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Knowledge Leadership

Consumer Spending Outlook and Value Creation in the New Global Economy

by Yuwa Hedrick-Wong, Theodore Iacobuzio, Carlos Fonseca

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Consumer Spending Outlook

There are three key drivers that raise private household consumption. The first is growth of employment, the second, wage increases, and the third, expanding consumer credit. These key drivers work either independently, or, more potently, in combination. For example, wage increases leading to rising household income and consumer demand will trigger in turn more business investment that creates more jobs — a phenomenon typically seen in a robust recovery phase of the business cycle. And, when household debts are generally low and wages are rising, household consumption can be boosted by more credit being made available to consumers without the increase in consumer debt becoming a concern. Indeed, under such circumstances, consumer credit acts as a healthy multiplier that allows the consumer to monetize some of tomorrow's income for today's use.

Since the 2008/09 global financial crisis, however, it is quite clear that none of these key drivers of private household consumption is working properly. For instance, in the US, the largest consumer market in the world, unemployment has remained stubbornly high, and households are trying to pay down their debts with any spare cash that they have. From a peak of 135% of average annual disposable income in 2008, household debts in the US have steadily declined to around 123% in early 2011[1]. While this is a move in the right direction, the amount of household income that is used to pay down debt also automatically reduces households' consumption demand. So the growth of the consumer market in the US is unlikely to return to the pre-crisis level for quite some time to come.

What is true for the US is equally true for other developed markets. In the Euro Zone, the volume index of retail sales has been flat since 3Q 2010. Any data showing increases in retail sales only reflect price increases, in other words, inflation. Data coming out of the strongest and best-performing economy in Europe, Germany, are indicative. Since the beginning of the year, German consumer-durable orders from the Euro Zone have been contracting. It is exports outside the Euro Zone that have kept the German economy humming, while domestic durable-goods orders are up a modest 5% year-on-year. This is in spite of Germany's record-low unemployment and strongest GDP growth in 20 years.

In fact, the challenge of the situation today can be summarized in terms of a contrast between three groups of markets: developed, emerging, and transitional; and their respective shares of growth in consumer demand before and after the 2008/09 crisis[2]. Collectively, these three groups account for the lion's share of the growth of global household consumption. Transitional markets, the key drivers of Eastern Europe — are included because of their super-fast growth in household consumption in the decade prior to the crisis. As Table 1 shows, the average annual growth rates over the 2000 to 2008 period ranged from 7% for developed markets to an amazing 35% for transitional markets, with the most significant emerging markets averaging over 19% per year.

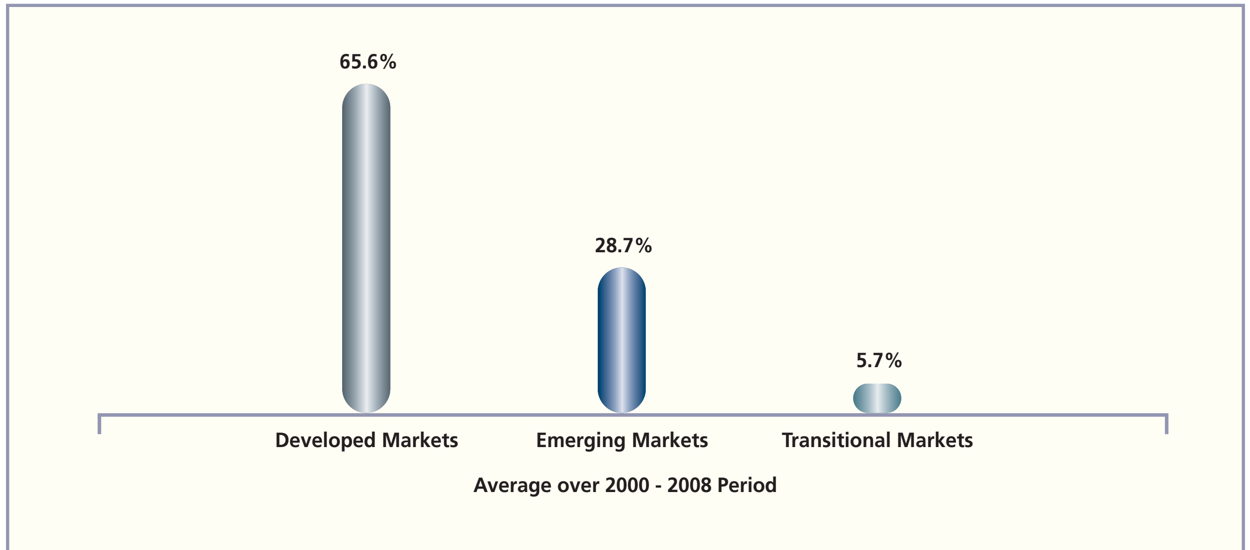
Table 1. Average Annual Growth Rates in Household Consumption, 2000 - 2008

All Three Groups	9.1%
Developed Markets	7.0%
Emerging Markets	19.3%
Transitional Markets	35.0%

Source: CEIC, Eurostat

Due to the massive difference in the size of their consumer markets, the picture looks completely different when comparing the share for each group in overall consumption growth. For example, in 2008, the size of the consumer market of the group of developed markets is estimated at US$22.2 trillion. In comparison, the size of the consumer markets for the emerging and

Chart 1. Global Shares of Household Consumption Growth



Source: CEIC, Eurostat, IFS

transitional markets are estimated at US$5.6 trillion and US$0.9 trillion respectively. Consequently, as seen in Chart 1, developed markets accounted for 65.5% of the increases in household consumption during the 2000 to 2008 period; whereas the emerging markets accounted for only 28.7% of the total. The transitional markets trailed even further behind with a 5.7% share of total growth.

It is this preponderancy of household consumption in the developed markets that is of concern in the post-crisis global economy. Even though emerging markets have appeared to be able to keep powering ahead in spite of the crisis and the anemic recovery, the question is whether the growth of consumer spending in emerging markets (in combination with transitional markets) is enough to compensate for the stagnation in developed markets. This concern is illustrated in Table 2, which shows the growth rates in household consumption for the three groups from 2009 to 2010. As expected, growth in the developed markets averaged a miniscule 0.13% a year, in sharp contrast with 8.8% in the emerging markets. The transitional markets actually went into contraction, shrinking by 8.5% a year over this period. Thus, in spite of an otherwise respectable performance of 8.8% growth in consumer spending in the emerging markets, the overall growth for the three groups of markets came to only 1.6% in this period.

It is therefore an important question to ask today where growth in the consumer market will come from in the global economy in the next five years, given the poor prospects in the developed markets and the uncertain outlook in the transitional markets. This is not just an academic exercise in number crunching. There are far-reaching implications for global businesses when the dynamics of demand change in the consumer markets. This is because consumption lies in the heart of value creation in a market economy. It's consumer demand that ultimately determines whether businesses,

Table 2. Average Annual Growth Rates in Household Consumption, 2009 - 2010

All Three Groups	1.6%
Developed Markets	0.13%
Emerging Markets	8.8%
Transitional Markets	-8.5%

Source: CEIC, Eurostat

after the investments required to develop their products and services, have succeeded in creating value. For global businesses, an understanding of how and where growth will originate in the consumer marketplace will be crucial to their success.

The role that consumption plays in economic growth and value creation is often misunderstood as well as underappreciated. In many societies, frugality is praised, and by implication this means saving and investing are good, and consumption is at best to be kept modest. In the aftermath of the 2008/09 financial crisis, such sentiments are further boosted by a backlash against the debt-fueled consumption of the US and much of Western Europe in the past decade. And, yet, investment and production, without the guiding hand of consumer choices and demand, inevitably lead to capital misallocation and business failure. It is consumption, and consumption alone, that ultimately creates value. History abounds with such examples, if we know where to look.

Value Creation and Consumer Choices

An American clipper sailed up the Hooghly River to deliver a most peculiar cargo in Calcutta in the late 1870s. It carried in its hull large blocks of ice chipped from lakes in Massachusetts, in northeast US. Shippers found that when properly insulated with sawdust and stored in the hull of ships, about two-thirds of the ice blocks could survive the six-month long journey to India.

In the 19th century, the hot weather was probably one of the most daunting challenges to the British colonialists in India. Perspiring British colonial officials first discovered the hills— places at higher elevation where the temperature was cooler, especially during the summer. Hill stations were established all over India, and the most famous was Simla, nestled in the foothills of the Himalayas, to which the viceroy and his army of clerks and officials escaped for the summer. The hill stations were a partial solution to the British yearning for cooler weather. Another solution was to import it. In 19th-century India, this meant importing ice from New England. It is estimated that in the 1870s New England exported 12,000 tons of ice a year to India.[3]

One can only imagine what went through the minds of Indians unloading the "ice ships" and the New Englanders who were paid to saw and pack ice to be shipped to India. As long as the British in India wanted ice and were prepared to pay for it; that consumption choice set into motion a complicated supply chain made possible with ingenious innovations.

This example of shipping ice to India highlights a profound truth about value creation that is often misunderstood. There is a natural bias to focus on the production process as the source of value creation. Superficially it seems to make sense that value is created when something is being produced. After all, if we paid X dollars for a gadget, then surely the producer of that gadget produced X dollars' worth of value. In this instance, common sense is utterly and completely wrong.

Take for example, a car being displayed in a showroom. Regardless of how costly the manufacturing, how brilliant its design, or how lavishly it is upholstered, it has exactly zero value before it's sold, whatever its price tag states. The economic value of this car comes into existence the moment a consumer makes the decision to buy it. The price willingly paid by the buyer is the value of the car. The creation of economic value, therefore, is intimately intertwined with the act of conducting a transaction, and value is created at the very moment that the exchange is made between the buyer and the seller. Thus, while value creation lies at the heart of the economic process, consumption lies at the heart of value creation.

Consumption choices are driven by consumer tastes, which can vary greatly from place to place, and from time to time. Consumer taste ultimately determines how consumption choices are made. Taste is, by definition, subjective. But, consumer taste, however arbitrary and fanciful, has been one of the most powerful driving forces in history in mobilizing societies to venture at great risk into the unknown, and, as a consequence, affect how people and societies interact, propelling advances in technology, and stimulating innovations in business and commerce.

Some may think that we are grossly exaggerating our case, and dismiss as trivial, the example of shipping ice to India in order for well paid servants of the British Empire to indulge in their iced gin tonic in the sweltering heat. Let's look at two other examples of how consumer taste and choice which stand out as having had

powerful impact in shaping world history in the past two millennia — silk and spices. The appreciation for silk is easier to relate to, even by today's standard of affluence and abundance. The taste for spices, on the other hand, may seem more quixotic, and the prices they fetched, outright bizarre. Yet, both have been immensely important in changing history in virtually every corner of the planet.

In ancient Rome, silk from China was an item of rare luxury and much sought after by the patricians, the elite of Roman society. Traditional local materials for clothing were predominantly scratchy wool or crinkly linen; supplemented by heavy animal skins. In sharp contrast, silk was soft, light and came in a variety of luxuriant colors; outclassing the dull monotone of wool and linens. So it is not surprising that silk became an instant hit when it arrived in Rome around the first century AD.

Silk arrived in Rome before the fabled Silk Road came into existence. Traders in southern China loaded their ships with silk and sailed along the coasts of Indochina, then around the Malay Peninsula into the Bay of Bengal. They exchanged goods with Indian merchants there, who in turn sailed across the Arabian Sea to trade with Greek and Arab middlemen. Then the cargo of silk was transported up the Red Sea by barges. At the northern tip of the Red Sea, it was loaded onto camels that carried it across the desert to reach the Nile. From the Nile it was transferred to ships and ferried to Alexandria, where Greek and Roman ships awaited. These vessels then carried the silk across the Mediterranean to its final destination, Rome.[4]

This long supply chain linked the Roman and the Chinese Empires in the first century AD. Neither the Romans nor the Chinese had firsthand knowledge of each other. All the Chinese knew was that there were people living in a land far to the west who wanted their silk. The Romans, on the other hand, had heard all sorts of stories about China; mostly fanciful exaggerations or sheer fabrications. They had no idea whether silk was fauna or flora, or how it was produced.

Silk in China was expensive but in Rome, it was easily a hundredfold higher. The fact that wealthy patrician Romans were prepared to pay the high prices for silk justified this long and arduous supply chain, rendering the immense amount of logistics engaged profitable. It also brought about sustained cultural exchange between the different communities involved in the trade. For example, some Christian communities in South India today trace their roots to this period, at least 1,500 years before the arrival of European missionaries in the 17th and 18th century.

An equally long and difficult supply route started to operate in the second century AD from Western China during the Han Dynasty across Central Asia to reach Rome. This is the famous Silk Road. The Silk Road was never actually a single road, but rather, two main routes, the northern and the southern routes, each with many branches. It was the trade along the Silk Road that bought fortunes to the fabled cities of Samarkand, Isfahan, and Herat; populated by multi-ethnic communities of Jewish, Armenian, and Syrian middlemen. Buddhism eventually found its way to China from India along the Silk Road. The traffic along the Silk Road fostered the development of the practice and protocols of diplomacy between the Chinese Empire and rulers of Central Asia; encouraged the invention of travel accommodations, the caravanserai; and stimulated innovations of rudimentary forms of trade finance and credit. All these came about because of the Roman patricians' taste for silk.

If the Roman taste for silk is understandable; the European craze for spices in the Middle Ages would seem bizarre to the modern eye. The spices that were so sought after in Europe came from a few islands in tropical Asia. Cloves, for instance, originally grew only on five tiny specks of land in north Moluccas, an island group in today's eastern Indonesia. Nutmeg and mace came from the Bandas, a group of nine small isles; in the southern Moluccas. These were the fabled Spice Islands and they are very far away from Europe indeed, even with today's transcontinental flights. To reach the Spice Islands from Western Europe in the Middle Ages would be the equivalent of a space flight today. For one thousand years after the appearance of spices in Europe, no Europeans, not until the 16th century, had any clue as to where these Spice Islands were.

Spices were exotica personified for medieval Europeans. They were associated with myths of one kind or another. Some spices were believed to be endowed with potent medicinal effects, and were used to treat

all sorts of ailments, including as a prophylactic against the plague. Spices were popular as an aphrodisiac; wealthy households used them to flavor their food and drink to and fumigate their clothes and closets. Wealthy Europeans were prepared to pay a small fortune for such spices.

For centuries, Europeans lived without spices, and there is no evidence that the use of these spices significantly improved the quality of life for the Europeans. Yet, once these tropical spices arrived, Europeans became enamored with them. And they were very expensive. The splendor and power of Venice, at the height of its glory, embodied the wealth generated by the spice trade, with its grand and magnificent architecture, artwork, public squares, and canals; all built on the profits generated by Venetian dominance in the Mediterranean trade in cinnamon, nutmeg, mace and cloves. Venetian galleys transported three and a half million pounds of spices each year, prior to the Portuguese penetration of the Indian Ocean at the turn of the 16th century. Clearly, the Europeans loved their spices.[5]

The tropical spices reached Europe from the Spice Islands via a supply chain that rivaled the complexity and difficulty of that of silk from China. Islanders of the Spice Islands did not have much use for the spices themselves, and since the spice trees were found in nature and not cultivated, they had practically no economic value for the islanders. So the islanders happily traded with the legendary Bugis, the seafarers from Sulawesi, the territory situated halfway between the Spice Islands and the island of Java. The Bugis transported the spices north across the South China Sea; and traded with Chinese and India merchants; who in turn took the goods westward; following roughly the same trade pattern of silk.

The strong demand and the exorbitant profit of the spice trade led inevitably to business and technological innovations in attempting to cut out the middlemen that dominated the trade. In today's marketing speak, it would be characterized as the disintermediation of the incumbents. This was what the Portuguese tried to do.

In the 16th century, the Portuguese made major advances in their ship design, navigation skills, and mapmaking. This time period became known in history as the age of exploration; but, as it turned out, it was also the age of business disintermediation. In the 16th century, conquistadors like Bartholomew Diaz and Vasco da Gama, hugging the coast of Africa, rounded the Cape of Good Hope and sailed into the Indian Ocean. From there they started to cut out the Indian and Arab middlemen; and fought to control the shipping and trading of spices to Europe themselves. In fact, it was the Portuguese who first recognized the strategic value of the deep harbor sheltered among several closely clustered islands in the west coast of India and established a toehold there, calling it Bom Bahia, the "good bay." It was anglicized into Bombay when it passed into British hands later.

In 1512, Ferdinand Magellan, a veteran Portuguese conquistador who had sailed, fought, and survived many skirmishes in the Indian Ocean; conceived the idea of circumnavigating the globe by sailing round the extreme end of South America; which he believed would lead him to the Indies from the opposite direction of the route that rounded the Cape of Good Hope in Africa. He argued that in so doing it would also allow him to pin down the exact whereabouts of the Spice Islands; and take control of them while he was at it. By 1517, he secured the backing of the Spanish court for his enterprise, and two years later he led a multinational crew in five vessels to sail into the Atlantic in one of the most astonishing voyages of discovery.

After crossing the Atlantic and sailing across the South Pacific, Magellan himself was killed in an altercation with natives on an island in today's Philippines (that did not prevent the expedition naming the islands after the Spain's King Philip). Finally, two surviving vessels, leaky and manned by emaciated crews, guided by a captured local pilot, found one of the Spice Islands; Tidore. The crew traded with the local sultan, and loaded their hulls full with cloves and set sail for Spain. Only one vessel managed to complete the voyage. And yet the value of the cargo, based on the willingness of wealthy Europeans to pay for the spices, was so high that the profit margin of the lone surviving vessel, Victoria, which arrived in Spain with 26 tons of cloves, paid for the entire expedition with some change to spare. The King of Spain awarded Juan Sebastian de Elcano, who guided the ship back to Spain, a handsome pension and a coat of arms of two cinnamon sticks, three nutmegs, and a dozen cloves.[6]

What followed was four centuries of the rise of European colonial expansion, technological progress, and last but not least, spread of evangelical Christian missionaries to all corners of the world. It would be simplistic to say that all these were the result of the Europeans' taste for spices and their willingness to pay for them. Counterfactual historical hypotheses may suggest that if it were not for the spices, it would have been something else that would have driven the Europeans overseas to conquer, loot, pillage, preach, and convert; and on the positive side of the ledger, to trade, invest, educate, and enlighten. Counterfactual history or otherwise, however, it could not be denied that it was a consumption choice that ignited much of what came after during this age of exploration. This is because consumption choices create value, and it is this value creation process that mobilized not only businesses, but adventurers, royal courts, and whole societies in pursuit of such values, and, in the case of the trade in silk and spices, molded world history.

The common thread in all three examples, ice, silk and spices, is the disparity in value between the place of their origination and production, and the place of their consumption. This is a direct reflection of the difference in the value placed on these products by the consumers; ice in the winter had practically no value for New England farmers but huge value for the British in India; silk always commanded good value for the Chinese but even greater value for the Roman patricians; spices were literally indistinguishable from weeds for the islanders on Bandas and Tidore but meant fantastic value for Europeans. In all instances, the physical nature of the products remained unchanged; the only difference lay in how they were consumed. In other words, it is the act of consumption that created fantastic values for ice in India, silk in Rome and spices in Europe.

The value creation process described by these three examples remains fundamentally unchanged today. Of course, things move much faster now. Many more goods are also being moved from one end of the earth to the other; and not just luxury items. It is not an exaggeration to say that our planet today resembles more and more a gigantic bazaar. Yet, now as in the past, at the very center of this global bazaar is the consumer. It is the consumer's choice, ability, and willingness to pay that creates value for all the goods and services that are on display in the global bazaar.

Global Consumer Spending Outlook and Business Implications

In the post-crisis global economy, the dynamics of consumer markets are undergoing a profound transformation that is both quantitative and qualitative. The quantitative aspect is a result of the diverging growth rates between the developed and the emerging markets in their economies and consumer markets, resulting in what has sometimes been referred to as the "two speed" global economy. The qualitative side, however, is far more important in terms of business implications, and it comes about because of the role of consumption in value creation. In the coming years, choices by consumers in emerging markets will begin to dominate in determining how value is being created in the consumer markets. On this critical point, it is not just the difference in overall growth that matters, but it is the rising share in the growth of discretionary consumption in the emerging markets that will be decisive.

A scenario of consumer market growth for the next five years was developed to illustrate the changing dynamics of global consumer markets. Conservative assumptions are used for projecting the average annual real GDP growth over the 2011 to 2016 period. It is 2% for developed markets, 6% for emerging markets, and 4% for transitional markets; all significantly below their respective average in the previous decade. The ratio between household consumption and real GDP growth is also assumed to be lower for the all markets.[7] As Table 3 shows, in developed markets where every 1% growth in real GDP in the 2000 to 2008 period induced 2.55% growth in household consumption, the forecast is that every 1% growth in real GDP will induce only an equivalent 1% growth in household consumption in the next five years. Similarly, the ratio is reduced from 3.24 to 2.5 for emerging markets, and from 6.18 to 2.0 for transitional markets.

The shares of total household consumption between the three groups of markets between 2008 and 2016 are shown in Chart 2. The developed markets' share will drop from 77.4% in 2008 to 58.3% in 2016. The share of the emerging markets, on the other hand, will increase from 19.5% in 2008 to 38.7% in 2016. The share of the transitional markets will remain basically unchanged. From a simply quantitative point of view, this means that the size of household consump-

Table 3. Ratio of Household Consumption to Real GDP Growth

	Ratio of Household Consumption to Real GDP Growth 2000 - 2008	Ratio of Household Consumption to Real GDP Growth 2011 - 2016
Developed Markets	2.55	1.0
Emerging Markets	3.24	2.5
Transitional Markets	6.18	2.0

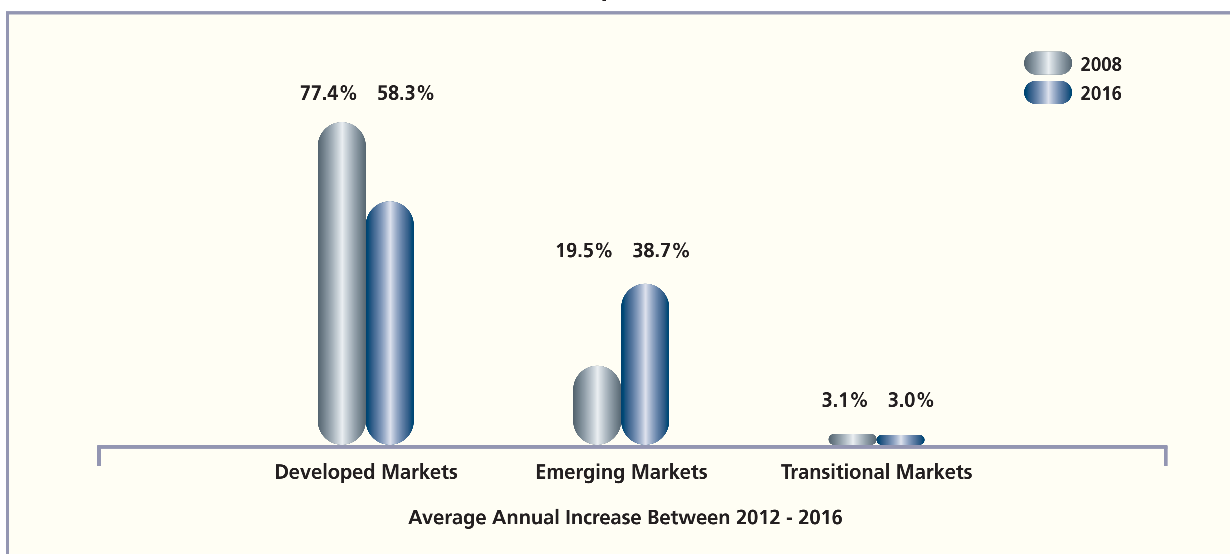
Estimated with data from CEIC, Eurostat

tion in emerging markets will be around two-thirds of that of the developed markets by 2016, up from being one-quarter in 2008.

In annual consumer spending growth, emerging markets will pull ahead of developed markets. As Chart 3 shows, over the 2012 to 2016 period, emerging markets will add an average of US$1.2 trillion of consumer spending to the global economy per year, whereas developed markets will add only around US$700 billion annually. Transitional markets will add another US$95 billion. It is this difference in the incremental increases in consumer demand that will firmly put emerging markets in the driver's seat.

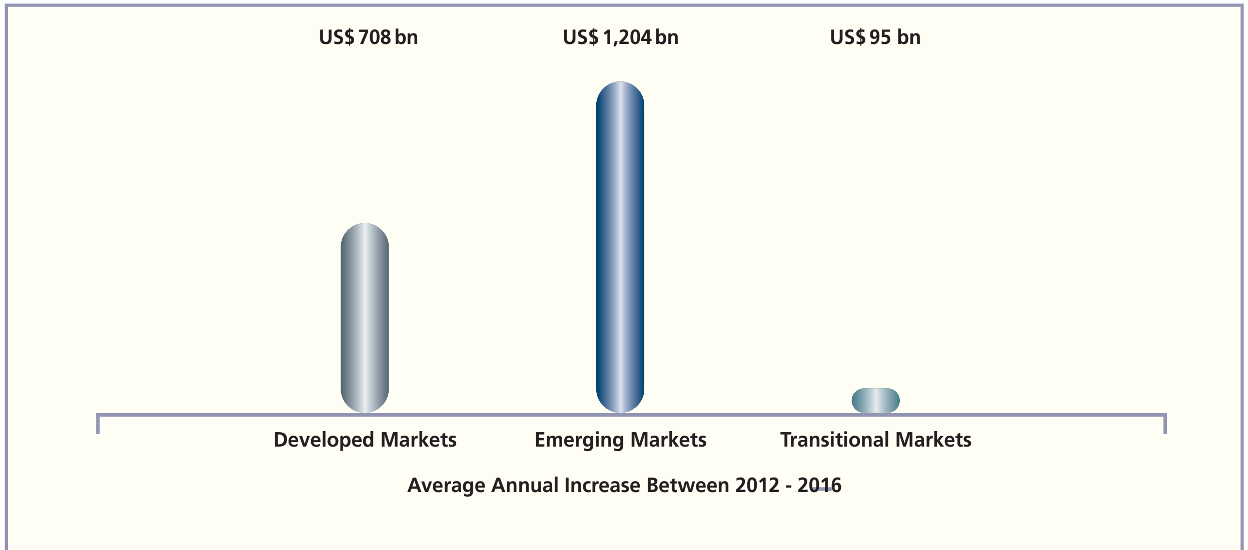
A great deal of increased household consumption in emerging markets is undoubtedly for basic necessities. From a business perspective, if the change in incremental growth is driven by consumption of basic necessities and nothing else, then the impact may not be that significant. It is change in discretionary consumption that the business impact will be strongly felt.[8] As it turns out, the change in shares of growth in discretionary consumption will be no less dramatic in the

Chart 2. Global Shares of Total Household Consumption



Estimated with data from CEIC, Eurostat, IFS

Chart 3. Increase in Global Household Consumption



coming years in the global economy. Table 4 summarizes estimates made on such changes for the developed, emerging and transitional markets, contrasting the 2000 to 2008 period with the 2012 to 2016 period. Between 2000 and 2008, developed markets accounted for 88.2% of the global growth in discretionary spending, while emerging markets accounted for only 9.2%, followed by transitional markets with 2.6%. Under these conditions, it would not be an exaggeration to say that consumers in developed markets, due to the dominance of their demand, single-handedly drove the value creation process through their choices, tastes and preferences. In the coming five years, however, the shares of growth in discretionary spending will be about equal between the developed and emerging markets (49.0% versus 47.8%). This is a significant milestone, very possibly the first time in the last 200 years when consumers in emerging markets (the Third World, the under-developed, or the colonies as they were previously known) drive value creation in equal measure with consumers in the developed markets.

That being the case, consumer choices, tastes and preferences in emerging markets will also become a much important consideration for global businesses re-

Table 4. Shares of Growth in Discretionary Consumption

	2000 to 2008 Average	2012 to 2016 Average
Developed Markets	88.2%	49.0%
Emerging Markets	9.2%	47.8%
Transitional Markets	2.6%	3.2%

Estimated with data from CEIC, Eurostat, IFS

garding where and how investment is to be made, and what products and services to create. In many important aspects consumers are different between the developed, emerging markets and transitional markets. Chart 4 highlights one such aspect, the age of the consumer. The size of "active consumers," defined as those aged 15 to 65, as expected, is much larger in emerging markets than the developed or transitional markets. More importantly, however, the numbers of active consumers are expected to continue to rise in the coming years in the emerging markets, whereas they are projected to be basically unchanged in the developed markets, and declining in transitional markets. This implies that consumers are much younger in the emerging markets than in either developed or transitional markets.

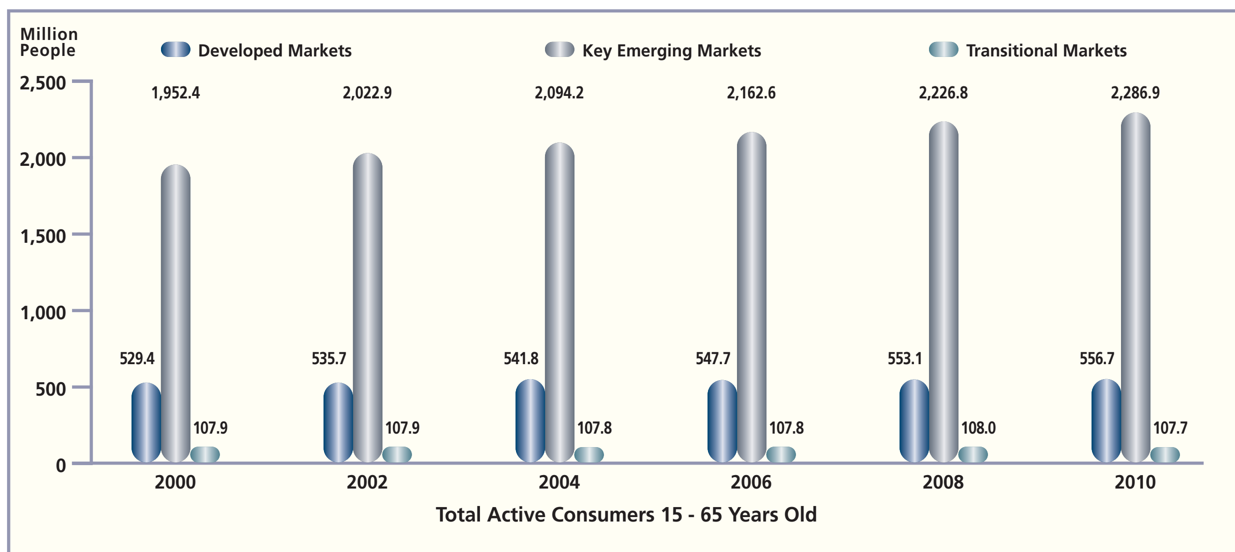
The younger consumers in emerging markets will have far-reaching business implications in terms of how to leverage technology trends, engage information and marketing channels, and prepare for the pace and direction of consumer lifestyle trends. The youth consumer segment is also all about the future, and consequently, businesses must become much more forward looking than before. Younger consumers also tend to be more optimistic. Thus, the rise of the youth consumer market will inject much-needed optimism into the global economy as well.

Resilience of the Global Consumer Market

There is a recurring theme in popular media that blames the emerging markets (and China in particular) for producing cheap consumer goods that fed bargain-hungry American consumers; that led to a global imbalance, which in turn contributed to the 2008/09 global financial crisis. It also blames the "greedy" American consumers who overextended themselves, then pulled in their horns when things turned sour, precipitating a collapse of demand when the crisis hit. There is an element of truth here. US consumers, at the time of the Lehman Brothers' collapse, were heavily overleveraged. The ratio of debt payments in relation to household income rose from 11.7% in 1995 to 13.9% in 2007.[9] And the majority of the debt was real estate borrowing, which was the source of the US economy's woes from 2007 to the present.

But there is no doubt that American consumers have started to save and pay down their debts. As stated in the opening section of this report, American households' debt to annual disposable income ratio has dropped from a peak of 135% of average annual disposable income in 2008 to around 123% in early 2011. As American consumers cut back on their spending in the context of high unemployment, it would appear that the US consumer markets, the largest in the world,

Chart 4. Active Consumers (Aged 15 - 65)



Source: United Nations

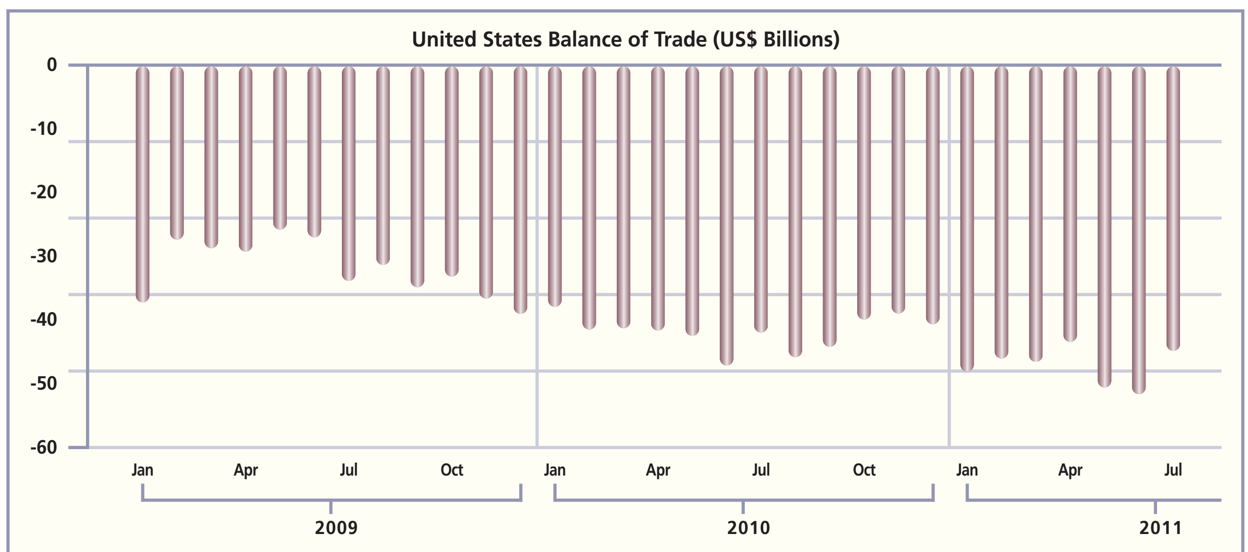
could be down for the count for the foreseeable future. This is certainly what some are saying, and there is no shortage of new prophets who herald the end of consumerism as a result of the crisis. Their argument is that a wholesale collapse of the consumer market in the US would lead to the collapse of demand for exports in the emerging markets, thereby undermining growth of income and employment there, thus nipping in the bud the growth of consumer spending in the emerging markets as well. The result is a collapse of consumer demand in both the developed and the emerging markets, and the end of consumerism worldwide.

This doom and gloom scenario is, however, widely off the mark. For example, while the deleveraging of US consumers is impressive thus far, their appetite for revolving credit at the point of sale has by no means collapsed. The revolve rate, as opposed to absolute volume, went from 44% in 2008 to 41% in 2010 — a decrease, and a considerable one, but it is far from being a catastrophic implosion of demand for consumer goods paid on revolving instruments at the point of sale. This resilience is even reflected at the more macro level numbers: the U.S. trade deficits went from a low of $25 billion in June 2009 (the height of the crisis), only to exceed $50 billion in July 2011,[10] as seen in Chart 5. While the total balance of trade is not simply a matter of low-cost Asian-manufactured consumer goods, such merchandise represents a significant part of it, and the appetite of US consumers, chastened though they are, would still appear robust. So the demise of US consumers as a force in global growth has been greatly exaggerated. The fact of the matter is that American consumers are still spending, albeit much more carefully than before. The real risk to businesses today is to unthinkingly buy into this fallacy and underestimate the resilience of American consumers.

For emerging markets, their resilience has been amply demonstrated by their ability to rebound from a collapse of exports in the range of 30% to 45% year-on-year in 2009. By 2010, for example, virtually all the emerging markets in Asia had returned to pre-crisis levels of growth and more. And in the past two years, domestic demand in many emerging markets has risen sufficiently to compensate for the decline in their exports. In the case of China, the change has been very impressive; whereas in 2007 net exports accounted for 7.3% of GDP, it has dropped to 3.1% in 2010.[11] Apart from their ability to mobilize domestic demand to sustain growth, there is also an additional factor at work that is providing extra growth momentum to the emerging markets — rapidly rising trade between them.

Take the example of intra-Asia trade, which is now acting as an effective counterforce to the weakened de-

Chart 5. No Let-Up in US Trade Deficits



Source: U.S. Census Bureau

mand from developed markets. According to the Asian Development Bank, intra-regional (non-oil) trade between emerging markets in Asia is now much higher compared to that of intraregional trade in the North American Free Trade Agreement zone, which rose from 20% in 1985 to over 52% by 2008.[12] This is in spite of the fact there is no pan-regional free trade agreement in Asia. Such trade flows is significant for two reasons: first it represents a well-trodden path in terms of infrastructure, finance, imports and regulation that can be used for goods consumed domestically at some future time, and not simply as components used as assembly work for manufacturing within the region; and that as the workforce engaged in the production of such components increases, whether by organic growth, or through the stimulus of such moves as the easing of internal migration on the part of China in its latest five-year plan,[13] that workforce represents a cadre of consumers, potential or actual, to populate as it were, the path first beaten by the wholesale trade flows.

Consumers in both the developed and emerging markets are showing greater resilience than what the prophets of doom are saying. As illustrated in the five-year projections shown earlier, the really profound change in the coming years will be a shift in the weight of the spending power of consumers in emerging markets, which will open a whole new chapter of how values are being created in the global market. Part of this shift will also have far-reaching implications on how technology and innovations in technology are to be applied in the consumer markets.

Implications for Technology: Coming of the Age of Mobile Payments

Technology and consumers are interacting today more dynamically than ever before, exerting powerful influences on each other. Technology can channel and magnify specific aspects of consumer behavior with far-reaching impact on demand. At the same time, consumers are more directly involved in driving technological innovations, and increasingly in the very early stages of the innovation and development process. Nowhere are these trends more pronounced than in the emerging markets. And the fast-evolving technology and applications of mobile telephony stand out as a powerful example of how emerging markets are changing the way technology and consumers interact.

To achieve widespread adoption, technology needs to respond to people's day-to-day needs.One such example can be found at the Fitzwilliam Museum in Cambridge, England. It's a folding implement with a three-pronged fork, spatula, pick, spike and knife that was used in the Roman Empire between AD 201 to 300. The functions of this instrument reflect the primary day-to-day needs of a person living close to two thousand years ago. Fifteen centuries later, in 1886, the Swiss Army decided to equip every soldier with a regulation multi-tool instrument. Since then, tens of millions of Swiss Army Knives have been sold worldwide. Today, the most advanced Swiss Army Knife includes a laser pointer and a 32 GB detachable flash drive, which has a capacity a thousand times larger than the one used in the computer onboard Apollo 11!

Mobile phones are arguably the essential survival tool today, serving an ever-expanding range of human needs from communication, information access, payments and to even status symbols. According to estimates by the International Telecom Union, there were 5.3 billion mobile subscriptions worldwide at the end of 2010, including 940 million subscriptions to 3G services. Access to mobile network signal is now available to 90% of the world population (80% of the population living in rural areas), and users are moving rapidly from 2G to 3G platforms, in both developed and emerging markets. It is projected that by 2015, the mobile phone will surpass the PC as the device of choice for accessing the internet.[14]

However, the global average cited here masks a yawning gap that is opening up between the developed markets and the group of most significant emerging markets analyzed in this report. Using the same grouping of the developed and emerging markets, in 2005 there were some 690 million mobile subscriptions in the developed markets versus about 570 million in the emerging markets. Five years on, in 2010, it is estimated that while the number of mobile subscriptions in the developed markets reached 940 million, it is dwarfed by the emerging markets at over 1.6 billion. More importantly, the growth momentum is much stronger in emerging markets. While mobile subscriptions have been growing on average at around 7% a year in the developed markets, it has been growing at an astonishing 37% a year in the emerging markets.[15] It is this di-

vergence in subscription numbers and growth rates that will see consumers in the emerging markets driving the way mobile telephony will be used, with direct implications for technology and business innovations.

Take the consumer purchase cycle as a relatively simple example. Typically, the purchase cycle involves four distinct stages: choosing what to purchase, the location where the purchase takes place, paying for the purchase, and post-purchase services. Mobile connectivity is revolutionizing the entire consumer purchase cycle today. And because of their much higher mobile subscriptions and dramatically faster growth rates, emerging markets will also lead in this revolution.

In terms of making a decision of what to buy, consumers have at their fingertips the power to access information that was unimaginable a mere ten years ago. Cloud computing can conduct some 40,000 searches per second using Google and 7,000 tweets per second. In Facebook, some 1.2 million pictures are viewed per second. From the consumer's perspective, these impressive numbers all point to one thing: a massive increase in the choices available, and the ability for consumers to communicate with one another about such choices.

In the second stage of the purchase cycle, mobile connectivity is also expanding the range of available purchase locations, both physical and virtual, all done with the explicit objective of making everything more convenient for the consumer. The purchase experience is now hugely enriched with customization of products, and of delivery services for the consumer. Technology is also enabling the retailer to capture more information about the consumer and his/her spending behavior, taste and preferences.

When it comes to paying for the purchase, mobile payment is also leading the charge in providing greater convenience and flexibility for consumers, while accelerating transaction flows and reducing transaction costs. An important implication of mobile payment is that it can effectively connect the unbanked population in many emerging markets and for that matter, the unbanked in the developed markets as well, in ways that could not be done before. It is estimated that there are some 2.7 billion people worldwide (45% of the world's population) that have no access to financial services simply because they do not have a bank account. By 2012, however, 1.7 billion of these unbanked will have a mobile phone in spite of their inability to open a bank account.[16] The potential of mobile payment for the unbanked population is therefore immense, and it is going to be a hot bed of payment innovations in the years to come, and, again, with emerging markets leading the way.

Finally, in terms of post-purchase services and activities, such as the design and functions of loyalty programs, the extraordinary prevalence of mobile connectivity in emerging markets will also usher in new innovations. Evidence is mounting that consumers in emerging markets are more enthusiastic about loyalty programs. Not only are they keen to take advantage of such programs, they are more discerning as well, and they communicate constantly with one another to share tips and their experiences of how loyalty programs have served, or not served them.[17] Take the Chinese consumer for instance — China now has the highest number of internet users and mobile subscriptions among the BRIC countries. Through mobile connectivity, Chinese consumers are able to share their buying and post-purchase experiences instantly, and more openly, without having to worry too much about the issue of "face." When it comes to a face-to-face conversation, many Chinese consumers are less forthcoming and direct, especially about bad experiences that they have had. As a consequence, mobile connectivity is a powerful enabler in the empowerment of the consumer; and for businesses that are able to understand and use this development to their advantage, they could reap great benefits in unlocking unmet consumer needs and desires.

To sum up, there is a virtuous cycle of consumer and technology interacting to drive innovations faster and deeper. Consumer feedback is now incorporated in real time to guide innovations. In this process, knowledge of the consumer is paramount. And the share of consumer power in the global economy is changing, as argued in this report. Emerging markets are poised to take the lead in the coming years. This puts the emerging market consumer in the driver's seat in technology innovations as well. In so doing, they are also driving

value creation.

Conclusion

The current backlash against big business and unbridled consumption is intertwined with a deepening pessimism about the future. The fact is that there is an abiding tendency in the human psyche of seeing the future in bleak terms. Consider the opening words of Agenda 21 of the United Nations Conference convened in Rio de Janeiro in 1992, signed by world leaders unanimously, "Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities within and between nations, a worsening of poverty, hunger, ill health and illiteracy, and the continued deterioration of the ecosystems on which we depend for our well-being." And yet, according the United Nations' own data, the following decade saw the fastest decline in poverty, hunger, ill health and illiteracy in human history.

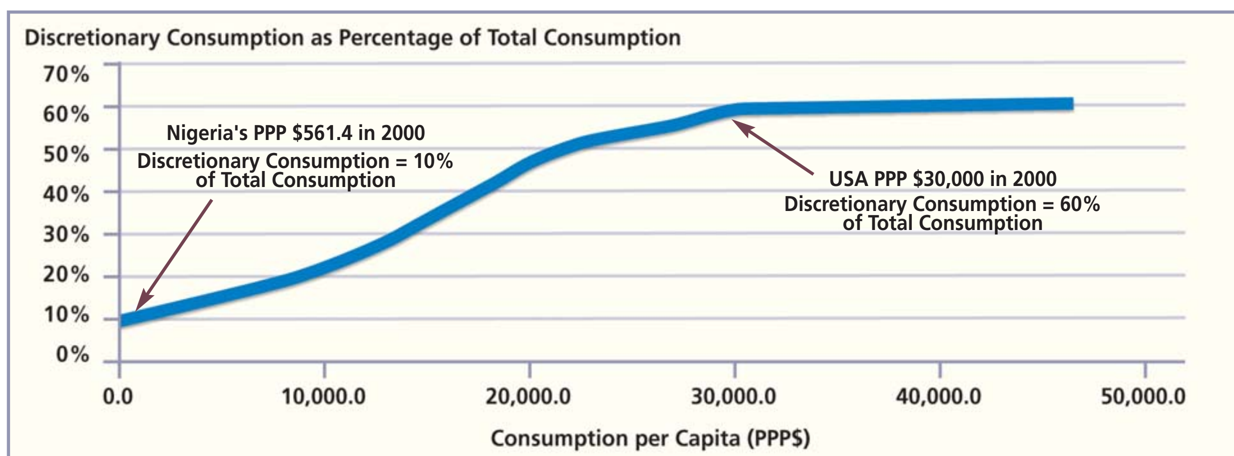
The same kind of pessimism about the future is once again rearing its ugly head today. An alliance of traditional anti-business lobby and new fangled anti-growth activists is becoming more assertive, usurping the moral high ground in the aftermath of the 2008/09 crisis to proclaim the end of progress and demise of consumerism. Listening to them, the world is stumbling toward either an ecological apocalypse, or financial anarchy, or political chaos; or all of the above. Rising household consumption in the emerging markets, and the vigor of their consumers, will powerfully mitigate the prevailing tide of pessimism. It also presents a strategic window of opportunity for global businesses to create new value for the future.

Appendix: Estimation of Discretionary Consumption

The estimation of discretionary consumption as a percentage of total household consumption (HHC) is done with the following steps:

1. Converting HHC per capita in PPP$
2. Establish the range of minimum and maximum HHC in PPP$ per capita for the 34 countries across 2000 to 2016 (PPP$561 from Nigeria 2000 to max of PPP$45,224 of USA in 2016).
3. Within this range a sliding scale is approximated and applied to the range, with the lower cutoff point set at US$6,000 (in PPP$). The sliding scale is shown graphically below.

Methodology for Estimating Discretionary Household Consumption



4. Once the discretionary HHC in PPP$ is estimated for all 34 countries, then the PPP$ is converted back to actual dollars for calculating the discretionary HHC as a percentage of the total HHC in each of the 34 countries. These percentages are shown in the chart below.

Methodology for Estimating Discretionary Household Consumption

Household Discretionary Consumption as Percentage of Total Consumption	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Developed Markets	41.48%	43.38%	44.04%	44.93%	46.44%	47.86%	49.42%	50.48%	50.96%	50.50%	51.29%
Significant Developed Markets	13.06%	13.15%	13.15%	13.40%	13.93%	14.25%	14.53%	15.10%	15.24%	14.88%	15.19%
Transitional Markets in Eastern Europe	15.98%	16.21%	16.60%	17.15%	17.65%	18.11%	18.69%	19.86%	21.23%	21.13%	21.55%

1. US Federal Reserve.

2. These three groups of markets are: (i) developed: US, Japan, Australia, South Korea, Hong Kong, Singapore, UK, Austria, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden; (ii) emerging: China, India, Brazil Russia, South Africa, Turkey, Mexico, Nigeria, Egypt; (iii) transitional: Belarus, Bulgaria, Czech Republic, Georgia, Hungary, Poland, Romania, Slovakia, Ukraine.

3. Beattie, A. 2009. False Economy - A Surprising Economic History of the World. New York: Riverhead Books.

4. Warmington, E.H. 1995. The Commerce between the Roman Empire and India New Delhi: Munshiram Manoharlal.

5. See Lane, F.C. 1973. Venice: A Maritime Republic. Baltimore: Johns Hopkins University Press.

6. Bernstein, W.J. 2008. A Splendid Exchange: How Trade Shaped the World. New York: Atlantic Monthly Press.

7. The exception is China, where the next five years is likely to see a structural shift in its domestic economic rebalancing, which will see household consumption's share in GDP rise steadily. See GEMS Close-Up Report, Keeping Steps with the Dragon's Dance: China's Rebalancing and Global Implications. April 2011.

8. Discretionary consumption refers to consumer expenditures that are not of a routine nature such as basic food items, daily transport needs, and basic housing. In emerging markets, a household with an annual income below US$6,000 is likely to spend most of the disposable income on basic necessities, with little left for discretionary spending. Hence the rise in discretionary spending in emerging markets is highly correlated with rising numbers of households with annual income exceeding US$6,000.

9. US Federal Reserve.

10. The United States Balance of Trade," Trading Economics, http://www.tradingeconomics.com/united-states/balance-of-trade

11. Estimated with CEIC data.

12. "Asian Trade Flows: Trends, Patterns and Projections," by Prema-chandra Athukorala, Asian Development Bank, January 2011.

13. See "China's Economic Rebalancing and Global Implications," Yuwa Hedrick-Wong, MasterCard Worldwide Insights 3Q2011.

14. Source: ITU World Telecommunication/ICT Indicators database

15. Source: ITU World Telecommunication/ICT Indicators database

16. Estimates by the Department of International Development, Government of the UK.

17. Colloquy Cross-Cultural Loyalty Study, 2011. This study shows two distinct patterns in terms of loyalty: 3 E's in emerging markets: Energy, Engagement and Enthusiasm while developed countries demonstrate 3 T's: Tired, Turned Off and Tuned Out.

About the Authors

Yuwa Hedrick-Wong, Ph.D.

Yuwa Hedrick-Wong is currently HSBC Visiting Professor of International Business at the University of British Columbia, Canada.

Yuwa is an economist and business strategist with 25 years of experience gained in over thirty countries. He is a Canadian who grew up in Vancouver, British Columbia, and spent the last 20 years working in Europe, Sub-Sahara Africa, the Indian Sub-continent, and Asia/ Pacific. He has served as strategy advisor to over thirty leading multinational companies in the Asia/Pacific region.

In 2010, Yuwa was appointed as Global Economic Advisor to MasterCard Worldwide. Prior to this role, he was Economic Advisor to MasterCard in Asia/Pacific, a position he held since 2001. As economic advisor, he chairs a MasterCard Knowledge Panel of leading economists, policy analysts, academics and business strategists for regular exchange and knowledge sharing. His other appointments are: Advisor at Southern Capital Group, a private equity fund (since 2007); member of the Investment Council of ICICI, India's largest private bank (since 2008); and member of the Board of Advisors, Center for Macro Consumer Research, India (since 2010).

Yuwa is a frequent speaker at international high-profile conferences. Recent presentations include the Morgan Stanley Investment Forum, McKinsey & Co's Kitzbeuhel Forum, the BusinessWeek CEO Forum, Asia Business Conference at Harvard University, the Indian Economic Summit, and the Annual Asia Leadership Forum. He has also spoken at, among others, The Royal Institute of International Affairs at Chatham House, London; the World Finance Forum; the World Knowledge Forum; the Trinity Forum in London; the ASEAN Business & Investment Summit; The Economist Strategic Forecast Forums; Economic Council of APEC; and the Forbes Global CEO Conference.

Yuwa is a regular commentator in the broadcast and print media on current economic, policy and business issues, and is a published author in consumer market dynamics, economic development, trade, and international relations. He was voted "Communicator of the Year" in Asia in 2006 by the Asia/Pacific Association of Public Relations Professionals. He wrote a regular column in Forbes Asia called "Asian Angles" in 2005 and 2006. He was adjunct professor at the School of Management, Fudan University, Shanghai, China; from 2005 to 2008; and guest lecturer at the Graduate School of Business, University of Chicago.

As a student of philosophy, political science, and economics, Yuwa studied at Trent University and pursued post-graduate training at the University of British Columbia and Simon Fraser University in Canada, where he received his Ph.D. He also received training, at the post-doctoral level, in health economics, energy and environmental economics, and scenario forecast and planning.

Theodore Iacobuzio

Theodore Iacobuzio is vice president in charge of Global Insights, MasterCard's interdisciplinary thought leadership organization. He and his team use research and analysis to better understand consumer behavior and market dynamics — and how those insights can strengthen the business performance of MasterCard customers around the world.

Under his direction, MasterCard has published groundbreaking work on payments profitability, the myth of debit "cannibalization," global debit point-of-sale migration, remittances in Asia/Pacific and the Middle East, and affluent segmentation in Brazil. Ted is the moving spirit behind Global Insights' highly regarded Payments Perspectives blog, http://insights.mastercard.com.

Prior to joining MasterCard in 2009, Mr. Iacobuzio led the Payments Practice at TowerGroup, the leading financial services high tech research and advisory firm. The first analyst at TowerGroup to cover payment cards as a discipline, Ted wrote on information marketing, credit scoring, solicitation and portfolio management in credit cards, on deposit accounts and debit cards, ecommerce and mobile, and was the first industry analyst to publish on the subject of asset-backed securities in the U.S. market. He also covered global issues, including EMV, chip and PIN, cross-border clearing and settlement in the EU and the Single European Payments Area (SEPA) initiative. Ted has also published extensively on high tech issues, especially on chip cards. He is the author of a series of infrastructure cost analyses for the implementation of chip cards in the US.

A known industry speaker, Ted has presented to issuers, merchants and acquirers around the world, most recently the MasterCard U.S. Customer Forum.

Ted is a graduate, summa cum laude, Phi Beta Kappa, of Amherst College.

Based in Purchase, N.Y., he can be reached at ted_iacobuzio@mastercard.com.

Carlos Fonseca

Senior Business Leader, International Markets Strategy Head MasterCard Worldwide

Carlos Jose Fonseca is responsible for driving the development, design, and overall delivery of the country-level strategies for MasterCard International Markets in collaboration with regional market development, and country management. Carlos and his team act as advocates for the region and country strategies at a corporate-level, working with geographical and cross-functional partners to create an integrated view of market opportunities to then prioritize and recommend investment allocation and execution plans to advance the MasterCard business around the world.

Before this global position, Carlos headed the Market Intelligence Planning and Insights Area for MasterCard Latin America where he was in charge of providing actionable market insights based on deep understanding of the business context, and the synthesis of primary research, secondary data and strategic information. His areas of responsibility included scenario planning, investment allocation, campaign and product research, consumer, customer and competitive analysis.

Before joining MasterCard he held positions in Brand Management, Planning and Analytics in financial services and FMCG companies, including, Citigroup, BAT and Procter & Gamble with in-country assignments in Latin-America, Asia Pacific and the United States. Mr. Fonseca holds an Engineering degree from Universidad de los Andes, in Colombia, and a MBA from Georgetown-INSEAD.

Based in Purchase, N.Y., he can be reached at carlos_fonseca@mastercard.com.

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