roughly one billion. Thus the two leading emerging economies are experiencing roughly ten times the economic acceleration of the Industrial Revolution, on 100 times the scale—resulting in an economic force that is over 1,000 times as big.



Exhibit 4

The Change in Earth's Economic Center of Gravity

Evolution of the earth's economic center of gravity¹ 1 CE to 2025



¹Calculated by weighting national GDP by each nation's geographic center of gravity; a line drawn from the center of the earth through the economic center of gravity locates it on the earth's surface. For detailed analysis, see the appendix in the McKinsey Global Institute (MGI) report *Urban world: Cities and the rise of the consuming class*.

Source: MGI analysis using data from Angus Maddison, University of Groningen; MGI Cityscope v2.0

Source: McKinsey. http://www.mckinsey.com/global-themes/urbanization/urban-world-cities-and-the-rise-of-the-consuming-class

The new consuming, or booming, emerging market middle class is not a new story. This has been an investment theme for years now and the McKinsey paper came out four years ago. So why is it worth focusing on now? The answer can be best shown through a quote from one of the characters in Hamilton, Thomas Jefferson.

"Knowledge is power, knowledge is safety, knowledge is happiness."

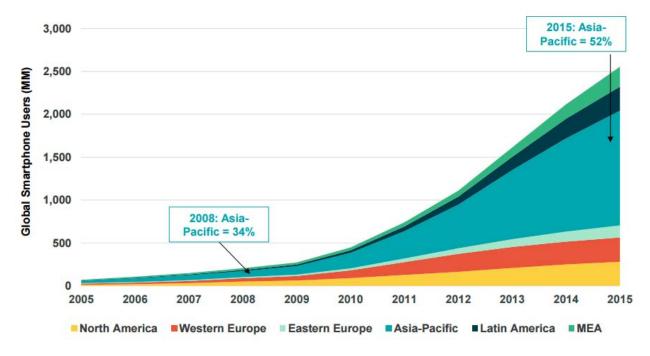
-Thomas Jefferson



This knowledge for the world is coming via the smartphone, as illustrated in Exhibit 5 from a recent Kleiner Perkins presentation. There are approximately 7.4 billion people on the planet and until recently most of them had no access to information. In the developed world we cannot possibly understand what this would be like. As was the case in America's early days with Alexander Hamilton's influential role in the Federalist Papers and freedom of the press, the smartphone to us was just a small step in a continuous evolution of communication and access to information. It is impossible to measure the importance of the smartphone for the world today or the impact it will have on the future.

Exhibit 5

The Rise of the Smartphone in the Emerging World



Source: Kleiner Perkins. http://www.kpcb.com/internet-trends

Over two billion people now use the broadband Internet, up from perhaps 50 million a decade ago, when I was at Netscape, the company I cofounded. In the next 10 years, I expect at least five billion people worldwide to own smartphones, giving every individual with such a phone instant access to the full power of the Internet, every moment of every day.

-Marc Andreesen

This quote from a famous Wall Street Journal article in 2011 is one of the reasons why I began traveling to Silicon Valley years ago to spend time on what the future will look like. Andreesen and others like him are not futurists making unlikely forecasts. The math behind



their vision and forecasts has been very accurate. Although lately it seems as though they may have even underestimated the pace of the innovation change. People absorbed in the digital revolution think differently than people locked in the Industrial Revolution. As an example, each time I listen to an oil analyst talk about how little the impact electric vehicles, autonomous driving, ride-sharing and solar will have on future gas demand, I feel like I have traveled back in time. These situations take me back to my youth watching Cha-ka on Land of the Lost. By going to San Francisco, you get a clearer sense of the macro trends shaping the world going forward. In the past, you spent time on monetary policy and fiscal policy shifts to figure out where we were in the business cycle. Now it's about seeing what the world will look like 10 years from now and figuring out the macro investment trends that will benefit as well as prior trends which will get disrupted. Oil demand is a place I think will continue to be disrupted in the years ahead, particularly as people recognize that global trade growth has peaked. More on the new global trade later.

Democratization of Information and Technology Changes the Relationship Between Governments and People

It was on my last trip to Silicon Valley in June where the importance of the iPhone became much clearer. Repeatedly I heard people reference the importance of the democratization of information and technology. What does it mean for so many more people on the planet to have access to information and the ability to communicate? It reminded me of a book I read in 2013 titled the *New Digital Age: Reshaping the Future of People, Nations and Business* by Eric Schmidt and Jared Cohen. I had been consuming as much information as I could on exponential innovation and singularity theory and I ran into this book because of the title. At that time, I was not focused on the implications of the democratization of information and technology because the smartphone was not as ubiquitous as it is today, but this excerpt highlights the main point of the book.

Digital empowerment will be, for some, the first experience of empowerment in their lives, enabling them to be heard, counted and taken seriously—all because of an inexpensive device they can carry in their pocket. As a result, authoritarian governments will find their newly connected populations more difficult to control, repress and influence, while democratic states will be forced to include many more voices (individuals, organizations and companies) in their affairs.

-Eric Schmidt, The New Digital Age: Reshaping the Future of People, Nations and Business

Whether it's the Arab Spring, the Hong Kong protests or the Brazil protests leading to the government impeachments and arrests of important political and business leaders, we are seeing an example of this point. Governments are aware of these "newly connected populations". When I lived in Brazil, it was clear the role corruption played in the government was a major reason for the problems in the country. I cannot think of a more powerful signal to buy Brazil then what's happened this year. Potential growth in the country may be coming down but now, with the government having a mandate from an empowered population, there will be no turning back on



necessary structural reforms. The process always takes longer than investors want but I think people will start to realize that structural reform in developing markets is actually easier than getting necessary pension, healthcare and entitlement reforms done in developed markets due to the hunger for change in the developing world. For Europe, the current and ongoing situations involving immigration, terrorism, Brexit, referendum and elections make it look very emergingmarket like. In Japan, we still have population declining and negative rates. The US political situation with talk of election rigging and revolutions screams "emerging markets" to me. The pendulum of political risk is shifting in both the developing and developed worlds; one of them is improving and one of them is worsening.

This theme of the evolving relationship between governments and the people was expressed in a different way in a new book by Steve Case titled, *The Third Wave: An Entrepreneur's Vision of the Future.*

"First, let's start with defining the First and Second Waves of the Internet, The First Wave of the Internet, which took place from roughly 1985 to 2000, was defined by companies like AOL, Cisco, Microsoft creating the underlying infrastructure and bringing America (and the rest of the world) online. The Second Wave has been about building apps and services on top of the Internet. Now the Third Wave has begun, as the Internet integrates seamlessly and pervasively through every aspect of our lives, changing how we work, how we learn, how we stay healthy, how we get around, even how we eat. This means that startups in some of the largest sectors that impact our lives - transportation, health, education, financial services, to name a few - will have the tools necessary to have transformative impact. Business leaders need to be mindful of this next economic revolution because competition will accelerate and come from unpredictable places. Instead of ignoring entrepreneurs, or watching them with skepticism (or, worse, seeking to hobble them by playing the regulatory card), they'll be wise to engage with them, seeking win-win partnerships. This next wave will feature a new era of cooperation will likely be animated by the African proverb: "If you want to go quickly, go alone, but if you want to go far, you must go together."

"The third wave of the internet will be defined not by the internet of things; it will be defined by the internet of everything. We are entering a new phase where the internet will be fully integrated into every part of our lives-how we learn, how we heal, how we manage our finances, how we get around, how we work, even what we eat."

Third wave industries are among the most regulated in the economy, from energy, to financial services, to education, to health. And government is not just a regulator in these sectors; it is often also a very large customer.



In this case, Case speaks about the need for the government and entrepreneurs to work together in a partnership where they help each other. In the developed world, this is proving to be difficult as there are strong unions and established businesses being disrupted such as in the case with Tesla, Uber or Airbnb. In developing markets, the government needs the entrepreneurs to bring much needed efficiency and productivity to please the newly empowered people. The list of examples of this grows every day. Developed markets have the same resistance to change as business incumbents. The resistance to change is both structural and psychological. Faster adoption to autonomous driving, ride sharing, gene editing, drone delivery, police drones, mobile banking, virtual currencies and the blockchain are already occurring in developing markets. This is due in part to less regulation as well as those governments' willingness to take risk. But it's also due to the fact that the user adoption rates don't involve switching from a long established habit. The switch from brick and mortar to online doesn't need to happen in many places because brick and mortar never existed in the first place. This ability to technologically leapfrog is one of the largest benefits for emerging markets. Each time I am on a train on my way to Boston or Washington D.C. or forced to take a flight from LaGuardia, I think about how having a clean slate with a lack of infrastructure can be better than old infrastructure that is difficult to update. This excerpt from a Mark Mobius blog site highlights the impact of technological leapfrogging.

> The potential for emerging and frontier markets to realize accelerated economic growth as a result of new technology transfer comes up regularly in our research findings. We have been increasingly excited about a new development—the capacity for new technology, particularly related to data over the Internet, to completely bypass swathes of older technology and business activity. We think this could lead to even more dramatic economic progress. In effect, the emerging markets are leapfrogging over the old technology and taking advantage of the newest technology today.

-Mark Mobius, September 2014¹

Education is the Premise of Progress

"Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family."

-Kofi Annan

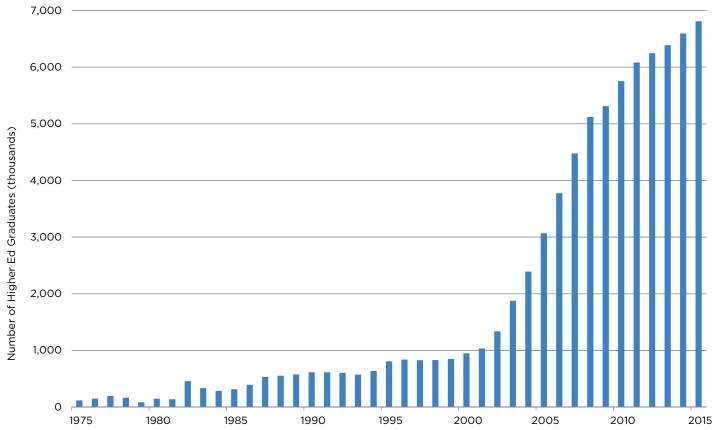
This Kofi Annan quote sums up the power of information and knowledge to help force government change. It also highlights the focus of the Third World on education. This is of critical importance for emerging markets. Historically, educating a country has been a multi-generational

¹ <u>http://mobius.blog.franklintempleton.com/2014/09/10/leapfrog-role-technology-accelerating-emerging-markets-growth/</u>



effort due to many difficulties preventing the ability to scale it. Technology, including online learning and virtual reality, will absolutely help in the ability to scale in the coming years. China has been a leader in the education boom. Exhibit 6 shows the explosive growth in Chinese college graduates over the last 15 years. Goldman Sachs predicts another 74 million college graduates over the next 10 years. This education chart looks a lot like the industrialization and commodity charts from 2001-2010 which supported the last movement into emerging markets. I expect many of the emerging market education-related charts to look like that 10 years from now and increased education will lead to more efficiency and productivity in domestic companies and more global competition. The following two exhibits indicate the entrepreneurial importance and empowerment of education but also the importance of the government to foster entrepreneurship.

Exhibit 6



Higher Education Surging in China

Source: Matthews Asia



Exhibit 7- Chinese Innovation and Entrepreneurship

Percent of College and Graduate Students Interested in Building Their Own Business



Source: Korea International Trade Association

China Is The Biggest Venture Capital Firm In the World

Source: Fortune Magazine. <u>http://fortune.com/2016/03/09/investors-venture-capital-china/</u>

In bid to ease the slowing Chinese economy into a consumer-based rather than heavy industry-focused one, the country reportedly raised about 1.5 trillion yuan, or \$231 billion, in state-backed venture funds through 2015, according to Zero2IPO.

That tripled its assets under management to \$338 billion. The money, which is almost five times the amount raised by any other venture firm in the world in 2015, comes mostly from tax revenues or state backed loans, and is funneled into some 780 funds across the country.²

A New Generation of Consumers Shaping the Digital Revolution

If we fast forward to 2025 and think about the number of empowered, educated consumers we expect we should go back to one of the earlier McKinsey excerpts: "The Industrial Revolution is widely recognized as one of the most important events in economic history. Yet by many measures, the significance of that transformation pales in comparison with the defining megatrend of our age: the advent of a new consuming class in emerging countries long relegated to the

² <u>http://fortune.com/2016/03/09/investors-venture-capital-china/</u>



periphery of the global economy." The numbers of people joining the consuming and producing world makes this a megatrend to focus on for investments. Like in 2001 when Jim O'Neil of Goldman Sachs correctly highlighted the industrialization boom coming in the BRICS, I see this year as the point in time where we will look back on as the start of the rise of the EM consumer.

Leading the way is a generation of consumers in their 20s and early 30s who are confident their incomes will rise and are willing to spend in order to realize their high aspirations. These new consumers have come of age in the digital era. Already, more than half of all Internet users globally are in emerging markets. Emerging consumers are shaping the digital revolution, not just participating in it, and they are leapfrogging developed-market norms.

-McKinsey "Winning the \$30 Trillion Decathlon: Going for Gold in Emerging Markets"

McKinsey references something very important though in this quote. These consumers are different than prior consumers. They are not the baby boomers consuming things. They came of age in the digital era where ownership has moved to sharing. The assembly line working mentality of the past has shifted to a desire to have more flexibility and a better work/life balance. In addition, the desire to accumulate things has been replaced by the desire for experience. Therefore, the democratization of information and technology not only empowers and educates but it will change the demand side of the global economy. It will also impact many of the important themes that ran through my head while watching Hamilton. These newly empowered, hungry consumers, like Alexander Hamilton when he immigrated to America, will be looking for growth opportunities and supportive governments with improving domestic education and healthcare. Immigration will be impacted. In addition, if the new consuming class cares less about ownership and things, we have also likely hit the peak of global trade. We are already seeing the data support this fact and I believe this is the single most confusing outcome for investors and economists who believe less trade is an indication of globalization breaking down rather than being impacted by technology, a new type of consumer and a rebalance of global order. The next six excerpts talk about the transition happening in global trade.

Global Trade of Goods to Global Trade of Digital Flows and Tourists

In this new phase, growth will be less dependent on global trade. For emerging countries, growth will be determined more by internal structural reforms designed to drive domestic demand (rather than exports) and to broaden the industrial footprint (especially for commodity-producing countries). This is already happening in India, which is enjoying high rates of economic growth despite falling exports. For developed countries and



China, growth will be driven primarily by improvements in productivity aided by new technology and innovation. Boston Consulting Group – What You Need to Know About Globalization's -Radical New Phase

The 20th-century version of globalization was defined by rapidly growing trade in goods, as major multinationals created supply chains that spanned the world. Today growth in global trade has flattened, and it looks unlikely to regain its previous peak relative to world GDP anytime soon. The same is true for cross-border financial flows. But globalization hasn't gone into reverse. It's gone digital. Cross-border data flows have grown by a factor of 45 over the past decade, and they're projected to post another ninefold increase by 2020. -Harvard Business Review

The world has become more intricately connected than ever before. Back in 1990, the total value of global flows of goods, services, and finance amounted to \$5 trillion, or 24 percent of world GDP. There were some 435 million international tourist arrivals, and the public Internet was in its infancy. Fast forward to 2014: some \$30 trillion worth of goods, services, and finance, equivalent to 39 percent of GDP, was exchanged across the world's borders.

International tourist arrivals soared above 1.1 billion. And the Internet is now a global network instantly connecting billions of people and countless companies around the world. Flows of physical goods and finance were the hallmarks of the 20th-century global economy, but today those flows have flattened or declined. Twenty-first-century globalization is increasingly defined by flows of data and information. This phenomenon now underpins virtually all cross-border transactions within traditional flows while simultaneously transmitting a valuable stream of ideas and innovation around the world.

-McKinsey Global Institute, March 2016 DIGITAL GLOBALIZATION: THE NEW ERA OF GLOBAL FLOWS

In the decade ahead, the global goods trade may continue to decline relative to world GDP. At a minimum, it is unlikely to resume rapid growth. Not only are factor costs changing, but 3D printing and other technologies also have the potential to transform how—and where—goods such as electronics, vehicle parts, other transportation equipment, machinery and electrical equipment, medical instruments, and apparel are produced.



-McKinsey Global Institute, March 2016 DIGITAL GLOBALIZATION: THE NEW ERA OF GLOBAL FLOWS

Global trade growth has decelerated significantly in recent years...... Between 1985 and 2007, real world trade grew on average twice as fast as global GDP, whereas over the past four years, it has barely kept pace. Such prolonged sluggish growth in trade volumes relative to economic activity has few historical precedents during the past five decades. -IMF World Economic Outlook October, 2016

International tourism receipts in destinations around the world grew by 3.6% in 2015, in line with the 4.4% increase in international arrivals. For the fourth consecutive year, international tourism grew faster than world merchandise trade, raising tourism's share in world's exports to 7% in 2015. The total export value from international tourism amounted to US\$ 1.4 trillion.

-United Nations World Trade Organization

"Despite a weak and slow economic recovery, spending on international tourism grew significantly in 2015, proving the sector's relevance in stimulating economic growth, boosting exports and creating jobs for an increasing number of economies worldwide." -United Nations World Trade Organization

In prior papers I have written about how GDP can no longer be a relevant measure in a digital world. Global trade is arguably the most important indicator of global growth. If, as these excerpts argue, global trade of goods has peaked, we as investors should begin to focus on the areas of global flows which are growing, including data and tourism. For data, this involves efficiency, corporate productivity and increased innovation competition. It is software instead of hardware. It is opex instead of capex. It involves the virtual rather than the physical. It also involves a movement from globalization of developed market companies to "glocalization". Glocalization is becoming a major theme on many of the podcasts I've been listening to this year regarding the advantage local companies have in understanding local consumers. This was especially true in the case of Uber's failed attempt in China to compete with Didi Chuxing and with many of the global tech companies trying to compete in China. Glocalization will be a major theme in the coming decade.

What's most interesting to me, however, and what I think is the biggest benefit to the developed world, is the point made in the last excerpt attributable to the WTO; the boom in global tourism. For the fourth year in a row, global tourism has grown faster than global trade. As GDP per capita continues to grow in emerging markets, you will likely see the experience-hungry younger generation travel in numbers which will inevitably impact GDP numbers in countries due to the law of large numbers. If 85% of the world's population is only just now getting information,

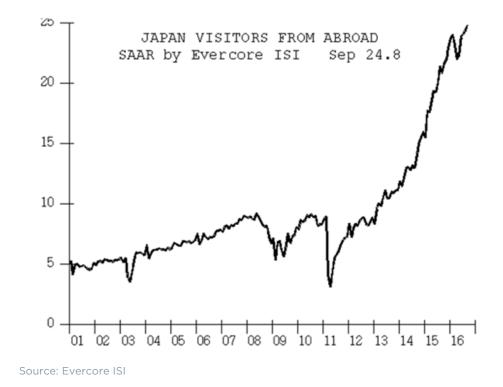


and will be expected to get wealthier, you will see the economic reversal of them as once considered cheap labor but now as spending visitors. All of us have seen this growth in the last 10 years mainly through the stories of Chinese tour groups. The rapid compounding of these large numbers is starting to have an impact. In fact, my favorite investment idea for 2017 which capitalizes on this impact is in one of the developed markets - Japan. China is already the largest global source of annual tourists and the largest global spenders on tourism despite only about 4% of the population having passports. This has benefitted Japan significantly. In 2012, as part of Abe's plan for Japan, he set out a goal of doubling the amount of tourists from 10 million visitors to 20 million by 2020. Four years later, and through August, Japan is on pace for 25 million tourists this year or 25% YoY growth. Hearing about growth is not as effective as seeing it. Exhibit 8 shows the acceleration. Last year was the first year in 45 years that inbound tourists exceeded outbound tourists. According to the Japan National Tourism Organization, 85% of the visitors are from the Asia pacific region. China is a driving force of this growth. The forces driving Exhibit 8 are the same forces driving Exhibit 6. In 2012, 1.4 million Chinese tourists visited Japan. In July and August of this year alone, a total of 1.4 million Chinese tourists visited Japan. Chinese tourists also spend more than other visitors. Locally, the Japanese use a new word to describe the spending of Chinese tourists, bakugai which means explosive buying. With China's disposable income continuing to grow and passports ownership at low levels, Goldman Sachs predicts the number of China travelers to rise from 120 million in 2015 to 220 million in 2025. Japan only recently started to focus on tourism. Tourism is still less than 1% of GDP, way below other countries like the US and Europe. With the Olympics coming up in 2020, I believe Japan is answering one of the biggest questions it has had to address. With population shrinking due the aging of the country and no immigration, the exploding tourist numbers are a key area of growth for Japan in the coming years. I also think this benefits Australia in the coming years in a similar way. If you want to look at what the boom in global tourism can do to countries with smaller populations, look at what has happened to Iceland since its crisis. I also like the Japan story in this new normal story because of the theme of unlearning. Unlearning in the post industrial revolution world is to me about searching for historical correlations that will break. In this case, because I think oil prices will continue to head lower on the back of less global trade and an auto transformation in the years ahead, Japan's terms of trade will improve regardless of whether the yen weakens. It also helps from a sentiment basis that recently Bloomberg had a news headline that read "Global Money is Fleeing Japan Stocks at Fastest Pace since 1987". I see Japan as a good entry point for many reasons.



Exhibit 8

Acceleration of Tourism in Japan



Look to Emerging Markets for Alpha

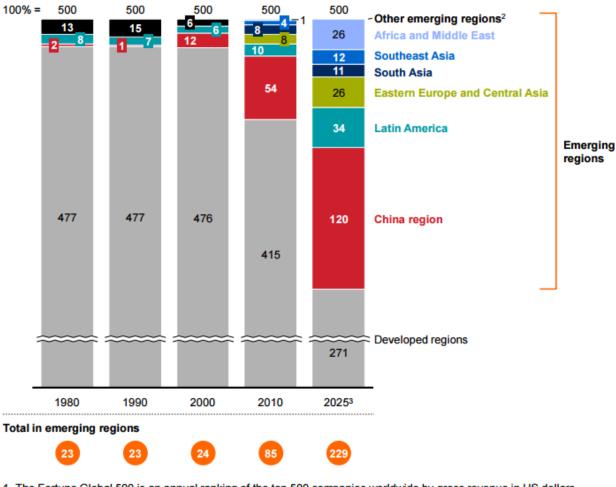
The center of economic gravity has been slowly shifting. Yes, the United States is still the most important economy in the world, but New York, Chicago, and L.A. have gotten company, from Beijing to Brasilia, from Moscow to Mumbai, and from Jakarta to Johannesburg....Emerging and developing economies are home to 85 percent of the world's population— 6 billion people. These 85 percent matter to the global economy more than ever, and they matter to you more than ever—because of strong linkages through trade, finance, economics, geopolitics, and personal connections that you experience every day....As a group, emerging and developing economies now account for almost 60 percent of global GDP, up from just under half only a decade ago. They contributed more than 80 percent of global growth since the 2008 financial crisis, helping to save many jobs in advanced economies, too. And they have been the main driver behind the significant reduction in global poverty.

-Christine Lagarde Feb 4th, 2016 University of Maryland



Exhibit 9

Emerging Regions Expected to be Home to More Fortune 500 Companies



1 The Fortune Global 500 is an annual ranking of the top 500 companies worldwide by gross revenue in US dollars.

2 Shares of emerging regions excluding China and Latin America combined until 2000.

3 Fortune Global 500 share in 2025 projected from revenue shares of countries in 2025.

NOTE: Numbers may not sum due to rounding.

SOURCE: MGI CompanyScope; McKinsey Global Institute analysis

Source: McKinsey

http://www.mckinsey.com/~/media/McKinsey/Global%20Themes/Urbanization/Urban%20world%20The%20shifting%20global%20busi ness%20landscape/MGI_Urban_world3_Full_report_Oct2013.ashx

Since Ben Bernanke explained the benefits of QE in the November 2010 op-ed in the Washington Post (and started the game of beggar thy neighbor QE follow the leader), emerging markets have underperformed the developed markets. At the G20 in February of this year, just weeks after this speech by Christine Lagarde at the University of Maryland, central banks came to the realization that the globalized world, particularly emerging markets, needed to focus on the world rather than their own economies in this interconnected world. Why should the benchmark weighting be about 10% in emerging markets? In the Lagarde speech, she highlights that EM has 85% of the population, is 60% of global GDP and has been 80% of the global growth since 2008! For all the insights I have tried to provide in this paper, it is these numbers that I believe are the



most important. In my opinion, the recent inflows to EM are not something to go against. Over the course of the next decade, driven by increases in corporate productivity and efficiency, I am confident a psychological shift will gradually take place in investors' minds as they are forced to find higher returns to meet growing liability needs and to follow the inevitable rising benchmark weightings. We are still very early in that process. Developed market investors may still be focused on their memories of the risk side of the equation with emerging markets but as Christine Lagarde points out, the 6 billion people entering the global economy are from emerging markets and they will be more willing to focus on the return side of the opportunity. In addition, developed markets have their own political, entitlement and demographic risks that make them riskier then investors may think. Sometime visuals are more impactful than words and Exhibit 9 tells a simple story to me of what McKinsey thinks the global Fortune 500 composition will look like in 2025.

Watching the play Hamilton, I was taken back to the beginning of the Industrial Revolution and the shifting of global economic power. I believe we are currently living through the early days of a rebalance of economic power driven by the aging of the developed world and the democratization of technology and information where emerging markets are finally ready for their shot. This Lin-Manuel Miranda lyric sung in the play by Alexander Hamilton sums it up well with regard to my thoughts on emerging markets.

> Don't be shocked when your hist'ry book mentions me I will lay down my life if it sets us free Eventually, you'll see my ascendancy I am not throwing away my shot! I am not throwing away my shot! Hey yo, I'm just like my country I'm young, scrappy and hungry

Jordi



AUTHOR Jordi Visser <u>ivisser@gweiss.com</u>

NEW YORK OFFICE

320 Park Avenue, 20th Floor New York, NY 10022

HARTFORD OFFICE One State Street, 20th Floor Hartford, CT 06103

INQUIRIES

Gillian Tullman Director of Investor Relations and Marketing <u>gtullman@gweiss.com</u> +1 212 390-3451

Jena Roche Vice President, Investor Relations and Marketing <u>iroche@gweiss.com</u> +1 212 390-3445

> WEBSITE http://gweiss.com

This document is provided to you by Weiss Multi-Strategy Advisers LLC. The forgoing information is confidential and contains forward-looking statements, which present the Chief Investment Officer's expectations and beliefs regarding future financial performance, and assumptions or judgments concerning such performance. Any such statements involve estimates, assumptions, judgments and uncertainties, and you should not rely on such statements to reach conclusions or make any investment decisions. You will not necessarily be informed if the Chief Investment Officer's expectations or beliefs change after the date hereof. Weiss Multi-Strategy Advisers LLC ("Weiss") has no control over information at any site hyperlinked to in this communication. Weiss makes no representation concerning and is not responsible for the quality, content, nature, or reliability of any hyperlinked site and is providing this hyperlink to you only as a convenience. The inclusion of any hyperlink does not imply any endorsement, investigation, verification or monitoring by Weiss of any information in any hyperlinked site. In no event shall Weiss be responsible for your use of a hyperlinked site. This is not intended to be an offer or solicitation of any security. Any such offer or solicitation may only be made by means of a confidential private offering memorandum.

