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Recent reports have assessed the economic benefits of tackling gender inequality, a new era of global competition, Chinese innovation, and digital globalization.

MGI is led by three McKinsey & Company directors: Jacques Bughin, James Manyika, and Jonathan Woetzel. Michael Chui, Susan Lund, Anu Madgavkar, and Jaana Remes serve as MGI partners. Project teams are led by the MGI partners and a group of senior fellows, and include consultants from McKinsey & Company's offices around the world. These teams draw on McKinsey & Company's global network of partners and industry and management experts. In addition, leading economists, including Nobel laureates, act as research advisers.

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URBAN WORLD: THE GLOBAL CONSUMERS TO WATCH

APRIL 2016



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PREFACE

Sweeping demographic change is transforming the world economy. In 2015, MGI explored the impact of an aging world on global GDP growth, and the imperative to boost productivity to make up for slowing growth in the labor pool. Now we turn more specifically to how slowing population growth is likely to shape global consumption over the next 15 years, with a focus on large cities whose inhabitants will generate over 90 percent of consumption growth between 2015 and 2030.

This report is the fourth in our Urban World series. It draws on a global consumer model included in MGl's Cityscope database, which maps the evolution of global urban consumption from 2015 to 2030 using projections for population growth among different age segments and age-specific consumption patterns at a country level. This model allows us to compare large consumer groups across the world, and to understand patterns of global consumption across age groups, countries, and cities. MGl's new research is the second in the Urban World series that has a consumer focus, and adds to the growing body of research by McKinsey & Company in this area. The MGl report is published alongside, and is informed by, two new pieces of research from the McKinsey Consumer Practice focusing on consumers. One is McKinsey 2016 China Consumer Report based on 10,000 in-person interviews with people aged 18 to 65 in 44 cities, representing China's major regions and tiers. The other is McKinsey's 2016 Global Sentiment Survey of more than 22,000 consumers in 26 countries. These two reports provide companies in the consumer markets with the broadest and most recent set of insights on consumer trends across regions. Both are available at **mckinsey.com**.

MGI's latest research was led by Jaana Remes, a MGI partner based in San Francisco, with guidance from three McKinsey and MGI directors: Richard Dobbs, based in London, James Manyika in San Francisco, and Jonathan Woetzel in Shanghai. We are particularly grateful for the contributions of Gordon Orr, director emeritus and senior external adviser to McKinsey, and Sven Smit, a McKinsey director in Amsterdam. Kanaka Pattabiraman and Hemant Sharma, both consultants based in San Francisco, led the project team, which comprised Tarun Agarwal, Kevin Coles, Eduardo Doryan, Clemens Fahrbach, Vivian Lu, Ganesh Raj, Melissa Renteria, Raman Sharma, and Sophie Turnbull. We are also grateful for the helpful advice of MGI senior fellows Jan Mischke and Sree Ramaswamy, knowledge experts Jonathan Ablett, Ezra Greenberg, Xiujun Lillian Li, and Anne Martinez, and Timothy Beacom, MGI knowledge operations specialist. Thanks also go to Hong Chen, Lucia Fiorito, Amy Jin, Teera Price, and Tejaswi Tharakabhushanam. We would like in particular to thank McKinsey's geospatial analytics team, which works on geographic or locational aspects of doing business, including, for instance, location strategies, infrastructure diagnostics, and urban growth modeling; and McKinsey's health-care analytics team, which combines health-care expertise with big data analyses to improve the global health-care community.

Numerous McKinsey colleagues gave us of their expertise including Vivek Agrawal, Yuval Atsmon, Alec Bokman, Andres Cadena, Kara Carter, Vladimir Cernavskis, Joy Chen, Yougang Chen, Peter Child, Clara Chung, Susan Colby, Jenny Cordina, David Court, Elizabeth Day, Carolyn Dewar, Ewan Duncan, Alan Fitzgerald, Laura Furstenthal, Chenglin Gan, Jonathan Gordon, Bryan Hancock, Alexandra Hicks-Hardiman,

Honayoun Hatami, Jan Henrich, Liz Hilton Segel, Rogerio Hirose, Roland John, Andrew Jordan, Alex Kazaks, Greg Kelly, Sajal Kohli, Udo Kopka, Jörn Küpper, Eric Labaye, Jonathan Law, Cheryl SH Lim, Emmy Liss, Max Magni, Greg Malen, Tim McGuire, Doug McElhaney, Paul McInerney, John Means, Fabrice Morin, Rukhshana Motiwala, James Naylor, Jesko Perrey, Lisa Renaud, Christian R. Riis-Hansen, Erik Rong, Ben Silverstein, Marc Singer, Jennifer Sternberg, David Turnbull (alumnus), Robert Turtle, Tony Zhou, and Christina Zaybekian.

Many thanks goes to MGI's academic advisers Richard N. Cooper, Maurits C. Boas Professor of International Economics at Harvard University, and Jed Kolko, independent economist, who served as chief economist at Trulia until June 2015. We are also grateful to Homi Kharas, senior fellow and deputy director for the global economy and development program at the Brookings Institution; Ronald Lee, professor in the Department of Economics and Demography and the Center on the Economics and Demography of Aging at the University of California, Berkeley; Andrew Mason, professor in the Department of Economics at the University of Hawaii; and Michael Storper, Professor of Urban Planning at the University of California, Los Angeles, LSE Centennial Professor of Economic Geography at the London School of Economics, and affiliate of the Centre de Sociologie des Organisations at Sciences-Po in Paris. We would also like to thank Assaf Wand, CEO and co-founder at Hippo; Katy Fike, partner at Generator Ventures and co-founder of Aging2.0; John Forsyth, former McKinsey director and now partner at Forsyth Insights; and Amit Mohindra, talent analytics, Apple.

MGI's operations team provided crucial support for this research. We would like to thank MGI senior editor Janet Bush; Matt Cooke in external communications and media relations; Julie Philpot, editorial production manager; Marisa Carder, Richard Johnson, Jason Leder, Mary Reddy, Margo Shimasaki, and Patrick White, graphics and data visualization specialists; and Deadra Henderson, manager of personnel and administration.

This report contributes to MGI's mission to help business and policy leaders understand the forces transforming the global economy, identify strategic locations, and prepare for the next wave of growth. As with all MGI research, this work is independent and has not been commissioned or sponsored in any way by any business, government, or other institution. We welcome your comments on the research at MGI@mckinsey.com.

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IN BRIEF

URBAN WORLD: THE GLOBAL CONSUMERS TO WATCH

As world population growth slows, global consumption growth—the demand that fuels much of the world's economic expansion—will depend heavily on how much each individual spends. Knowing which consumers are likely to be spending robustly, where they are, and what products and services they prefer to purchase becomes even more important for companies, policy makers, and investors.

- Until the turn of the century, more than half of global consumption growth came from an expanding number of consumers in the world. In the period to 2030, population growth will generate only 25 percent of global consumption growth with the rest coming from rising per capita consumption. For decades, companies serving consumer markets could rely on expanding numbers in most segments—but no longer.
- Nine groups of urban consumers are projected to generate three-quarters of global urban consumption growth from 2015 to 2030—and just three groups about half of that growth:
 - Developed retiring and elderly (60-plus years in developed regions). This group will grow by
 more than one-third, from 164 million in 2015 to 222 million in 2030. It will generate 51 percent of urban
 consumption growth in developed countries, and 19 percent of global urban consumption growth.
 - China's working-age consumers (15 to 59 years). Their number will expand by 20 percent—an
 additional 100 million people. Their per capita consumption is expected to more than double. By 2030,
 they will spend 12 cents of every \$1 of worldwide urban consumption.
 - North America's working-age consumers (15 to 59 years). The already large numbers and per capita
 consumption of this group will grow modestly by 7 percent and 24 percent, respectively, from 2015 to
 2030. Many younger consumers are under income pressure and are cost conscious in their spending.
- Consumption is shifting toward services, reflecting two trends: heavy spending on health care among aging consumers in developed regions, and increasing spending by consumers in emerging economies as their incomes rise to thresholds where consumption of services such as communications, transport, restaurants, and catering takes off.
- Cities matter. By 2030, consumers in large cities will account for 81 percent of global consumption and generate 91 percent of global consumption growth from 2015 to 2030. Global urban consumption is extraordinarily concentrated—just 32 cities are likely to generate one-quarter of the \$23 trillion in urban consumption growth projected from 2015 to 2030, and 100 cities will be responsible for 45 percent of that growth.
- Consumption and growth are now coming under pressure in many cities as population growth slows and urbanization plateaus in many countries. Six percent of large cities—most of them in developed regions—are already experiencing declining populations. However, others, particularly in emerging economies, continue to grow, and will be home to rising numbers of consumers to watch. Roughly 700 large cities in China alone will account for \$7 trillion, or 30 percent, of global urban consumption growth to 2030.
- Companies need to understand how shifting demographics impact their organization's footprint. If that footprint doesn't match the most promising consumer markets, they may need to adjust their strategy. Knowing which cities—and even neighborhoods within cities—are home to key consumers of the future will matter. Companies need to navigate their way through arguably the most diverse consumer markets in history, managing parallel products and channels for increasingly disparate consumer groups. And, finally, the growing importance of services needs to be factored into the thinking of all consumer-facing businesses.

CONSUMPTION IN AN URBAN WORLD

MAJOR DEMOGRAPHIC SHIFTS

75% of global consumption growth will be driven by increases in per capita spending

Contribution to global consumption growth from per capita consumption growth 1970–2000 46% 54% 2000–15 58% 42%

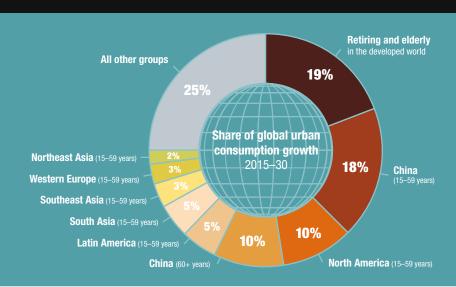
GLOBAL CONSUMER GROUPS TO WATCH



in 2015-30.

Nine groups

of consumers are set to generate **3/4** of global urban consumption growth from 2015–30.



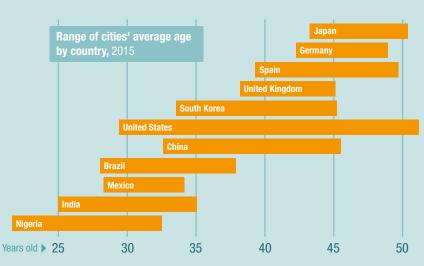
CITIES MATTER



91% of global consumption growth

will be generated by people living in cities from 2015–30.

City demographics are already very different and could become more so.



TAKEAWAYS

Footprint matters in a shifting consumer landscape.

Companies with the skills to manage increasing complexity can prosper.

Look closely at services as they grow in importance.



EXECUTIVE SUMMARY

Shifting demographics are causing a major rebalancing of the engines of global consumption. In the past, an expanding population was a main driver of consumption growth, but now the pace of the world's population growth is waning. That means that consumption growth in the period to 2030 will depend overwhelmingly on individuals spending more. It is now even more important to know which consumers will have the purchasing power and the inclination to spend, where they are, and what they want to buy.

This research finds that just nine groups of "consumers to watch" are projected to generate three-quarters of global urban consumption growth from 2015 to 2030. Of these, just three groups have the scale and spending power to reshape global demand and the world economy. Together, the 60-plus age group in developed economies; those of working age in China, an age group that, by 2030, will consist of those born and raised since China reformed and opened up its economy; and the working-age population of North America, are expected to generate half of urban consumption growth to 2030.

The urban world is overwhelmingly where consumption takes place. By 2030, consumers in large cities—accounting for 50 percent of the global population in 2030—will generate 81 percent of global consumption and 91 percent of global consumption growth.¹ However, the demographic profiles and therefore growth prospects of cities are now diverging. Some cities are continuing to expand their populations and can expect robust consumption growth while others are already experiencing declining populations—6 percent of all large cities—potentially putting their consumption under pressure. Over the next 15 years, 17 percent of cities in developed regions will be in this situation, and 8 percent of cities globally. Over half of the world's large cities will have fewer young adults (15- to 29-year-olds) than they have today.

Patterns of consumption are becoming more varied and complex—there is no such thing, if there ever was, as an average consumer in an average market. Emerging economies with richly varied incomes, cultures, and spending habits are becoming ever more prominent features on the global consumption landscape as incomes rise. At the same time, income inequality is rising in many countries, which means that companies face the challenge of attracting customers at very different price points. The weight of global consumption is shifting toward services, reflecting the aging of key consumer segments in developed economies and rising incomes in emerging economies. And cities, already very different in their consumer profiles, could diverge even further from one another as population growth slows.

In the face of this ferment of change, companies need to arm themselves with deep knowledge about the geography of consumers as well as the structural drivers of their spending, from ethnic and income trends to the changing timing of major life decisions such as getting married and having children. In North America, for instance, the median age at which a first marriage takes place has moved from the age of 22 for the generation born between 1940 and 1954 to 28 for those born after 1985. This shift alone explains much of the decline in house ownership among young adults.

We define cities as broader metropolitan areas that include both a core city and surrounding metropolitan regions integrated into a connected urban region. Large cities include metropolitan areas with 150,000 or more inhabitants in developed regions, and 200,000 or more inhabitants in developing regions.

This report draws on a new global consumer model incorporated into McKinsey Global Institute's Cityscope database to map the evolution of global urban consumption from 2015 to 2030. Using both projections for population growth among different age segments and age-specific consumption patterns at a country level, we compare large consumer groups across the globe across age groups, countries, and cities and describe the major consumption shifts to watch in the next 15 years.²

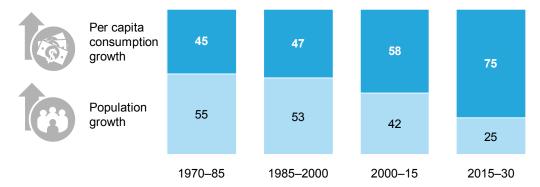
PER CAPITA SPENDING IS PROJECTED TO FUEL 75 PERCENT OF GLOBAL CONSUMPTION GROWTH TO 2030

As population growth wanes and the world ages, growth in consumption will increasingly depend on each individual spending more. Until the turn of the century, more than half of global consumption growth came from an expanding pool of consumers. In the period to 2030, population growth will generate only 25 percent of global consumption growth, with the rest coming from rising per capita consumption—\$17 trillion out of a total of \$23 trillion (Exhibit E1).³ A similar shift is occurring in urban markets where population growth is slowing because of declining fertility and an easing in the pace of rural-to-urban migration.

Exhibit E1

Three-quarters of global consumption growth to 2030 will come from increases in per capita spending

Source of consumption growth % of growth



SOURCE: World Bank; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

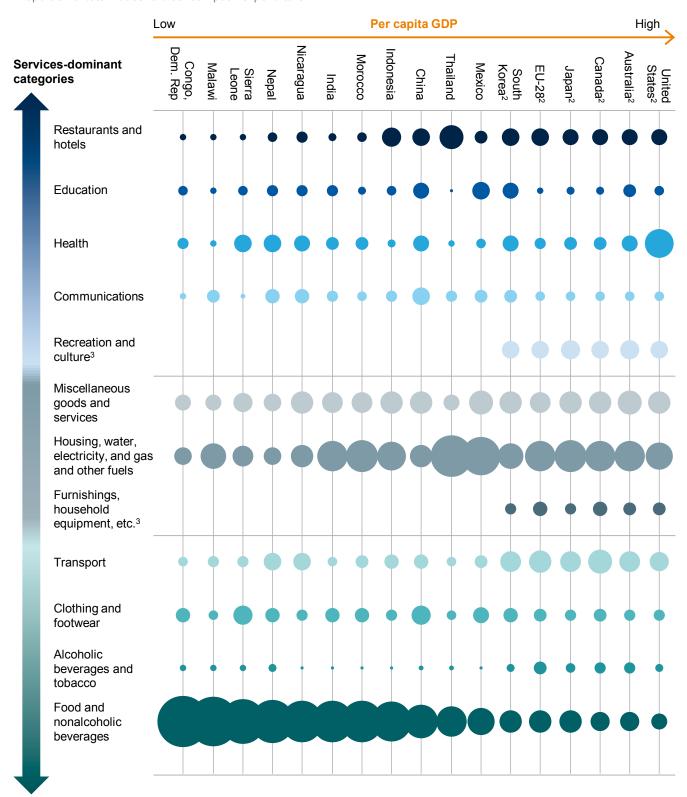
SERVICES ARE COMMANDING AN EVER-LARGER SHARE OF CONSUMPTION

Although demand for goods is still growing at respectable rates in many economies, consumption is shifting toward services as per capita incomes rise and large cohorts of consumers age. Across economies, a higher share of household spending goes on services as per capita GDP rises (Exhibit E2). With rising income, a smaller share of spending goes toward necessities such as food, and the share of spending on services such as restaurants, hotels, recreation, and culture rises.

- Cityscope 3.0's global consumer model incorporates the UN's demographic projections with age-specific consumption profiles from the National Transfer Accounts Project database to generate scenarios for the evolution of consumption by country, urban region, and large city. The city-level projections rely on demographic and economic data from MGI's Cityscope database. Although the focus of this report is on urban consumption, the model covers consumption in small cities and rural areas, too. While our base case takes consensus macroeconomic growth projections as its starting point, we assess the impact of different macroeconomic and other uncertainties on the base-case scenario.
- When we decompose consumption growth into the contributions of population and per capita consumption growth, changes in per capita consumption include two components. First, rising per capita income lifts consumption across age groups. Second, the changing age distribution can shift the level and composition of aggregate consumption. As the 75-plus age group gains share in population, overall consumption rises because of high per capita consumption among this older age group, and because health-care spending rises relative to education and other goods consumed by younger consumers.

Services share of household consumption increases with per capita income

Household consumption expenditure by country¹ Proportion of total household consumption expenditure



Goods-dominant categories

- 1 Figures do not include public spending on health care and education.
- 2 Household consumption figures from Eurostat; all other figures from the World Bank Global Consumption Database.
- Category data only available for select countries.

SOURCE: World Bank Global Consumption Database; Eurostat; McKinsey Global Institute analysis

The share of consumption devoted to services is growing across all groups of urban consumers to watch. However, the underlying reasons vary depending on the consumer group. Across developed regions, the heath-care spending of those aged 60 plus is rising rapidly even as the rest of their consumption tends to plateau or decline. Today, average per capita public and private health-care expenditure increases from about \$8,200 at age 60 to \$35,000 at age 90-plus in developed regions. Across emerging markets, an expanding consuming class is fueling demand for cinemas, restaurants, and banking services. In China, \$1.25 of every \$10 of consumption growth between 2015 and 2030 is expected to be in education as the young and working invest heavily in the next generation.

The share of consumption devoted to services is growing across all groups of urban consumers to watch.

\$23T Global urban consumption growth 2015–30

NINE GROUPS OF CONSUMERS ARE SET TO GENERATE THREE-QUARTERS OF GLOBAL URBAN CONSUMPTION GROWTH

Global urban consumption is expected to grow by \$23 trillion between 2015 and 2030—a 3.6 percent compound annual growth rate. MGI's projections suggest that just nine groups of urban consumers to watch will generate three-quarters of this urban consumption growth (Exhibit E3 and Box E1, "Methodology for identifying global consumer groups to watch"). Of these, just three groups have the scale and spending power to reshape global demand and the world economy. They are the retiring and elderly in developed countries (aged 60-plus); those of working age in China (aged 15 to 59); and the working-age population of North America (also aged 15 to 59). These three are expected to generate \$11 trillion—48 percent—of global urban consumption growth from 2015 to 2030. An additional 28 percent is projected to come from six groups that are either large but no longer growing in their numbers—the working-age populations of Western Europe and Northeast Asia (which includes Japan and South Korea)—or small but growing very rapidly, namely Chinese consumers aged 60-plus, and the working-age populations of South Asia, Southeast Asia, and Latin America.

Companies seeking to serve these groups successfully need to disentangle the drivers of their consumption. It is tempting to explain changes in consumption by pointing to shifting preferences and taste, as many commentators have done to explain the behavior of millennials.⁴ However, structural factors, which are easier to measure and anticipate than shifting consumer preferences, can explain many of these changes in consumption. Our analysis of key urban consumers to watch looks at the full range of factors driving consumption.

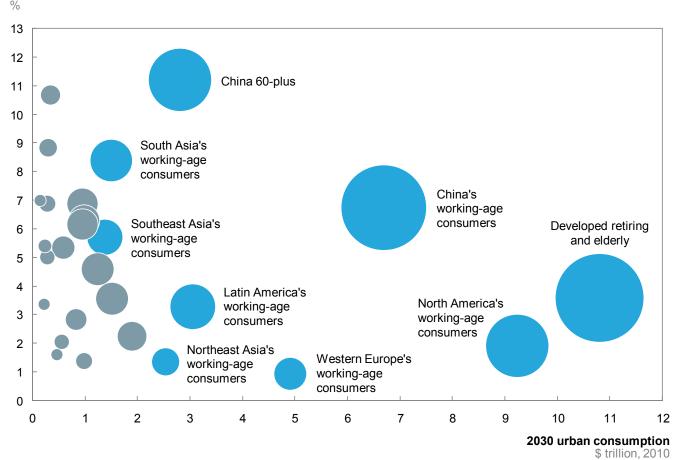
We define millennials as those born between 1985 and 2000; see the technical appendix for details.

Nine consumer groups are set to generate about 75 percent of global consumption growth in 2015–30, 50 percent by the top three alone

Global urban consumption growth, 2015-30

Size represents urban consumption growth Global consumer groups to watch Other groups

Consumption growth, compound annual growth rate, 2015–30



Box E1. Methodology for identifying global consumer groups to watch

MGI's analysis of the impact of demographic trends on global consumption growth between 2015 and 2030 uses a combination of urban population projections by age, per capita consumption by age, and macroeconomic forecasts of per capita GDP and the consumption share of GDP (Exhibit E4). Throughout this report, consumption includes private consumption, public education consumption, and public health-care consumption.¹ Some figures rely on household surveys that include private household expenditure only; these are footnoted.

We use our global consumer model to analyze urban consumption for six groups: age ranges 0 to 14, 15 to 29, 30 to 44, 45 to 59, 60 to 74, and 75-plus. For the global consumers to watch, we combined three age categories to make a working-age group aged 15 to 59, and we combined two other age groups to create the retiring and elderly who are aged 60 and older. The reason we took this approach is that consumption behavior changes in systematic ways as people proceed through life. There are notable consumption shifts that start around age 15 and age 60. Children's consumption is lower than that of other age groups except for publicly and privately funded education (estimated private and public spending on their behalf, as it were). Given their similar demographic trends and total per capita consumption patterns, we have combined the 60-plus age group across developed regions. The numbers of retiring and elderly consumers are rising and their consumption per capita is high largely due to rising health-care expenditure.² Within these large groupings are different consumer segments and shifts in consumption patterns.

Based on these projections, we identified which regional consumer age groups contributed most to consumption growth from 2015 to 2030 and had the highest share of consumption in 2030 (Exhibit E5). Each of the nine urban consumer groups to watch contributes at least 4 percent of global consumption growth or represent at least 3 percent of global consumption in 2030. In the case of the top three groups, each is projected to generate more than 10 percent of global consumption in 2030.³

For the underlying data on consumption by age, and more information on the National Transfer Accounts project and methodology, see the National Transfer Accounts website at ntaccounts.org.

In contrast, the number of working-age consumers is declining in Western Europe and Japan, while continuing to rise in North America.

The nine consumer groups account for 68 percent of the world's urban population, and the three consumer groups 32 percent.

The MGI Global Consumption Model projects consumption by age group

Definition



Urban population growth by age

- Projections of urban population growth by age group leading to changing demographic structures
- Estimates based on medium fertility scenario by the United Nations Population Division
- Urbanization rates based on McKinsey Global Institute Cityscope database



Urban per capita consumption by age

- Age distribution of consumption for 37 countries, scaled to 100-plus countries using regional averages
- Consumption profiles from National Transfer Accounts
- Average per capita urban consumption based on ratio of urban per capita GDP to total per capita GDP



Aggregate macroeconomic projections

- Aggregate growth in per capita consumption based on real-exchange-rate adjusted GDP per capita growth rates
- Base case based on consensus numbers from the McKinsey Global Growth Model, Oxford Economics, IHS, and EIU
- China consumption share of GDP adjusted based on McKinsey Global Growth Model projections

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Exhibit E5

Global consumers to watch

Share of urban consumption growth, 2015–30 %

Low High

	Develop	ed region	s		Emergin	g regions						
Age group Years	United States and Canada	Western Europe	North- east Asia	Austral- asia	China	Latin America	South Asia	South- east Asia	Eastern Europe and Central Asia	Sub- Saharan Africa	Middle East and North Africa	Total
0–14	2.35	0.79	0.43	0.16	2.62	0.64	0.81	0.64	0.40	0.58	0.33	9.73
15–29	2.82	1.00	0.38	0.20	5.57	1.28	1.56	1.10	0.67	0.99	0.55	16.12
30–44	4.44	1.05	0.23	0.24	6.71	1.79	1.69	1.20	0.83	0.95	0.56	19.68
45–59	2.67	0.68	1.39	0.21	5.96	2.03	1.37	1.10	1.19	0.64	0.70	17.96
60–74	5.76	3.00	1.08	0.24	6.74	1.69	0.91	0.72	0.93	0.34	0.41	21.81
75-plus	4.99	2.14	2.33	0.20	3.07	0.79	0.26	0.21	0.48	0.06	0.14	14.70
Total	23.02	8.67	5.84	1.24	30.68	8.22	6.60	4.98	4.50	3.56	2.68	

Global consumers to watch

- 1 Developed retiring and elderly
- 4 China's 60-plus
- 7 Western Europe's working age

- 2 North America's working age
- 5 Southeast Asia's working age
- 8 Northeast Asia's working age

- 3 China's working age
- 6 South Asia's working age

9 Latin America's working age

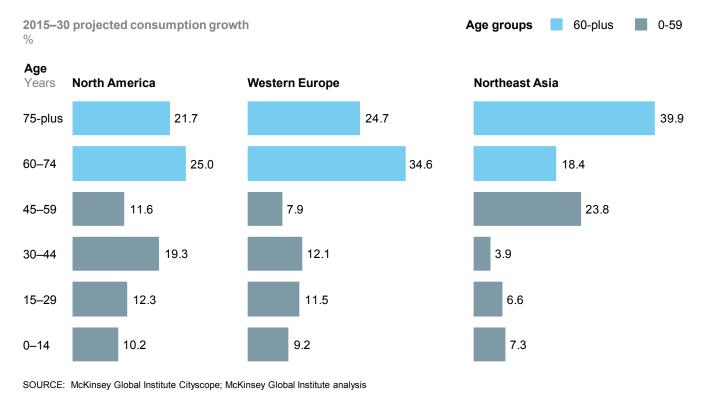
We now briefly summarize the three largest groups of consumers to watch, which account for 32 percent of today's global urban population but will generate half of global growth in urban consumption and, as such, have the scale to influence the choices that all of the world's consumers will be making in the years ahead.

Developed country retiring and elderly (60-plus years in developed regions)

The developed retiring and elderly will be extraordinarily important to global consumption from 2015 to 2030. The number of people in this age group will grow by more than one-third, from 164 million to 222 million. As a result, they will generate 51 percent of urban consumption growth in developed countries, or \$4.4 trillion, in the period to 2030. That is 19 percent of global consumption growth (Exhibit E6). The 75-plus age group's urban consumption is set to grow at a compound annual rate of 4.5 percent between 2015 and 2030. As well as increasing in number, each individual in this group is consuming more, on average, than younger consumers, mostly because of rising public and private health-care expenditure. The retiring and elderly in developed economies today have per capita consumption of around \$39,000 per year. In comparison, the 30-to-44 age group consumes on average \$29,500 per year. Health-care spending by those aged 60 and older is projected to grow by \$1.4 trillion in the period to 2030.

Exhibit E6

The 60-plus age segment will account for nearly 60 percent of consumption growth in Western Europe and Northeast Asia



It's not just health-care spending that is prominent among these consumers, however. Between 2015 and 2030, the 60-plus age group in the United States, for instance, is projected to contribute 40 percent or more of consumption growth in categories such as personal care, housing, transportation, entertainment, and food and alcoholic beverages.

The 60-plus populations in the United States, Western Europe, and Northeast Asia are treated as one consumer segment because they have similar demographic and consumption patterns. In each of these regions, those aged 60-plus constitute the fastest-growing population segment, and their per capita consumption levels and age-specific consumption profiles are similar. Of course, there are differences among and within countries among retiring and elderly consumers.

People aged over 50 bought nearly two-thirds of the new cars sold in the United States in 2011, according to one study.⁶ Half of all Americans riding Harley-Davidson motorcycles are baby boomers.⁷

In 2030, we expect to see a wider variation in purchasing power among the elderly than we see today. While many in the 60-plus age group are wealthy, others have not saved sufficiently to see them through retirement. Income inequality in the United States has always been highest among the elderly and has been increasing among those aged 65 and older since the 1980s. Elderly consumers who are not wealthy may need to boost their income by monetizing their homes, downsizing, renting out rooms, or using financial products such as reverse mortgages or home-reversion schemes.

The geography of the developed retiring and elderly is shifting. Today, cities in Western Europe and Northeast Asia have the highest share of the over-60s, but populations in North American cities will age quickly between now and 2030.

There are several critical life-stage factors that affect the consumption of this age group—the age at which these individuals retire, rates of divorce, the death of a spouse, and the need for, and timing, of assisted living. When people retire matters for their consumption choices. After declining for decades, the retirement age is now inching up. Many baby boomers are delaying retirement to shore up savings and putting off the day when they start drawing social security benefits in the hope of ensuring that they have sufficient purchasing power in retirement. In the United States, nearly 65 percent of boomers plan to work past the age of 65; of those, 62 percent are continuing to work to maintain income or health benefits and the rest because they enjoy work. The US Bureau of Labor Statistics projects that the labor-force participation rate of the over-65s will increase from 18.5 percent in 2012 to 23.0 percent in 2022. Despite the trend of people working longer, there is still a very large number of retirees with time on their hands, and that has significant implications for certain consumption categories. Time spent on leisure and sports each day in the United States is expected to increase by 210 million hours by 2030, and the 65-plus age group will account for 195 million of those hours, the equivalent of 24 million full-time jobs.

The aspirations and preferences of older consumers are shifting. These individuals increasingly want to grow old in their own homes—age in place—and remain independent for as long as possible. This means rising demand for refurbishment of houses. A decade ago, those aged 55 and older accounted for less than one-third of all US spending on home improvement. By 2011, this share was more than 45 percent.¹⁰

China's working-age consumers (15-59-years)

By 2030, members of this group will have lived their whole lives in post-reform China. They are expected to contribute around \$4 trillion, or 18 percent, of urban consumption growth to 2030. By 2030, the number of consumers in this segment will grow by 20 percent, adding 100 million new consumers. Their average per capita consumption is expected to more than double from \$4,800 per person annually to \$10,700. By 2030, this group will spend 12 cents of every \$1 of worldwide urban consumption. These consumers are so numerous and their incomes rising so rapidly that they have the potential to reshape global consumption as the baby-boomer generation of the West—the richest generation in history—did.

- ⁶ AARP Media Sales with J. D. Power and Associates.
- ⁷ The BOOMer report 2015, Sabi, May 4, 2015.
- Baby boomer workers are revolutionizing retirement: Are they and their employers ready? Transamerica Center for Retirement Studies, December 18, 2014.
- ⁹ This compares with a participation rate of 11.5 percent in 1992 and 13.2 percent in 2002. See "Labor force projections to 2022: The labor force participation rate continues to fall," *Monthly Labor Review*, US Bureau of Labor Statistics, December 2013.
- ¹⁰ The BOOMer report 2015, Sabi, May 4, 2015.

One of the key drivers for this consumption growth is the large number of Chinese households that will reach comfortable middle class. The total share of Chinese urban working-age consumers achieving disposable monthly household incomes upward of \$2,100 is expected to soar from around 4 percent in 2010 to over 50 percent by 2030, more than a tenfold increase.¹¹

2x
Increase in average per capita consumption by China's workingage consumers 2015–30

Reflecting their rising incomes, consumption by those of working age in China will be fueled by higher per capita spending. The group's average per capita consumption is expected to more than double, from \$4,800 annually to \$10,700. Higher disposable income and a willingness to spend is fueling spending. Annual household spending on personal products is set to more than double, from around \$300 per household to about \$770. Similarly, annual household spending on dining out is set to more than double, resulting in an additional \$720 spent per household. The Chinese are increasingly interested in traveling abroad. According to the China Outbound Tourism Research Institute, an additional 100 million Chinese are expected to travel overseas by 2020.¹²

In China, 18.4 million individuals of working age live in Shanghai alone, and 16.6 million live in Beijing. Yet the highest shares of these consumers are not in China's largest cities but in Dongguan, Foshan, Shantou, Shenzhen, and Xiamen and other manufacturing powerhouses (Exhibit E7). Beijing and Shanghai have both the largest and the fastest-growing numbers of people of working age, but beyond these two megacities it is China's smaller cities that will experience the highest growth rates in the number of people of working age.

China's young people are spending more years in school than their predecessors, and China's education spending is growing quickly. Between 2015 and 2030, China is expected to spend 12.5 percent of overall consumption growth on education, virtually the same as Sweden's 12.6 percent. These shares are by far the highest of all the countries in our sample.

This group is marrying and having children later for both social and economic reasons. The fact that Chinese citizens are spending longer in education is one reason many people are delaying marriage. Chinese citizens with a tertiary education are likely to marry later.¹³ The increased economic opportunities available to women in China are also contributing to decisions to marry later, consistent with experience in other countries. The share of young women aged 25 to 29 who are unmarried has quadrupled since 1980 to stand at 22 percent in 2014.¹⁴

These consumers have grown up in a very different China from their parents, and their consumption choices reflect this. They are more optimistic about their financial future and more willing than previous generations to spend a greater share of their disposable income. In 2012, McKinsey's 2005–12 Annual Chinese Consumer Survey found that 61 percent of China's working-age group believed that their household income would increase significantly over the next five years compared with 50 percent of older consumers who felt

To differentiate among Chinese households on the basis of their income levels, we use poor, mass middle class, upper middle class, and affluent segments. By 2030, around 46 percent of Chinese urban households will move out of the mass middle class category into the upper middle class and affluent classes. Using figures from 2012, poor households have monthly incomes of less than 3,333 renminbi, or \$520; mass middle-class households, between 3,334 and 13,490 renminbi (\$520 to \$2,100); upper-middle-class households, between 13,500 and 19,999 renminbi (\$2,100 to \$3,100); and affluent households, more than 20,000 renminbi, or \$3,100. Upper-middle-class households are able to afford goods such as laptops, digital cameras, and luxury products. See Dominic Barton, Yougang Chen, and Amy Jin, "Mapping China's middle class," *McKinsey Quarterly*, June 2013.

¹² Chinese outbound travel a multi-decade growth trend, Credit Lyonnais Securities Asia, 2015.

World Bank education statistics; China Annual Population Change Survey (1986, 1994, and 2008); China One-percent Population Sample Survey, 2005.

Wang Feng, "What will happen if China adopts a two-child policy?" New Scientist, March 19, 2014.

the same way. Nearly one-third of working-age consumers in China see value in premium brands and are willing to pay more for them—the highest share of any age group in any geography that was included in the McKinsey 2016 Global Sentiment Survey. In contrast, only one-fifth of China's elderly population and only one-fifth of those of working age in North America share this sentiment. Digital technologies are a major part of the evolving consumption story of this generation in China. Among the consumers who shop for household goods online, one-third did so on their smartphones. Fifty-five percent of them said that they were willing to recommend a product, service, or company to their friends or family on Weibo, China's equivalent of Twitter.

Exhibit E7

Beijing and Shanghai have the most working-age consumers, but the group is growing fastest in smaller cities



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

The rapid proliferation of platforms and apps that connect these consumers to services in the physical world will continue to gather pace. Didi Kuaidi, a taxi-hailing service, has expanded its service offerings to enable users to book test drives of new cars and connect with fellow passengers using their LinkedIn profiles. WeChat, a social media platform, now enables users to shop for everything from stickers and games to groceries, to book taxis

¹⁵ Company website.

and flights, and to make mobile payments. The company allows subscribers to set up online stores. The rapid pace of change—and the willingness of these consumers to innovate—makes this segment a market to watch.

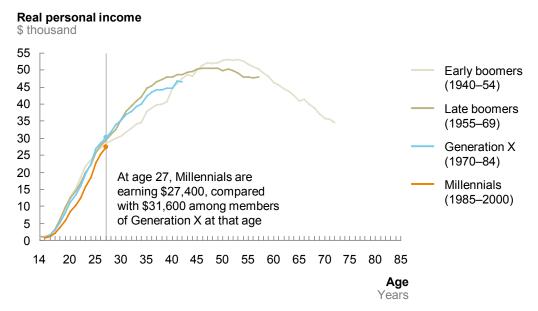
North America's working-age consumers (15 to 59 years)

The number of people of working age in North America is expected to expand by 7 percent, from 180 million in 2015 to 191 million in 2030. The per capita consumption of this group is expected to increase by 24 percent during this period. The younger members of this group have been particularly hard hit by the global recession of 2008 and the slow economic recovery since. The median income of 27-year-olds, for instance, is \$27,400 a year, which is 9 percent below that of the Generation X cohort born between 1970 and 1984 when they were the same age (Exhibit E8; see the technical appendix for definitions of different generations). This group also has high levels of student debt. Inequality is rising. Today, the median net worth of the top 20 percent of young adult households is eight times that of the other 80 percent; in 2000, that multiple was four times. This means that companies looking at this group of consumers will need to consider how to serve individuals with vastly different purchasing power.

Exhibit E8

Incomes of US millennials are 9 percent lower than those of Generation X at the same stage in their lives

Real personal income by cohort age, 2014



NOTE: See technical appendix for full cohort definitions.

SOURCE: US Census Bureau; McKinsey Global Institute analysis

This group is becoming more ethnically diverse. In the United States, for instance, the share of Hispanic young adults tripled from 7 percent in 1980 to 21 percent in 2012. This has an impact on consumption. Certain categories of consumer products including baby food, hair-care products, and dried food and vegetables are particularly popular among Hispanic shoppers. ¹⁶ These working-age individuals are more educated than earlier generations, and educational attainment among these individuals is expected to continue to rise. In 1984, 55 percent of those aged under the age of 35 had completed some

¹⁶ State of the Hispanic consumer: The Hispanic market imperative, Nielsen, April 2012.

postsecondary education. By 2013, that share had increased to 69 percent. By 2030, the largest populations of working-age people in North America will be found in large US cities including Chicago, Illinois; Los Angeles, California; Miami, Florida; New York, New York; and Washington, DC, and in fast-growing cities in southern states including Atlanta, Georgia, Dallas and Houston in Texas, and the southwestern state of Phoenix, Arizona.

36% 2014 share of married young adult households, down from

54% in 1982

North America's working-age population is going through key life stages such as finishing education, having a first child, getting married, or buying a first home later than earlier cohorts did. This has an impact on consumption patterns. The share of married young adult households has fallen from 54 percent in 1982 to 36 percent in 2014. Since homeownership rates among young adults in married households is 30 percentage points higher than among those in other living arrangements, we estimate that this trend alone could be responsible for a 5 percentage point fall in the rate of homeownership between 1982 and 2014—enough to fully explain the actual decline. At the same time, the share of young adults living with their parents has risen from 30 percent to 36 percent, a change that is likely to reflect economic realities rather than changes in preferences.

There appear to be two broad shifts of attitude among these consumers. One is a propensity to trust their peers when judging whether a good or service is worth buying, rather than relying on information from the companies and organizations that provide them.¹⁷ There is also evidence that younger people of working age in North America have less trust in traditional firms and investment advisers and are willing to patronize alternative forms of money management.¹⁸ They are very likely to shop around for financial services and buy online. The second attitude is that this group of consumers prefers goods and services to be delivered instantaneously—or at least as quickly as possible. They have more choices than previous generations. Millennials grew up with the Internet and digital technologies. These consumers prefer on-demand television and other entertainment content. Millennial North Americans are 10 percent less likely to take out a cable subscription than older consumers, and are four to five times as likely to purchase goods and services using their mobile phones. Even in health care, they tend to use retail or urgent-care clinics more than earlier generations because they want to avoid long waits for a primary-care physician.

WHAT FACTORS ARE MOST LIKELY TO SWING GLOBAL CONSUMPTION FROM THE BASE-CASE PROJECTIONS?

While the broad patterns of consumption growth among the global consumers to watch are robust to a range of underlying assumptions, there are uncertainties to watch for. The future trajectory of China's per capita consumption growth, expected to expand by 5.4 percent per year between 2015 and 2030, is subject to the widest band of uncertainty. If per capita income grows more slowly than consensus estimates—say at a 4.1 percent rate instead of the 6.1 percent expected real-exchange-rate adjusted growth rate— China's consumption growth would be \$2.4 trillion lower. However, if China were to move faster toward a consumption-driven growth path—with the share of consumption in GDP rising from 41 percent (our projected 2030 baseline) to 50 percent of GDP by 2030, the aggregate consumption of China's urban consumers could expand by \$2.0 trillion more than projected. In developed economies, the consumption of the retiring and elderly in developed economies may not prove sustainable. Paying for pensions and health care will be challenging: neither private savings nor public finances are sufficiently well funded for future costs. Another source of uncertainty is the timing of retirement. We estimate that a three-year delay in retirement would boost consumption growth in developed economies by \$155 billion by 2030. There are uncertainties about the trajectory of consumption by North America's working-age consumers. For instance, we estimate that a three-year delay in key

Talking to strangers: Millennials trust people over brands, Bazaarvoice, January 2012.

¹⁸ The Microsoft Millennials in financial services survey, conducted by KRC Research of Washington, DC, 2009.

life-stage decisions would reduce non-health-care consumption growth by \$260 billion in North America and Europe, and a five-year delay by \$440 billion.

CITIES MATTER, BUT THEIR DEMOGRAPHICS—AND CONSUMPTION PROSPECTS—ARE DIVERGING

Worldwide consumption is extraordinarily concentrated; just 32 cities are likely to generate one-quarter of total urban consumption growth between 2015 and 2030, and 100 cities will account for 45 percent of that growth. 19 Cities in North America, a region that features prominently for two of the key groups of consumers to watch—the developed retiring and elderly, and North America's working-age population—continue to be important in the consumption landscape. But the weight of consumption is shifting rapidly toward the cities of emerging economies, including China, whose working-age population is the third key consumer group to watch. In 2030, just 315 large cities in China and North America are likely to contribute more than 40 percent of global consumption growth (Exhibit E9).

315
large cities in China and North America to contribute

40%+
of global
consumption
growth

The 20 metropolitan areas with the most consumption growth between 2015 and 2030 include seven cities in the United States and six in China. London—the only European city in the top 20—is projected to have the highest consumption growth. By 2030, ten of the 20 top cities for consumption will be in the United States. Western Europe and Japan are projected to have three cities each in the top 20, and China will have two—up from zero today (Exhibit E10).

How cities fare in the face of major demographic shifts will matter for consumption. The urban world faces a double threat to growth: global population growth is slowing and rural-to-urban migration or urbanization is plateauing in many countries. These two factors matter because expanding populations have been the key driver of urban growth, contributing almost 60 percent of urban GDP growth between 2000 and 2012. Globally, more than half of the deviation of individual cities' GDP growth from the national average of their countries has been due to differences in population growth rather than higher (or lower) per capita GDP growth.²⁰

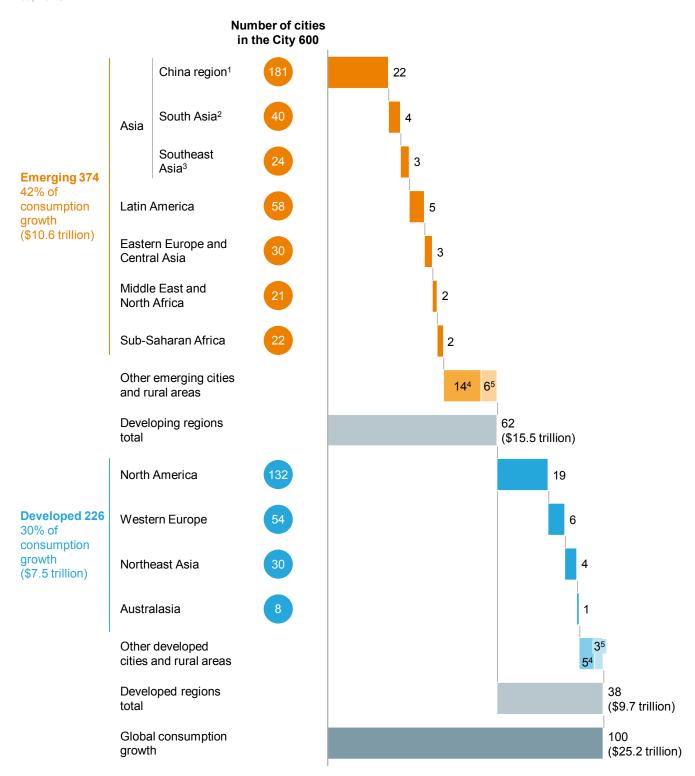
Demographic variations among cities—and therefore their growth and consumption prospects—are already surprisingly large. In our sample of cities, the average age ranges from 22 years in the Nigerian city of Minna to 52 years in Punta Gorda in the US state of Florida. Even within countries, there are large variations in cities' demographic profiles. In 2012, the median age varied by a decade in the cities in South Korea and Spain with the oldest and youngest populations, and by more than 20 years in the United States (Exhibit E11).

These 32 cities are 12 cities in the China region (Beijing, Chengdu, Chongqing, Guangzhou, Hangzhou, Hong Kong, Nanjing, Shanghai, Shenyang, Shenzhen, Tianjin, and Wuhan); 11 cities in the United States (Atlanta, Georgia; Boston, Massachusetts; Chicago, Illinois; Dallas, Texas; Houston, Texas; Los Angeles, California; Miami, Florida; New York, New York; Phoenix, Arizona; San Francisco, California; and Washington, DC); two cities each in Northeast Asia (Osaka and Tokyo, both in Japan), Latin America (Mexico City, Mexico, and São Paulo, Brazil), and South Asia (Delhi and Mumbai, both in India); and one city each in Western Europe (London in the United Kingdom), the Eastern Europe and Central Asia region (Istanbul, Turkey), and Southeast Asia (Jakarta, Indonesia).

We analyzed urban GDP growth between 2000 and 2012 for 943 cities with 500,000 or more inhabitants in 145 countries using the Canback global income distribution database (C-GIDD). Among developed regions, differences in population growth rates contributed two-thirds of the GDP growth differences of individual cities from the national city average, and per capita income growth accounted for the rest. In developing regions, there was wider variance across regions. China and South Asia were the two regions where per capita GDP growth differences contributed more than half of the deviation, at 58 percent and 56 percent, respectively. Also see *Urban America: US cities in the world economy*, McKinsey Global Institute, April 2012. This research shows in more detail how the US cities that grew faster than their peers over the past 30 years did so because of higher population growth rather than higher growth in per capita income.

Around 315 large cities in China and North America will contribute more than 40 percent of global consumption growth

Consumption growth at real exchange rate by geography, 2015–30 $\%,\,2010$

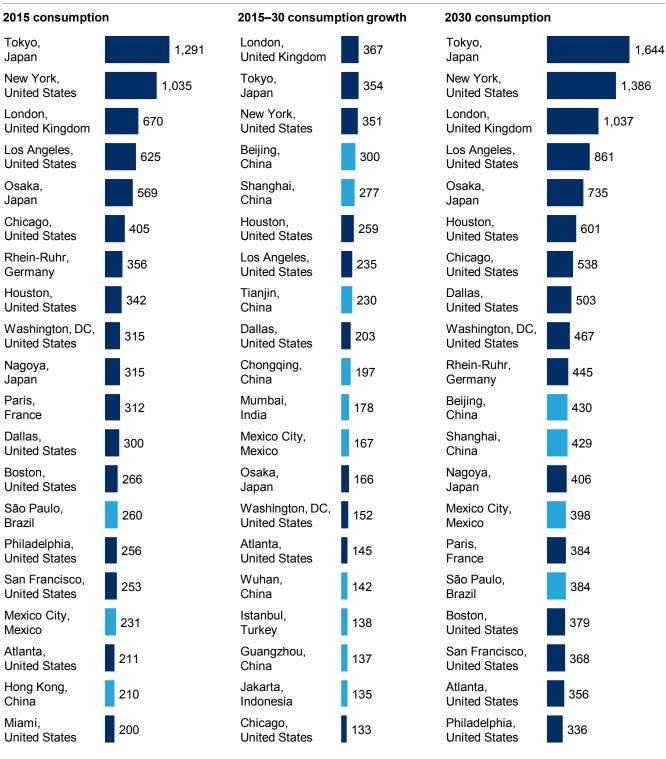


- 1 Includes cities in China (Hong Kong and Macau) and Taiwan.
- 2 Includes cities in Afghanistan, Bangladesh, India, Pakistan, and Sri Lanka.
- 3 Includes cities in Cambodia, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, and Vietnam.
- 4 Other large cities not included in the City 600.
- 5 Small cities and rural areas.

NOTE: Numbers may not sum due to rounding.

Top cities by absolute consumption and consumption growth

Top cities by



Even within nations, cities vary widely in their demographic profiles

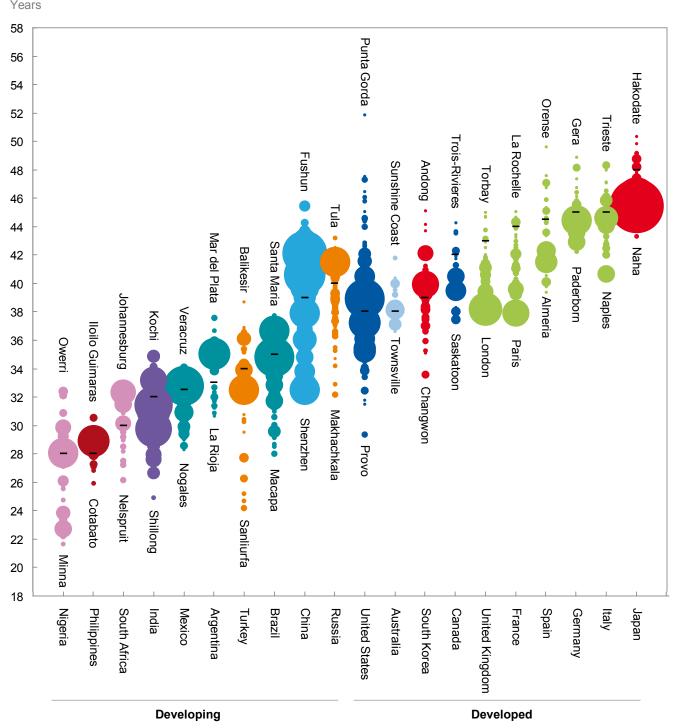
Cities by weighted average age, 2015



Bubble size indicates city population

Median of weighted average age for cities within country

Median weighted average age, 2015



As demographic changes roll across the globe, we are seeing the economic fortunes of cities diverge. Six percent of the large cities that we looked at have already experienced a decline in their populations since 2000, most of them in developed economies (Exhibit E12). But in other countries where urbanization continues, cities are still experiencing significant growth in their populations. Urban populations will grow at an annual rate of 3.4 percent in sub-Saharan Africa, 2.4 percent in South Asia, and 2.1 percent in China from 2015 to 2030. Many cities in emerging countries will be home to rising numbers of consumers with considerable and growing purchasing power. Roughly 700 large cities in China alone will account for \$7 trillion, or 30 percent, of global urban consumption growth to 2030.

Exhibit E12

Populations are declining in 6 percent of large cities—most of them in developed regions further along in aging and urbanization

Cities with declining populations by population size and degree of population decline



NOTE: Analysis includes 1,692 cities.

COMPANIES NEED TO WORK EVEN HARDER TO THRIVE IN CONSUMER MARKETS THAT ARE FRAGMENTING AND DIVERSIFYING

The shifts we are seeing in global consumption are significant. For decades, companies serving consumer markets could rely on expanding numbers in most segments—but no longer. Three-quarters of consumption growth to 2030 will depend on each individual spending more. So, more than ever, companies need to know which consumers are likely to sustain robust spending, where they live, and what products and services they want to buy. Add to this arguably unprecedented variety in consumer markets, and the challenge deepens. To compete for the purchasing power of varied and highly dispersed pockets, three aspects of the challenge are worth considering:

- Footprint matters for success in a shifting consumer landscape. With consumption shifting, footprint matters. Companies also need to adapt continuously to the evolving demographics and consumption patterns of cities—and even neighborhoods within cities.
- Companies with the skills to develop tailored products and services to meet the needs of an increasingly complex consumer landscape can prosper. It is not just a question of matching footprint to growth markets. The variety of consumers that companies can serve has arguably never been more rich and diverse, both across regions and within them. Those companies that have the skill to manage multispeed, multifaceted, and increasingly diverse markets are more likely to succeed. In many markets, companies may need to strengthen their skills in managing overlapping products and brands.
- Look closely at services as they grow in importance. The growing share of services in overall consumption will, directly or indirectly, have an impact on all consumer-facing businesses. Services are growing faster than overall consumption as consumers spend a rising share of their income on, for example, travel and health care in aging developed markets and education in China's cities. At the same time, many traditional products incorporate complementary digital or physical services, and some products are being replaced by services.

•••

The era of slowing population growth and aging is already having a profound impact on patterns of consumption. Whereas in the past rising numbers of consumers fueled growth in demand, it will be per capita consumption that drives it to 2030. This means that companies need to work harder to carve out profitable markets. They need to know which consumer segments are likely to be spending more vigorously, where they are, and what they are likely to devote their hard-earned money to. Those companies that gather deep intelligence on the evolving consumption landscape can thrive even in an aging world.



1. MAJOR CONSUMPTION SHIFTS AHEAD

Great forces are at work in the global economy that are now familiar to many of us. Population growth is slowing, aging the world. A number of developed economies appear to be facing secular stagnation with persistently high youth unemployment. Economic dynamism continues its shift toward emerging economies, where incomes and purchasing power are rising. The overwhelming dominance of cities in global economic activity continues and deepens as an urbanization wave continues across developing economies. But it is far from clear that we sufficiently understand the sheer scale and transformative power of these developments on the economic and social fabric of our lives, and on our consumption.

The impact of changing demographics on global consumption is startling.

The impact of changing demographics on global consumption is startling. Two shifts, in particular, are worth noting. The first is that as population growth slows, global growth in urban consumption will increasingly depend on each individual spending more. The second is that as incomes rise and populations age, the weight of consumption is shifting toward services. Global demand growth will increasingly depend on innovative and efficiently delivered services.

PER CAPITA SPENDING IS PROJECTED TO FUEL ABOUT 75 PERCENT OF GLOBAL CONSUMPTION GROWTH TO 2030

Population growth is slowing around the world. Over the 50 years to 2014, the global population grew at an annual rate of 1.4 percent, more than doubling the number of people in the world, from 3.4 billion to 7.2 billion. Fertility rates were high, infant mortality rates were falling, and life expectancy was increasing as hygiene improved and the provision of health care expanded. But over the next 50 years, the annual rate of growth is expected to slow to only 0.4 percent. Fertility rates continue to fall or are already very low. The fertility rate in many countries is falling below the "replacement" threshold of 2.1 children for each woman that is necessary to keep the population stable. Current projections suggest that, worldwide, one million fewer babies will be born from 2015 to 2025 than in the previous ten years. At the same time, longevity continues to increase.

These figures are for a 20-country sample—the 19 national members of the G20 plus Nigeria, which is the only exception to the trend; its population is expected to grow at a rate of 2.4 percent. For more detail, see *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.

Fertility is low or declining in both developed and developing countries, with large variations in this trend. In the United States, the fertility rate (average births per woman) has been 1.9 since 2010. US fertility would have declined even further if it had not been for higher birthrates among migrants. In Japan, the fertility rate was 1.5 in 1990 and then fell to 1.4 in 2000 and has held stable since. In the United Kingdom, the fertility rate is 1.9 and has been stable over the past five years. See World development indicators 2013, World Bank, April 2013.

When we look at specific age groups, their population-growth patterns vary widely across geographies (Exhibit 1). The most rapid increases in the 15-to-59 age group will be in sub-Saharan Africa and South Asia. Meanwhile, the numbers in this age group are expected to decline in Western Europe and Japan. In the case of the retiring and elderly—those aged 60-plus—the highest growth rates will be in the developing world. China will have the largest absolute increase in the number of people aged 60-plus and the highest growth rate between 2015 and 2030.

Exhibit 1

Population compound annual growth rate, 2015–30

Low High									%	
	Emerging regions						Developed regions			
East Sub- and	South- east Central Asia Asia	South Asia	Latin America	China	Austral- asia	North- east Asia	Western Europe	United States and Canada	Age group Years	
2.8 0.6 0.9	1.1 0.1	1.2	-0.1	1.0	1.2	0.0	0.0	0.7	0–14	
3.5 0.9 0.6	1.5 -0.3	1.7	0.2	0.0	0.6	-0.9	-0.2	0.3	15–29	
3.7 1.2 1.4	1.8 -0.3	2.8	1.1	1.8	1.0	-1.1	-0.5	1.0	30–44	
4.1 3.7 1.7	3.1 1.0	3.5	2.2	1.9	0.8	0.6	-0.6	-0.1	45–59	
4.2 4.9 3.6	5.5 1.8	4.4	3.8	5.2	2.0	0.7	1.7	1.9	60–74	
4.0 4.4 4.2	5.1 1.8	5.0	4.5	6.6	3.9	3.0	2.1	3.9	75-plus	
3.4 1.8	2.2 0.5	2.4	1.2	2.1	1.3	0.3	0.3	0.9	Total	
Africa Africa 2.8	Asia Asia 1.1 0.1 1.5 -0.3 1.8 -0.3 3.1 1.0 5.5 1.8 5.1 1.8	Asia 1.2 1.7 2.8 3.5 4.4 5.0	-0.1 9 0.2 1.1 2.2 3.8 4.5	1.0 3 0.0 1.8 1.9 5.2 6.6	asia 1.2 0.6 1.0 0.8 2.0 3.9	Asia 0.0 8 -0.9 -1.1 0.6 0.7 3.0	0.0 7 -0.2 -0.5 -0.6 1.7 2.1	0.7 0.3 1.0 -0.1 1.9 3.9	0–14 15–29 30–44 45–59 60–74 75-plus	

Global consumers to watch

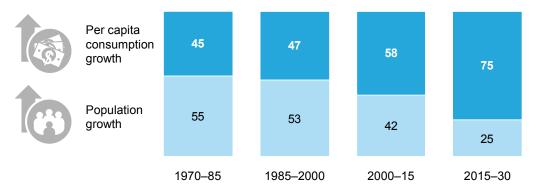
- Developed retiring and elderly
- 2 North America's working age
- 3 China's working age
- China's 60-plus
- 5 Southeast Asia's working age
- 6 South Asia's working age
- Western Europe's working age
- 8 Northeast Asia's working age
- 9 Latin America's working age

As population growth wanes across many consumer segments, growth in consumption will increasingly depend on each individual spending more. There has been a clear shift in the factors driving consumption since the start of the new century. Up to 2000, more than half of global consumption came from a rising number of consumers. But between 2015 and 2030, this will generate only around 25 percent of consumption. Seventy-five percent of all global consumption growth will rely on rising per capita consumption—\$17 trillion out of a total of \$23 trillion, compared with 58 percent between 2000 and 2015, and a 45 percent share from 1970 to 1985 (Exhibit 2).

Exhibit 2

Three-quarters of global consumption growth to 2030 will come from increases in per capita spending

Source of consumption growth % of growth



SOURCE: World Bank; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Strong per capita consumption growth will critically depend on per capita income growth, but the distribution of incomes and the evolution of prices of consumer goods and services matter, too. Not all consumers spend the same share of their income; higher-income households are more likely to save a higher share. In Europe, the marginal propensity to consume of higher net worth households is only about one-third that of lower wealth households, and capital income is less likely to be spent than labor income. The wealthiest 20 percent of households have a marginal propensity to consume in the order of 10 percent, while the less wealthy half of households has one in the order of 60 percent.²³ This means that transferring income or wealth from high-income to low-income households is likely to raise average consumption and aggregate demand (Exhibit 3).²⁴ However, there has been a broad-based rise in inequality within most countries.²⁵ Reversing this trend so that incomes among the poorest in each country increase would help strengthen overall global consumption growth.

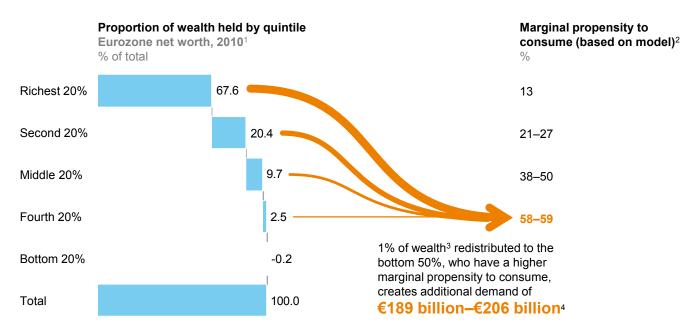
²³ Christopher D. Carroll, Jiri Slacalek and Kiichi Tokuoka, *The distribution of wealth and the marginal propensity to consume*, European Central Bank working paper number 1655, March 2014. For further discussion, see *A window of opportunity for Europe*, McKinsey Global Institute, June 2015.

See, for instance, Andrew G. Berg, and Jonathan D. Ostry, *Inequality and unsustainable growth: Two sides of the same coin?* IMF staff discussion note number 11/08, April 2011; Jonathan D. Ostry, Andrew G. Berg, and Charalambos G. Tsangarides, *Redistribution, inequality, and growth,* IMF staff discussion note number 14/02, February 2014; and *Focus on inequality and growth,* OECD Directorate for Employment, Labour and Social Affairs, December 2014.

Era Dabla-Norris et al., Causes and consequences of income inequality: A global perspective, IMF staff discussion note number 15/13, June 2015.

Exhibit 3

A redistribution of net wealth to lower-income households could boost aggregate demand



- 1 Household Finance and Consumption Survey ECB reference year 2010, published in 2013.
- 2 Ranges: Krusell-Smith and Friedman/Buffer Stock models (wealth measure: net worth; distribution: by wealth/permanent income ratio).
- 3 Similar in order of magnitude to taxes currently levied in France, the Netherlands, Norway, and (temporarily) Spain.
- 4 Excludes household spending multiplier.

SOURCE: Christopher Carroll, Jiri Slacalek, and Kiichi Tokuoka, *The distribution of wealth and the marginal propensity to consume*, European Central Bank working paper number 1655, March 2014; European Central Bank Statistics Paper number 2, April 2013; McKinsey Global Institute analysis

Consumer spending power also reflects the prices of goods and services in consumption baskets. A declining price of one product or service means consumers have more money to buy more of that product or service, or others. Over the past 50 years, globalization and the automation of manufactured products have been important factors fueling global consumption growth. As prices of clothing, cars, and electronics have declined, consumers have had more money left to spend on new goods and services. In contrast, many categories of services have risen in price in recent decades. Efforts to raise productivity and reduce the cost of services could provide a similar boost to consumption growth in the decades to come as happened in the case of manufactured products in the recent past.

SERVICES ARE COMMANDING AN EVER-LARGER SHARE OF CONSUMPTION

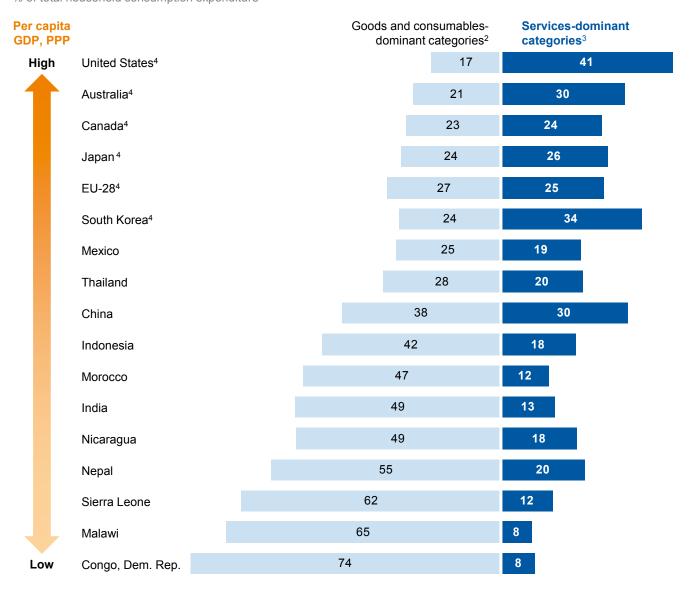
There is a well-established pattern across economies in which the share of services in employment and value added increases along with per capita incomes. ²⁶ This holds for household consumption, too: as per capita consumption increases, the share spent on services tends to rise. In the early stages of economic development, necessities such as food, clothing, and household items—largely goods rather than services—eat up a high share of households' disposable income. But as incomes rise, consumers can afford to spend money on items beyond the basic necessities, often on services such as cinemas, beauty parlors, restaurants, banking, and education. In the United States, for instance, services-dominant categories account for 41 percent of an average household consumption basket (half of this is private spending on health care). In South Korea, the share is 34 percent, and in Australia 30 percent. In Mexico and India, where incomes remain relatively low, the average share of household income devoted to services-dominant categories is only 19 percent and 13 percent, respectively (Exhibit 4).

See, for example, Domestic services: The hidden key to growth, McKinsey Global Institute, December 2005.

Exhibit 4

Services share of household consumption increases with per capita income

Household consumption expenditure by country¹ % of total household consumption expenditure



- 1 Figures do not include public spending on health care and education.
- 2 Goods and consumables-dominant includes furnishings and household equipment; clothing and footwear; alcoholic beverages and tobacco; and food and nonalcoholic beverages.
- 3 Services-dominant includes restaurants and hotels; education; health; recreation and culture; and communications.
- 4 Household consumption figures from Eurostat; all other figures from the World Bank Global Consumption Database
- NOTE: Other categories (not shown) include housing, water, electricity, gas, and other fuels; miscellaneous goods and services; and transport. Numbers may not sum due to rounding.

SOURCE: World Bank Global Consumption Database; Eurostat; McKinsey Global Institute analysis

Looking ahead, spending on services will generate the lion's share of consumption growth in most middle- and high-income countries. However, the growth of spending on different types of services will vary widely because consumption of different types of service tends to take off at different income levels. MGI has documented this among emerging-market consumers (see Box 1, "The rise of the consuming class in emerging economies").

Box 1. The rise of the consuming class in emerging economies

The size of the world's consuming class has doubled since 1990 and is set to rise by an additional 1.8 billion people by 2025. One billion of these new consumers will live in large cities across the emerging world. More than 600 million of the new members of the consuming class will live in just 440 emerging-market cities.¹

We define the consuming class as individuals with disposable income of more than \$10 a day—or over \$3,600 per year—using constant 2005 purchasing power parity dollars. We deem this income threshold to be sufficient to enable households to pay for necessities such as food, shelter, and clothing, as well as goods and services beyond those that are necessary. At this threshold, spending on many consumer goods begins to rise rapidly.

Demand for goods and services beyond necessities is now soaring because many millions of people are attaining income thresholds at which their consumption takes off rapidly. In India, such spending accounted for 35 percent of average household consumption; by 2025, MGI expects this share to have increased to 70 percent. In the case of urban India, household consumption of education and entertainment accounts for more than one-tenth of total household consumption. Yet different products tend to take off at different income levels, which means that, depending on the income level of individual cities, the goods and service markets growing most rapidly will vary.

In China, MGI found that spending on dining starts to increase rapidly at annual incomes of around \$3,000 per household; by about \$9,000, that spending is on a steep upward trajectory.⁴ World Bank data suggest that credit card penetration starts to slowly rise after average income reaches \$10,000.⁵ Leisure travel and bank deposits start climbing once per capita income reaches \$18,000 per year—an income level at which demand for household goods such as refrigerators or washing machines has already matured.

Urban world: Cities and the rise of the consuming class, McKinsey Global Institute, June 2012.

² The "Bird of Gold": The rise of India's consumer market, McKinsey Global Institute, May 2007.

³ Key indicators of employment and unemployment in India 2011–2012, NSS 68th Round, July 2011–June 2012, National Sample Survey Office, June 2013. Movie theaters are a good example of services for leisure purposes whose consumption takes off at relatively low incomes whether in China, India, or Mexico today or in France or the United Kingdom in the early 20th century. See Gerben Bakker, "The evolution of entertainment consumption and the emergence of cinema, 1890–1940," in *The evolution of consumption: Theories and practices*, Marina Bianchi, ed., Emerald Group Publishing, 2007.

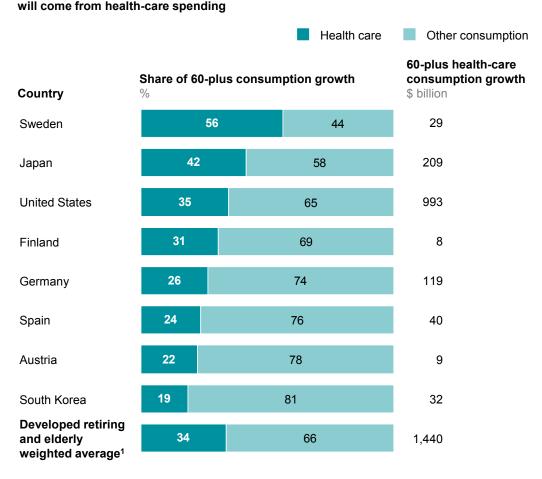
⁴ Urban world: Cities and the rise of the consuming class, McKinsey Global Institute, June 2012.

⁵ World Bank Findex database

Consumption of services also increases with aging because of rising health-care needs. In developed regions, aging populations mean that health care is the major growth category, expected to account for 34 percent of overall consumption growth among the 60-plus age group in these economies (Exhibit 5).

Exhibit 5

One-third of consumption growth among the over-60s in developed countries



¹ The developed retiring and elderly weighted average includes only those countries shown; it excludes Canada and several Western European countries such as Italy and the United Kingdom.
NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute Cityscope

In most developed countries, public health-care spending covers a significant part of rising spending. While households may not directly feel the cost as lower disposable income, the aggregate impact on the public purse raises questions about the sustainability of current levels of support.²⁷ In the United States, average private spending on health care for the 75-plus age group is \$8,700 per year, and, as such, accounts for a large share of their overall consumption. By 2030, this is likely to rise to \$10,600 in constant dollars. Whether

Health-care spending accounts for 10 percent of GDP in Organisation for Economic Co-operation and Development (OECD) countries and an average of 6 percent of GDP in the four leading emerging economies (the BRICs) of Brazil, China, India, and Russia. China's health-care spending has almost tripled over the past five years and is projected to reach \$1 trillion by 2020. Over the next four years, global health-care spending is projected to grow at 5.3 percent a year. This is almost two percentage points higher than projected global GDP. Rising demand for health care is putting increasing pressure on government budgets, boosting public debt levels, and constraining the ability to spend on education and other areas. If health-care spending continues to outpace GDP growth at the current rate, it would exceed 10 percent of GDP in nearly all developed (OECD) economies by 2030, exceeding 20 percent of GDP in many of them. See World healthcare outlook, Economist Intelligence Unit, August 2013.

privately or publicly funded, health care is a major consumption category that makes it a key form of spending to watch. The imperative is to ensure that health care is delivered as efficiently as possible. Rising health-care costs reflect the rapidly improving quality of care that helps extend longevity and improve quality of life. However, increasing productivity and reducing waste in the system can help reduce the amount of money needed to provide any level of service, thereby leaving more public or private money to be spent on other categories—surely an important aspiration. MGI research has found that, although it is difficult to measure productivity in health care and other public services, there is potential to save nearly 25 percent of health-care spending by 2025 without compromising health outcomes.²⁸

Health care is a major consumption category that makes it a key form of spending to watch.

Despite these broad patterns by income and age, there are regional differences in household consumption of services (Exhibit 6). In the United States, private spending on health care is a major category. Households in Mexico and South Korea spend more on educating their young than households elsewhere. In China, the working population is investing enormous amounts in the education of the next generation (see Chapter 2 for further discussion).

28-32%

Share of US income spent on housing over the past 30 years

The rising share of services means that the prices consumers pay for those services will matter for real purchasing power and consumption growth across economies. Yet productivity gains and price declines have been much slower in service industries. Cost of housing is a good example. Housing and utilities today represent roughly one-quarter of household consumption globally. The cost of housing and associated spending has been climbing significantly in the United States and Western Europe, as well as in many large cities in the emerging world. Yet the productivity of construction has been flat or declining: in many countries, residential houses are built the same way as they were 50 years ago. ²⁹ This has meant that people have spent less disposable income on other goods and services. In the United States, for instance, the share of income spent on housing has risen from 28 percent to 32 percent over the past 30 years as housing costs have grown faster than overall consumption. Reversing these trends by boosting productivity—and particularly the productivity of services—as well as expanding affordable housing would make an important contribution to sustaining global consumption across categories. ³⁰

McKinsey and the McKinsey Global Institute have conducted a number of health-care productivity assessments. See, for instance, Accounting for the cost of health care in the United States, January 2007, and The challenge of funding Japan's future health care needs, March 2008. See also Health care productivity, McKinsey Global Institute and McKinsey Health Care Practice, October 1996. Health care has also been one of MGI's in-depth case studies for assessing the impact that information technology and big data have on productivity. All of the research is available at www.mckinsey.com/mgi.

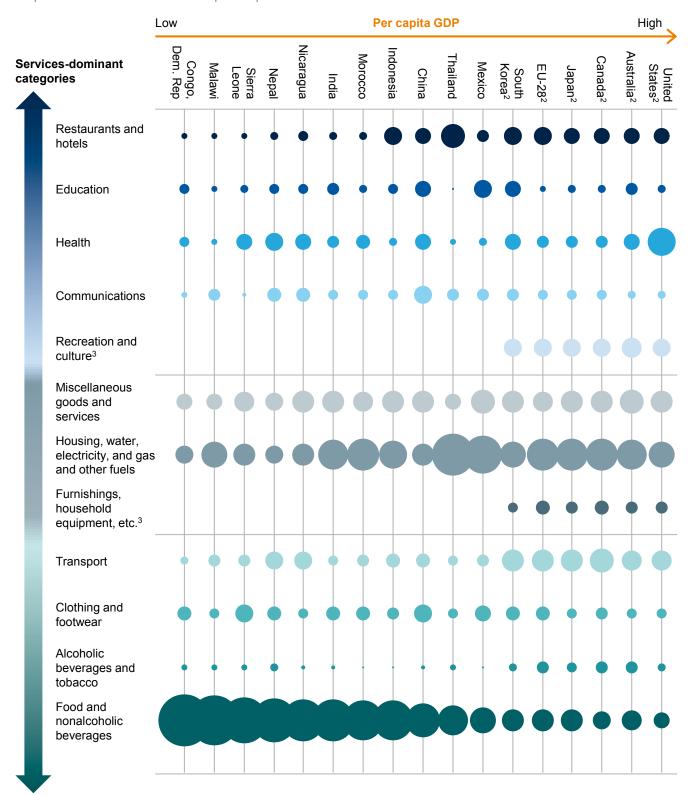
²⁹ A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute, October 2014.

A productive and competitive retail industry is a particularly important catalyst for fueling household consumption. Given that retail is the channel for delivering consumer goods to households, a low-cost retail industry means lower prices to consumers, translating directly into greater purchasing power. See *How to compete and grow: A sector guide to policy*, McKinsey Global Institute, March 2010.

Exhibit 6

Services share of household consumption increases with per capita income

Household consumption expenditure by country¹ Proportion of total household consumption expenditure



Goods-dominant categories

- 1 Figures do not include public spending on health care and education.
- 2 Household consumption figures from Eurostat; all other figures from the World Bank Global Consumption Database.
 3 Category data only available for select countries.

SOURCE: World Bank Global Consumption Database; Eurostat; McKinsey Global Institute analysis

Because most consumer services are still supplied locally, the nature of national and local regulations and industry practices to a large extent explain variations in the performance of service industries among countries. 31 Take South Korea as one example. The productivity level of South Korean services is only 40 percent of that of manufacturing industries, a larger gap than in other nations. Overall, service-sector productivity, measured as value added per employee, is 30 to 57 percent below levels in the United States, the United Kingdom, and Germany. One factor is government policies that have long favored large manufacturing businesses and export industries, offering exemptions from land taxes and receiving government-subsidized discounts on electricity services. In 2006, the government extended such benefits to large retailers, hotels, and golf courses, but other service-sector companies do not receive these benefits. Another factor is lax enforcement of pro-competition rules in services.32

The consumption landscape is changing in significant ways due to major demographic shifts—and this matters for global growth prospects. Household consumption accounts for about 60 percent of global GDP.33 In a world where consumption growth depends on rising per capita spending, it matters that economic gains, both in terms of rising income and lower prices, are broadly distributed and benefit the lowest income segments most likely to spend their income. Service sectors, which are an increasingly important part of the global consumption mix, need to be as productive as possible so that attractive and innovative offers at attractive prices are passed on to consumers, thereby boosting their purchasing power. In the next chapter, we look in more detail at where the most promising consumer markets are likely to be and offer a new detailed framework for understanding what is driving spending among different age cohorts.

³¹ See, for instance, Sweden's economic performance: Recent development, current priorities, McKinsey Global Institute, May 2006; Lean Russia: Sustaining economic growth through improved productivity, McKinsey Global Institute, April 2009; and The future of Japan: Reigniting productivity and growth, McKinsey Global Institute, March 2015. Also see William W. Lewis, The power of productivity: Wealth, poverty, and the threat to global stability, University of Chicago Press, 2005.

³² Beyond Korean style: Shaping a new growth formula, McKinsey Global Institute, April 2013.

³³ World development indicators 2013, World Bank, April 2013.





2. NINE GROUPS OF CONSUMERS TO WATCH

Just nine groups of urban consumers to watch are projected to generate more than three-quarters of global urban consumption growth between 2015 and 2030. Three of these groups have the scale and spending power to reshape global demand and the world economy, and they are expected to contribute nearly half of global consumption growth to 2030. They are the growing army of retiring and elderly in developed economies, individuals of working age in China who by 2030 will have grown up entirely in the period since the People's Republic opened up its economy to the rest of the world; and the working-age population of North America, a large group of consumers who continue to boast substantial collective spending power despite coming under income pressure. The other six groups of urban consumers to watch are projected to contribute an additional 25 percent of global consumption growth (Exhibit 7).

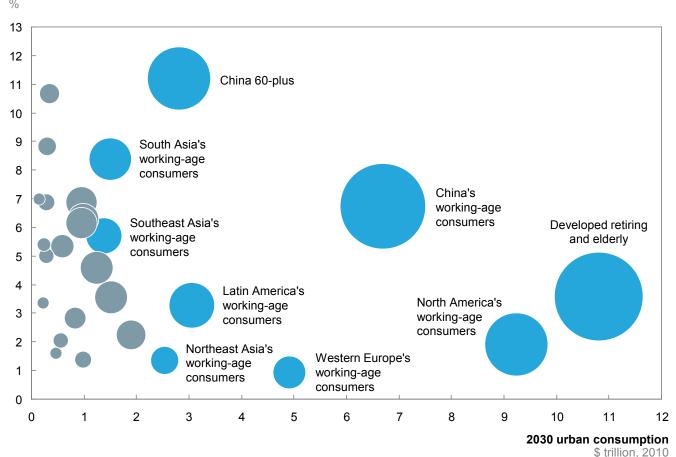
Exhibit 7

Nine consumer groups are set to generate about 75 percent of global consumption growth in 2015–30, 50 percent by the top three alone

Global urban consumption growth, 2015-30

Size represents urban consumption growth Global consumer groups to watch Other groups

Consumption growth, compound annual growth rate, 2015–30



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Companies that understand what demographic and consumption trends are likely to affect their business, and anticipate how consumers are likely to behave in this environment, will have the highest chance of success. In this chapter, we offer a new framework for understanding all the factors that drive consumption, discuss the three largest groups of consumers to watch in some detail, and offer some thoughts about the risks to the trajectory of consumption growth from 2015 to 2030.

NINE GROUPS OF CONSUMERS ARE SET TO GENERATE THREE-QUARTERS OF GLOBAL URBAN CONSUMPTION GROWTH

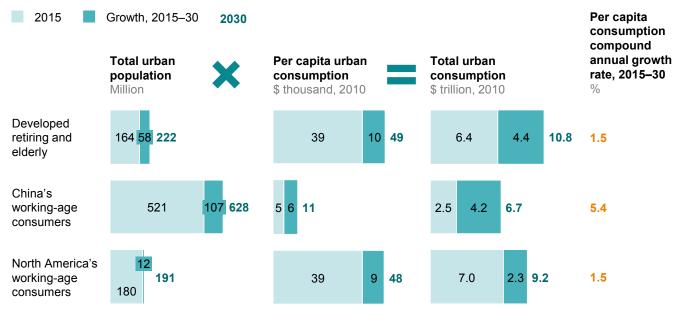
Global urban consumption is expected to grow by \$23 trillion between 2015 and 2030—a 3.6 percent compound annual rate. Three groups of urban consumers—the developed retiring and elderly (those aged 60-plus in developed economies), China's working-age population (ages 15 to 59), and the working-age population of North America (ages 15 to 59)—are expected to generate \$11 trillion, or 48 percent, of global urban consumption growth from 2015 to 2030.

Their weight in global consumption growth reflects both their large numbers and their high, or growing, per capita consumption. By 2030, cities in developed economies will be home to more than 220 million people who are aged 60 or older, and there will be more than 190 million working-age consumers in North America. Members of each of these groups are already consuming \$39,000 worth of goods and services on average every year. Almost 630 million people of working age living in Chinese cities are expected to more than double their average per capita consumption by 2030.

The factors fueling the consumption of these groups differ. In the case of the developed retiring and elderly, it is sheer growth in their number as large cohorts of baby boomers reach the end of their working lives that makes this group so important in global terms. In the case of China's working-age population, soaring per capita incomes are acting as the larger engine of their consumption growth (Exhibit 8).

Exhibit 8

The main consumption drivers are population growth for those aged 60-plus in developed economies and per capita income for China's working-age consumers



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

The three groups also show different patterns of household consumption (Exhibit 9). Housing accounts for one-third of household consumption for those of working age in North America as well as for the retiring and elderly in the developed world. However, for China's working-age population, food still accounts for nearly half of household consumption. Dining out accounts for nearly a fifth of household consumption by North America's working-age population but only 5 percent of household consumption by those of working age in China.³⁴

Six other groups of urban consumers to watch are projected to generate an additional 28 percent of global urban consumption growth.

28% of global urban consumption growth from six other groups of consumers

The first two have a high share of global consumption, but are growing very slowly in number. They are individuals of working age in Western Europe and Northeast Asia. These consumer segments are already experiencing declining numbers. There will be ten million fewer 15- to 60-year-olds living in Western European cities in 2030 than today, and 5.5 million fewer in Japanese and South Korean cities.³⁵ They have high per capita consumption, but this is projected to grow only slowly. These two groups will continue to offer substantial markets in 2030 but with a declining share of global consumption.

Three other groups have the opposite dynamics—they are growing rapidly in both the number of consumers and their per capita consumption but are starting from a low base. These are the retiring and elderly in China, and individuals of working age in Southeast Asia and South Asia. Together, these three groups account for less than 5 percent of global consumption today, but they are projected to contribute almost 20 percent of global consumption growth. Those of working age in South Asia and Southeast Asia are rising consumer groups where average incomes are still relatively low today but are set to increase; their consumption habits are evolving. These consumers are likely to be responsible for a spurt in consumer demand for a broad range of goods and services, similar to the patterns we observe among those of working age in China. In contrast, China's elderly population will be a testing ground for the types of elderly services that emerge for large cohorts of elderly outside developed economies. Given that China's elderly have traditionally relied on their children for support in their old age, we are likely to see new care models evolve to meet the needs of wealthier individuals of working age and their parents and grandparents.

The final group—the working-age population of Latin America—is medium-sized today and is expected to grow at a moderate rate in terms of both numbers and incomes. These individuals are projected to contribute more than 5 percent to both today's consumption and to projected consumption growth to 2030.

Each of the nine urban consumer groups to watch contributes at least 4 percent of global consumption growth or represents at least 3 percent of global consumption in 2030. In the case of the top three groups, each is projected to generate more than 10 percent of global consumption in 2030.

³⁴ A part of this difference is explained by the high demand for ordering takeout food among China's working-age population, which is included in the food category of the consumption basket.

Population projections are from the UN Population Division's *World population prospects: The 2015 revision*. The UN counts all residents regardless of legal status or citizenship except for refugees who are not permanently settled in the country of asylum. In 2014, the UN High Commissioner for Refugees (UNHCR) estimated that there were about 1.8 million refugees and asylum seekers in Western Europe. Of these, some 0.2 million were from Syria. For future population growth, UN projections include base-case assumptions on the level of migration. Take the case of Germany. Its population is forecast to decline by 1.4 million by 2030; without net immigration, the country's population would decline by 4 million. To assess the sensitivity of this projection, we assumed that the exceptionally high immigration levels of the past five years would continue for the next 15. In this scenario, Germany's population would remain virtually flat, rising by only 100,000 people by 2030.

Exhibit 9

Comparison of consumption by the developed retiring and elderly, and the working-age consumers in China and North America

Share of household expenditure %

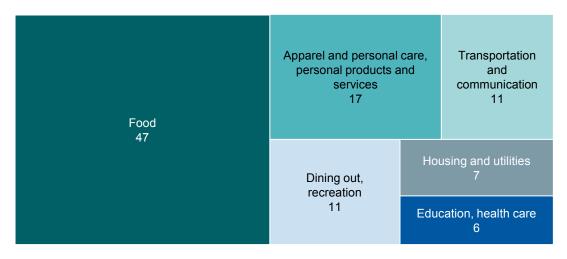
Developed retiring and elderly, 2013¹

100% = \$51,000



China's workingage consumers, 2012²

100% = \$6,000



North America's working-age consumers, 2013³

100% = \$50,000



- 1 Data for 65- to 74-year-olds in the United States.
- 2 Data for mass middle class 15- to 59-year-olds in China.
- 3 Data for 25- to 34-year-olds in the United States.

NOTE: The household consumption data in this chart only includes direct household expenditure and not public expenditure on health care and education. Household consumption data vary among countries and the categories do not match exactly. Numbers may not sum due to rounding.

SOURCE: US Bureau of Labor Statistics (BLS) Consumer Expenditure Survey, 2013; China National Bureau of Statistics; McKinsey Insights China, Annual Consumer Studies, 2012; McKinsey Global Institute analysis

COMPANIES NEED TO UNDERSTAND STRUCTURAL DIFFERENCES BETWEEN CONSUMER GROUPS

In a world where rising consumption by each consumer is key to growth, companies will need a deep understanding of the consumption patterns of their target customers. In the case of the three large consumer groups, their mere size justifies getting to know them much better. How is their spending changing, and why? How are their income, household structure, and ethnic composition affecting purchasing behavior? How are their choices different from those of previous generations? How are the needs and wants of these large groups evolving?

It is tempting to seek to explain changes in consumption by pointing to shifting preferences and taste. Attention has been lavished on consumer cohorts such as the millennials (a large constituent of North America's working-age population), and how they shop. But focusing on evolving consumer attitudes implies that all companies need is marketing savvy. The truth is that much deeper forces are shaping global consumption.

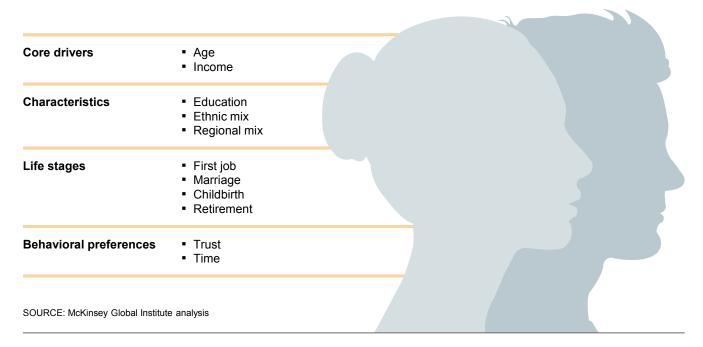
Focusing on evolving consumer attitudes implies that all companies need is marketing savvy. The truth is that much deeper forces are shaping global consumption.

In general, if two generations consume differently although they face similar socioeconomic conditions, the reason is likely to be shifting preferences or choices they are offered. But if those same two generations face different socioeconomic conditions, then changes in behavior may well be in response to those conditions. Take the youngest cohort of North America's working-age population as an example. The fact that fewer of these individuals own cars or houses than earlier generations did at the same age does not necessarily mean that they have less appetite for car or homeownership. Other factors are in play. The fact that they have lower average incomes and more student debt than previous generations means that these individuals are less able to afford to own assets such as these. The fact that this generation is getting married later is another reason that the rate of homeownership is lower than it was for the same age group in previous generations.

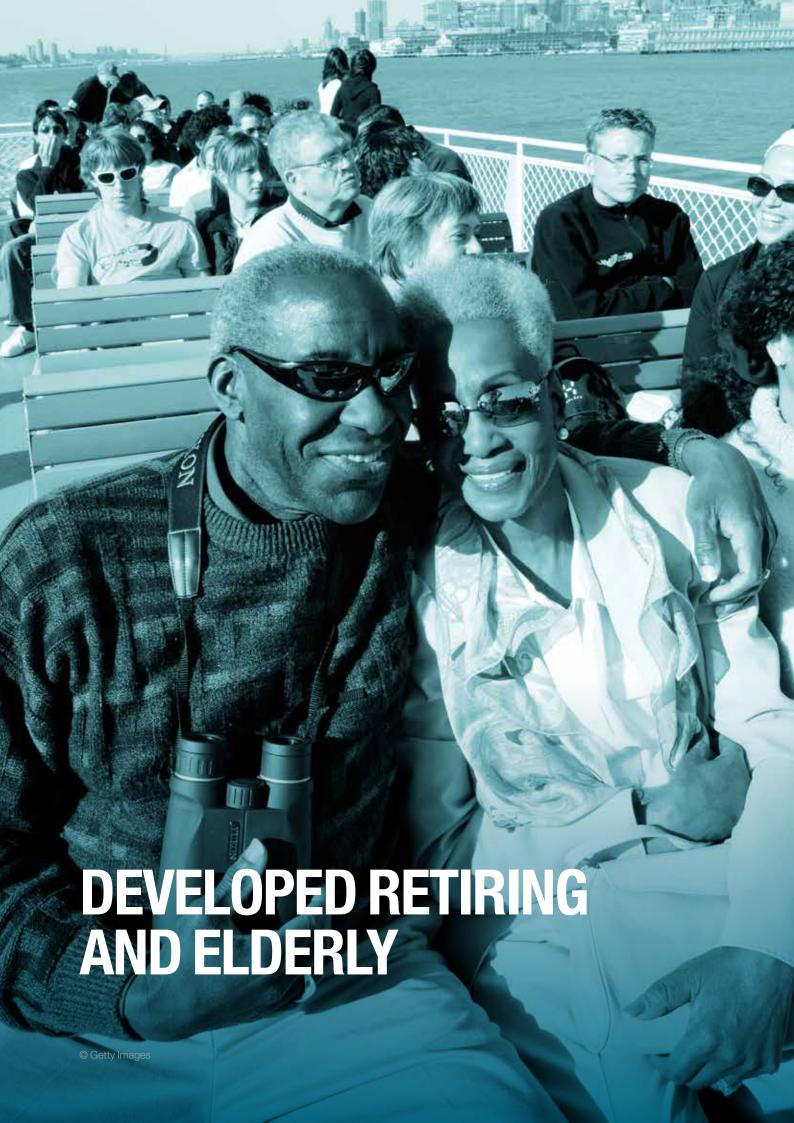
Companies are more likely to be able to predict consumption trends if they focus on understanding the full stack of structural reasons for consumer choices. Understanding net changes in consumption over time requires taking into account four sets of factors that influence consumers' behavior (Exhibit 10). First are the core drivers of consumption including their age and income (average income and distribution). Second are the other characteristics of consumers in a particular cohort that can affect purchasing behavior, from education to ethnic and regional mix. Third is life stages—the timing of major life decisions such as getting married or having children, or life events such as starting a first job or retiring from work. Fourth, and finally, are behavior and preferences—which are often the hardest to assess or predict.

Exhibit 10

Key factors behind consumption choices



In the rest of this chapter, we discuss these three groups in some detail using the framework we have described, and we finish with a short commentary on some of the uncertainties of the future trajectory of consumption.



The first group of consumers to watch—the retiring and elderly in developed economies—is ballooning largely because of the high number of baby boomers entering the 60-plus age group in the period to 2030, and the rapidly growing number of those who are aged 75 and older. These people largely belong to the generation born in the immediate aftermath of World War II when the birthrate spiked.³⁶ The number of people who are aged 60 and older will grow by more than one-third between 2015 and 2030 and will likely continue to have high per capita consumption relative to other age cohorts.

This group of consumers is more urban, more ethnically diverse, more educated, and definitely more tech-savvy than the 60-plus age group in previous generations. Yet their incomes and readiness for retirement vary widely. There will be many retiring and elderly with plenty of disposable income who will be able to include a desire for luxury goods. But there are many others who do not have sufficient savings to see them through retirement, who are worried about their finances, and who are working beyond the standard retirement age out of economic necessity.

The developing retiring and elderly will be extraordinarily important to global consumption during the 2015–30 period.

CORE DRIVERS: THE NUMBER IN THIS GROUP WILL INCREASE BY ONE-THIRD TO 2030, BUT PURCHASING POWER VARIES WIDELY

The developing retiring and elderly will be extraordinarily important to global consumption during the 2015–30 period. The number of people in this age group will grow by more than one-third, from 164 million to 222 million. As a result, they will generate 51 percent of urban consumption growth in developed countries, or \$4.4 trillion, in the period to 2030. That is 19 percent of global consumption growth. The 75-plus age group's urban consumption is set to grow at a compound annual rate of 4.5 percent between 2015 and 2030. In addition to this group's increasing in number, each individual in this group continues to consume at high levels relative to younger consumers, mostly because of rising health-care expenditure. The retiring and elderly in developed economies today have per capita consumption of around \$39,000 per year.

1/3
growth in number of developed retiring and elderly 2015–30

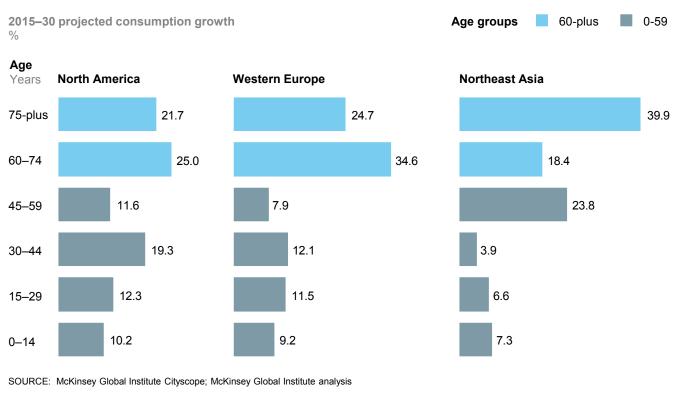
In Western Europe and Northeast Asia, the only age group whose population is growing is those who are 60 and older. In the United States and Canada, this age group will account for 60 percent of overall population growth. The highest growth in the numbers of consumers in this category will be in the United States and Western Europe, while this segment will grow more slowly in Northeast Asia because the population in Japan and South Korea is already relatively aged.

After World War II, birthrates spiked in Canada, Japan, the United States, and Western Europe. Birthrates in the United States increased by about 50 percent from prewar levels of 18 births per 1,000 people in 1935 to 27 births per 1,000 people in 1946. From prewar lows to postwar highs, birthrates increased by 45 percent in Canada, 47 percent in the United Kingdom, 63 percent in France, 50 percent in Sweden, 53 percent in the Netherlands, and 48 percent in Japan.

In both Northeast Asia and Western Europe, consumers aged 60-plus will account for about 60 percent of urban consumption growth (Exhibit 11). In the United States and Canada, this category will account for 47 percent of urban consumption growth. However, urban consumption growth among those aged over 75 diverge among regions. The 75-plus age group—the elderly—will account for about 40 percent of urban consumption growth in Northeast Asia but only 22 percent in the United States and Canada, and 25 percent in Western Europe.

Exhibit 11

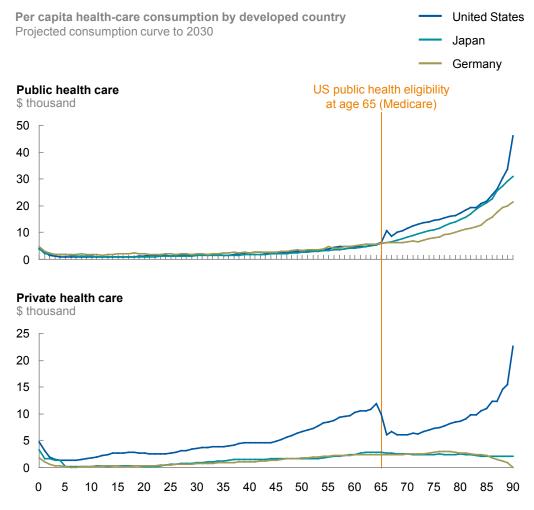
The 60-plus age segment will account for nearly 60 percent of consumption growth in Western Europe and Northeast Asia



The age of consumers is an important factor because spending patterns and priorities among the elderly are different from those of younger people. The high per capita spending of the developed retiring and elderly is almost entirely driven by health care—publicly funded health care in Europe and Northeast Asia, and a significant portion of additional private health spending in the United States (Exhibit 12). Predictably, these consumers spend significantly more on health care than any other age group, and this expenditure rises sharply after the age of 85. In developed countries, a 30-year-old consumes \$3,000 per year of health care on average, compared with a 60-year-old who consumes \$8,200 and a 90-year-old who consumes \$35,000.

Exhibit 12

In developed countries, public-health expenditure rises past the age of 65; in the United States, spending on private health care also increases



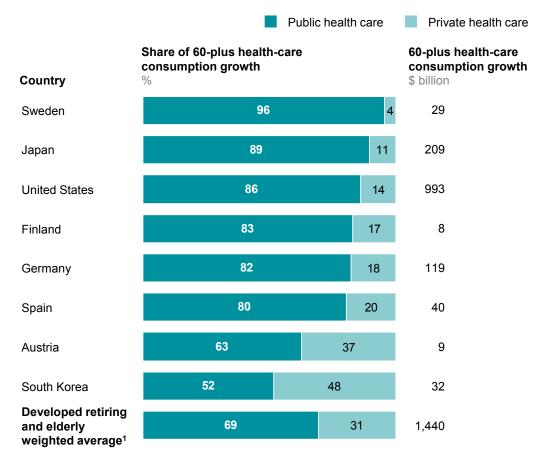
SOURCE: McKinsey Global Institute Cityscope; National Transfer Accounts Project; McKinsey Global Institute analysis

In the United States, the share of household spending devoted to health care by individuals aged 75 and older is more than double that of the 45-to-54 age group. In the United Kingdom and Germany, private health care is increasing as a share of household spending although absolute spending plateaus past the age of 60. People in the 75-plus age group in the United States spent 16 percent of their total spending on health care in 2013—double the 8 percent spent by this cohort in Germany and eight times the 2 percent spent by this cohort in the United Kingdom.

While it is natural that health spending rises with age, the sharpness of the increase is notable. Health-care spending by those over 60 is projected to grow by \$1.4 trillion in the period to 2030. Of that, 70 percent—more than \$1 trillion—will be funded through public health care (Exhibit 13).

Exhibit 13

Nearly 70 percent of 60-plus health-care consumption growth will be publicly funded, raising questions about affordability



¹ The developed retiring and elderly weighted average includes only those countries shown; it excludes Canada and several Western European countries such as Italy and the United Kingdom.
NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

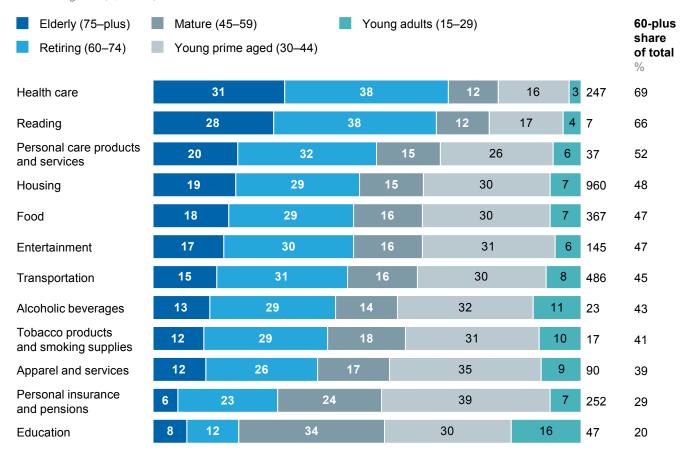
Health-care companies have focused on the elderly because they spend significantly more on this category than younger consumers. However, the 60-plus age group spends significantly on other categories, too. In the United States, for example, health care accounts for one-fifth of household spending; another one-fifth is spent on food, personal care, and entertainment; and one-third is spent on housing. Many companies that have not traditionally tailored their products, channels, and services to the needs of the elderly should consider whether this is now a strategic direction they should take. Between 2015 and 2030, the 60-plus age group is set to contribute 40 percent or more of US consumption growth in categories ranging from personal care and housing to transportation, entertainment, and food and alcoholic beverages (Exhibit 14).

Beyond their rising numbers, the other important factor to consider is the disposable income or purchasing power of older consumers, as the income and wealth of consumers affect their ability and willingness to spend and influence the kinds of products and services they devote their income to.

Exhibit 14

Retiring and elderly consumers in developed countries contribute more than 40 percent of consumption growth in a broad range of goods and services

Aggregate US household consumption growth by head of household age, 2015–30 % of total growth; \$ billion, constant 2013



NOTE: The household consumption data in this chart only include direct household expenditure and not public expenditure on health care and education. Numbers may not sum due to rounding.

SOURCE: BLS Consumer Expenditure Survey, 2013; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Today, those aged 60-plus—predominantly what MGI defines as the "silent generation" born before 1939 and early baby boomers born between 1940 and 1954—have relatively secure retirement savings.³⁷ The existence of social security and prevalence of defined benefit pension plans have reduced poverty among the elderly over the past half century. In the United States, the poverty rate of those over 65 years of age halved in just 14 years, from 35 percent in 1959 to 16 percent in 1973. Inequality among the elderly also declined in the United States from the mid-20th century until around 1985 (Exhibit 15).

However, the baby-boomer generation that is retiring by 2030 has been the largest consuming cohort in history and has saved relatively little.³⁸ Moreover, this is the first generation that has been primarily responsible for its own savings for retirement. In

We define early baby boomers as those born between 1940 and 1954, and late baby boomers as those born between 1955 and 1969. This differs from the US Census Bureau definition of baby boomers, which is those born from 1946 to 1964. Given the global scope of our work, we use a wider definition of baby boomers to ensure that each generation is a comparable 15-year cohort. See the technical appendix for more detail.

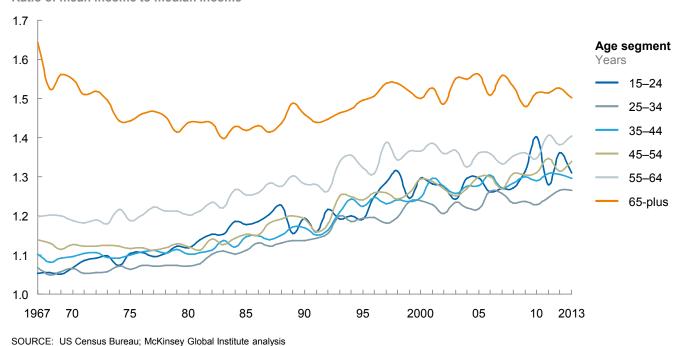
For more on the retirement readiness among US baby boomers, see *Talkin' 'bout my generation: The economic impact of aging US baby boomers*, McKinsey Global Institute, June 2008. The research found that two-thirds of baby boomers were unprepared for retirement even before the economic downturn that has further eroded the wealth and savings of many households.

combination, this means that many boomers are not financially prepared for a comfortable retirement. Many of them face a choice—delay retirement or scale back their spending in order to make ends meet and make savings last.

Exhibit 15

Income inequality in the United States has always been higher among those aged 65-plus, but has increased further since the early 1980s

Ratio of mean income to median income



In 2030, we expect to observe a wider variation in purchasing power among the elderly than we see today. Insufficient retirement readiness limits the per capita consumption of the 60-plus age group and exacerbates already evident income inequality among people of this age group. There is evidence that income inequality produces consumption inequality. In the United States, one study showed that the two moved closely in tandem between 1980 and 2007. ³⁹

The distribution of accumulated wealth also suggests widely varying retirement readiness. In the United Kingdom, 40 percent of the retiring and elderly have a net worth of less than £250,000 (\$352,000), while nearly 25 percent have a net worth above £600,000 (\$844,000). Wealth dispersion is high also in the United States where 36 percent of the retiring and elderly have a net worth of less than \$100,000 and 21 percent have a net worth of more than \$500,000.40

McKinsey's 2016 Global Sentiment Survey conducted in 2015 found that economic sentiment among consumers aged 55 to 74 is weaker in Japan than in China, the United States and Canada, and Western Europe. More than 80 percent of Japanese respondents in this age bracket said that they were either "making ends meet but having to make

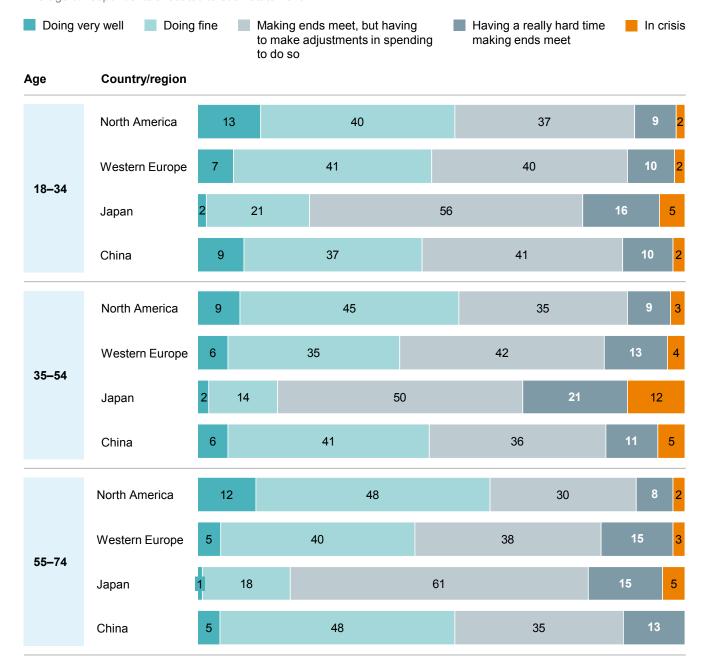
Mark A. Aguiar and Mark Bils, Has consumption inequality mirrored income inequality? NBER working paper 16807, February 2011.

⁴⁰ Office for National Statistics, United Kingdom; US Census Bureau.

Exhibit 16

Economic sentiment is weakest in Japan

Q10. How would you describe your current overall economic situation? Average % respondents allocated to each statement



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Sentiment Survey 2015; McKinsey Global Institute analysis

⁴¹ McKinsey 2016 Global Sentiment Survey. The survey was conducted in September 2015, covering 22,500 consumers in 26 countries. The sample was weighted for age, income, and socioeconomic status. Country results were weighted to the census for age, and to the panel for income and socioeconomic status. The survey was conducted online, and therefore results are weighted toward younger, more affluent urban consumers.

Increasing inequality in incomes and variations in how financially ready individuals are for retirement means that products and services targeting the middle segments of the 60-plus market will meet the needs of a smaller share of people. There will be a greater bifurcation of needs, in particular for financial services. High-wealth elderly consumers will tend not to need annuities given they are unlikely to outlive their savings; that group will likely demand estate and legacy planning. Low-wealth elderly consumers may need to monetize their homes to boost their incomes, by downsizing, renting out rooms, or deploying financial products. For example, reverse mortgages can allow the elderly to borrow against the value of their homes to receive monthly payments for life. Home reversion schemes allow homeowners to sell their homes in exchange for monthly income and use of the home for their lifetime. Hybrid plans, such as those offered by San Francisco-based REX Agreement, allow homeowners to sell a share of their home equity. In addition to traditional financial services, the sharing economy may enable the elderly to monetize more than just their homes; assets such as cars, garages, and equipment may provide additional income streams.

CHARACTERISTICS: THE 60-PLUS AGE GROUP IS INCREASINGLY ETHNICALLY DIVERSE AND EDUCATED

This group of consumers aged 60 and over is becoming increasingly ethnically diverse in Western Europe and North America. In England and Wales, the non-white share of the 60-plus age group increased from 1.6 percent in 1991 to 3.3 percent in 2001 and 4.7 percent in 2011. In the United States, the non-white share of this age group increased from 13 percent in 2000 to 16 percent in 2014. This trend will continue. The US Census Bureau estimates that the white non-Hispanic share of the 65-plus population will decline from 79 percent in 2012 to 61 percent in 2050. The Hispanic share of this age group is expected to increase more than 2.5 times, from 7 percent in 2012 to 18 percent in 2050.

Increasing ethnic diversity has implications for certain consumption categories. For instance, increasing ethnic diversity among those aged 60 and older is already transforming the housing market in the United States. Demand for multigenerational housing is increasing. This type of housing is expected to account for one-fifth of growth in US housing demand in the 65-plus age group. Demand for such housing is stronger in cities such as Houston, Texas, which has a fast-growing and ethnically diverse elderly population. Social attitudes reflect this trend. The General Social Survey of 2014 found that 55 percent of respondents said that multigenerational housing was a good idea compared with only 33 percent who said that in 1973.⁴⁴

Across developed regions, educational attainment has increased over the past 60 years. For instance, in Japan only 7 percent of the 60-to-64 age group in 1950 had received a secondary education; in 2010, that share had increased to 83 percent. Similarly, in Germany the share rose from 12 percent in 1950 to 96 percent in 2010. The patterns are similar across developed countries for tertiary education as well. In the United States, the share of the 60-to-64 segment with some tertiary education was 10 percent in 1950, rising to 60 percent in 2010.⁴⁵

Cities in developed regions will increasingly age. Cities in Europe and Japan have the highest share of the over-60s today, but North American cities will age quickly between now and 2030 (Exhibit 17). Today, aging North American cities are concentrated in eastern states and in Florida, while cities in the southern states and Southern California will remain youthful.

In 2010,

96%
of Germans aged
60-64 had received
a secondary
education, vs.

12% in 1950

⁴² Office for National Statistics, United Kingdom.

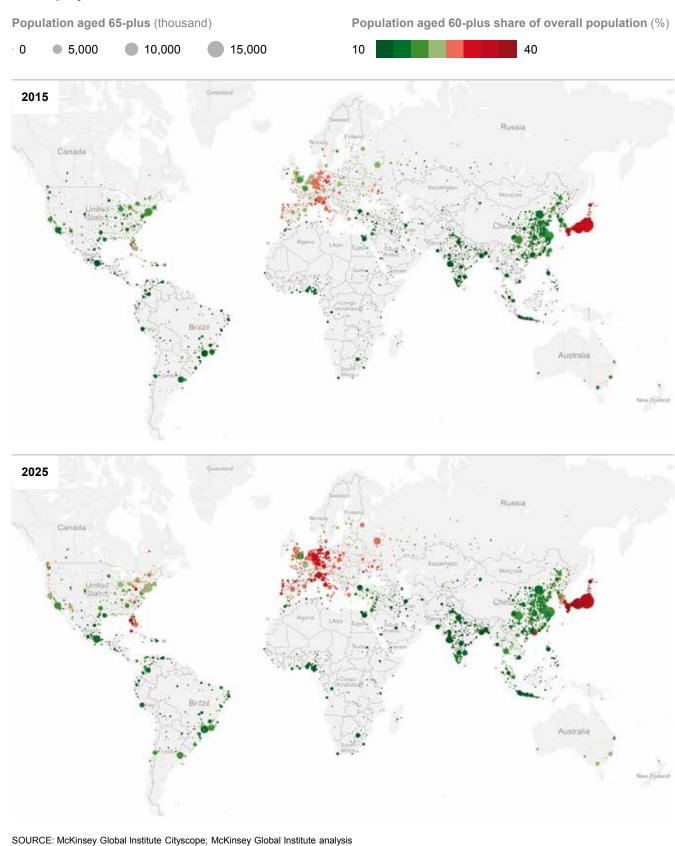
⁴³ US Census Bureau.

⁴⁴ The General Social Survey is published by NORC (formerly National Opinion Research Center) at the University of Chicago.

Robert J. Barro and Jong-Wha Lee, "A new data set of educational attainment in the world, 1950–2010," Journal of Development Economics, volume 104, September 2013.

Exhibit 17

Japan's cities are already aged and those of Europe are close behind, while the eastern US cities will age more rapidly than western ones



One of the major challenges facing Japan is that its population is relatively static compared with other developed economies where people are more mobile and move in search of economic opportunity or better quality of life. In Japan, the older generation is staying put, and some of Japan's cities have the oldest demographic profile of any urban space in the world. Its migration rate is 1.0 per 1,000 citizens on average, significantly less than 4.1 per 1,000 in Western Europe and 4.3 per 1,000 in United States. Japan has 29 cities—31 percent of the total—whose populations declined from 2000 to 2013. They are experiencing significant outward migration as people of working age seek economic opportunities elsewhere. As these cities' populations shrink and age, they become less attractive to young people, risking a downward demographic spiral. The Japan Policy Council expects that some cities, including Akita, Aomori, and Hakodate, could experience a further 50 to 60 percent decline in the number of women of childbearing age between 2010 and 2040.

Nearly

65%
of US baby
boomers plan to
work past the age
of 65

LIFE STAGES: KEY WORKING AND LIVING CHOICES BY THE DEVELOPED RETIRED AND ELDERLY CAN SIGNIFICANTLY INFLUENCE CONSUMPTION

There are several important life-stage changes facing individuals after they turn 60. Some of these are choices that individuals can make, including whether, and when, to retire, or whether to venture into another job or volunteer career. Other changes may be less predictable and under their control, including a spouse dying or divorce, or whether, or when, they may need assisted living. All of these changes directly affect consumption.

Average retirement ages in developed economies steadily declined from 68 years in 1970 to 63 years in 2004. However, this trend then came to an end and slowly started to reverse. By 2012, the average retirement age increased to 64. This reflects changes in legal retirement ages (which were declining at the turn of the millennium but have since started to inch up), and also higher "effective" retirement ages—when people actually stop working. This trend is likely to continue both out of necessity and choice. Many boomers are likely to delay retirement to shore up savings and put off the day when they start drawing social security benefits in the hope of ensuring they have sufficient purchasing power in retirement. In the United States, nearly 65 percent of baby boomers plan to work past the age of 65; of those, 62 percent are continuing to work to maintain income or health benefits and the rest because they enjoy work.

The age at which people retires matters for consumption because when people stop working and earning, spending and time-use patterns change. Spending that we might link to employment, including clothing, transport, and time-saving services, tends to decrease, while spending on leisure categories such as reading or personal travel tends to increase. Time spent commuting and working is instead spent volunteering and engaging in leisure activities. Retirees tend to be generally less willing to pay for convenience and may value the experience of shopping or service more than younger consumers. In the United States, they spend about one-quarter more time shopping than younger consumers on every dollar they spend.⁴⁹

Despite the trend of people working longer, there is still a very large number of retirees with time on their hands, with significant implications for certain consumption categories. Daily

⁴⁶ OECD statistics.

⁴⁷ Regulation has a direct impact on retirement ages. For a global summary, see Courtney Coile, Kevin S. Milligan, and David A. Wise, Social security and retirement programs around the world: The capacity to work at older ages — Introduction and summary, NBER working paper number 21939, January 2016. This theme has also been explored by MGI. See, for instance, Talkin' 'bout my generation: The economic impact of aging US baby boomers, McKinsey Global Institute, June 2008, and Global growth: Can productivity save the day in an aging world? McKinsey Global Institute, January 2015.

⁴⁸ Catherine Collinson, *Baby boomer workers are revolutionizing retirement: Are they and their employers ready?* Transamerica Center for Retirement Studies, December 2014.

⁴⁹ American Time Use Survey, US Bureau of Labor Statistics.

time spent on leisure and sport each day in the United States is expected to increase by 210 million hours by 2030, and the 65-plus age group will account for 195 million of those hours, the equivalent of 24 million full-time jobs.

The rate of divorce is another life-stage element with implications for consumption. The number of divorced individuals who are aged 60 and older will naturally rise because so many baby boomers had already divorced before retirement age. Across the OECD group of developed economies, divorce rates doubled from 1970 to 1995; since 1995, the OECD average divorce rate has remained high, with the trend continuing in half of the 28 countries in the sample and reversing in the other half. Similarly, US Census Bureau statistics show that the percentage of women aged between 60 and 69 who are divorced increased from 27 percent in 1996 to nearly 37 percent in 2009. The share of women aged over 70 who are divorced rose from 18 percent to 22 percent over that period.

More single people living alone increases demand for housing among this age group. Demand for alternative living arrangements such as cohabitation and group living is likely to increase. The higher rate of 60-plus divorced individuals also means that wealth is divided among a greater number of households. In these circumstances, spending on housing, food, and transport is likely to increase, and discretionary expenditure is likely to decline. For instance, elderly individuals living alone in the United States dedicate 40 percent of spending to housing, significantly higher than the 32 percent share their coupled counterparts spend. ⁵⁰ It may also be that the over-60s may have to provide housing for their adult children, who tend to live with their parents for longer. This may limit parents' ability to move into smaller homes, thereby reducing their geographic mobility and increasing their consumption of housing-related expenses. And it may increase spending on food, depending on family arrangements.

BEHAVIORAL PREFERENCES: THE ELDERLY OF TOMORROW ARE LIKELY TO BEHAVE VERY DIFFERENTLY FROM THEIR COUNTERPARTS IN THE PAST

Many commentators discuss the attitudes and buying behavior of the millennials or Generation X; less attention has been paid to the way the older generation thinks. Yet the developed retiring and elderly of the large cohorts today are really quite different from people of earlier cohorts at a similar age.

One report finds that close to 42 percent of mature adults in the United States say they have a keen sense of adventure, and nearly 40 percent say they vacation in a different place every time they take time off.⁵¹ Another reported that, in 2009, grandparents in the United States spent more than \$77 billion on travel, over \$100 billion a year on entertainment including sporting events and concerts, and more than \$97 billion on restaurants.⁵²

Most of the baby-boomer generation is used to being mobile and, for many, the choice of a vehicle is a way of self-expression. People over 50 bought over 60 percent of the new cars sold in the United States in 2010, up from less than 40 percent in 2001, according to one study. ⁵³ Drivers over the age of 65 are projected to rise sharply after 2010, and to double to more than 70 million by 2030. ⁵⁴ Half of all Americans riding Harley-Davidson motorcycles are baby boomers. ⁵⁵ Significant segments of baby boomers are not content to accept the

⁵⁰ US Bureau of Labor Statistics, Consumer Expenditure Survey, 2013.

⁵¹ See, for example, The mature market: Consumer trends and US retail markets, Market Research.com, March 2007.

⁵² Peter Francese, *The grandparent economy: A study of the population, spending habits and economic impact of grandparents in the United States, Grandparents.*com, April 20, 2009.

 $^{^{\}rm 53}~$ AARP Media sales with J. D. Power and Associates.

Alan E. Pisarski, Commuting in America III: The third national report on commuting patterns and trends, Transportation Research Board of the National Academies, 2006.

⁵⁵ The BOOMer report 2015, Sabi, May 2015.

mundane—they want "more professional, premium, or sassier versions" of goods and services.⁵⁶

27%
penetration of smartphones among US 65-plus vs.

79% among 30- to 49-year-olds

Lifestyle and housing preferences are also changing among baby boomers and the elderly. These individuals increasingly want to grow old in their own homes—age in place—and remain independent for as long as possible. This means rising demand for refurbishment of houses. According to one study by the AARP Public Policy Institute, 87 percent of respondents surveyed aged 65 or older wanted to stay in their own homes and communities, as do 71 percent of those aged 50 to 64.57 The elderly are also concerned with convenient access to health-care facilities and shopping in the United States; 40 percent of respondents over the age of 69 cited these as factors when purchasing a home, significantly more than their counterparts under the age of 35.58

Yet the evidence suggests that the housing stock is not fit-for-purpose for an aging population that increasingly wants to age in place.⁵⁹ This is driving a wave of spending on home improvements to equip houses with the features needed as people age. The share of remodeling projects undertaken by older householders has risen sharply. A decade ago, those aged 55 or over accounted for less than one-third of all US spending on home improvement. By 2011, this share was more than 45 percent.⁶⁰

However, age-related health conditions impair the ability of many elderly people to live unassisted. This adds to rising demand for tools and services to help the elderly with age-related mobility and living issues ranging from in-home health-care services, leveraging technology to increase mobility, social connectivity, confidence, companionship, and compliance with medication regimes. The demand for such services will be particularly acute in cities with large elderly populations. Tokyo is likely to have more than 600,000 dementia patients in 2025, an increase of about 150,000 from 2012. Cities with fast-growing elderly populations such as Calgary, Alberta, Canada, will experience the incidence of dementia rising more than 2.5 times from 2012 to 2025.

The elderly population of 2030 will be more technologically savvy than today's elderly. For instance, the penetration of smartphones among those aged 65-plus in the United States is only about 27 percent compared with 79 percent among 30- to 49-year-olds. ⁶² As these younger consumers age and become the next generation of retiring and elderly, they will be quite comfortable with technology and will be likely to continue to use it at the same rate as younger consumers.

Digital technologies are increasingly being used to help the elderly remain independent and healthy and meet their desire to age in place. One example is Lively, a system of activity sensors that detects abnormalities in seniors' routines and alerts caregivers if help is needed. Another example, developed by Independa, a US startup, is a smart TV that supports video chats, emails, and photos. A virtual assistant called Angela appears on

⁵⁶ US baby boomer attitudes and opportunities: At home, at work and on the road, Packaged Facts, June 2008.

⁵⁷ Rodney Harrell, Jana Lynott, and Shannon Guzman, What is livable? Community preferences of older adults, AARP Public Policy Institute, April 2014.

⁵⁸ Home buyer and seller generational trends, National Association of Realtors, March 2015.

Five universal design features are agreed to make homes safer for older residents: no-step entries; single-floor living, eliminating the need to use stairs; switches and outlets accessible at any height; extra-wide hallways and doors to accommodate walkers and wheelchairs; and lever-style door and faucet handles. Yet, according to Harvard's Joint Center for Housing Studies, only 57 percent of existing homes have more than one of these features. See *The US housing stock: Ready for renewal*, Joint Center for Housing Studies of Harvard University, 2013.

 $^{^{60}}$ The US housing stock: Ready for renewal, Joint Center for Housing Studies of Harvard University, 2013.

⁶¹ MGI estimates are based on 5 to 7 percent age-standardized prevalence of dementia among those aged 60 or above in most regions of the world from Martin Prince et al., "The global prevalence of dementia: A systematic review and metaanalysis," *Alzheimer's & Dementia*, volume 9, issue 1, January 2013.

 $^{^{\}rm 62}~$ U.S. smartphone use in 2015, Pew Research Center, April 1, 2015.

screen to remind the viewer to take his or her medication. WalkJoy, a device that straps on below the knee, helps those who have lost feeling in their legs maintain balance by sending an electric pulse to the brain when a foot strikes the ground. ActiveProtective Technologies is designing a waist belt with a built-in air bag to guard against hip fractures and other injuries from falls. Another challenge to unassisted living for seniors is the loss of their ability to drive. Ride-sharing companies are working on creating more mobility options for elderly customers. Uber Access, for example, offers rides with wheelchair assistance. Uber is also piloting programs with free technology tutorials and free rides at certain senior centers and retirement communities. ⁶³

Technology is also being used to try to provide companionship for the elderly. Japan allocated \$21.3 million in its 2013 budget to develop robots to help with care for its aging population. Paro, a robotic baby harp seal developed by Japan's National Institute of Advanced Industrial Science and Technology (AIST) functions as "pet" therapy for people with dementia or depression. Embedded with sensors, the robot reacts to petting, responds to simple words, and can modify its responses based on the way the person touches or talks to it. An AIST study found that users developed emotional companionship with Paro that can improve brain function. ⁶⁴

Many consumers in the 60-plus age group have a taste for good design and personalized style, which Los Angeles-based Sabi Company has tapped into with an ergonomic pill organizer that retails at \$30, well above the \$5 average price of the top five best-selling pill dispensers sold on Amazon.com. Sabi's walking canes, available in an array of bright colors, are more examples of reinventing the ordinary for the design-conscious older consumer. Oxo, a manufacturer of kitchen utensils and housewares, originally came up with its Good Grips product range to help people with arthritis, but the product has been a major hit with younger consumers, too.

Outside developed regions, the one retiring and elderly segment among the consumers to watch is the 215 million people in China aged 60 and older. To give just one example, there is a major shortage of appropriate housing and residential care facilities for the estimated 37 million Chinese aged 60-plus who have disabilities and the 100 million who suffer from chronic conditions. ⁶⁵ Half of these people live alone with younger people migrating to cities for work. Current facilities tend to focus on housing rather than services, which makes families reluctant to use them. There is clearly a large opportunity to introduce services such as rehabilitation as assisted-living complexes do in developed economies.

•••

In the most telling illustration of how the aging world is affecting global consumption, in developed regions the 60-plus age group will account for half of all urban consumption growth between 2015 and 2030. In some ways the consumption habits of this group will mirror patterns of previous generations, notably in their increased health-care spending. In other ways, however, they are poised to defy stereotypes regarding elderly consumers—they will use technology at rates closer to those of younger generations, seek more active lifestyles and vacations, and show a willingness to spend on good design and higher-cost items when their savings can support it. As such, this is a group of consumers that few consumer-facing companies can afford to ignore.

⁶³ Kate Donahue, *UberACESS; Expanding transportation options*, UBER newsroom, October 28, 2014.

Paro found to improve brain function in patients with cognition disorders, National Institute of Advanced Industrial Science and Technology, press release, September 15, 2005.

Yuhan Wu and Junwu Dang, China report of the development on aging cause, Social Sciences Academic Press, 2013.



The second group of key consumers to watch is China's working population aged 15 to 59, a group of people who by 2030 will have lived their entire lives in post-reform China. Their numbers are set to grow by one-fifth—an additional 100 million people—between 2015 and 2030, but it is an expected more than doubling of per capita consumption that will be the main engine of growth as incomes soar. By 2030, this group will spend around 12 cents of every \$1 of worldwide urban consumption. As such, it has the potential to reshape global consumption just as members of the Western baby-boomer generation—the richest generation in history—did in their prime years.

This generation of consumers in China is more prosperous, more educated, and more willing to spend a higher share of their income than previous generations were at the same age. Spending on personal products, dining out, recreation, and education among the wealthier members of this group already accounts for more than one-quarter of their consumption. They are also more optimistic about their financial future than previous generations, a testament to rising incomes. These consumers are now reaching income thresholds at which spending on services takes off rapidly. One distinct category of spending for this group is education as the current generation invests in the next. In their use of technology, urban consumers of working age in China are very much children of the digital age. They are not just adopting the Internet but are helping to shape its use by, for example, crowdsourcing product design ideas for Chinese companies. 66

CORE DRIVERS: THIS GROUP WILL EXPAND BY ONE-FIFTH IN 15 YEARS, AND ITS PER CAPITA SPENDING IS EXPECTED TO MORE THAN DOUBLE

Today, China's urban working-age group numbers 521 million, but this will rise to 628 million by 2030, an increase of 20 percent in just 15 years. The consumption of this group is expected to increase from \$2.5 trillion in 2015 to \$6.7 trillion in 2030, contributing 18 percent of total urban consumption growth over this period.

20% rise in number of Chinese workingage consumers 2015–30

One of the key drivers for this consumption growth is the large number of Chinese households entering the middle class. China's working-age individuals today have higher disposable incomes than their parents have. Twenty-one percent of China's retiring and elderly (60-plus) households were "poor" in 2012, but only 9 percent of working-age individuals fell into this category in that year. Furthermore, the share of Chinese of working age that belongs to comfortable middle-class households is also expected to rise. The total number of Chinese urban working-age households in this category, with monthly earnings of \$2,100 or more, is expected to soar from 4 percent in 2010 to 54 percent by 2030.⁶⁷

Reflecting their rising incomes, the consumption by individuals of working age in China is fueled by rapidly rising per capita spending. Between 2000 and 2030, the per capita consumption of urban working-age Chinese is expected to grow at a compound annual growth rate of 5.4 percent. The group's average per capita consumption is expected to more than double, from \$4,800 to \$10,700 per person annually.

Higher disposable income and a willingness to spend are fueling spending by China's working-age group (Exhibit 18). Compared with China's retiring and elderly population, this group spends more on categories beyond basic necessities such as personal products, recreation, and dining out. The share of household spending on these categories increases

⁶⁶ For another view of changing Chinese consumption, see Daniel Zipser, Yougang Chen, and Fang Gong, *Here comes the modern Chinese consumer,* McKinsey & Company, March 2016.

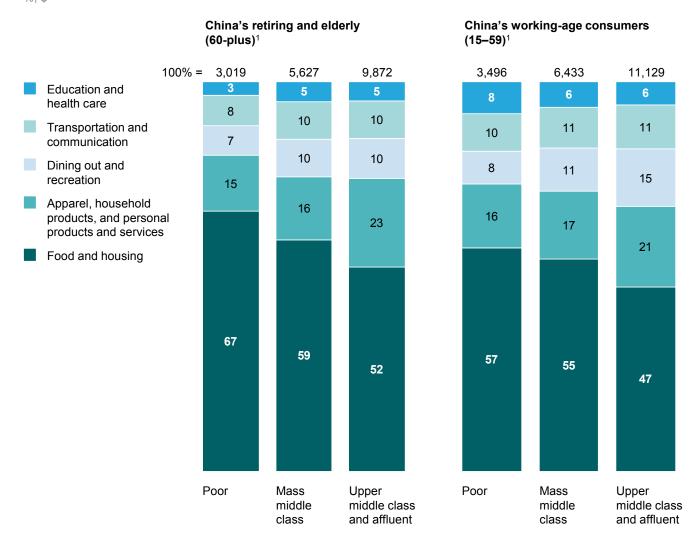
To differentiate among Chinese households on the basis of their income levels, we use poor, mass middle class, upper middle class, and affluent segments. By 2030, around 46 percent of Chinese urban households will move out of the mass middle class into the upper middle class and affluent groups. Using figures from 2012, poor households have monthly incomes of less than 3,333 renminbi, or \$520; mass middle-class households, between 3,334 and 13,490 renminbi (\$520 to \$2,100); upper-middle-class households, between 13,500 and 19,999 renminbi (\$2,100 to \$3,100); and affluent households, more than 20,000 renminbi, or \$3,100.

with income, and Chinese working-age households in the top income brackets (upper middle class and affluent) devote more than one-fifth of their household spending to these categories. In lower-income brackets (mass), the younger consumers (those aged 15 to 30) spend a higher share of their household income on these categories than those of working age (31 to 59)—18 percent compared with 15 percent. Furthermore, as more Chinese working-age households enter upper middle class and affluent income brackets, annual per household spending on personal products is set to more than double, from around \$300 per household to about \$770. Similarly, annual per household spending on dining out is set to more than double, resulting in an additional \$720 spent per household. Annual household spending on recreation is also set to more than double, resulting in an additional \$200 spent per household each year.

Exhibit 18

China's working-age consumers devote more income to spending beyond basic necessities than previous generations, prioritizing education

Annual household consumption and share by category and income level, 2012 %; \$



¹ Age range included in the survey = 18–65.

NOTE: The household consumption data in this chart only includes direct household expenditure and not public expenditure on health care and education. Numbers may not sum due to rounding.

SOURCE: McKinsey Insights China—Annual Consumer Studies (2012); McKinsey Global Institute analysis

Spending on foreign travel is rising, too. According to the China Outbound Tourism Research Institute, an additional 100 million Chinese are expected to travel abroad by 2020. 68 Europe benefits from the spending power of increasing numbers of Chinese tourists. Switzerland, for instance, attracted 58 Chinese visitors for every 1,000 Swiss citizens in 2011. 69

These Chinese individuals of working age are more optimistic about their financial future, and they are more willing than previous generations to spend a greater share of their disposable income. In 2012, McKinsey's 2005–12 Annual Chinese Consumer Survey found that 61 percent of China's working-age group believed that their household income would increase significantly over the next five years compared with 50 percent of older consumers who felt the same way. Fifty-two percent of individuals of working age in China said that borrowing was always risky and that they should live within their means, compared with 58 percent of older consumers.

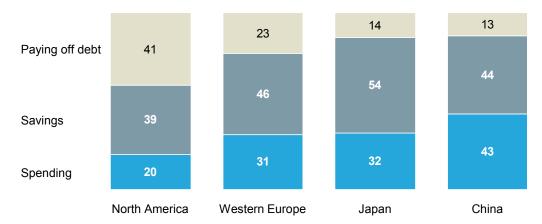
The McKinsey 2016 Global Sentiment Survey found that China's working-age population showed the highest propensity to spend additional income of any of their peers in other regions (Exhibit 19). Chinese urban consumers in every age bracket are more willing to spend additional income (instead of saving it or using it to pay off debt) than their counterparts in Japan, Western Europe, and North America. Given that China's working-age population is poised for income growth, this is indicative of higher consumption and spending among these consumers and lends further credence to a parallel generational shift to baby boomers in the West.

Exhibit 19

Consumers in China say they would prioritize spending additional income; those in North America say they would pay off debt

If you earned 10% more in the next 12 months, what would you put it toward? Age 18–54

Average % respondents allocated to each statement



SOURCE: McKinsey Global Sentiment Survey 2015; McKinsey Global Institute analysis

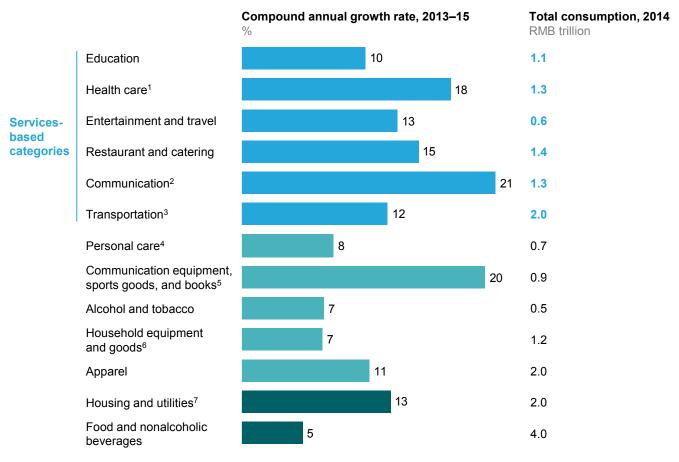
⁶⁸ Chinese outbound travel a multi-decade growth trend, Credit Lyonnais Securities Asia, 2015.

⁶⁹ A window of opportunity for Europe, McKinsey Global Institute, June 2015.

As incomes rise to 2030, we expect to see the consumption of services in China continue to increase. The GDP share of China's services sector already increased from 44 percent in 2010 to 48 percent in 2015, according to the World Bank. The McKinsey Insights China Consumer Survey found that, among urban Chinese consumers, the highest growth in household annual consumption from 2013 to 2015 occurred in services categories. Spending on communications, restaurants, health care, entertainment and travel, and education experienced compound annual growth in double digits (Exhibit 20).

Exhibit 20 The shape of Chinese consumption is evolving as services lead growth

Chinese urban household annual consumption by category



- 1 Health care includes medical device, medicine, and treatment.
- Communications includes instruments, e.g. cell phones, and related services. Transportation includes transportation vehicles and related services.
- Personal care includes jewelry, watches, cosmetics, and haircut services.

 Communication equipment excludes cell phones, but includes magazines, newspapers.
- Household equipment and goods includes furniture, fridges, beddings, etc.
- Housing and utilities includes household management services.

NOTE: The household consumption data in this chart only include direct household expenditure and not public expenditure on health care and education.

SOURCE: McKinsey Insights China, Macroeconomic update, September 2015; McKinsey Global Institute analysis

The first wave of Chinese innovators to address the emerging needs of Chinese consumers were makers of goods such as home appliances, television sets, mobile phones, and personal computers. Innovation meant creating designs that were "good enough"—very low cost, with adequate functionality. Now innovators are addressing the rising expectations of the increasingly affluent Chinese population, coming to market with "cheaper and better" products that are intended to be as good as the models of global brands but still priced for the Chinese market. Xiaomi now sells smartphones that are priced for Chinese consumers but include hardware features that are intended to meet or exceed the quality of components used in phones sold by some foreign companies. As a result, in just four years, Xiaomi has become the largest smartphone player (by shipments) in China with more than a 12 percent share. It is now entering foreign markets.⁷⁰

CHARACTERISTICS: FAMILY STRUCTURE, RISING EDUCATIONAL ATTAINMENT, AND INCREASING URBANIZATION RATE ALL INFLUENCE SPENDING

China's one-child policy has had a significant effect on traditional family structures, leading to a shortage of younger relatives to take care of a rising number of old people. The old age dependency ratio (ratio of population aged 65 plus per 100 population aged 15 to 64) in China is set to increase from 13.0 in 2015 to 25.3 in 2030.⁷¹ One study found that an increasing number of Chinese elderly live alone but there has also been a rise in the number of elderly who live close their children who visit them frequently. Many of China's older people also receive financial transfers from their children, especially from those who are living further away.⁷² The responsibility of young people looking after the elderly—in practical and financial terms—is becoming more onerous as longevity increases and the prevalence of age-related diseases rises. The number of people suffering from dementia in China rose from 3.7 million in 1990 to 9.2 million in 2010.⁷³ This means that, as in other countries, there is a growing need for long-term care—an increasing challenge for China's working-age population as well as the government.

China's one-child policy has also had a significant effect on consumption at the other end of the age range. Per capita consumption up to the age of 29, relative to national average, is higher in China than in other countries, partly reflecting the fact that parents of an only child have more resources to devote to that child (Exhibit 21).⁷⁴ Education spending accounts for almost 50 percent of the per capita consumption of the average 20-year-old in China compared with less than 25 percent in the United States. Interestingly, poor households spend a higher share of their private consumption on education than their higher-income peers do.⁷⁵

As recently as 1990, only 3 percent of 20- to 24-year-olds in China had received a tertiary education. By 2010, that share had risen to 12 percent. ⁷⁶ Individuals of working age in China are spending more years in school than their predecessors, leading to high growth in demand for education services, and China's education spending is growing quickly. In the case of 15- to 19-year-olds, the average number of years spent in school is 9.3, compared with 7.0 among older Chinese.

Almost
1/2
of per capita
consumption of
average Chinese
20-year-old goes
to education

⁷⁰ The China effect on global innovation, McKinsey Global Institute, October 2015.

⁷¹ World population prospects: The 2015 revision, UN Population Division.

Xiaoyan Lei et al., Living arrangements of the elderly in China, Rand Labor and Population working paper, July 2011.

⁷³ Kit Yee Chan et al., "Epidemiology of Alzheimer's disease and other forms of dementia in China, 1990–2010: A systematic review and analysis," *The Lancet*, volume 381, number 9882, June 8, 2013.

Yee Ronald Lee and Andrew Mason, Population aging and the generational economy: A global perspective, Edward Elgar, 2011, and the National Transfer Accounts Database.

⁷⁵ McKinsey Insights China 2012.

⁷⁶ Jon-Wha Lee and Hanol Lee, *Human capital in the long run,* Korea University, February 2015.

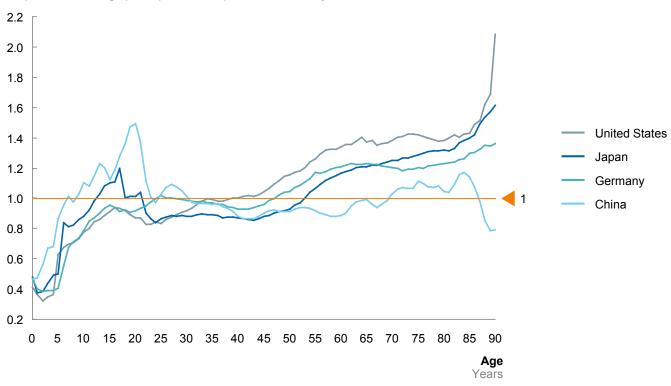
China's urbanization is continuing even while the process is plateauing in many developed economies, bolstering the importance of Chinese individuals of working age as a consumer group to watch. Today, 54 percent of China's working-age population lives in large cities; by 2030, that share is expected to have risen to 72 percent.⁷⁷ In 1990, people living in urban areas contributed 41 percent of China's GDP; in 2010, that contribution had nearly doubled to 80 percent.⁷⁸

Exhibit 21

There are significant differences among countries in per capita consumption profiles by age

Per capita consumption by age

Proportion of average per capita consumption for 30- to 49-year-olds



NOTE: Per capita consumption includes private household spending, public education, and public health care.

SOURCE: McKinsey Global Institute Cityscope; National Transfer Accounts Project; McKinsey Global Institute analysis

To give an idea of the scale of the presence of individuals of working age in China's cities, consider that 18.4 million people in this category live in Shanghai alone and that 16.6 million live in Beijing. Yet the highest shares of these consumers are not in China's largest cities but in Dongguan, Foshan, Guangzhou, Shenzhen, and other manufacturing powerhouses in the south. Manufacturing offers a great many jobs in these cities. In Dongguan and Shenzhen, 87 to 88 percent of the entire urban population in each case is of working age.

LIFE STAGES: WORKING-AGE CONSUMERS IN CHINA ARE SPENDING MORE YEARS IN SCHOOL AND MARRYING AND HAVING CHILDREN LATER

Like North America's working-age population, this group of consumers is marrying and having children later (Exhibit 22). There are both social and economic reasons behind delayed marriage. The fact that Chinese citizens are spending longer in education appears

⁷⁷ MGI Cityscope database.

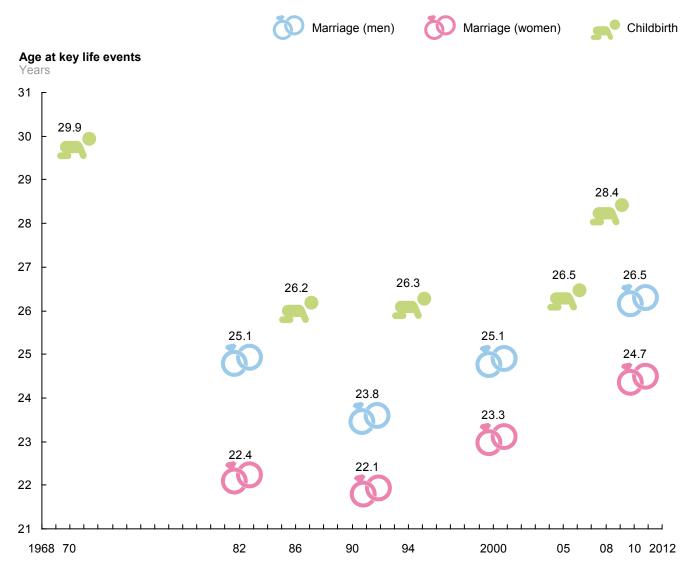
⁷⁸ China National Bureau of Statistics; McKinsey Insights China 2012.

to be one reason: those with a tertiary education are likely to marry later. There is also evidence that the rapid improvement in women's social and economic status has an impact on marriage behavior. The traditional practice in China in which women tend to marry men of higher social status—hypergamy—means that women are waiting for those men to reach a certain level of wealth at which they can meet their consumption aspirations. One research paper said, "We now observe a trend of increases in the age gap between husband and wife so as to allow prospective husbands to accumulate more economic resources than prospective wives of similar education." Another factor associated with later marriage is the soaring cost of housing in cities. An online poll by the Chinese Ministry of Civil Affairs found that 92 percent of women indicated that a stable income is a prerequisite for marriage, and 70 percent indicated that they would enter marriage with a man only if he owned a house.

Exhibit 22

China's working-age population is marrying and having children later than previous generations did

Median age at first marriage and birth of first child



SOURCE: UN Population Division; China National One-per-Thousand-Population Sample Survey on Fertility, 1982; China Annual Population Change Survey (1986, 1994, and 2008); China One-percent Population Sample Survey, 2005; McKinsey Global Institute analysis

World Bank education statistics; China Annual Population Change Survey (1986, 1994, and 2008); China One-percent Population Sample Survey, 2005.

Zheng Mu and Yu Xie, Marital age homogamy in China: A reversal of trend in the reform era? University of Michigan Population Studies Center research report number 11–742, August 2011.

⁸¹ Yu Xie, *Gender and family in contemporary China*, University of Michigan Population Studies Center research report number 13–808, October 2013.

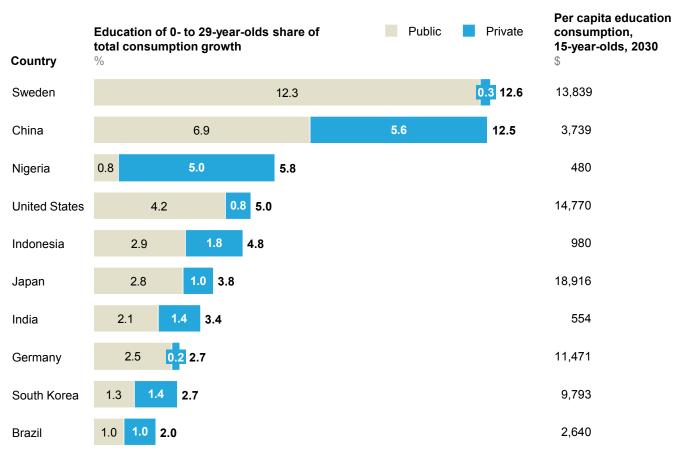
As the number of single consumers rises, the concept of "eating alone" is gaining traction. In response to this trend, many restaurants have increased the number of single seats, so that singles can enjoy dining out without feeling uncomfortable when sitting alone. One example is Xiabu Xiabu, a fast-food hot pot restaurant chain with more than 400 branches in China. Traditionally hot pot was consumed in group gatherings, but Xiabu Xiabu is best known for its "one man hot pot." Its outlets have long bar tables where individuals can dine. 82

BEHAVIORAL PREFERENCES: EDUCATIONAL SPENDING IS A MAJOR PRIORITY, AS ARE BETTER SERVICE AND DIGITAL TECHNOLOGIES

One of the most striking consumption patterns is the very significant share of income that Chinese consumers are spending on education. Between 2015 and 2030, China is expected to spend 12.5 percent of overall consumption growth on education for those under 30—a higher share than in any other country in our sample, save Sweden, the country with the largest share at 12.6 percent. It is notable that both public and private education spend are rising, contributing to growth roughly equally (Exhibit 23 and Box 2, "Investing in China's next generation").

Exhibit 23

Growing spending on education contributes 13 percent to China's consumption growth



NOTE: Numbers may not sum due to rounding.

SOURCE: UN population data set, August 2015; National Transfer Accounts; Oxford Economics; IHS; McKinsey Global Institute analysis

⁸² MGI interviews.

One example of a company catering to this demand is Gymboree, whose trademark Play and Music program is experiencing robust growth in the Chinese market. The company is targeting the middle-class Chinese consumer and is planning to open centers not just in large cities but also in midsize urban centers. It's not only in China that money is being spent on education. Many Chinese families are choosing to send their children abroad for their tertiary-level education. The number of inbound students from Asia into Europe increased to around 300,000 in 2012. With a share of 35 percent of the top 100 universities in the world, Europe is also well positioned to attract Chinese students. The United Kingdom, which boasts some of the most prestigious universities in Europe, attracted more than 76,000 Chinese students in 2012.⁸³

Overall, McKinsey consumer surveys in China show that emotional benefit, personalization, better service and experience, and convenience have become important motivations for younger working-age consumers in China. Here consumers are increasingly motivated by the personal enjoyment of spending their hard-earned cash and are more likely than previous groups to see such consumption as a way of rewarding themselves. On November 11—Singles Day in China and a major nationwide shopping spree—online marketplace Alibaba enjoyed sales of over \$14 billion in 2015, a record for a single day anywhere in the world. People of working age in China want to spend money in stores that offer superior service and a better customer experience: the number of survey respondents in this group reporting such attitudes is 15 percent higher than it is among those of older generations. They are at least one-third more willing than that previous group to spend on leisure and entertainment.

Box 2. Investing in China's next generation

Demand for private education in China, particularly among urban households, is increasing. Private kindergartens outnumber public ones by more than two to one, with chains of hundreds of outlets building strong brands and economies of scale. Indeed, the number of public kindergartens is declining, while private ones are growing at double-digit rates each year. While primary schools are state-dominated, private schools play a larger role at the secondary level. From accounting for less than 3 percent of schools a decade ago, today they account for 10 percent. This holds across junior, senior, and vocational secondary schools and includes about 12,000 schools.¹

Even poor households among China's working-age group are investing heavily in the education of their children. In the 15- to 30-year-old age bracket, poor households are spending 7 percent of their household income on

education compared with 3 percent by mass middleclass households and 1 percent by upper middle class and affluent households. Poor households are financing this heavy investment in their children's education by spending less on categories such as personal care products and dining out.

But education in China is not just for those of school age. More Chinese are getting a tertiary education, and there is higher demand for learning among the elderly. Chinese citizens also show a marked willingness to pay for after-school lessons from math to English to dancing, and for private schooling and tertiary education.² The type of education that the Chinese are willing to pay for is diversifying, too. There is a willingness, for instance, to pay for online classes. Wealthier citizens are even paying a significant amount of money on "lifestyle" classes with the aim of boosting their social status.

⁸³ A window of opportunity for Europe; Detailed analysis, McKinsey Global Institute, June 2015.

⁸⁴ The age group discussed here consists of individuals born after 1971.

⁸⁵ Richard Dobbs, James Manyika, and Jonathan Woetzel, *No ordinary disruption: The four global forces breaking all the trends*, Public Affairs, 2015.

⁸⁶ McKinsey Insights China 2012.

Gordon Orr, "The state of play in China's private education market," McKinsey China, Gordon's View blog, January 11, 2014.

² MGI interviews.

These consumers care about quality and are willing to spend more on branded products that are deemed to signify high quality. The explosive growth in sales of Apple iPhones is just one example of these attitudes at work. Nearly one-third of working-age consumers in China see value in premium brands and are willing to pay more for them—the highest share of any age group in any geography that was included in the McKinsey 2016 Global Sentiment Survey. In contrast, only one-fifth of China's elderly population and only one-fifth of those of working age in North America share this sentiment. More than one-fifth of working-age consumers in China derive personal satisfaction from using premium brands, in line with their peers in North America. Furthermore, nearly 30 percent of these consumers in China are willing to pay more for new or innovative household products compared with 15 percent of their counterparts in North America and Western Europe.

Starbucks has been able to successfully introduce coffee to a nation of tea-drinking consumers by appealing to this group's willingness to try new products and pay for premium brands. Starbucks drinks are priced well above local brands and are considered premium products. Those of working age in China patronize Starbucks locations not just for the coffee but also for the experience of relaxing and socializing in a place outside home. China is now the second-largest market for the company after the United States, and Starbucks has announced that more than half of its new store growth in the next five years will be in the China/Asia Pacific region.⁸⁷

A search for convenience is another priority that is emerging, and it is an important consideration for companies seeking to serve this group of consumers. Nearly 40 percent of this group agrees or strongly agrees with the view that they would be prepared to spend more money if that would save time when buying a product or receiving a service. Among China's working-age consumers, the key driving factors behind their preference to shop for household goods online were time savings and the convenience of ordering whenever it suited them.⁸⁸

1/3
of Chinese
working-age
consumers will
pay more for
premium brands

Digital technologies are a major part of the evolving consumption story of people of working age in China. They truly are children of the digital age, displaying an openness to new technologies and a willingness to adapt to change. The McKinsey Annual Chinese Consumer Survey 2012 found that 81 percent of China's young urban consumers born after 1985 had purchased clothes online in the previous month compared with 65 percent of the older generation. More than 65 percent of working-age consumers in China shopped for household goods online in contrast to less than 30 percent of their peers in North America. Among those working-age Chinese who did shop for household goods online, one-third did so on their smartphones. Fifty-five percent of them said that they were willing to recommend a product, service, or company to their friends or family on Weibo, China's equivalent of Twitter. Forty-two percent of the post-1985 generation said that they had received product information through the Internet. However, it is notable that even these young consumers tend to be somewhat skeptical of digital platforms, especially third-party platforms. They use a variety of channels to research purchases but also value word-of-mouth recommendations as previous generations did.

As an indication of their appetite to experiment and be early adopters, Chinese consumers are willing to buy 1.0 versions of products and give feedback that helps manufacturers (or service providers) refine their offerings. Xiaomi relies on more than one million "fans" who vote online for new smartphone features that then appear in weekly software updates. ⁸⁹ The rapid proliferation of platforms and apps that connect these consumers to services in the physical world will continue to gather pace. Didi Kuaidi, a taxi-hailing service, has expanded

⁸⁷ Company website.

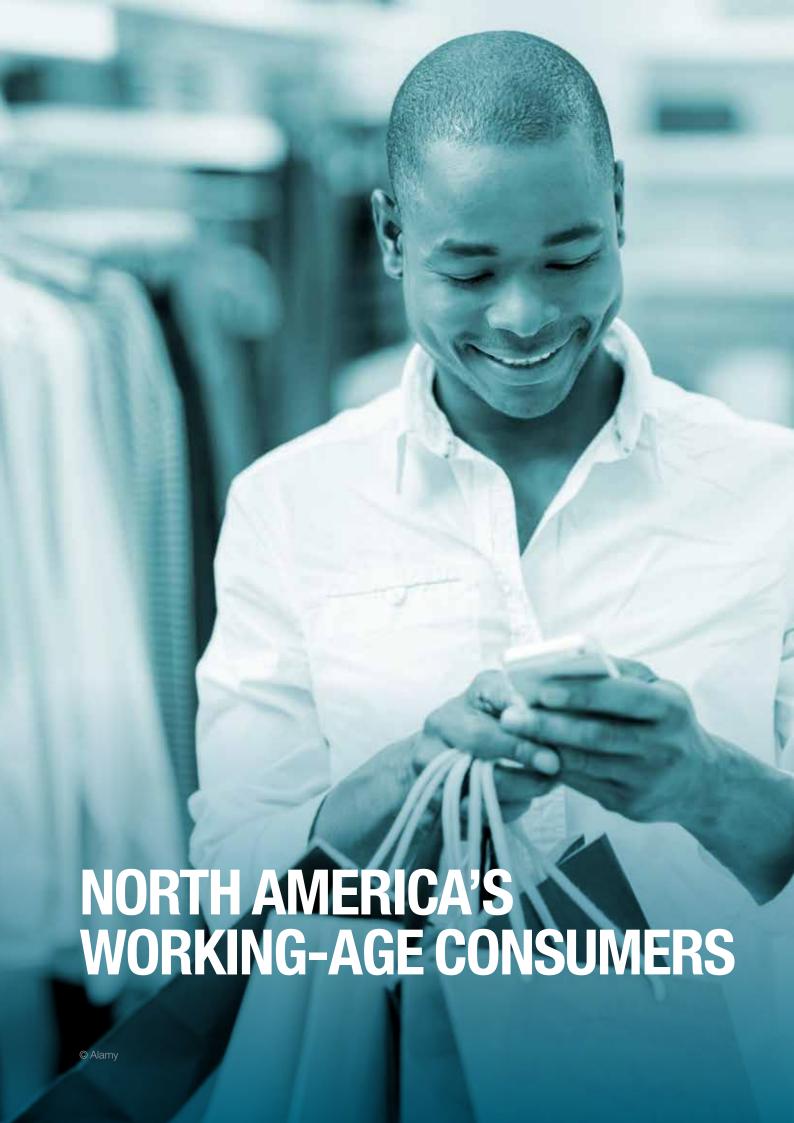
⁸⁸ McKinsey 2016 Global Sentiment Survey.

⁸⁹ The China effect on global innovation, McKinsey Global Institute, October 2015.

its service offerings to enable users to book test drives of new cars and connect with fellow passengers using their LinkedIn profiles. WeChat, a social media platform, now enables users to shop for everything from stickers and games to groceries, to book taxis and flights, and to make mobile payments. The company allows subscribers to set up online stores. The rapid pace of change—and the willingness of these consumers to innovate—makes this segment a market to watch.

•••

China's working-age consumers are poised to define the shape of global consumption in the years to come, just as Western baby boomers did before them. They are enjoying sharp income growth, are confident about their financial future, and—in contrast to generations of Chinese that preceded them—are willing to spend more of their earnings on services, premium brands, and technology. Consumers everywhere are likely to benefit from the innovations developed to meet the demand of China's growing consumer market. Companies that can capture some of the spending firepower of China's working-age consumers will thrive.



The third group of consumers to watch is North America's working-age population, which comprises people aged 15 to 59 in the United States and Canada. This is a large consumer segment whose numbers and per capita consumption are continuing to increase, albeit at more moderate rates than the other two major groups of consumers to watch. By 2030, consumers in this age group will include generation X consumers (born between 1970 and 1985), millennials (born between 1985 and 2000), and digital natives (born after 2000).

This group includes the first generation that risks not doing as well economically as its predecessors. Millennials were hard hit by the 2008 recession. Average income among these consumers is somewhat below the average of the generation immediately before them. Labor-force participation among 16- to 24-year-olds is at a 35-year low, and unemployment is high compared with long-run historical averages. With the rising cost of education, they also have high levels of student debt. All of this adds up to lower average purchasing power and—for many individuals—cost consciousness in decisions, from where they live to how they watch television and to how they consume health care. These individuals are marrying later and becoming parents at older ages than their own parents. They are less likely to own a car or a house, instead being enthusiastic about sharing transport and accommodation through Uber, Airbnb, and other services. These consumers are more likely to trust an online review community than the company selling a product and service. Once they make a purchase, they want it delivered immediately. Companies seeking to serve this segment will need to take all of these disparate elements into account.

CORE DRIVERS: NUMBERS AND PER CAPITA CONSUMPTION ARE GROWING MODERATELY WHILE INCOMES ARE UNDER PRESSURE

This is a large group whose numbers are expected to expand by 7 percent, from 180 million in 2015 to 191 million in 2030. In comparison, the number of people in the developed retiring and elderly category will increase by one-third. The United States is currently home to 91 percent of the group and will account for 94 percent of the projected 12 million increase in population with Canada accounting for the remainder from 2015 to 2030. The per capita consumption of North America's working-age population is projected to increase by 24 percent between 2015 and 2030. While this is far slower than the 123 percent increase projected among those of working age in China, per capita consumption is already high at \$39,000 per year (vs. \$4,800 for China) and is expected to continue to rise at a rate of 1.5 percent per year to 2030. North America's working-age individuals will account for more than 16 percent of global consumption in 2030, ahead of their Chinese and Western European counterparts and second only to the retiring and elderly population in developed regions.

Individuals of working age in North America comprise the largest group measured by share of consumption today. Their size and purchasing power have made it the single largest consumer group in the world in recent decades—and its members' preferences and choices have shaped global consumption. But while the consumption momentum of these consumers remains solid, growth is slowing, and their share of global consumption is expected to decline from 21.2 percent to 16.5 percent. Furthermore, the large cohort of millennials that will be the largest subgroup within the North American working-age population by 2030 has been hit particularly hard by the global recession of 2008 and the slow economic recovery since. ⁹¹ This economic pressure on many of these individuals has had a substantial impact on their consumption compared with earlier cohorts, and the experience of previous generations suggests that this impact may prove durable.

Labor-force participation among North American 16- to 24-year-olds lowest since

1981

There is no consensus on the definition of the millennials cohort. For reasons of data consistency, our definition of millennials aligns with our global 15-year age groups defined by their birth years. Others have used broader definitions that cover people born after 1980, or between 1980 and the mid-2000s. Given the inherent fluidity of cohort definitions, we focus on insights that are based on demonstrated facts relevant to the evolving consumer behavior of the broader working-age population. See the technical appendix for details.

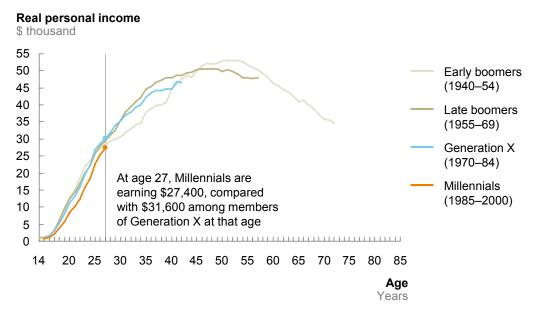
⁹¹ In 2030, millennials will be aged 30 to 44 and represent 36 percent of the 15-to-59 age segment.

The average income of millennials at 27 years of age, for instance, is \$27,400 a year in the United States, which is 9 percent below that of the Generation X cohort born between 1970 and 1984 when they were the same age (Exhibit 24). Rising educational attainment may contribute to the decline as more individuals are in school instead of working: millennials are spending 0.3 more years in postsecondary education on average than their Generation X predecessors. However, average incomes of late boomers and members of Generation X in this age were higher than earlier cohorts' even as they, too, spent more years in postsecondary school, 0.6 and 0.1 years, respectively. ⁹² This suggests that increasing postsecondary educational attainment is unlikely to be the main factor behind decline in average millennials' incomes.

Exhibit 24

Incomes of US millennials are 9 percent lower than those of Generation X at the same stage in their lives

Real personal income by cohort age, 2014



NOTE: See technical appendix for full cohort definitions.

SOURCE: US Census Bureau data; McKinsey Global Institute analysis

Most of the income gains of the past 30 years have gone to older workers. Those in the 65-to-74 age group now earn 1.5 times the 1984 income of this same age group in real terms, while those aged under 25 earn the same as their counterparts in that same year. Incomes for older workers have also grown faster in Canada, where the income gap between older and younger workers has grown wider since the 1980s: the average after-tax income of 50- to 54-year-olds is now 64 percent higher than that of 25- to 29-year-olds, up from 47 percent in the mid-1980s.⁹³

Compounding the economic squeeze is the fact that young North American consumers also have high levels of student debt, reflecting the rising cost of going to college and greater numbers enrolling. In 2000, total student debt in the United States was close to \$100 billion. By 2014, this had increased tenfold to more than \$1 trillion. 94 In the United States, college

⁹² Barro-Lee Educational Attainment Dataset, 2014.

⁹³ Vijay Gill, James Knowles, and David Stewart-Patterson, The bucks stop here: Trends in income inequality between generations, Conference Board of Canada briefing, September 23, 2014.

⁹⁴ Rohit Chopra, *Too big to fail: Student debt hits a trillion,* Consumer Financial Protection Bureau, 2012.

funding per student is between 20 percent and 30 percent below levels in 2008. Even in public institutions, the share of funding coming from student tuition payments has risen 10 percentage points. 95 Home mortgages remain the largest type of debt among this group of consumers, but student debt is now the second largest, replacing auto loans and credit-card debt. 96

40% of North Americans of working age would use additional income to pay off debt The McKinsey 2016 Global Sentiment Survey found that individuals of working age in North America would use additional income to pay off debt rather than spend it and would save less than their counterparts in other regions. Forty percent of those of working age surveyed responded that they would use additional income to pay off debt, and only about a fifth of them said they would spend the additional income. In contrast, nearly a third of those of working age in Western Europe and Japan would spend additional income, and more than 40 percent of working-age individuals in China would spend additional income. The indebtedness of North America's working-age consumers and their focus on paying down debt rather than spending is diminishing their consumption at least in the near term.

Although income inequality tends to be lowest among those aged 24 to 34, the level of inequality is rising. The ratio of mean-to-median income for this age segment has risen from 1.10 in 1985 to 1.25 in 2013. Furthermore, the median net worth of the top 20 percent of young adult households in the United States in 2011 was eight times that of the other 80 percent; in 2000, that multiple was four times. ⁹⁷ Many are finding their incomes squeezed, are grappling with high student debt, and have little savings or financial assets. This constrains their discretionary spending and makes them cost conscious even when purchasing basic goods and services. This bifurcation of economic fortunes within this group means that most companies can no longer count on serving an "average consumer" but need to tailor their products and services to individuals with very different income profiles and therefore very different consumption behavior.

Many working-age consumers in North America display cost consciousness across sectors, reflecting the economic strain under which they find themselves. Their consumption of health care is one example. Part of the changing behavior reflects the fact that younger consumers today face different health-care choices than earlier generations. Consumers can now choose their own health insurance plans through health-care exchanges established by the Patient Protection and Affordable Care Act of 2009. Even though health challenges differ by age, cost is consistently ranked as a more important factor for millennials aged 21 to 32 in the United States compared with older populations. According to PNC Healthcare, 41 percent of millennials are likely to try to ask for cost estimates before treatment begins, compared with 21 percent of baby boomers and 18 percent of seniors. 98 They are also three times as likely as seniors to delay or avoid health-care treatment for cost reasons—54 percent of millennials would delay or avoid treatment compared with 53 percent of Generation X consumers, 37 percent of baby boomers, and 18 percent of seniors.99 The McKinsey Consumer Insights Survey finds that 18-to-34-year-olds in North America are not tied to their physicians and are more than twice as likely as older groups to be willing to switch between them. Compared with seniors, they tend to rely more on retail clinics and acute-care clinics than on primary-care physicians.

Donna M. Desrochers and Steven Hurlburt, Trends in college spending: 2003–2013, Where does the money come from? Where does it go? What does it buy? Delta Cost Project, American Institutes for Research, January 2016.

⁹⁶ 15 economic facts about millennials, White House Council of Economic Advisers, October 2014.

⁹⁷ US Census Bureau, Survey of income and program participation.

⁹⁸ The road ahead in US healthcare: Will patients take the wheel? PNC Healthcare, 2015.

In its report, PNC defines millennials as those aged 21 to 32, Generation X as aged 33 to 49, baby boomers as aged 50 to 71, and seniors as those over 71.

Some companies are catering to this group's appetite for on-demand services and cost-conscious behavior. For instance, CVS is one of many retailers creating retail health clinics that are favored by these young North American consumers. CVS has set up a chain of 980 Minute Clinics in 31 US states targeted at cost-conscious patients who receive prompt consultations, the convenience of SMS alerts, and transparent pricing. Other companies have developed innovative products that use digital tools to provide health-care services quickly and cost-efficiently. One is Alii Healthcare, which provides emergency health consultations using a smartphone app called Bond Intelligent Care. The app has the advantages of location and time flexibility for users and is also transparent on pricing: these consultations have fixed fees and simplified billing. Another example of providing health care digitally is Sherpaa, which provides tele-health e-services to companies for their employees. This service offers cost savings and avoids employees taking time off work; it, too, provides transparent billing.

In housing, novel solutions are also coming to market. In response to the fact that many US millennials are so financially stretched they cannot afford to buy a home, Pardee Homes, a developer in Las Vegas, has come up with a new "modular" home concept. Instead of each unit's being a single home, each room can start as a separate apartment that can be rented out in the short term and then converted into an extra room belonging to the house when the owner can afford it.¹⁰⁰

In financial services, Wealthfront, a Silicon Valley-based financial services startup, targets low-net-worth millennials by providing automated investment services. It has a low \$500 investment minimum, no fees up to \$10,000, and low 0.25 percent fees for amounts of more than \$10,000. The company also taps into millennials' relative mistrust of financial-service providers and their risk aversion by investing algorithmically in a portfolio of index funds and exchange-traded funds, rather than deploying human advisers. In three and a half years, the company's assets under management have grown to more than \$2.6 billion, and its users, more than half of whom are under the age of 35, now number more than 40,000. Toronto-based Wealthsimple brought this "robo-adviser" business model to Canada in 2014 and a year later had 10,000 clients and C\$400 million (\$298 million) under management; its average customer is 29 years old.

Other financial services providers are reacting to income stress due to the weight of student loans. One example is an income-share agreement (ISA) program created by Purdue University and financial services firm Vemo Education. The program funds students' educational expenses in exchange for a share of their income for a fixed number of working years once they have completed their education. This scheme reduces the risk for students of not being able to pay back their student loans. If their incomes are lower than expected, they pay back a lower amount; if their incomes exceed expectations, they can afford to pay back more to the ISA.

It could be that, when the economic environment improves, a certain amount of pent-up demand could be unleashed, and these consumers will adopt the type of behavior typical of previous generations—or at least display more similar patterns than now. However, there are reasons to suggest that consumption patterns and behavior may not entirely revert to those of past generations. One reason is that there is strong evidence that unemployment during the early career years has a negative impact on earnings prospects in the long term—income lost during the recession and its aftermath could lead to permanently lower incomes

¹⁰⁰ Adele Peters, Is this the house that will turn millennials into homeowners? Co.Exist, January 14, 2016.

¹⁰¹ Wealthfront website.

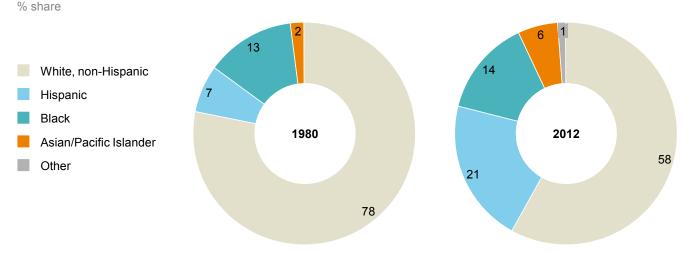
for those affected. ¹⁰² In addition, factors such as rising income inequality and increasing education costs may prove structural rather than cyclical. Finally, attitudes shaped by economic circumstances when people are young tend to "stick." The frugality and cost consciousness on display could prove permanent in a similar way to the behavior of the hero and silent generation vs. baby boomers.

CHARACTERISTICS: YOUNGER GENERATION IS MORE DIVERSE, EDUCATED, AND URBAN

About 15 percent of today's 20- to 34-year-olds in the United States were foreign born (this age cohort is the larger group within North America's working-age population, and comparing it to earlier cohorts can help tell us how the working-age is going to be by 2030). This is a dramatic change from the period during World War II when that share was only about 2 to 3 percent.¹⁰³ An increasing number of ethnically Hispanic citizens in this group is another major change.¹⁰⁴ The share of Hispanic young adults in the United States in this age demographic tripled from 7 percent in 1980 to 21 percent in 2012 (Exhibit 25). In Canada, 19 percent of 15- to 44-year-olds were non-white minorities in 2006; by 2031, this share is expected to nearly double to 36 percent.¹⁰⁵

Young cohorts of US working-age consumers are more ethnically diverse than in the past

Ethnic split of 15- to 34-year-old population in the United States



SOURCE: US Census Bureau; 15 economic facts about millennials, White House Council of Economic Advisers, October 2014; McKinsey Global Institute analysis

Their consumption is making waves. One growing industry is Spanish-language entertainment. Univision, a Spanish TV network, is now the fifth-largest television network in the United States. Certain categories of consumer products including baby food, hair-care products, and dried food and vegetables are particularly popular among Hispanic

Exhibit 25

¹⁰² See Hanan Morsy, "Scarred generation," Finance and Development, volume 49, number 1, March 2012; Philip Oreopoulos, Till von Wachter, and Andrew Heisz, The short- and long-term career effects of graduating in a recession: Hysteresis and heterogeneity in the market for college graduates, NBER working paper number 12159, April 2006; and Paul Gregg and Emma Tominey, The wage scar from youth unemployment, CMPO (Centre for Market and Public Organisation) working paper series number 04/097, February 2004.

¹⁰³ US Census Bureau; and 15 economic facts about millennials, White House Council of Economic Advisers, October 2014.

¹⁰⁴ US Census Bureau.

¹⁰⁵ Projections of the diversity of the Canadian population 2006 to 2031, Demography Division, Statistics Canada, 2010.

shoppers. A 2012 Neilsen report found that Hispanic consumers acted as accelerators for growth in categories such as beverages in the United States.¹⁰⁶

North America's working-age individuals are more educated than earlier generations, and educational attainment among these individuals is expected to continue to rise. In 1984, 55 percent of those under the age of 35 in the United States had completed some postsecondary education. By 2013, that share had increased to 69 percent. Up to 47 percent of 25- to 34-year-olds had received a postsecondary education in that year.¹⁰⁷

This group of consumers is overwhelmingly urban—85.3 percent of them live in metropolitan areas, and this share is expected to rise to 89.5 percent by 2030.

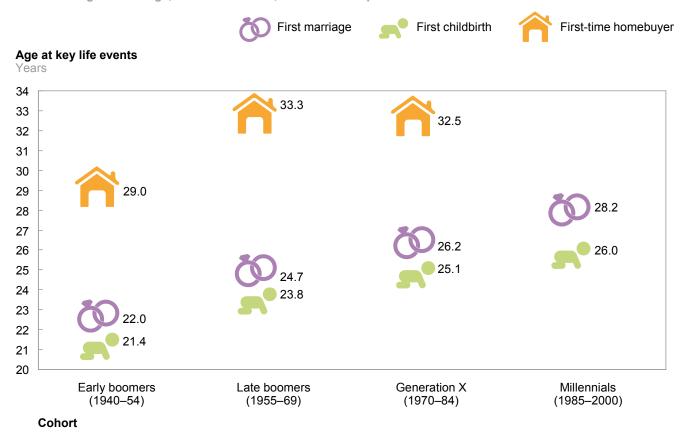
LIFE STAGES: THE AGE OF MARRIAGE AND FIRST CHILD CONTINUES TO RISE

Those of working age in North America are going through different life stages or milestones, such as finishing their education, having a first child, getting married, or buying a first home, later than earlier cohorts did. This is having an impact on the pattern of their consumption. For example, in the United States, female early boomers (born between 1940 and 1954) on average had their first child around the age of 21; millennials are delaying that event to about the age of 26. The median age at which a first marriage takes place has moved from 22 to 28. Early boomers tended to buy their first house at the age of 29 on average, but the average age among late boomers and Generation X individuals is about 33 (Exhibit 26).

Exhibit 26

North America's working-age consumers are marrying, having children, and buying their first house later than previous generations did

US median age at marriage, birth of first child, and first home purchase



SOURCE: US Centers for Disease Control and Prevention; National Association of Realtors; US Census Bureau; McKinsey Global Institute analysis

¹⁰⁶ State of the Hispanic consumer: The Hispanic market imperative, Nielsen report, quarter 2, 2012.

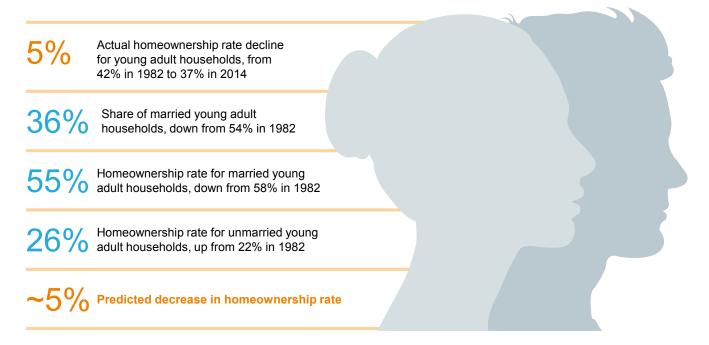
¹⁰⁷ US Census Bureau, Current Population Survey 2014, census.gov.

Homeownership among US millennials has declined from 42 percent in 1982 to 37 percent in 2014. Many commentators have pointed to their reduced desire to own a home. But there appear to be deep societal, demographic, and economic trends involved, including delayed marriage. The share of married young adult households has fallen from 54 percent in 1982 to 36 percent in 2014. Since homeownership rates among young adults in married households are 30 percentage points higher than among those in other living arrangements, we estimate that these trends could be responsible for a 5 percentage point fall in the rate of homeownership between 1982 and 2014—enough to fully explain the actual decline (Exhibit 27). At the same time, the share of young adults living with their parents has risen from 30 percent to 36 percent, a change that is likely to reflect the economic realities we have discussed rather than changes in preferences.¹⁰⁸

Exhibit 27

Delayed life-stage choices can explain declining homeownership among young adults in the United States between 1982 and 2014

Homeownership in young adults up to 34 years



SOURCE: US Census Bureau; US Census Bureau Housing Vacancy Survey; Pew Research Center; McKinsey Global Institute analysis

A lower propensity to marry and an older average marriage age are both trends that have continued for some time and are unlikely to reverse quickly. However, the rate at which the age of childbearing increases may well slow down. There are biological limits to women's childbearing age and many educated, professional women are already hitting that age.

The timing of major life decisions is an aspect of the consumption landscape that has not been given a great deal of attention. Yet this can have a marked impact on spending patterns. When major life decisions are delayed—say, later retirement or greater age when children move out of their parents' home—and when cohort-specific consumption habits and preferences carry onto later life, companies may need to adjust their view of "age-appropriate" products and services. This is relevant for companies that target a particular age group (for example, Saga with the over-50s, MTV with teens) as well as companies that

¹⁰⁸ For an in-depth discussion of the causes of declining homeownership among young adults in the United States, see Jed Kolko, The recession's lost generation of homeowners isn't millennials – it's the middle aged, Trulia's blog, July 16, 2014.

target a particular cohort and continue to serve them as they move through the years (such as Harley-Davidson, *Rolling Stone* magazine).

BEHAVIORAL PREFERENCES: THESE CONSUMERS TRUST PEERS MORE THAN INSTITUTIONS AND WANT DELIVERY NOW

Even after accounting for changes in socioeconomic environment, there are differences in consumer choices that reflect the specific experiences of a cohort or the period in which they are living.¹⁰⁹ In the case of working-age individuals in North America, consumption patterns throughout their lives are likely to reflect changes as a result of both factors, just as they did for past generations.

Cohorts that have grown up in the era of technological connectivity demonstrate some evidence of two shifts in attitude based on McKinsey's research across industries. One is a propensity to trust their peers when judging whether a good or service is worth buying, rather than relying on information from the companies and organizations that provide them. The second is a desire for immediate delivery of those goods and services. Companies should take note and explore whether these attitudes offer new opportunities.

Trust issues are one reason that this generation of North Americans is so eager to gather information from their families, friends, and communities on what to buy.

Levels of trust in other people have fallen sharply among the young in the United States in recent decades, according to survey evidence. The National Opinion Research Center of the University of Chicago has been asking the question, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in life?" Strikingly, the proportion of respondents aged 18 to 29 who responded "can trust" has fallen by half, from 41 percent in 1984 to just 19 percent in 2014.¹¹¹

This generation of North Americans is so eager to gather information from their families, friends, and communities on what to buy. Eighty-four percent of millennials in the United States said that they considered the advice of their friends and online peer review groups to be of importance, compared with 70 percent of baby boomers. Websites such as TripAdvisor, Yelp, and IMDb, and Amazon and Google reviews have become an integral part of product discovery and selection process for young adults whose lives are, in any case, lived through mobile and online channels, and who increasingly use those channels to shop. In social media use, nearly 30 percent of 20- to 35-year-olds surveyed indicated that they do not have a Facebook account due to privacy concerns. For Snapchat accounts, a messaging service that deletes shared photos and videos after they are viewed, this share is 10 percent or less.

¹⁰⁹ See, for instance, Joseph O. Rentz and Fred D. Reynolds, "Separating age, cohort and period effects in consumer behavior," Advances in Consumer Research, volume 8, 1981.

¹¹⁰ McKinsey Insights China survey 2012; McKinsey iConsumer Survey 2012.

Trust is a topic of increasing interest among economists and sociologists, and there is extensive literature on this issue. See, for instance, April K. Clark and Marie A. Eisenstein, "Interpersonal trust: An age-period-cohort analysis revisited," Social Science Research, volume 42, issue 2, March 2013; Giuseppe Albanese and Guido de Blasio, "Who trusts others more? A cross-European study," Empirica, volume 41, issue 4, November 2014; and Junyi Shen and Xiangdong Qin, "Cooperation, trust, and economic development: An experimental study in China," Pacific Economic Review, volume 19, issue 4, October 2014.

¹¹² Talking to strangers: Millennials trust people over brands, Bazaarvoice, January 2012.

¹¹³ Ipsos/Battery Ventures Poll, August 2015; 1,253 US adults ages 20 to 35 were polled online and data were weighted to the US current population data by gender, age, education, and ethnicity.

We see the same tendencies in financial services. There is evidence that individuals aged between 21 and 36 in North America lack trust in traditional firms and investment advisers and are willing to patronize alternative forms of money management. They are very likely to shop around for financial services and buy online. In contrast, older consumers are still more likely to trust financial experts and to purchase from an agent than over the Internet.

60% of North American millennials trust sharing-economy services North America's young working-age consumers have a lower net worth than previous generations at the same age. This is driven in part by their lower incomes and delayed life stages, as discussed earlier. However, another important reason for this decline in ownership is that through the sharing economy, this generation has more choices available than previous generations had. The sharing economy benefits from this group's evolving views on whom to trust and when to trust them. Some skeptics suggested that concepts such as Airbnb and Uber would not take off because nobody would trust strangers in their houses or in their cars; how wrong has that contention proved to be. A majority of millennial travelers aged between 18 and 34—60 percent—trust sharing economy services such as Airbnb, HomeAway, Lyft, Getaround, and Feastly to book travel experiences compared with only 37 percent of other travelers, according to the sixth annual Allianz Travel Insurance Vacation Confidence Index. 117

Compared with older cohorts, young adults are 10 to 20 percentage points more likely to consider and use sharing economy services, from accommodations to car rental to furnishings. The converse of a decline in car ownership is a rise in willingness to try out ride-sharing models like Uber or Lyft. In the shared-transport segment, Ford has struck a partnership to integrate its vehicles into Zipcar's vehicles into its university car-sharing program. This initiative has introduced a Students with Drive scholarship program.

Products and services that have social engagement are becoming more prevalent. According to Nielsen, 49 percent of activity-band users are aged 18 to 34. Most fitness-conscious young people like to share their goals and progress with friends. A Sporting Goods Manufacturers Association report found that young adults are more likely to participate in fitness activities that focus on togetherness rather than competition. Fit Bit has combined fitness tracking and sharing with friends and family with its activity band and mobile app to become the US market leader.

The second characteristic is that this group of consumers prefers goods and services to be delivered instantaneously—or at least as quickly as possible. This reflects their life experience. Millennials grew up with the Internet and digital technologies that allowed them to access information anytime anywhere and that they have instant access to any music they want to listen to and videos that can teach them about virtually any topic. Many are used to having Siri or Wikipedia provide instant answers to any question that crosses their mind. These consumers prefer on-demand television and other entertainment content. They use Internet-based video programming such as Netflix, Hulu, and Amazon Prime more than older individuals, and they continue to consume content this way even after they become

¹¹⁴ Think you know the Next Gen investor? Think again, UBS Investor Watch, first quarter, 2014.

In the United States, the median net worth of households headed by under under-35-year-olds fell from \$11,500 in 1984 to \$3,700 in 2009 (constant 2010 dollars), according to the Pew Research Center. In Canada, median net worth among young adults aged 28 to 34 declined from C\$30,100 in 1977 to C\$17,400 in 2005 (\$22,230 to \$12,900); median debt levels rose from C\$14,400 to C\$23,700 (\$10,600 to \$17,500) over the same period, according to Statistics Canada.

¹¹⁶ Jason Tanz, "How Airbnb and Lyft finally got Americans to trust each other," Wired, April 23, 2014.

¹¹⁷ Harvey Chipkin, Value-seeking millennials turn to the sharing economy, travelmarketreport.com, July 24, 2015.

¹¹⁸ See Jeremiah Owyang and Alexandra Samuel, The new rules of the collaborative economy: The threat to traditional companies that can't be ignored, Vision Critical, 2015, and Jonathan Hall and Alan Krueger, An analysis of the labor market for Uber's driver-partners in the United States, Princeton University Industrial Relations Section working paper number 587, January 2015.

¹¹⁹ Sporting Goods Manufacturers Association.

parents. Individuals aged 18 to 34 in North America are 10 percent less likely to take out a cable subscription than older consumers, and are four to five times as likely to purchase goods and services using their mobile phones. These are people who like to have entertainment and shopping at their fingertips on smartphones and tablets.

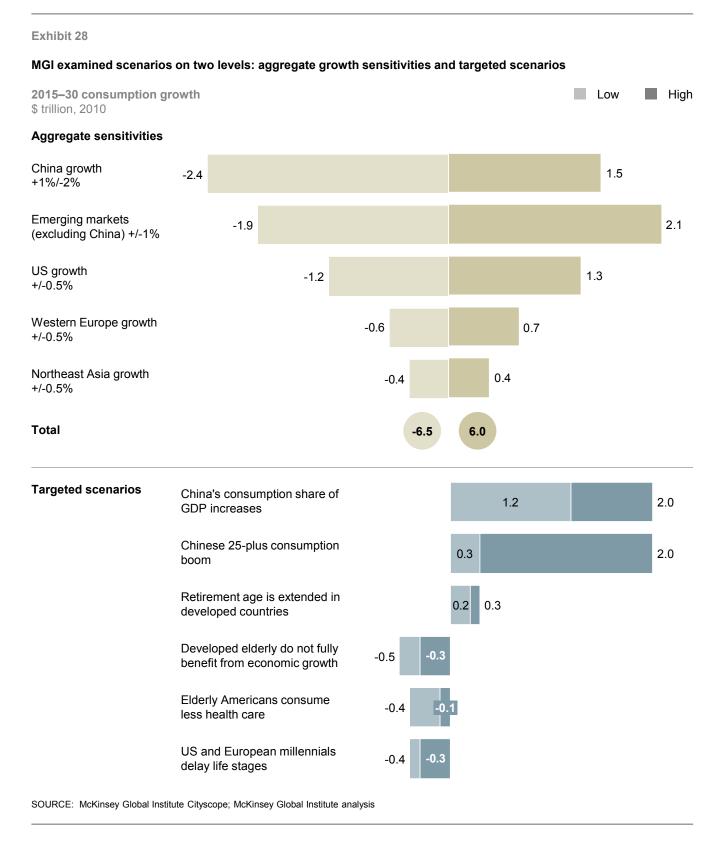
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The number of working-age people in North America is not growing as fast as either of the other two groups of urban consumers to watch. Nevertheless, these consumers already constitute a large market—and one that is evolving in interesting and challenging ways. Cost consciousness and rising inequality need to be factored into companies' strategy for capturing the purchasing power of these consumers. The unique needs of these consumers are creating opportunities such as the sharing economy. Looking ahead, if their fortunes improve through wage growth that is higher than expected or through lower debt, it will be interesting to see if their cost-conscious choices endure.

McKinsey TMT Digital Insights Survey, 2014; John B. Horrigan and Maeve Duggan, One-in-seven Americans are television "cord cutters", Pew Research Center, December 21, 2015.



UNCERTAINTIES AND RISKS



CHINA'S WORKING-AGE CONSUMERS

The future trajectory of China's per capita consumption growth, expected to expand by 5.4 percent per year between 2015 and 2030, is subject to the widest band of uncertainty. On the downside, if per capita income grows more slowly than consensus estimates—say, at a 4.1 percent real exchange-rate-adjusted growth rate instead of the 6.1 percent expected rate—China's consumption growth would be \$2.4 trillion lower. An additional factor to watch for is the speed at which China is shifting to a consumption-driven growth path. Those of working age in China may choose to spend more of their income and broaden their demand, particularly for services, thereby fueling even faster growth in China's consumption. If the share of consumption in GDP were to rise from 41 percent (our projected 2030 baseline) to 50 percent of GDP by 2030 (similar to South Korea's consumption share of GDP when it was at a similar income level), the aggregate consumption of China's urban consumers could expand by \$2.0 trillion more than projected. At the microeconomic level, we examined how changing spending patterns by age would affect aggregate consumption. If Chinese consumers aged 25 and over were to follow a rising consumption profile over their lifetime, equivalent to the age-consumption profiles observed in South Korea and Japan, consumption would be \$0.3 trillion and \$2.0 trillion higher, respectively, in 2030 (Exhibit 29).

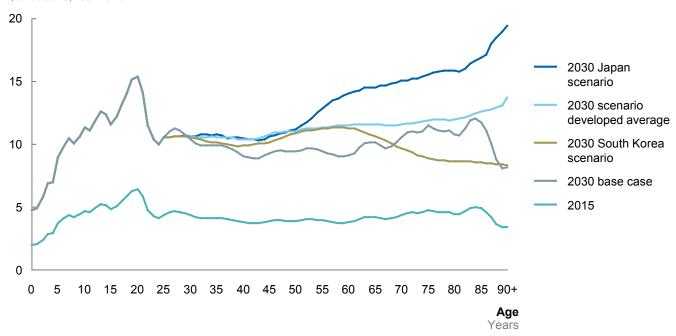
Exhibit 29

China's consumption growth would rise by \$0.3 trillion to \$2.0 trillion if those aged 25-plus matched the spending of developed-country counterparts

China urban per capita consumption distribution

Consumption per capita, 2030

\$ thousand, real 2010



SOURCE: McKinsey Global Institute Cityscope; National Transfer Accounts Project; McKinsey Global Institute analysis

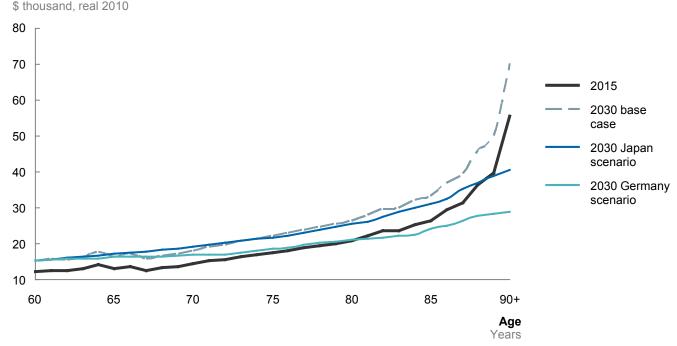
DEVELOPED RETIRING AND ELDERLY

Another downside risk is that the consumption of the retiring and elderly in developed economies may not prove sustainable. Paying for pensions and health care will be challenging: neither private savings nor public finances are sufficiently well funded for future costs. Health-care spending rises as a share of consumption by the 60-plus age group, especially among consumers aged 75 and over. If the United States, the nation with the highest health-care expenditure, limited health-care costs to the level in Japan, health-care consumption growth would be \$120 billion lower in 2030. Bringing costs down to German levels would reduce US health-care consumption growth by \$410 billion (Exhibit 30). Another uncertainty in the projections is that increases in retirement benefits and pensions will not keep pace with per capita income growth, and the rate of per capita consumption growth by the elderly falls behind that of people of working age. If the per capita consumption of the developed retiring and elderly were to grow at 50 percent the rate of the per capita consumption of those of working age, aggregate consumption growth in developed economies would be reduced by \$530 billion.

Exhibit 30

If US 60-plus health-care costs were at the level of Japan or Germany, consumption growth would decline by \$120 billion to \$410 billion

US per capita health-care consumption, 2030



SOURCE: McKinsey Global Institute Cityscope; National Transfer Accounts Project; McKinsey Global Institute analysis

For an in-depth analysis of the economic implications of aging across nations, see Ronald Lee and Andrew Mason, *Population aging and the generational economy: A global perspective*, Edward Elgar, 2011. In all of the dozens of societies they and their collaborators have studied, the elderly as a group consume more than they produce and require either private or public transfers, or asset-based reallocations from younger generations to sustain their consumption. Their National Transfer Account database shows both current transfers between age groups and projects how future transfers will evolve with aging if current levels of per capita consumption by age are sustained. These data permit, for example, cross-country comparisons of how aging will impact public-sector transfers under current policies.

Another factor that may influence consumption over the 2015–30 period is the timing of retirement, and whether retirees have sufficient savings. Delayed retirement would be expected to increase non-health-care consumption as working individuals tend to have more expenses than those who do not work. In addition, more years of saving and contributing to (and not drawing from) social security programs increases future purchasing power. We estimate that a three-year delay in retirement would boost consumption growth in developed economies by \$155 billion by 2030. A five-year delay would increase consumption growth by \$285 billion. We should note that these increases are modest relative to global consumption growth, and the impact of delaying retirement on the level of overall consumption (in contrast to social security payments or patterns in where older consumers choose to spend their money) should not be overstated.

NORTH AMERICA'S WORKING-AGE CONSUMERS

Finally, there are risks to consumption by those of working age in North America, too. As key life decisions such as getting married and having children are delayed, so the increased per capita consumption associated with such life stages is delayed. We estimate that a three-year average delay in life stages from the current levels would reduce non-health-care consumption growth by \$260 billion in North America and Western Europe, and a five-year delay would reduce it by \$440 billion. High levels of student debt (particularly in the United States) and high youth unemployment can also have a lasting negative impact on consumption.

•••

In an aging world where consumption will rely ever more heavily on each individual spending more, it is increasingly important to understand which consumers are likely to have the spending power to constitute growing markets, where they are, and what they are likely to want to devote their income to. Overwhelmingly, key consumers will live in cities. In the next chapter, we discuss how sweeping demographic change is affecting the urban landscape, and, in the light of these shifts, where key consumers to watch are most likely to be found.





3. CITIES AND CONSUMPTION

Cities continue to be the engines of the world economy and global consumption. Ninety-seven percent of the world's population growth from 2015 to 2030 will occur in cities. By 2030, people living in large cities alone will account for 50 percent of the global population and 81 percent of global consumption. They will be responsible for 91 percent of global consumption growth between 2015 and 2030.

Densely populated urban areas are not just where the vast bulk of the world's consumers live and spend their money; they are also hubs for change and growth.

Densely populated urban areas are not just where the vast bulk of the world's consumers live and spend their money; they are also hubs for change and growth. They are where social and economic changes tend to start, where new consumer models and behaviors emerge, where most companies locate their head offices. They are also the crucibles of business innovation: Airbnb, Alibaba, Baidu, Etsy, and Uber were born and are tested in large cities. Metropolitan economies are where service industries particularly thrive.

GLOBAL CONSUMPTION IS CONCENTRATED IN JUST A FEW HUNDRED CITIES

Consumption growth is set to be more concentrated than growth in either GDP or population—just 600 cities are likely to contribute nearly three-quarters of global consumption growth between 2015 and 2030. Just 32 cities are likely to generate one-quarter of urban consumption growth during this period. One hundred cities are projected to generate 45 percent of urban consumption growth (Exhibit 31).

Urbanization has been one of the most important forces driving global GDP growth in recent years, reflecting the powerful economies of scale of densely populated centers. Cities tend to have disproportionate numbers of skilled workers. Many have better education and training systems that feed the talent pool and attract students from elsewhere, many of whom stay. In India, higher-educational attainment is increasing five times as fast in urban households as in rural households. The presence of large pools of labor, much of it skilled, then attracts businesses that can, at the same time, serve a large customer base. Cities are instant markets for many types of business. As businesses cluster in cities, jobs are created and incomes rise. There is a large body of literature on urban economics focused on assessing the nature and size of urban economies of scale. See, for example, Edward L. Glaeser and Joshua D. Gottlieb, *The wealth of cities: Agglomeration economies and spatial equilibrium in the United States*, NBER working paper number 14806, March 2009; *World development report 2009: Reshaping economic geography*, World Bank, November 2008; and Indermit S. Gill and Chor-Ching Goh, "Scale economies and cities," *World Bank Research Observer*, volume 25, number 2, August 2010.

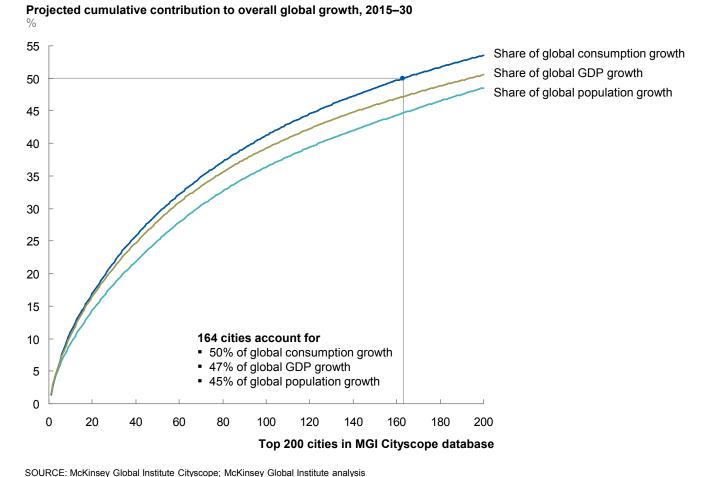
These 32 cities are 12 cities in the China region (Beijing, Chengdu, Chongqing, Guangzhou, Hangzhou, Hong Kong, Nanjing, Shanghai, Shenyang, Shenzhen, Tianjin, and Wuhan); 11 cities in the United States (Atlanta, Georgia; Boston, Massachusetts; Chicago, Illinois; Dallas, Texas; Houston, Texas; Los Angeles, California; Miami, Florida; New York, New York; Phoenix, Arizona; San Francisco, California; and Washington, DC); two cities each in Northeast Asia (Osaka and Tokyo, both in Japan), Latin America (Mexico City, Mexico, and São Paulo, Brazil), and South Asia (Delhi and Mumbai, both in India); and one city each in Western Europe (London in the United Kingdom), the Eastern Europe and Central Asia region (Istanbul, Turkey), and Southeast Asia (Jakarta, Indonesia).

The consumption share of GDP tends to be higher in developed regions. ¹²⁴ This means that these economies' share of global consumption is higher than their share of worldwide GDP. North America, for instance, is a region with relatively high incomes and a high consumption share of GDP. About one-fifth of global consumption growth between 2015 and 2030 will be generated in just 132 cities in North America. But the weight of consumption is shifting rapidly toward emerging economies—and overwhelmingly to their cities. In 2015, emerging-market cities accounted for just 23 percent of global consumption, but between 2015 and 2030 they will generate 56 percent of consumption growth. Consistent with the importance of North America and China in the global consumer groups to watch, cities in these two regions feature prominently in the global consumption growth landscape. Just 315 large cities in China and North America are likely to contribute more than 40 percent of global consumption growth to 2030 (Exhibit 32).

Of the top 20 global cities by consumption growth between 2015 and 2030, seven are projected to be in the United States and six in China. London in the United Kingdom tops the ranking with the highest projected consumption growth rate of any city in the world during this period, but it is notable that the UK capital is the only European city in the top 20 (Exhibit 33). By 2030, ten of the 20 top metropolitan areas by consumption will be in the United States. Western Europe and Japan are projected to have three cities each in the top 20, and mainland China will have two—up from zero today.

Exhibit 31

Global consumption growth is more concentrated in top cities than either GDP or population growth

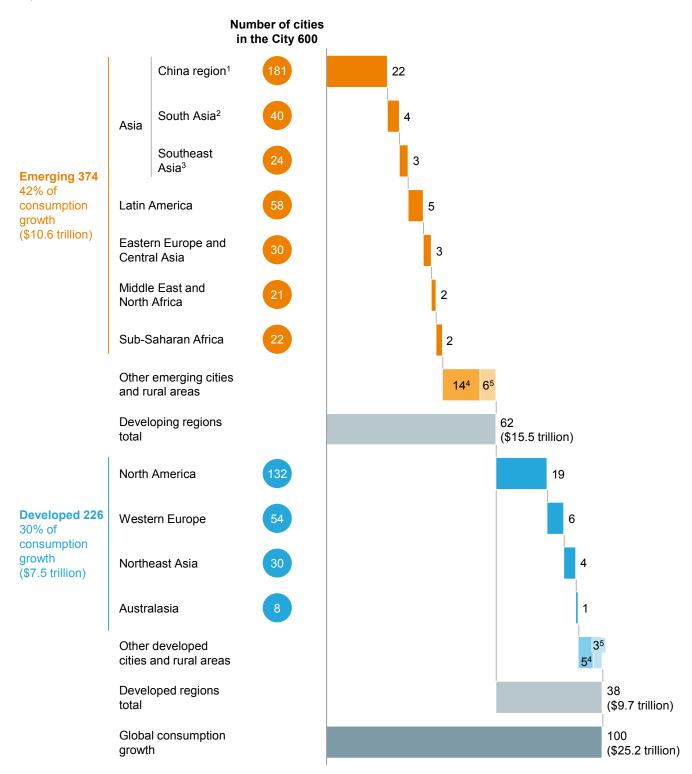


¹²⁴ In 2013, OECD countries had an aggregate 62 percent consumption share of GDP compared with 56 percent in the case of low- and middle-income countries, according to the World Bank's World Development Indicators.

Exhibit 32

Around 315 large cities in China and North America will contribute more than 40 percent of global consumption growth

Consumption growth at real exchange rate by geography, 2015–30 %, 2010



- 1 Includes cities in China (Hong Kong and Macau) and Taiwan.
- 2 Includes cities in Afghanistan, Bangladesh, India, Pakistan, and Sri Lanka.
- 3 Includes cities in Cambodia, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, and Vietnam.
- 4 Other large cities not included in the City 600.
- 5 Small cities and rural areas.

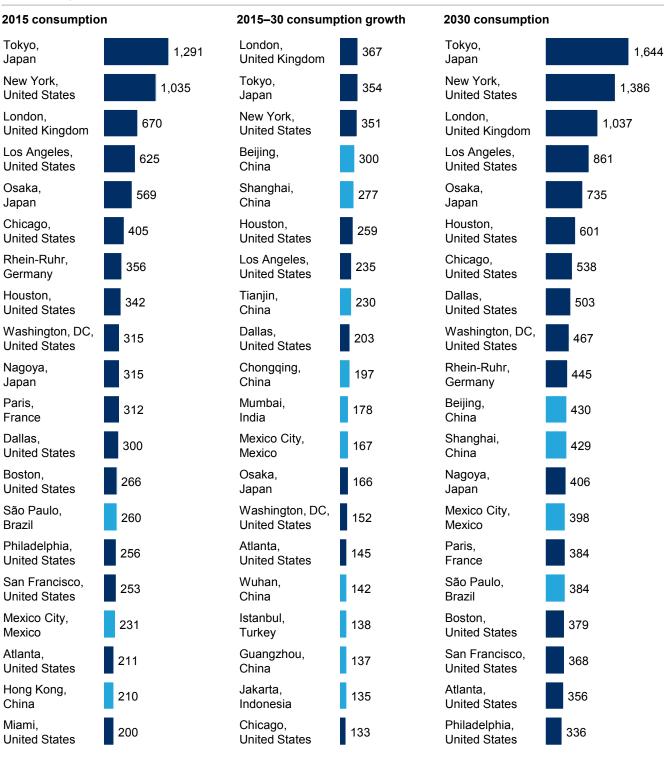
NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Exhibit 33

Top cities by absolute consumption and consumption growth

Top cities by



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Both demographics (total population and age structure) and per capita income will influence how consumption evolves in individual cities. Companies need to track both if they are to keep abreast of the shifting geography of the consumer landscape.

Cities are the true engines of the world economy, but many of them now face a double threat to their growth.

THE DEMOGRAPHIC PROFILES OF CITIES ARE SIGNIFICANTLY DIFFERENT

Already surprisingly wide differences are evident in the demographic compositions of metropolitan areas. In our sample of cities, the average age ranges from 22 years in the Nigerian city of Minna to 52 years in Punta Gorda in the US state of Florida. Even within countries, there are large variations in demographic profile among cities. In 2012, the median age varied by a decade in the oldest and youngest cities in South Korea and Spain and by more than 20 years in the United States (Exhibit 34).

These demographic variations among cities—and therefore their growth and consumption prospects—could widen further as nations age. Cities whose populations are relatively younger and have a higher share of women in their prime childbearing years are likely to experience higher birthrates and age more slowly than cities whose populations are already older. Migration between cities can also lead to wider age gaps if, say, mobile young adults or wealthy retirees choose to move to other urban areas. The ability of cities to attract international migrants is another factor likely to influence their demographic profiles and therefore their consumption trends.

THE POPULATION GROWTH PROSPECTS OF CITIES ARE DIVERGING

Cities are the true engines of the world economy, but many of them now face a double threat to their growth. Not only is global population growth slowing but the rural-to-urban migration—or urbanization—that has been such a powerful driver of cities' economic growth is plateauing in many countries (Exhibit 35). Worldwide, the share of people living in urban areas steadily increased by 0.9 percent a year between 1960 and 2014. Today, 54 percent of the world's population lives in cities and towns of all sizes, up from 34 percent in 1960. This leaves less room for further rural-urban migration to fuel the growth of cities' populations. In the United States and Latin America, 80 percent of people live in urban areas. Western Europe is close behind, with 79 percent of the population clustered in cities and towns.

80% of people live in urban areas in the United States and Latin America

¹²⁵ Given that we do not have historical data for the sample of large cities included in the Cityscope database, we rely on the UN's urbanization database. The UN's urban area definition is much broader and includes small cities and dense villages below MGI's Cityscope population threshold of 150,000 in developed countries and 200,000 in developing countries. This explains why UN urbanization rates are higher than the share of large cities based on MGI's sample of large cities.

Exhibit 34

Even within nations, cities vary widely in their demographic profiles

Cities by weighted average age, 2015



Median weighted average age, 2015

58 Punta Gorda • 56 Hakodate 54 Orense • 52 Trieste Gera La Rochelle 50 Trois-Rivieres Fushun Sunshine Coast Andong • 48 Torbay •• 46 Tula 44 Mar del Plata Santa Maria Balikesir Naha 42 Paderborn Almeria 40 Naples Johannesburg 38 Veracruz Kochi lloilo Guimaras Saskatoon 36 Townsville London Paris Owerri 34 Changwon Makhachkala 32 Shenzhen 30 La Rioja Provo ••• Macapa 28 Nogales 26 Sanliurfa Nelspruit Shillong Cotabato 24 22 Minna 20 18 Nigeria India Australia Canada France Spain Mexico Russia Philippines South Africa Turkey United States South Korea United Kingdom Japan Argentin*a* Germany **Developed** Developing

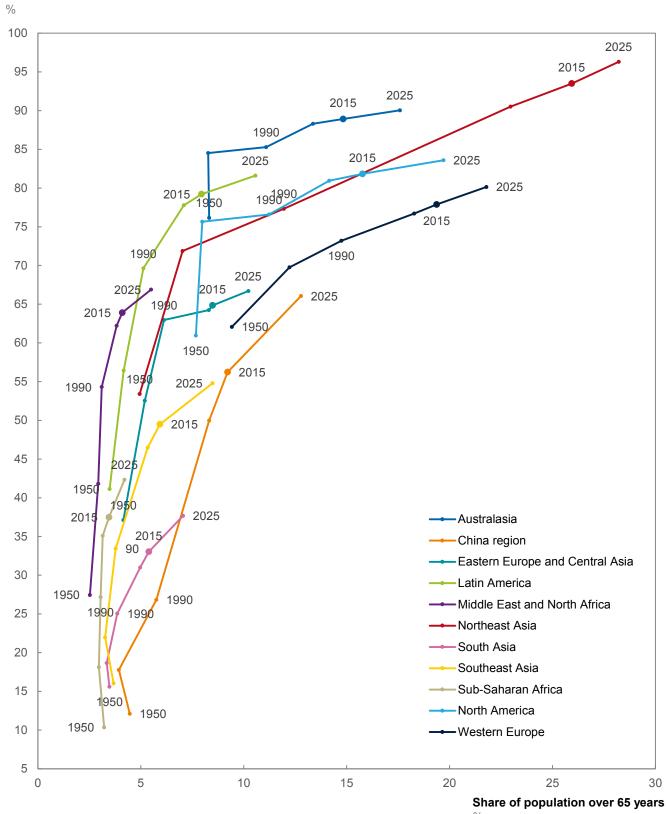
SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Exhibit 35

Population growth in cities is poised to decline as populations age and urbanization runs its course

Regions by their urbanization and share of population over 65 years of age over time

Urbanization



SOURCE: UN Population Division; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

This matters because expanding population has been key to the rise of thriving urban economic regions. Between 2000 and 2012, population growth contributed almost 60 percent of the GDP growth of the world's large global cities, while per capita income contributed the rest. Variations in population growth among cities have been a key differentiator in their economic growth performance. Globally, more than half of the deviation of individual cities' GDP growth from the national average of their countries has been due to differences in population growth rather than higher (or lower) per capita GDP growth. Having an expanding population benefits cities also by increasing the size of the local economy, which, in turn, has been shown to boost creative and innovative activities disproportionately.

6% of the world's large cities are experiencing declining populations Research has shown that doubling a city's population is correlated with a more than doubling the number of research and development establishments and jobs, new patents, total wages—and GDP.¹²⁷ Because of the benefits of larger cities, the configuration of urban geography matters for the overall economic performance of national economies and regions. In past research, MGI estimated that 85 percent of the gap between the per capita GDP of the United States and Western Europe was due to the presence of a greater number of larger cities with higher incomes in the United States.¹²⁸ Therefore, slowing population growth—or an outright decline in a city's population—risks having a disproportionately dampening effect on economic growth, particularly in cities of limited scale.

The geography of consumption is shifting as demographic changes affect urban regions in different ways. Six percent of the large cities that we looked at are already experiencing stagnant or declining populations, most of them in developed economies where urbanization and aging started earlier than in emerging economies (Exhibit 36).

More than two-thirds of cities with shrinking populations are in Western Europe; they include Dublin, Lisbon, Madrid, and Palermo. Five Japanese cities are expected to experience a decline in their populations. Even in China, the populations of Fushun and Yichuan (in Heilongjiang Province) declined between 2000 and 2012. An additional 38 percent of the cities in our sample—including Berlin, Germany; Detroit, Michigan in the United States; Milan, Italy, New York in the United States, and Rio de Janeiro, Brazil—will have population growth of less than 1 percent in the period to 2025. The other half of the cities in our sample, spread across developed and developing regions, are projected to have population growth of more than 1 percent over the next decade, but rates of population growth will still be slower than over the previous ten years.

Natural land constraints and regulatory barriers to housing construction have raised the cost of living in many cities and slowed down population growth. Different housing policies will also contribute to diverging population growth patterns between cities.¹²⁹

We analyzed urban GDP growth between 2000 and 2012 for 943 cities with 500,000 or more inhabitants in 145 countries using the Canback global income distribution database (C-GIDD). Among developed regions, differences in population growth rates contributed two-thirds of the GDP growth differences among individual cities from the national city average, and per capita income growth the rest. In developing regions, there was wider variance across regions. China and South Asia were the two regions where per capita GDP growth differences contributed more than half of the deviation, at 58 percent and 56 percent, respectively. Also see Urban America: US cities in the world economy, McKinsey Global Institute, April 2012. This research shows in more detail how the US cities that grew faster than their peers over the past 30 years did so because of higher population growth rather than higher growth in per capita income.

¹²⁷ Luis M. A. Bettencourt et al., "Growth, innovation, scaling, and the pace of life in cities," Proceedings of the National Academy of Sciences, United States, volume 104, number 17, April 2007.

¹²⁸ Urban America: US cities in the global economy, McKinsey Global Institute, 2013.

¹²⁹ See A blueprint for addressing the global affordable housing challenge, McKinsey Global Institute, October 2014.

Exhibit 36

Populations are declining in 6 percent of large cities—most of them in developed regions further along in aging and urbanization

Cities with declining populations by population size and degree of population decline



NOTE: Analysis includes 1,692 cities.

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

In Japan, mobility is low, and its cities are more similar to one another in terms of their age profiles than cities are in most other countries. Fourteen cities clustered in the Tokyo/Nagoya region together with a few southern prefectural capitals are experiencing inward migration and average population growth of 0.5 percent but the other 55 large cities have flat or declining populations, with smaller cities around regional hubs aging the fastest (Exhibit 37). In contrast, the United States has the highest mobility rate of all developed regions. Its cities not only vary more widely in their demographic profiles, but they are evolving in different ways (see Box 3, "Evolving city archetypes in the United States"). 130

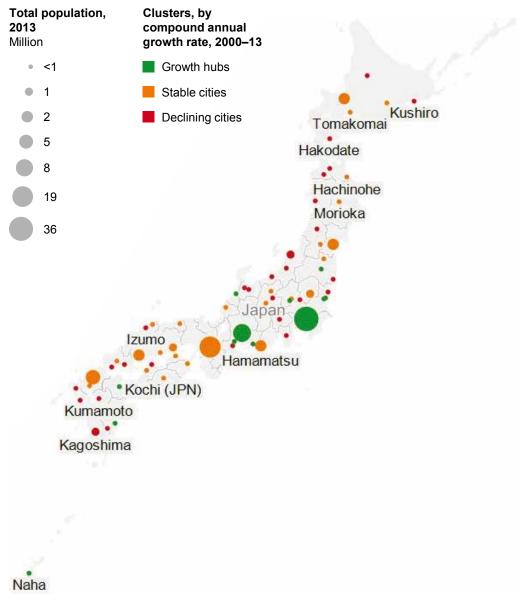
In countries where urbanization has not yet run its course—or may be at a relatively early stage as in sub-Saharan Africa and South Asia—cities are still experiencing significant growth in their populations as migration from the countryside continues. Urban populations will grow at an annual rate of 3.4 percent in sub-Saharan Africa, 2.4 percent in South Asia, and 2.1 percent in China from 2015 to 2030. Many cities in emerging countries will be home to rising numbers of consumers with considerable and growing purchasing power. Roughly

¹³⁰ See the technical appendix for details about how we clustered cities by their demographic profiles.

Exhibit 37

Only a few large Japanese cities have growing populations; populations of smaller cities around regional hubs are already declining

69 cities in three clusters



SOURCE: Japan National Statistics; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Box 3. Evolving city archetypes in the United States

The United States is largely urbanized, but its birthrate is higher than in most other developed regions and its international and domestic city-to-city mobility is higher than in Western Europe or Japan. We clustered all large US cities by their demographic data and identified seven types of cities that illustrate how the consumer profiles of cities can evolve in very different ways (Exhibit 38).1

Three archetypes of US cities are enjoying faster-thanaverage population growth:

Growth centers. There are 40 "growth centers" that are benefiting from all three main sources of population growth: high birthrates, migration, and immigration. A

Population growth and demographic profiles of US cities vary widely

large share of these cities are located in the Sunbelt, such as Atlanta, Georgia; Charlotte, North Carolina; Dallas and Houston, Texas; Orlando, Florida; and Phoenix, Arizona, as well as some southeastern cities such as Durham and Raleigh, North Carolina, and Nashville, Tennessee. These growth centers tend to have low unemployment that makes them attractive to people in search of work. They are all the more attractive to newcomers because they tend to be affordable. These inward migrants tend to be young and well educated. Today, 62 percent of the populations of growth centers are made up of workingage people.²



Total population, 2013 (million) 15.000 20.000 • 100 5.000 10,000 Cluster name Stable College Slowing Expensive Family Growth Retirement globals towns cities places centers hubs cities



SOURCE: US Census Bureau; McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

We used a K-means clustering approach to group 257 US metropolitan statistical areas (MSAs) with 150,000 or more inhabitants in 2012 into seven categories. The variables included in the analysis are population growth rate, 2000–14; population age distribution in 2014; average birth and death rates per 1,000 population, 2000–14; net domestic and international migration, 2000–14; and median existing family house price in 2013. See technical appendix for more detail.

² Joe Cortright, The young and restless and the nation's cities, CityObservatory, October 2014.

Box 3. Evolving city archetypes in the United States (continued)

Retirement hubs. The second type of US city experiencing rapid growth is the "retirement hub." Thirteen such cities are growing because of their ability to attract domestic migrants. The population of these cities grew at an annual rate of 1.9 percent between 2000 and 2014, higher than the US urban average. Cities such as Palm Bay and Deltona in Florida are making a virtue of their aging populations by offering a high quality of life for the older generation, and they are exploiting a general trend for US citizens to move southward to warmer climes. One indication of this is that these cities have been building a high volume of smaller single-story homes at affordable prices that suit older consumers.

Family places. Another growth city type in the United States is the "family place"; we have identified 22 of these. Their population grew at 1.8 percent a year from 2000 to 2014. Almost all of these cities are in Texas, the Southeast, and the Intermountain West. Brownsville and El Paso in Texas, Salt Lake City and Provo in Utah, and Fresno and Bakersfield in California are examples. On average, these cities have a 40 percent higher birthrate than the average among large cities (20.9 vs. 14.9 births per 1,000 people). Forty-nine percent of the population in these cities is younger than 30—a much higher share than in most large cities. These cities are thriving because, as their name suggests, they are attractive places for families with children to live. These cities are generally less densely populated than many other large cities, have affordable housing—in 80 percent of these cities, the median house price is below the national average—and offer a wealth of family amenities.

College towns. Population growth in these cities roughly tracks the average among large metropolitan areas. By definition, college towns such as Lubbock, Texas, and lowa City, lowa have a high share of students and academics. This type of city grew at an average of 1.1 percent a year between 2000 and 2014, largely because of domestic and international migration. They have been thriving because of increased demand for tertiary education over the past decades. Education hubs support vibrant local economies with jobs tied to educational institutions and a high density of sporting facilities, entertainment, and hospitality services.

Three other types of US city are at the other end of the spectrum with slow-growing populations. Each has very different dynamics:

Stable cities. These cities have average birthrates but below-average inward migration. Overall, their population growth of 0.7 percent between 2000 and 2014 lagged the national average by a third. Some of these cities were once manufacturing centers, but since the decline of their industrial base they have not been able to diversify sufficiently to promote rapid growth. Many of these cities have an above-average share of agriculture, as Kansas City, Missouri, does, or on health care as in Indianapolis, Indiana, and Milwaukee, Wisconsin.

Expensive globals. These are high-octane cities with a high share of working-age inhabitants. This group includes New York, Miami, San Francisco, and San Diego. Roughly half of residents of the New York borough of Manhattan, for example, are in the prime-working-age group of 25 to 54. But because these cities are already so large, their population growth was below the national average at 0.7 percent a year between 2000 and 2014. As their name suggests, these cities are costly places to live. Average housing prices are more than double the average of the rest of large urban regions. The median house price in expensive globals is \$413,000 versus the \$231,000 average of the cities we examined. Three-quarters of these cities have experienced large outflows of people to other cities in the United States. But these cities are also attracting large numbers of international migrants. New York, San Jose, California, and Washington, DC, fall into both categories. Indeed, these cities are major hubs for people flows with the largest inflows of immigrants but outflows of domestic residents to other cities within the United States.4

Slowing cities. On average, the populations of these largely post-industrial cities grew at only 0.2 percent a year between 2000 and 2014. One-third of the 66 cities of this archetype had zero or negative population growth during this period, largely reflecting the declining performance of manufacturing. Their future lies in diversifying into new industries and attracting migrants. Buffalo, New York, whose population declined by 0.2 percent between 2000 and 2014 is, for instance, trying to create more jobs in technology, provide more affordable housing, and encourage international migrants through refugee resettlement options.

³ European retirees are also relocating to warmer climates. In 2010, Spain was home to the second-largest group of Finnish pension beneficiaries living abroad after neighboring Sweden. The average pension size among the residents in Spain was more than twice the average in other countries, by far the highest pension payment among countries except for Portugal, according to the Finnish Centre for Pensioners.

Based on US Census Bureau data, the average rate of net domestic migration for expensive globals in the period 2000–14 was minus
 1 per 1,000 people, while the net international migration rate was
 per 1,000. This was double the rate of college towns, the group with the second-highest rate of international migration.

URBAN CONSUMPTION PROFILES SHIFT WITH EVOLVING POPULATIONS

The demographic changes that we have discussed will have a direct impact on the shape of consumption as urban markets with similar consumer profiles today can evolve in very different ways (see Box 4, "Companies need to know where key consumers to watch live"). As illustration, take Raleigh, North Carolina, and Memphis, Tennessee, in the United States. These two cities have roughly 1.5 million inhabitants each, a similar share of inhabitants below the age of 30, and aggregate annual consumption of around \$47 billion. Because jobs are growing in the area, half of Raleigh's projected population growth in the period to 2030 will be people of working age—half a million of them. Over the same period, the population of Memphis is projected to grow by 30,000 but only 20 percent of them is expected to be people of working age. By 2030, this demographic divergence between the two cities would mean that the overall consumption in Raleigh could be around \$100 billion and consumption in Memphis could be around \$66 billion—that's a gap of 50 percent between the two cities in just 15 years.

Let's compare and contrast two other cities—one in the developed world and one in an emerging market: Boston, Massachusetts, in the United States, and Beijing in China. Today 19.8 percent of the population in metropolitan area of Boston is aged 60 or older, and that age group spent almost \$72 billion in 2015. In Beijing, the 60-plus age group accounts for 16.7 percent of the city's population and spent \$22 billion in 2015—less than one-third of the spending of this age group in the US city. This reflects the fact that per capita consumption in Beijing is still less than 10 percent of Boston's level for this age group. But by 2030, the 60-plus age group consumption in the Chinese capital will grow fivefold to \$115 billion—or 85 percent of their counterparts in Boston—because both the 60-plus population and its per capita consumption are growing so rapidly.

Aging means that China is not an even growth story—the number of 15- to 29-year-old citizens across all large cities is expected to decline from 176 million in 2015 to 144 million in 2030. The number of 15- to 29-year-olds will decline in fully 78 percent of all Chinese large cities. Many Chinese cities will experience declines in consumer age groups akin to conditions in cities in Western Europe. So let's compare Qiqihar in China and Leipzig in Germany. Each had more than a million inhabitants in 2015. That number is expected to grow by 9 percent by 2030 in the Chinese city and slightly decline in the German city. Yet both are set to experience a sharp decline in their 15- to 29-year-old populations: by 2030, the number of people in this age group in Leipzig is expected to decline by 17 percent and in Qiqihar by 25 percent. This decline means fewer students in public and private postsecondary schools, and slowing demand for personal care products and services such as restaurants and movies that disproportionally cater to this age group.

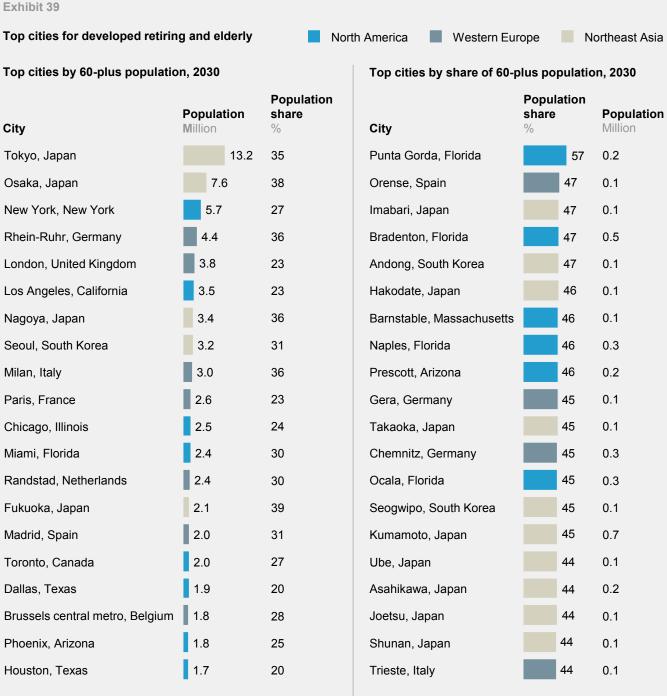
¹³¹ Our Cityscope projections use population projections to 2025 by metropolitan area from Moody's Analytics.

¹³² An indication of the broadening of global aging is that more than half of all Cityscope cities are expected to experience a decline in their 15- to 29-year-old populations by 2030.

Box 4. Companies need to know where key consumers to watch live

Building up a profile of where in the urban landscape key groups of consumers to watch live is an important part of the business response to shifting demographics.

In the case of the developed retiring and elderly, cities with high growth in the numbers of this group of consumers appear in a number of developed economies and regions. Notable is New York, which will have about 5.7 million developed retiring and elderly in 2030. Tokyo and Osaka, already aged cities, stand out for the huge number of people who will turn 75 over this period—2.5 million in the case of Tokyo and 1.5 million in the case of Osaka (Exhibit 39).



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Total = 70.8

Box 4. Companies need to know where key consumers to watch live (continued)

China's very large cities will experience the highest growth in absolute numbers of working-age individuals between 2015 and 2030. Beijing and Shanghai have both the largest and the fastest-growing numbers of such individuals. Beijing's working-age population is projected to rise from 16.6 million in 2015 to 21.7 million in 2030, growth of 1.8 percent a year. Shanghai's 2015 working-age population of 18.4 million is expected to expand to 22.7 million in 2030, growth of 1.5 percent per year. However, with the exception of these two megacities, it is China's smaller cities, especially those near Shanghai

(such as Ningbo, Suzhou, and Wenzhou) that will experience the highest growth rates in the number of working-age people (Exhibit 40).

By 2030, the largest populations of people of working age in North America will be found in expensive coastal cities including Miami, New York, and Washington, DC; stable metropolitan areas such as Chicago and Los Angeles; and growing cities in southern states including Atlanta, Dallas, and Houston. Growth in North America's workingage population will be fastest in growing Sunbelt cities such as Orlando, Phoenix, and Raleigh (Exhibit 41).

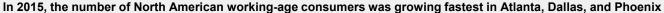
Exhibit 40

Beijing and Shanghai have the most working-age consumers, but the group is growing fastest in smaller cities



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Exhibit 41





Dallas

Houston

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

San Diego

In Western Europe, the number of working-age consumers is set to decrease by 10 million 2030, but the 60-plus population is expected to increase by 20 million. However, growth in the number of people aged 60-plus will nowhere be more dramatic than in China. Take Shanghai as an example. In the 15 years to 2030, the city's 60-plus population will double to 10.9 million—that's an addition as large as the combined 60-plus populations of Chicago and New York.

Outside developed regions and China, large urban concentrations of working-age consumers will be on many companies' radars. Let's look at those of working age in Southeast Asia as just one example. In absolute terms, the largest urban working-age populations in this region are in Jakarta, Indonesia, and Manila in the Philippines, at 6.8 million and 8.5 million, and these two cities will also experience the largest increases at 2.3 million and 2.5 million, respectively, in the period to 2030. To put this in perspective, Manila's working-age population will increase by as much as the entire working-age population of Rome, Italy, today. Consumption by

those of working age in Jakarta and Manila is poised to grow by \$77 billion and \$74 billion during this period. Yet there are shifts in the region's urban landscape. Today, nine of the top ten cities in Southeast Asia with the largest shares of citizens of working age are in Vietnam. But, in a testament to how quickly the urban consumption landscape is shifting, only one Vietnamese city will remain in the top ten in 2030—Ho Chi Minh—and seven cities in the only recently and partially opened up economy of Myanmar will have entered that top ten.

Miami

Atlanta

It is not just numbers but also the income and consumption potential of urban consumers that matter. In Latin America, just five cities account for 31 percent of urban consumption, and some of these have a large share of high-income households. Mexico City, for instance, has nearly 1.4 million households with annual incomes of more than \$70,000, more than either Boston or San Francisco. By 2025, Mexico City's tally of households with these high incomes will rise by 2.2 million to reach a higher total of either Dallas or Houston in Texas today.

These examples illustrate how a good grasp of urban demographic trends can help companies—and the leaders and managers of cities—anticipate and respond to shifts in consumption. As we look ahead, cities with declining populations face particular challenges such as, for example, adjusting to weakening demand for housing. Eastern Germany has the largest cluster of cities whose populations have declined since 2000; they include Cottbus, Halle, and Rostock, which share low birthrates and high levels of outward migration. As a result, vacant residential properties are a growing problem. There were more than 500,000 empty flats in eastern Germany (8.1 percent of all flats) in 2011. An intimate knowledge of cities in an area of demographic shifts will be necessary to pinpoint consumer markets that offer growth opportunities and those that present significant risks.

•••

The demographic profiles of cities—even within the same country—are already surprisingly different. As population growth slows, the variations among cities may well increase and lead to widening differences in their consumption patterns. This is just one way that the global consumption landscape is becoming richer and more varied—and that much more challenging for companies to navigate successfully. Other sources of complexity, as we have noted, include increasing income inequality within consumer segments, and the increasing prominence of consumers from a variety of emerging markets with different income profiles, cultures, and spending preferences. In the next chapter, we explore how companies should consider reacting to this rich variety and ferment of change.

¹³³ Tanja Buch et al., How to woo the smart ones? Evaluating the determinants that particularly attract highly qualified people to cities, Hamburg Institute of International Economics paper number 159, December 2014.

¹³⁴ Current and future trends of regional vacancies in Germany, German Federal Institute for Research on Building, Urban Affairs and Spatial Development, 2014; Anreizinstrumente für investitionen im stadtumbau ost—alternativen zur altschuldenhilfe? (Incentives for investments in urban restructuring—alternatives to existing debt help?), German Federal Institute for Research on Building, Urban Affairs and Spatial Development, 2014.



4. IMPLICATIONS FOR COMPANIES

Patterns of consumption are becoming more varied and complex—there is no such thing, if there ever was, as an average consumer in an average market. Cities, already very different, could diverge even further from one another in their demographics and consumption as population growth slows. Emerging economies with richly varied incomes, cultures, and spending habits are becoming ever more prominent features on the global consumption landscape as incomes rise, bringing a kaleidoscope of new markets into the picture. The weight of global consumption is shifting toward services, reflecting the aging of key consumer segments in developed economies and rising incomes in emerging economies. And, at the same time, income inequality is rising in many countries, presenting companies with the challenge of attracting customers at very different price points.

Companies need to ask themselves whether they have sufficiently deep market intelligence, the right strategic priorities for the markets of the future, and the skills needed to succeed. First, companies will need to understand how shifting demographics impact their organization's footprint. If that footprint doesn't match the most promising consumer markets, they may need to adjust their strategy to match the evolving geography of consumption. Knowing which cities—and even neighborhoods within cities—are home to key consumer groups will matter, and then allocating resources to high-growth areas will be key. Second, they need to be able to manage arguably the most diverse consumer markets in history, tailoring products and channels to increasingly disparate consumer groups even within the same geography. And, finally, the growing importance of services needs to be factored into the thinking of all consumer-facing businesses.

FOOTPRINT MATTERS FOR SUCCESS IN A SHIFTING CONSUMER LANDSCAPE

In a world in which global consumption growth will rely heavily on per capita spending rather than growth in the number of consumers and where consumption is shifting to new geographies and age groups, companies' footprints matter. A company's overall growth prospects depend on whether its current customers' spending is growing or slowing. Companies also need to continuously adapt to the evolving demographics and consumption patterns of cities—and even in neighborhoods within cities.

Patterns of consumption are becoming more varied and complex—there is no such thing, if there ever was, as an average consumer in an average market.

Companies already well positioned in growing consumption markets—notably the nine we have identified in this analysis—have grounds for optimism. They can benefit from the positive growth momentum of their existing business portfolio, which past McKinsey research found to be the single biggest contributor to corporate growth. 135 Yet being present in a growing consumer market should not lead to complacency but to vigorous efforts to build on existing relationships. The expanding number of retiring and elderly consumers across developed regions is an example of a growing segment that is often talked about

Patrick Viguerie, Sven Smit, and Mehrdad Baghai, The granularity of growth: How to identify the sources of growth and drive enduring company performance, John Wiley & Sons, 2008.

but seldom fully incorporated into strategic priorities. The elderly spend on a wide range of goods and services and collectively fuel half of overall consumption growth across developed regions. Both old and new companies with attractive and innovative products and services for this segment will be able to tap into a growing market.

Many companies are already catering to the elderly. One of many examples is UK company Saga, a leading provider of holidays targeted at consumers over the age of 50, which has been able to use its travel business as a platform to become a major provider of insurance, personal finance, and health-care products. In November 2015, the company went one step further, launching a new investment services business. But this is not the norm in all industries. One CEO in Silicon Valley noted in a conversation with MGI that tech companies, which have innovated so successfully for the young, have been far less effective in understanding the needs and preferences of the elderly—arguably because most people who work in technology startups are so young themselves. This is a new market opportunity waiting to happen. The smartphone penetration rate in the United States is only about 45 percent for the elderly but is 80 percent among 35- to 44-year-olds. As these consumers age, the retiring and elderly of 2030 are likely to be quite comfortable with technology and using it at the same rate as younger consumers.

100M more Chinese working-age consumers 2015–30 Today's up-and-coming emerging consumer groups similarly offer a rich opportunity to companies that position themselves to be in the right place at the right time. China's working-age consumers are the obvious group to watch. Their numbers are already large, as we have noted, and are set to grow by another 100 million by 2030, each, on average, doubling their consumption. Yet it is not just the numbers that matter. Just like the baby boomers of the West starting in late 1960s, they are a generation that is both more educated and have lived through very different experiences in their early lives than the cohorts before them. Their openness to trying new and different experiences, together with their collective purchasing power, suggests that the products and services they consume may become features of consumer markets the world over. ¹³⁶

China's success in manufactured export products is well known. Look around a Western kitchen and it is very likely that you will find appliances not just made in China but manufactured and sold by a Chinese company. There are consumer brands that are now international successes. Shanghai-based Jahwa, which has been selling personal care products in China since 1991, launched its high-end Herborist brand of cosmetics in 1998. Fifteen percent of the brand's sales have been through a direct online sales channel, and its success means that the company has now opened a flagship store in Paris.¹³⁷

What is even more interesting is how the ways companies in China interact with consumers are now being picked up by Western companies. Volkswagen in China, for instance, has adopted the approach of many Chinese firms and now engages in online conversations with potential customers rather than relying solely on traditional dealerships. The company's "digital acceleration strategy" was designed to respond to the fact that, in China, more than 80 percent of purchase decisions are made by word-of-mouth. Volkswagen has, for instance, used crowdsourcing initiatives such as the People's Car Project, which invited consumers to design the VW of the future. Stephan Horvath, global chief marketing officer of hackeragency, a Seattle-based digital and direct marketing agency that worked with Volkswagen, pointed to two important components of such a strategy: earning the trust of consumers, and meeting "the consumer where they are and not where you want them to be." 138

¹³⁶ See also *Urban world: Cities and the rise of the consuming class*, McKinsey Global Institute, June 2012.

¹³⁷ The China effect on global innovation, McKinsey Global Institute, October 2015.

¹³⁸ Stephan Horvath, Lessons learned in China, hackeragency blog, February 18, 2016.

On the flip side, there are declining markets that may require companies to adjust their approach. Managing slowing and even declining markets will become a necessary skill for many companies. In Western Europe, there will be ten million fewer 15- to 59-year-old urban consumers in 2030 than today, a decline felt particularly acutely in German and Italian cities. The number of children in Latin America's large cities will decline by 1.6 million. Growth in consumer markets that are experiencing waning population growth will, as we have said, rely on rising average per capita spending. Companies in these markets will need either to serve that group of consumers that is spending more on average, or expand to a broader set of products and services. Either way, it may be necessary to reevaluate resource allocation decisions. There may be room to shift resources including managerial time and investment dollars from today's large but stagnant consumer markets to ones that are faster growing.

Diverging urban consumption profiles among cities add another layer of footprint decisions to get right. Even in economies where consumption is growing at a healthy clip, not all cities will have the same consumption trajectory because their demographic profiles differ. For example, cities in northeast China such as Dalian, Harbin, and Shenyang are experiencing low birthrates and outward migration by their working-age populations. As a result, 60-plus consumers already comprise more than one-fifth of the population of these cities. As we have noted, six percent of large cities around the world have seen their populations decline since 2000. Over the next 15 years, 17 percent of cities in developed regions will be in this situation, and 8 percent of cities globally. Over half of the world's large cities will have fewer young adults (15- to 29-year-olds) than they have today.

The increasing diversity of cities even within the same country or region argues for a more tailored approach than traditional regional sales and marketing strategies. Marketing to groups of similar cities may be a more fruitful approach, particularly as our analysis has found that families—at least in the United States—tend to move between similar city types such as family places. The fire-grilled chicken restaurant El Pollo Loco, for example, has built a growing presence anchored on family places and smaller cities across the US Southwest. 139

To reach the consumers they want to serve, companies need to look not only at cities as a whole but also at neighborhoods within cities. One way to identify underserved areas and optimize their footprints is using geospatial mapping that can draw a detailed profile of consumers within a city. For instance, think of a company that offers specialized health care, meals, or transport services to the elderly and is planning for expansion. In Chicago, looking at the neighborhoods with fastest growth in the 75-plus age group reveals not just where these neighborhoods are located but also the fact that they to tend have lower average incomes and higher shares of non-white inhabitants (Exhibit 42). When looking at hospital coverage, we see very different patterns across cities. In San Francisco, there is a hospital within a ten-minute drive of the home of every individual aged 75-plus living in the city; in Chicago, only 85 percent of elderly residents are within the same radius. Less dense cities like Orlando have much lower coverage with only 58 percent of the elderly population living within a ten-minute drive of a hospital (Exhibit 43). As elderly populations grow rapidly in such cities, both city governments and businesses will have to identify the best way of reaching and serving them.

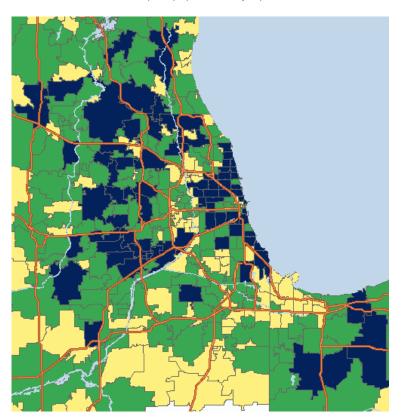
¹³⁹ elpolloloco.com.

Exhibit 42

In Chicago, the fastest growth in the 75-plus population is in lower-income, non-white neighborhoods

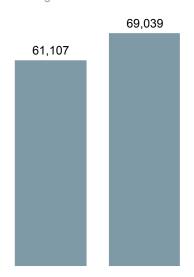
Elderly population-growth quintiles

Estimated increase in 75-plus population, by zip code, 2014–19



Elderly population growth and income

Average median household income (\$)



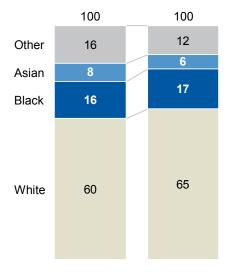
top quintile

Elderly population growth and ethnicity

Top quintile

2nd–3rd quintiles 4th–5th quintiles

% of population



75-plus growth CBSA total¹ top quintile

75-plus growth

NOTE: Median household income is computed using zip code—level income data that are weighted based on number of households in each zip code. For this, all zip codes whose center falls in the CBSA are considered. CBSA-level median income is also computed this way using zip codes and therefore does not correspond exactly to the Census-reported CBSA median income numbers. Numbers may not sum due to rounding.

SOURCE: Esri; McKinsey geospatial team analysis; McKinsey Global Institute analysis

CBSA total1

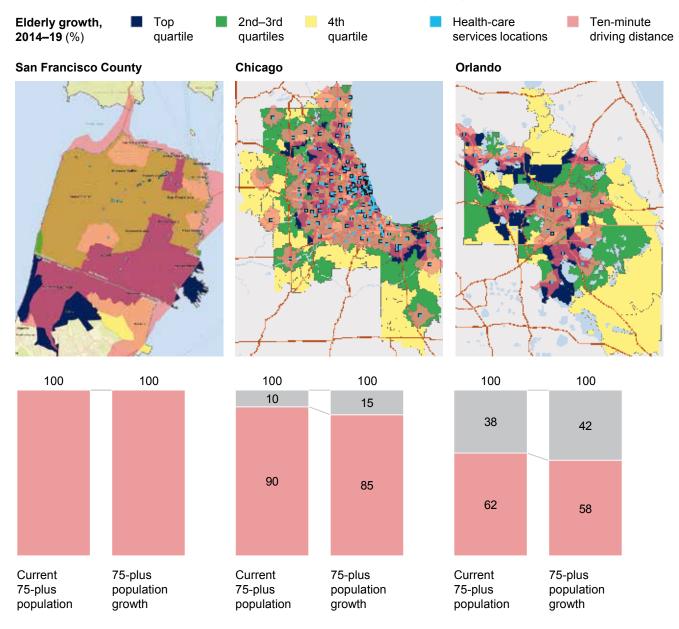
¹ Core based statistical area.

Exhibit 43

Hospital coverage for the elderly varies by geography

Elderly growth areas and access to health services

% share of 75-plus population within ten minutes of hospital facilities, and projected growth 2014–19



NOTE: Numbers may not sum due to rounding.

SOURCE: Esri; McKinsey geospatial team analysis; McKinsey Care Continuum Analytics; McKinsey Global Institute analysis

COMPANIES WITH THE SKILLS TO DEVELOP TAILORED PRODUCTS AND SERVICES TO MEET THE NEEDS OF AN INCREASINGLY COMPLEX CONSUMER LANDSCAPE CAN PROSPER

It is not just a question of matching footprint to growth markets. The variety of consumers that companies can serve has arguably never been more rich and diverse, both across regions and within them. Those companies that have the skill to manage multispeed, multifaceted, and increasingly diverse markets are more likely to succeed. In many markets, companies may need to strengthen their skills in managing overlapping products and brands.

Multinationals cannot compete against dynamic local players without superb, detailed knowledge.

We have discussed how demographic profiles of cities are diverging, leading to different demands for companies serving them. For instance, in the United States there is expected to be significant variation in growth in health-care consumption among the top metropolitan areas between 2015 and 2030, not just in overall health-care spending but also in the share of older consumers in overall growth. For example, health-care consumption in Miami, Florida, is expected to grow at a rate of more than 4 percent a year to 2030, with 75 percent of the growth coming from the 60-plus age group. In contrast, Dallas and Houston are expected to have a similar overall growth rate, but almost half of overall growth will come from consumers younger than 60 (Exhibit 44). Given the different needs and preferences between the age groups, optimizing health-care services in each city will need to account for such differences.

The second source of rising market complexity is the larger number of consumers from a wide variety of emerging markets with different languages, cultural tendencies, and consumer preferences who are entering the global consumption mix as incomes rise. There are significant differences among cities even within the same country. As an example, consider the southern Chinese cities of Guangzhou and Shenzhen, which are roughly the same size and only 62 miles apart. The majority of people living in Guangzhou speak Cantonese. In Shenzhen, Mandarin-speaking migrants make up more than 80 percent of the population. Chinese premium auto buyers from coastal cities such as Hangzhou and Wenzhou, who have long been exposed to international brands, are looking for cars that reflect their social status. They react favorably to advertising that appeals to this impulse. But in interior cities like Taiyuan and Xian, drivers rely heavily on word of mouth and in-store experience to reassure themselves that cars provide what brands advertise.

Multinationals cannot compete against dynamic local players without superb, detailed knowledge. This is evident in the failure of most Western grocery multinationals to expand profitably to emerging markets over the past two decades. The expectation was that in every country the retail landscape would eventually consist of a combination of modern formats: full-line supermarkets and hypermarkets, convenience stores, and discounters. These assumptions have been proven wrong. Food-shopping habits are largely local and deeply entrenched, and supply-side factors such as informality and public policy play a

¹⁴⁰ Richard Dobbs, James Manyika, and Jonathan Woetzel, No ordinary disruption: The four global forces breaking all the trends, Public Affairs, 2015.

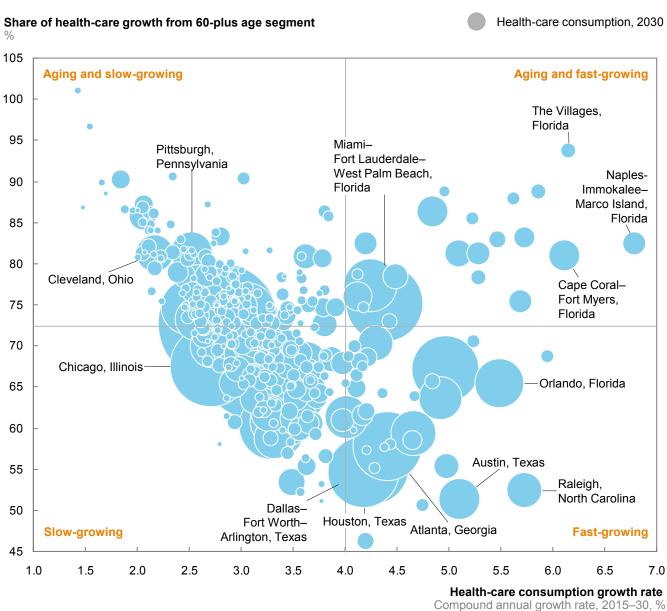
¹⁴¹ Sha Sha, Theodore Huang, and Erwin Gabardi, Upward mobility: The future of China's premium car market, McKinsey Automotive & Assembly Practice, March 2013.

¹⁴² Urban world: The shifting business landscape, McKinsey Global Institute, October 2013.

key role in determining what types of formats will work.¹⁴³ Traditional trade has proven remarkably resilient. And the market and channel structures taking shape in individual emerging economies are distinct from one another, following no obvious pattern.

Exhibit 44

Increasing elderly populations will drive health-care consumption growth in specific US cities



SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

The third source of consumer market fragmentation is increasing inequality within countries and even within key groups of consumers. Increased inequality will lead to a bifurcation of consumers in many market segments, driving a larger wedge between premium and discount offerings. As we have noted, there is increasing inequality in incomes and variations in how individuals are financially ready for retirement among the developed retiring and elderly, which means that products and services targeting the middle segments of the 60-plus market will not be enough. The economic fragility—and rising income inequality—

¹⁴³ Peter Child, Thomas Kilroy, and James Naylor, "Modern grocery and the emerging-market consumer: A complicated courtship," McKinsey Quarterly, August 2015.

among US millennial consumers has undermined homeownership, necessitating innovations in the housing market such as the "modular" home, as described in Chapter 2.

A fourth factor adding complexity to consumer markets is that niche markets are growing in scale. As the number of older consumers increases, for instance, there is sufficient demand to support a much wider range of lifestyle preferences. One example of this is increasingly tailored elderly care and housing services. Aegis Gardens, a retirement community in Fremont, California, is geared specifically toward the needs of Asian seniors. The architecture of the buildings complies with feng shui principles, cultural activities include tai chi and calligraphy, and staff members speak Chinese as well as English. Another example is a day-care community in Livingston, Texas, called Escapees Care Center dedicated to retirees who want to continue to live in their recreational vehicles (RVs). The RVs are wheelchair accessible, and nurses visit the vehicles throughout the day to serve meals, help residents get dressed, or take their medication. A third model is a grass-roots model of assisted living called Villages, which helps seniors remain in their own homes as they age but offers support such as personal care and shopping. These villages are typically run by neighborhood volunteers and funded by annual membership fees.

The question is how companies can respond to the challenge of increasing complexity. Two broad aspects are worth consideration.

First, companies need to be able to run multiple brand programs in tandem, managing their separation (or integration) and conflict between brands. As illustration, consider Gap Inc., which has three different brands—Banana Republic, The Gap, and Old Navy—that target different age and income segments. The company's challenge has been to be able to maintain differentiation between these brands in the minds of consumers while continuing to enjoy the benefits of scale across each.¹⁴⁷

Second, companies need to decide how to respond to the evolving demography of their consumers. Should they stick with their customer cohort and adjust their approach as they age, as *Rolling Stone* magazine or Harley-Davidson motorcycles have done? Or should they focus on a specific age group and adjust to each generation that reaches this age group, as MTV for example has done? Brands that are focused on specific cohort will ultimately need to reinvent themselves if they want to avoid dying with their customers. One example of success is Old Spice, a Procter & Gamble brand of men's deodorant and body wash products, which chose to transform and repurpose its brand to appeal to younger consumers than its traditional, much older base. In 2008, the company launched the Old Spice Swagger campaign that targeted at male customers aged 18 to 24. They rebranded one of their lowest performing scents, Glacial Falls, by renaming it Swagger and featuring it in one of the most successful advertisement campaigns that became a viral Internet phenomenon. 148 Following the campaign, sales of the product formerly known as Glacial Falls quadrupled.

¹⁴⁴ Latest trends in assisted living facilities, Bankrate, June 30, 2014.

¹⁴⁵ escapeescare.org/.

¹⁴⁶ vtvnetwork.org/.

John R. Wells and Galen Danskin, Gap, Inc., 2012, HBS case collection, Harvard Business School, revised March 2014.

¹⁴⁸ For a sample of the advertisements, see www.youtube.com/watch?v=owGykVbfgUE.

LOOK CLOSELY AT SERVICES AS THEY GROW IN IMPORTANCE

The growing importance of services will, directly or indirectly, have an impact on all consumer-facing businesses. Services are growing faster than overall consumption as consumers spend a rising share of their income on, for example, travel and health care in aging developed markets and education in China's cities. At the same time, many traditional products incorporate complementary digital or physical services, and some products are being replaced by services.

Because consumption of services increases in tandem with disposable household income, companies need a good handle on income trends at the level of individual cities.

As we have discussed, services are growing faster than overall consumption. In China alone, MGI estimates that innovation in service-sector businesses could generate value of \$550 billion to \$1.4 trillion per year by 2025, equivalent to 11 to 29 percent of service-sector growth. These innovations would not only raise Chinese productivity, but expanding the service sector would also help make the economy more consumption-driven, while at the same time benefiting consumers with better services, greater convenience, and lower cost. 149

Because consumption of services increases in tandem with disposable household income, companies need a good handle on income trends at the level of individual cities. Look at China as an example. In megacities such as Beijing and Shanghai where average annual household disposable income is around 135,000 renminbi to 145,000 renminbi, about 40 percent of annual household consumption is on services. In contrast, less wealthy households in cities like Liupanshui, where the average annual household disposable income stands at 66,000 renminbi, spend only around 25 percent of their annual consumption on services (Exhibit 45).

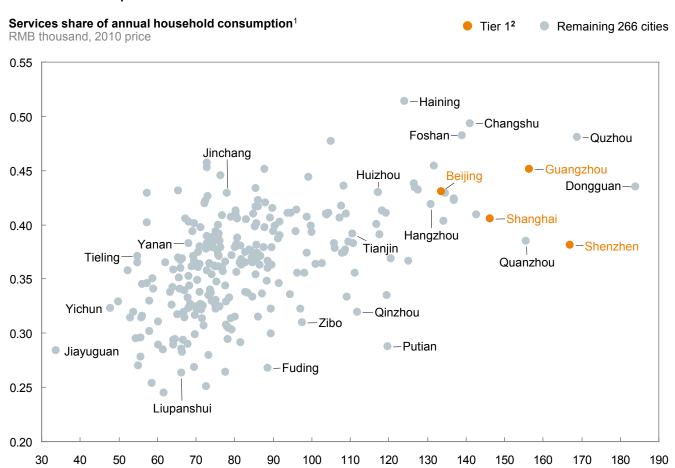
While rising income is the major engine of service-sector growth around the globe, there are other factors that help. Many retired consumers have more time to spare, making them more likely to value the experience or service level of their purchases. The younger cohorts of consumers in most global cities have grown up in a world with almost instant access to music, video/TV, and Wikipedia answers to questions that earlier generations needed to memorize. They embrace an "I want it now" consumer culture and value speed of delivery.

The rise of the of sharing economy is disrupting incumbent businesses, and it may change the signaling value of brands if luxury cars and designer dresses can become accessible without purchasing them. In some cases, products are being replaced by services. Cars are an example of this. In the United States, car sales are virtually flat. In 2000, 17.3 million vehicles were sold; by 2015, that number was barely changed at 17.5 million. Both lower incomes of young adults and the rise of ride-sharing companies such as Zipcar, Uber, and Lyft have contributed to the trend. Some large auto manufacturers have responded by acquiring key sharing economy transport companies. In 2014, German carmaker Daimler anticipated the competitive threat from ride-sharing companies to its Mercedes-Benz models—a popular choice for taxi fleets in Europe—and acquired US firm RideScout. More recently, GM invested in Lyft, Uber's main competitor in the United States.

¹⁴⁹ The China effect on global innovation, McKinsey Global Institute, October 2015.

Exhibit 45

Household consumption of services in China increases with income



- Annual disposable income per household, 2014 RMB thousand, 2010 price
- 1 Includes health care, education, recreation and culture, and transportation and communication.
- 2 Cities with a 2010 nominal GDP greater than RMB 932 billion.

SOURCE: China National Bureau of Statistics; McKinsey Insights China; McKinsey Global Institute analysis

As globalization and digitization are making the world economy increasingly connected, it is tempting to think that location is losing its importance—that goods and services are now bought and sold "virtually" and are no longer as local as they used to be. There is an element of truth to this. Some steps in the services value chain can be delivered from a distance. Consider, for instance, radiology reading in health care, online purchasing, customer services by phone, or online educational courses. Yet two of these continue to have a critically important local component: the technician who takes the X-rays before they are read, and the on-the-ground service that will deliver online purchases to your door.¹⁵⁰

The fact remains that services are largely local in nature: think restaurants, transportation repair or maintenance, or caring for children and the elderly. Previous MGI research found that only one in ten jobs in services could be performed at a distance. ¹⁵¹ Even today, services are far less internationally traded than goods because many services have an intrinsic link to person-to-person interactions. Services sectors account for roughly two-thirds of global GDP, yet cross-border flows of services are less than one-quarter those of

¹⁵⁰ The two remaining services also rely on local phone and Internet services.

¹⁵¹ Exploding the myths about offshoring, McKinsey Global Institute, April 2004.

goods.¹⁵² The continuing local nature of many services is reflected in the fact that certain types of service-sector companies—including health care and real estate—tend to be found in a large number of medium-sized cities in different countries and regions, close to their customers.¹⁵³ Moreover, large differences in the regulation of services among countries and even regions within countries and individual cities are another reason that local knowledge and expertise are so vital. For example, regulation of health care varies among US states; cities have different zoning laws or wireless spectrum regulation.¹⁵⁴

So companies catering to consumption of services need to have an acute sense of geography—and back up that overall knowledge of where key consumers live with local expertise. Running a globally successful service operation requires finding the right balance between taking advantage of economies of scale and local expertise. Because many services are so local, companies' capacity to take advantage of growing consumption depends even more on having a footprint that benefits from growth momentum. Global banks or money-transfer services need to look for local growth booms in regions with rapid growth in migrant populations. Delivery or transportation companies are more likely to tap into growth hubs where they have a local presence. Retailers that are nimble in adjusting their footprint as they detect shifts in shopping preferences—say between suburbs and city centers, or between shopping malls and trendy neighborhoods—are more likely to maintain their market share.

•••

Powerful demographic trends are transforming prospects for global consumption, and therefore the world's economic growth trajectory. In the past, companies serving consumer markets had an easier time of it as global population growth naturally increased the size of markets. The era now under way will be more challenging, with growth in markets relying increasingly on key consumers spending more. The imperative is to get to know who they are, where they are, and what they are likely to want to spend their hard-earned income on. At the same time, consumer markets are becoming more complex, requiring even more targeted strategies. Even within the same consumer cohorts, incomes are diverging. Even within the same country, cities are becoming more different from one another, not less. And the rise of the emerging-market consumer in many different countries adds many languages, cultures, and consumer preferences to the mix. The job of understanding consumers has just become a lot harder.

Trade in goods including commodities totaled \$17.8 trillion in 2012, or 24 percent of global GDP. This was four times the value of services flows at \$4.2 trillion. See Global flows in a digital age: How trade, finance, people, and data connect the world economy, McKinsey Global Institute, April 2014. See, for instance, Charles Collyns et al., The rise of services—what it means for the global economy, Institute of International Finance, December 15, 2015, and Cristina Constantinescu, Aaditya Mattoo, and Michele Ruta, The global trade slowdown: Cyclical or structural? IMF working paper number 15/6, January 2015.

¹⁵³ Urban world: The shifting global business landscape, McKinsey Global Institute, October 2013.

¹⁵⁴ For further discussion, see *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.



TECHNICAL APPENDIX

This report describes one possible scenario of the evolution of global consumption. Like any forward-looking projection, it is subject to large bands of uncertainty at the level of countries and individual cities about the evolution of population and households, migration patterns, business innovation, income growth, and the exchange-rate outlook. In addition to these uncertainties, methodological choices influence economic forecasts.

This appendix provides details about the data sources and methodologies used in this report with a focus on MGI's Cityscope consumption model, how MGI segmented consumers in global consumer groups, and how we define groupings of cities in the United States.

CITYSCOPE 3.0 GLOBAL CONSUMPTION MODEL

MGI's Cityscope 3.0 database includes a model to generate consumption estimates for 2015 and projections to 2030 by country for six age groups of consumers in the following age ranges: 0–14, 15–29, 30–44, 45–59, 60–74, and 75-plus. The model covers 100 countries and forms the basis of both urban consumption projections and city-specific consumption projections for about 3,000 metropolitan areas around the world that are contained in MGI's Cityscope database.

The consumption projections are built from three components: population projections by age group, normalized per capita consumption estimates by age for each country, and projected average levels of per capita consumption by country. Multiplying these three variables for each age group generates our aggregate consumption estimates for each country and city.

First, we use data from the UN Population Division's *World population prospects: The 2015 revision* to generate single-year age-group populations for each country in 2015 and 2030.¹⁵⁵ To generate urban consumption projections, we rely on population forecasts for 15-year age groups from the Cityscope's pool of large cities. Exhibit A1 provides a snapshot of the contributions of each age group and region to the overall increase in the number of people living in large cities between 2015 and 2030.¹⁵⁶

The UN World population prospects: The 2015 revision definition of a country's population includes all residents regardless of legal status or citizenship except for refugees not permanently settled in the country of asylum who are generally considered part of the population of the country of origin.

The city-level projections rely on demographic and economic data from MGI's Cityscope 3.0 database, which covers all 3,000 metropolitan areas in the world that have at least 150,000 inhabitants in developed regions, and at least 200,000 inhabitants in emerging ones. In this analysis, we have used the most recent population and per capita GDP forecasts, and the methodology used to generate population and per capita consumption estimates is the same as in previous urban world reports. Our methodology is described in detail in the technical appendix of *Urban world: Cities and the rise of the consuming class*, McKinsey Global Institute, June 2012. Our consumption projections are based on single-year population and consumption projections. We aggregated population, per capita consumption, and aggregate consumption estimates across the 15 years to generate the projections for each of the six age groups.

Exhibit A1

Change in global urban population, 2015-30

Million										Low		High
	Develop	ed regions	S		Emerging regions							
Age group Years	United States and Canada	Western Europe	North- east Asia	Austral- asia	China	Latin America	South Asia	South- east Asia	Eastern Europe and Central Asia	Sub- Saharan Africa	Middle East and North Africa	Total
0–14	6.6	-0.3	0.1	0.7	13.5	-1.6 9	17.8	9.3	0.4	22.7	2.7	72.0
15–29	2.9	-1.3	-3.1	0.4	-0.6	2.9	24.7	13.2	-1.7	24.0	4.3	65.8
30–44	9.8	-3.8	-5.0	0.7	55.9	14.1	34.8	14.6	-1.8	18.4	5.4	143.0
45–59	-0.9	-5.1	2.6	0.5	51.2	22.0	28.6	18.9	5.4	12.6	11.9	147.7
60–74	12.6	12.0	2.9	0.9	97.8	21.8	21.0	15.9	6.8	6.5	7.3	205.5
75-plus	13.2	8.9	8.4	1.0	45.3	10.2	6.3	3.8	3.2	1.3	1.9	103.4
Total	44.2	10.5	5.9	4.2	263.1	69.3	133.2	75.7	12.3	85.5	33.4	
Global consumers to watch 1 Developed retiring and elderly 2 North America's working age 5 Southeast Asia's working age 8 Northeast Asia's working age												

South Asia's working age

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

China's working age

Second, we draw on the National Transfer Accounts Project (NTA) data to generate normalized consumption profiles by age group—the ratio of each single-year age group's per capita consumption relative to the country's average per capita consumption. The data are built from snapshots of age-specific consumption and cover 40 countries. For the 60 countries for which age-specific consumption data are not sufficiently available to build such profiles, we rely on regional composite profiles based on the average consumption profiles for countries where data are available within the same region (Exhibit A2). For 20 countries in the sample, NTA also provides a decomposition of age-specific consumption into five categories: public health care, public education, private health care, private education, and private "other consumption."

Latin America's working age

¹⁵⁷ For the underlying data and more information on the NTA project, see www.ntaccounts.org/web/nta/show/.

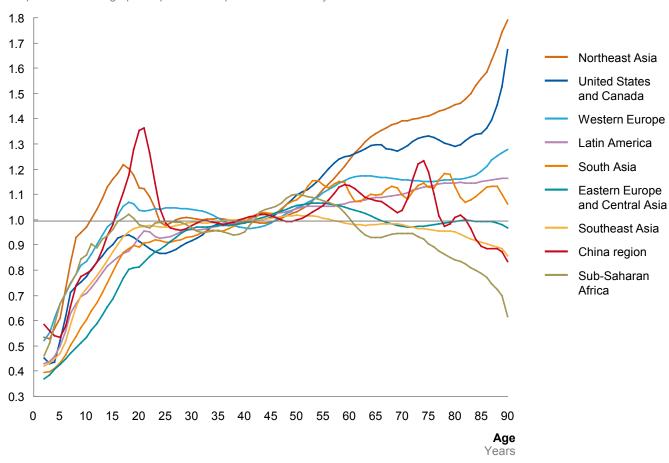
¹⁵⁸ Since there were no Middle East or North Africa countries in NTA's 40-country set, we used an average of developing world consumption curves to estimate curves for several of those countries.

Exhibit A2

There are significant regional differences in per capita consumption profiles by age

Per capita consumption by age

Proportion of average per capita consumption for 30- to 49-year-olds



SOURCE: McKinsey Global Institute Cityscope; National Transfer Accounts Project; McKinsey Global Institute analysis

Third, we create an average real dollar national per capita consumption estimate for 2015 and projection to 2030. For the 100 countries in our sample, our baseline per capita consumption estimates are anchored in historical per capita consumption data for 2000 to 2013 from Oxford Economics. ¹⁵⁹ Assuming that the overall share of consumption in GDP remains at today's level, we projected future per capita consumption with consensus forecasts for the per capita GDP growth rate from 2013 to 2015 and to 2030, using average forecasts from IHS, the Economist Intelligence Unit, Oxford Economics, and McKinsey's Long-Term Growth Model. ¹⁶⁰ While our base case takes consensus macroeconomic growth projections as its starting point, we assess the impact of different macroeconomic and other uncertainties on 2030 consumption outcomes. To generate urban consumption forecasts

¹⁵⁹ Oxford Economics' historical data cover real private consumption and real public consumption. To ensure that the definitions are consistent with the NTA age consumption data, we drew on national statistics, Eurostat, and World Bank data for public expenditure on health and education, and we excluded other public consumption (for example, defense) that is not specific to an age group.

¹⁶⁰ In the case of China, we assumed that the consumption share climbs from 37 percent today to 41 percent by 2030. In our scenario analyses, we assess China's consumption growth if consumption share rises up to 50 percent.

by age group, we use city-specific per capita GDP level and growth estimates for Cityscope cities and aggregated them across all large cities in a country.¹⁶¹

GLOBAL CONSUMER GROUP SEGMENTATION

For the global consumer groups to watch, we combined three age categories to make a working-age group aged 15 to 59, and combined two other age groups to create the retiring and elderly who are aged 60 and older (Exhibit A3). The reason we took this approach is that consumption behavior changes in systematic ways as people proceed through life. There are notable consumption shifts that start around the ages of 15 and 60. Children's consumption is lower than for other age groups, except for publicly and privately funded education. Meanwhile, the 60-plus age group spends more than any other on health care, while spending on other categories declines with age. Within these large groupings, there are different consumer segments and shifts in consumption patterns, too.

Exhibit A3

Global consumers to watch—definitions Global consumers to watch												
	Develope	d regions			Emerging	g regions						
Age group Years	North America	Western Europe	North- east Asia	Austral- asia	China	Latin America	South Asia	South- east Asia	Eastern Europe and Central Asia	Sub- Saharan Africa	Middle East and North Africa	
0–14	US children	Western Europe children	North- east Asia children		China children	Latin America children	South Asia children	South- east Asia children				
15–29	2	7	8		3	9	6	5				
30–44	US working age	Western Europe working age	North- east Asia working age	Other	China working age	Latin America working age	South Asia working age	South- east Asia working age		Other		
45–59				Outer						Outer		
60–74	Developed retiring				4 China	Latin America	South Asia 60-	South- east Asia				
75-plus		and elderly	′		60-plus	60-plus	plus	60-plus				

SOURCE: McKinsey Global Institute analysis

We have updated per capita GDP forecasts to reflect the latest available GDP information at the city level, and used the same macroeconomic forecasts as in the national forecast. We use the same methodology described in our earlier urban world reports. See *Urban world: Cities and the rise of the consuming class*, McKinsey Global Institute, June 2012.

Across the regional age groups of consumers, we assessed consumption growth from 2015 to 2030 and the level of consumption in 2030 to identify the nine consumer groups to watch (Exhibit A4). Given their similar demographic trends and total per capita consumption patterns, we have combined the 60-plus age group across developed regions. The numbers of retiring and elderly consumers are rising and their consumption per capita is high largely due to rising health-care expenditure. ¹⁶² Each of the nine urban consumer groups to watch contributes at least 4 percent of global consumption growth or represents at least 3 percent of global consumption in 2030. In the case of the top three groups, each is projected to generate more than 10 percent of global consumption in 2030.

Exhibit A4

Share of urban consumption, 2030

%										Low		High	
	Developed regions					Emerging regions							
Age group Years	United States and Canada	Western Europe	North- east Asia	Austral- asia	China	Latin America	South Asia	South- east Asia	Eastern Europe and Central Asia	Sub- Saharan Africa	Middle East and North Africa	Total	
0–14	3.42	1.76	0.83	0.19	1.70	1.00	0.53	0.50	0.42	0.44	0.34	11.13	
15–29	4.87	2.69	1.23	0.30	4.02	1.78	0.97	0.85	0.78	0.69	0.54	18.72	
30–44	5.75	2.95	1.43	0.32	4.23	1.94	0.97	0.88	0.94	0.65	0.54	20.60	
45–59	5.92	3.16	1.91	0.29	3.75	1.76	0.76	0.74	1.00	0.43	0.48	20.20	
60–74	5.93	3.44	2.00	0.24	3.51	1.20	0.48	0.41	0.72	0.22	0.26	18.41	
75-plus	3.79	2.21	2.00	0.15	1.54	0.52	0.14	0.12	0.35	0.04	0.09	10.95	
Total	29.68	16.21	9.39	1.49	18.75	8.20	3.84	3.52	4.21	2.46	2.25		

Global consumers to watch

Developed retiring and elderly

North America's working age

3 China's working age

4 China's 60-plus

Southeast Asia's working age

6 South Asia's working age

7 Western Europe's working age

8 Northeast Asia's working age

9 Latin America's working age

SOURCE: McKinsey Global Institute Cityscope; McKinsey Global Institute analysis

Our consumer groups bring together individuals based on their age, which means that individuals move from one age group to the next as they get older. For instance, the consumers who are in the 15- to 29-year-old group today will move on to the 30- to 45-year-old group by 2030, and today's 0- to 14-year-olds will replace them in that age group.

¹⁶² In contrast, the number of working-age consumers is declining in Western Europe and Japan, while the number continues to rise in North America.

However, there is behavior that is specific to a cohort or a generation: a group of individuals who are about the same age and who have experienced specific historical events that may influence their views of the world. However, studying cohort behavior is challenging for two reasons. First, there are very limited time series data that permit comparison of cohorts at similar ages. Second, there is no clear-cut way to define cohorts, and definitions vary across studies. However, there is no clear-cut way to define cohorts.

When we want to highlight differences in consumption patterns between generations, we define cohorts as consumers who were born in 15-year increments, consistent with our age groups. We label each cohort using names of generations commonly used in public discourse: the Silent Generation born before 1940; Early Boomers born between 1940 and 1955; Late Boomers born between 1955 and 1970, Generation X born between 1970 and 1985; Millennials born between 1985 and 2000; and Digital Natives born after 2000.

METHODOLOGY FOR CLUSTERING CITES IN THE UNITED STATES

To identify how cities in the United States differ in their population characteristics, we used a K-means clustering approach to group 257 US metropolitan statistical areas with 150,000 or more inhabitants in 2012 into seven categories. The variables included in the analysis are population growth rate, 2000–14; population age distribution in 2014; average birth and death rates per 1,000 population, 2000–14; net domestic and international migration, 2000–14; and median existing family house price in 2013. All data were sourced from the US Census Bureau (see Exhibit A5 for a snapshot of average differences among the seven categories of city).

¹⁶³ Generations in Canada, Statistics Canada.

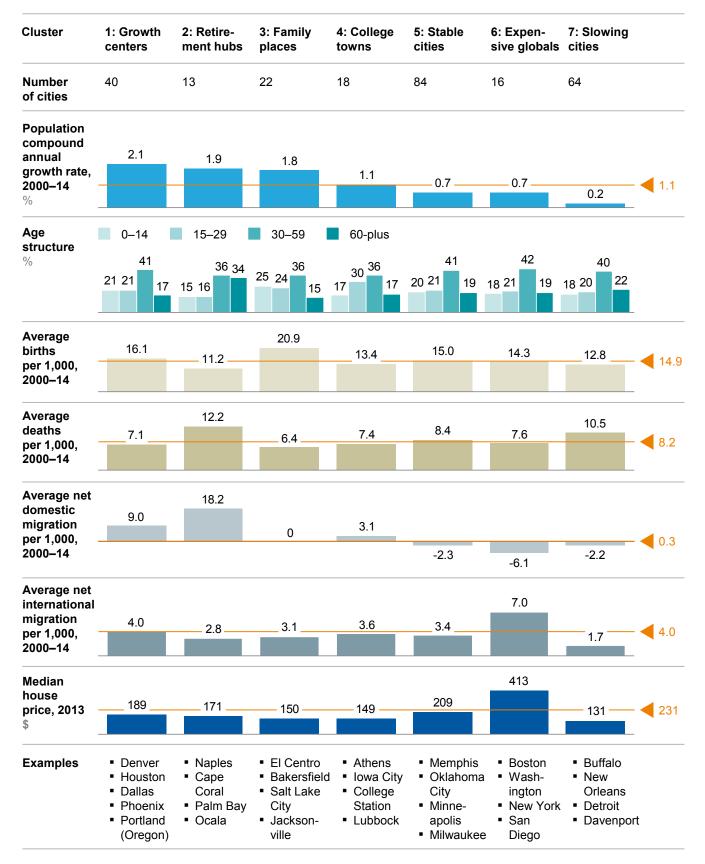
The US Census Bureau only defines one cohort, baby boomers, and the bureau's chief demographer explains why: "Unlike the baby boom generation, the birth years and characteristics for other generations are not as distinguishable and there are varying definitions used by the public" (quoted in Philip Bump, "Your generational identity is a lie," Washington Post, April 1, 2015). The White House defines the millennial generation as born between 1980 and 2004; see 15 economic facts about millennials, White House Council of Economic Advisers, October 2014. The Pew Research Center's definition of millennials is individuals born between 1981 and 1997; see The generations defined, Pew Research Center, May 8, 2015. Statistics Canada refers to millennials as "Generation Z," born between 1993 and 2011.

Exhibit A5

US city archetypes vary significantly in their population dynamics

257 Cityscope cities in seven clusters ordered by population compound annual growth rate, 2000–14

Weighted average



SOURCE: Alteryx K-means clustering using data from McKinsey Global Institute Cityscope database; US Census Bureau data, 2000–14; American Community Survey and published abstracts, 2002–15; McKinsey Global Institute analysis



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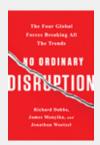
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April 2016
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