The 'Bird of Gold': The Rise of India's Consumer Market

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Preface

This report is the product of a year-long research project conducted by the McKinsey Global Institute (MGI) in collaboration with McKinsey's Global Strategy Practice and McKinsey's offices in India.

Eric Beinhocker, a senior fellow at MGI based in London, worked closely with me to provide overall leadership for the project. The project was managed initially by Ulrich Gersch and then by Sumit Gupta, engagement managers in New York and Silicon Valley respectively. Ezra Greenberg, a specialist with MGI in Washington, DC, led the econometric modeling team which included Jonathan Ablett, a senior research analyst, and Geoffrey Greene, an independent econometrician based in Washington, DC.

The team also included several members of McKinsey's India office and the McKinsey Knowledge Center and we are grateful for the efforts of Aadarsh Baijal, Anupam Bose and Shishir Gupta. In addition, we would like to recognize the work done by Elizabeth Stephenson, Ambika Walia, Avinash Chandra, and Ashish Garg in laying the groundwork for this project.

The report would not have been possible without the support and expertise of partners in McKinsey's offices in Delhi and Mumbai. We owe particular thanks to Adil Zainulbhai, Subbu Narayanswamy, Ireena Vittal, Leo Puri and Ranjit Pandit. In addition, our work has benefited tremendously from in-depth discussions with Gautam Kumra, Shirish Sankhe, Noshir Kaka, Pierre Avanzo, Tilman Ehrbeck, Peter Haden, Vipul Tuli, Palash Mitra, Rajiv Lochan and Prashant Gupta.

Moreover, we would like to thank Janet Bush for her editorial efforts, Martha Laboissiere for shepherding this report through production, Rebeca Robboy and

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Table of contents

Executive summary

India's economic growth has accelerated significantly over the past two decades and so, too, has the spending power of its citizens. Real average household disposable income has roughly doubled since 1985. With rising incomes, household consumption has soared and a new Indian middle class has emerged.[1]

Yet much remains unknown about how India's consumer market will evolve in the future. Will Indian incomes continue to keep pace with overall economic growth? How will the distribution of incomes change? Who will benefit most from growth? How big is India's middle class today and how large will it become? How will income be distributed geographically? What will Indians spend their new-found wealth on, and which industry sectors will be the winners and which the losers from changing spending patterns?

To answer these questions the McKinsey Global Institute (MGI) undertook a year-long study to examine the future of the Indian consumer market. We assembled a proprietary database of 20 years' data linking macroeconomic and demographic variables to Indian incomes and consumption behavior. We made extensive use of our exclusive access to the Market Information Survey of Households (MISH) database created from income surveys conducted by the National Council of Applied Economic Research (NCAER) covering over 300,000 households, as well as the National Sample Survey Organization (NSSO) household consumption database created from consumer expenditure surveys across thousands of villa-

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1   R.K. Shukla, S.K. Dwivedi, and Asha Sharma (with assistance from Sunil Jain), *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households,* National Council of Applied Economic Research (in association with Business Standard), 2004, (http://www.ncaer.org/Downloads/PublicationsCatalog.pdf).

ges and urban blocks. After integrating the MISH and NSSO data with our own dataset, we constructed an econometric model to forecast Indian household income and spending from 2006 to 2025.

Our analysis shows that if India continues on its current high growth path, over the next two decades the Indian market will undergo a major transformation. Income levels will almost triple and India will climb from its position as the 12th-largest consumer market today to become the world's fifth-largest consumer market by 2025. As Indian incomes rise, the shape of the country's income pyramid will also change dramatically. Over 291 million people will move from desperate poverty to a more sustainable life, and India's middle class will swell by over ten times from its current size of 50 million to 583 million people. By 2025 over 23 million Indians—more than the population of Australia today—will number among the country's wealthiest citizens. While much of this new wealth and consumption will be created in urban areas, rural households will benefit too. Annual real rural income growth per household will accelerate from 2.8 percent over the past two decades to 3.6 percent over the next two. Indian spending patterns will also evolve, with basic necessities such as food and apparel declining in relative importance, and categories such as communications and health care growing rapidly. But in order for India to achieve these positive results, the country must continue to reform and modernize its economy, as well as address significant shortfalls in its infrastructure and education system.

We briefly outline these findings below. Readers interested in the detailed results and analyses are directed to the main chapters of the report, while those interested in our methodology, assumptions, data sources, and category-specific results are directed to the appendices.

INDIAN INCOMES WILL ALMOST TRIPLE OVER THE NEXT TWO DECADES

Forecasts for India's real GDP growth rate over the coming two decades generally range between 6 and 9 percent per year. Our base case assumes real compound annual growth of 7.3 percent from 2005–2025, a marked acceleration from the 6 percent growth of the previous two decades.[2] We believe this optimism is justified because of the substantial scope for continued productivity increases in Indian businesses, the growing openness and competitiveness of the Indian economy, and favorable demographic trends.

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2 Our forecast of GDP growth is derived from a macroeconomic model developed by Oxford Economics. Unless otherwise noted, growth figures are reported as real compound annual growth rates (CAGR) and thus may appear somewhat lower than the nominal average annual growth rates that are often reported.

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Our analysis shows that if India does in fact achieve this growth path over the next 20 years, Indian income levels will almost triple. Average real household disposable income will grow from 113,744 Indian rupees in 2005 to 318,896 Indian rupees by 2025, a compound annual growth rate of 5.3 percent (Exhibit 1).[3] This is significantly more rapid than the 3.6 percent annual growth of the past 20 years—and with the exception of China, much quicker than income growth in other major markets. For example, US average real household income increased at a compound annual growth rate of 1.5 percent over the past two decades; for Japan the figure was 0.25 percent.

Exhibit 1

HOUSEHOLD INCOME GROWTH WILL ACCELERATE ACROSS INDIA
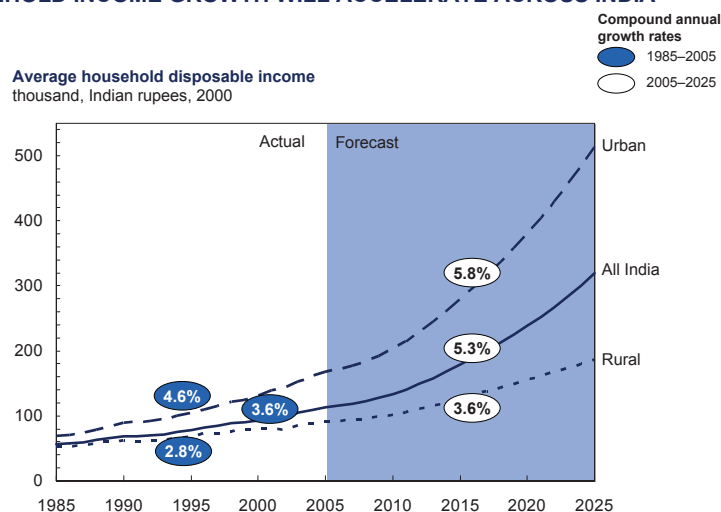
Source: Mckinsey Global Institute

RISING INCOMES WILL LIFT 291 MILLION OUT OF POVERTY AND CREATE A 583 MILLION-STRONG MIDDLE CLASS

India's rising real incomes have already had a significant impact on poverty reduction. In 1985, 93 percent of the population had an annual household income of less than 90,000 Indian rupees, or less than $1,970 per year or $5.40 per day—an income bracket we categorize as *deprived*.[4] By 2005 this had dropped

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3   Unless otherwise noted, figures throughout this report are quoted in real 2000 rupees. Figures quoted in other currencies are also adjusted for inflation, using 2000 as the base year. Indian fiscal year figures are reported as the year in which nine out of 12 months of the results occurred, e.g. FY 2006 is reported as 2005.

4   Our definition of poverty—the deprived segment—at less than 90,000 Indian rupees household disposable income is also the measure used by NCAER. India's official definition of poverty is based on caloric intake and is set at 2,400 calories per capita per day for urban regions and 2,100 calories for rural areas. According to this lower threshold, extreme poverty dropped from 36 percent of the population in 1993 to 29 percent in 1999 (Source: UN).

by about two-fifths to 54 percent of the population, with the biggest fall occurring since 1995. Thus more than 103 million people moved out of desperate poverty in the course of one generation—not just in India's urban centers but in its rural areas as well. This is all the more impressive given that India's population grew by 352 million during this period. So, in effect, there are 431 million fewer poor people in India today than there would have been if poverty had remained at its 1985 rate. In short, India's economic reforms, and the increased growth that has resulted, have been the most successful anti-poverty program in the country's history.

Our forecast shows that overall economic growth will continue to benefit India's poorest citizens and that the deprived segment will further drop from 54 percent of the population in 2005 to 22 percent by 2025 (Exhibit 2). The rural deprived will drop from 65 percent of the total rural population to 29 percent. Overall a further 291 million people will move out of poverty during a period when 322 million people will be added to the country's population. In effect, this means that India will have 465 million fewer poor by 2025 than if the poverty rate remained at 2005 levels, and over a billion less poor people than if the rate had remained stuck at 1985 levels.

Exhibit 2

INDIA WILL SEE FURTHER REDUCTION IN POVERTY AND GROWTH OF ITS MIDDLE CLASS
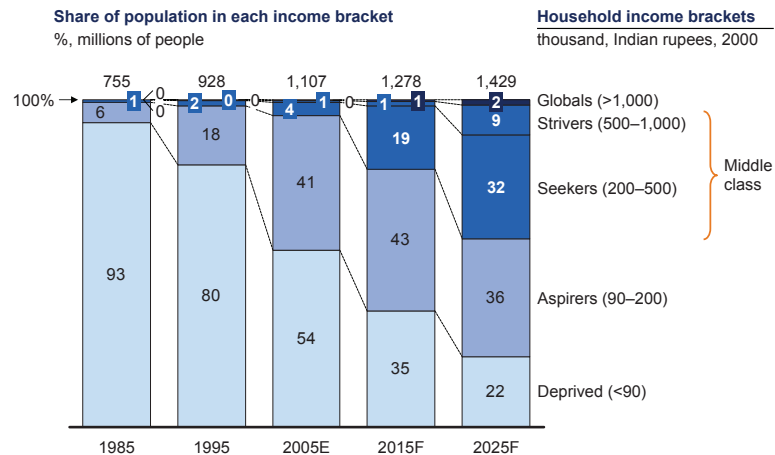
Share of population in each income bracket
% , millions of people

Household income brackets
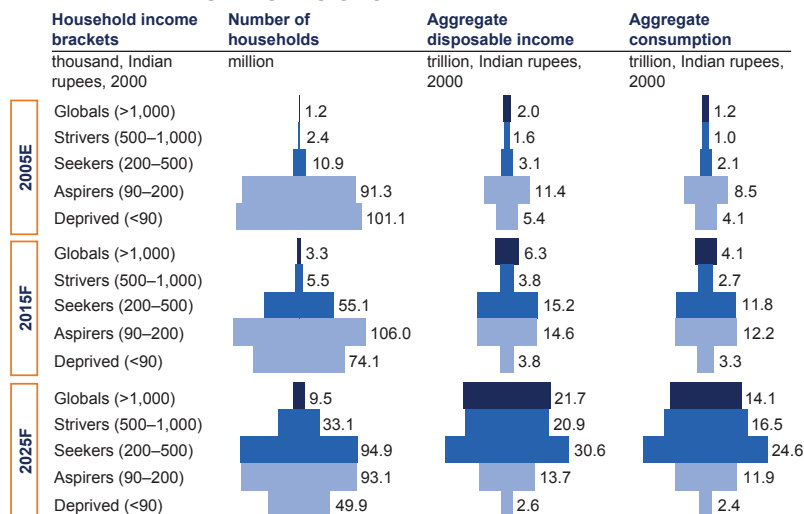thousand, Indian rupees, 2000

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: Mckinsey Global Institute

As Indian incomes rise the shape of the country's income pyramid will also change dramatically (Exhibit 3). Apart from a substantial reduction in poverty, India will create a sizeable and largely urban middle class. For the purposes of this report

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we follow the conventions used by NCAER and define the middle class as comprising two economic segments: *seekers* with real annual household disposable incomes of 200,000 to 500,000 Indian rupees ($4,380 to $10,940 or $23,530 to $58,820 at purchasing power parity or "PPP") and *strivers* at 500,000 to 1,000,000 Indian rupees ($10,940 to $21,890 or $58,820 to $117,650 at PPP).[5] In 2005, the Indian middle class was still relatively small, comprising approximately 5 percent of the population or 13 million households (50 million people). However, if India achieves the growth rates we assume, its middle class will reach 41 percent of the population or 128 million households (583 million people) by 2025. In addition, households with real earnings of more than 1,000,000 Indian rupees a year (classified as *global*—greater than $21,890 or $117,650 at PPP) will comprise approximately 2 percent of the population, but earn almost a quarter of its income.

Exhibit 3

THE SHAPE OF INDIA'S INCOME PYRAMID WILL CHANGE DRAMATICALLY AS INCOMES GROW

Household income brackets thousand, Indian rupees, 2000	Number of households million	Aggregate disposable income trillion, Indian rupees, 2000	Aggregate consumption trillion, Indian rupees, 2000
2005E			
Globals (>1,000)	1.2	2.0	1.2
Strivers (500–1,000)	2.4	1.6	1.0
Seekers (200–500)	10.9	3.1	2.1
Aspirers (90–200)	91.3	11.4	8.5
Deprived (<90)	101.1	5.4	4.1
2015F			
Globals (>1,000)	3.3	6.3	4.1
Strivers (500–1,000)	5.5	3.8	2.7
Seekers (200–500)	55.1	15.2	11.8
Aspirers (90–200)	106.0	14.6	12.2
Deprived (<90)	74.1	3.8	3.3
2025F			
Globals (>1,000)	9.5	21.7	14.1
Strivers (500–1,000)	33.1	20.9	16.5
Seekers (200–500)	94.9	30.6	24.6
Aspirers (90–200)	93.1	13.7	11.9
Deprived (<90)	49.9	2.6	2.4

Source: Mckinsey Global Institute

INDIA WILL BECOME THE WORLD'S FIFTH LARGEST CONSUMER MARKET BY 2025

The combination of rapidly rising household incomes and a robustly growing population will lead to a striking increase in overall consumer spending. We fore-

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5   The labels and cut-off points that we have used for our income classes are broadly similar to those used by NCAER and reported in their publication, *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households*. However, we have re-calibrated the specific brackets for the time period that we examine.

cast that aggregate consumption in India will grow in real terms from 17 trillion Indian rupees today to 34 trillion by 2015 and 70 trillion by 2025—a fourfold increase (Exhibit 4).

Exhibit 4

INDIA'S AGGREGATE CONSUMPTION WILL QUADRUPLE OVER THE NEXT 20 YEARS

Aggregate consumption across income brackets
trillion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

Year	1985	1995	2005E	2015F	2025F	Bracket
Total	7	10	17	34	70	
Globals (>1,000)				4	14	
Strivers (500–1,000)			1	3	16	
Seekers (200–500)	0	1	2	12	25	Middle class
Aspirers (90–200)	1	3	9	12	12	
Deprived (<90)	5	5	4	3	2	

4.1x
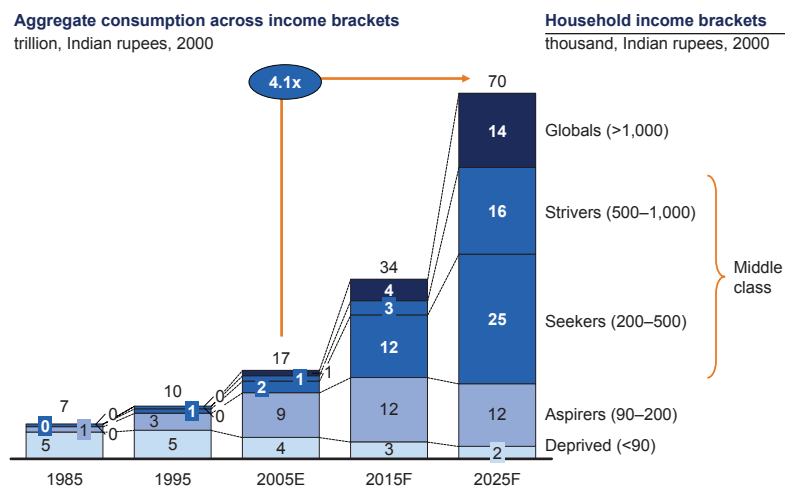
Note: Figures are rounded to the nearest integer and may not add up exactly to column totals.
Source: Mckinsey Global Institute

This soaring consumption will vault India into the premier league among the world's consumer markets. Today its consumer market ranks 12th. By 2015 it will be almost as large as Italy's market. By 2025 India's market will be the fifth largest in the world, surpassing the size of Germany's consumer market. We should note, however, that the size of India's market will still be tied closely to its large population. On a per capita basis, real spending will remain modest at 48,632 Indian rupees in 2025 (or $1,065)—although this will still represent a tripling from today's level.

We also find that income growth will be the biggest driver of increasing consumption, far outweighing population growth or any change in savings behavior. We estimate that 80 percent of consumption growth will come from rising income, while 16 percent of the increase will be due to growth in the number of households. Only 4 percent will come from changes in India's household savings rate.

As incomes grow, the class structure of consumption will change significantly as well. Consumption today is dominated by the deprived and aspirer income

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segments, which together control 75 percent of spending. By 2025, however, the global segment will wield 20 percent of total spending and the new middle class will come to dominate, controlling 59 percent of India's consumption power.

MIDDLE-CLASS GROWTH WILL SPREAD BEYOND TOP-TIER CITIES

The geographic pattern of India's income and consumption growth will shift too. Today, despite their lower incomes, rural households, due to their majority share of the population, are collectively India's largest consumers—57 percent of current consumption is in rural areas versus 43 percent in cities. The challenges of accessing and serving rural markets mean that much of the Indian market has not been addressable by major companies and is served by the informal economy instead.

Income growth will be fastest in urban areas where real average household incomes will rise from 166,922 Indian rupees today to 513,042 Indian rupees by 2025, an annual increase of 5.8 percent. This is not to say that India's rural areas will be left on the sidelines. Average real rural income growth per household will accelerate to 3.6 percent over the next two decades and consumption will reach today's average urban household level by 2018.

However, by 2025 the Indian consumer market will largely be an urban affair, with 62 percent of consumption in urban areas versus 38 percent in rural areas. Urban areas will account for over two-thirds of the future growth in the Indian market despite the fact that even in 2025, urban areas will have only 37 percent of the population. This represents an important opportunity for many companies because urban areas are often easier for the formal sector of the economy to address. Indian and multinational businesses will thus see their addressable market grow substantially.

Within urban areas we will also begin to see India's middle tier and smaller cities begin to emerge as increasingly attractive markets with substantial numbers of middle class customers. While India's two largest conurbations, Delhi and Mumbai, will continue to be the country's biggest markets and the top eight cities will remain the dominant locations for upper-income global consumers, we estimate that almost two-thirds of India's middle class opportunity will lie outside these top-tier urban areas. For example, mid-size cities such as Chandigarh, Ludhiana and Amritsar have experienced significant income growth and currently have average incomes equal to, or higher than, the top-tier cities.

DISCRETIONARY SPENDING WILL ACCOUNT FOR 70 PERCENT OF ALL SPENDING BY 2025

As Indian incomes rise, the "share-of-wallet" of consumer spending will change significantly too. We have projected spending patterns in nine major consumption categories and 30 subcategories. Our results show that all categories will experience growth in absolute terms, but some will grow much faster than others. The percentage of Indian spending on discretionary items will grow dramatically, while spending on necessities will grow more slowly (Exhibit 5).

Exhibit 5

INDIA'S SHARE-OF-WALLET IS SHIFTING FROM BASIC NECESSITIES TO DISCRETIONARY ITEMS
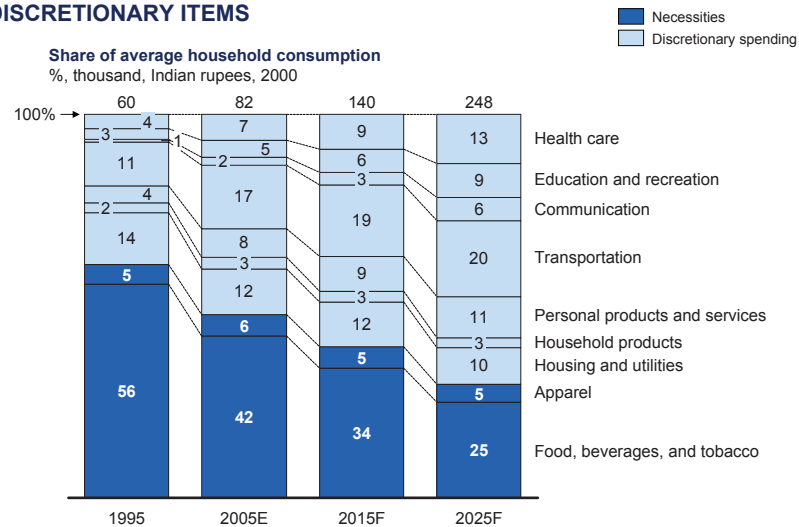
Necessities
Discretionary spending

Share of average household consumption
%, thousand, Indian rupees, 2000

Health care
Education and recreation
Communication
Transportation
Personal products and services
Household products
Housing and utilities
Apparel
Food, beverages, and tobacco

1995　2005E　2015F　2025F

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: Mckinsey Global Institute

Today the largest categories of Indian spending are food, beverages, and tobacco (FB&T); transportation and housing. By 2025 FB&T will still be the biggest category, although its share will have dropped from 42 percent to 25 percent. Transport and health care will be the second and third biggest markets respectively. Communications, which accounts for only 2 percent of spending today, will be one of the fastest expanding categories with growth of over 13 percent a year (on an aggregate basis). Other categories that will see annual growth of over 8 percent include transportation, personal products and services, health care, and education and recreation as these categories evolve into sizable markets (Exhibit 6).

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Exhibit 6

FOOD WILL REMAIN THE LARGEST CONSUMPTION CATEGORY WHILE COMMUNICATIONS WILL GROW THE FASTEST

Market size in 2025
trillion, Indian rupees, 2000

2005–2025 compound annual growth rate of aggregate consumption
%

Communications (4.3)
Education and recreation (6.1)
Health care (8.9)
Personal products (7.4)
Transport (13.8)
Household products (1.8)
Apparel (3.3)
Housing and utilities (6.6)
Food, beverages, and tobacco (17.3)

2005 market size
trillion, Indian rupees, 2000

Source: Mckinsey Global Institute

Even India's slower growing spending categories will represent significant opportunities for companies because these markets will still be growing rapidly in comparison with their counterparts in other parts of the world. Indeed India's relative share of world markets will rise in virtually every product and service category. If the consumer markets of the OECD countries continue to expand at their current rates, we estimate that India will grow from accounting for 2.1 percent of total OECD plus India demand today to 4.6 percent by 2025.

POSITIVE CHANGES BUT IMPORTANT CHALLENGES

The upcoming changes in the Indian consumer market will create major opportunities and challenges for Indian and multinational businesses alike. For example, companies will need to attract and educate large numbers of new consumers, establish and retain brand loyalties as tastes change with rising incomes, and introduce high-value products and services at sufficiently low prices to be accessible to the emerging middle class. The quadrupling of the Indian market will present companies competing in India with a critical discontinuity to navigate—who the leaders of this changed market will be has yet to be decided.

Growth in Indian incomes and consumption will also deliver extensive societal benefits, with further declines in poverty and the growth of a large middle class. We should emphasize again, however, that the overall outcome we have described,

depends significantly on India maintaining a relatively high rate of long-term growth, in the range of 7 to 8 percent.[6] That in turn depends crucially on the government continuing to pursue a pro-reform, pro-growth economic agenda. Our results do not assume an unrealistic breakthrough, but rather that India continues to open its markets to both domestic and foreign competition, and that the government follows through on its pledges to address key infrastructure and education issues. Faster reform would provide further upside to our results. But at the same time, slower reform and failure to act on India's significant challenges could dampen growth and put the opportunities we have described substantially at risk.

During the first millennium AD, merchants referred to India as the "Bird of Gold" due to the glittering dynamism of its market. Over the next two decades, that bird may take flight once again.

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6   The impact of varying growth rates on our model is generally to shift the timing of results. For example, slower GDP growth would imply slower income and consumption growth, thus pushing the point at which Indian consumption triples out past 2025. Likewise, faster growth would accelerate the rate at which that point is reached.

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1. Introduction: The Bird of Gold flies again

As business leaders scan for new opportunities over the coming decades, one of the most significant will be the creation of a vast new pool of consumers arising out of the world's emerging economies. The two countries that will create new consumers more quickly and in greater numbers than anywhere else in the world will be India and China. In a previous McKinsey Global Institute (MGI) report, we focused on the growth of China's consumer market.[1] In this companion report we turn our attention to India.

Following a series of reforms beginning in the early 1990s, India has enjoyed over a decade of strong and accelerating growth. From 1995–2000 India's gross domestic product (GDP) clocked a compound annual growth rate of 5.8 percent, which increased to 6.8 percent from 2000–2005. Current estimates are that India's GDP grew by 9.0 percent in 2005. This made India one of the fastest-growing economies in the world.[2]

As India's economy has grown, so too has the spending power of its citizens. Real average household income in India has roughly doubled over the past two decades. Along with rising incomes have come greater consumption and the emergence of India's much discussed "new middle class".[3]

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1   Diana Farrell, Eric Beinhocker, Ulrich Gersch, Ezra Greenberg, Elizabeth Stephenson, Jonathan Ablett, Mingyu Guan, Janamitra Devan, *From 'Made in China' to 'Sold in China': The Rise of the Chinese Urban Consumer,* McKinsey Global Institute, November 2006, (www.mckinsey.com/mgi/publications/china_consumer/index.asp).

2   Press releases from the Ministry of Statistics and Programme Implementation, Government of India (www.mospi.nic.in/mospi_press_releases.htm). The figure cited is for Indian fiscal year 2006, which we refer to as year 2005—see "A note on exchange rates, reporting years, and other model factors" later in this chapter.

3   R.K. Shukla, S.K. Dwivedi, Asha Sharma (with assistance from Sunil Jain), *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households,* National Council of Applied Economic Research (in association with Business Standard), 2004, (www.ncaer.org/Downloads/PublicationsCatalog.pdf).

India has begun to develop into an important consumer market with over 16.9 trillion Indian rupees ($370 billion) in spending in 2005. This has resulted in growing interest among business leaders and policy makers as to what the future will hold for India's consumers. How will overall economic growth impact the incomes of Indian households? How will income growth be distributed across the population? What kinds of goods and services will Indian consumers be able to afford? How will Indian savings behavior change? Which markets will benefit the most and which the least? And how differently will consumer growth affect India's urban and rural regions?

In response to these questions MGI launched a year-long study to examine the future of the Indian consumer market, and we present our results in this report. In this chapter we will describe our approach to addressing these questions, provide some background on the Indian market, and discuss how that context informs our base-case scenario for future Indian growth—information which, in turn, drives our projections of incomes and consumption in subsequent chapters we present our results and discuss their implications.

OUR APPROACH

Much has been written about the likely evolution of India's market over the near-term, but there has been less discussion of the true long-term potential of India as a consumer market. Our objective in this research was to understand how fundamental forces of long-term economic growth such as demographics, urban-ization, and rising education levels, will affect growth in Indian incomes, and how increased spending power will, in turn, translate into household consumption. We were particularly interested in how Indian consumers will segment by income brackets, how much spending power they will have, what these different groups of consumers will buy, and how the picture will vary between urban and rural India.

Our approach to addressing these questions relied on three key elements:

1. A proprietary database. First, we constructed a comprehensive and consistent historical database of variables relevant to Indian incomes and consumption from 1985 to 2005. The core of this data comes from the Market Information Survey of Households (MISH) surveys conducted by the National Council of Applied Economic Research (NCAER), household-expenditure surveys conducted by the National Sample Survey Organization (NSSO), and data from the National Account Statistics (NAS) maintained by the Central Statistical Organization (CSO). We used statistical techniques to adjust for methodology changes during this

period, as well as to fill in for years in which there was no data collected for certain variables. We also applied a set of checks for consistency across the dataset, and made further adjustments to reconcile national account and survey data. (It is well-known that national account and household survey data rarely match.) Finally, our estimates also depend on forecasts of various macroeconomic and demographic variables such as GDP growth, inflation, and population growth. For these various exogenous variables, we used data from a number of sources including Oxford Economics, the World Bank, Global Insight, and the United Nations (UN). Appendix B provides a detailed description of our data sources, methodologies, and adjustments.

2. An econometric forecasting model. Second, using the historical database, we built an econometric model that enables us to translate macroeconomic scenarios for India into forecasts for income growth by income class and consumption category across nine major product and service categories and 30 subcategories from 2006 to 2025. This enabled us to address very specific questions such as: How many Indian consumers will have an income between 90,000 and 200,000 Indian rupees by 2015 or 2025? And how much potential demand will there be for personal products by these consumers in 2025? We organized the model into five major blocks (Exhibit 1.1). The model uses a set of exogenous inputs and data from the database to create a set of macroeconomic drivers, and then translates those drivers into forecasts for income distributions and consumer spending across urban and rural India. The model then combines these to create an estimate of future potential demand for each product category by income class. Appendix B provides a detailed description of the model.

3. On-the-ground insights. Third, the results of an econometric modeling exercise would be of little value unless they are interpreted and placed in the context of what is actually happening on the ground in India. We relied heavily on the knowledge of our colleagues in McKinsey's India office and their experience in serving both Indian and multinational companies in the region.

Why our approach is distinctive

A number of researchers in both the academic and business worlds have examined the issue of India's consumption (see Bibliography). While many of these studies have provided useful insights, our approach is distinctive in three ways:

● *Focused on long-term consumption.* Several studies have been based on surveys of current Indian consumer behavior. While this is very helpful in understanding the spending patterns and the attitudes of Indian consumers

today, such studies do not tell us what the long-term evolution of spending will be. Our use of econometric techniques enabled us to use a number of data sources to inform a forecast of future demand.

Exhibit 1.1

THE MGI INDIA CONSUMER DEMAND MODEL HAS FIVE MAJOR BLOCKS

Incorporate exogenous forecasts of the macroeconomic environment
- Input forecasts of real GDP, population, inflation, interest rates, and exchange rates
- Examine the impact of differing macroeconomic scenarios

Determine other key macroeconomic and demographic drivers

Develop forecasts for additional national and regional macroeconomic and demographic variables (e.g. urbanization, household size, educational attainment)

Forecast consumer spending and prices by category of goods

Use aggregate drivers to produce top-line forecasts of prices and spending in nine broad consumption categories and 30 detailed subcategories

Estimate income distribution of households

Estimate fixed-bracket income distributions based on the percentile-based survey data (e.g. number of households earning between 90,000 and 200,000 million Indian rupees)

Derive consumer spending by category of goods and income bracket

Combine income distribution and product category forecasts to estimate consumption of goods by income bracket

Source: MGI India Consumer Demand Model, v1.0

- *Constrained to 100 percent of available spending.* Where other studies have looked in detail at future consumption, they have tended to focus on specific product and service categories such as automobiles and mobile phones. This leaves open the possibility that, if one adds all the forecasts for individual categories together, the result may be greater than the total spending available in the economy. Our forecasts begin with total demand in the economy derived from our forecasts for income and savings, and then allocate that demand across consumption categories based on relative prices and preferences. This produces share-of-wallet estimates that are constrained to 100 percent of total demand.

- *Based on detailed forecasts of the income distribution.* We used econometric techniques to model the evolution of India's income distribution over time and then related those income distributions to consumption at a product- and service-category level. This enabled us to analyze future consumption patterns by specific income class. To our knowledge, this has not been done before.

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The most important assumption underlying the results from our model is the GDP path that we expect India to follow over the coming years. We will first briefly provide some background on India's growth over the past two decades, and then look ahead to the next two.

THE LONG ROAD TO REFORM

When India finally emerged as an independent nation in 1947 it was a deeply impoverished country, subject to the whims of monsoons and periodic famine. In 1950 the country accounted for a mere 1.2 percent share of global GDP despite having over 14 percent of the world's population.[4] Despite a stable democracy and a young and increasingly educated workforce, India's model of significant state control over the economy and lack of openness to trade led to persistently disappointing economic results during the 1970s and 1980s, with a compound annual growth rate of 4.3 percent per year—well below what many felt to be India's potential.

In 1991 a severe balance of payments crisis finally prompted deep-rooted change. India's government became a less ideological and more pragmatic economic manager and initiated broad-based reforms. Revisions to tax and tariff policies, the de-listing of 15 industries previously reserved for the public sector, liberaliza-tion of parts of the financial sector, and an easing of foreign direct-investment (FDI) restrictions were among the reforms that laid the groundwork for the sub-stantial economic improvement of the past decade. As a result India progressed from being the 16th-largest economy in the world in 1990 to the 13th-largest in 2005, surpassing countries such as Australia and the Netherlands.

Although India has had several different governments since the program of reforms began, each government, irrespective of differing political ideologies, has made growth a focus of its economic agenda. Progress has at times been uneven and slow. However, this continued commitment to reform has encour-aged both Indian and foreign businesses to substantially increase their level of investment in the economy. From 1992 to 2004 investment spending grew from 2.6 trillion Indian rupees ($56 billion) to 7.1 trillion Indian rupees ($156 billion). Likewise, while foreign direct investment is still low relative to the size of India's economy (and dwarfed by the flows of FDI going to China and other parts of Asia), it has increased almost 18-fold from $315 million during 1992 to more than $5.6 billion in 2004.

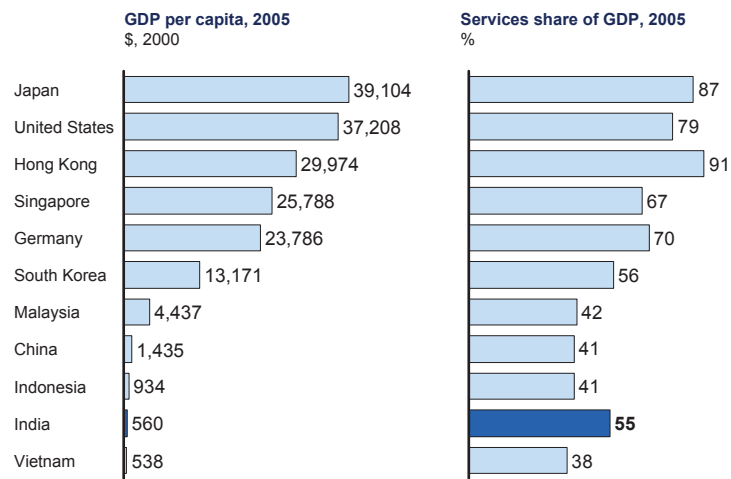---

4   *World Population Prospects: The 2006 Revision Population Database*, UN population division
    (http://esa.un.org/unpp/); Angus Maddison, *The World Economy, Historical Statistics,* (www.
    ggdc.net/maddison/other_books/new_HS-7.pdf).

INDIA'S SERVICES-LED GROWTH MODEL

India's path to high growth rates has been different from its Asian counterparts such as China, Indonesia and Malaysia. The clearest distinction is in the importance of services relative to industry.[5] Whereas the East Asian model has emphasized moving up the manufacturing value-chain, services have been the key driver of India's GDP growth. Overall, services accounted for 55 percent of India's GDP in 2005 putting it between China at 41 percent (excluding Hong Kong) and the United States at 79 percent (Exhibit 1.2).

Exhibit 1.2

INDIA'S SERVICES SHARE IS RELATIVELY HIGH FOR AN EMERGING ECONOMY

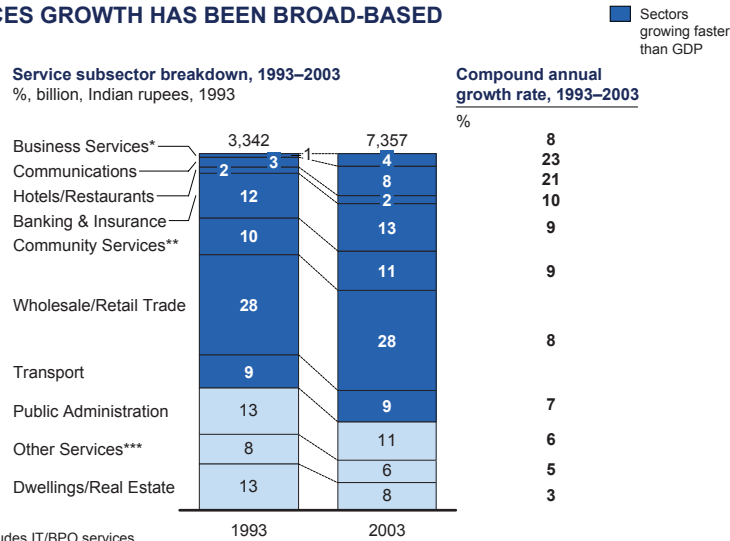|	GDP per capita, 2005 $, 2000	Services share of GDP, 2005 %
Japan	39,104	87
United States	37,208	79
Hong Kong	29,974	91
Singapore	25,788	67
Germany	23,786	70
South Korea	13,171	56
Malaysia	4,437	42
China	1,435	41
Indonesia	934	41
India	560	**55**
Vietnam	538	38

Source: EIU Viewswire; Global Insight; MGI India Consumer Demand Model, v1.0

The best-known example of India's service sector growth is its information technology (IT) and business-process-outsourcing (BPO) sector, whose success has been built on factors such as telecoms deregulation, falling technology costs and the availability of educated, English-speaking workers. However, it would be a misconception to imagine that India's service sector growth is all about IT/BPO. Although this sector has grown rapidly—over 20 percent per annum in the last decade—it still remains a small part of India's overall economy, accounting for less than 2.5 percent of GDP today. India's services-led growth model has been far broader with large sectors such as banking, retail and health care enjoying 8 percent-plus growth during the 1990s (Exhibit 1.3).

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5   We should note that, while India's services-led model has been different from its Asian peers, services have also played a significant role in the growth of other countries, particularly in Latin America.

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Exhibit 1.3

SERVICES GROWTH HAS BEEN BROAD-BASED

■ Sectors growing faster than GDP

Service subsector breakdown, 1993–2003
%, billion, Indian rupees, 1993

Compound annual growth rate, 1993–2003
%

Sector	1993	2003	CAGR
	3,342	7,357	
Business Services*	1	4	8
Communications	3		23
	2	8	21
Hotels/Restaurants	12	2	10
Banking & Insurance	10	13	9
Community Services**		11	9
Wholesale/Retail Trade	28	28	8
Transport	9		
Public Administration	13	9	7
Other Services***	8	11	6
		6	5
Dwellings/Real Estate	13	8	3

1993   2003

* Includes IT/BPO services.
** Includes health care and education.
*** Includes personal services, legal services, railways, storage, entertainment etc.
Source: Central Statistical Organization; MGI India Consumer Demand Model, v1.0

India has gone down the services path for a variety of reasons. One is simply that large segments of India's manufacturing sector still remain heavily regulated and unreformed, and have therefore lagged behind services in terms of productivity growth and competitiveness.[6] Another reason is that services play to India's great strength—its vast pool of human capital. Literacy and education levels have been rising over the past two decades. The literacy rate has increased from 45 percent in 1985 to 62 percent in 2005. During the same period, the secondary-school attainment rate has doubled from 6.8 percent to 13.5 percent. These gains, combined with India's youthful demographic profile, have provided the labor market with a large supply of relatively skilled, low-priced service workers.

India's services-led model of growth has given the country a profile different from its Asian peers in the trade-off between investment and consumption. China and the other Asian tigers have sustained their manufacturing-based growth through the rapid accumulation of fixed capital in the form of infrastructure, technology, and factories. From 1990 to 2005 real fixed investment in China rose at a rate of 14.1 percent per year, climbing from a 24 percent share of GDP to 41 percent.
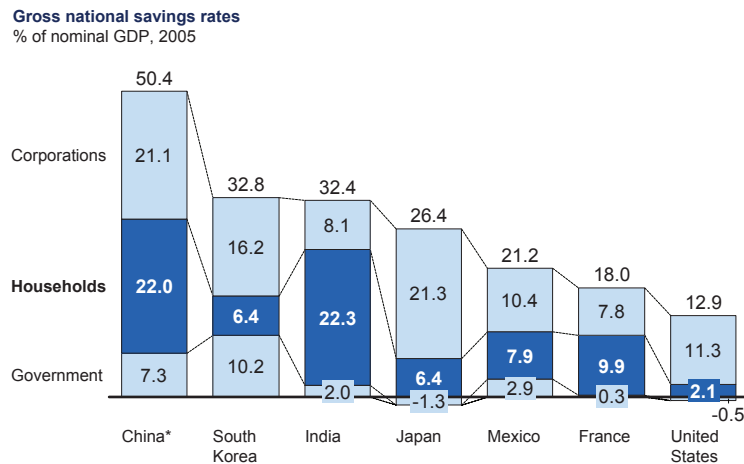
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6   Tushar Poddar and Eva Yi, *Global Economics Paper No. 152, India's Rising Growth Potential,* Goldman Sachs Economics Research, January 2007; Goldman Sachs estimates that Total Factor Productivity (TFP) of Indian industry decreased at an average rate of -1.2 percent during 1997–2001, while TFP in the service sector grew at an average of 2.8 percent in the same period. While industrial productivity growth picked up during 2002–2004 to 1.9 percent, the service sector was still ahead with an average of 3 percent TFP growth in this period.

While this remarkable level of investment helped to fuel China's 10 percent rate of GDP growth, it also meant that the growth of China's consumer economy has lagged behind.[7] During the same period real fixed investment in India grew at 7.4 percent a year, rising from 23 to 28 percent of GDP. While India has not quite reached China's levels of growth, its more "asset-light" services model has enabled it to achieve high growth levels with relatively less fixed investment and higher levels of consumption.

There is a common misconception that India does not save enough, and that this is why it has turned to services rather than manufacturing. The evidence, however, does not bear this out. First, at a national level, India has a relatively high savings rate, comparing favorably with high-saving countries such as South Korea and Japan (Exhibit 1.4). Second, we note that such comments are usually made in comparison with China. China's gross national savings rate has risen from 33.6 percent in 1985 to 50.4 percent in 2005, a level that is driven by inefficiencies in China's financial sector[8] and is arguably too high.

Exhibit 1.4

INDIA HAS A RELATIVELY HIGH NATIONAL SAVINGS RATE COMPARED WITH OTHER COUNTRIES

Gross national savings rates
% of nominal GDP, 2005

	China*	South Korea	India	Japan	Mexico	France	United States
Total	50.4	32.8	32.4	26.4	21.2	18.0	12.9
Corporations	21.1	16.2	8.1	21.3	10.4	7.8	11.3
Households	22.0	6.4	22.3	6.4	7.9	9.9	2.1
Government	7.3	10.2	2.0	-1.3	2.9	0.3	-0.5

* MGI estimate based on 2005 GDP and estimates of flow-of-funds information.
Source: Country National Accounts; IMF; MGI China Consumer Demand Model, v2.0

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7   Diana Farrell, Eric Beinhocker, Ulrich Gersch, Ezra Greenberg, Elizabeth Stephenson, Jonathan Ablett, Mingyu Guan, Janamitra Devan, *From 'Made in China' to 'Sold in China': The Rise of the Chinese Urban Consumer,* McKinsey Global Institute, November 2006, (www.mckinsey.com/mgi/publications/china_consumer/index.asp).

8   Diana Farrell, Susan Lund, Jaeson Rosenfeld, Fabrice Morin, Niyati Gupta, Ezra Greenberg, *Putting China's Capital to Work: The Value of Financial System Reform,* McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/china_capital/index.asp).

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If anything, a comparison with benchmark countries shows that India's businesses and government save less than they should, leaving the country's national savings skewed and heavily dependent on households. While India's services-driven economy has not been as capital-hungry as China's manufacturing-based one and household savings have been sufficient for the required investments so far, rectifying this imbalance will be essential for India to sustain strong investment growth in the future. While some argue that India has been under-investing in fixed assets (particularly infrastructure) and that this is now putting a brake on growth, the solution does not lie in the growth of household savings.[9] Other MGI work has shown that a combination of greater government fiscal discipline, financial sector reform, and a further opening of the industrial sector to competition would make more efficient use of existing capital stocks, as well as raise real returns and thus encourage greater capital formation by India's businesses.[10]

A VIRTUOUS CYCLE BETWEEN CONSUMPTION AND INCOME GROWTH

India's lower level of investment relative to GDP has meant that consumption has played a bigger role in its growth story than in other developing countries in Asia, and at an earlier stage. At 62 percent of GDP, consumption in India is closer, proportionally, to developed countries such as Japan and the United States than it is to China (Exhibit 1.5). While consumption grew slowly in the decade before the 1991 reforms (and irregularly due to the vagaries of the monsoon season), it has been an important engine of Indian growth over the past decade, accounting for over half of India's GDP growth during 1995–2005. Again, this is more similar to Japan where consumption contributed to 51 percent of growth in the same period than to China where it was just 30 percent.

We believe that India has now entered a virtuous long-term cycle in which rising incomes lead to increasing consumption, which, in turn, creates more business opportunities and employment, further fuelling GDP and income growth. This domestic-consumption-led growth has made India somewhat less dependent on exports as compared to other Asian tigers (exports were 22 percent of GDP for India versus 47 percent for China in 2005), although some would argue that greater investment in the export sector would serve only to enhance India's growth further.

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9   *Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan,* Planning Commission, Government of India, June 2006.

10 Diana Farrell and Susan Lund, *A Tale of Two Financial Systems*: *A Comparison of India and China,* McKinsey Global Institute, September 2006, (www.mckinsey.com/mgi/publications/talefinsys.asp); Diana Farrell, Susan Lund, Ezra Greenberg, Raj Doshi, Jaeson Rosenfeld, Fabrice Moran, *Accelerating India's Growth Through Financial System Reform,* McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/india_growth/index.asp).

Exhibit 1.5

INDIA'S CONSUMPTION SHARE OF GDP IS CLOSER TO JAPAN AND THE UNITED STATES THAN IT IS TO CHINA

%, billion, nominal $, 2005
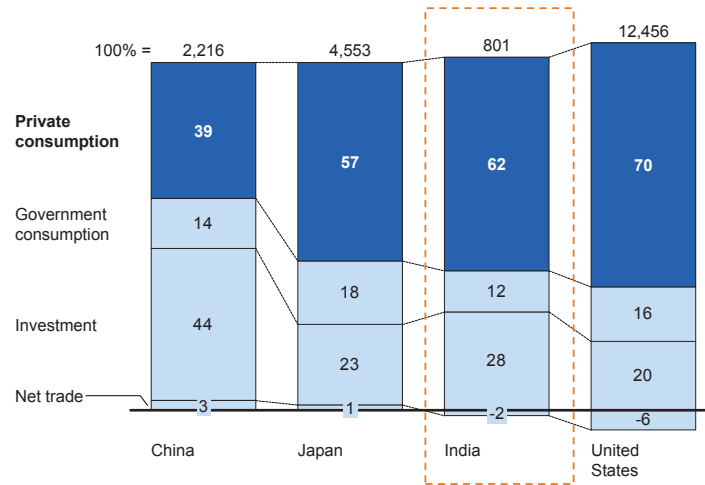
Source: Global Insight; MGI India Consumer Demand Model, v1.0

Overall, Indian incomes have experienced healthy growth over the past two decades. India's real aggregate disposable income has grown from 7,527 billion Indian rupees ($165 billion) in 1985 to 23,526 Indian rupees ($515 billion) in 2005—a compound annual growth rate of 5.9 percent. India's fast-growing population has meant that, on a per-household basis, real disposable income growth has been less rapid though still moderately strong, rising from 56,470 Indian rupees ($1,236) in 1985 to 113,744 Indian rupees ($2,489) in 2005—a compound annual growth rate of 3.6 percent (Exhibit 1.6).
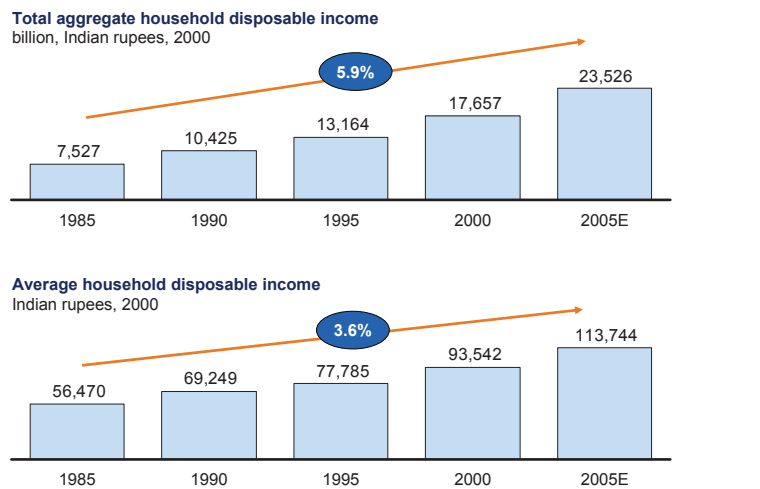
One of the greatest dreams of all Indians has been an economy that could lift the country's millions out of destitution, and India's reforms have been very successful in making progress towards that goal. Based on our calculations, in 1985 India had 702 million people living in households with annual disposable income of less than 90,000 Indian rupees ($1,969 per household per year or $5.40 per household per day) which we have categorized as *deprived*.[11] In

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11 See chapter 2 for a discussion of the income brackets used in this report and our methodology for selecting them. The Indian government uses a different definition of poverty based on caloric intake and is set at 2,400 calories per capita per day for rural areas and 2,100 for urban areas. This corresponds to an income of approximately 330–450 Indian rupees ($7–$10) per capita per month and is lower than our cutoff, which translates to approximately 680–750 Indian rupees ($15–$16) per capita per month. Thus our calculations for poverty reduction are higher than those published by the government. One might view the threshold used in this report (and by NCAER) as corresponding to general poverty, and the government's threshold to extreme poverty.

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1985, 93 percent of India's population fell under this lowest bracket of income. This proportion dropped by two-fifths to 54 percent during 1985–2005, with the biggest fall occurring after 1995. This has resulted in over 103 million people moving out of destitution. This reduction is all the more impressive given that India's population grew by 352 million during this period. In effect, there are 431 million fewer poor people today than there would have been if poverty had remained at its 1985 rate (Exhibit 1.7). While the problem of poverty in India has not been solved by any means, it is encouraging that during India's period of reform significant progress has been made.

Exhibit 1.6

INCOMES HAVE BEEN GROWING STEADILY OVER THE PAST TWO DECACES

Compound annual growth rate

Total aggregate household disposable income
billion, Indian rupees, 2000

5.9%

1985	1990	1995	2000	2005E
7,527	10,425	13,164	17,657	23,526

Average household disposable income
Indian rupees, 2000

3.6%

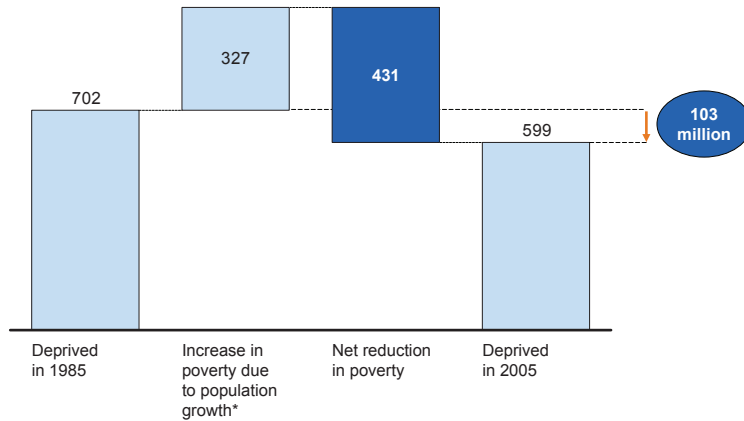| 1985	1990	1995	2000	2005E
56,470	69,249	77,785	93,542	113,744

Source: National Accounts Statistics; MGI India Consumer Demand Model, v1.0

India has come a long way, particularly over the past decade. Its rapid growth has been driving rising incomes for its large population and significantly reducing poverty. India, however, still has some distance to go before its income and consumption levels reach world standards. The total size of the Indian market in 2005 at 16,896 billion Indian rupees (or $370 billion) makes it slightly larger than South Korea. But South Korea has less than 5 percent of the population of India. On a per-capita basis, India is still very much a developing country with consumption of $334 per person, lagging behind countries such as Indonesia ($557 per person) and China ($542 per person). So, while there has been a great deal of excitement about India's recent growth and its potential as a consumer market with more than a billion people, one must be realistic about its size today. But the critical question remains: How will India's consumer market evolve in the future?

Exhibit 1.7

GROWTH HAS SUBSTANTIALLY BENEFITED INDIA'S POOR

**Population with annual household disposable income
less than 90,000 Indian rupees, 2000**
million

	327	431	
702			599

Deprived in 1985	Increase in poverty due to population growth*	Net reduction in poverty	Deprived in 2005

103 million

* Impact of population growth on poverty at 1985 poverty rate
Source: MGI India Consumer Demand Model, v1.0

BASE-CASE AND MODEL ASSUMPTIONS

The most important factor in our forecasts of income and consumption growth is our set of assumptions about India's overall macroeconomic path during the next two decades. In this section we will briefly outline our views of India's growth prospects. More details about our base-case assumptions, including factors such as demographics, interest rates, relative prices, trade and worldwide growth, can be found in Appendix B.

The sustained increase in India's pace of growth during the last few years has prompted a number of observers to ask whether India has entered a new stage of development. Research by Dani Rodrik of Harvard University and Arvind Sub-ramanian of the International Monetary Fund suggests that India's long-term sustainable growth rate is approximately 7 percent, with potential for more rapid growth if the pace of reform continues.[12] Further work by MGI, the World Bank and others has identified and quantified the impact of various reforms and productivity increases on India's growth rate.[13] MGI's work on the Indian financial system estimated that growth could increase to more than 9 percent per year

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12 Dani Rodrik and Arvind Subramanian, "Why India Can Grow at 7 Percent A Year Or More: Projections and Reflections," IMF Working Paper, July 2004.

13 For example, *Accelerating India's Growth Through Financial Sector Reform*, McKinsey Global Institute, May 2006, and Dalhman and Utz, "India and Knowledge Economy," World Bank 2005, as well as *India, The Growth Imperative,* McKinsey Global Institute, 2001.

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if critical steps were taken to reform the financial system, and if product-, labor-market, and other reforms stayed on track. A recent report by Goldman Sachs pegs the long-term rate up to 2020 at 8.4 percent.[14]

Given the two-decade time horizon of our forecasts, we should note that our interest is in the long-term growth rate rather than near-term cyclical swings. For a variety of reasons, India's growth rate has had more near-term variability than other markets such as China, and there is much discussion currently as to whether India's current high growth rate is indicative of an overheating economy.[15] Our intention is not to forecast the short-term swings of India's business cycle, but rather to look at India's long-term sustainable growth path based on funda-mentals, and then assess the implications for income and consumption.

Our model utilizes a macroeconomic forecast produced by Oxford Economics which projects that India's real GDP will grow at just under 7.3 percent annually through 2025, down from the 8.4 percent growth experienced over the past three years, but more than a full percentage point above the trend during the past two decades (Exhibit 1.8). With India's growing population, this results in a real per-capita-growth rate of 5.9 percent during the forecast period. This is in the middle of the range when compared with the projections of other forecasters (Exhibit 1.9), and we believe that long-term expectations in this range are justified by the recent strength of the economy and the continued potential for expansion of India's services-led growth model.

There has been considerable discussion about whether India's services-led growth model is sustainable. Some argue that India will eventually need to start climbing up the manufacturing value-chain as China and others have done before it.[16] In our view there is still significant scope for productivity increases, growth, and export expansion in India's service sector. Our base-case scenario shows the service sector growing at a rate of 8.2 percent over the forecast period, down somewhat from the 9.3 percent pace in the 2001 to 2005 period, but nonethe-less a rapid rate that results in services growing from 55 percent of real GDP in 2005 to 65 percent by 2025 (Exhibit 1.10).
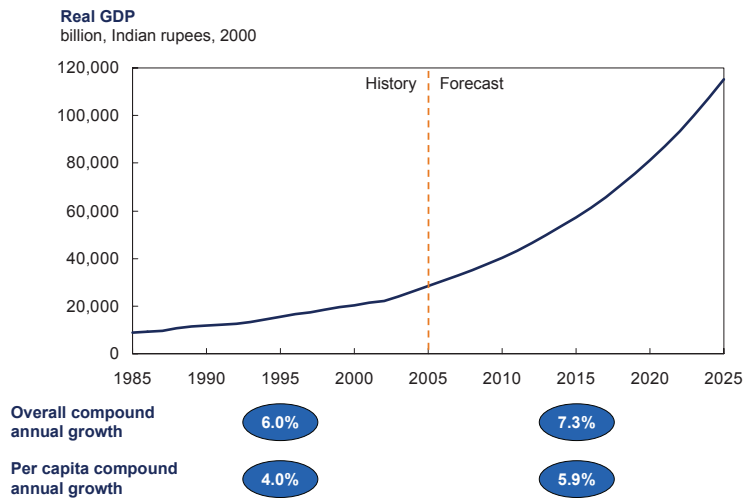
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14 Tushar Poddar and Eva Yi, Global Economics Paper No. 152, *India's Rising Growth Potential,* Goldman Sachs Research, January 2007.

15 Based on estimates from the Ministry of Statistics and Programme Implementation, India's real GDP grew at 9 percent in 2005 and an estimated average of 8.9 percent in the first three quarters of 2006 (over the corresponding quarters of the previous year).

16 For example, *India Rising: A Medium-Term Perspective,* Deutsche Bank Research, May 2005.
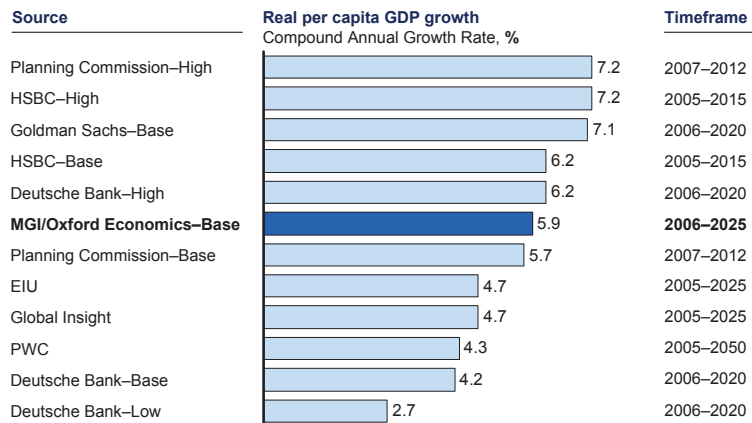
Exhibit 1.8

FORECAST ASSUMES 7.3 PERCENT COMPOUND ANNUAL GDP GROWTH

Real GDP
billion, Indian rupees, 2000

Overall compound annual growth	6.0%	7.3%
Per capita compound annual growth	4.0%	5.9%

Source: MGI India Consumer Demand Model, v1.0

Exhibit 1.9

MGI'S BASE-CASE GDP FORECAST IS MIDDLE OF THE RANGE

Source	Real per capita GDP growth Compound Annual Growth Rate, %	Timeframe
Planning Commission–High	7.2	2007–2012
HSBC–High	7.2	2005–2015
Goldman Sachs–Base	7.1	2006–2020
HSBC–Base	6.2	2005–2015
Deutsche Bank–High	6.2	2006–2020
MGI/Oxford Economics–Base	5.9	**2006–2025**
Planning Commission–Base	5.7	2007–2012
EIU	4.7	2005–2025
Global Insight	4.7	2005–2025
PWC	4.3	2005–2050
Deutsche Bank–Base	4.2	2006–2020
Deutsche Bank–Low	2.7	2006–2020

Source: Oxford Economics; *India: Pitfalls and Possibilities*, HSBC, July 2006; *India's rising growth potential*, Goldman Sachs, Jan 2007; *India Rising: A Medium-Term Perspective*, DB Research, May 2005; *Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan*, Planning Commission, Government of India, June 2006; *The World in 2050: How Big will the Major Emerging Market Economies Get and How Can the OECD Compete?*, PWC, 2006

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Exhibit 1.10

SERVICES WILL CONTINUE TO BE THE MAIN DRIVER OF GDP GROWTH OVER THE NEXT TWO DECADES

Share of GDP
%, trillion, Indian rupees, 2000

Growth by sector
Compound annual growth rate, %

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0
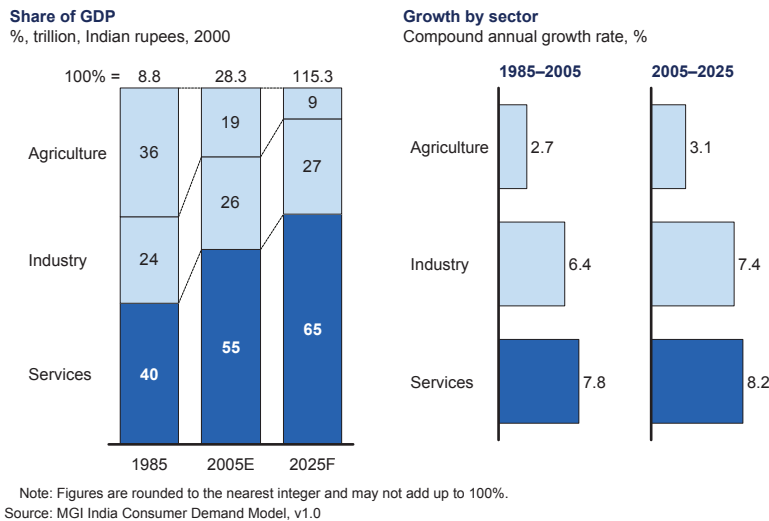
In order for India's service sector to maintain high growth rates it will have either to significantly improve productivity, or to increase its share of employment, or a combination of the two—our view is that there is significant potential for both. Previous work by MGI shows that there are substantial opportunities for improving productivity across the Indian economy including in service industries such as construction, retail, wholesale trade, and financial services.[17] But there are also significant productivity-growth opportunities in the industrial and agricultural sectors. Modest improvements in productivity in line with recent trends will cause employment in agriculture and manufacturing to continue to shift from those sectors into services. For example, one recent report estimated that the agricultural sector has 160 million surplus workers who would be released should productivity improve.[18] Furthermore India's youthful demographic profile will add 270 million workers during the forecast period. There will, therefore, be no shortage of future service workers, particularly for low to medium-skilled jobs.

Thus the growth we assume is dependent on continued productivity improvements, and sufficient flexibility in India's labor markets to allow the sectoral composition of employment to shift. This in turn is dependent on India continuing down the

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17 For further detail see Appendix B and India, *The Growth Imperative,* McKinsey Global Institute, 2001.

18 Robert Prior-Wandesforde, *India: Pitfalls and Possibilities,* HSBC Global Research, Indian economics, July 2006.

path of reform, as well as investing in education to ensure sufficient skills in its growing labor force to support its fast-growing services sector. Likewise, we assume that agriculture and manufacturing will continue their pace of modest annual productivity gains, though the recent performance of the manufacturing sector since 2002 may point to a more optimistic scenario.[19]

We have thus made several implicit assumptions about the evolution of the Indian economy over the next two decades. Below, we summarize the essential assumptions and their associated risks:

- **Forward progress on reforms.** As discussed, our base-case growth scenario is dependent on continued reform. We assume progress in areas such as the reduction of the fiscal deficit, lowering of trade tariffs, further opening of markets to competition, easing of labor laws, financial system reform, and reducing internal barriers to trade.

- **Increased investment in infrastructure and education.** We assume that fixed investment will continue to grow at 7.8 percent annually over the next two decades. It will be critical that a significant portion of this investment flows into improving India's infrastructure, in particular electrical-power generation and transport, which are critical to both the manufacturing and service sectors. In addition we assume that investment in education will grow from its historical level of 4.1 percent of GDP today to 5.7 percent over the next two decades as the size of India's youth cohort grows.

- **Continued growth in exports and foreign investment.** Exports have grown steadily since the 1991 reforms, driven more recently by strong IT/BPO sector growth. India's success in IT/BPO has given rise in the United States and Europe to protectionist sentiment targeted at the off-shoring industry. If protectionist actions were taken, they could hurt Indian exports, dampening our income and consumption forecasts. India will also need to continue to increase its attractiveness to FDI to provide capital as well as the skills and productivity gains that tend to come with FDI. While India is less dependent on exports and FDI than other Asian economies (e.g. Indian FDI is estimated at $5.6 billion today, or 3.3 percent of total fixed investments, versus $54.9 billion, or 7.0 percent, for China), both will become increasingly important as India grows over the next two decades.[20]

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19 Global Economics Paper No. 152, *India's Rising Growth Potential*, Goldman Sachs Economics Research, January 2007.

20 Reserve Bank of India (www.rbi.org.in/scripts/PublicationsView.aspx?id=8714); MGI China Consumer Demand Model, v2.0.

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Our base-case growth scenario thus does not assume any radical changes of direction, but rather that the progress that has been made over the past two decades is consolidated and built upon. Faster progress in reform, infrastructure investment, and integration into the world trading system would provide further upside to our results, while a slowdown in reform, lack of investment, or populist backlash would provide downside.

A note on base year, exchange rates, reporting years, and other model factors

It is important to note that all figures in this report, unless otherwise noted, are reported in real terms using year 2000 Indian rupees as our base year (the latest year available for all inflator figures). In addition, except where otherwise mentioned, growth rates are reported as compound annual growth rates. Thus the figures reported may generally appear somewhat lower to readers accustomed to seeing figures in nominal or average annual terms.

Our results are all calculated in Indian rupees. Our conversions to US dollars are merely for illustrative purposes to assist non-Indian readers in calibrating the results. When we convert to US dollars or provide comparisons with other countries, we will use year 2000 real US dollars with an exchange rate of 45.7 Indian rupees per dollar (since our rupee figures are in real year 2000 Indian rupees, we have used the year 2000 exchange rate), or the year 2000 purchasing power parity (PPP) adjusted rate of 8.5 Indian rupees per dollar, as appropriate.

We have not attempted to forecast the impact of future exchange rates on our model. The natural volatility and unpredictability of exchange rates invariably makes their impact on future economic scenarios difficult to forecast. In India's case predicting the exchange rate is complicated by the fact that the rate is currently managed by the Reserve Bank of India, and therefore any forecast depends on assumptions about the Bank's policy. However, since our analysis is focused on domestic income and consumption, the impact on our forecasts is limited.[21]

We should also note that our results are calculated on a fiscal-year basis to be consistent with Indian National Accounts data and common practice followed in the country. However, India's fiscal year ends in March, which means that

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21 The primary real economic impact of exchange rates on our model is twofold. First, they would potentially change overall GDP growth due to the impact of rate movements on the export sector. Second, by changing relative prices of goods across the consumption categories (e.g. prices of imported final goods or goods reliant on imported factors of production might change), exchange-rate movements would also have an effect on the share-of-wallet mix of consumption.

three-quarters of the results occur in the prior year. Thus, in order better to align with calendar years and to make international comparisons more meaningful, we have chosen to label the data by the year in which most of the results occurred, e.g. that which is referred to in the report as "2005" corresponds with Indian FY 2006, and includes the last three quarters of calendar year 2005 and the first quarter of 2006.

A common question in an analysis such as this is how one handles data-quality issues. While it is inevitable that some data-quality issues will arise when dealing with a large developing country such as India (particularly one with many remote rural villages), we have selected the best data sources available for each of the variables under consideration, and conducted tests for consistency across variables and over time.

A second related question is how we handle under-reporting of income and consumption. Under-reporting tends to occur for several reasons. The first is that when people are questioned in a survey about their income and consumption, their memories are imperfect and they tend to underestimate both figures. This leads to inconsistencies between survey data and national accounts data. This is a well-known issue and not particular to India—it also shows up in US data, for example. We adjust for these discrepancies first by mapping the consumption categories from the survey data to the national accounts. We then use statistical relationships between variables to scale up the survey data to the national accounts data on a category-by-category basis, and apply a similar scaling process to the income data. Finally, we use this historical scaled data to estimate the relationships between income and consumption, and generate our forecasts by projecting these relationships. This approach allows us to ensure that our results consistently align with macroeconomic aggregates, and compensate for likely under-proporting biases. Appendix B provides further details on the scaling-up process.

Other sources of under-reporting include tax evasion and black-market activity. As relatively few Indian households pay direct taxes such as income tax, the former is a lesser issue than in other countries (with the exception of high-income brackets). Regarding the latter, we should note that the Indian "black market" (which refers to unaccounted income) is distinct from the "informal" or "unorganized" economy, which is legal but is simply carried out by small business rather than large enterprises.[22] Informal economic activity is explicitly captured in our

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22 As per official standards, all firms that either have electricity and more than 10 workers or have more than 20 workers are required to register which would make them a part of the formal sector. It is estimated that more than 90 percent of workers in the country are employed in the informal sector today.

data and model. While black-market data is not directly captured in our model as there are no reliable estimates of its scope, it is partially accounted for in the scaling up of household consumption from surveys to the national accounts data obtained from the production side (since even goods purchased in the black market have to be produced or imported from somewhere, not counting illegal trade).

Finally, all econometric models make implicit assumptions about the stability of relationships between variables over time—for example, the price elasticity of demand or consumer preferences. Unforeseen changes such as breakthroughs in technology, sudden shifts in consumer tastes, major upheavals in industry structure, or significant changes in relative prices across product categories, are all factors that could impact outcomes.

ORGANIZATION OF THIS REPORT

The remainder of the report is divided into the following chapters:

- **Chapter 2: The quadrupling of Indian consumption, 2006–2025** begins by examining our key results at a national level, including household-income growth, changes in household-savings behavior, and India's demographics, all of which will play a role in the evolution of its consumer markets. Chapter 2 shows how these trends will fuel dramatic growth in aggregate Indian consumption.

- **Chapter 3: The future development of the urban market** delves more deeply into specific trends in urban India. We look at some examples of the dynamics of urban-income growth, highlight rapid changes in the consumer base, and explore specifically the question of which income classes will drive consumption at which points in time. In particular, we discuss the dramatic rise of urban India's middle and upper classes. Finally, we touch upon the impact of India's growth on second- and third-tier cities.

- **Chapter 4: The future development of the rural market** studies the changes underway in rural India. Specifically, we describe future sources of rural-income growth, the impact of this growth on rural poverty, and the impact on rural consumption. We conclude that rural India's growth as a consumer market will be faster than many might think. Lastly, we offer a viewpoint on regional variations in the growth of rural markets.

- **Chapter 5: How consumption patterns will change** looks at how patterns of Indian consumption will evolve across nine consumption categories, and what

this will mean for specific sectors of the economy. In particular we note how spending on discretionary goods and services will come to dominate Indian consumption.

- **Chapters 6: Opportunities and challenges** offers our viewpoint on considerations for companies looking to capitalize on the changes in India's markets, and the role of public policy in ensuring that India's market realizes its potential.

Following the main body of the report, **Appendix A** provides more in-depth discussion of the results of our forecasts for category-by-category consumption, while **Appendix B** provides more detailed information on the model, base-case scenario, and data sources.

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Throughout much of the first millennium India was a major hub of world trade, exporting goods ranging from precious gems and pearls to metals, textiles and spices, and attracting merchants from around the world to sell goods into India's vibrant market. Historians often referred to India during this period as the "Bird of Gold". After a long period of stagnation, dynamism has returned to India's markets and India is once again attracting the attention of the world. As we will see in the coming chapters, the Bird of Gold has the potential to fly again.

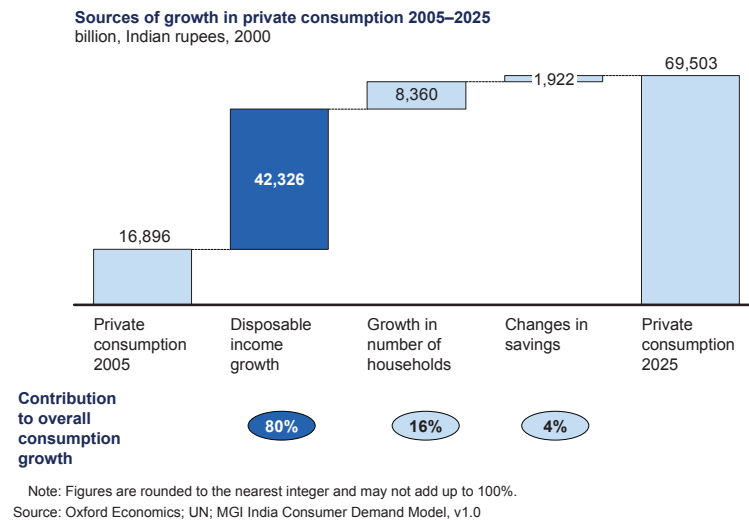# 2. The quadrupling of Indian consumption, 2006–2025

Indian consumption and savings patterns have undergone three periods of major change. Just after independence, much of the population struggled on subsistence levels of income with little left over for savings. Consumption constituted over 90 percent of GDP and was devoted largely to necessities. Having just emerged from colonial rule, the government focused on developing self-sufficiency. It strongly encouraged people to buy only Indian-made products and discouraged the consumption of imported goods.

As incomes rose in the 1980s and 1990s consumption rose too, but at a significantly slower rate than GDP. Consumption therefore declined from 76 percent of GDP in 1985 to 60 percent today. Imports of goods from developed-world companies became increasingly available, but were still only affordable for India's wealthiest households. With spending failing to keep pace with income growth, household-saving rates increased dramatically, rising from 11 percent of household disposable income in 1985 to approximately 28 percent today. It is generally agreed that the lack of a social safety-net in India has been a critical reason for much of this savings growth. As incomes of families passed the subsistence threshold, their first priorities were to save for health care, their children's education, and their old age.

We believe that India has entered a third phase of shifting consumption and savings patterns. During this stage we expect to see a dramatic expansion of domestic consumption that will turn India into one of the largest consumer markets in the world (Exhibit 2.1). Three factors will drive this shift:

Exhibit 2.1

RISING HOUSEHOLD INCOMES WILL BE THE KEY DRIVER OF CONSUMPTION GROWTH

Sources of growth in private consumption 2005–2025
billion, Indian rupees, 2000

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: Oxford Economics; UN; MGI India Consumer Demand Model, v1.0

- First, we project that incomes will rise rapidly as Indian households benefit from strong overall economic growth. Rising incomes will in turn have a broad effect across India's income distribution, leading to the creation of a large middle class, and increasing per-capita spending.

- Second, India's population will continue to grow at a relatively rapid pace, helping to drive up total spending. India's youthful demographic profile will further enhance this trend.

- Third, a combination of factors will cause India's household savings rate to plateau and then gradually to decline.

This combination of more income per person, more people, and moderating savings will fuel a quadrupling of India's consumer market over the next two decades. Of these three factors, rising incomes will play the biggest role and will account for 80 percent of consumption growth. This is where we will begin the discussion of our results.

ACCELERATING INCOME GROWTH WILL TRANSFORM THE ECONOMIC STRUCTURE OF INDIAN SOCIETY
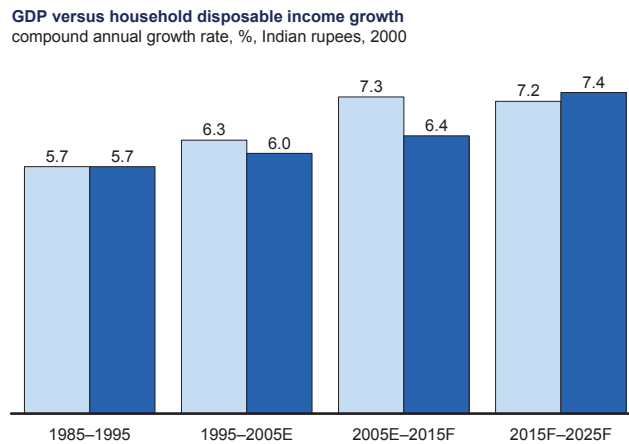
Income growth in India has accelerated as the economy has grown. In 1985–1995 incomes increased at 5.7 percent per year, and then by 6 percent in 1995–2005 (Exhibit 2.2). We project that this trend will continue with 6.4 percent growth in

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income from 2005–2015. In many fast-growing economies such as India and China, household-income growth tends to lag behind the overall expansion of GDP. This is because during periods of high growth, businesses tend to capture a greater share of total factor income as they generate profits that are then plowed back into investments (and the inefficiencies in both the Indian and Chinese financial systems also means that non-invested profits tend not to be re-circulated back to households). It also takes time for output growth to filter through to increased wages and household incomes. However, as India settles into trend growth in the second decade of our forecast period, incomes will begin to "catch up" and our forecast shows income growth bumping up to 7.4 percent during 2015–2025.

Exhibit 2.2

INCOME GROWTH WILL ACCELERATE WITH ECONOMIC GROWTH

☐ GDP
■ Household disposable income

GDP versus household disposable income growth
compound annual growth rate, %, Indian rupees, 2000

	1985–1995	1995–2005E	2005E–2015F	2015F–2025F
GDP	5.7	6.3	7.3	7.2
Household disposable income	5.7	6.0	6.4	7.4

Source: MGI India Consumer Demand Model, v1.0

This growth in incomes will make India's households substantially richer over the coming two decades. The total annual income of Indian households will increase from approximately 23.5 trillion Indian rupees today to almost 90 trillion Indian rupees in 2025, a 3.8 times rise. With the total number of households in the country growing at 1.5 percent annually during this period, this translates into growth of average annual household incomes from 113,744 Indian rupees today to 318,896 Indian rupees in 2025, a 2.8 times rise or compound average growth of 5.3 percent per year.

However, India's income growth will be spread unevenly throughout the population. Over the next few sections we will consider how growth is likely to impact different income groups.

India's households can be classified into five economic groups

We have divided Indian households into five economic classes based on real annual disposable income. We began with the categorizations developed by NCAER in its publication *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households*.[1] However, we have recalibrated these classes based on the time period we have examined. We have also made some adjustments based on the proportion of household spending on basic necessities versus discretionary items to help relate the Indian classes to consumers in other countries. Finally, for the sake of simplicity, we have also combined the wealthiest income brackets used in NCAER's classification into a single class we refer to as "global".

The following are the five annual household disposable income brackets that we will use in the remainder of the report. To help orient non-Indian readers as to what kind of lifestyle each of these levels of income buys, we will also give a brief profile of a typical family in each of these classes.[2] Once again, all figures are in real 2000 Indian rupees and real 2000 US dollars:

- *Deprived* **(less than 90,000 Indian rupees; less than $1,969):** Households in this income bracket are the poorest group, many living under the country's official definition of poverty (2,400 calories per capita per day in rural areas, 2,100 in urban areas). People in this bracket typically earn their livelihoods by engaging in unskilled or low-skilled activities. Also many workers in this segment struggle to find employment throughout the year and therefore engage in seasonal or part-time employment.

> **Profile:** Mangu (43) and his wife Basanti (35) work as daily-wage earners in a poor rural district in central India. The couple has a large family of five children whom they think of as their old-age insurance; Mangu's mother also lives with them. Life is a constant struggle because they don't have a regular flow of income and, when they do find work, wage rates are very low. They rely heavily on government-subsidized food and health care. A number of people they know have migrated to big cities nearby in search of better employment. Mangu is wondering whether he should join them and move to a city. He could find work at a construction site while Basanti could work as a housemaid. Weighing against such a move is that, even in comparison with their village

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1   R.K. Shukla, S.K. Dwivedi and Asha Sharma (with assistance from Sunil Jain), *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households*, NCAER (in association with Business Standard), 2004, (www.ncaer.org/Downloads/PublicationsCatalog.pdf).

2   The profiles, while fictional, are composites of typical consumers based on interviews and insights from McKinsey's India office and consumer practice.

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hut, a city-dwelling could be worse—they would stay in a crowded slum, with no access to basic amenities like clean water. There are pressures on the children to work, but their parents want them to complete at least a basic level of education, which they see as the only way out of their current poverty.

- *Aspirers* **(90,000–200,000 Indian rupees; $1,969–$4,376):** People in this group are usually small-time shop-keepers, small-hold farmers, or low-skilled industrial and service workers. Although they cannot be described as deprived, they nevertheless struggle to live comfortably, typically spending almost half of their income on basic necessities.

Profile: Ramnath (43), a high-school graduate, works as an electrician in the Public Works Department in a mid-size city. His wife Lakshmi is a housewife, bringing up the couple's three children and taking care of her in-laws who are both in their mid-60s. They supplement their household income with the takings from a small grocery shop run by Ramnath's father from their inherited house—a one-bedroom structure, badly in need of repair, in the old part of the city. Food security is not an issue and the family owns an LPG stove, a small TV, an electric rod for heating water, and an iron. They are very frugal in their limited purchases—most of their household articles are second-hand and sourced from the local gray market. The family dreams of the day when they will enjoy the luxury of cold water from their own refrigerator. Although their survival is not in question, they are squeezed constantly by a scarcity of resources.

- *Seekers* **(200,000–500,000 Indian rupees; $4,376–$10,941):** Of all our segments, households in this income stratum are probably the most varied in terms of employment, attitudes, age, and other factors. They range from young college graduates who have just started working to traditional white-collar employees, mid-level government officials, and medium-scale traders and businesspeople.

Profile: Suresh (35) is a commerce graduate and works as an accountant in a private yarn company. His wife works as a nursery teacher. Although they try to economize, the family spends almost half its income on food and rent for their two-bedroom apartment. Educating the children is one of the couple's highest priorities and, despite the fact that it weighs on the family budget, they send their two children to a good private school. Life is not uncomfortable—they own a small second-hand car, a 21-inch color TV, a compact music system, mobile phone, cooler, fridge, and some jewelry. Suvesh is always looking for ways to

earn more; he hopes someday to be able to afford luxuries like eating out regularly in good restaurants and owning a flat. He hopes to win a promotion to a senior accountant position, or even to progress to a relatively well-paid job with one of the many multinational corporations that have arrived in India.

- *Strivers* **(500,000–1,000,000 Indian rupees; $10,941–$21,882):** People in this income band and upwards are generally regarded as very successful in Indian society, working as businesspeople (traders) in cities, as established professionals, senior government officials, medium-scale industrialists in towns, and rich farmers in villages. Typically, they have done well financially over a period of time and have stable sources of income and a reasonable wealth base.

Profile: Yash (32) and Radha (30) are both college graduates and come from prosperous families. Yash works as a sales manager in a multinational retail-banking company that recently entered the Indian market; Radha is juggling a job as a marketing manager and a weekend course in interior design. They have recently bought a two-bedroom flat in one of the city's new apartment complexes. They are not rich but they are both highly brand-conscious. They drive a Honda car, have a Sony TV, air conditioners in each bedroom, and own a fully-automatic washing machine. Although they sometimes purchase international designer products, mostly they settle for more conventional up-market brands. Vacations are an annual affair, mostly within India or to neighboring countries.

- *Global Indians* **(1,000,000+ Indian rupees; $21,882+):** This group is the cream of the country and comprises senior corporate executives, large business owners, politicians, big agricultural-land owners and top-tier professionals. More recently, we have also seen the rapid emergence of a new breed of the upwardly mobile—mid-level executives or graduates from India's top colleges who are able to command premium salaries from international companies. This bracket of Indians is truly global in its tastes and preferences, and enjoys a very high standard of living.

Profile: Rahul (40) is vice president of a large IT company. An engineer by profession, he graduated from the Indian Institute of Technology and completed his MBA at the Indian Institute of Management. His wife, from the same business school, works as a senior executive in a leading advertising agency. They have bought a spacious four-bedroom apartment complete with the latest accessories. Like most of their friends, they have a flat-screen TV and a Bose

audio system among an impressive range of other lifestyle items. They have a full-time cook, maid, and chauffeur. They have two cars—a new Honda Accord, which Rahul uses primarily to drive to work, and a Ford Fusion for the family's needs. The family manages annual vacations either to Europe or the United States, and enjoys collecting art and antiques for their large apartment.

The deprived class will be reduced by more than half

As discussed in the previous chapter, India's growth has benefited not just its wealthiest citizens, but it has also had a substantial impact on the poorest income bracket over the past 20 years, with the poverty rate having dropped by almost half. Our analysis shows that this trend will continue. The number of people in the deprived income bracket will be reduced by approximately half again over the next two decades, dropping from 54 percent of the population today to 22 percent by 2025, even as the population grows by 29 percent (Exhibit 2.3).

Exhibit 2.3

SHARE OF POPULATION IN THE DEPRIVED CLASS WILL DROP BY MORE THAN HALF BY 2025
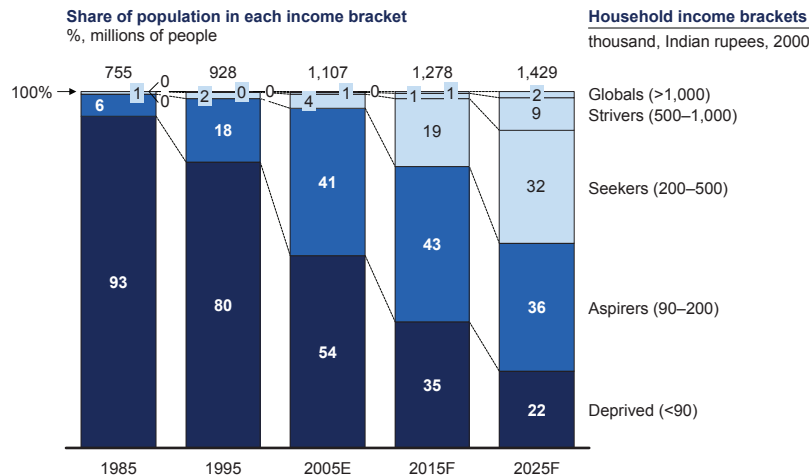
Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

Overall, this means that 291 million people will move out of poverty and climb into the aspirer and seeker classes during a period when the country's population will grow by 322 million people. If economic growth continues as per our base case, *India will have over a billion fewer poor people in 2025 than if poverty had remained stuck at its pre-reform 1985 level,* and 465 million fewer poor than if the rate remained at 2005 levels. If this does occur, India's climb out of poverty will rank alongside China's as one of the great achievements in economic history.

India will become a middle-class country

The second big change resulting from continued income growth will be the long-awaited emergence of a large Indian middle class. There has been much discussion recently about India's emerging middle class—how big is it today, how quickly will it grow?[3] But there is no generally-agreed definition as to what constitutes the middle class in India. For the purposes of this report we will define middle class as a combination of seekers and strivers, whom we can think of as lower- and upper-middle class respectively. Taken together, the middle class therefore refers to households earning between 200,000 Indian rupees and 1,000,000 Indian rupees a year. We have chosen this definition because it reflects income levels that would be considered middle class when compared with world norms. Although the amounts sound low to developed-world ears (roughly between $4,400 and $22,000), on a PPP basis this income class spans between $23,500 and $118,000 and in India purchases a recognizably middle-class lifestyle.[4]

Our analysis shows that the distribution of incomes across these brackets will change dramatically over the next two decades and, by the end of this period, the income pyramid of Indian society will look remarkably different from today's (Exhibit 2.4). Despite significant progress, India today remains dominated by people living in the deprived and aspirer classes. The middle class currently constitutes just 13 million households (50 million people), or 5 percent of the population. By 2015, however, a bulge of aspirers and seekers will work its way up the income ladder; by 2025 India will transform itself into a nation of strivers and seekers with 128 million households (583 million people), or 41 percent of the population, in the middle class.
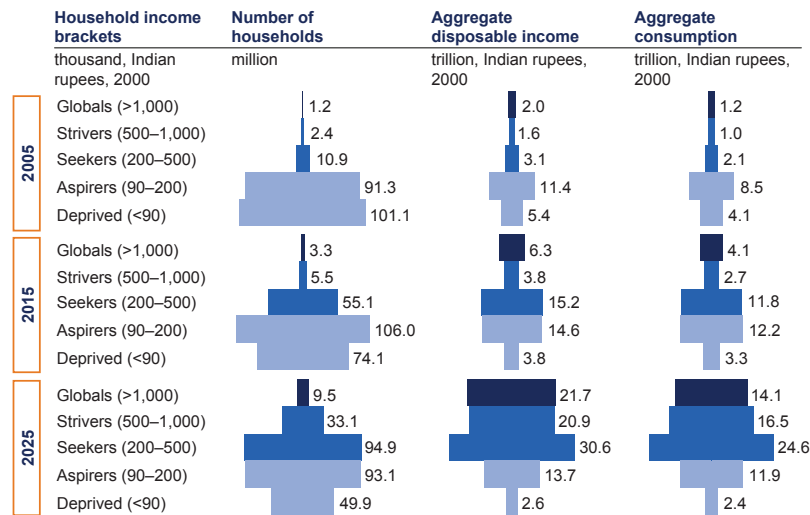
Not only will the magnitude of socioeconomic change be great, its speed will also be far greater than anything the country has seen before. The deprived population has long dominated India, and that domination has started to decline only in the recent past. In contrast, the aspirer class has been growing steadily over the past two decades (Exhibit 2.5). We expect aspirers to become the largest segment in terms of number of households by 2008, and seekers to begin a sharp period of upward growth starting around 2010. The numbers of strivers and global Indians will remain modest, but will begin to climb rapidly towards the end of the forecast period.

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3   For example, *Indian Middle-Class Dream Takes Shape*, India Brand Equity Foundation (IBEF), 2005.

4   NCAER uses a similar definition in its publication *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households*— i.e. households with annual income between 200,000 Indian rupees and 1,000,000 Indian rupees, except that it uses income levels measured in the year 2001 (fiscal year 2001–02), whereas we use base year 2000.

Exhibit 2.4

**THE SHAPE OF INDIA'S INCOME PYRAMID WILL CHANGE
DRAMATICALLY AS INCOMES GROW**

Household income brackets	Number of households	Aggregate disposable income	Aggregate consumption
thousand, Indian rupees, 2000	million	trillion, Indian rupees, 2000	trillion, Indian rupees, 2000

2005

Globals (>1,000)	1.2	2.0	1.2
Strivers (500–1,000)	2.4	1.6	1.0
Seekers (200–500)	10.9	3.1	2.1
Aspirers (90–200)	91.3	11.4	8.5
Deprived (<90)	101.1	5.4	4.1

2015

Globals (>1,000)	3.3	6.3	4.1
Strivers (500–1,000)	5.5	3.8	2.7
Seekers (200–500)	55.1	15.2	11.8
Aspirers (90–200)	106.0	14.6	12.2
Deprived (<90)	74.1	3.8	3.3

2025

Globals (>1,000)	9.5	21.7	14.1
Strivers (500–1,000)	33.1	20.9	16.5
Seekers (200–500)	94.9	30.6	24.6
Aspirers (90–200)	93.1	13.7	11.9
Deprived (<90)	49.9	2.6	2.4

Source: MGI India Consumer Demand Model, v1.0

Exhibit 2.5

**FIRST ASPIRERS AND THEN SEEKERS WILL BECOME THE LARGEST
INCOME BRACKETS**

Number of households in each income bracket
millions of people

Household income brackets
thousand, Indian rupees, 2000
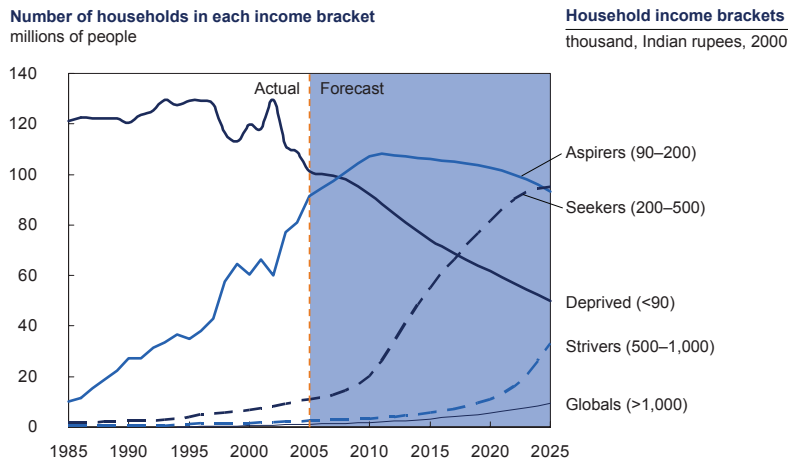
Source: MGI India Consumer Demand Model, v1.0

Spending power will also shift by income bracket as the middle class begins to bulge. By 2015 India's middle class will control the largest block of income in the country at 19 trillion Indian rupees, or 44 percent of total income. By 2025 this will balloon to 51.5 trillion rupees—11 times the level of today—or 58 percent of total income.

Globals will become a major spending force

Today India's globals constitute just 1.2 million households and are, in essence, a niche market confined mostly to India's largest cities (though they also include a few large land-owners in a few wealthy rural pockets). While they control only 2 trillion Indian rupees in spending power ($43 billion), or 8 percent of total income today, they will evolve into a major spending force in the economy over the coming decades.

Our analysis shows that the number of global households will multiply by almost eight times in our forecast period to reach 9.5 million households by 2025. This group's income will also expand by some 11 times its current level to 21.7 trillion Indian rupees ($475 billion), or 24 percent of India's total. Furthermore, average annual income in this bracket will climb from 1.6 million Indian rupees ($35,000) per household today to 2.3 million Indian rupees ($50,000) by 2025.
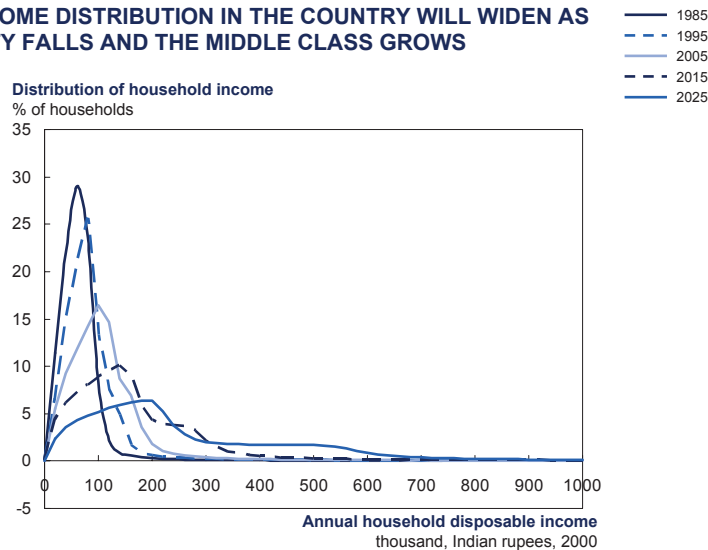
A widening distribution of income

Changes in the composition of India's income classes will continue to have a dramatic effect on the shape of India's income distribution. When we look at the percentage of households with different levels of income over a four-decade period—1985–2025—we can see the tall, spiked distribution of India in 1985, when society was almost uniformly poor, and the "stretching" of the distribution to the right over the decades as more Indians have seen their incomes rise (Exhibit 2.6). We project that this stretching will continue.

A consequence of this stretching of the income distribution is that the gap between rich and poor in India has been widening, and according to our projections, will continue to widen. While some might see this as a fault in India's program of reform, it is important to remember that this widening gap does not mean that India's poor are getting poorer or failing to benefit from growth. The stretching that we have talked about is due to the fact that the great mass of the population, including large numbers of India's poorest citizens, has been growing richer (shifting to the right in the exhibit). Growth does not benefit everyone evenly, and it is vital that opportunities are created for those who have been left behind by growth, particularly those mired in extreme poverty. However, it would be inac-

curate to say that India's growth over the past two decades has benefited only the wealthy. In fact, growth is having a very broad impact on Indian society.

Exhibit 2.6

THE INCOME DISTRIBUTION IN THE COUNTRY WILL WIDEN AS POVERTY FALLS AND THE MIDDLE CLASS GROWS

1985
1995
2005
2015
2025

Distribution of household income
% of households

Annual household disposable income
thousand, Indian rupees, 2000

Source: MGI India Consumer Demand Model, v1.0

If this shift in the shape of India's income distribution continues as we predict, it will undoubtedly have a profound impact on India for decades to come. It will affect not just the development of India's consumer market and businesses, but also its politics and culture. The only other country to undergo such a rapid transformation is China, and the long-term implications of China's development are also still playing out. Over the course of two generations, India and China will have vaulted from the world's largest impoverished countries into the ranks of the world's middle class—an astonishing achievement.

**INDIA'S FAST-GROWING POPULATION AND SMALLER HOUSEHOLDS WILL ALSO BOOST CONSUMPTION GROWTH**

After income growth, the second largest factor driving India's development as a consumer market will be its continued population growth. India's strength has always been in numbers and today it is second only to China in this respect. However, China's adoption of a one-child policy means that India's population is growing significantly faster by comparison. According to UN projections, India will overtake China to become the most populous country in the world by 2030.

As India's economy has developed, population growth has slowed down from a high 2.1 percent annual growth rate in 1985–1995 to 1.6 percent in the past two or three years. The average birthrate in the country has fallen from 33 per thousand in 1985 to under 25 per thousand today. But India's population growth still remains high by world standards. According to the UN, India's current population of 1.1 billion will grow at a rate of 1.3 percent per year over the next 20 years, surpassing the 1.4 billion mark by 2025. To put this in perspective, this amounts to adding a population the size of Canada every two years. In comparison, China's population is expected to grow by only 0.5 percent in 2005–2025, and that of the United States by only 0.8 percent.

This rapid population growth is a double-edged sword. On one hand, it will pose severe challenges to India's already strained infrastructure and struggling health and education systems. But it will also give India a youthful demographic profile as its dependency ratio (the ratio of children and elderly to income earners) drops from 60 today to 48 by 2025 (Exhibit 2.7). This signifies a rapidly growing labor force and a quickly expanding consumer base. If India can manage to educate these young workers, and if its labor markets are flexible enough to absorb them—two admittedly big "ifs"—then they will constitute an important engine for growth.

Exhibit 2.7

INDIA'S DEPENDENCY RATIO WILL DROP SIGNIFICANTLY OVER THE NEXT 20 YEARS

Dependency ratio*
%

1985	1995	2005E	2015F	2025F
72	68	60	52	48
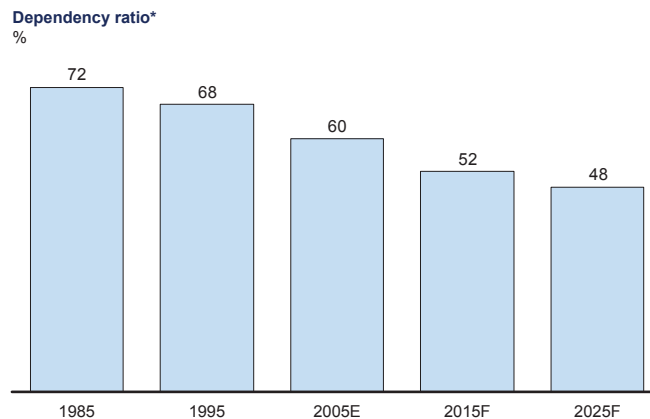
* The dependency ratio is defined as the number of children (population in age group 0–14 years) and elderly (65 years and older) as a percentage of the total working population (age group 15–64 years).
Source: UN Population Division; MGI India Consumer Demand Model, v1.0

Accompanying this population growth will be an increased rate of household formation, and we expect these households to be smaller in size, with the average Indian household size dropping from 5.4 people today to 5.1 by 2025. Three factors are driving this. First, as incomes rise it becomes possible for children to move away from their families, something that they may not have been able to afford to do previously. Second, wealthier, urbanizing families tend to have fewer children. Third, with greater diversity of employment opportunities across the country and greater mobility of the workforce, families will tend increasingly to fragment across multiple cities or locations within cities.

CHANGES IN SAVINGS BEHAVIOR IS NOT A SIGNIFICANT DRIVER OF CONSUMPTION

As noted earlier, the biggest drivers of future consumption will be growth in disposable income and population, which will contribute 80 percent and 16 percent respectively of consumption growth. An important finding of our work is that India's development as a major consumer market does not depend on Indian households saving significantly less than they do today. As we will discuss, we do foresee a modest decline in the household savings rate, but this is responsible for only 4 percent of the projected increase in consumption.
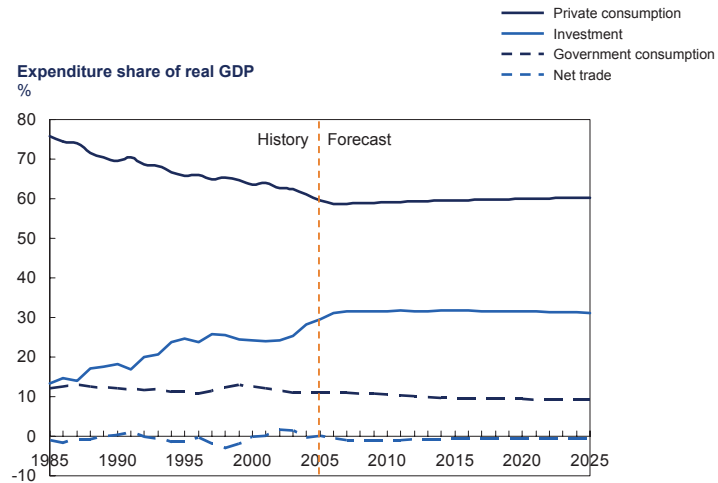
We will begin our discussion of savings with our analysis of the amount of investment needed in India in order to support the growth rate in our base case. As discussed in chapter 1, some commentators have questioned whether Indians are saving enough to finance future growth. India's investment rates have been lower than those of countries such as Korea and Thailand when they were at a similar stage of development, and well below that of China in recent years (although China's level of investment intensity is more properly viewed as an outlier when compared with other countries).

But despite these concerns, India's real fixed-investment spending grew at 8.4 percent per year in 1985–2005, a faster pace than the 5.9 percent annual increase in real GDP. Thus investment has grown steadily as a share of GDP since 1985 (Exhibit 2.8). Our base case shows fixed investment as a share of GDP continuing to climb in the short-term, but beginning to level off at 32 percent of GDP in the next couple of years so that, overall, investment growth broadly reflects growth in the economy. This is consistent with current forecasts that India's economy will experience a "soft landing" from its recent growth spurt, which many analysts believe to be above the sustainable trend.[5]

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5   Jonathan Anderson, "India's soft landing," UBS Investment Research, Asian Focus, January 2007.

Exhibit 2.8

INVESTMENT WILL GROW APPROXIMATELY IN LINE WITH GDP

- ——— Private consumption
- ——— Investment
- – – – Government consumption
- – – – Net trade

Expenditure share of real GDP
%

Source: National Accounts; MGI India Consumer Demand Model, v1.0

However, we believe that, at 32 percent of GDP, investment levels will be sufficient to support the 7.3 percent services-led growth path in our base case. Thus investment will continue to grow rapidly in absolute terms, but will track GDP on a relative basis. What will continue to change is the way in which India finances its investment, which will undergo a significant shift.

To understand this shift, it is important first to focus on how national savings are defined. National investment and savings are both measured to account for depreciation, although we usually refer to savings concepts that are net of depreciation. Throughout this report, we define household savings as disposable income less consumption. Similarly, corporate savings are usually thought of as undistributed profits, while government savings are viewed in terms of the fiscal balance. These are all net concepts. Furthermore, public-sector enterprises play a large role in India, so any definition of government savings must be expanded to encompass the entire public sector.[6] This difference is significant given that, over the past ten years, gross savings were approximately two-thirds higher than net savings.
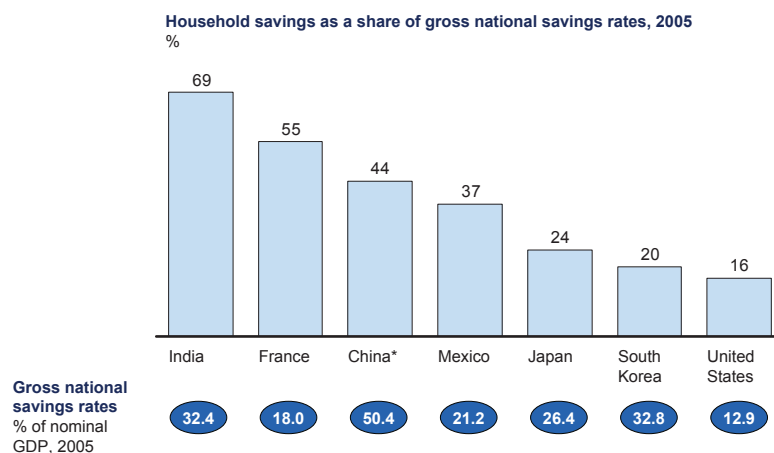
For the past two decades, India's total national savings rate has been comparable to that of a number of other countries, and recently passed Japan's high rate. Since 2001 both national savings and national investment levels in India have been growing significantly, despite flat contributions from households. This

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6   Public-sector enterprises include both departmental and non-departmental enterprises.

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is due to the fact that Indian corporations have been accounting for a rapidly growing component of national savings, and the increased fiscal discipline of the Indian government means that, the public sector has become less of a drag. We expect that Indian households will continue to save less, and that corporations and the government will save more. Furthermore, we expect that India will draw on international savings by running a modest current account deficit in the first half of the forecast period, and then run a current account that is near balance in the longer term. This rebalancing in India is noteworthy because households are the largest contributor to national savings today, and they account for a much greater share than they do in other countries (Exhibit 2.9).[7]

Exhibit 2.9

INDIAN HOUSEHOLD SAVINGS ACCOUNT FOR A DISPROPORTIONATE SHARE OF NATIONAL SAVINGS

Household savings as a share of gross national savings rates, 2005
%

	India	France	China*	Mexico	Japan	South Korea	United States
Household savings (%)	69	55	44	37	24	20	16
Gross national savings rates % of nominal GDP, 2005	32.4	18.0	50.4	21.2	26.4	32.8	12.9

* MGI estimate based on 2005 GDP and estimates of flow-of-funds information.
Source: Country National Accounts; IMF; MGI China Consumer Demand Model, v2.0

One reason for this rebalancing is that a large portion of household savings is currently used to support businesses that are part of the "unorganized sector" that comprises approximately 60 percent of Net Domestic Product. Indeed, as MGI's analysis of India's financial system has shown, more than half of household investment is used for business-related buildings and equipment.[8] As reforms

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7   There is some discrepancy when comparing statistics across India and China because China classifies state-owned enterprises (SOEs) as corporates in its flow-of-funds data, while India includes most of these firms in the public sector. Moving the most independent SOEs in India (non-departmental enterprises) into the corporate sector increases the corporate savings rate to 8.1 percent.

8   Diana Farrell, Susan Lund, Ezra Greenberg, Raj Doshi, Jaeson Rosenfeld, and Fabrice Moran, *Accelerating India's Growth Through Financial System Reform*, McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/india_growth/index.asp).

in the financial system, land, and product markets push forward, more of the unorganized sector will become organized, creating employment opportunities that do not exist today. Households will not need to save so much because they can shift their savings out of low-productivity personal businesses and into the financial system, which can re-circulate those savings into higher-productivity investments. As this occurs, greater access to capital from the financial system will reduce the amount of personal capital that entrepreneurs are obliged to tie up in their small businesses.[9]

In addition to shifts between household and corporate savings, we also expect to see shifts between household and public-sector savings. Two forces are driving this trend. The first is the more predictable of the two— i.e. that rising personal incomes and corporate profits will increase the tax base of the Indian government. The second—less easily anticipated—is the question of whether India will maintain its recent commitment to greater fiscal discipline in the coming years. We expect that real government expenditure will grow more slowly than GDP at 6.1 percent a year, and that the deficit will gradually fall from 8 percent of GDP today to a slightly improved 6 percent by 2025.[10] This will reduce the drain by the Indian government on national savings.

In addition to these macroeconomic forces at work on Indian savings, demographic factors are in play as well. As mentioned previously, India's population profile will become younger and its dependency ratio will drop significantly over the coming two decades. With reduced pressure to save for children and elders, and retirement a distant prospect, India's youthful households will tend to save less.

The final factor is changing attitudes and behaviors. While this factor is difficult to quantify, many observers have noted a change in Indian attitudes towards consumption and savings over the past decade, particularly among the young. Optimism about the future, for example, is a key factor in driving consumption behavior. In late 2006 Indian consumers ranked first—for the third time in a row—in a global consumer-confidence survey by the market-research firm A.C. Nielsen.[11] There is also evidence that Indians are increasingly comfortable with

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9   The shift toward increased access to credit for small businesses will likely occur slowly, however, due to the lack of competition and inefficiencies in India's financial system.

10 The figures quoted here refer to the consolidated government deficit, which is a combination of central, state and local government deficits, with removal of inter-governmental transfers. While this may seem high to those used to viewing only the central government deficit, we use this measure as it allows us to see the total burden of the government deficits and to estimate the impact on capital markets and capital availability.

11 *Global Consumer Confidence Report, September 2006,* ACNielsen (http://www2.acnielsen. com/reports/documents/GlobalConsumerConfidence_Sept06.pdf).

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using credit rather than savings to finance major purchases. There has been a four-fold increase in credit-card penetration in India, from 2.5 percent in 2001 to 8.1 percent in 2005. Finally, factors such as the increased availability of television and radio, more visible advertising, and increased communications and travel also tend to stimulate consumption. Overall, these factors point towards greater consumption and a lower household-savings rate.

The net effect of all these factors is that we estimate that the household-savings rate will gradually decline from its current peak of 28 percent of disposable income today to 22 percent by 2025. We must again emphasize that these savings rates are still relatively high by world standards, and that the shift in the national composition of savings we foresee will not constrain India's growth. The moderation in household savings will, however, increase the percentage of Indian income spent on consumption from 72 percent in 2005 to 78 percent by 2025.

The story of the likely evolution of Indian savings may be complex but its overall impact is modest, driving just 1,922 billion Indian rupees in additional consumption—or just 4 percent of the projected increase during our forecast period. So, even if the savings story plays out differently from that of our base case—for example if investment expands to a higher level than that which we have forecast—the impact on consumption is likely to be minimal.

THE QUADRUPLING OF INDIAN CONSUMPTION

With rising incomes, the creation of a massive middle class, and a growing population, India will become one of world's largest consumer markets by 2025. Consumption will increase at an aggregate rate of 7.3 percent annually over the next 20 years to reach more than 69.5 trillion Indian rupees by 2025, or $1.5 trillion.
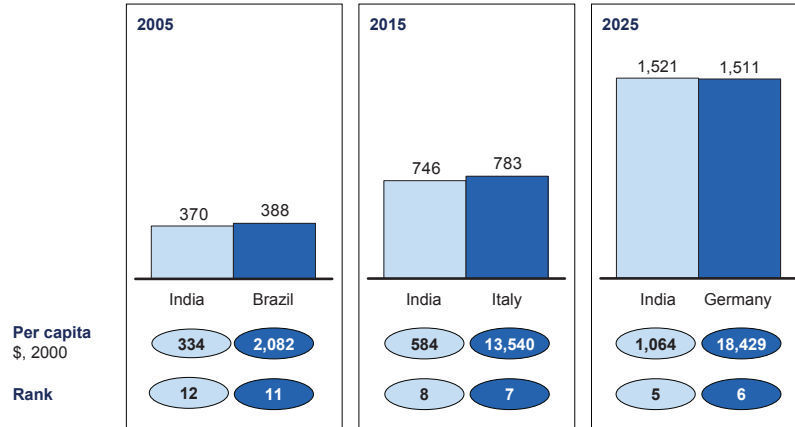
To put the growth of India's consumer market in perspective, it is useful to compare it with some other countries. Today, India's consumer market ranks 12th in the world, about on a par with Brazil, despite having about six times the population. By 2015, however, it is expected to be as large as Italy's projected market. By 2025 its consumer market will be larger than that of Germany, becoming the fifth-largest consumer market in the world (Exhibit 2.10), just behind the United States, Japan, China, and the United Kingdom.

Moreover, these figures may underestimate the true spending of Indian consumers because of differences in living standards. If PPP-implied exchange rates are used, India's consumer market will be worth $8.2 trillion by 2025, surpassing the worth of today's US market of $7.8 trillion.

Exhibit 2.10

INDIA WILL BECOME THE FIFTH LARGEST CONSUMER MARKET IN THE WORLD BY 2025

Aggregate private consumption, 2005–2025

billion, $, 2000

	2005		2015		2025	
	India	Brazil	India	Italy	India	Germany
	370	388	746	783	1,521	1,511
Per capita $, 2000	334	2,082	584	13,540	1,064	18,429
Rank	12	11	8	7	5	6

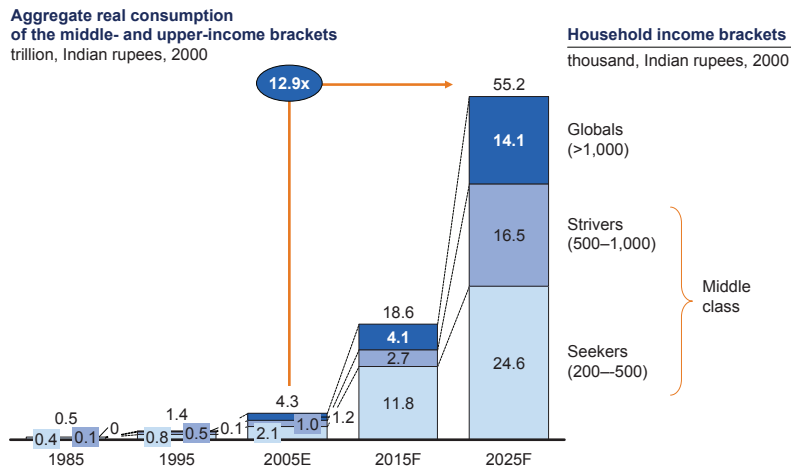Source: Global Insight; UN Population Division; MGI India Consumer Demand Model, v1.0

However, it is important to qualify expectations of India's stellar growth as a consumer market. On a per-capita basis, India will still be a developing nation, even in 2025. Its real consumption per capita will expand more than three times from $334 to $1,064 in 2025—but this will still be roughly equivalent only to present-day Egypt, and will continue to lag far behind developed countries. Put another way, it would take over a century of growth at more than 7 percent per year for India's per capita consumption levels to catch up with those of the United States (if the US market continued to grow at 2.5 percent per year).

Despite these caveats, when we look behind the averages, it becomes clear that India will experience tremendous consumption growth in its booming middle and upper classes (again see Exhibit 2.4), and that this will provide significant opportunities for both Indian and multinational companies. Total combined spending by these classes will more than quadruple in the first decade from 4.3 trillion Indian rupees ($94 billion) today to 18.6 trillion Indian rupees ($407 billion) in 2015, and by nearly 13 times over the next 20 years to reach 55.2 trillion Indian rupees ($1,207 billion) by 2025 (Exhibit 2.11). To put this in perspective, India's middle- and upper-class market will be on par with present-day Spain by 2015. With average consumption per capita ranging between 55,000 Indian rupees and 70,000 Indian rupees per annum (approximately $1,200–$1,500), the middle class will expand to the point at which it commands almost 60 percent of total consumption by 2025. India's global class, with average spending per capita

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ranging between 500,000 Indian rupees and 600,000 Indian rupees per annum (approximately $11,000–$13,000), will also become very important, commanding 20 percent of total consumption by 2025 (Exhibit 2.12).
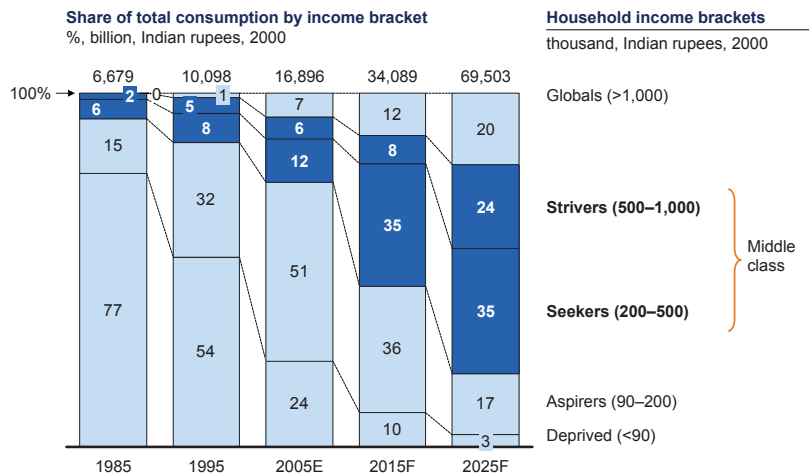
Exhibit 2.11

AGGREGATE CONSUMPTION BY MIDDLE- AND UPPER-INCOME HOUSEHOLDS WILL GROW NEARLY 13 TIMES BY 2025

Aggregate real consumption of the middle- and upper-income brackets
trillion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

12.9x

Globals (>1,000)

Strivers (500–1,000)

Seekers (200—500)

Middle class

Source: MGI India Consumer Demand Model, v1.0

Exhibit 2.12

INDIAN CONSUMPTION WILL BE DOMINATED BY THE MIDDLE CLASS

Share of total consumption by income bracket
%, billion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

Globals (>1,000)

Strivers (500–1,000)

Middle class

Seekers (200–500)

Aspirers (90–200)

Deprived (<90)

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

URBAN VERSUS RURAL INDIA

Thus far we have discussed the development of India's consumer economy at an aggregate level. In the next two chapters, we will look more deeply at how income and consumption growth are likely to play out in India's urban and rural regions. In many ways, India is two economies: rapidly growing urban India, housing some of the world's leading IT firms as well as some of the world's most desperate slums; and rural India, which still depends to a large extent on subsistence agriculture.

We recognize that the urban and rural categories upon which we focus in the next two chapters of this report have within them a considerable level of diversity. India's geographic regions contain a wide range of cultures, languages, and diverse economies. India is more a collection of markets—like the European Union (EU)—than a true single market, and India's regional diversity is reinforced by the strong influence on the economy of state governments through powers such as taxation, investment, and internal tariffs on the movement of goods and services.

According to the official definition, urban India consists of 5,161 cities and towns including the major metropolitan areas such as Delhi and Mumbai. As of 2005 it included 318 million people, or nearly 30 percent of the population. In 2000, the last year for which urban-rural output data is available, urban areas accounted for 52 percent of India's net domestic product, despite having just over one-quarter of the population.

On the other hand, rural India is home to the bulk of India's population. More than 70 percent of Indians today live in over 600,000 villages of varying sizes all over the country, with wide variations in rural infrastructure, education levels, and economic activity across states. Although the primary source of employment is agriculture, as we will discuss in chapter 4 the rural economy is more diverse in terms of economic output than is often understood.

Most government data sources (such as the Census of India) use three metrics to distinguish between urban and rural areas—population size, population density and economic activity. Regions that satisfy all the following criteria—population greater than 5,000; population density greater than 400 per square kilometer (1,000 per square mile); and at least 75 percent of the male working population engaged in non-agricultural employment—are classified as urban areas. Regions not meeting these criteria are classified as rural.[12]

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12 In addition, all places with a municipality, corporation, cantonment board, or notified town area committee are classified as urban (www.censusindia.net/2001housing/metadata.pdf).

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While this is an appropriate classification in India's case, it is different from the definition used by other countries, and it is useful to keep this in mind when interpreting our urban-rural results. For instance, we project that urbanization rates in India will rise from 29 percent in 2005 to 37 percent by 2025, a slight acceleration relative to the past two decades.[13] While this might sound low compared with other emerging economies such as China or Indonesia, with their respective urbanization rates of 40 and 48 percent in 2005 (Exhibit 2.13), India's urbanization rate is arguably understated. For example, if the United States were to use India's definitions, we estimate that the United States' urbanization rate would be at least 10 percent lower than its reported rate of 69 percent. Applied to India, this definition implies that India's urbanization level is closer to that of China today than statistics indicate, and will approach 47 percent in 2025 on an adjusted basis. Another implication of India's classification scheme is that regions on the fringe of major urban centers may still be categorized as rural, despite the fact that they might reasonably be considered semi-urban by other standards.

Exhibit 2.13

INDIA REMAINS LESS URBAN THAN ITS COUNTERPARTS IN ASIA, BUT DEFINITIONS VARY

Urban share of total population, 2005
%
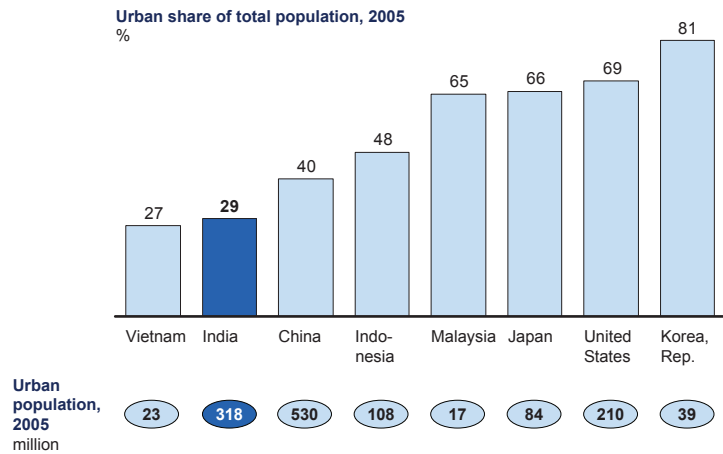
Source: United Nations World Urbanization Prospects 2005; MGI India Consumer Demand Model, v1.0

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13 Our urbanization forecasts are also closely aligned with external estimates from the Indian Census and the UN. For further detail, see *Population Projections for India and the States, 2001–2026*, National Commission on Population, May 2006; and *World Urbanization Prospects: The 2005 Revisions Population Database,* UN Population Division, 2006.

Both urban and rural areas are expected to benefit significantly in the coming decades from strong income growth. In urban areas average real household disposable-income growth is projected to pick up from 4.6 percent over the past 20 years to 5.8 percent in the forecast period; in rural areas, we expect growth to accelerate from 2.8 percent to 3.6 percent (Exhibit 2.14). The fact that urban India will see much faster income growth than rural areas is even more significant when one notes that India's urban population is growing more than three times as fast as its rural population because of migration.

Exhibit 2.14

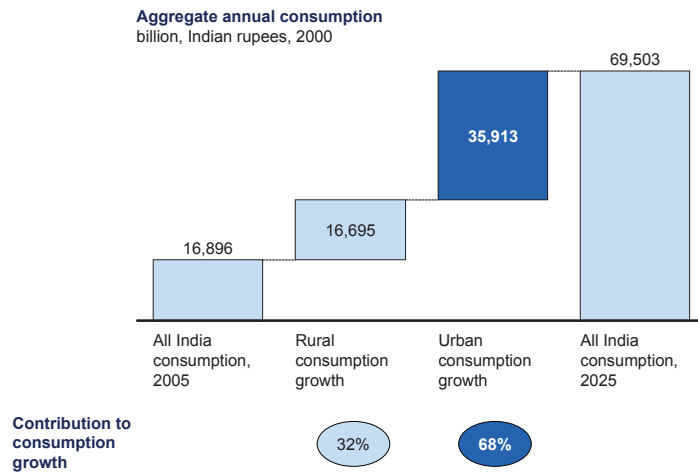**HOUSEHOLD INCOME GROWTH WILL ACCELERATE ACROSS INDIA**
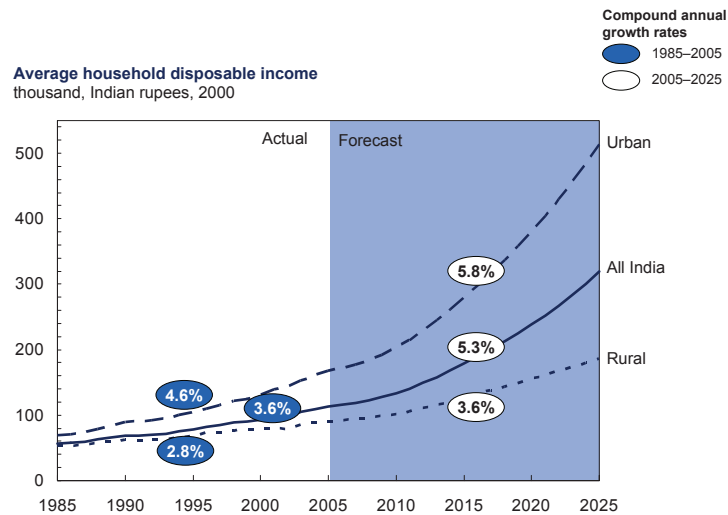
Source: MGI India Consumer Demand Model, v1.0

Differences in income growth across urban and rural India are due to several factors including variations in the type of economic activity, levels of educational attainment, and demographics (e.g. lower household size in urban areas). As we have discussed, the service and industrial sectors will be the major drivers of GDP growth over the next 20 years and the labor pools, capital and infrastructure for these sectors is more concentrated in urban areas. Agriculture, which continues to dominate the rural economy, will grow more slowly. Thus urban India will not only drive India's growth but will also benefit from it disproportionately compared with rural areas. While urbanites will remain a minority of the country's population even in 2025, rapid income growth will mean that they will dominate growth in the Indian market, accounting for more than two-thirds of the projected increase in consumption over the next 20 years (Exhibit 2.15).

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URBAN INDIA WILL ACCOUNT FOR MORE THAN TWO-THIRDS OF CONSUMPTION GROWTH OVER THE NEXT 20 YEARS

Aggregate annual consumption
billion, Indian rupees, 2000

16,896	16,695	35,913	69,503
All India consumption, 2005	Rural consumption growth	Urban consumption growth	All India consumption, 2025

Contribution to consumption growth   32%   68%

Source: MGI India Consumer Demand Model, v1.0

Although growth and additional employment in services and industry will benefit India's urban population more than its rural population, rural India will benefit from the pull-through effect of growing urban demand for agricultural products and better integration into the country's economy. As we will see in chapter 4, rural India lags less far behind urban India than one might imagine. Indeed, it will approach today's levels of urban household income within the next 17 years.

3. The future development of the urban market

We will now shift our emphasis away from the Indian consumer market in total, and on to India's urban market. Urban India is, in itself, on the way to becoming a major world market. Many companies focus their activities in India specifically on urban areas because of the greater accessibility of those markets. Thus urban consumption growth rather than overall growth is, for many companies, the most significant measure of the future Indian consumer opportunity.

Over the past decade aggregate urban consumption has grown by 6.2 percent, outpacing GDP growth (Exhibit 3.1). We expect urban consumption both to accelerate and to continue to grow faster than the overall economy, and forecast a compound annual growth of 9.4 percent over the next 20 years. If incomes follow this growth path, then average annual spending per urban Indian household will more than triple from 115,620 Indian rupees annually today to 378,170 Indian rupees in 2025. As household spending rises, the urban market will expand from 7,208 billion Indian rupees ($158 billion) to 43,120 billion Indian rupees ($944 billion) by 2025. At that point, the urban Indian market will exceed the size of France's total consumer market today.
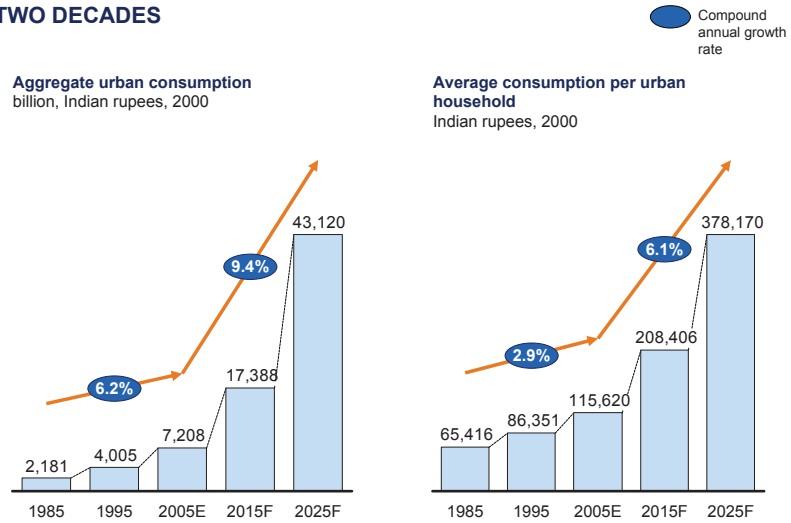
RAPID GROWTH IN THE URBAN POPULATION

Apart from dramatic income growth, one of the main drivers of the rising urban market is the rapid growth in urban population. Nearly two-thirds of the total increase in population in India over the next two decades will occur in urban India. In addition, continued internal migration into urban areas will mean that the share of the country's population in urban areas will rise from 29 percent today to 37 percent in 2025. The combination of births and migration will raise

the urban population from 318 million today to 523 million by 2025 (Exhibit 3.2). Urban India today is already more populous than the entire United States; by 2025, it will exceed the current population of the EU.
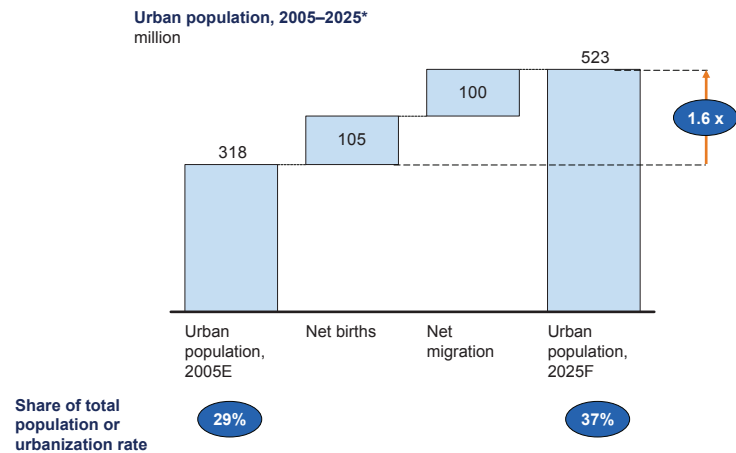
Exhibit 3.1

URBAN CONSUMPTION WILL GROW VERY RAPIDLY OVER THE NEXT TWO DECADES

Compound annual growth rate

Aggregate urban consumption
billion, Indian rupees, 2000

1985	1995	2005E	2015F	2025F
2,181	4,005	7,208	17,388	43,120

6.2%   9.4%

Average consumption per urban household
Indian rupees, 2000

1985	1995	2005E	2015F	2025F
65,416	86,351	115,620	208,406	378,170

2.9%   6.1%

Source: MGI India Consumer Demand Model, v1.0

Exhibit 3.2

BIRTHS AND MIGRATION WILL DRIVE URBAN POPULATION GROWTH

Urban population, 2005–2025*
million

Urban population, 2005E	Net births	Net migration	Urban population, 2025F
318	105	100	523

1.6 x

Share of total population or urbanization rate

29%   37%

* Estimate of birth vs. migration split assumes urban birth rate = 19 per 1,000 and death rate = 6 per 1,000
Source: MGI India Consumer Demand Model, v1.0; United Nations

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The dramatic future growth of India's urban population has several implications. First, the accessibility of India's consumers will improve. It is important in India to distinguish between the potential market versus the "addressable" market—i.e. how many consumers one can actually reach with marketing, distribution, service, and the necessary logistical infrastructure (e.g. a cold-chain in food). As we will discuss in the next chapter, the isolation and lack of connectivity in many rural areas reduces their addressability. The fact that India's fastest growth is occurring in more easily reached urban areas means that the percentage of the Indian market that is truly addressable will grow very quickly over time.

Second, as we shall see later in this chapter, urban population growth beyond the existing big cities will fuel the expansion of second- and third-tier cities, satellite towns, and new economic centers. This will change the distribution of wealth and spending power across cities. While the largest cities will still dominate India economically, many smaller cities will become attractive markets too.

Finally, and as our forecast assumes, the Indian government will need to follow through on its stated objectives of increasing infrastructure investment at a rate that will keep pace with or exceed urban population growth. Otherwise India's already strained urban infrastructure could limit growth possibilities significantly.

THE EVOLUTION OF THE URBAN LABOR MARKET

An important question in the urban growth story is whether India's labor market will be able to absorb such a rapidly growing and youthful population in a productive way. If it can, then a rising population with favorable demographics will be an important engine of growth. If it cannot, major economic and social challenges could result.

The past decade is encouraging. Despite antiquated labor regulations that discourage employment creation, India's dynamic urban markets have generally been able to absorb a large proportion of the growing labor pool. An overview of developments across the strata of urban India's labor market makes us optimistic that the trend of the last ten years will largely continue.

First, at the top of the pyramid, we expect to see continued growth in demand for skilled professionals. Demand for managers, engineers, doctors, technicians and other highly skilled employees will outpace supply, resulting in continued wage growth. Previous MGI work identified potential labor shortages in certain skill areas such as engineering, software design, and middle management.[1]

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1   Diana Farrell, Noshir Kaka, Sascha Stürze, "Ensuring India's offshoring future," *The McKinsey Quarterly*, 2005 Special Edition: Fullfilling India's Promise.

The difficulties many Indian and multinational companies have had in recruiting senior talent have, for example, resulted in average wage growth in the range of 30–40 percent for top management. Likewise, the average placement salary for graduates from some of India's leading business schools has increased by five to ten times over the last ten years. Further evidence of demand outstripping supply at the top of the skills ladder is to be found in rising attrition rates in the workplace as people jump to jobs with higher wages. For example, the organized retail sector is seeing annual attrition rates as high as 40–50 percent, and many IT/BPO companies have had to make significant investments to manage staff turnover.

Second, at the entry level, rapidly expanding service industries are creating significant employment opportunities for young, educated workers. The move away from low-value-added work will make a considerable contribution to boosting incomes across urban India. Already, recent rapid job growth in sectors such as retail and wholesale, financial services, housing construction, auto-components manufacturing, and airline services, has reflected expansion in these sectors to meet growing demand. For example, according to data from the Ministry of Labor, the trade, restaurants and hotels segment added almost 51,000 new jobs in 2002, and the financial- and business-services segment added another 182,000. As these and other service sectors further liberalize and attract FDI, they could contribute significantly to the job pool for more educated, higher skilled workers.

Third, there is a trend towards increasing the skill base at all levels of the income pyramid. There are several factors behind this. First, shortages in key skill areas are leading companies to increase investment in training to expand their labor pool—for example, several auto and other manufacturing companies have set up centers to train workers in computer-aided design. Second, young workers are participating independently and in greater numbers in vocational or supplemental education such as computer-training and language courses. Our projections, described in chapter 5, show privately funded education as one of the fastest-growing consumption categories over the coming years. In the long run, this growing skill base will create opportunities for workers to move towards higher-paid jobs.

Fourth, while we have emphasized the services-led nature of India's growth model, it is important to remember that industry, too, will be growing relatively rapidly at 7.4 percent annually over the forecast period, and will increase output over four times in the next two decades. Manufacturing will continue to be an important source of employment down on the lower rungs of the skills ladder, in particular

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providing opportunities for migrants from rural areas. Further liberalization and FDI would provide additional employment and wage upside for unskilled and semi-skilled workers.

Finally, it is important to recognize the unique nature of certain employment opportunities in unskilled and semi-skilled jobs owing to low Indian labor costs. For example, many retailers in Mumbai's central business district employ people to deliver single units of the smallest stationery items such as one ream of paper; skilled repairmen can easily be found who will make a house-call for the equivalent of a few dollars to repair an expensive and complicated audio system; local companies commonly hire thousands of direct-selling agents for door-to-door sales of small, low-value items such as kitchenware, small electronics, and credit-card offers. Although such employment is a reflection of India's very low labor productivity and will become rarer as productivity increases and wages rise, in the near-term these types of jobs provide a rung onto the workforce for large numbers of people.

Thus, while the rapid growth of India's urban population will create many challenges, provided that government, business, and individual Indians continue to invest in education and building employable skills, we believe that these new workers will contribute significantly to urban India's economic growth. In turn, they will benefit from that growth with rising incomes, and then spend some of that income to help feed the cycle of consumption-led growth.
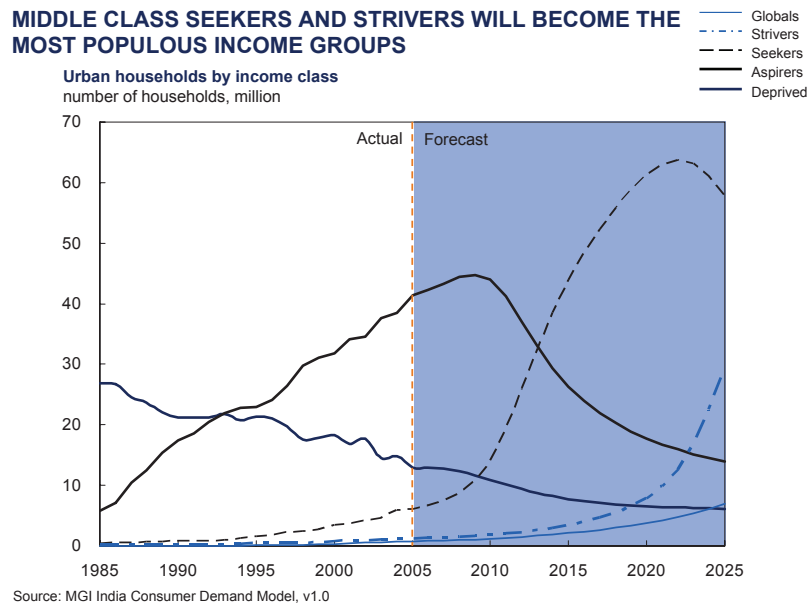
A NEW MIDDLE CLASS WILL DOMINATE URBAN INDIA

With a fast-growing, upwardly mobile, working-age population, and continued favorable labor market conditions, our projections show that urban India will undergo a substantial shift in the structure of its income classes. In past decades, deprived and aspirer households dominated urban India, together accounting for 95 percent of urban households as late as 1995. Only in the last decade has a clear class structure begun to emerge as average household incomes have risen by 4.9 percent, and a modest urban middle class of 7 million households has emerged. However, over the next two decades, we will see "waves" of different income groups rising and falling as urban Indians climb to higher income brackets (Exhibit 3.3).

Over the past decade, the proportion of aspirer households has been rising rapidly while that of deprived households has declined. Aspirers are currently the largest group and will peak around 2009. We expect the lower-middle-class seeker group to take off sharply in the next several years, surpassing the aspirers as the

largest group in 2014. This sudden growth in the number of seeker households will be fuelled by the large mass of the population currently poised just below the seeker income threshold. The seeker segment will continue to grow as incomes migrate upwards, peaking in 2022 at 64 million households, or 62 percent of total urban households.

Exhibit 3.3

MIDDLE CLASS SEEKERS AND STRIVERS WILL BECOME THE MOST POPULOUS INCOME GROUPS

Urban households by income class
number of households, million
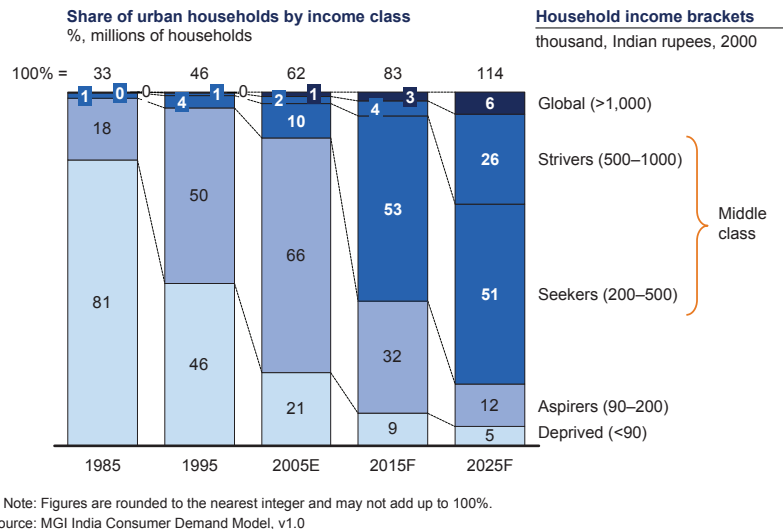

Source: MGI India Consumer Demand Model, v1.0

This rolling wave of income growth will not stop there, but will continue throughout the second decade. By 2022, the number of households in the seeker class will begin to decline as the population begins to climb the next step up the income ladder. Finally, during the latter half of the second decade, we expect to see the appearance of a sizeable striver class and a robust global class. As a result of this transformation, the urban income structure will look much more stratified in the coming decades than it does today (Exhibit 3.4).

As a large bulge of the population moves through the seeker and striver income bands, we will see the emergence of a massive urban middle class. We have already defined the middle class as a combination of seeker and striver house-holds. The urban middle class will experience unprecedented growth, expanding from just 7 million households today, or 12 percent of urban households, to 87 million households, or 76 percent of urban households by 2025. At an average of 4.4 people per household this implies an urban middle-class population of 384 million people by 2025—this alone will be larger than the projected population of the United States in 2025.

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The evolution of this middle class will be a relatively near-term phenomenon as seeker growth takes off between now and 2010, and as early as 2015 the middle class will already comprise some 57 percent of urban households, mostly made up of seekers. As overall GDP growth continues to translate into rising incomes and opportunities, a significant number of seekers will make the further jump into the strivers segment by 2020. By 2025, one-third of urban middle-class households will be classified as strivers.

Exhibit 3.4

URBAN HOUSEHOLDS WILL STRATIFY AS A CLASS STRUCTURE EMERGES

Share of urban households by income class
%, millions of households

Household income brackets
thousand, Indian rupees, 2000

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

This changing structure of urban incomes will result in a shift in the concentration of spending power. Today, the lower-income-groups—aspirer and deprived households—account for almost two-thirds of urban spending. However, by 2025, the combined spending of India's middle class will dominate urban spending, accounting for 70 percent of the total (Exhibit 3.5). Upward mobility will become a key characteristic of a majority of India's consumers.
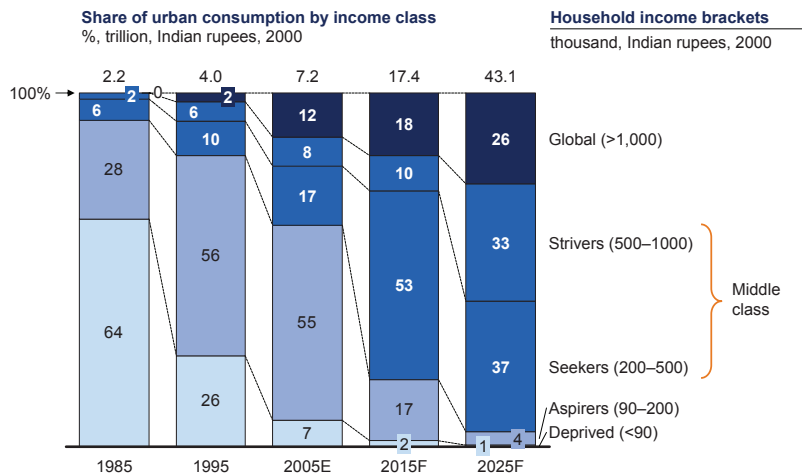
Profile: From seeker to striver

2005: Gautam Dhir (41) works as a plant manager in a textile company in Gujarat. He and his wife, a secretary in a transportation and logistics company, have three children, all of whom are educated in English and are hard-working students. The combined household income places the family firmly in the seeker category—they come from a modest background, enjoy a lifestyle that is basic, yet comfortable, and are willing to work hard to be successful.

2025: Life has changed substantially. Gautam retired as operations director for his company, and he and his wife now spend most of their time playing with their grandchildren. Both their daughters have good careers and families of their own. One daughter is a medical doctor and the other works for an insurance company. After college, their son Vivek started as a junior sales executive at one of the new retail-chain stores that grew rapidly after reform of the retail sector, and then he rose to become the western regional manager. The family's standard of living has steadily improved over the years; Vivek recently fulfilled a long-cherished dream by buying a three-bedroom apartment which he and his wife have enjoyed furnishing, and he also now owns two mid-segment cars.

Exhibit 3.5

THE MIDDLE CLASS WILL DOMINATE URBAN CONSUMPTION

Share of urban consumption by income class
%, trillion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

Note: Figures are rounded to the nearest integer and may not add up to 100%.
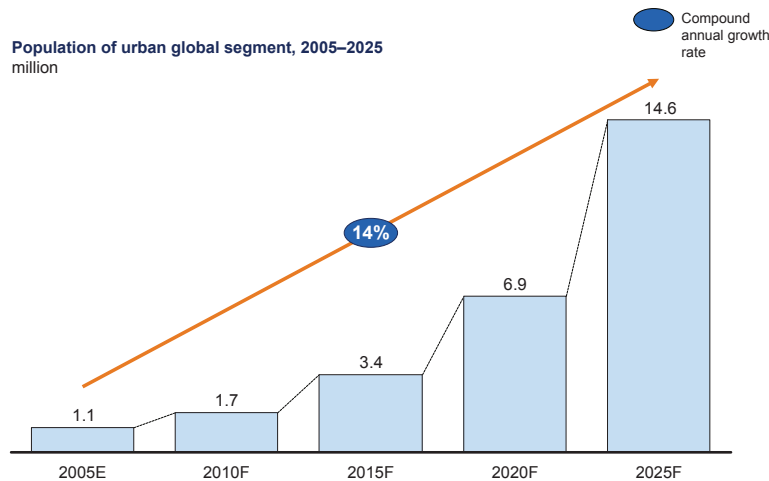Source: MGI India Consumer Demand Model, v1.0

THE EMERGENCE OF A GLOBAL INCOME CLASS

Urban India will also see a growing number of consumers in the highest income bracket, with annual household incomes of over 1,000,000 Indian rupees ($21,882 or $117,647 in PPP terms). These consumers will command significant and growing spending power over the next two decades, and have an outlook and tastes that are similar to the rich across the world.

Initially, the number of high earners will be small as a percentage of the population. Today, global households account for a mere 0.3 percent of the urban population and 1.3 percent of its households, but will triple in number by 2015. However, it is in the second decade of our forecast—2015–2025—that this class really takes off, as successful seeker households increasingly move up into the global ranks. One can already find significant numbers of double-income professional households who started their careers as seekers and have worked their way up through striver status into the global category, and in the next ten years this transition from seeker to global will accelerate. Over the next two decades, the number of global consumers in urban India will grow at an impressive 14 percent annually to reach almost 15 million by 2025 (Exhibit 3.6), exceeding the current populations of markets such as Hong Kong, Belgium, Sweden, or Switzerland. By the end of our forecast, this class will be adding more than two million consumers to its ranks every year.

Exhibit 3.6

THE URBAN GLOBAL CLASS WILL GROW RAPIDLY OVER THE NEXT TWO DECADES TO REACH ALMOST 15 MILLION CONSUMERS BY 2025

Source: MGI India Consumer Demand Model, v1.0

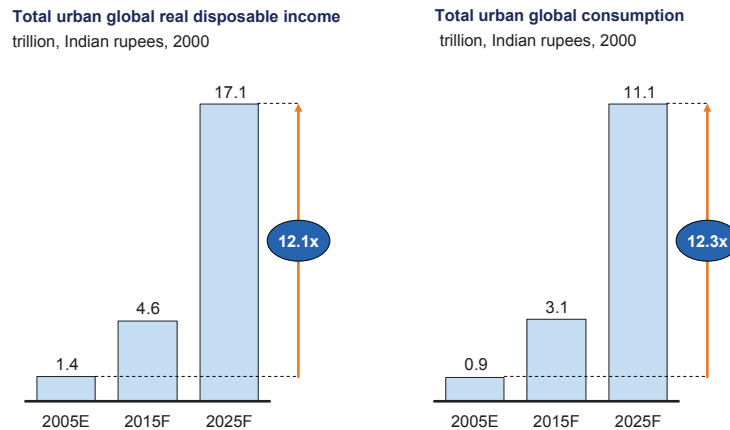**Profile: From seeker to global**

2005: Sandeep (25) and Deepika (24) have just married. Sandeep is an engineering graduate from a good college, and recently started working in India's largest telecoms company, while Deepika is a designer. They were both born to lower middle class seeker families who, while not wealthy, worked hard to fund their children's education and give them a good start in life.

2025: Sandeep has been a major success. He is now working as an executive in a leading bank. Over the last 20 years, he has achieved a great deal—completing an MBA from a top Indian business school, progressing through the management ranks of three different technology companies – and is now in charge of technology strategy for the consumer division of an international bank. The couple has lived in three of India's major cities and even moved to Singapore for two years. Their financial investments have done well, and they now own a plush four-bedroom apartment in one of the expensive parts of Delhi, as well as two imported cars. They travel, eat out in restaurants, and enjoy the latest gadgets, and their greatest hope is that their children will study at world-class universities and replicate their success.

This expanding Indian upper class will wield considerable spending power. The total real disposable income and consumption of global households will increase more than 12-fold to reach 17.1 trillion Indian rupees and 11.1 trillion Indian rupees respectively ($374 and $243 billion) by 2025 (Exhibit 3.7). In fact, global households alone will account for 26 percent of total urban spending in 2025, with a per-capita consumption level exceeding nine times the national average.

Exhibit 3.7

URBAN GLOBAL INCOME AND CONSUMPTION WILL INCREASE MORE THAN 12-FOLD

Total urban global real disposable income
trillion, Indian rupees, 2000

	2005E	2015F	2025F
	1.4	4.6	17.1

12.1x

Total urban global consumption
trillion, Indian rupees, 2000

	2005E	2015F	2025F
	0.9	3.1	11.1

12.3x

Source: MGI India Consumer Demand Model, v1.0

Rich urban households in India will have spending habits similar to those of their developed-country counterparts—branded apparel, vacations abroad, electronics, and cars will all be high-priority purchases. A comparison of the share-of-wallet

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of global households shows that, even today, they devote almost 75 percent of their total spending to discretionary items. This share will increase to over 85 percent by 2025, a figure comparable with consumers in developed countries. In addition, throughout our forecast, global households will tend to be much smaller in size than the national average, and thus spending on a per-capita (rather than a per-household) basis will be relatively even higher.

Finally, another attractive aspect of this target segment will be its geographical concentration. Today 60 percent of urban global households live in the top eight cities of the country (Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Ahmedabad and Pune), making them a relatively more visible and easily targeted segment than the other income bands.

MAJOR CITIES WILL DOMINATE, BUT "NICHE" CITIES WILL ALSO PROVIDE OPPORTUNITIES

One of the most important questions for businesses that aim to capitalize on urban market growth is its geographical distribution. Which cities in India's vast and diverse geography should companies focus on when targeting particular income bands? In this section, we describe the broad structure and concentration of India's urban population and incomes, and overlay this information with our own findings in order to highlight some important implications for geographic strategy.
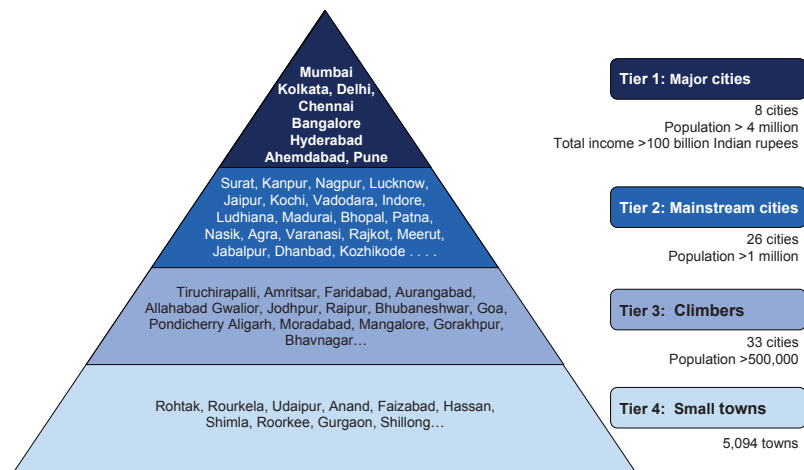
Based on the latest Indian National Census in 2001, India comprises 5,161 cities and towns in 35 states and union territories and almost 600 districts across the country. Given the lack of a standard structure of classification, we have grouped these towns into four tiers, primarily on the basis of population (Exhibit 3.8). Over the past two decades Tier 1 cities such as the national capital New Delhi, commercial capital Mumbai, and IT hubs such as Bangalore and Hyderabad have expanded to become much larger markets than other populous cities. Most multi-nationals operate only in the eight Tier 1 cities, and many have a long way to go before they have fully penetrated these rapidly growing markets. Among Tier 1 cities, Delhi and Mumbai are in a class apart in terms of market size. These two mega-metropolises have experienced rapid growth in their suburbs as well as mushrooming satellite towns, many of which are becoming significant markets of their own.

The "mainstream" or Tier 2 cities include all other cities in the country that have over a million people. These include state capitals such as Patna or Lucknow, traditional old cities such as Jaipur or Agra, and several other cities scattered across the country. Some large multinationals and most Indian corporations are

already present in Tier 2 cities and, in recent years, have started scaling up their operations to target the growing middle class here. Tiers 3 and 4 comprise all the remaining Indian smaller cities and towns, from upcoming urban centers such as Gurgaon, down to tiny settlements of just 1,000 people. In the smaller Tier 3 and 4 towns the informal economy becomes more significant. Many Indian companies do not have full national distribution to these areas (though some may be strong in a regional sub-set), and few multinationals, outside of sellers of fast moving consumer goods (FMCGs), have a significant these small cities and towns.

Exhibit 3.8

CLASSIFICATION OF CITIES AND TOWNS

Tier 1: Major cities
8 cities
Population > 4 million
Total income >100 billion Indian rupees

Tier 2: Mainstream cities
26 cities
Population >1 million

Tier 3: Climbers
33 cities
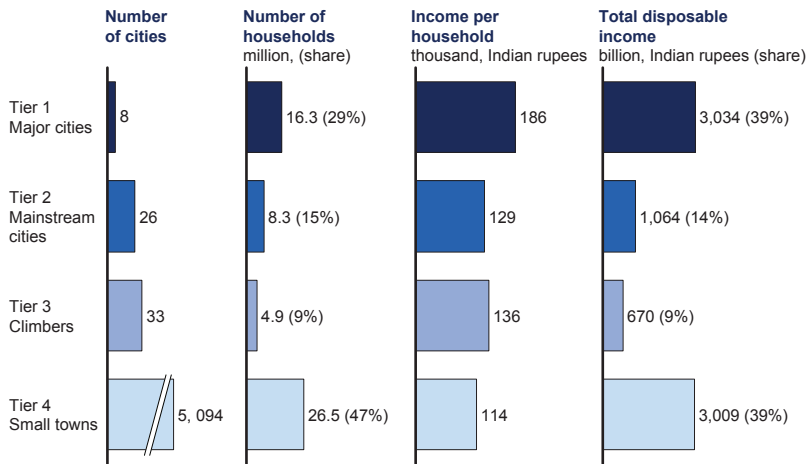Population >500,000

Tier 4: Small towns
5,094 towns

* Population for each city estimated using the average urban household size (from MGI model) and the estimated number of households in each city from NCAER (in the year 2001).
Source: *The Great Indian Middle Class,* NCAER; MGI India Consumer Demand Model (v1.0); MGI analysis

The concentration of multinational corporations in top-tier cities is unsurprising when one examines the population and income distribution across these four tiers. In 2001 the top eight cities in the country alone accounted for almost a third of urban India's population and 40 percent of its disposable income, while Tiers 1 and 2 together accounted for 44 percent of the urban population and more than half of total urban income (Exhibit 3.9). In terms of income brackets, the top two tiers house more than two-thirds of the country's rich and middle class today (Exhibit 3.10). Interestingly, while Tier 3 towns have almost as many middle-and upper-class citizens as Tier 2 cities, they are much smaller in size and consequently, on average, slightly richer.

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Exhibit 3.9

TIER 1 AND 2 CITIES ACCOUNTED FOR 44 PERCENT OF THE URBAN POPULATION AND OVER HALF OF URBAN INCOME IN 2001

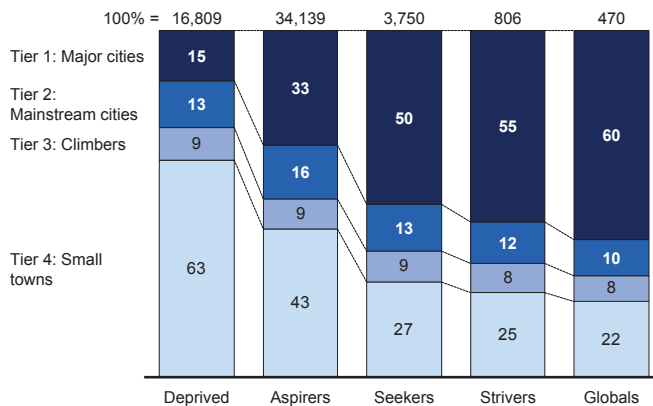|	Number of cities	Number of households million, (share)	Income per household thousand, Indian rupees	Total disposable income billion, Indian rupees (share)
Tier 1 Major cities	8	16.3 (29%)	186	3,034 (39%)
Tier 2 Mainstream cities	26	8.3 (15%)	129	1,064 (14%)
Tier 3 Climbers	33	4.9 (9%)	136	670 (9%)
Tier 4 Small towns	5, 094	26.5 (47%)	114	3,009 (39%)

Note: Disposable income estimated using income distribution of households from NCAER and model estimates of average household income; Figures are rounded to the nearest integer and may not add up to 100%.
Source: *The Great Indian Middle Class*, NCAER; MGI India Consumer Demand Model, v1.0; MGI analysis

Exhibit 3.10

HIGHER INCOME CONSUMER SEGMENTS PREDOMINATE IN LARGE CITIES, POOR IN SMALL TOWNS

Proportion of households in each income class across city tiers, 2001
%, thousand, households

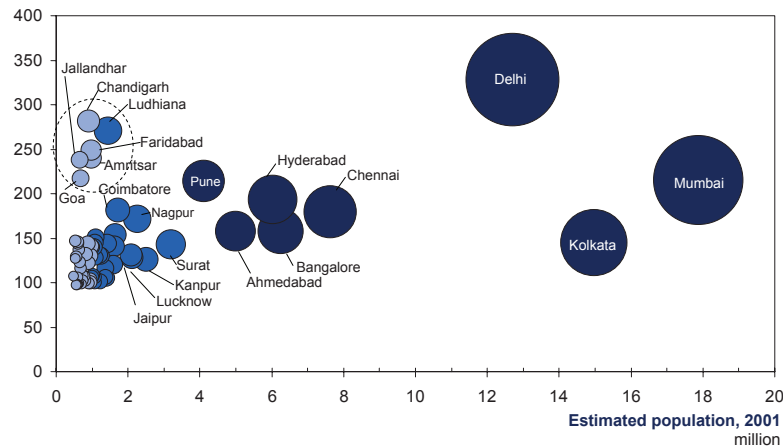| 100% =	16,809	34,139	3,750	806	470
Tier 1: Major cities	15	33	50	55	60
Tier 2: Mainstream cities	13	16	13	12	10
Tier 3: Climbers	9	9	9	8	8
Tier 4: Small towns	63	43	27	25	22
	Deprived	Aspirers	Seekers	Strivers	Globals

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: *The Great Indian Middle Class*, NCAER; MGI India Consumer Demand Model, v1.0; MGI analysis

We also see that several Tier 3 towns have emerged as wealthy centers and, on a per-household basis, are richer even than some of the top eight mega-cities (Exhibit 3.11). With higher per-capita spending, niche cities provide opportunities for many companies, and are becoming increasingly important in the national market.

Exhibit 3.11

EMERGING NICHE TIER 3 CITIES ARE RICHER THAN MOST TIER 1 AND 2 CITIES

Total disposable income
billion, Indian rupees

- Tier 1
- Tier 2
- Tier 3
- Niche cities

Average annual household disposable income, 2001
thousand, Indian rupees, 2000

Jallandhar
Chandigarh
Ludhiana
Faridabad
Amritsar
Coimbatore
Goa
Nagpur
Pune
Hyderabad
Chennai
Delhi
Mumbai
Kolkata
Bangalore
Ahmedabad
Surat
Kanpur
Lucknow
Jaipur

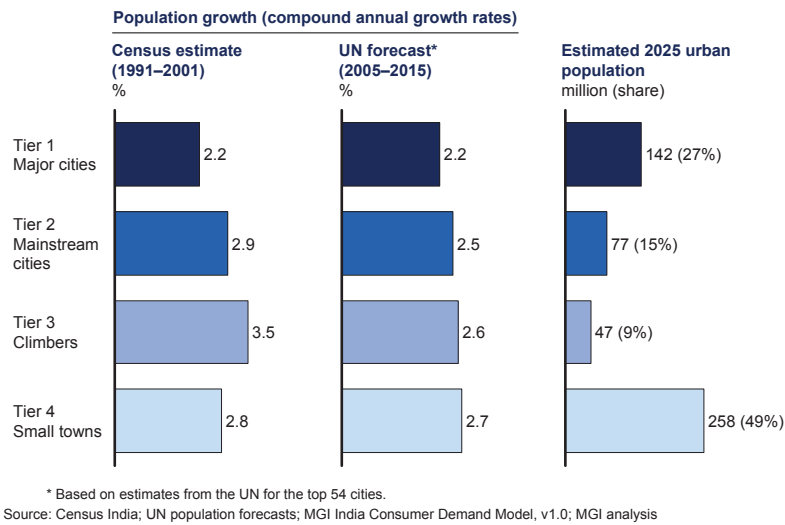**Estimated population, 2001**
million

Source: *The Great Indian Middle Class*, NCAER; MGI India Consumer Demand Model, v1.0; MGI analysis

We would like to highlight two trends that we expect over the next 20 years. First, population growth estimates show that the distribution of urban population across tiers is likely to remain reasonably stable over the next two decades. While Tier 1 cities are forecast to grow more slowly than other cities, this is primarily a large-base effect, and they will still account for over a quarter of total urban population in 2025 (Exhibit 3.12). Tiers 2, 3 and 4 cities and towns are expected to grow at similar rates to each other, and to maintain their share of urban population with only slight shifts.

Second, while population ratios will be roughly stable, India's middle class will begin to move beyond Tier 1 cities and spread into Tier 2, 3, and 4 cities. Middle class growth in the next two decades will be so dramatic that, even if the entire population of Tier 1 cities were middle class or richer, they would still account for only 35 percent of the country's middle class and rich households in 2025. Overall we estimate that 45 to 58 percent of middle class consumers will reside in Tier 3 and 4 cities and towns by 2025.

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Exhibit 3.12

DESPITE SLOWER GROWTH, TIER 1 CITIES WILL ACCOUNT FOR A MAJOR SHARE OF URBAN POPULATION EVEN IN 2025

Population growth (compound annual growth rates)

	Census estimate (1991–2001) %	UN forecast* (2005–2015) %	Estimated 2025 urban population million (share)
Tier 1 Major cities	2.2	2.2	142 (27%)
Tier 2 Mainstream cities	2.9	2.5	77 (15%)
Tier 3 Climbers	3.5	2.6	47 (9%)
Tier 4 Small towns	2.8	2.7	258 (49%)

* Based on estimates from the UN for the top 54 cities.
Source: Census India; UN population forecasts; MGI India Consumer Demand Model, v1.0; MGI analysis

Thus, while many companies will still find it makes sense to concentrate on the large, accessible, Tier 1 and 2 cities, many will also find it attractive to selectively target Tier 3 niche cities with high average incomes and large numbers of middle-class and global households. Bolder companies will seek innovative ways to move beyond India's most competitive markets to capture the large but scattered middle class that will emerge across the Tier 3 and 4 spectrum.

4. The future development of the rural market

While urban areas will constitute the fastest-growing part of the Indian market, rural areas currently hold 70 percent of India's population and have historically accounted for more than half of Indian consumption. Even with increasing urbanization and migration, 63 percent of India's population will still live in rural areas in 2025.[1] Thus, the rural market has been, and will remain, vitally important to the Indian economy.

Our analysis shows that while rural consumption growth will continue to lag wealthier urban areas, it will nonetheless accelerate from a compound annual rate of 3.9 percent during the past two decades to 5.1 percent during the next two (Exhibit 4.1). By the end of our forecast period, rural consumption will have nearly tripled, creating a large potential market worth over 26 trillion Indian rupees ($577 billion). By way of comparison, in 20 years the rural Indian market will be larger than the total consumer markets in countries such as South Korea or Canada today, and almost four times the size of today's urban Indian market.
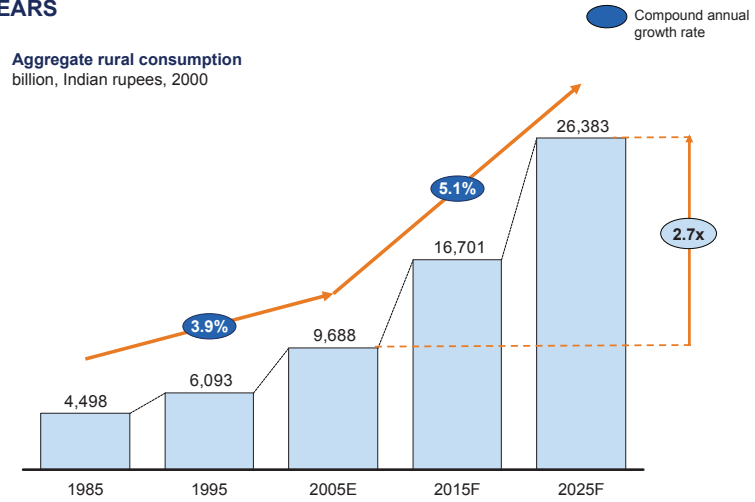
Rural India will also see consumption growth on a per-household basis. At present, consumption rates in rural areas effectively lag behind those in urban areas by around 10 to 15 years. We forecast that per-household spending in rural India will reach current levels in urban India by 2017 (Exhibit 4.2).

There are of course many daunting challenges involved in serving the rural Indian consumer market. Significant gaps in road and telecommunications connectivity, lack of reliable electricity and water supplies, and limited distribution infrastructure

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1   However, as discussed in chapter 2, India's urban-rural classification scheme probably understates the rate of urbanization when compared with other countries.
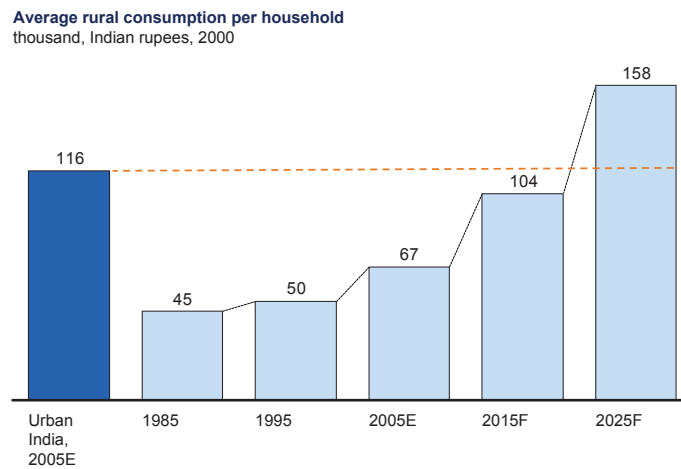
Exhibit 4.1

RURAL CONSUMPTION GROWTH WILL ACCELERATE OVER THE NEXT 20 YEARS

Compound annual growth rate

Aggregate rural consumption
billion, Indian rupees, 2000

	1985	1995	2005E	2015F	2025F
	4,498	6,093	9,688	16,701	26,383

3.9%   5.1%   2.7x

Exhibit 4.2

PER-HOUSEHOLD CONSUMPTION IN RURAL INDIA WILL REACH TODAY'S URBAN LEVELS BY 2017

Average rural consumption per household
thousand, Indian rupees, 2000

Urban India, 2005E	1985	1995	2005E	2015F	2025F
116	45	50	67	104	158

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(e.g. cold-storage) make it difficult for companies to fulfill rural India's latent demand. In addition, a combination of wide geographic spread, low per-capita spending, and competition from local players in the unorganized sector makes it hard to construct profitable business models in these markets. But some major companies already serve rural markets profitably today, and others view the rural areas as the next frontier as the major urban markets become increasingly competitive.

It is important, however, to note that what constitutes "addressing" the rural market will vary widely by company and industry sector. For example, it would be uneconomic for a durable-goods company to have a distribution outlet in every tiny hamlet. Thus durable goods companies such as LG Electronics tend to focus on larger settlements and classify towns with populations of up to 50,000 as "rural", and then serve those larger towns with a network of district offices, stocking points and local dealers. In contrast, some packaged consumer-goods companies consider even the remotest regions and tiniest villages as potential targets, and aim to maximize penetration in the rural economy's scattered 3.5 million retail outlets. For example, Eveready, the market leader in batteries and flashlights, operates a fleet of over a thousand company-owned vans and has over 4,000 distributors to directly service 600,000 retail outlets. Hindustan Lever Limited (HLL) has pioneered new forms of rural distribution with its widely discussed Shakti campaign, which recruits female members of village self-help groups and trains them to become direct-to-home distributors of HLL products.

Serving India's large rural market is thus not an impossibility even for multi-nationals, but it does require adapting to the market's particular conditions. In this chapter we will begin with further background on rural India, including addressing some myths, then look at the impact of growth on the rural poor in the deprived class. Finally, we will examine how spending will increase in the households of the emerging rural aspirer class.

MYTHS ABOUT RURAL INDIA

It is useful at the outset to clarify precisely what rural India currently is and is not. Almost 600,000 villages of varying size scattered all over the country are home to 790 million Indians today. While the term "rural" conjures up images of tiny, remote villages engaged only in agriculture, the reality is often quite different. In fact, 15 percent of the rural population lives in about 20,000 large "non-urban" centers, each with a population greater than 5,000 people. Just over 63 percent of the rural population lives in villages of 1,000 to 5,000 people in size. The

remaining 390,000 villages have fewer than 1,000 people each and account for only about 22 percent of the total rural population.

In terms of economic output, rural India accounts for almost half (48 percent) of the country's economy and this output is far more diverse than might be imagined.[2] While agriculture accounts for a significant share of employment, services and industry together account for 54 percent of rural value added. This share is likely to increase with rising education levels, industrialization, and improved infrastructure. Based on the 2003 *Annual Survey of Industries* that covers organized industrial establishments in the country, 44 percent of gross output of these establishments was from rural areas with rural India housing 37 percent of the country's factories and 41 percent of its organized industrial workers.[3]

In addition, a growing portion of rural India is "infrastructure enabled". A recent McKinsey study concluded that almost 50 percent of the population of rural India lives in "connected" districts with reasonable infrastructure.[4] Even for the other half of the population, there are villages with at least some basic road and electrical connectivity. Although much remains to be done to increase the penetration of rural infrastructure and improve the quality of what already exists, as we will discuss, investment in rural infrastructure is an ongoing government priority.

RURAL POVERTY WILL CONTINUE TO DECLINE

Poverty is an evocative term in India; ever since independence, it has arguably been the most talked-about issue in Indian politics. As discussed in chapter 1, a great deal has been achieved in moving households out of poverty, but much still remains to be done, particularly in rural areas. India's national definition of poverty is based on calorific consumption, which it sets at 2,400 calories per capita per day for rural inhabitants. (According to the US Department of Agriculture the average American in 2000 had 3,900 calories available for consumption per day.) Under this definition, in 2001, 29 percent of Indians were classified as being below the poverty line and at risk of malnourishment and a large proportion of this group was in rural areas.

However, our analysis shows that if India can achieve the levels of GDP growth assumed in our base case, rural incomes will continue to rise, leading to a further

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2   Estimated for 1999 National Domestic Product. See National Accounts Statistics (2006).

3   *Annual Survey of Industries, 2003*, Ministry of Statistics and Programme Implementation, Government of India (http://mospi.nic.in/mospi_asi.htm).

4   Adil Zainulbhai, "Viewpoint: Equitable growth is not just a dream," *Financial Times*, Nov 28, 2006.

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significant decline in the level of rural poverty. As a reminder, our definition of the deprived class (household income of 90,000 Indian rupees or less than 90 cents per person per day in real 2000 terms) is set at a higher level than the government poverty line. We project that by 2025 the size of the rural deprived class will decline from 515 million people today, or 65 percent of the population, to 266 million, or about 29 percent of the rural population—an absolute decline of 249 million people (Exhibit 4.3). With the rural population growing by 116 million over the next 20 years, this means that there will be 325 million fewer rural poor in 2025 than if poverty remains at the 2005 rate.

Exhibit 4.3

RURAL POVERTY WILL DECLINE SIGNIFICANTLY BY 2025
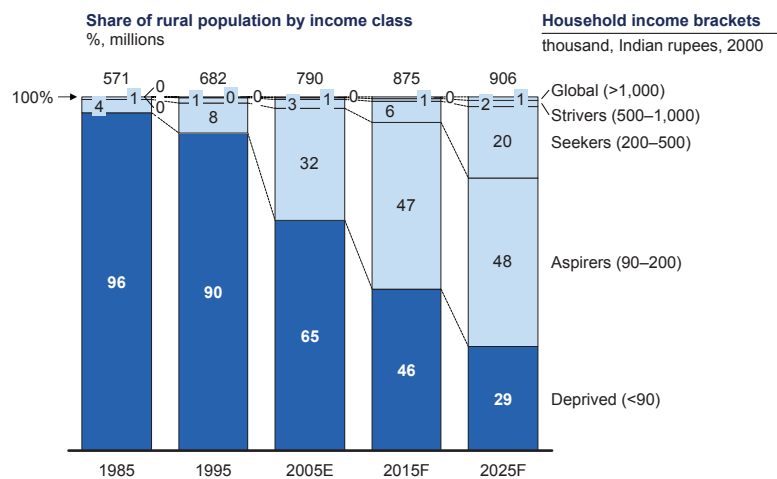
Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

In this section we will explore three important potential contributors to the decline in rural poverty: government investment, the diversification of the rural economy, and improvements within the agricultural sector.

Government investment

The current government has made a major commitment to spreading India's economic growth to deprived rural areas and has set out two ambitious programs to do this.

First, the government has pledged to provide direct income support to rural inhabitants through the recently launched rural-employment guarantee scheme, which guarantees 100 days of paid employment per year for every rural household.

While the long-term impact of this program remains to be seen, in the short-term it will provide a direct boost to many households in the poorest rural bracket.

Second is the multi-billion dollar *Bharat Nirman* plan set up by the current government in partnership with state governments and the Panchayat Raj Institutions (locally elected governing bodies). This program provides a schedule for rural infrastructure investments (roads, access across water, provision of electricity and communications) at an accelerated pace from 2005 to 2009. Plans include bringing an additional 10 million hectares of land under assured irrigation, connecting every village with a population of more than 1,000 individuals (500 in mountainous tribal regions) with an all-weather road, providing drinking water to all habitations, and offering electricity to 23 million households.[5]

This kind of investment in infrastructure has a two-fold impact on rural incomes. In the short to medium term, it creates large numbers of jobs for unskilled labor (building canals, roads, schools, etc), and in the services that will inevitably be needed to support such efforts. In the long-term, as infrastructure growth finally penetrates to small, remote villages, it will stimulate local economies, which will thus increasingly be able to provide jobs and alternate sources of income for residents. For example, with better roads, it will be easier for rural inhabitants to seek jobs in manufacturing facilities in nearby towns. And it will become even more cost-effective for manufacturing and service companies to seek locations in rural India with its low-cost base and large labor pool.

In addition to the above public investments in employment and infrastructure, improved human capital will also be critical to rural income growth, and recent governments have stepped up their efforts in this direction. The National Rural Health Mission (2005–2012) is an example of the government's commitment to increase public spending on health from 0.9 percent to 2–3 percent of GDP. This scheme seeks to provide effective health care to rural populations across the country, with a particular focus on the 18 states with currently weak public-health indicators or notable shortfalls in health-care infrastructure. Similarly, the *Sarva Shiksha Abhiyan* (Education for All) scheme is a major government initiative to achieve the goal of universal primary education.

Our forecasts do not assume perfect execution of all of these initiatives, nor do we assume that the government will meet all of its ambitious targets. But collectively, these programs represent a major commitment to boosting the rural economy with the potential for significant long-term impact.

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5   See http://www.bharatnirman.gov.in.

The diversification of the rural economy

Another consequence of better connectivity will be to accelerate the ongoing shift away from agricultural employment into higher value-added activities in manufacturing and services. Data collected by the National Sample Survey Organization (NSSO) over more than a decade shows that the proportion of male rural workers employed in agriculture has already declined from 75 percent to 67 percent (Exhibit 4.4). The service sector has picked up the major share of this labor as sectors such as construction, trade, hotels and restaurants, transport, storage, and communication have expanded significantly, but manufacturing employment's share has also grown.

Exhibit 4.4

RURAL EMPLOYMENT HAS BEEN GRADUALLY SHIFTING AWAY FROM AGRICULTURE

Distribution of rural male workers by economic activity
%

Manufacturing
Construction
Trade, hotels and restaurants
Transport, storage and communication
Others*

Agriculture

	1987	2004
Manufacturing	7	8
Construction	4	7
Trade, hotels and restaurants	5	8
Transport, storage and communication	2	4
Others*	7	7
Agriculture	75	67
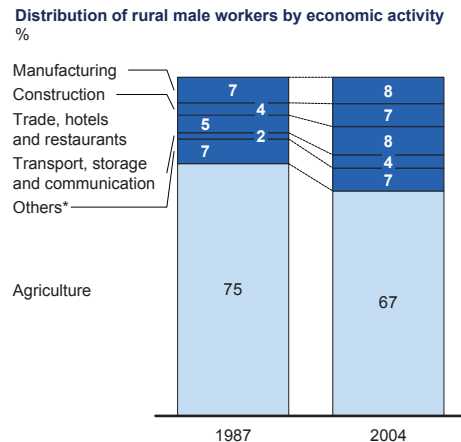
* Sectors with minimal shift in this period (6% in other services, 1% in mining, quarrying, electricity and water).
Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: *Employment and unemployment situation in India (2004–05),* NSSO; MGI India Consumer Demand Model, v1.0

As education levels in rural India continue to rise, the country's new and relatively better-educated workers are likely to turn towards jobs that use their education and offer them a way out of the poverty of subsistence agriculture. Falling communications and transport costs will also enable new business-production models in rural centers. An interesting example is the GramIT project, in which Satyam Computers, a leading Indian IT firm, has begun to transfer its basic data-entry work away from traditional IT hubs such as Hyderabad to rural areas. This initiative has been enabled by the availability of electricity, computers, and a lower cost workforce than is available in urban areas, but still with sufficient levels of education for the requirements of the work.
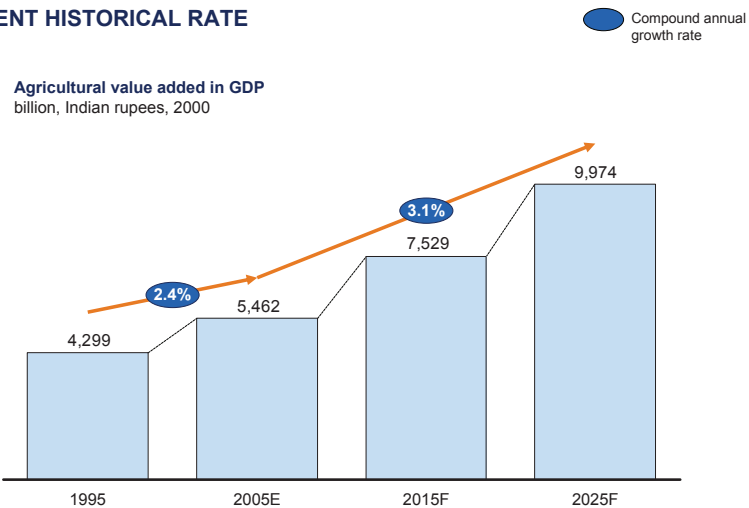
Some view this gradual shift away from agricultural employment as a potential threat to India's food security. However, this shift is a relative one and a natural result of productivity rising in both the agricultural and non-agricultural sectors. Our base-case scenario shows that, even as employment shifts, per-capita agricultural output will grow from 4,933 Indian rupees in 2005 to 6,979 Indian rupees in 2025, a compound annual growth rate of 1.8 percent. Likewise, average per household spending on food will grow from 34,552 Indian rupees to 61,569 Indian rupees during this period.

Improvements within agriculture

Despite the stimulus to rural incomes provided by government initiatives, and a steady shift towards industry and services, agriculture will continue to be the primary source of income and employment for the majority of rural Indians into the foreseeable future. Overall, our model assumes that the agricultural sector will see continued modest productivity gains, and that value added by the agricultural sector will pick up from its 2.4 percent growth rate of the past decade to 3.1 percent over the next two decades (Exhibit 4.5).

Exhibit 4.5

AGRICULTURAL GROWTH IS FORECAST TO ACCELERATE FROM ITS RECENT HISTORICAL RATE

Compound annual growth rate

Agricultural value added in GDP
billion, Indian rupees, 2000

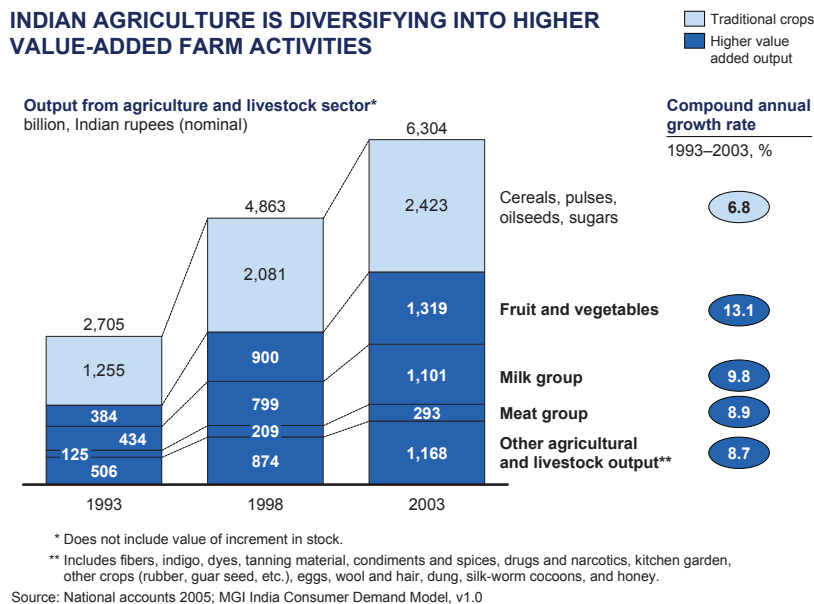|	1995	2005E	2015F	2025F
	4,299	5,462	7,529	9,974

2.4%   3.1%

Source: MGI India Consumer Demand Model, v1.0

There are several trends that support this view. First, is a continued shift towards higher value-added farm activities—i.e. moving from traditional cereal and pulse crops to higher-value fruits and vegetables, poultry, dairy produce and products such as honey and even silk cocoons (Exhibit 4.6). For example, India's output

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of fruit and vegetables saw rapid growth of more than 13 percent during 1993 to 2003 (in nominal terms), with its share of total agricultural output increasing from 14 percent to 21 percent. Another example is the vibrant milk-production industry in the state of Gujarat, which has helped boost rural incomes.

Exhibit 4.6

INDIAN AGRICULTURE IS DIVERSIFYING INTO HIGHER VALUE-ADDED FARM ACTIVITIES

Traditional crops
Higher value added output

Output from agriculture and livestock sector*
billion, Indian rupees (nominal)

Compound annual growth rate
1993–2003, %

Year	1993	1998	2003		CAGR
Total	2,705	4,863	6,304		
Cereals, pulses, oilseeds, sugars	1,255	2,081	2,423	Cereals, pulses, oilseeds, sugars	6.8
Fruit and vegetables	384	900	1,319	**Fruit and vegetables**	13.1
Milk group		799	1,101	**Milk group**	9.8
Meat group	434	209	293	**Meat group**	8.9
	125	874	1,168	**Other agricultural and livestock output****	8.7
	506				

* Does not include value of increment in stock.
** Includes fibers, indigo, dyes, tanning material, condiments and spices, drugs and narcotics, kitchen garden, other crops (rubber, guar seed, etc.), eggs, wool and hair, dung, silk-worm cocoons, and honey.

Source: National accounts 2005; MGI India Consumer Demand Model, v1.0

Second, shifts further down the food processing value chain have also brought benefits to rural areas. For example, in 1997, Sula vineyards established a mass production facility for producing Indian wine in Nashik, northern Maharashtra, that has had a significant economic impact on the surrounding rural area. Based on a Mckinsey study, before the winery started, 90 percent of villagers were unemployed or subsistence farmers. Now the winery employs 150 people directly, uses 100 contract farmers, and has spawned ancillary industries in the surrounding villages. Average income per acre for farmers has increased 40 percent, and the secondary impact has been dramatic—30 percent of the workers are women, local schools have been renovated, a health center is planned, and 90 percent of houses now have electricity.

Third, there is a trend towards win-win partnerships between agri-businesses and rural villagers. An example is Suguna, a major player in the poultry sector that has been one of the first to establish a successful contract-poultry-farming model in India. Apart from reducing Suguna's production costs and lowering its supply and quality risks, the model has benefited farmers tremendously by offering

them guaranteed minimum returns (i.e. no risk), as well as access to technology, veterinary services and training. As a result, farmers' incomes have increased by approximately 20 Indian rupees per square foot of land. The scheme has directly employed 24,000 farmers over the last six years. The model has become increasingly popular in villages across southern India in Tamil Nadu, Andhra Pradesh, and Karnataka and there are now many examples of such schemes. Although they still only impact a fraction of Indian agriculture, the expectation is that these types of arrangements will spread over time.

Fourth, as rural areas become better connected to India's communications infrastructure, farmers will have access to better information. For example, a number of studies have documented the positive impact of mobile phone adoption on rural development.[6] Another much-discussed example is the *e-choupal* initiative of the Indian Tobacco Company (ITC), which maintains a large rural IT network across several villages. Computers on the network are linked to the internet and each serves an average of 600 farmers within a five-kilometer radius. Farmers can access a wide variety of information—for example, daily closing prices in nearby *mandis* (local markets), market trends, weather forecasts, and information for planting and harvesting. Farmers selling through an *e-choupal* typically receive prices that are 25 percent higher ($6 per ton) for their crops than they would through the traditional *mandi* system.

Finally, while we do not assume a second green revolution, technological advances and government investment do offer potential productivity gains. For example, India's Planning Commission has made agricultural research, better seed varieties, and investments in irrigation systems a priorities. In the long run, these efforts have the potential to lead to better yields and dampen income volatility by reducing farmers' dependence on monsoons.

While these trends and examples provide hopeful indications about the long-term possibilities for rural India, significant challenges do remain. Despair is still all too common. Since 2000 over 2,300 cotton farmers in the Vidarbha region in eastern Maharashtra have committed suicide as a result of poor crop yields, plunging prices, and heavy debts financing seed and equipment. An estimated 95 percent plus of the region's farmers are struggling financially, and in 2006 crop failures affected parts of Punjab, Kerala, and Andhra Pradesh too.[7]

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6 An example is L Waverman, M Meschi, and M Fuss, "The Impact of Mobile Phones on Economic Growth in Developing Countries," Vodafone Policy Paper No. 2, in Vodafone, "Africa: The Impact of Mobile Phones," London, 2005.

7 These figures are cited in Amelia Gentleman, "Despair takes toll on Indian Farmers," *International Herald Tribune*, May 31, 2006.

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A previous MGI study estimated that the country's agricultural-labor productivity is a mere 1.2 percent of US levels.[8] It also revealed a number of powerful barriers to future productivity growth in the sector, in particular the ineffectiveness of mechanization due to the highly fragmented nature of land ownership. Productivity gains will thus tend to come from actions that increase yields, add value, and improve pricing and distribution, such as those cited above. While we expect to see broad and gradual improvement for the bulk of the rural population, for many, particularly on sub-scale subsistence farms, life will continue to be a struggle.

MANY RURAL HOUSEHOLDS WILL MAKE THE TRANSITION FROM DEPRIVED TO ASPIRING

With all the drivers we have described working in concert, we project that average household incomes in rural India will increase by 3.6 percent a year over the next 20 years, 0.8 percentage points faster than in the last 20 years. Although this pace of income growth will be significantly slower than that of urban India, it will still be sufficient to trigger a shifting of significant numbers of households from the deprived to aspirer income bracket. This upward migration will first be noticeable by about 2010, as the benefits of the last decade of economic growth begin to trickle down to this poorest category. By 2015 the aspirer class of households will be the largest group at 47 percent of the rural population, or 80 million households, and will control 55 percent of spending (Exhibit 4.7). Thus, within ten years, we expect a large part of the rural population to have risen to a level between poverty and the middle class.

Profile: From rural deprived to aspirer

2005: Ram Khilawan (43) is a weaver and was born in the foothills of the great Himalayas. He has an eight-strong household—his wife, their five children, and his ailing mother. They live in a mud house on a four-acre plot, which they own. However, because the plot lacks irrigation, the land doesn't yield much produce. Like most people in his village, he is a skilled craftsman but he makes little money because he has no way to get his weaving products to the markets in the larger towns, and is thus forced to sell through agents who take a substantial commission on his goods.
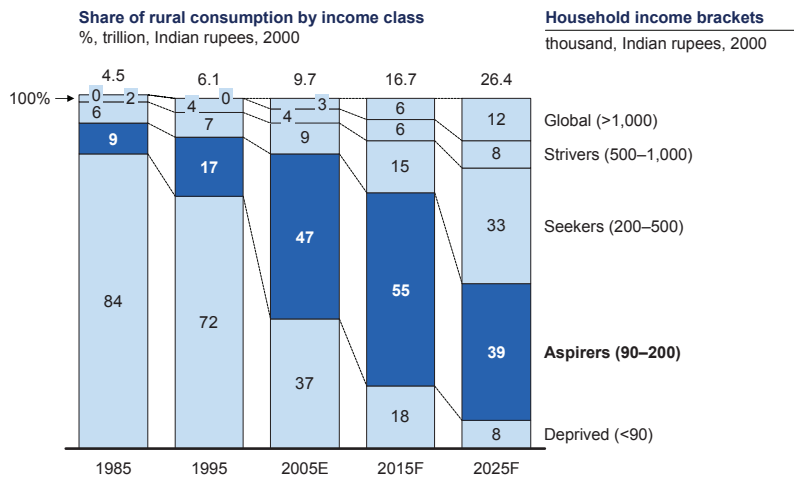
2025: Ram Khilawan is still a weaver, but life has changed for the better. As a result of the government's big push on rural infrastructure, the village was connected to the national highway with an all-weather road several years ago.

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8 *India: The Growth Imperative*, McKinsey Global Institute, 2001, (www.mckinsey.com/mgi/publications/india.asp).

This meant that traders started coming to his village and he and his fellow weavers in the community have banded together to create a market to attract the traders and cut out a layer of middlemen. His farming income has risen as well. He has benefited from a subsidized irrigation scheme, and his sons helped him switch crops to grow higher value herbs that he sells to a buyer for a pharmaceutical company. While the village has had electricity for some time, it is only now that Ram's family can afford a few discretionary items to utilize it, including a fan and a adio.

Exhibit 4.7

ASPIRERS WILL DRIVE RURAL SPENDING OVER THE NEXT TWO DECADES

Share of rural consumption by income class
%, trillion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

	1985	1995	2005E	2015F	2025F	
Total	4.5	6.1	9.7	16.7	26.4	
Global (>1,000)	0	0	3	6	12	
Strivers (500–1,000)	2	4		6	8	
Seekers (200–500)	6	7	9	15	33	
Aspirers (90–200)	9	17	47	55	39	
	84	72	37	18		
Deprived (<90)					8	

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

By 2025 the balance will have shifted further and a lower-middle class of seekers will begin to emerge. This group will constitute a fifth of the rural population by 2025 and wield a third of its spending power.

These seeker households will, for the first time, cross the threshold of income needed to start spending on discretionary products and services. A comparison of the share of basic versus discretionary spending of a rural deprived household today versus an aspiring rural household in 2025 shows a relative increase in discretionary spending of almost 20 percent.

As noted earlier, while aggregate rural spending will be very large, businesses will still face the challenge of extremely low per-household spending (on average only
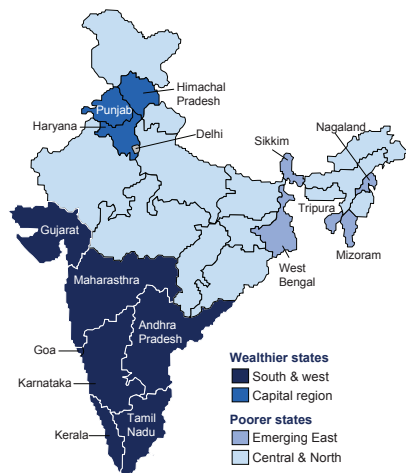
67,047 Indian rupees today or $1,468 and 158,464 Indian rupees or $3,469 in 2025), as well as the fact that rural aspirers and seekers will be widely dispersed throughout the countryside. Businesses must be willing to acquire an understanding of the often unique needs of these households, design products and services to meet those needs, and then create sales and distribution models capable of reaching out to this highly fragmented consumer base.

It is likely that attractive pockets of rural markets will emerge in certain parts of India at an earlier stage. For example, states in India's southern and western regions currently have a relatively better rural infrastructure, along with those around the national capital, Delhi (Exhibit 4.8). Even today these relatively wealthier states are already attracting greater foreign investment, contributing more than 60 percent of India's GDP, and posting better social indicators. We would expect the regions that have already proved to be engines of rural growth to see stronger income growth and faster market development than other areas where the drivers of growth are less well-established.
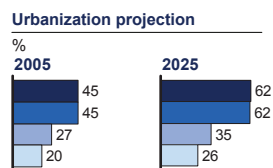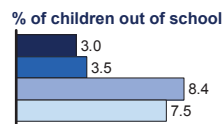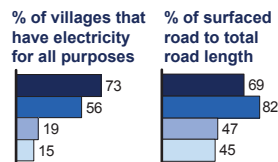
Exhibit 4.8

THE RELATIVELY WEALTHY SOUTH/WEST AND CAPITAL REGIONS ARE LIKELY TO LEAD RURAL GROWTH

Source: Indiastat; Ministry of Human Resource Development; Department of Road Transport and Highways; Census India, 2001; *Population projections for India and states, 2001-2026,* Census India

5. How consumption patterns will change

As incomes rise, what will India's consumers buy with their newfound wealth? How will their patterns of consumption change over time? Other developing economies have shown that rising incomes typically lead to significant changes in spending patterns. How will India compare with other nations? In this chapter, we will explore how the growth of Indian income and consumption will likely affect spending on specific product and service categories.

To answer these questions, we examined changes in the consumption basket of Indian households over the past two decades, as well as current spending patterns at different income levels and the experience of other countries. We then used our econometric model to estimate the future evolution of Indian consumption by income bracket across nine high-level and 30 more detailed product and service categories that cover 100 percent of Indian household consumption.

Overall we found that Indian consumption patterns are already evolving rapidly, and will continue to do so. Consumption will increase across nearly all categories, but there will be marked differences in category growth rates, leading to significant changes in the "share-of-wallet" of various consumption categories. In this chapter we present the highlights of this analysis, while more detailed results can be found in Appendix A.

SPENDING IN INDIA WILL SHIFT RAPIDLY FROM NECESSITIES TO DISCRETIONARY ITEMS

The historical pattern in India and in most developing economies shows that, as incomes rise, consumers tend to spend proportionally less on basic necessities

and more on discretionary items. In our analysis we define necessities as food and apparel. We exclude housing because local-market housing conditions differ significantly across India (e.g. many regions in India have restrictive rental and ownership laws). Also the methodology for calculating housing consumption (imputed rents) has more inherent assumptions and variables than other categories. Furthermore differences in regulations and market conditions make international comparisons difficult. Thus, in this chapter we will simply define necessities as food and clothing, while in the next chapter we will examine the impact of a broader definition used by many consumer-goods companies that also includes housing, health care, education, and transportation.

Using the food and clothing definition, South Korea's share of spending on necessities has fallen from 57 percent in 1970 to 22 percent today; Japan's has declined from 35 percent in 1980 to 22 percent today; while US consumers spent 26 percent on the basics in 1970, but this has dropped to 14 percent today.

A similar change is already underway in India. As millions of deprived households move into the aspirer segment, they will begin to be able to afford products and services beyond their immediate needs for food and clothing. For example, they may start seeing a local doctor instead of relying on home remedies for health care, or invest in jewelry (a common form of savings in India) or buy a second-hand motor bike. For families transitioning from aspirer to seeker, aspirations might include a cell phone, a television, or private schooling for their children.

Discretionary spending has already risen from 35 percent of average household consumption in 1985 to 52 percent in 2005. We see this trend continuing, with discretionary spending reaching 70 percent of average household consumption over the next 20 years. By comparison, the equivalent development in South Korea occurred during its high-growth period from 1981–1992, when non-basic spending increased from 50 percent to 71 percent. But South Korea's average per-capita income was higher in terms of PPP during this period, rising from $5,017 to $12,850, than will be the case in India where it will grow from $2,500 to $7,364 (Exhibit 5.1). Thus India's transition towards greater discretionary consumption is happening at lower levels of income than it did in South Korea and elsewhere.

Of the various changes in household spending across the nine consumption categories, the most significant will be the drop in relative share of food, beverages and tobacco. The average Indian household currently spends 42 percent of its consumption budget on this category, but this is set to decline to 25 percent during our forecast period (Exhibit 5.2). While the angle of decline may appear

Exhibit 5.1

FALL IN SHARE OF SPENDING ON NECESSITIES IN INDIA IS COMPARABLE TO KOREA'S DURING ITS HIGH-GROWTH PHASE
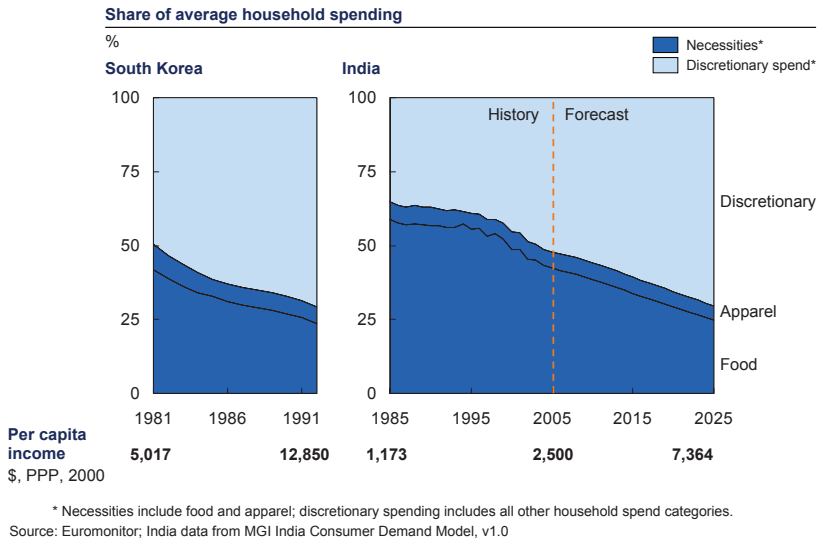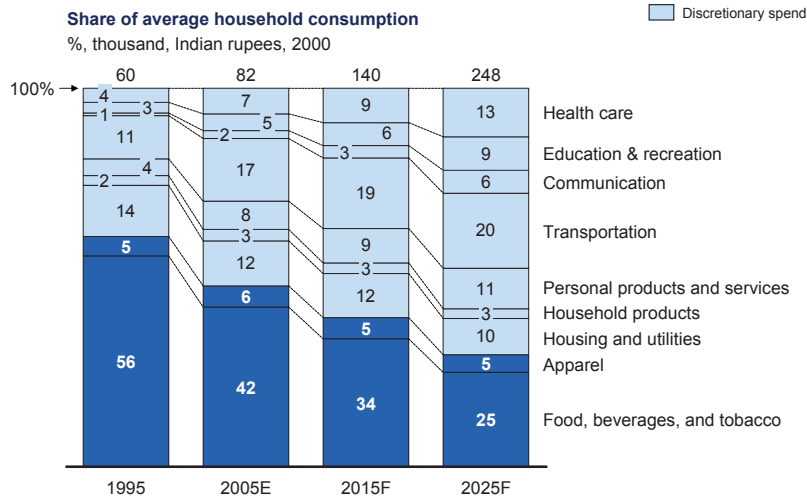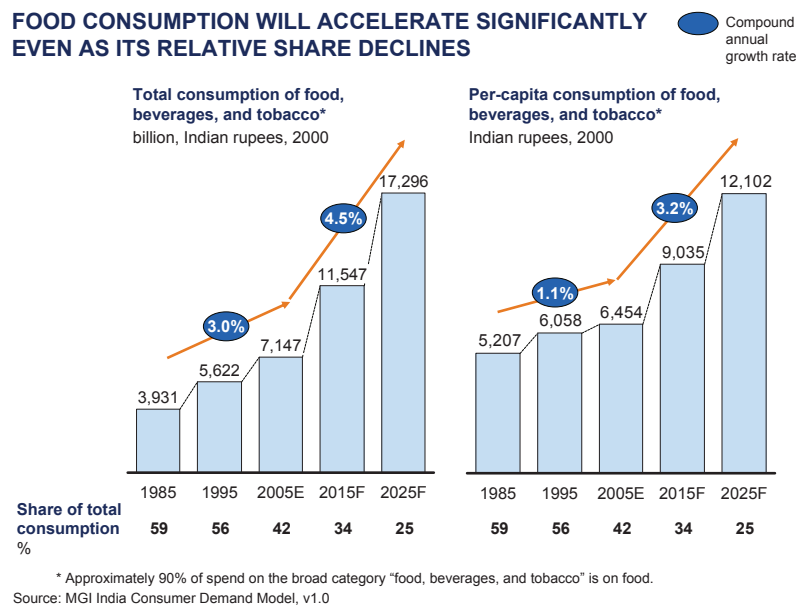
Share of average household spending

%

Legend: ■ Necessities* ☐ Discretionary spend*

South Korea | India

| Per capita income | 5,017 | 12,850 | 1,173 | 2,500 | 7,364 |

$, PPP, 2000

* Necessities include food and apparel; discretionary spending includes all other household spend categories.
Source: Euromonitor; India data from MGI India Consumer Demand Model, v1.0

Exhibit 5.2

SPENDING PATTERNS WILL EVOLVE MARKEDLY OVER THE NEXT 20 YEARS

Legend: ■ Necessities ☐ Discretionary spend

Share of average household consumption

%, thousand, Indian rupees, 2000

Categories (top to bottom): Health care, Education & recreation, Communication, Transportation, Personal products and services, Household products, Housing and utilities, Apparel, Food, beverages, and tobacco

Note: Figures are rounded to the nearest integer and may not add up to 100%.
Source: MGI India Consumer Demand Model, v1.0

steep, it is largely driven by a dramatic growth in overall consumption rather than a slowdown in food demand. In fact, we expect per-capita consumption of food to grow almost three times as fast as it has in the past (Exhibit 5.3). Furthermore, the fall in the share-of-wallet for food is closely linked to the upward mobility of households. Already households in upper-income brackets such as the urban striver class spend only about 20 percent on food (Exhibit 5.4). As more Indian households move up the income scale, the reduction in the share-of-wallet for food is natural.

Exhibit 5.3

FOOD CONSUMPTION WILL ACCELERATE SIGNIFICANTLY
EVEN AS ITS RELATIVE SHARE DECLINES

Compound annual growth rate

Total consumption of food, beverages, and tobacco*
billion, Indian rupees, 2000

Per-capita consumption of food, beverages, and tobacco*
Indian rupees, 2000

	1985	1995	2005E	2015F	2025F
Total consumption	3,931	5,622	7,147	11,547	17,296
Per-capita consumption	5,207	6,058	6,454	9,035	12,102

Total: 3.0% / 4.5%
Per-capita: 1.1% / 3.2%

Share of total consumption %	59	56	42	34	25
	59	56	42	34	25

* Approximately 90% of spend on the broad category "food, beverages, and tobacco" is on food.
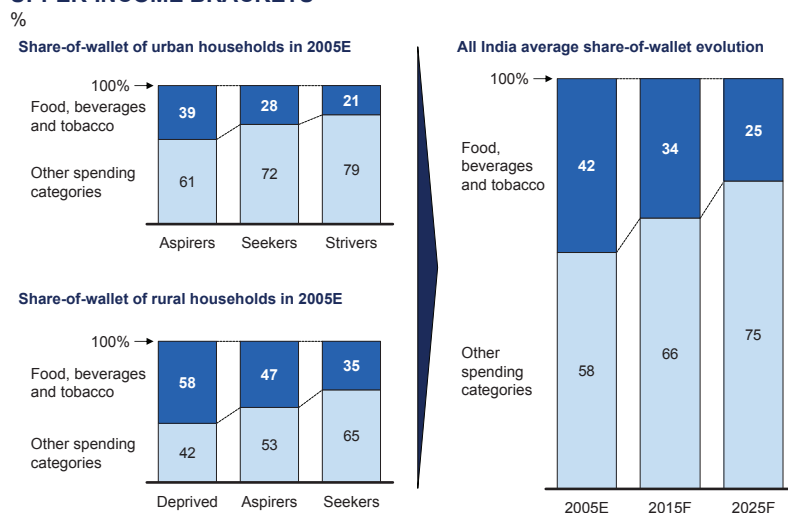Source: MGI India Consumer Demand Model, v1.0

Significant shifts in consumer spending will be seen in other consumption categories too, as the values and preferences of India's consumers change. Most interesting are the categories upon which Indian consumers have historically shown a greater propensity to spend as income rises, and where we project substantial increases in share-of-wallet. Unsurprisingly, high priorities are the "economically enabling" categories that either boost current productivity or facilitate future participation in economic activity—namely health, education, transportation, and communication.

Not only will these the categories see the most substantial increases in share-of-wallet, but they will also be the ones where Indian consumers will spend a greater share compared with their counterparts elsewhere. For example, we forecast the share of spending on health care will nearly double from 7 percent in 2005 to 13

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percent in 2025. This is higher than in all of our benchmarked countries except the United States (Table 1). India's anticipated high private spending on health care is largely explained by the weaknesses in the public-health system.

Exhibit 5.4

SHARE-OF-WALLET ON FOOD IS ALREADY LOW IN MIDDLE- AND UPPER-INCOME BRACKETS

%

Share-of-wallet of urban households in 2005E

Share-of-wallet of rural households in 2005E

All India average share-of-wallet evolution

Source: MGI India Consumer Demand Model, v1.0

Table 1: Indian spending patterns will be unique

Share of total consumption, %

Consumption category	United States	Germany	Brazil	South Korea	China	India (2005)	India (2025)
In line with benchmarks							
· Food, beverages and tobacco	15	21	19	23	35	42	25
· Apparel	4	5	6	4	11	6	5
· Personal products and services	14	10	8	13	4	8	11
Less than benchmarks							
· Housing and Utilities	19	27	22	18	9	12	10
· Household products	5	7	9	4	6	3	3
· Education and recreation	12	8	13	16	15	5	9
More than benchmarks							
· Transportation	11	17	13	12	6	17	20
· Communication	1	1	4	2	7	2	6
· Health care	19	4	6	8	7	7	13

Note: Figures are rounded to the nearest integer and may not add up to 100%
Source: Euromonitor, MGI China Consumer Demand Model, v2.0

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Share of spending on both transportation and communication will also continue to grow rapidly (from 17 percent to 20 percent for transport and from 2 percent to 6 percent for communication) as Indians demonstrate their desire for increased mobility and connectedness.

Meanwhile, the combined category of recreation and education will command a lower share of Indian consumers' wallets compared with, say, the United States or Brazil. However, this will be due primarily to the relatively low importance of recreation. When we break this category down into its components, we find that India's share of spending on education will actually increase rapidly from 4 percent today to 8 percent by 2025, and will be higher than all of the benchmark countries we examined. It is clear that the cultural importance placed on investing in the future through education, and on avoiding "wasting" money on recreation, will continue to be reflected in the spending of Indian households, particularly those we classify as middle class.

Looking and feeling good will remain important, though we do expect the share-of-wallet of the apparel category to fall slightly, as it has in other economies during periods of rapid income growth. Pent-up consumer demand for personal products and services led to a doubling of this category's share-of-wallet from 4 percent to 8 percent in 1995–2005, with the aggregate market growing at an annual growth rate of 11.3 percent during this period. We expect this category to continue to grow rapidly (9.2 percent per year over the forecast period) and to increase its share of wallet to 11 percent by 2025, putting the average Indian consumer in line with worldwide consumers.[1]

While Indian consumers' share of spending on apparel and personal items will match that of consumers in other countries, we expect that the share of spending on housing and household products will remain relatively low throughout the forecast period, averaging 3 percent of annual spending on household products, and 10–12 percent on housing and utilities. Although these proportions vary across income bands, this relatively low overall spend compared with, say, Germany or Brazil, can be attributed to the low penetration of household products due to infrastructure constraints (water, electricity, etc.), the availability of cheap domestic-service-based substitutes (maids, washer-men, etc.), and the extremely low cost of repairs, which results in long product-replacement cycles and consequent low annual spending on household products. We discuss this in further detail in Appendix A.

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1   It should be noted, however, that the personal products and services category also includes jewelry, which as mentioned, Indian households use as a form of savings, thus somewhat inflating the relative size of this category.

As mentioned previously, wide differences in housing markets in different countries (e.g. land availability, rent control, etc.), plus the fact that owner-occupied housing is given imputed values, make nationwide comparisons difficult. However, the relatively low spending on housing by the average Indian household may be due to the fact that a majority will continue to live in rural areas where housing is relatively inexpensive, and many will live in *kuccha* or semi-permanent dwellings.

While these trends will be broadly similar for urban and rural consumers and across income classes, they will naturally vary in magnitude. All classes in urban and rural India will see a significant decline in the share-of-wallet of food, although the share among deprived families will remain high at over 60 percent. The relatively low cost of housing in rural India, which has the effect of releasing more income for spending on other categories, will mean that the rural share-of-wallet on categories such as apparel, personal products and health care will remain higher than in urban households with the same levels of income.

GROWTH ACROSS ALMOST ALL CATEGORIES

We will now shift our focus away from relative changes in spending and on to how fast individual categories will grow, and how big their markets will become. As discussed in previous chapters, one of the defining characteristics of India's growth will be the way in which households will traverse the various economic brackets as they move up the income ladder. To illustrate this, we can track the evolution of spending of a typical household as it moves from today's aspirer band into the seeker category by 2015, and on up to the striver income-class by 2025—a journey that over 30 million households will make. For these households, consumption will grow rapidly across all categories, despite relative shifts between categories (Exhibit 5.5). For example, spending on education and recreation by such households will grow to 13 times its current level, health care to 10 times and personal products and services to 7 times.
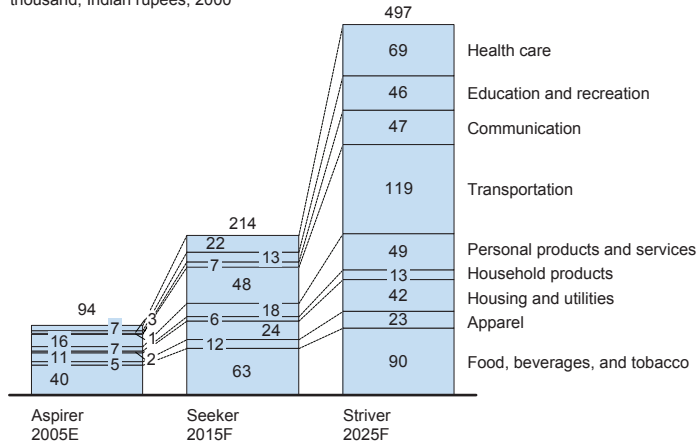
Significant increases in consumption will occur in households in the lower-income brackets as well as for those graduating into the middle class. For example, a household moving from the deprived bracket into aspiring over the next two decades would see its food consumption multiply 2.2 times and its spending on transport grow more than 4 times.

As overall private consumption in India quadruples in the next 20 years from 16.9 trillion Indian rupees today ($370 billion) to 69.5 trillion Indian rupees in 2025 ($1,521 billion), the impact of this growth will be spread widely as almost all categories of consumer spending experience significant increases in value (Exhibit 5.6). As shown in Table 2, transport will see the biggest gain in absolute

Exhibit 5.5

FROM ASPIRER TO STRIVER – THE EVOLUTION OF SPENDING FOR A TYPICAL HOUSEHOLD

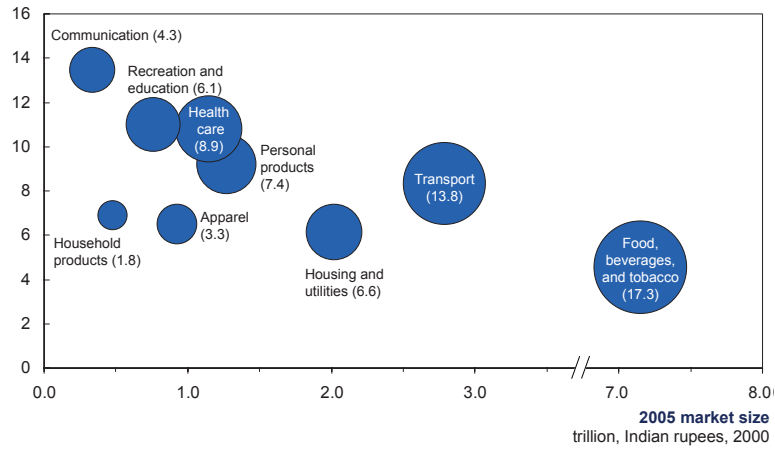**Average household consumption**
thousand, Indian rupees, 2000

		497
		69 Health care
		46 Education and recreation
		47 Communication
		119 Transportation
	214	
	22 13	49 Personal products and services
	7	13 Household products
	48	42 Housing and utilities
94	18	23 Apparel
16 7 7 3	6 24	
11 5 1 2	12	90 Food, beverages, and tobacco
40	63	

Aspirer 2005E — Seeker 2015F — Striver 2025F

Source: MGI India Consumer Demand Model, v1.0

Exhibit 5.6

COMMUNICATION WILL GROW THE FASTEST, WHILE FOOD WILL REMAIN THE LARGEST CONSUMPTION CATEGORY

Size in 2025
trillion, Indian rupees, 2000

Consumption growth, 2005–2025
compound annual growth rate, %

Communication (4.3)

Recreation and education (6.1)

Health care (8.9)

Personal products (7.4)

Apparel (3.3)

Household products (1.8)

Transport (13.8)

Housing and utilities (6.6)

Food, beverages, and tobacco (17.3)

2005 market size
trillion, Indian rupees, 2000

Source: MGI India Consumer Demand Model, v1.0

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market size, growing from 2.8 trillion Indian rupees today ($61 billion) to 13.8 trillion Indian rupees in 2025 ($501 billion). Other big gainers will include food, which will grow from 7.1 trillion Indian rupees ($156 billion) to 17.3 trillion Indian rupees ($379 billion), health care—from 1.1 trillion Indian rupees ($25 billion) to 8.9 trillion Indian rupees ($195 billion), and personal products and services—from 1.3 trillion Indian rupees ($28 billion) to 7.4 trillion Indian rupees ($162 billion).

Table 2: All categories will grow, some faster than others

Category	2005 market size (billion, Indian rupees, 2000)	2025 market size (billion, Indian rupees, 2000)	Market growth (billion, Indian rupees, 2000)	Compound annual growth rate %
Transportation	2,788	13,754	10,965	8.3
Food, beverages, and tobacco	7,147	17,296	10,150	4.5
Health care	1,148	8,902	7,755	10.8
Personal products and services	1,274	7,424	6,150	9.2
Education and recreation	762	6,120	5,359	11.0
Housing and utilities	2,019	6,624	4,605	6.1
Communication	344	4,288	3,944	13.4
Apparel	931	3,267	2,336	6.5
Household products	484	1,828	1,344	6.9

While these categories will be the biggest gainers in absolute terms, some relatively small consumption categories in India today will be the biggest gainers in percentage terms. In particular, communications will experience strong growth at a 13.4 percent compound annual rate over the forecast period. Other categories showing strong percentage growth are likely to be recreation and education at 11 percent, health care at 10.8 percent, and personal products and services at 9.2 percent.

A final perspective is gained by combining size and growth rate in order to reveal cumulative spending. Measured in this way, our analysis shows that five product categories—food, transportation, housing and utilities, health care, and personal products and services—will account for more than 80 percent of total cumulative spending in India over the next 20 years (Exhibit 5.7).

Exhibit 5.7

FIVE CATEGORIES WILL ACCOUNTING FOR MORE THAN 80 PERCENT OF CUMULATIVE CONSUMPTION OVER THE NEXT 20 YEARS

Breakdown of total cumulative consumption across categories (2005–2025)

trillion, Indian rupees, 2000

Source: MGI India Consumer Demand Model, v1.0

McKinsey&Company
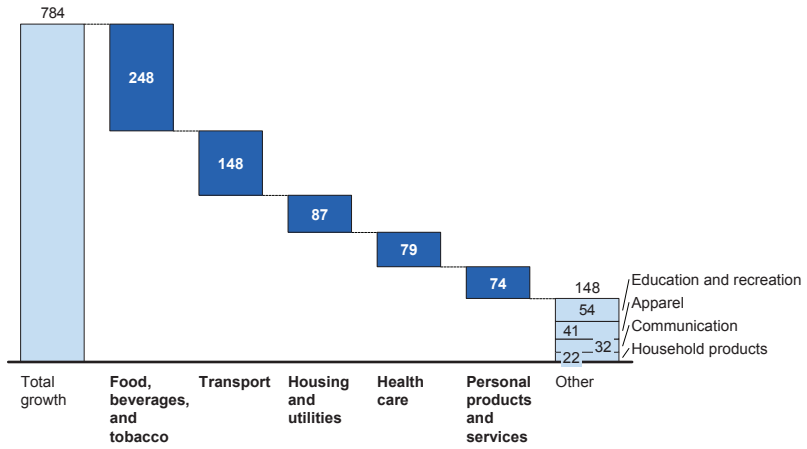
6. Opportunities and challenges

The entry of vast numbers of new consumers into the world economy from emerging markets will represent one of the most important opportunities available to consumer-goods companies over the coming decades. China will be the largest contributor with over 213 million middle and upper class households entering the consumer market over the next 20 years, but, as this study has shown, India will follow closely with 123 million.[1]

FOR COMPANIES—NEW STRATEGIES WILL BE REQUIRED

These emerging consumer markets will be of a kind not seen before. They will be large, on the scale of those of the major developed world markets, but made up of vast numbers of people of still modest means. Multinational companies face two basic strategic choices in serving these markets.

One option is to offer products and services at prices comparable to those in other major markets, focus on the top-end, which is still relatively small today, and wait for that segment to grow as incomes rise. The global class in India is already able to afford internationally priced products. It comprises 1.2 million households today, but will grow at a rate of 8.6 percent to reach almost 2 million households by 2010.

The other option is to drive price-points down and face the consequent pressure on margins, but tap into the extraordinary volume that these emerging markets

1   Diana Farrell, Eric Beinhocker, Ulrich Gersch, Ezra Greenberg, Elizabeth Stephenson, Jonathan Ablett, Mingyu Guan, Janamitra Devan, *From 'Made in China'* to *'Sold in China'*: *The Rise of the Chinese Urban Consumer*, McKinsey Global Institute, November 2006, (www.mckinsey.com/mgi/publications/china_consumer/index.asp).

offer. Our study provides an indication of how low price-points have to be in order to reach the large volumes in the Indian market. For example, if a company's products and services are priced to be attractive to a seeker family with an income of 200,000 to 500,000 Indian rupees per annum (about $4,400 to $10,900), they can reach a potential market of 11 million households today. By 2010, that market will be 20 million households, a growth rate of 13.4 percent per year.

Many Indian companies already compete at such price-points, so the challenges they face will be different. One option is to serve an expanding consumer base in an existing market. For example, many Indian companies serve today's aspirer and seeker income brackets. These classes will expand significantly over the next five years, growing from 102 million households to 128 million households. The other option is to follow customers as they head up-market, and to compete with, or partner with, the many multinational companies who will be trying to lure those top-end customers away.

The key battleground where Indian and multinational companies will meet will be in the fast-growing, lower-middle-class urban seeker group. This group will begin to expand dramatically around 2009 (Exhibit 6.1). Indian companies will seek to hold onto these customers as their tastes become more aspirational, while multinational companies will vie to gain a share of their growing spending power.

Exhibit 6.1

SEEKER GROWTH WILL ACCELERATE OVER THE NEXT FIVE YEARS
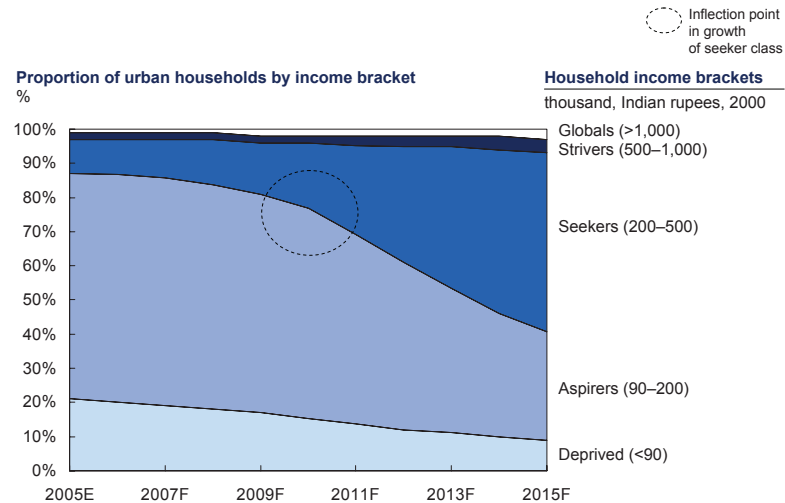
Source: MGI India Consumer Demand Model, v1.0

The dynamism of India's market, with waves of the population rolling through the different income brackets, will create challenges for Indian and multinational companies alike. Companies will face new consumers who have never before had significant amounts of money to spend, as well as consumers whose needs are changing rapidly as their life situations change.

Many consumers will engage in "choice-driven" consumption for the first time

As discussed in chapter 5, a key characteristic of India's growth will be an increase in the number of consumers able to allocate more than half of their spending to discretionary consumption beyond the basic necessities of food and clothing. However, "food and clothing" is still a minimal definition of necessary spending. Many consumer-goods companies consider expenditures on housing, education, health care, and transport as necessities too. As household incomes rise, these categories are often early priorities for incremental spending. The question thus remains, at what point will Indian incomes reach a level at which consumers will begin spending on items such as apparel (beyond basic clothing), personal goods, cars, recreational goods, and the other types of products and services associated with a consumer society? In other words, at what point will consumption be driven by choice rather than need?
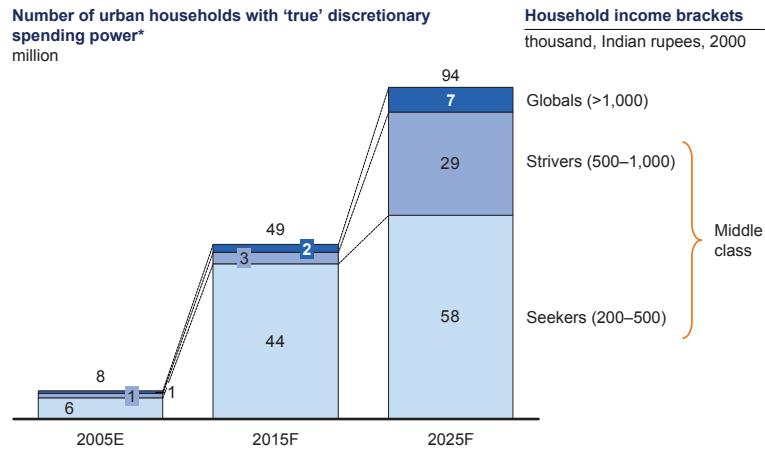
According to our analysis, the urban seeker group is the key bracket in which spending on "choice-driven" categories (alcohol, apparel, personal products and services, household products, automobiles, motor bikes and scooters, communication, and recreational goods and services) becomes large enough in absolute terms—42,500 Indian rupees ($930) per average urban seeker household in 2005—to start becoming attractive to large consumer goods and retail companies.

The number of households that can engage in choice-driven consumption will grow enormously, from just 8 million today to 49 million by 2015 and 94 million by 2025 (Exhibit 6.2). There will be a particularly large influx of consumers at the bottom end of this band in the first decade, with the urban seeker bracket growing by 38 million households and collectively spending over 1.9 trillion Indian rupees ($42 billion) on choice-driven categories by 2015 (Exhibit 6.3).

We can think of these new urban seekers as new consumers who for the first time will have money to spend for enjoyment. Companies will face challenges ranging from educating these first-time consumers about unfamiliar products and services, to creating brand awareness, and tailoring service and support towards these new customers' particular needs. At the same time, however, these new consumers will represent an important opportunity as their patterns and tastes are not yet established and they have few brand loyalties.

Exhibit 6.2

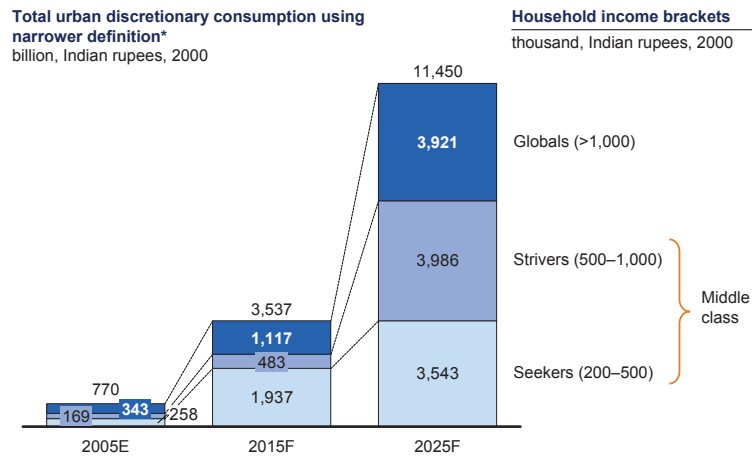**FAST GROWTH IN HOUSEHOLDS WITH SIGNIFICANT LEVELS OF DISCRETIONARY SPENDING POWER**

Number of urban households with 'true' discretionary spending power*
million

Household income brackets
thousand, Indian rupees, 2000

	2005E	2015F	2025F
Total	8	49	94
Globals (>1,000)		2	7
Strivers (500–1,000)	1	3	29
Seekers (200–500)	6	44	58
	1		

Strivers (500–1,000) and Seekers (200–500) = Middle class

* Consumers with sufficient budget to have significant levels of choice-driven spending (beyond categories such as food, housing, health care, education, fuel and transport services)

Source: MGI India Consumer Demand Model, v1.0

Exhibit 6.3

NARROWER DEFINITION OF 'DISCRETIONARY' SPENDING STILL YIELDS DRAMATIC INCREASE

Total urban discretionary consumption using narrower definition*
billion, Indian rupees, 2000

Household income brackets
thousand, Indian rupees, 2000

	2005E	2015F	2025F
Total	770	3,537	11,450
Globals (>1,000)	343	1,117	3,921
Strivers (500–1,000)	169	483	3,986
Seekers (200–500)	258	1,937	3,543

Strivers (500–1,000) and Seekers (200–500) = Middle class

* Includes alcohol, apparel, personal products and services, household products, automobiles, two-wheelers, communication and recreational goods and services.

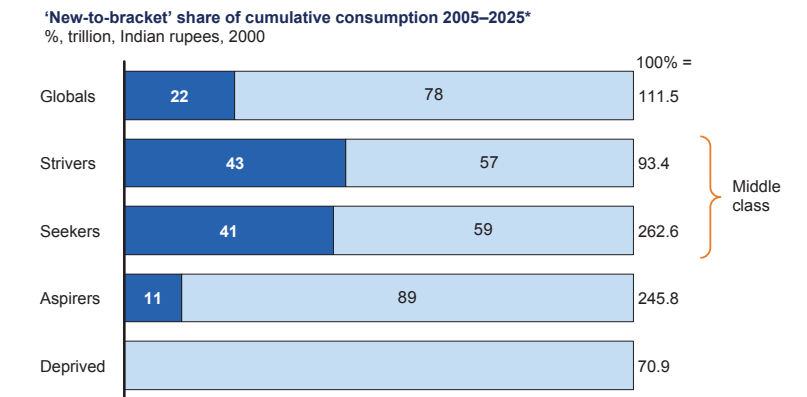Source: MGI India Consumer Demand Model, v1.0

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Large numbers of consumers will be in the "new-to-bracket" class

The broad rise in incomes also means that many consumers will experience major changes in their income status and consumption patterns during their lifetime. Of course, people do not immediately change their behavior simply because their income moves from the 499,000 Indian rupee seeker level to the 500,000 Indian rupee striver level. Change occurs in the form of a continuum, so, while the income brackets we have defined do not necessarily represent discrete break points, it is nonetheless useful to look at how many consumers will move to higher income brackets or be "new-to-bracket" over the next two decades as an indication of the importance of these households in the market.

If we suppose that households moving up to a higher income category are "new-to-bracket" for a period of three years (after which they become full members of that bracket), we can then ask what proportion of the spending in that category those households will be responsible for (Exhibit 6.4). New seekers will account for 41 percent of all seeker spending, while new strivers will account for 43 percent of all striver spending over the next two decades.

Exhibit 6.4

CONSUMPTION BY 'NEW-TO-BRACKET' CONSUMERS WILL BE SIGNIFICANT, ESPECIALLY IN THE MIDDLE CLASS

■ 'New-to-bracket' consumers
□ Old consumers

'New-to-bracket' share of cumulative consumption 2005–2025*
%, trillion, Indian rupees, 2000

	'New-to-bracket'	Old	100% =
Globals	22	78	111.5
Strivers	43	57	93.4
Seekers	41	59	262.6
Aspirers	11	89	245.8
Deprived			70.9

Middle class (Strivers, Seekers)

* Calculated by determining the number of households that have shifted income class, assume they consume at new bracket levels in the first year, and then consider them 'new' to that bracket for three years.
Source: MGI India Consumer Demand Model, v1.0

To put these shifts across brackets into perspective, we can compare the numbers involved with other markets. For example, the growth over the next two decades of the upper-middle class striver category of 30.7 million households is roughly the same as the total number of households in the United Kingdom.

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Likewise, we estimate that 8.3 million households will be added to the top-end global bracket, equivalent to the total number of households in Australia.

Companies serving these customers will have to work hard to retain old loyalties as upwardly-mobile households rise through the income brackets. But companies that are strong with upper-bracket customers will also have the opportunity of appealing to the aspirations of large numbers of "new-to-bracket" households.

Business models will need to adapt

Multinational and Indian companies alike will need to adapt their business models to this fast-changing environment. Multinationals aiming at the volume markets will need to develop new products and services with features appealing to the emerging Indian middle class—high functionality on the features that matter, stripping out features that add cost but aren't valued, fulfilling an aspirational image, but all offered at a competitive price. These products and services will then need to be supported by distribution, logistics, and service networks capable of reaching India's new middle class, not just in the largest cities, but right across the spectrum of Tier 1, Tier 2, and emerging niche cities as described in chapter 3. In a sprawling country with an infrastructure as poor as India's, this remains a significant challenge. Many multinationals have found distribution costs to be high, putting further pressure on already thin margins.

For Indian companies, pressures to adapt will be different, but no less daunting. Many Indian businesses have historically faced only limited competition for their existing customers, and thus product and service quality is low, with efforts at marketing and branding limited. Likewise, low prices are dependent on low labor costs rather than on high productivity but, as competition increases and wages grow, there will be greater pressure to improve productivity. The advantages that Indian companies have hitherto enjoyed in local distribution networks will begin to erode as the retail sector reforms, with competition for shelf-space intensifying alongside the advent of modern, more efficient retail formats.

For such adaptations to be successful, both sets of companies will need to develop a deeper understanding of these new and changing consumers. What are their needs? How do those needs differ from what the Indian market has seen before? How are those needs changing as incomes and life situations change? India's diversity and size also demand that this understanding be taken to the granular level in different regions and cities. For example, how will the tastes and preferences of up-and-coming strivers in Hyderabad differ from those in Kolkata?

Market winners are yet to be decided

The rewards for those who innovate, adapt, and develop a deep understanding of India's new consumers will be substantial. Perhaps the most attractive aspect of India's consumer growth is that the history of its market is yet to be written. The changes we have described—a quadrupling of consumption and a dramatic shift in the structure of incomes—will represent a period of discontinuity. Today's winners will not necessarily be tomorrow's, and the field is open for entrepreneurial companies to take advantage of these fundamental changes.

Whose clothing brands will upwardly-mobile strivers favor? Who will provide aspirers and seekers with their first mobile phones? Which banks will capture the greatest share of the growing assets of India's global class? And which health-care company will introduce market-changing innovations to meet the enormous untapped demand for affordable, quality health care?

The Indian consumer market will continue to be a challenging environment in which to operate, but businesses will not be constrained by a lack of opportunities—only by a lack of imagination, ambition, and the skills required to seize those opportunities.

FOR POLICY MAKERS—CONTINUE ON THE PATH OF REFORM AND INVESTMENT

The results we have presented in this report have been largely positive ones—rising incomes, poverty reduction, middle-class growth, and greater opportunities for individuals and businesses. However, it is important to remember that this good-news story depends upon India's GDP growth continuing in the range of 6 to 8 percent, and upon this growth then translating into higher incomes and consumption.

Several factors could delay or derail this story:

- **A slowdown or backlash against the reform agenda**—both citizens and policy makers need to know how widespread the benefits of growth have been. As discussed in this report, households across the income spectrum have experienced gains. Policy makers need to impress upon citizens that further reform is essential to continuing these gains. Future priorities include labor-market reform, financial-system reform, further opening-up of the manufacturing sector to competition, modernizing protected industries such as retail, and continued attempts to attract international trade and investment;

- **Poor macroeconomic management**—the Indian economy has recently been at risk of overheating as inflationary pressures build. While a cyclical "hard landing" might not damage India's long-term growth potential permanently, it could set back our forecasts by a number of years;

- **Poor fiscal discipline**—the Indian government has demonstrated greater fiscal restraint over the past 4–5 years, and the budget deficit has dropped from 10 percent of GDP in 2001 to 7.5 percent today. We assume that such discipline will continue, with the deficit averaging 6.5 percent during our forecast period;

- **Lack of investment in infrastructure**—it well known that India's infrastructure, particularly with regards to transport and power, lags substantially behind its economic growth. Without significant investment, this could become a constraint on growth;

- **Lack of investment in education**—the most important reason why Indian growth has translated into broadly rising incomes across the population has been the general improvement in educational attainment. Education will be critical in ensuring that the fruits of growth continue to be widely shared, and there is a risk that the already strained education system will be put under even more pressure by India's young demographic profile.

Making progress on such politically difficult reform issues, while at the same time balancing the need for fiscal discipline with the demands to spend on critical investments in physical and human capital, would be a challenge for any government.

However, if India manages to strike this balance, the positive results described in this report are a matter of "when", not "if". These results might be realized a few years sooner or later than we have projected. But if the economy continues to grow rapidly, a combination of deeply-rooted economic and demographic forces will eventually translate that growth into rising incomes and consumption. If policy makers can progress more quickly on the agenda of reform and investment, then there is further upside to the results we have described.

· · ·

India is on the verge of one of the great achievements in economic history. It has the potential to transform itself, within two generations, from the desperately poor nation of 1985, dependent on the vagaries of subsistence agriculture and the monsoon rains, into a nation with a diverse, services-led economy and the

world's second-largest middle class by 2025. During this process, India will take its place among the global consumer superpowers, providing an attractive market for both Indian and multinational companies. Such an historic shift will inevitably bring with it stresses and dislocations, and inevitably some will be left behind. But the transition will also enable hundreds of millions of Indian households to realize their dreams of a better life.

A. Forecasts and analyses by consumption category

In this appendix we offer more detailed analyses of future consumption trends in nine major product and service categories as well as 30 subcategories. Taken together, these categories account for 100 percent of Indian final consumer demand less financial services. Table 1 summarizes our results for each of the subcategories, their market size in 2005, their expected market size in 2025, and the growth rate implied by the difference between the two.

Table 1: A snapshot of consumption categories

Category	2005 consumption billion, Indian rupees, 2000	2025 consumption billion, Indian rupees, 2000	Compound annual growth rate %
Food, beverages, and tobacco	**7,147**	**17,296**	**4.5**
· Food	6,565	14,598	4.1
· Non-alcoholic beverages	346	1,877	8.8
· Alcoholic beverages	115	712	9.6
· Tobacco	121	109	-0.6
Transportation	**2,788**	**13,754**	**8.3**
· Transportation equipment	12	44	7.0
· Automobiles	37	354	12.0
· Two-wheelers	99	496	8.4
· Transportation non-durables	1,008	7,441	10.5
· Transportation services	1,633	5,418	6.2
Housing and utilities	**2,019**	**6,624**	**6.1**
· Rent, utilities and repair	1,288	3,624	5.3
· Electricity and fuels	731	3,000	7.3
Personal products and services	**1,274**	**7,424**	**9.2**
· Personal non-durables	256	1,848	10.4
· Jewelry	30	160	8.7
· Personal and household services	987	5,415	8.9

Health care	**1,148**	**8,902**	**10.8**
· Medical equipment	2	6	6.6
· Medical services	362	6,941	15.9
· Pharmaceuticals	784	1,956	4.7
Apparel	**931**	**3,267**	**6.5**
· Clothing	827	2,872	6.4
· Footwear	104	395	6.9
Education and recreation	**762**	**6,120**	**11.0**
· Books and education	711	5,844	11.1
· Recreational goods	6	39	9.3
· TV, video	22	161	10.5
· Entertainment services	22	77	6.5
Household products	**484**	**1,828**	**6.9**
· Household non-durables	174	536	5.8
· House wares	182	612	6.3
· Large appliances	36	245	10.0
· Small appliances	77	420	8.8
· Furniture	14	15	0.3
Communication	**344**	**4,288**	**13.4**
· Post and telegraph	5	0	-14.6
· Telecommunications	338	4,288	13.5

The largest product categories are food, transportation, health care, housing and utilities, and personal products and services. We expect the fastest-growing category to be communication, followed by education and then recreation and health care.

DETERMINING CATEGORY-LEVEL CONSUMPTION EXPENDITURE

In order to generate spending forecasts at the category level, we took our overall forecast for spending in the economy, and then allocated that spend across the specific categories. The advantage of this approach is that all category spending must ultimately relate back to total spending and a specific scenario for GDP growth. (Conversely, the risk of using unconstrained forecasts of individual categories is that they could potentially add up to more or less than the economy as a whole.) We determined the allocation of spending on each specific category by estimating the number of consumers making purchases, the quantities purchased and the prices paid. These factors were, in turn, determined by ten more detailed drivers, that we will discuss later in this section (Exhibit A.1).

Sales of a product or service depend on how many consumers have a latent need for that product, as well as its availability, accessibility, and usefulness. For example, a latent need for health-care services can be driven by demographics

(ageing), or the impact of the environment (pollution). A product or service will be purchased by more consumers if those consumers are offered a wider range (through innovation, for example) because it then becomes more likely that they will find an option that meets their needs. At the same time, products and services need to be accessible, with the appropriate distributional infrastructure in place. When cell phones didn't exist and fixed-line phones were inaccessible in rural India, many potential consumers couldn't satisfy their latent need for communication. Even once products or services are easily available, and even if they meet a latent need, they will be consumed only if they can be used—again, for example, their use may depend upon the presence of the necessary infra-structure. Household electrical goods will be purchased only if the required electricity-distribution infrastructure is in place.

Exhibit A.1

MGI METHODOLOGY FOR ASSESSING PRODUCT CATEGORY VALUE GROWTH INCLUDES TEN DETAILED DRIVERS
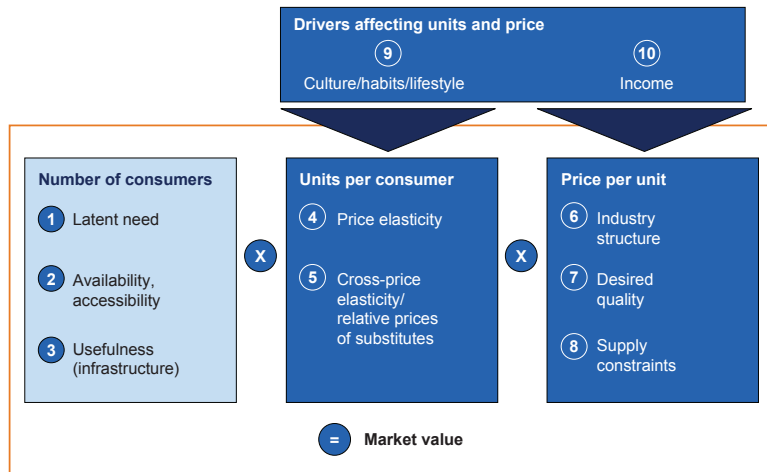
Source: MGI India Consumer Model, v1.0

The number of units consumed depends on consumer preferences, the price elasticity of demand, and the relative price of substitutes. By price elasticity we mean the degree to which consumption increases or decreases as the price is changed. Most goods and services are consumed in larger quantities when their price drops. (There are exceptions, so-called "Veblen" goods—for example, a luxury item that becomes more desirable when it has a higher price tag.) At the same time, the number of units consumed of a certain item or service depends upon the relative price of other goods and services, and on whether consumers view them as complementary, substitute, or independent products.

The average price per unit is determined by the industry's structure, the desired product quality, and supply-side constraints. Key drivers of price are the degree of competition within an industry or product market, the available production technology and efficiency, and the local and global sourcing costs of product components. Furthermore, the quality demanded by consumers determines the average price per unit consumed. With growing incomes, for instance, many Indian consumers will upgrade the level of quality to which they aspire, and buy higher-priced goods and services. This increases the value of the market, even if the number of consumers and average units per consumer remain unchanged. In addition, supply constraints affect the average price per unit of a product or service. Given India's fast urbanization, space is likely to become increasingly scarce in urban centers, constraining the supply and average size of apartments, for example, and thereby increasing average prices.

Cultural changes, including evolving habits and lifestyles, can also alter the buying behavior of consumers. For instance, Indian consumers will spend relatively more on transportation as suburbanization and labor specialization increase the average distance between work and home. Finally, changes in income influence both the number of units consumed per customer, and the average price per unit.

Our econometric model generates price, income, and other elasticities from historic data. It then applies these to macroeconomic and demographic forecasts to generate consumption forecasts by product category and income class. This method assumes that the dynamic relationships between variables (for example, relationships between income and consumption), and constraints on the system (for example, the availability of products) remain on the same trend line as they have been in the past. Changes in these factors can naturally affect the outcome. For example, increased retail efficiency and market penetration have been making a greater variety of products available at lower cost to consumers—a trend that is implicit in the historical data and in our forecasts. If this trend were to accelerate or decelerate sharply in the future, consumption patterns could be affected. Other exogenous factors could also affect specific categories, such as government regulation, or global shifts in energy prices.

We emphasize once more that, while it is impossible to take into account every contingency, the model produces likely category forecasts based on economic patterns and relationships observed over time.

A.1 FOOD, BEVERAGES, AND TOBACCO

India has a strong and long-standing food culture, and the importance of food is reflected in the numbers. Food, beverages, and tobacco (FB&T) forms the single

largest consumption category in India today, estimated at approximately 7.1 trillion Indian rupees ($155 billion), and accounting for over 40 percent of total spending. While the aggregate market is large, average per capita consumption of FB&T in the country is still very low, estimated at only 18 Indian rupees per day (or approximately $2.30 a day after PPP adjustments). With 70 percent of the country's population living in rural areas, urban India accounts for only one-third of total food consumption today.

Also, the Indian food industry is still at a nascent stage of development. Millions of households depend on subsistence farming or local village produce for their food, production, and processing, and distribution are significantly fragmented. Almost all agricultural production is unorganized, only a third of the food pro-cessing and packaging industry is organized, and less than 10 percent of the total food market is branded, despite the fact that brands such as Lipton tea or Britannia biscuits have been around since the 19th century.[1] Finally, with six million traditional "mom-and-pop" retail outlets across the country, organized food retailing constitutes less than 1 percent of the food-distribution market.[2]

However, significant forces are at work in this sector. Fast-growing incomes, falling poverty, changing lifestyles and preferences, and companies racing to capture India's new consumers—all will cause the food market to evolve dramatically in the coming years. We expect total consumption of food and beverages to grow robustly at 4.5 percent over the next two decades, adding another 10 trillion Indian rupees in spending by the end of the forecast period (Exhibit A.2). While urban spending will grow twice as fast as that in rural areas at a 6.3 percent compound annual growth rate (making it one of the fastest-growing global food markets), total food consumption over the next two decades will still be largely in rural India due to the huge rural population base.

Among the subcategories of this broad market—namely food, non-alcoholic bev-erages, alcoholic beverages, and tobacco—we expect food to grow at 4.1 percent over the next 20 years, with total beverage consumption growing at 9 percent during the same period. While consumption of non-alcoholic beverages will grow rapidly at 8.8 percent, driven by the introduction of more varieties of packaged products as seen in developed countries, we expect the alcoholic beverage market to grow at 9.6 percent, and to see proliferating brands and increasing imports (Exhibit A.3). The alcoholic beverage market may also experience a further significant boost if it is de-regulated (beer is heavily taxed today). On the
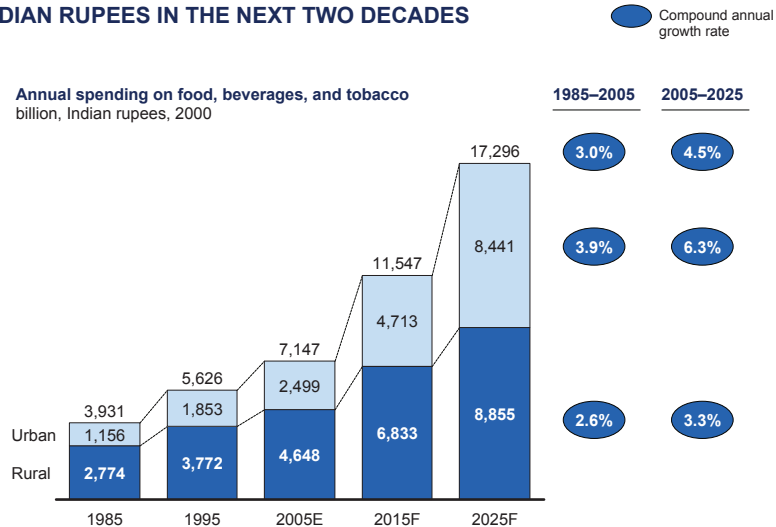
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1   Press report, interview with Ravi Naware, CEO, ITC Ltd Foods Division; *ITC Annual Report*, 2006, (www.itcportal.com).

2   *India Retail Report*, Images-KSA Technopak, 2005, (www. imagesretail.com/india_retail_report. htm).

other hand, we project that consumption of tobacco will fall as a direct result of increasing awareness of the hazards of excessive tobacco consumption and growing health consciousness.
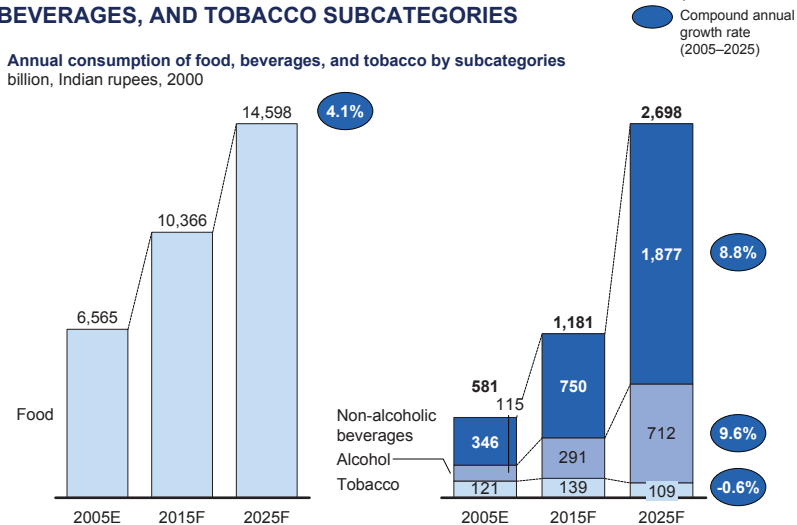
Exhibit A.2

TOTAL FOOD CONSUMPTION WILL GROW BY MORE THAN 10 TRILLION INDIAN RUPEES IN THE NEXT TWO DECADES

Compound annual growth rate

Annual spending on food, beverages, and tobacco
billion, Indian rupees, 2000

	1985–2005	2005–2025
	3.0%	4.5%
	3.9%	6.3%
	2.6%	3.3%

	1985	1995	2005E	2015F	2025F
Total	3,931	5,626	7,147	11,547	17,296
Urban	1,156	1,853	2,499	4,713	8,441
Rural	2,774	3,772	4,648	6,833	8,855

Source: MGI India Consumer Model, v1.0

Exhibit A.3

ALCOHOLIC BEVERAGES WILL GROW FASTEST OF THE FOOD, BEVERAGES, AND TOBACCO SUBCATEGORIES

Compound annual growth rate (2005–2025)

Annual consumption of food, beverages, and tobacco by subcategories
billion, Indian rupees, 2000

Food	2005E	2015F	2025F
	6,565	10,366	14,598

4.1%

	2005E	2015F	2025F	
Total	581	1,181	2,698	
Non-alcoholic beverages	346	750	1,877	8.8%
Alcohol	115	291	712	9.6%
Tobacco	121 / 139		109	-0.6%

Source: MGI India Consumer Model, v1.0

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Feeding consumers at the bottom of the rural pyramid

The most important driver of FB&T consumption growth in rural India will be the fall in poverty levels. With approximately 55 million rural households moving up from deprivation over the forecast period, and 35 million moving up from the aspirer class, these consumers will be vital for all players in this market. They will dominate rural food consumption, with the middle class (strivers plus seekers) and aspirers together accounting for 80 percent of the rural food market by 2025 (Exhibit A.4). Malnourished in the past, these consumers' greatest latent demand will be for more and better quality food, and this will create huge demand for basic foods across the country. Since households emerging from poverty will still spend most of their increasing disposable income on food, they will still be exceedingly price-conscious. However, they will, at the same time, be willing to try new products within their price reach. These consumers will also be diversifying for the first time, from basic food-grain consumption to fruits, vegetables, dairy and poultry products, as well as various beverages.

Exhibit A.4

THE MIDDLE CLASS AND ASPIRERS WILL ACCOUNT FOR 80 PERCENT OF RURAL FOOD CONSUMPTION WITHIN 20 YEARS

Total rural consumption of food, beverages, and tobacco by income class
%, billion, Indian rupees, 2000

	1985	1995	2005E	2015F	2025F
100% =	2,774	3,772	4,648	6,833	8,855
Globals	0	4	6	1	2
Middle class	2	0	0	11	28
Aspirers	6	12	40	56	52
Deprived	91	84	54	33	19
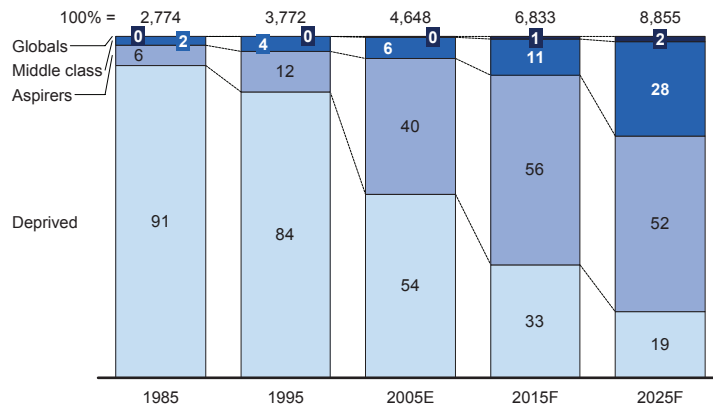
Source: MGI India Consumer Model, v1.0

Alongside growing demand, changes in rural food distribution will also bring changes to the market. Today many rural households obtain their food-grain requirements from the government-run public distribution system (PDS). This is a heavily subsidized system of procurement and distribution of a few basic food items at stable prices to ensure household food security. Significant reforms are expected in the PDS over the coming years, opening up this huge, relatively untapped market to private enterprise.

Capitalizing on rural spending, however, will be no easy task. Players in the food industry will need to create products that are locally relevant and economic. Furthermore they must employ marketing strategies to make these products familiar, and yet at the same time create the perception of a higher value, whilst employing packaging and distribution strategies to encourage new consumers to experiment. Companies trying new strategies to tap this market include Nestlé and Britannia who have introduced smaller chocolate/biscuit packages for as low as 1 Indian rupee (2 cents). Some years ago, Coca Cola launched *Chota Coke* (Small Coke), introducing a 200 ml bottle for just 5 Indian rupees (10 cents). This initiative prompted a spurt in demand in villages and cities and increased penetration, forcing its competitor Pepsi to create a similar product offering.[3]

Upwardly-mobile middle classes to dominate maturing urban food market

In a striking contrast, the most important trend in urban India's food and beverage market will be the dramatically changing lifestyles of the middle class, with their consequent rapidly evolving preferences and tastes. The explosive growth of the middle class in urban India means that it will dominate the market, accounting for more than three-quarters of urban spending on food by 2025 (Exhibit A.5). These consumers already have incomes adequate to meet their basic food needs and so, instead of increasing the amount of food they buy, they will increase their spending on "higher-value" items in terms of variety and quality. With more single working youth, nuclear families, working mothers, and generally faster-paced, mobile, metropolitan lifestyles, the new urban middle class is prepared increasingly to spend on eating out and on ready-to-eat foods, and on experimenting with alternative cuisines and more diverse food and beverage products. In a testament to the incredible mushrooming of dining out in India's large cities, the number of restaurants, clubs, food courts and eateries has shot up dramatically in recent years. In addition, as experience from other countries suggests, "lifestyle" categories such as premium foods, organic produce, and health and dietary supplements will grow in popularity across the country as health consciousness increases, particularly for high-end global consumers.

Apart from fostering the consumption of a growing diversity of food, the middle class will also drive changes in the way food is purchased in future. For decades, Indians have preferred to buy fresh food, with vegetable sellers offering their daily produce door-to-door, and housewives using only freshly ground spices to prepare meals. Packaged foods have traditionally been perceived as "stale". However, as a result of growing necessity and affordability, this mind-set is slowly
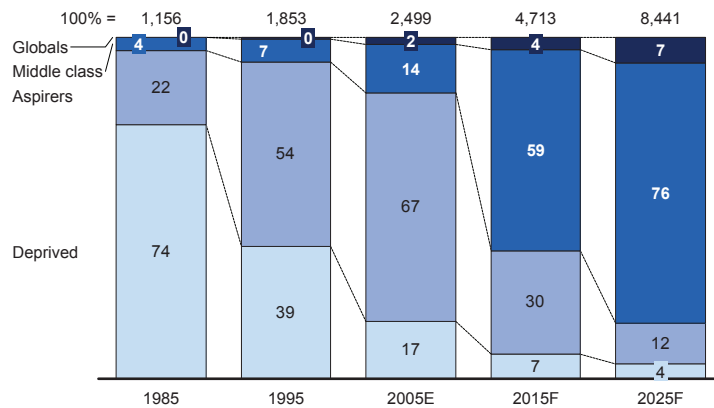
3   Pradeep Kashyap and Siddhartha Raut, *The Rural Marketing Book*, 2007 edition, Dreamtech Press, (http://www.wileyindia.com/).

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changing, and a new perception that "packaged is hygienic and high quality" is resulting in rapidly growing sales of branded and packaged foods. Better electrical infrastructure and greater penetration of refrigerators and microwaves have meant that frozen foods are becoming increasingly popular too.

Exhibit A.5

IN URBAN INDIA, THE MIDDLE CLASS WILL ACCOUNT FOR THREE-QUARTERS OF FOOD CONSUMPTION

Total urban consumption of food, beverages, and tobacco by income class
%, billion, Indian rupees, 2000

100% =	1,156	1,853	2,499	4,713	8,441
	1985	1995	2005E	2015F	2025F
Globals	0	0	2	4	7
Middle class	4	7	14	59	76
Aspirers	22	54	67	30	12
Deprived	74	39	17	7	4

Source: MGI India Consumer Model, v1.0

A good example of this growth in recent history is the Indian Tobacco Company's (ITC) branded packaged-foods division. Launched in 2001, the business has seen investments of over $22 million, and grown at 87 percent over the past year. Today its food products reach over 14 million households. In 2002, ITC introduced its Aashirvaad Atta line ("Atta" referring to the processed wheat flour used daily in most Indian households) which has already become the market leader with a 45 percent market share. The company has been developing new products at a tremendous rate over the past few years—one a month for over 30 months.[4]

Food retailing to show rapid growth but will face constraints

On the supply side, the food and beverages sector is an area of booming growth for organized retailers. Recent years have seen the rapid emergence of food retailing names such as Food World, Subhiksha, Nilgiri's, Food Bazaar, Fab Mall, and Trinethra. Not only are these players growing revenue by 12–30 percent per year, but they are also operating at gross margins of approximately 15 percent,

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4   *ITC Annual Report*, 2006, (www.icportal.com).

and are investing heavily in hundreds of new stores across the country over the next few years.[5] With the evolving needs of upwardly-mobile urban consumers, and their appetite for choice and convenience, we expect these stores to continue to grow rapidly over the coming years, completely changing the face of urban food retailing.

To support this rapid growth, however, the food industry requires dramatically im-proved infrastructure and streamlined processes across the supply chain. With an estimated 30 percent of farm produce wasted every year due to inadequate storage and transportation facilities, the country desperately needs to invest in these areas. A weak cold-chain network means that only about 20 percent of India's fruit and vegetable output is processed today, compared with 80 percent in Brazil, and between 60 and 70 percent in the United States.[6] Government will play a very important part in this development, and it has already begun to implement initiatives in this direction. It recently declared food processing to be a priority industry, and the entire sector has been de-licensed with a view to regularizing the market. Opening up FDI, providing critical infrastructure, and reforming land-ownership laws that constrain consolidation will also be essential to boost domestic supply.

Share-of-wallet of FB&T to fall rapidly

Despite steady growth of FB&T spending, overall incomes and consumption will grow much faster than food consumption over the next two decades. As seen in several countries elsewhere, households prefer to spend their increasing incomes on discretionary categories rather than on food or apparel (beyond a certain minimum threshold), and consequently the share-of-wallet devoted to food in the average Indian household will fall from around 42 percent today to 25 percent by 2025 (Exhibit A.6). Urban India will be very similar to urban China in this respect, with average share-of-wallet spent on food, beverages, and tobacco falling from 35 percent today to 20 percent by 2025.

As discussed in chapter 5, while the relative fall in FB&T may seem dramatic, we expect per capita food consumption to grow three times as fast over the next 20 years as it has historically. However, given the even faster growth of overall consumption, the share-of-wallet of this category will actually fall. When comparing India with other high-growth countries, we find that a more rapid evolution of share-of-wallet was seen in South Korea during that country's high-growth period (1981–1991), where average share of food consumption fell from

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5   *India Retail Report*, Images-KSA Technopak, 2005, (www. imagesretail.com/india_retail_report. htm).

6   *Food and Beverages Survey* FICCI, February 2006, (http://www.ficci.com/surveys/food1.pdf).

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42 percent to 24 percent in a single decade. While India will witness these changes at lower per-capita levels, it will be by no means the most dramatic evolution seen in the world.

Exhibit A.6

SHARE-OF-WALLET SPENT ON FOOD, BEVERAGES, AND TOBACCO WILL FALL AS DISCRETIONARY SPENDING RISES
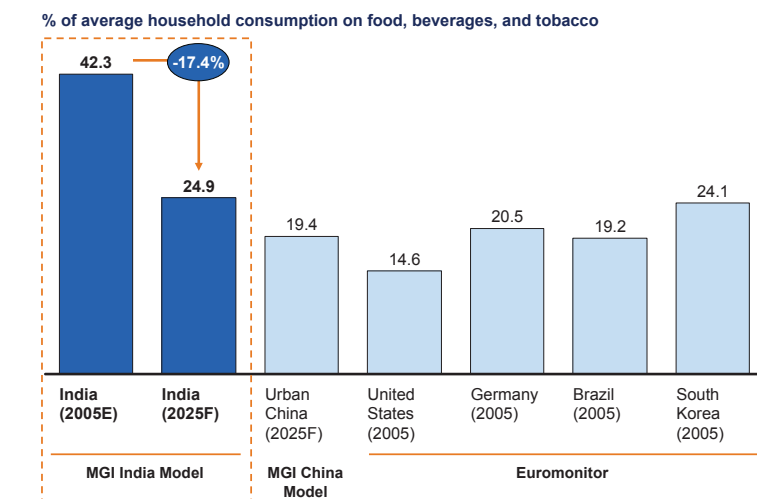
% of average household consumption on food, beverages, and tobacco

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

Furthermore, it is important to note also that the fall in share-of-wallet is a direct consequence of the upward mobility of households, and does not imply a dramatic change in consumer preferences. An analysis of share-of-wallet of the middle classes shows that food already accounts for only 20–35 percent of their total consumption, and as households move into the middle class the composition of the country's average share-of-wallet is bound to change accordingly.

A.2 TRANSPORTATION

The nature of India's widespread geography scattered with jam-packed cities ensures that transportation will always be a critical category. The scale upon which India's transport infrastructure operates is illustrated by the fact that not only is Indian Railways the country's largest business in terms of customer numbers, but it moved those customers 576 billion passenger kilometers in 2004, compared with the 571 billion passenger kilometers of its Chinese counterpart.

The transportation sector is second only to food in size. Worth 2,788 billion Indian rupees (or $61 billion) today, it is forecast to grow rapidly at a compound annual growth rate of 8.3 percent over the next 20 years to almost five times its

current size, or 13,754 billion Indian rupees ($301 billion) by 2025 (Exhibit A.7). With 148.4 trillion Indian rupees (or $3.2 trillion) of cumulative consumption over the next two decades, this category is going to be one of the most important in the Indian market in the future.

Exhibit A.7

TRANSPORTATION CONSUMPTION WILL GROW ALMOST FIVE TIMES BY 2025
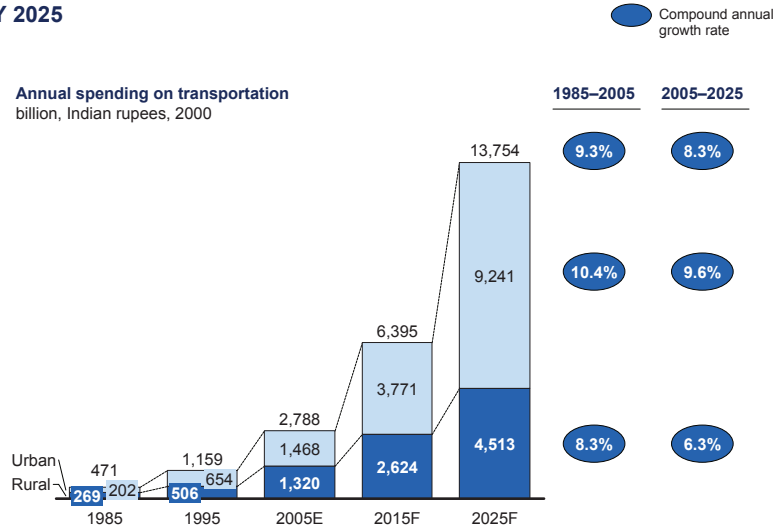
Source: MGI India Consumer Model, v1.0

Transportation consumption is currently divided roughly equally between the rural and urban areas. However, over the coming years urban consumption of transportation is expected to grow much faster at 9.6 percent, compared with rural consumption growth at 6.3 percent. So, in spite of containing only 37 percent of the country's population, urban India will account for 67 percent of transportation consumption in 2025. Despite this imbalance, with overall rural consumption growing at 5.1 percent in the next two decades, transportation will still be one of the fastest-growing categories in rural India.

There are three major subcategories of transportation consumption: services (such as rail, air, and bus transportation), transport goods (which can be further divided into automobiles, two-wheelers, and transport equipment), and non-durables or fuel. We shall discuss each in detail in the following sections.

India's public transport system changing rapidly

The largest subcategory is transportation services, where total spending was 1,633 billion Indian rupees ($35.7 billion) in 2005. Given the huge starting base

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and severe capacity constraints (especially in railway services), consumption of transport services is forecast to grow at a moderate 6.2 percent annually over the next 20 years, with total spending reaching 5,418 billion Indian rupees ($118.6 billion) in 2025 (Exhibit A.8).

Exhibit A.8

CAPACITY CONSTRAINTS WILL LIMIT TRANSPORTATION SERVICES CONSUMPTION, BUT SPENDING ON CARS WILL SOAR

Compound annual growth rate (2005–2025)

Annual spending on transportation subcategories
billion, Indian rupees, 2000
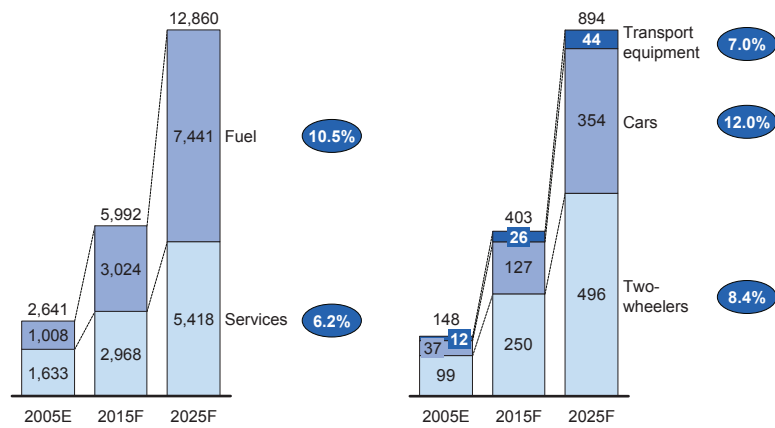
Source: MGI India Consumer Model, v1.0

Expansion of transportation services is intrinsically linked with a country's economic growth. Swift, reliable and convenient modes of transport are the lifeline of any emerging economy, and transportation services assume paramount importance in the Indian context. Although largely thought of as an urban phenomenon, transport-services consumption is roughly equally split between urban and rural areas, and this split will shift only slightly towards urban India in the future. The biggest driver of future growth in transportation-services consumption is likely to come from the booming airline industry. There has been significant progress on the regulatory front in this industry in recent years, with the removal of supply-side bottlenecks that have been holding back growth. These reforms have revolutionized the industry, prompting the entry of several new players, and leading to a dramatic reduction in prices, increased capacity and booming demand. This has also led to significant growth in leisure travel (both domestic and international), a sector which is expected to see explosive growth in the coming years among the growing middle class. Apart from this, the increasing mobility of workers (especially the young) and rapid growth of cities are also factors that will drive transportation-services consumption. In rural areas, with most households

relying heavily on public transport for long-distance travel, government initiatives for building roads are expected to have a significant impact on the demand for bus services.

Demand for cars and two-wheelers to boom

The other important subcategory of transportation is transport goods—cars, two-wheelers, and transport equipment. The automotive sector has been one of the greatest successes during the past decade of liberalization in India. While there were just two domestic car manufacturers prior to 1991, the market is currently flooded with products from domestic and global auto majors. This increased competition has led to a strong pressure on prices and an unleashing of domestic demand. Over the next 20 years, total household spending on cars is expected to grow at a rapid annual rate of 12 percent per annum, taking total consumption up to 354 billion Indian rupees ($7.7 billion) by 2025.[7] Two-wheeler consumption is also expected to grow rapidly at 8.4 percent, taking the total market to 496 billion Indian rupees ($10.9 billion) by 2025.

There are several factors driving the growth in the market for automobiles and two-wheelers. First and foremost, it has been observed in several economies that, as incomes increase, people have a tendency to rely more and more on personal vehicles. While for lower-income households, this might mean the purchase of a new scooter or motorcycle, for a middle-class household, it may mean a new car. With the wave of upward mobility expected in India over the next two decades, booming demand for vehicles is hardly surprising.

The Indian automotive industry is also affected by several other developments. First, the rapid growth of consumer financing in recent years has made India's car financing industry more mature than, for example, China's, with financed purchases accounting for over 80 percent of all car sales. Innovative strategies in the market have also boosted sales growth. For example, a recent partnership between the country's largest bank, State Bank of India, and the country's leading car manufacturer, Maruti, enabled Maruti to offer its most basic product (which had hitherto been experiencing declining sales in urban India) in rural areas with a financing arrangement involving monthly payments smaller than that required to purchase a motorcycle. This strategy saw a boost in sales for Maruti's car as rural consumers, previously accustomed to investing in motorcycles, started buying cars instead.

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7   It is important to note that these numbers represent only the private consumption of cars, and will be much less than total auto sales in the country (especially taking into account government consumption and the large number of cars bought by SMEs). Indian national accounts allocate total consumption of cars into private, government, and corporate, using measures of input-output flow. Our forecasts begin from these estimates.

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A second expression of the continuing maturing of the market is the provision of a wider range of product offerings. At the high-end, recognizing the potential of the global class, carmakers such as Porsche and Audi have started operations in the country with luxury car line-ups. At the low-end, India's leading automotive player Tata Motors is about to launch a *One-lakh* car priced at just $2,100, which would probably be the cheapest car in the world, and is sure to cause fast demand growth. Also, most automotive manufacturers, acknowledging that old product lines from developed markets cannot simply be transferred into this competitive market, are investing in customizing their products to make them attractive to the average Indian consumer. As an example, while the Ford *Escort*, which was an old product and not well suited to India's difficult driving conditions, performed poorly, Hero Honda's *Splendour* was a hit in rural markets.

Fuel to become largest transportation subcategory

The third subcategory of transportation is fuel. (We should note that our forecast is for consumer final-use fuel consumption, and thus does not include fuel used by businesses or the government.) Worth 1,008 billion Indian rupees ($22 billion), and growing rapidly at an annual growth rate of 10.5 percent for the next 20 years, fuel consumption will become the largest subcategory of transportation in the forecast period, amounting to 7,441 billion Indian rupees ($162.8 billion) by 2025.

This growth in fuel use is unsurprising given the growth in transport goods and services. We should note that the increases are due to a combination of more people using transport, and people traveling greater distances as well as adopting higher fuel-use modes of transport (e.g. planes for trains, cars for two-wheelers).

### Transportation's high share-of-wallet to rise further

The share-of-wallet of transportation in Indian households is unusually high compared with benchmark countries, and with faster than overall consumption growth, this share-of-wallet is expected to increase in the coming years. Based on our model, transportation's share-of-wallet is 16.5 percent for average Indian households today, and will rise to 19.8 percent by 2025, a rise of 3.4 percent (Exhibit A.9).

Transportation's significant share of Indian consumption relative to other countries is largely due to the nature of income growth of households across the country, and to the importance of transportation in this growth. With a rapidly evolving labor market, transport will become a critical part of household consumption

for upwardly-mobile households—one that they will not sacrifice. The size of the share is also driven by the system's inefficiencies, which force consumers to pay high prices for their requirements. In the future, India must improve its transportation infrastructure to support, rather than inhibit, economic growth, and any improvements are likely to start moderating transportation's share in the long term.

Exhibit A.9

TRANSPORTATION'S SHARE-OF-WALLET IS ALREADY HIGH BY INTERNATIONAL STANDARDS, AND WILL RISE FURTHER
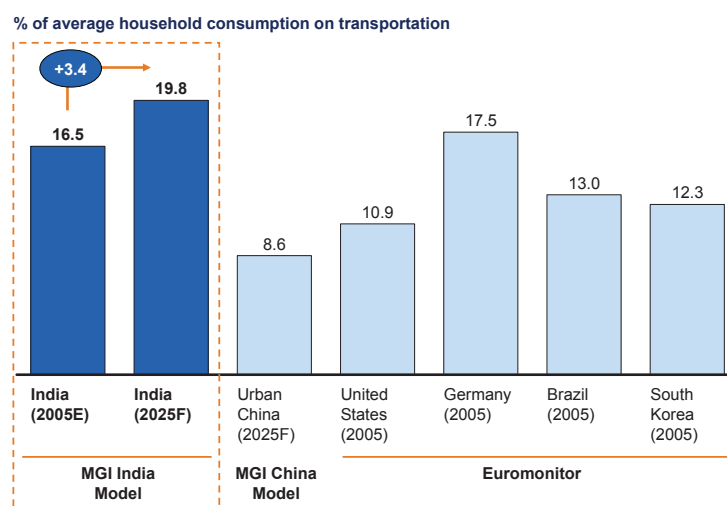
% of average household consumption on transportation

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

A.3 HOUSING AND UTILITIES

Housing and utilities—a sector that includes rent, imputed rent, water, housing repairs, electricity and fuels—is one of the most complicated consumption categories. This complexity is largely due to the methodologies used to measure spending in this category, and it is important to understand these to interpret our forecasts appropriately. We will address four of the main issues that readers should bear in mind for this category, and then discuss our results.

Computing housing and utilities consumption

The first important methodological consideration is the concept of imputed rents. Imputed rent is an estimate of the net rental income of owner-occupied housing (where the owner resides in the property). It is based on the assumption that owner-occupants are in the rental business, and that they are renting the houses in which they live to themselves. As tenants, they pay rent to the landlords (that

is, to themselves); as landlords, they collect rent from their tenants (that is, from themselves); they incur expenses and they may achieve a profit or a loss from the rental business. Imputed rent is a common concept across the world, used in national accounts to compute the contribution of the real-estate sector to GDP and consumption.[8]

Imputed rent for a house is usually estimated by determining the average market rental rate for a similar property in the same neighborhood. Given this construct, the total private consumption of rent in the country is a conceptual estimate of total rent paid by all households under the assumption that everyone in the country is a tenant in their own dwelling. It is important to note that the total consumption of housing rent does not directly capture the value of housing stock. For example, if a consumer purchases a house, the estimate of rent for that house is not linked to its purchase price, but rather to the neighborhood's rental rates. Needless to say, houses that are more expensive are likely to have higher rental rates too, so there is an indirect connection between these two metrics. In this scenario, if there is significant activity in the real-estate market in terms of buying and selling houses, this will not immediately impact the total consumption of rent in the country. However, if for some reason rental rates in an area increase rapidly (such as proximity to a newly built railway line), or there is significant construction of new property that quickly becomes occupied (such as new high-rise apartment buildings in major suburbs), such events are likely to boost the total spending on rent in the country.

Given this methodology of computing consumption of rent, it is important to recognize that this estimate is also independent from the mortgage market. The Indian mortgage industry has grown rapidly in recent years, but this would not have had a direct impact on the calculated consumption of rent during these years. Not only are housing loans implicitly part of household savings rather than consumption, but they reflect property value rather than rental value. There is an indirect impact, however. The recent spurt of housing loans in India has proved a great stimulus to the growth of new housing construction, which in turn increases the country's consumption of rent.

There are two further significant points to note with respect to housing and utilities consumption. First, as a reminder, we estimate our results in real 2000 Indian rupees. This means that housing price rises that reflect nominal increases

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8   Our imputed rent data is taken from both the NSSO household survey data and the national accounts data; as these two sources use somewhat different methodologies, we have made adjustments to combine them. See Appendix B for a discussion of integrating survey and national accounts data.

are not reflected in our data. Second, over the past 20 years utilities such as water and electricity have been provided to Indian consumers by the government at heavily subsidized prices. However, the electricity sector has recently been privatized with two large private corporations entering the market. The implications of this recent structural discontinuity are unlikely to be captured fully in the historical data that we are using for our forecasts. That said, we should point out that we do forecast that the relative price level of housing and utilities will be one of the fastest growing amongst all the categories—comparable only to transportation—and that this level is expected to be 7.5–8.5 percent higher than overall consumption price levels over the next 20 years.

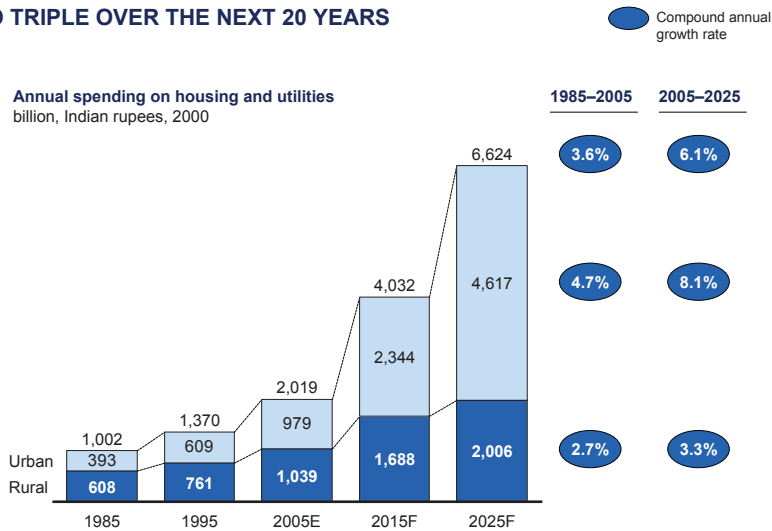**The housing and utilities consumption category is currently India's third-largest**

In 2005, the overall Indian housing and utilities market was worth 2 trillion Indian rupees ($44.2 billion), and was the third-largest consumption category in the country. While total consumption of housing and utilities grew slowly at a compound annual growth rate of 3.6 percent during the past two decades, that rate will accelerate to a robust 6.1 percent over the next 20 years, and total consumption is expected to triple to over 6.6 trillion Indian rupees ($145 billion) by 2025 (Exhibit A.10). This growth will be concentrated in urban areas, with urban housing and utilities consumption growing at 8.1 percent, and the rural market lagging behind with 3.3 percent annual growth. While overall consumption is divided roughly equally between rural and urban areas today, this unequal growth will mean that urban India will dominate total spending on housing and utilities in the future, and is expected to account for 70 percent of the market by 2025.

In terms of subcategories, housing and utilities consumption can be broken down into two components: *rent, utilities, and repair,* which includes actual rentals, imputed rent, water consumption and housing repair, and *electricity and fuels*, which includes consumption of electricity and all other household fuels such as charcoal, kerosene, etc. Of these subcategories, growth will be driven mostly by electricity and fuels (Exhibit A.11). In fact, urban consumption of electricity and fuels is expected to grow at a rapid annual growth rate of 11.5 percent over the next two decades, making it one of the fastest-growing urban markets. There is already significant latent, unmet demand for energy in urban households. As testament to this demand, it is interesting to observe that several newly constructed apartment complexes in fast-growing metropolitan suburban areas have set up their own backup electrical generators, charging residents a high premium for uninterrupted power supply. Far from depressing demand, this move has been welcomed by consumers who are more than willing to pay for such a

service to ensure their comfort and convenience. With a rapidly growing middle class, urban demand for electricity and fuels is expected to see explosive growth over the next two decades.
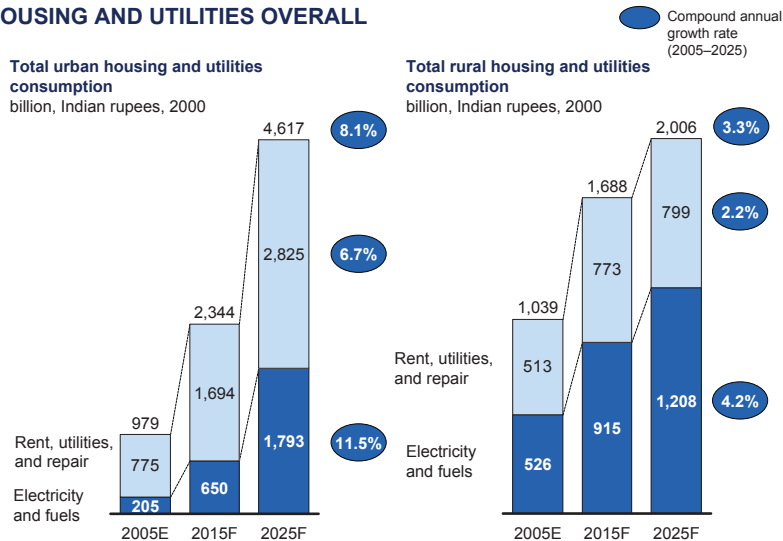
Exhibit A.10

INDIA'S CONSUMPTION OF HOUSING AND UTILITIES IS EXPECTED TO TRIPLE OVER THE NEXT 20 YEARS

Compound annual growth rate

Annual spending on housing and utilities
billion, Indian rupees, 2000

	1985–2005	2005–2025
	3.6%	6.1%
	4.7%	8.1%
	2.7%	3.3%

	1985	1995	2005E	2015F	2025F
Total	1,002	1,370	2,019	4,032	6,624
Urban	393	609	979	2,344	4,617
Rural	608	761	1,039	1,688	2,006

Source: MGI India Consumer Model, v1.0

Exhibit A.11

CONSUMPTION OF ELECTRICITY AND FUELS WILL DRIVE GROWTH IN HOUSING AND UTILITIES OVERALL

Compound annual growth rate (2005–2025)

Total urban housing and utilities consumption
billion, Indian rupees, 2000

	2005E	2015F	2025F	CAGR
Total	979	2,344	4,617	8.1%
Rent, utilities, and repair	775	1,694	2,825	6.7%
Electricity and fuels	205	650	1,793	11.5%

Total rural housing and utilities consumption
billion, Indian rupees, 2000

	2005E	2015F	2025F	CAGR
Total	1,039	1,688	2,006	3.3%
Rent, utilities, and repair	513	773	799	2.2%
Electricity and fuels	526	915	1,208	4.2%

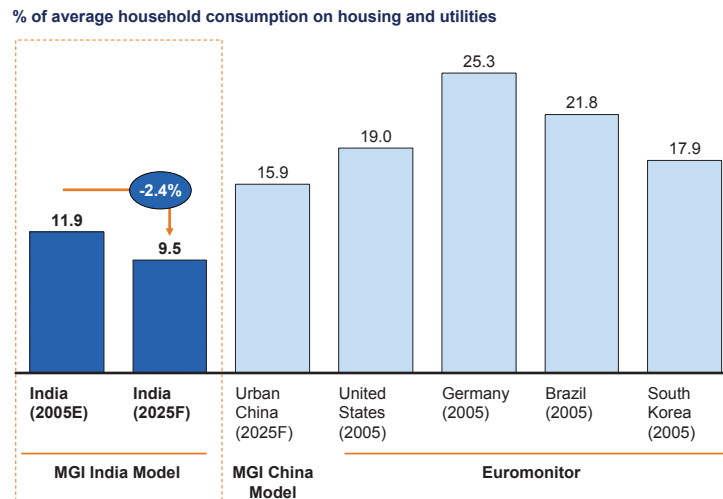Source: MGI India Consumer Model, v1.0

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The electrical-power industry, however, has a long way to go before it can meet this demand, and significant progress will be essential to enable the market to realize this consumption growth. Despite rising prices, the private players that have recently entered the market are struggling to provide uninterrupted power in the country's major cities, and even the capital city of New Delhi suffers regular power cuts throughout the year. Despite these obstacles, over the coming decades greater public and private infrastructure investment should help to build capacity that will be essential for urban India in the future.

A lower share-of-wallet than other countries

While housing and utilities is the third-largest consumption category, and constitutes 12 percent of total urban consumption today, this is still quite a small proportion when compared with other countries such as South Korea (17.4 percent) or Japan (26 percent). Furthermore, since overall growth of housing and utilities at 6.1 percent is slower than consumption growth, the share-of-wallet of this category is expected to fall even lower to 9.5 percent by 2025 (Exhibit A.12). While a similarly low proportion is seen in China today, even that is expected to grow rapidly on the back of recent privatization of housing stock, which will reach developed-market levels over the next two decades. So why is this share so low in India?

Exhibit A.12

INDIA'S SHARE-OF-WALLET OF HOUSING AND UTILITIES IS LOW BY INTERNATIONAL STANDARDS, AND WILL FALL FURTHER

% of average household consumption on housing and utilities

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

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One of the major reasons for the low share-of-wallet of housing and utilities is that India is still largely rural—72 percent of India's houses are in rural areas. This has three effects. First, rural houses have lower imputed rent due to location. Second, 97 percent of the rural population is still in the deprived and aspirer classes, and these consumers live in poor-quality, low-value housing. Third, rural households also have very limited water and electrical infrastructure, with low spending on both. In urban India, on the other hand, a large number of households enjoy subsidized housing, including houses provided by the government and large corporations to their employees. In addition, electricity and water are also provided at subsidized rates for most urbanites. All these factors put together make India's housing and utilities consumption quite small when compared with that of other countries.

The falling share of housing and utilities consumption in the future is also unsurprising. Importantly, India's urbanization rate is forecast to grow moderately and, even in 2025, 63 percent of the country's population will still reside in rural areas. Apart from this, several other emerging economies have demonstrated that, as with food and apparel, consumers spend less on housing and utilities as their incomes increase. This is expected to be the case in India too, with consumers preferring to spend their incremental income on other categories.

A.4 PERSONAL PRODUCTS AND SERVICES

Personal products and services is a very diverse category encompassing goods and services such as basic personal non-durables (e.g. toilet articles), personal and household services (e.g. legal, beauty-related, household cleaning, laundry and other services), and items of adornment (jewelry, watches, accessories). Many of these goods and services are adapted specifically to the Indian context, making this market very different from others across the world, and the players involved also range across the entire spectrum, from well-known multinationals such as Unilever to a large unorganized, widely distributed, informal sector.

We expect the market for personal products and services to expand very rapidly, growing at over 9 percent per year over the next 20 years. Where in most other sectors growth is concentrated in specific subcategories, growth in personal products and services is broad-based. According to our forecast, we expect personal services and jewelry each to grow by just under 9 percent annually, and personal non-durables at 10.4 percent over the next two decades (Exhibit A.13).
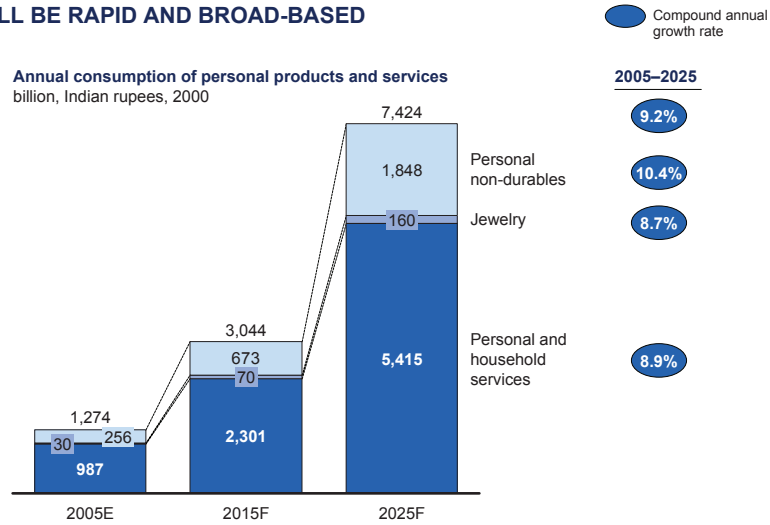
Personal non-durables to grow across urban and rural areas

Unlike other consumption categories that are dominated by urban growth, personal non-durables will see strong growth in both rural and urban areas. While we

forecast the total urban market to grow ten-fold, from just under 100 billion Indian rupees today to almost 1,000 billion Indian rupees by 2025, rural consumption will also grow significantly, adding 700 billion Indian rupees of spending over the next 20 years (Exhibit A.14).
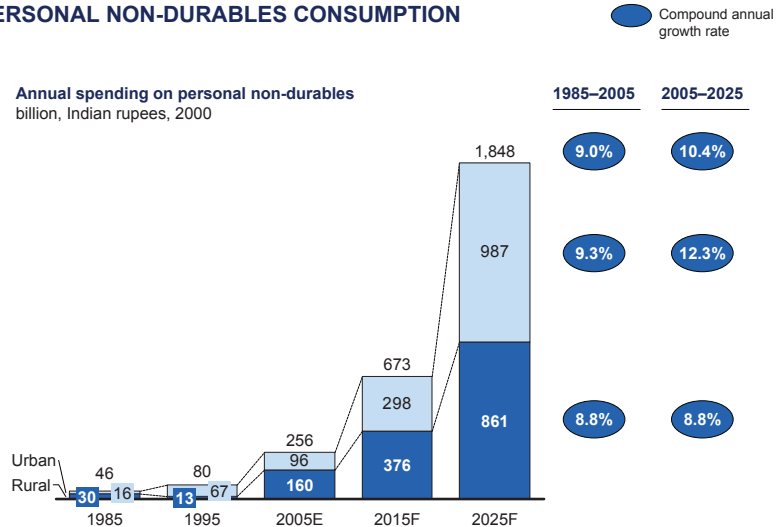
Exhibit A.13

PERSONAL PRODUCTS AND SERVICES CONSUMPTION GROWTH WILL BE RAPID AND BROAD-BASED

Compound annual growth rate

Annual consumption of personal products and services
billion, Indian rupees, 2000

2005–2025

7,424	
Personal non-durables 1,848	9.2%
Jewelry 160	10.4%
	8.7%
Personal and household services 5,415	8.9%
3,044	
673	
70	
2,301	
1,274	
30 256	
987	

2005E   2015F   2025F

Source: MGI India Consumer Model, v1.0

Exhibit A.14

BOTH URBAN AND RURAL AREAS WILL SEE RAPID GROWTH IN PERSONAL NON-DURABLES CONSUMPTION

Compound annual growth rate

Annual spending on personal non-durables
billion, Indian rupees, 2000

	1985–2005	2005–2025
1,848	9.0%	10.4%
987	9.3%	12.3%
673		
298		
256		
96	861	
376	8.8%	8.8%
160		
Urban 46 80		
Rural 30 16 13 67		

1985   1995   2005E   2015F   2025F

Source: MGI India Consumer Model, v1.0

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In rural markets the main driver of growth in personal non-durables will be the transition from home-made solutions to products from the formal sector. Today, most rural consumers rely on home-made solutions to meet their needs. These range from special herbs and wood for toothpaste and toothbrushes through to beauty treatments using simple foods and leaves. Many rural households have experienced only moderate exposure to the multiplicity of products used in urban areas. With rising incomes and increasing exposure, these consumers are likely to shift away from traditional solutions and towards higher-value packaged goods, giving a boost to rural market growth.

Two important challenges face players who aim to capture this nascent opportunity. First, the lion's share of the market will be composed of first-time buyers—consumers who have until now been unable to afford packaged goods and have utilized home-made solutions. These consumers will need familiar products (e.g. a consumer using *multani mitti*, a clay used for cleaning and beauty, may not identify with aloe vera), and will be prepared to experiment only if they perceive value for money. Not only will companies need innovative strategies to attract these consumers, but they will need to invest resources to educate consumers appropriately too.

The second challenge is that of low-cost distribution. Organized industry today faces high costs to reach remote rural areas, as well as significant competition from local, informal players who are able to provide cheaper products. The market is all about volume, and companies will need to devise lean and efficient distribution systems to operate profitably at the required prices.

The urban personal non-durables market will be largely a middle-class story, as in other categories. From just over 20 percent of the market today, consumption by the middle class will expand to almost 80 percent of total urban spending by 2025, growing at 20 percent annually. Despite strong overall growth in spending by the urban middle class, this market will lack a large luxury segment. Spending by global households will remain approximately three to four times higher than the market average, but consumption in this segment will still account for only 16 percent of the total market by 2025 (Exhibit A.15).
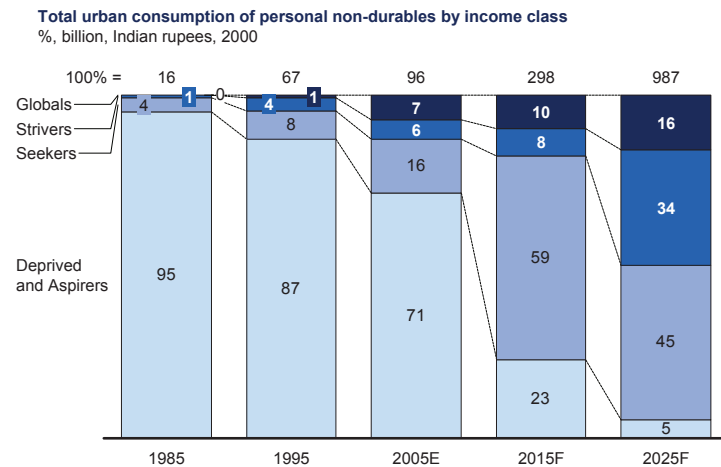
Personal-and household-services growth driven by low labor costs

With a large, extremely low-cost and readily available service economy throughout India, personal and household services forms one of the most interesting markets in the country. Given high levels of affordability, consumers across the country depend heavily on services for tasks that they would otherwise perform for themselves, or that would be technology-enabled in developed countries. With

a haircut costing 25–50 cents, a visit by the local electrician for repairs $3–$4, and a full-time maid $20 a month, unsurprisingly there has been a propensity towards consumption of such services in the past. Among the 30 subcategories into which we have divided overall household spending, personal and household services is one of the largest, preceded in size only by food, apparel, transportation non-durables, and transportation services.

Exhibit A.15

INDIA'S PERSONAL NON-DURABLES MARKET WILL STILL LACK A LARGE LUXURY SEGMENT IN 2025

Total urban consumption of personal non-durables by income class
%, billion, Indian rupees, 2000

Source: MGI India Consumer Model, v1.0

Despite the size of the market today, we expect the consumption of personal and household services to expand significantly in the future, growing at almost 9 percent annually for the next two decades. This strong growth will be driven by the emergence of a vast middle class—consumers who are willing and able to spend their rising incomes to improve their quality of life with greater convenience and comfort, and also by a steady supply of millions of workers prepared to provide the required services. It is important to note that not all of these services can be provided by unskilled labor, and there is a wide variety of fast-growing personal services that will require skilled workers, such as repair services, tailoring, beauty care, and legal and financial services.

Regional and income-class comparisons of spending also bring out interesting aspects of the personal-and household-services market in the future (Exhibit A.16). In urban India, the market will be completely dominated over the forecast period by the middle- and upper-income brackets, with globals, strivers, and

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seekers accounting for 98 percent of consumption by 2025. This market is also characterized by a significant luxury segment, with global consumers spending more than ten times per capita than those in the seeker class. In rural areas, consumption is expected to remain widely distributed through the next two decades with the middle classes growing to only 40 percent of total rural spend by 2025. On a per-household basis, while rural households in middle- and upper-income brackets spend less than their urban counterparts today, their propensity to consume personal products and services grows faster due to increasing availability, and they overtake the urban middle and upper classes by 2025.

Exhibit A.16

DEPRIVED AND ASPIRERS BECOME SMALL IN URBAN PERSONAL- AND HOUSEHOLD-SERVICES SPEND, BUT REMAIN KEY IN RURAL INDIA

Total urban consumption of personal and household services by income class
%, billion, Indian rupees, 2000

Total rural consumption of personal and household services by income class
%, billion, Indian rupees, 2000
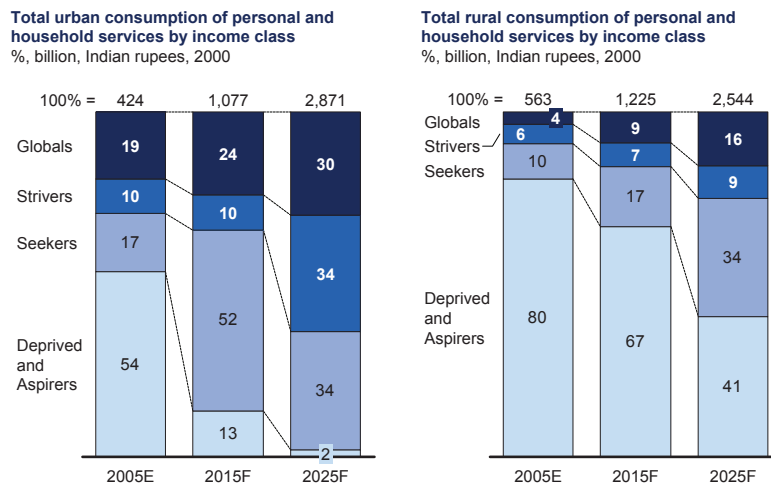
Source: MGI India Consumer Model, v1.0

On the supply-side, this subsector remains characterized by a huge mass of unorganized and informal players distributed across a wide variety of services. The nature of these services means that many will remain in the informal economy, just as, for example, house-cleaning services have remained largely in the informal economy in developed countries. But many services will be ripe for movement into the organized sector—for example, the low-cost chain haircutting salons that now dot developed-country shopping centers.

Urban areas push jewelry consumption higher

Despite its historical poverty, India has for many years been the number one consumer of gold in the world, and a major jewelry market. This is due to the adoption of gold and jewelry as a form of savings, the importance of jewelry

in Indian customs and traditions, and a culture that admires and appreciates well-crafted jewelry items.

As urban spending rises, we expect the jewelry market to expand at an annual growth rate close to 9 percent. As it grows, the market is likely to witness significant changes over the coming years. The most important of these include the expansion of large, organized players and the rapid growth of non-gold jewelry.

Despite being a big-ticket purchase, the Indian jewelry market has been largely distributed and unorganized, with most consumers relying on trusted family jewelers, and regarding items from standard manufacturers as likely to be lower in purity. This is expected to change over the coming years with the growth of branded jewelry, driven especially by changing urban lifestyles in which mobile consumers no longer use traditional family jewelers, and therefore come to rely on brands to ensure high quality and reliability. In addition, the market is also expected to change significantly because of the preferences of today's youth—who will be tomorrow's middle class. These consumers are shifting away from the traditional approach to investment in gold as a savings vehicle, and towards consuming jewelry mainly for personal adornment. Their tastes appear to be different too, with growing sales of precious stones, diamonds, platinum, and other forms of jewelry.
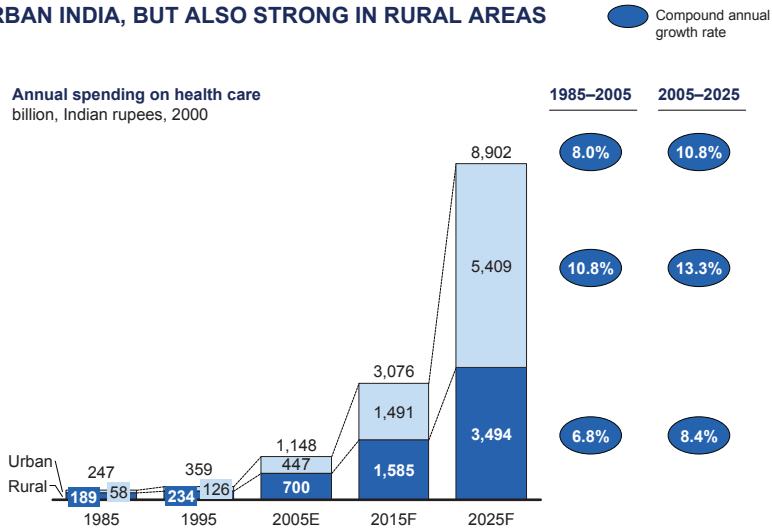
A.5 HEALTH CARE

The health-care category includes consumer spending on medical services, pharmaceuticals and non-durables, and medical equipment. Unlike in many developed countries, health-care spending in India is largely driven by household expenditure. In 2005, total private consumption of health care amounted to 1,148 billion Indian rupees ($25 billion), accounting for more than three-quarters of total health-care spending. This is in stark contrast to developed countries where the contribution of households is usually much lower at 10–15 percent.

Given the poor state of public-health infrastructure in India, recent years have seen strong growth in the numbers of private players attempting to meet considerable pent-up consumer demand in the market. With incomes on the rise, consumers are more than willing to spend more to obtain the health-care goods and services that they require. Our analysis shows that, over the past 20 years, health-care consumption has been growing at a rapid 8 percent annually (during which time overall consumption was growing at just 4.7 percent). We expect this strong growth to accelerate even further as health-care consumption grows at 10.8 percent annually through to 2025, taking total spending to 8,902 billion

Indian rupees ($194.8 billion), and making health care one of the fastest-growing consumption categories in the forecast period (Exhibit A.17). Market growth will be led by urban areas where consumption will grow at a very rapid 13.3 percent over the next 20 years. However, rural consumption will not lag too far behind, growing at 8.4 percent annually till 2025 and accounting for nearly half of total cumulative consumption over the next two decades. In the following sections we will discuss the major characteristics of the health-care market—urban and rural markets and the different subcategories.

Exhibit A.17

HEALTH-CARE CONSUMPTION GROWTH WILL BE MOST RAPID IN URBAN INDIA, BUT ALSO STRONG IN RURAL AREAS

Source: MGI India Consumer Model, v1.0

Rural areas currently rely heavily on the state for health care

Today, the rural poor rely heavily on the state to provide subsidized and free health care. A profound scarcity of resources and ever-increasing demand has caused the government to struggle to meet these obligations in recent years. There are no large private players to provide extensive health-care goods or services to rural populations due to low per-capita spending and infrastructure constraints. In the absence of professional help, adequate knowledge of first-aid, preventive measures or basic medicinal materials, the rural poor often resort to amateur medics or home-made remedies in times of need. It is also important to note that, because large parts of the rural population earn their living essentially through unskilled manual labor, "health" is more akin to "wealth" for them than it might be for other workers.

In this situation, there is tremendous latent demand for health-care goods and services in rural India. As incomes rise and households move out of poverty, these households will not only demand better services, but also be willing to pay for them, albeit still at modest levels. Growing awareness across the rural population will also play a big role in the development of health-care infrastructure and services in these areas. While the government will still play the primary role in providing health-care services to rural households, over time as incomes grow, private corporations will begin to enter even the rural health-care market.

Urban health care to be driven by upper-income and middle classes

One of the drivers of growth in the urban health-care market is the growing health consciousness in the middle and upper classes. The increasing importance of looking and feeling good, especially among the young, and rapidly evolving metropolitan lifestyles involving more travel, more work, less sleep and unhealthy eating habits, will lead to rapid growth of lifestyle-related health care. This trend is evident in the growing number of laser eye centers, fitness centers, and other facilities that have recently opened up for upper-income consumers in several major cities across the country.

The growing global class will also play a big role in boosting urban health-care consumption. While these consumers may previously have chosen to go abroad for premium health-care services, private players within the country have begun to recognize an opportunity to provide top-of-the-range services at high prices. As this income bracket grows in size, the next 20 years are likely to see an increase in the number of hospitals and nursing homes catering to the rich.

With overall health-care spending growing faster than Indian household consumption, share-of-wallet of health care in average Indian households is expected to rise significantly in the coming decades. Health care is one of the fastest-growing consumption categories and, based on our model, its share-of-wallet will increase by 6 percent in the forecast period, increasing from 6.8 percent today to 12.8 percent by 2025 (Exhibit A.18). While health care shares-of-wallet vary widely in benchmark countries depending on the level of state provision, India's spending level will be approaching that of urban China by 2025.

Health care supply side changing dramatically

Apart from rapid consumption growth, the health-care market will see important changes on the supply side over the coming decades, especially as the market matures to cater to the demands of the booming middle class. We will touch upon a few important developments.

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Exhibit A.18

INDIA'S SHARE-OF-WALLET OF HEALTH CARE WILL BE NEAR TO THAT OF URBAN CHINA BY 2025
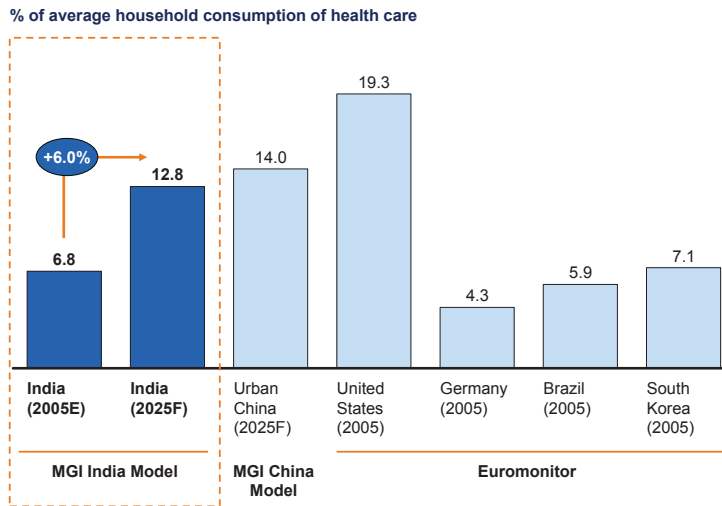
% of average household consumption of health care

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

Health-care services to be potentially the most lucrative segment

This is arguably the most lucrative of all the subcategories of health-care consumption, due both to growth potential and to present levels of underdevelopment. An example of a player attempting to exploit potential growth is the Apollo group. Apollo is the biggest private provider in the health-care market, offering a range of health-care services through its 13 owned and 22 managed hospitals. The group's flagship hospital in New Delhi is the world's largest private hospital outside the United States.

Not long ago, the group had the image of serving only very rich consumers. However, recognizing the market at the middle of the pyramid, Apollo has begun to expand its client base. It plans to enhance its presence in the middle market by setting up First Med hospitals, each operating 100–120 beds, in small metropolitan areas and towns. These hospitals will focus on specific services such as emergency medicine, maternity and general surgery, and would be scalable to 200 beds. As well as focusing on in-patient services, Apollo plans to address the large pool of outpatients. It has launched one of its most ambitious projects, Apollo Health and Lifestyle Limited, with the objective of establishing a nationwide chain of more than 250 primary health-care centers on a franchise basis.

New patent system boosts interest in pharmaceuticals

In January 2005, product patents come into force in India. Under the new regime, any new drug patented after 1995 will receive patent protection in the country.

This has led to renewed interest in India amongst global pharmaceutical giants. Formerly cautious, big pharmaceutical companies are now willing to launch new drugs to capitalize on this new market opportunity.

In terms of pharmaceutical distribution, the Indian market is largely unorganized. Presently, there are estimated to be about 800,000 pharmaceutical retailers in the unorganized sector, and just 200 in the organized. However, evolution in other markets would indicate that this could change over the coming years. As late as 1970, the United States had 75,000 pharmacies, and most of them were mom-and-pop stores.[9] Today there are 55,000 pharmacies, and only 25,000 of them are mom-and-pop stores. With the pace of change seen in Indian markets in recent years, India could potentially complete such a transition over the next two decades.

Medical tourism will play a stimulating role in the future

Lastly, we will touch upon a nascent trend in the health-care industry that, though not directly related to domestic consumption, is likely to have a major impact on the trajectory and speed of development of the industry in the future. Medical tourism is a relatively new phenomenon, which sees patients travel from other countries to India for treatment. This practice has gained momentum over the past few years, driven by India's low-cost advantage and the emergence of new high-quality health-care service providers. Estimates suggest that the costs of comparable treatment in India are on average one-eighth to one-fifth of those in the West. For instance, while a cardiac procedure costs anything between $40,000–$60,000 in the United States, it costs only $3,000–$6,000 in India. It is also noteworthy that the overall success rate of cardiac bypasses is 98.7 per cent in India, versus 97.5 per cent in the United States—though this is probably due to that fact that there are currently only a few highly specialized centers in India.

As testimony to the growing popularity of this trend, in 2004 approximately 180,000 patients traveled to India from across the globe for medical treatment. As medical tourism gains momentum, India's private health-care technology and practices at the top end of the market are likely to develop further, and converge with world standards. For example, in 2007 Dr. Trehan, one of India's leading cardiac surgeons, is establishing a "MediCity" on the outskirts of Delhi with the single objective of promoting medical tourism. The $250 million project proposes to integrate specialties such as cardiology, neurosciences and oncology under one roof, with 2,000 beds.

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9   *India Retail Report*, Images-KSA Technopak, 2005, (www. imagesretail.com/india_retail_report. htm).

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It is, however, important to note that health-care spending in India will not grow to the levels seen in more developed countries within the timeframe of our study. First, the country's demographics over the next two decades are favorable to maintaining health-care spending at a relatively low level. Second, India's health-insurance sector is also at a very early stage. Penetration of health-insurance products is low, and this sector is not likely to change radically in the short term. Consequently, despite being one of the fastest-growing consumption categories in the country, the size of India's health-care market will remain modest compared with world markets.

A.6 APPAREL

The apparel industry has been an important source of employment and foreign exchange for the country. The Indian apparel industry, however, lags far behind in terms of productivity and global technology standards, despite having an estimated quarter of the world's spindles (some 38 million) and almost 60 percent of the world's shuttle looms (approximately 1.8 million).[10] In a detailed study of the Indian apparel industry in 2000, MGI estimated that the average productivity of the industry was just 16 percent of US productivity levels. Unorganized next-door tailors, only half as productive as organized ones, still dominate the market, and constitute two-thirds of the work-force.[11] Apparel retailing is also widely distributed, with small traditional shops, multi-brand outlets and unorganized formats accounting for 60–75 percent of the market, and large department stores only 10–15 percent.[12]

However, this highlights an important point. The Indian apparel industry has huge growth potential and, with the right stimuli, can transform itself to catch up with the rest of the world. Over the past few decades, increasing exports have provided the stimulus shaping the evolution of the industry.[13] However, focus has begun shifting towards domestic demand, which is likely to be critical to the fortunes of the country's apparel industry over the next two decades. In 2005, the overall Indian apparel (clothing and footwear) market was worth approximately 930 billion Indian rupees, or $20.4 billion. Growth has been picking up recently, and we expect the market to grow at 6–7 percent over the next 20 years. Even though

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10 *Industry Insight—Apparel Retailing,* Cygnus Economic and Business Research, March 2004, (www.cygnusindia.com/Economy.asp).

11 *India: The Growth Imperative—Apparel Sector,* McKinsey Global Institute, 2001, (www.mckinsey.com/mgi/reports/pdfs/india/Apparel.pdf).
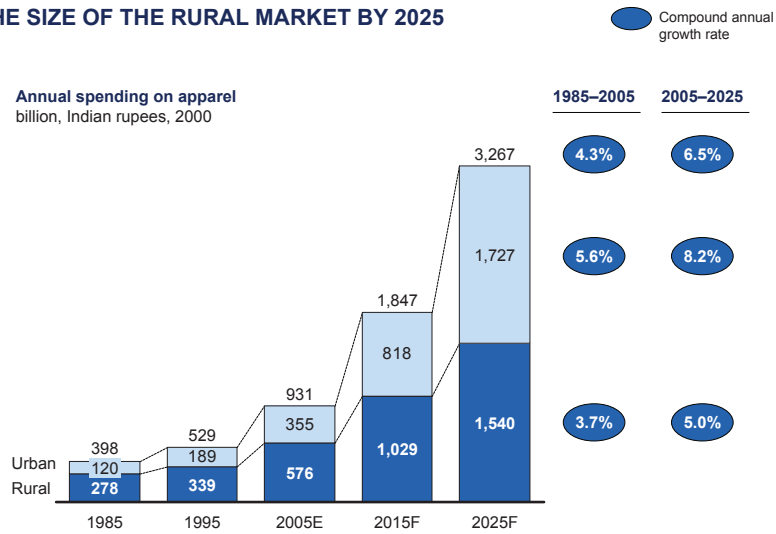
12 *India Retail Report,* Images-KSA Technopak, 2005, (www. imagesretail.com/india_retail_report.htm).

13 Apparel trade had been regulated under the Multi Fiber Agreement (MFA), which provided export quotas to countries, including India. However, the MFA came to an end in 2006.

only 40 percent of total apparel consumption is in urban areas today, it is urban consumption that will drive future growth. We project that urban consumption will post a growth rate of 8 percent, while rural spending rises at a more modest 5 percent. As a result, even though cumulative spending in the forecast period is greater in rural India, we expect the faster-growing urban market to become larger than that in rural areas by 2025 (Exhibit A.19).

Exhibit A.19

URBAN INDIA WILL DRIVE APPAREL MARKET GROWTH AND OVERTAKE THE SIZE OF THE RURAL MARKET BY 2025

Compound annual growth rate

Annual spending on apparel
billion, Indian rupees, 2000

	1985–2005	2005–2025
	4.3%	6.5%
	5.6%	8.2%
	3.7%	5.0%

	1985	1995	2005E	2015F	2025F
Total	398	529	931	1,847	3,267
Urban	120	189	355	818	1,727
Rural	278	339	576	1,029	1,540

Source: MGI India Consumer Model, v1.0

**Urban middle- and upper-class apparel spending to grow explosively**

One of the main factors driving the growth in urban consumption will be the upward mobility of households. As households graduate to higher income levels, they tend to upgrade their wardrobes to suit their new status, buying things their peers buy, and becoming more brand conscious. With urban households rapidly climbing the income ladder, spending on apparel will be boosted. Other factors contributing to market growth will be India's youthful demographic profile, the emphasis on "looking and feeling good", and changing dress standards at work. Against this scenario, we forecast total apparel consumption by the urban middle- and upper-income classes (strivers, seekers, and globals) to increase more than ten times from 166 billion Indian rupees ($3.6 billion) today to 1,693 billion Indian rupees ($37 billion) by 2025 (Exhibit A.20).

The very high 13.4 percent annual growth in apparel spending by the urban middle class over the next two decades will present a tremendous opportunity to the apparel industry. In the past, most market players chose one end of

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the income spectrum—either targeting the luxury segment or catering to the entire mass market. However, the industry is quickly discovering the increasing spending power of middle-income consumers, and the future is likely to see a plethora of new lines emerging that target the growing sub segments of the urban middle class.

Exhibit A.20

APPAREL SPENDING BY URBAN MIDDLE AND UPPER INCOME CLASSES WILL GROW TEN TIMES OVER THE NEXT 20 YEARS

Compound annual growth rate

Total apparel spending by urban middle and upper classes
billion, Indian rupees, 2000

2005–2025
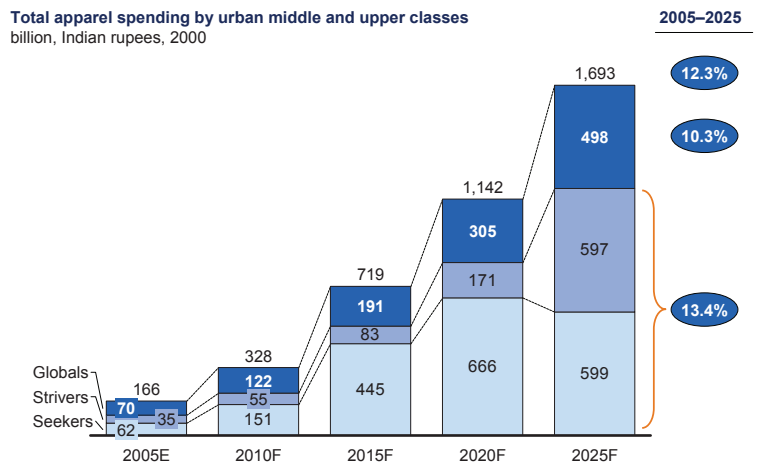
Source: MGI India Consumer Model, v1.0

The urban apparel market also has a large luxury segment that we expect to grow significantly in the future. Global consumers spend approximately 15–20 times more per capita than their lower-middle-class counterparts, and are a good target market for most global luxury brands. Spending by the global income segment already accounts for a fifth of the total urban apparel market, and we expect the consumption of globals to grow steadily at over 10 percent over the next 20 years. Brands such as Louis Vuitton, Tag Heuer, Christian Dior, Swatch, and Tommy Hilfiger are already present in India; many others, such as Gucci, Armani, and Versace are on their way.

Consumer preferences evolving markedly

In terms of preferences, the most fundamental change in urban spending on apparel will be a shift away from tailored clothing towards ready-made garments. With a growing need for convenience, urban customers are rapidly consuming the ever-increasing supply of affordable ready-to-wear clothing. While the millions of tailors across the country have a cost advantage today, this is likely to erode as

organized manufacturers mature and grow in scale. Another significant trend in the urban apparel market is the growing significance of western-style clothing. While most urban workers are employed in the informal or unorganized economy today, the growth of the formal economy over the next 20 years will result in greater demand for "office-wear". With more and more working women, this new segment of women's wear has also recently become important for the major players in the industry.

Another unique characteristic of Indian consumers' apparel preferences will be the continued importance of "value for money". While fashion consciousness and brand awareness have increased significantly in India in recent years, and fewer consumers are looking for the cheapest option, Indian consumers are still likely to ignore top brands if good quality garments and footwear are available at lower prices. This is evident in the recent successes of private labels in the fast-growing organized apparel retailing sector, with industry majors such as Globus, Pantaloon, and Westside earning 60–95 percent of their revenues from private labels.

True take-off in rural apparel market still a decade away

We expect the rural apparel market to grow steadily at 5 percent over the next two decades, tripling in size to 1,540 billion Indian rupees or $33.7 billion (real 2000 prices) by 2025. Like food, the primary driver of growth in this market initially will be the emergence of a large number of households out of poverty, and aspirers will continue to dominate the rural market over most of the forecast period. However, spending by middle- and upper-income rural classes will begin to grow quickly in the second decade and, by 2025, the rural middle class, though smaller in numbers, will account for almost half of total rural apparel spending (Exhibit A.21).
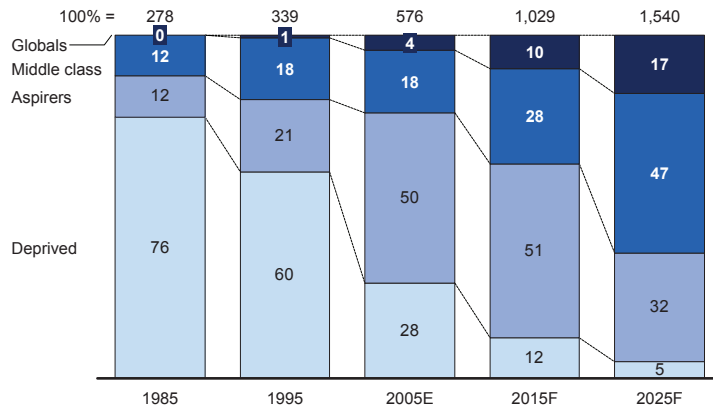
The main challenge for organized players targeting rural markets will be to create high value-for-money offerings and widespread distribution, since rural consumers tend to be highly price sensitive, and small tailors in rural areas are both accessible and very inexpensive. A good example of this is a recent initiative by Arvind Mills, India's leading denim manufacturer. The company realized that regular jeans would not be successful in rural India given the price point and consumer skepticism towards ready-made garments. To combat this, they introduced a ready-to-stitch Ruf 'n' Tuf jeans kit at a low price, distributing sewing-machine attachments to stitch the heavy denim cloth, and training village tailors to stitch the jeans using these kits. The product was highly successful, and demand surpassed the million-unit mark within the first two months.[14]

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14 Pradeep Kashyap and Siddhartha Raut, *The Rural Marketing Book*, 2007 edition, Dreamtech Press, (http://www.wileyindia.com/).

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Exhibit A.21

THE RURAL MIDDLE CLASS WILL ACCOUNT FOR ALMOST HALF OF RURAL APPAREL SPENDING BY 2025

Total rural consumption of apparel by income class
%, billion, Indian rupees, 2000

100% =	278	339	576	1,029	1,540
Globals	0	1	4	10	17
Middle class	12	18	18		
Aspirers	12	21	50	28	47
				51	
Deprived	76	60	28	12	32
					5
	1985	1995	2005E	2015F	2025F

Source: MGI India Consumer Model, v1.0

Share of apparel will shift modestly

Despite the robust growth discussed above, especially in particular segments, apparel spending in the country, like food, will grow slightly more slowly than total consumption in the forecast period. Consequently, the share-of-wallet of apparel for the average Indian household will fall over the next 20 years (Exhibit A.22).
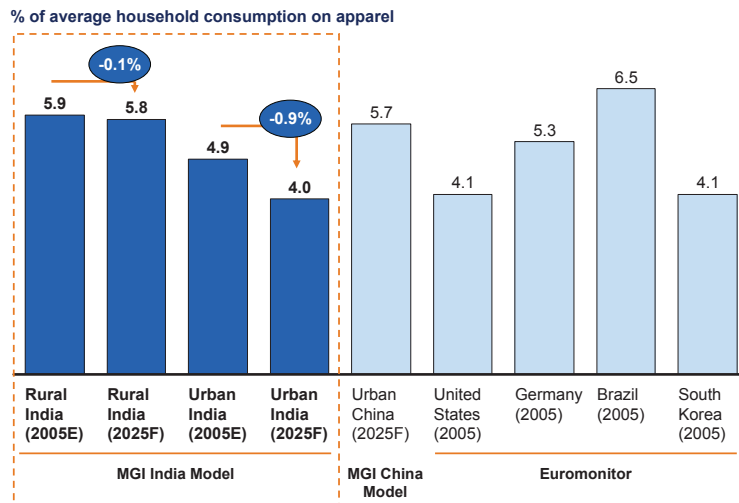
This trend is consistent with that seen in other countries, where rising incomes translate to greater discretionary spending rather than increased consumption of basic categories such as food and apparel. While the share-of-wallet of apparel falls to approach international levels in urban India, it will remain significantly higher in rural areas. This is primarily because a large proportion of the country's rural population will still be poor in 2025, and will therefore continue to devote most of its spending to food and apparel.

On the supply side, the most important development in the market will be the expansion of organized apparel retailing and large format multi-brand stores. Top players such as Shoppers Stop, Lifestyle, Pantaloons, Westside, Vishal Mega-mart, Ebony, Piramyd, and Globus are planning almost 100 new stores in the next two to three years across 10–15 cities. With the advent of FDI in multi-brand retailing expected in the near future, the market is also likely to see the entry of global retailing giants, which will further intensify competition, driving down prices and boosting demand. It is worth noting that, unlike in western countries,

catalog and internet retail channels have not yet become popular, possibly due to perceptions of their limited reliability as well as the increasing popularity of shopping as a leisure pursuit, although this may change as more Indians go on-line.[15]

Exhibit A.22

INDIA'S SHARE-OF-WALLET OF APPAREL WILL FALL OVER THE NEXT 20 YEARS, BUT ONLY SLIGHTLY IN RURAL AREAS

% of average household consumption on apparel

	Rural India (2005E)	Rural India (2025F)	Urban India (2005E)	Urban India (2025F)	Urban China (2025F)	United States (2005)	Germany (2005)	Brazil (2005)	South Korea (2005)
	5.9	5.8	4.9	4.0	5.7	4.1	5.3	6.5	4.1

-0.1% -0.9%

MGI India Model | MGI China Model | Euromonitor

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

A.7 EDUCATION AND RECREATION

The importance of education has a long history and is deeply rooted in Indian culture, and as the society has become increasingly geared towards economic growth, educational attainment has taken on an even greater significance. We have argued in this report that India's future economic prosperity hinges critically on the ability of its education system to help create a capable workforce for the future. It is therefore promising to see India's citizens choosing to spend their money on education.

This consumption category comprises household expenditure not just on education (which also includes books), but also on recreation (which includes goods and services). We shall discuss each of these separately.

**Indian government expected to raise education investment**

Provision of education (and even more so, literacy) has long been considered the "first among equals" of all the social objectives of the government in India. The

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15 *Apparel Retail in India,* Industry Profile, Datamonitor, August 2006, (www.datamonitor.com).

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state spent about 1,174 billion Indian rupees ($25.7 billion), or 4.1 percent of GDP, on education in 2005. As the Indian economy registers strong growth, the government is expected to increase its focus on expanding access to and improving the quality of education. We forecast government expenditure on education to grow more quickly than GDP at a rapid 9 percent annual rate over the next 20 years. This will take total government spending on education to 6,542 billion Indian rupees ($143.2 billion) or 5.7 percent of GDP in 2025.

Contrary to some perceptions, as a result of supply-side constraints, Indian households have been spending heavily on education for some time, making it one of the fastest-growing consumption categories of the past two decades. Based on our analysis, household spending on education increased at an extremely rapid 11 percent compound annual growth rate from 1985 to 2005, bringing total consumption to 711 billion Indian rupees ($15.6 billion) today (Exhibit A.23). This was especially strong given that overall consumption grew at 4.7 percent in this period. We expect this strong growth to continue in the future as well, as household spending on education grows at 11.1 percent annually over the next 20 years, taking total consumption to 5,844 billion Indian rupees ($127.9 billion) in 2025. While urban consumption growth in this category is expected to continue at its recent historical pace of 12.4 percent, rural growth is likely to slow down to 8 percent over the next 20 years.

Exhibit A.23

RAPID EDUCATION CONSUMPTION GROWTH WILL BE MAINTAINED OVER THE NEXT 20 YEARS

Annual spending on education
billion, Indian rupees, 2000
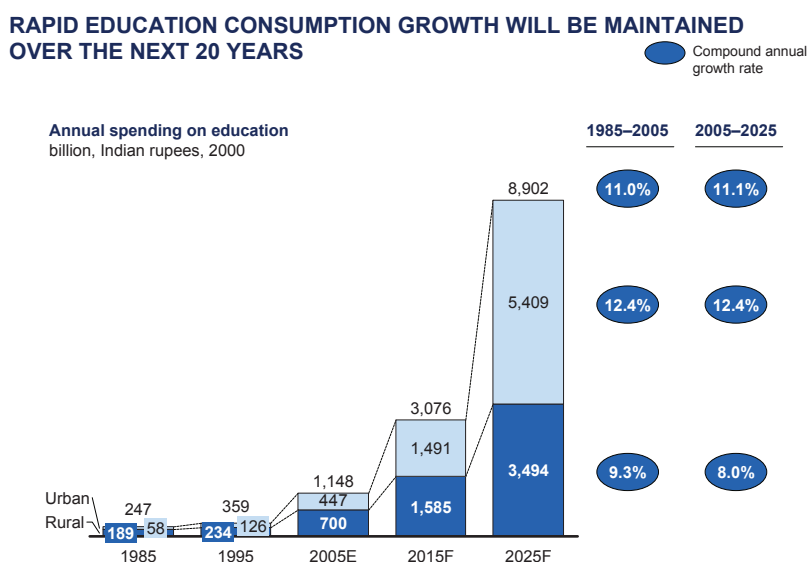
Source: MGI India Consumer Model, v1.0

Large gap exists between public-and private-education provision

An important point to appreciate about education spending in India is the state of education provision. While a moderately large private-education sector co-exists with a widespread government-education infrastructure throughout the country, the two are vastly different. Among the 640,000 primary and almost 200,000 secondary schools, it is an open secret that government schools are the last resort for consumers. While these schools still form the bedrock of the Indian educational infrastructure, reaching millions more than would be possible for the current private-school network, limited resources and a fast-growing population mean that they have significantly deteriorated in quality over the past decades. If it were not for their affordability or easy access, few households would send their children to government schools these days. In this context, the latent demand for primary and secondary education is huge. With rising incomes, more and more households will be willing to pay a premium to obtain better education for their children.

On the other hand, in the field of higher education the situation is almost exactly reversed, with the country's top institutions managed under government auspices. Here again, there is a mix of public and private institutes, but private colleges do not yet match the quality of the country's top public institutes today. But below this elite, despite the fact that there are 15,000 colleges across the country, there are very few high-quality institutes, with most colleges providing sub-standard education. Moreover, the government heavily subsidizes the top institutes, and hence faces significant resource constraints in expanding capacity in proportion to demand. As a result, there are a handful of world-class institutes alongside a huge collection of moderate and poor institutes serving a billion-plus population.

The stark reality of this is borne out every year as hundreds of thousands of students compete in the Joint Entrance Examinations for a mere 4,000–5,000 seats at the Indian Institutes of Technology (IITs). With success rates estimated at less than 2 percent, these institutes are tougher to enter than some of the world's best, such as Harvard or MIT. Here, too, while current spending by households is low due to large subsidies in public colleges, private providers have started entering the market to satiate the growing demand for high-quality professional education, and this is likely to drive consumption growth in the future. As an example, a recently established private college, the Indian Institute of Planning and Management (IIPM), is seeing tremendous growth in the market. It currently serves around 5,000 postgraduate management students with the help of more than 350 faculty members, making it one of the world's largest business schools.

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It has opened up placement offices across the world, in San Francisco, New York, London, Dubai and Singapore, and more than 400 companies visit its campuses for recruitment purposes. Its rapid growth bears testimony to the tremendous latent demand for high-quality education in the country.

Rural and urban education spending set to rise strongly

Rural households are also willing to pay for education. Surveys of rural households show that there is a tremendous demand for education, and that child labor is not as big a barrier to education as might be expected. Ninety percent of respondents to a survey of 188 villages felt that it was important for their children to go to school.[16] A far greater problem was found to be the appalling quality of public education.

Private education for children is therefore often a priority for families as they rise up the income ladder, and we see rural consumption increasing by almost five times over the forecast period (Exhibit A.24). Among the income brackets, aspirers and seekers will dominate consumption, accounting for almost two-thirds of total rural spending throughout the forecast period. While basic education will be important for this population, they will seek out opportunities for vocational training and education that directly enhances their employability as this is their primary concern. Perhaps unsurprisingly, the few households in the rural striver and global classes will account for over one-quarter of rural spending on education by 2025.

Domination of education spending by top income brackets is also seen in urban India. While the globals already account for 26 percent of urban spending on education, their consumption is expected to reach unprecedented levels, with their share climbing to 41 percent in 2025 (Exhibit A.25). With an annual growth rate of 15 percent over the next 20 years, and average global households spending six to seven times the national average, this class will be extremely important in the future of the urban education market. These households will spend enormous amounts of money on education as they send their children abroad to the top global schools and colleges, and also seek out premium providers in the domestic market.

With this growing opportunity in view, a number of schools have begun in recent years to target the country's rich. An example is the plush G. D. Goenka World School, founded in 2001 on the outskirts of Delhi. With high-tech facilities,

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16 See the 1996 *Public Report of Basic Education for India* (PROBE). The survey covered 188 villages in four provinces: Uttar Pradesh, Madhya Pradesh, Himachal Pradesh, and Bihar. Of these, only Himachal Pradesh is reasonably wealthy; the other three are relatively poor and densely populated.

RURAL CONSUMPTION OF EDUCATION WILL INCREASE FIVE-FOLD OVER THE NEXT 20 YEARS DRIVEN BY MIDDLE AND UPPER CLASSES

Total rural consumption of education by income class
%, billion, Indian rupees, 2000
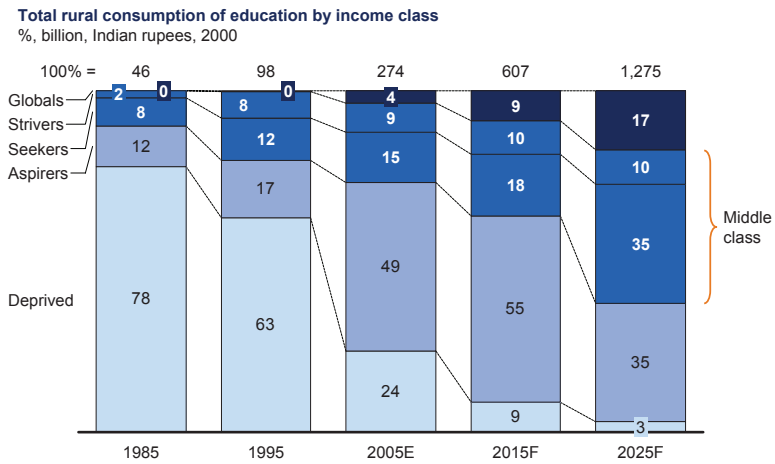
Source: MGI India Consumer Model, v1.0

EDUCATION CONSUMPTION BY URBAN GLOBALS WILL GROW AT AN UNPRECEDENTED RATE TO TAKE THE LARGEST SHARE IN 2025

Total urban consumption of education by income class
%, billion, Indian rupees, 2000

Source: MGI India Consumer Model, v1.0

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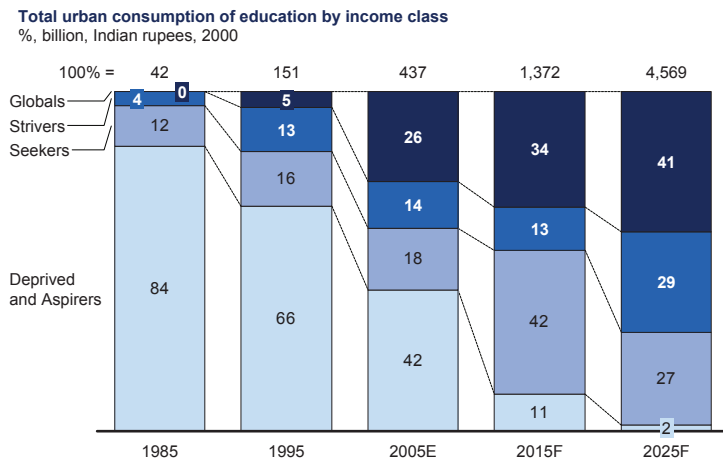
extensive extra-curricular opportunities for students such as a 17-acre interna-tional-standard golf course, and comforts such as a multi-cuisine cafeteria, this school gives a glimpse into the future of the luxury education sector. Schools like this are a world away from the age-old Indian concept of *gurukul* education, with its central tenets of toil.

Recreation to pick up from low base

Recreation consumption includes spending on consumer electronics such as TVs, VCRs, sporting goods, electrical devices, and on entertainment services. It is important to note that a significant portion of what might be viewed as recre-ation spending is not captured here, including leisure travel (which is captured in transportation services), eating out (included in food), and reading (included in books and education), to name a few.

Total recreation consumption by households was worth a modest 50 billion Indian rupees ($1.1 billion) in 2005. Even though not all aspects of recreational spend-ing are included here, this is still quite small compared with most markets, and illustrates an important characteristic of Indian consumer preferences. Indians are generally quite frugal in their appetite for recreational spending. The only popular sport is cricket, and the only significant entertainment industry is the film industry, known throughout the world as Bollywood. Even domestic spending on Bollywood films is smaller than one might expect, due to the fact that most of the industry's revenues today come from Indians overseas. Given this background, it is unsurprising that India's recreational spending is very low today.

Over the next 20 years, we expect recreational spending to pick up as household incomes rise and consumers begin to purchase more recreational goods and services. The total market is expected to grow annually at 8.9 percent over the forecast period, taking total consumption to 276 billion Indian rupees ($6 billion) by 2025 (Exhibit A.26). As a share-of-wallet, recreational spending will remain tiny, as Indian consumers channel more of their growing incomes towards categories such as communication, education, health care and transport.
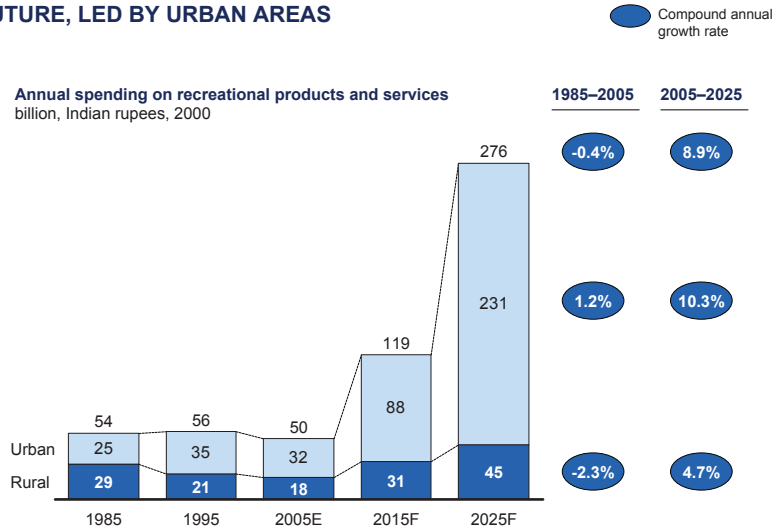
A.8 HOUSEHOLD PRODUCTS

A combination of India's closed economy and government focus on core sectors such as agriculture, apparel, and heavy industry, meant that the household-products market was severely under-developed for many years, being worth just over 160 billion Indian rupees ($3.6 billion) in 1985. However, this began to change following India's reforms. While overall consumption in India grew at 4.7

percent from 1985 to 2005, the household-products market grew at 5.6 percent annually in the same period.

Exhibit A.26

RECREATION SPENDING WILL ACCELERATE VERY RAPIDLY IN THE FUTURE, LED BY URBAN AREAS

Compound annual growth rate

Annual spending on recreational products and services
billion, Indian rupees, 2000

	1985	1995	2005E	2015F	2025F	1985–2005	2005–2025
Total	54	56	50	119	276	-0.4%	8.9%
Urban	25	35	32	88	231	1.2%	10.3%
Rural	29	21	18	31	45	-2.3%	4.7%

Source: MGI India Consumer Model, v1.0

A good example of this catching-up is the growth of the household air-conditioner (AC) market over the past few decades. ACs were traditionally perceived as luxury items for the rich only. Most were brought into the country with high import duties, and they were energy inefficient and thus consumed lots of electricity, and were expensive to operate. However, reductions in excise duties over the last decade made air conditioners affordable for a large section of society and, coupled with rising incomes, this led to rapid growth in demand across the country. After slow growth in the early years, since the late 1990s this market has witnessed intense competition as a result of the entry of multinationals such as LG, Samsung, National and, more recently, Electrolux, Whirlpool, Daikin, Fujitsu, and Haier.[17] This competition, combined with technological advances, has improved the quality and energy efficiency of the products on offer. With market volumes and value estimated to have grown at over 20 percent annually over the past decade, this is a classic example of how the opening-up of a market has unleashed latent demand and boosted growth.

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17 *Consumer Durables,* ICRA sector analysis, February 2005, (www.icra.in)

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The overall market for household products is worth 484 billion Indian rupees today ($10.6 billion at real 2000 prices). In our classification, this category includes most items used daily in a household such as non-durables (small items like umbrellas, flashlights, locks, etc.), housewares and furniture (including glassware, crockery, utensils, linens, furniture, fixtures, etc.), and appliances (large and small appliances including air conditioners, refrigerators, washing machines, lamps, fans, cookers, toasters, etc.).

Based on our forecast, over the next 20 years we expect this market to grow asymmetrically across the country, booming in urban India with growth at over 9 percent annually, but lagging in rural areas, growing at a slow 4.4 percent (Exhibit A.27). Cumulative spending over the forecast period is also expected to be greater in urban India, though rural areas still account for a significant 45 percent of this consumption.

Exhibit A.27

URBAN CONSUMPTION OF HOUSEHOLD PRODUCTS WILL GROW MUCH MORE RAPIDLY THAN THAT OF RURAL AREAS
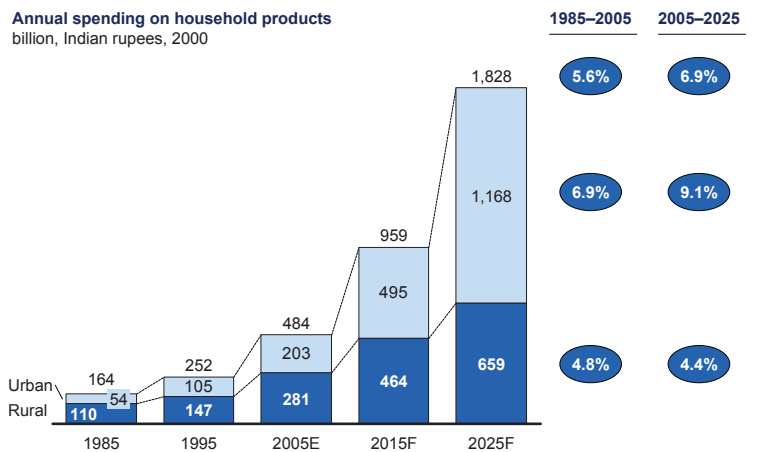

Appliance growth strong in urban markets

Primary drivers of the expansion of the urban household-products market include urban-population growth and rapidly rising household incomes. With urbanization accelerating, the number of households in urban India is expected almost to double in the coming decades, while per-household incomes are likely to triple by 2025.

In terms of subcategories, while the markets for house wares and non-durables are reasonably mature, the market for appliances is relatively nascent. Product penetration for most appliances is quite low compared with other countries, and there is considerable potential for the appliances market to expand its target segments through improved affordability. We expect this market to grow rapidly at 11.4 percent over the next two decades, driving overall household-products consumption, with house wares coming in second with strong growth at 8.4 percent (Exhibit A.28).

Exhibit A.28

APPLIANCES CONSUMPTION WILL BE THE STRONGEST DRIVER OF THE URBAN HOUSEHOLD-PRODUCTS MARKET
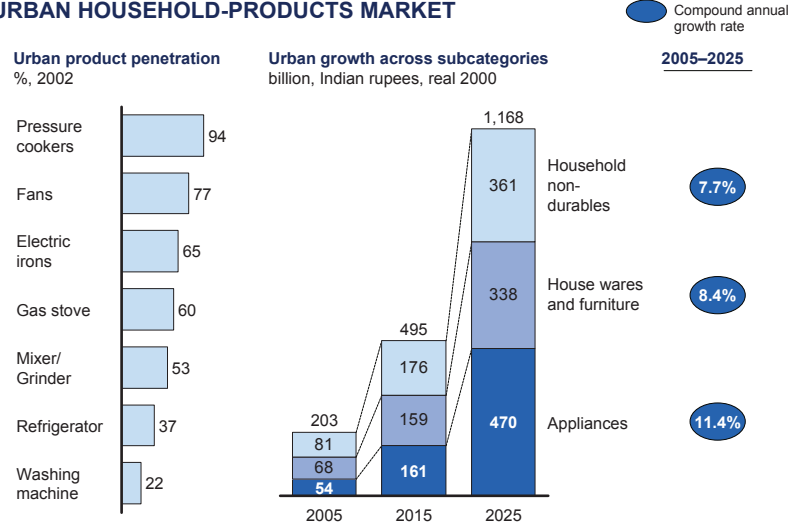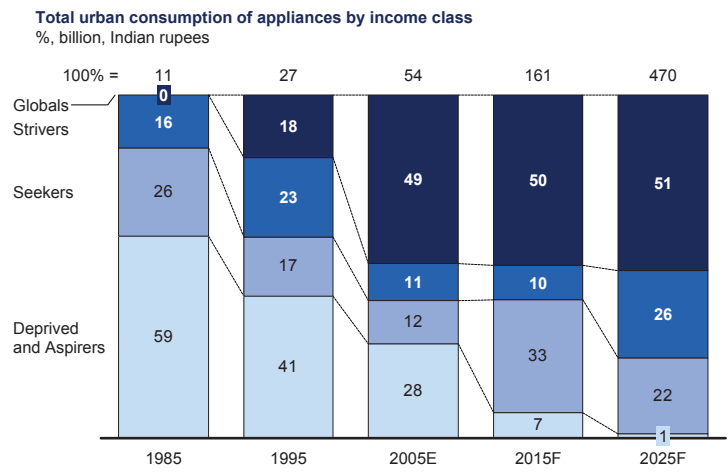

Source: MISH; MGI India Consumer Model, v1.0

Apart from rising household incomes, several other factors will shape consumer preferences and demand for appliances over the coming years. Most importantly, the need for increased convenience and comfort will be very strong among urban consumers. With continued growth in the number of urban households where both partners have jobs outside the home, the perception of appliances is shifting from luxury to necessity. Appliances are also viewed as status symbols indicating membership of the upwardly-mobile middle class.

In terms of consumer segments, urban globals dominate the appliances market. This class commands almost half of total spending on household appliances today, and is expected to maintain that share over the forecast period (Exhibit A.29). Growing at over 11 percent, total spending by the global segment in urban areas is expected to increase nine times, from an estimated 27 billion Indian

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rupees today to 240 billion Indian rupees in 2025. Apart from purchasing multiple items (e.g. several air conditioners in a single household), these consumers will increasingly demand top-of-the-range, high-quality products similar to those used by the rich across the world.

Exhibit A.29

URBAN GLOBALS WILL MAINTAIN THEIR DOMINANCE OF APPLIANCES CONSUMPTION IN URBAN INDIA OVER THE NEXT 20 YEARS

Total urban consumption of appliances by income class
%, billion, Indian rupees

Source: MGI India Consumer Model, v1.0

Rural household-products market constrained due to infrastructure

The appliances market will also be the fastest growing subcategory in the rural household-products market, growing at 6.1 percent annually over the next two decades compared with a 3–4 percent growth in other subcategories. Despite far lower product penetration in rural India however, the growth of this market is much slower than its urban counterpart. The main reason for this is the limited affordability of big-ticket products like air conditioners or refrigerators for average rural middle-class households. And factors such as infrastructure constraints (e.g. unreliable electricity supply), high distribution costs, and competition from unorganized local players selling second-hand goods will all hamper the growth of this market.

To succeed in rural markets, companies will need not only to provide products at affordable prices, but also to tailor their goods to suit the needs and tastes of rural consumers. Furthermore, they will need to establish effective distribution networks to minimize costs. A good example of a successful strategy is Videocon's

clothes washer—a washing machine without a dryer—launched specifically for rural markets. Priced at just 3,000 Indian rupees (around $66), it has registered over 100 percent growth in the last three years, pointing to the willingness of villagers to upgrade to new branded products from older second-hand models if those products are affordable. Another example of effective distribution and product customization is LG Electronics. With a view to appealing to larger rural households, the company devised a semi-automatic washing machine with double the capacity of the urban model, and with features such as a memory backup to compensate for the frequent electricity breakdowns in rural areas. Within the first three years, the product captured 15 percent of the market.[18]

Despite growth, share-of-wallet of household products remains low

Despite rapid growth in consumption of appliances in urban India, growth in the overall household-products market is slower than aggregate consumption growth across the whole country. Consequently, the share-of-wallet of household products falls slightly over the forecast period. While this fall is not significant of itself, it is interesting to note that Indian consumers already spend a much lower share-of-wallet on household products compared with other countries (Exhibit A.30).

Exhibit A.30

INDIA'S SHARE-OF-WALLET OF HOUSEHOLD PRODUCTS IS ALREADY RELATIVELY LOW, AND WILL DECLINE FURTHER
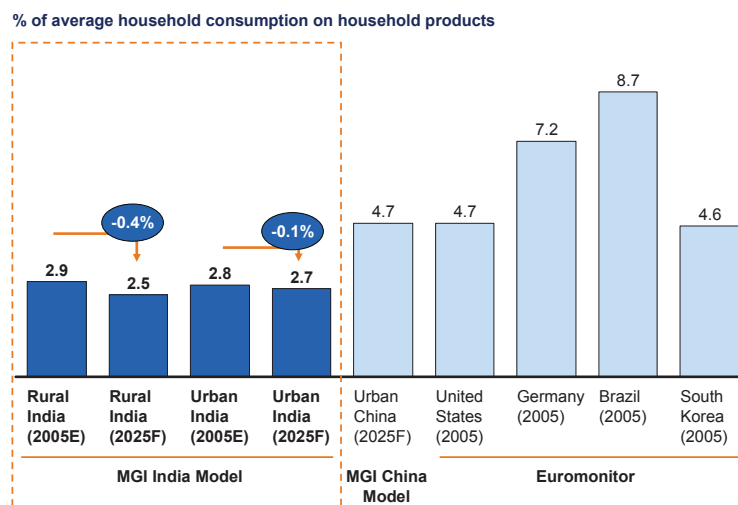
% of average household consumption on household products

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

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18 Pradeep Kashyap and Siddhartha Raut, *The Rural Marketing Book*, 2007 edition, Dreamtech Press, (http://www.wileyindia.com/).

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One of the main reasons for this is the life-cycle of household products in India. Most average Indian households purchase appliances such as washing machines or refrigerators, or even smaller products such as kitchen appliances, stoves, irons and so on, once or twice only in a lifetime. With extremely low repair costs, these products get mended whenever necessary, and consequently last many years. At the time of marriage or setting up a new household, families invest in these durables, and then get by without needing to replace them for much longer than in most other countries.

Apart from this, infrastructure constraints such as unreliable or expensive electricity will also inhibit the growth of this category significantly, when measured against its potential as compared to the growth seen in other markets.

Despite significant latent demand over the forecast period, it will not be easy for players to capture this market. The main challenge facing most entrants will be to adapt both to the preferences of Indian consumers, and to the supply-chain and distribution models. An extremely successful player in this sector is LG of Korea, which has grown rapidly in the Indian market since it first entered. Apart from value for money, aspects such as after-sales service are also extremely important for Indian consumers, and players will need to establish effective networks across the country to succeed.

A.9 COMMUNICATION

Prior to India's economic reforms, the country had a very low telecom-density of a mere 0.8 telephones per hundred people. As late as the beginning of the 1990s, there were only 8 million lines for a population of around a billion; 2.5 million people were on the waiting list. Soon after, the government realized that existing capacity would not be sufficient to fulfill the growing needs of the country's rapidly expanding economy, and the telecom sector was opened up for private participation in phases. Despite some initial problems, once the government moved away from the license-fee based model to a revenue-sharing agreement in 1999, there was no looking back.
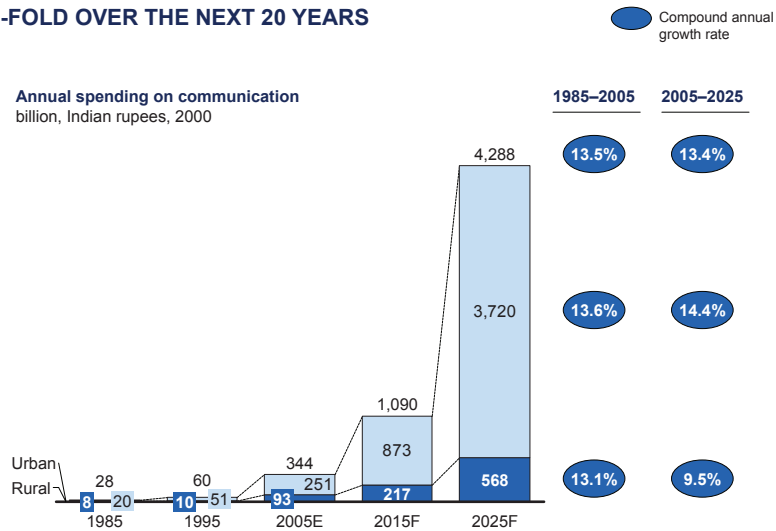
The transformation of India's telecom market has changed the face of the country forever. India is now adding a record 5 million new connections every month, more than the total number of phone lines in the entire country just a short while ago. The opening up of the sector has also been a critical enabler in the development of India's IT/BPO industry. But there is still much potential. Even after the consistently rapid growth of the past five years, the country's telecom-density stands at a mere 6.6 percent, compared with 40 percent in China and 143 percent in the United Kingdom.

High telecom growth to continue in both rural and urban areas

We expect the current momentum of explosive demand growth to continue, making communication the fastest-growing category of household consumption over the next two decades. Worth 344 billion Indian rupees ($7.5 billion) today, communication spending will grow at a very rapid 13.4 percent annual growth rate, taking it to 4,288 billion Indian rupees ($93.8 billion), or 12.5 times its current size, by 2025 (Exhibit A.31).[19]

Exhibit A.31

INDIA'S CONSUMPTION OF COMMUNICATION WILL GROW MORE THAN 12-FOLD OVER THE NEXT 20 YEARS

Compound annual growth rate

Annual spending on communication
billion, Indian rupees, 2000

	1985–2005	2005–2025
	13.5%	13.4%
	13.6%	14.4%
	13.1%	9.5%

Year	1985	1995	2005E	2015F	2025F
Total	28	60	344	1,090	4,288
Urban	20	51	251	873	3,720
Rural	8	10	93	217	568

Source: MGI India Consumer Model, v1.0

Several factors are driving this impressive growth. First, there is rapid household income growth, with an expanding middle class that has shown tremendous propensity to consume communications services in recent years. Whether a mobile worker keeping in touch with family, or an urban youth chatting with friends, communication has become a daily need for all. Apart from consumption for pleasure, communication, like transportation, is also a critical enabler for individuals to increase their participation in the economy, so this will further fuel demand. Given the country's still low penetration, falling prices, and continued improvements in technology, there remains significant scope for growth.

19 It is worth noting that, while our category of communication includes both telecommunications and postal/telegraph spending, close to 100 percent of total consumption is comprised of telecommunications. Not only is total spending on postal and telegraph services relatively small today (5 billion Indian rupees or $109 million), it is also rapidly shrinking. In this context, we will discuss only telecommunications spending in detail.

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In terms of the regional distribution of demand, both urban and rural areas will see rapid consumption growth. The urban market, currently worth 251 billion Indian rupees ($5.5 billion), will see annual growth of 14.4 percent through the next two decades, taking the market to 3,720 billion Indian rupees ($81.4 billion). Since this will be much faster than the growth in rural areas, the communications market will become even more concentrated in the future, with urban areas accounting for 87 percent of total consumption by 2025, and accounting for 83 percent of cumulative consumption over the next 20 years.

While overall communications-market growth will be led by urban areas, rural spending growth of 9.5 percent over the next 20 years is still notable. We estimate that communications will be the fastest-growing subcategory of rural consumption as millions of households rise out of poverty and enter the ranks of aspirers. While urban markets become more penetrated and competitive, the rural market will provide the next wave of consumers, and rural communication consumption will grow six-fold over the next 20 years, from 93 billion Indian rupees ($2 billion) today to 568 billion Indian rupees ($12.4 billion) in 2025.

Upper- income classes to dominate total consumption

In terms of the distribution of consumption across income brackets, we expect communication spending to be dominated by the upper-income classes (Exhibit A.32). Globals and strivers already account for 45 percent of total consumption today, despite the fact that these two classes account for only 2 percent of the country's households. This concentration is especially stark when compared with other categories, where spending is more widely distributed throughout the income pyramid. This may seem counter-intuitive, since most of the current market growth seems to be driven by new subscribers who are from lower-income classes. However, it is important to note that despite higher volumes, consumption among the lower classes is far lower in per-capita terms. Upper-income households, on the other hand, spend two to five times more than even the lower middle class. Over the next 20 years, significant growth in the numbers of upper-income households means that they will grow to dominate communication consumption even further. Based on our model, globals and strivers together will account for almost three-quarters of communication spending in 2025, and seekers the other one-quarter. Deprived households will remain very minor consumers in this segment.
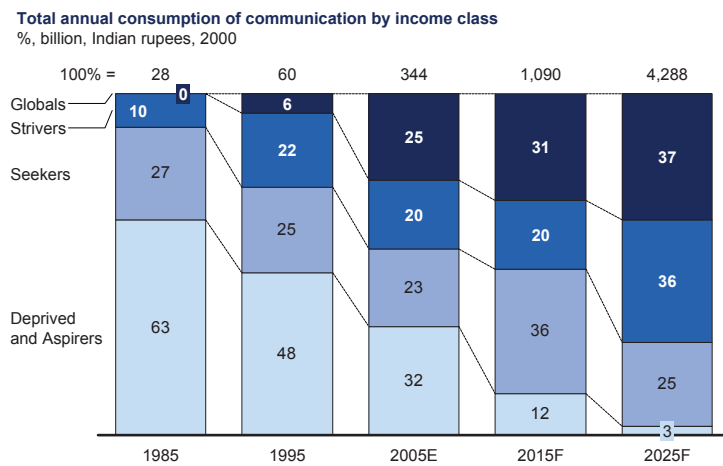
Communication to take increasingly large share of overall consumption

Communication will also become an increasingly large category in terms of overall consumption. The share-of-wallet of communication is 3.2 percent today, and

this is expected nearly to double to reach 6.2 percent by 2025. This puts India in line with some benchmark countries (such as Taiwan at 5.9 percent) but ahead of most others. In comparison with China, however, Indian households actually spend less on communications (Exhibit A.33).
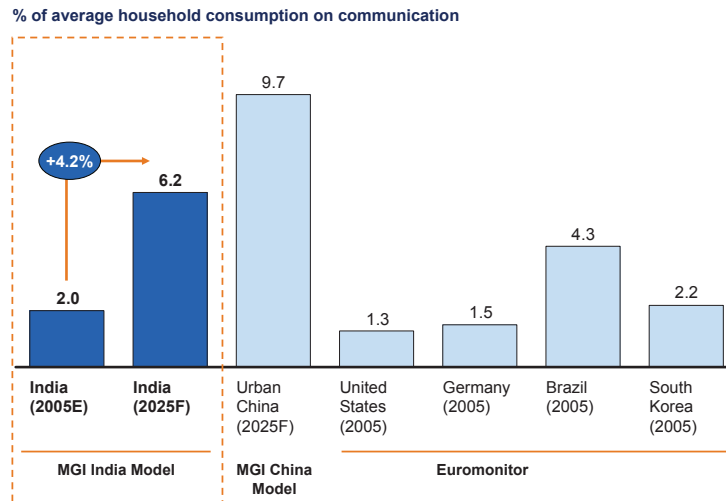
Exhibit A.32

CONSUMPTION OF COMMUNICATION WILL BE SPREAD BETWEEN GLOBALS, STRIVERS, AND SEEKERS

Total annual consumption of communication by income class
%, billion, Indian rupees, 2000

100% =	28	60	344	1,090	4,288

Globals — 0 (1985), 6 (1995), 25 (2005E), 31 (2015F), 37 (2025F)

Strivers — 10 (1985), 22 (1995), 20 (2005E), 20 (2015F), 36 (2025F)

Seekers — 27 (1985), 25 (1995), 23 (2005E), 36 (2015F), 25 (2025F)

Deprived and Aspirers — 63 (1985), 48 (1995), 32 (2005E), 12 (2015F), 3 (2025F)

| 1985 | 1995 | 2005E | 2015F | 2025F |

Source: MGI India Consumer Model, v1.0

Exhibit A.33

INDIA'S SHARE-OF-WALLET OF COMMUNICATION IS EXPECTED TO NEARLY DOUBLE BY 2025

% of average household consumption on communication

India (2005E): 2.0
India (2025F): 6.2   (+4.2%)
Urban China (2025F): 9.7
United States (2005): 1.3
Germany (2005): 1.5
Brazil (2005): 4.3
South Korea (2005): 2.2

MGI India Model | MGI China Model | Euromonitor

Source: Euromonitor; MGI China Consumer Demand Model, v2.0; MGI India Consumer Demand Model, v1.0

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B. Detailed description of the MGI India Consumer Demand Model

As described in chapter 1, our forecast of Indian incomes and spending patterns is the product of an econometric model constructed using a proprietary database integrating historical household survey, macroeconomic, and demographic data. This approach enables us to ground our projections of household spending and consumption behavior within the broader Indian context of the Indian economy.
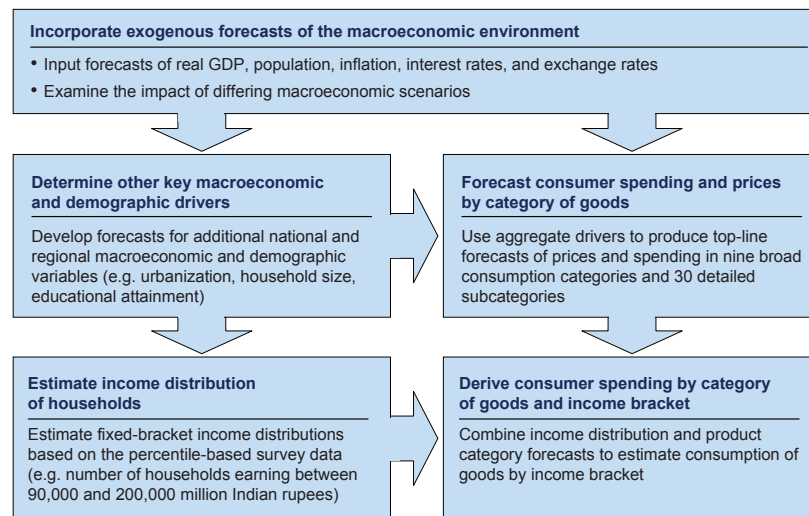
This appendix provides an overview of our modeling approach and our data sources (Exhibit B.1). We will first examine India's macroeconomic context and the key drivers of our forecast. We will then discuss our calculations for endogenously determined variables, highlight the methodology used to derive fixed-bracket income distributions, and review the data employed. The appendix has six sections, as follows:

- **Macroeconomic and demographic context**—provides background on the macroeconomic and demographic inputs we employ as exogenous inputs.

- **Model-determined demographic drivers**—develops forecasts for endogenously determined economic and demographic variables.

- **Income-distribution drivers**—explains how we develop estimates of household size, household employment, and income distributions by decile.

- **Consumption by category and its distribution**—describes how we model consumption by category and the distribution of that consumption across income deciles.

- **Fixed-bracket transformation**—explains how we develop estimates of the distribution of income and consumption by fixed-bracket income classes.

- **Data sources and methodology**—explains the data sources for the study, and methodology employed to ensure consistency in the development of the historical database.

Exhibit B.1

THE MGI INDIA CONSUMER DEMAND MODEL HAS FIVE MAJOR BLOCKS

Incorporate exogenous forecasts of the macroeconomic environment
- Input forecasts of real GDP, population, inflation, interest rates, and exchange rates
- Examine the impact of differing macroeconomic scenarios

Determine other key macroeconomic and demographic drivers

Develop forecasts for additional national and regional macroeconomic and demographic variables (e.g. urbanization, household size, educational attainment)

Forecast consumer spending and prices by category of goods

Use aggregate drivers to produce top-line forecasts of prices and spending in nine broad consumption categories and 30 detailed subcategories

Estimate income distribution of households

Estimate fixed-bracket income distributions based on the percentile-based survey data (e.g. number of households earning between 90,000 and 200,000 million Indian rupees)

Derive consumer spending by category of goods and income bracket

Combine income distribution and product category forecasts to estimate consumption of goods by income bracket

Source: MGI India Consumer Demand Model, v1.0

MACROECONOMIC AND DEMOGRAPHIC CONTEXT

Our forecasts of the distribution of income and spending in urban and rural India take as exogenous the evolution of the macroeconomy. We employ a "top-down" modeling framework in which we first set the path for GDP and its components, demographic trends, prices, and other key variables. We then develop our forecasts for household income and spending within this context.

The primary source for our macroeconomic projections is Oxford Economics (OE), formerly Oxford Economic Forecasting. The OE projections are developed using its proprietary *Global Model* which is made up of 24 industrialized-country models, 20 emerging-market country models (of which India is one), six trading blocs providing top-line macroeconomic variables for an additional 39 countries, and a world bloc which calculates global aggregates. The country models interlink fully via trade, prices, exchange rates, and interest rates and, taken together with the other blocs, they provide world coverage. OE offers a ten-year projection with a quarterly frequency, providing us with input through 2015 (2016 on an Indian fiscal-year basis). Working with OE, MGI developed a trend extension of the OE GDP forecasts through 2025, and validated certain aspects of the forecast by means of our own data and perspective.

We take as inputs OE's projections for the composition of real GDP, including both the sectoral composition of output and the components of final demand; forecasts of fiscal and monetary policy; the evolution of prices; and forecasts for the current account.[1] We supplement this with Global Insight's forecasts of relative prices by output sector. Finally, we use population forecasts from the United Nations to underpin our long-term demographic forecasts. The following section provides a description of the outlook for each of these over the forecast period.

GDP growth

In the decade following the 1991 reforms, real GDP grew at a compound average annual rate of 5.8 percent before accelerating to 8.4 percent in 2002–2005. Market liberalization, changes in technology, and a steadily growing pool of literate and educated workers were important factors driving this growth. As discussed in chapter 1, the combination of these specific changes and their timing produced a growth model that emphasizes service-sector-led growth—in contrast to China, Indonesia, and India's other Asian peers, where manufacturing has played a greater role.

Service-sector growth has also helped drive the expansion of India's international trade and, more generally, helped increase disposable incomes because of the relatively higher wages that this sector pays. Increases in income have translated into accelerating consumption and rapid expansion of the domestic market. The emergence of domestic consumption as an important driver of growth is one of the striking characteristics of the changing Indian economy.

Driven by this virtuous circle of service and consumption growth, we expect real GDP to increase 7.3 percent a year going forward, which translates into a 5.9 percent annual increase on a per-capita basis. As discussed in chapter 1 and shown in Exhibit 1.11, this projection is in line with the consensus view of long-term trend growth.

Growth by sector

Services-sector output has dominated growth in the Indian economy since well before the reforms prompted by the 1991 balance-of-payments crisis. Between 1981 and 1991 services grew at 6.8 percent annually, a full percentage point higher than industrial-sector growth. As a result, services were already the largest sector of the economy when India embarked on its latest and most far-reaching era of economic reforms in 1991. The sector grew at an annual rate of 7.8 percent in 1991–2001, and then at a rapid 9.3 percent between 2001 and 2005, reaching 55 percent of Indian output by 2005.

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1 For this report, we use the OE August 2006 long-term forecast.

Going forward, we expect real growth in the services sector to edge down from its recent pace to 8.4 percent over the next ten years, before slowing further to 7.9 percent in 2015–2025. By the end of the forecast period, services will account for nearly 65 percent of output.

We also see growth in the agricultural sector accelerating slightly to an annual rate of 3.1 percent, which is more rapid than that seen in recent years. However, as discussed in chapter 4, we believe that this estimate is reasonable due to a variety of factors affecting agricultural value added, yields, and price realization.

Sustaining service-led growth

Several observers have questioned whether India can sustain the service-led growth model that has fuelled its GDP expansion during the past two decades. Given our top-line forecasts of labor-force growth as well as sector growth, we wanted to understand the scope for continued gains in the services sector. Although no consistent time-series information on employment by industry is available, we were able to use historical employment surveys from the NSS to deconstruct sector growth into labor-productivity growth and changes in employment.[2] Having estimated historical labor-productivity growth, we then calculated which combinations of productivity and employment growth would be consistent with our forecasts of sector output.

We constructed two simplified labor-productivity scenarios. In the first, we assumed that the agriculture and industry sectors absorb the majority of employment growth, so that service-sector productivity growth needs to accelerate. In the second, we assumed that service-sector-productivity growth stalls and employment increases, so that productivity growth elsewhere needs to accelerate. These two scenarios lay out extreme "all or nothing" cases that allow us to define the range of possible combinations of labor productivity growth and employment growth required to sustain our GDP projections. Both scenarios assume that the capital employed per worker remains constant. Neither of these scenarios will occur, but they illustrate the two extremes of all the possible combinations of employment and labor-productivity growth, that would be required to sustain the service-sector model.

In the first scenario, we assume that labor-productivity growth in agriculture and industry stalls at its current rate. If this happens, employment growth in these sectors needs to accelerate in order to meet projected output growth, and this would effectively limit the workers available to the services sector.

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2 To perform this analysis, we used data from the 1993 and 2001 surveys.

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We estimate that services-productivity growth would need to accelerate by approximately 2.4 percentage points a year above the 1993–2001 rate of 5.2 percent to meet its projected output growth under this scenario.

In the second scenario, we assume that labor-productivity growth in the services sector stalls at its current rate. If this happens, additional growth in the service sector must come entirely through labor-force expansion. This, in turn, restricts the incremental labor force available to the agriculture and industrial sectors. Again, the difference between labor-force growth and the top-line forecasts would need to be met through increased productivity in these sectors. In this case, productivity growth in agriculture would need to rise by 0.3 percentage points to meet the forecast, while productivity growth in industry would need to rise by 2.9 percentage points (Exhibit B.2).

To understand whether outcomes within the range of these two extreme scenarios are possible, we examined the results of an earlier sector-by-sector analysis of the Indian economy conducted by MGI.[3] That study found that a combination of sector-specific reforms, adoption of best practices, and increases in competitive intensity would result in substantial productivity gains in each sector. Potential gains in the set of service subsectors analyzed were enough to justify productivity increases of nearly 8 percent a year, versus a 7.6 percent growth rate required by scenario 1 or 5.2 percent under scenario 2. Potential productivity gains in the industrial sector, which has yet to undergo the same degree of liberalization, are likely to be similar or even larger, versus the gains in our two scenarios of 3.3 percent and 6.2 percent respectively. While this may seem large by industrialized-country standards, other work by MGI has shown that growth in private corporate-labor productivity across all sectors was 9.9 percent annually between 1994 and 2002, so such gains are not unprecedented in the Indian context.[4]

As we have said, neither of these extreme scenarios is likely to develop. Rather we expect productivity gains across all three sectors, and a continued shifting of employment from agriculture and manufacturing into services. Thus agricultural-and manufacturing-output growth will largely be productivity-led, while faster growth in services will result from a combination of productivity and employment gains. In addition, we expect the capital/labor ratio to continue to increase (as it has over the past two decades), rather than remaining constant
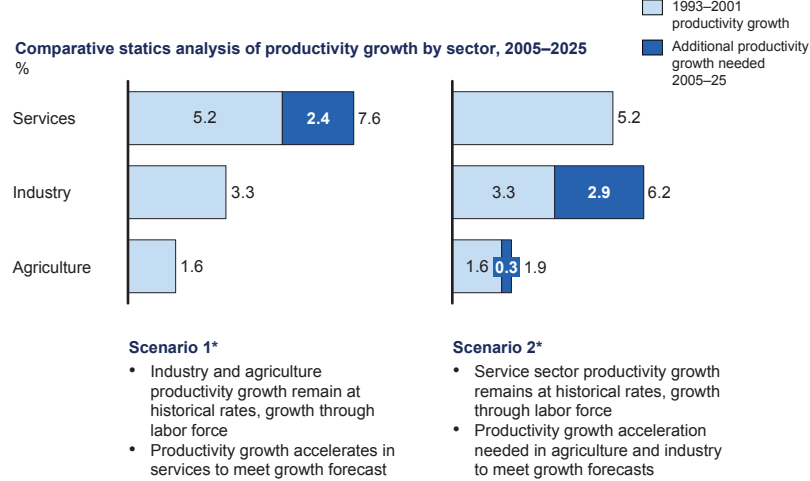
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3   *India: The Growth Imperative*, McKinsey Global Institute, September 2001, (www.mckinsey. com/mgi/publications/india.asp).

4   *Accelerating India's Growth through Financial System Reform*, McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/india_growth/index.asp).

as shown in our scenarios, further boosting output. Hence our exercise reveals that India's likely growth in productivity, labor, and capital provide more than sufficient scope for the GDP path assumed in our forecast.

Exhibit B.2

HOW SUSTAINABLE IS INDIA'S SERVICES-LED GROWTH?

Comparative statics analysis of productivity growth by sector, 2005–2025
%

Legend:
- 1993–2001 productivity growth
- Additional productivity growth needed 2005–25

Sector	Scenario 1	Scenario 2
Services	5.2 + 2.4 = 7.6	5.2
Industry	3.3	3.3 + 2.9 = 6.2
Agriculture	1.6	1.6 + 0.3 = 1.9

Scenario 1*
- Industry and agriculture productivity growth remain at historical rates, growth through labor force
- Productivity growth accelerates in services to meet growth forecast

Scenario 2*
- Service sector productivity growth remains at historical rates, growth through labor force
- Productivity growth acceleration needed in agriculture and industry to meet growth forecasts

* For both scenarios we assume a constant capital/labor ratio, and take forecasts of sector output and labor force growth as given.
Source: MGI India Consumer Demand Model, v1.0; Mckinsey calculations

Consumption and fixed investment

In the decade prior to the 1991 reforms, private consumption grew at an annual rate of 4 percent and was highly volatile. Household income and consumption depended, to a large extent, on the agricultural sector (directly and indirectly), which was susceptible to the vagaries of the monsoon season. However, the expansion of the service and industrial sectors over the past 15 years has helped stabilize income and consumption growth. Since the 1991 reforms, consumption growth has increased steadily—from an annual rate of 4.9 percent during the first post-reform decade to 6.1 percent annually over the past three years.

As incomes continue to rise, the pace of annual consumption growth will increase to more than 7 percent. In the long-term, real consumption will stabilize at just over 60 percent of GDP—slightly higher than its rate today.

Spending on fixed investment has also been an important driver of GDP growth. Over the past 25 years, real investment has grown about 2 percentage points more quickly than the overall economy. Consequently, fixed investment as a share of GDP rose from 20 percent in 1980 to 27.6 percent in 2005. Although

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investment rates in India are by no means low, they have not been as high as in many other Asian countries during their development phase because India's services-led growth model is not as asset-intensive as the manufacturing-led models elsewhere in Asia.

During more recent years, real fixed investment increased at an impressive rate of 13 percent per year in 2001–05. Higher overall growth and a loosening of credit conditions by the Reserve Bank of India (RBI) have both contributed to this investment spurt. Recent efforts to tighten credit by the RBI appear to be having an impact—investment growth slowed marginally in 2005, and continued to decelerate in 2006. OE forecasts that the annual rate of investment growth will stabilize at just below 8 percent over the coming decades.

Fiscal policy

India's fiscal deficit now hovers at around 7.6 percent of GDP. This represents some progress since 2001, when it reached 9.9 percent of GDP, but is still above the 1995 level of 6.5 percent. Overall, these movements do not constitute a material change, since the fiscal deficit has remained in this range for the past 25 years.

In 2003 the Fiscal Responsibility and Budget Management Act (FRBMA) decreed that government must restrict the deficit to 3 percent of GDP or less by 2007. However, after the May 2004 election, government allowed this deadline to slip to 2008, and the projected deficit for 2006 is still around 7.5 percent. Despite the government's stated intention to take control of the deficit, we assume slow progress in deficit reduction because there is little internal or external pressure to enforce the changes required in order to achieve a large reduction. Externally, high international reserves, low external debt (more than 95 percent of Indian-government debt is held domestically), and continued capital controls minimize the possibility of a recurrence of the 1991 financial crisis. Internally, any more dramatic progress on deficit reduction would require controversial changes to the way in which public-sector enterprises are subsidized and financed—an unlikely scenario.

In our forecast, we assume that the Indian government will continue to run a substantial deficit, but that the deficit will stabilize at approximately 6 percent of GDP. Our forecast allows for expenditure growth to continue exceeding revenue growth, albeit at a slower pace. Relative to GDP, the government will account for a smaller share of economic activity, reflecting the fast pace of growth in the private sector (Exhibit B.3).

Exhibit B.3

GOVERNMENT SPENDING AND DEFICIT GRADUALLY DECLINE AS A PROPORTION OF GDP
% of GDP

Expenditures (left scale)
Revenues (left scale)
Deficit (right scale)

Government expenditures and revenues*   Government budget deficit
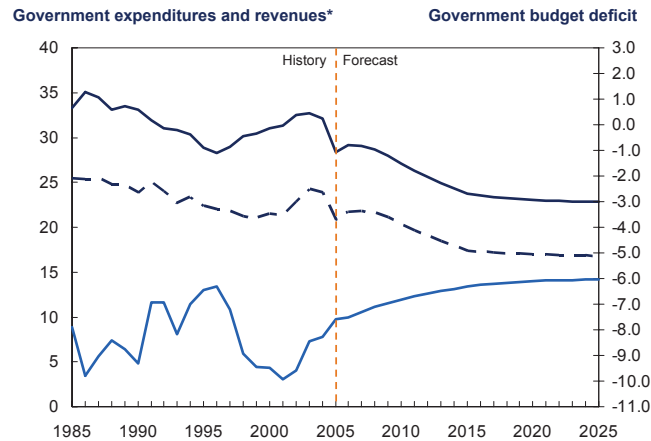
* Government expenditure figures are available through 2005.
Source: MGI India Consumer Demand Model, v1.0

Exchange-rate policy

Over the past five years, India's exchange rate has remained stable at around 45 Indian rupees to the dollar. In the face of steady capital inflows into India, the RBI has intervened in the foreign-exchange market to prevent the rupee appreciating and thus damaging export growth. RBI's twin objectives of keeping the rupee stable and at the same time restraining domestic-credit creation have obliged it to engage in large-scale sterilization operations in domestic-credit markets. Without sterilization, RBI's strategy of selling the rupee in order to hold down its value would result in significant growth in domestic credit, and consequently re-ignite inflation. Sterilization operations have caused a surge in the stock of net foreign reserves, which reached $132 billion by the end of 2005.[5]

We expect the recent rapid deterioration in the trade balance to put pressure on the rupee over the forecast period. The current-account balance fell from a surplus of 1.8 percent of GDP in 2003 to a deficit of 1.6 percent in 2005. The decline continued in 2006, but we expect the current account to start recovering in 2007 as oil prices decline (Exhibit B.4). Our forecast calls for a steady but small depreciation of the rupee of approximately 1.5 percent a year, consistent

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5   As noted in *Accelerating India's Growth Through Financial System Reform*, McKinsey Global Institute, 2006, (www.mckinsey.com/mgi/publications/india_growth/index.asp), sterilization has not been the only motivation for increasing reserves. Accumulating sufficient reserves to mitigate exchange-rate fluctuations was one of the preconditions for capital-account convertibility identified by a 1997 government committee assigned to examine the issue.

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with an adjustment necessary to bring the deficit on the current account back roughly in to balance. By 2025 the exchange rate is forecast at approximately 60 rupees to the dollar (Exhibit B.5).
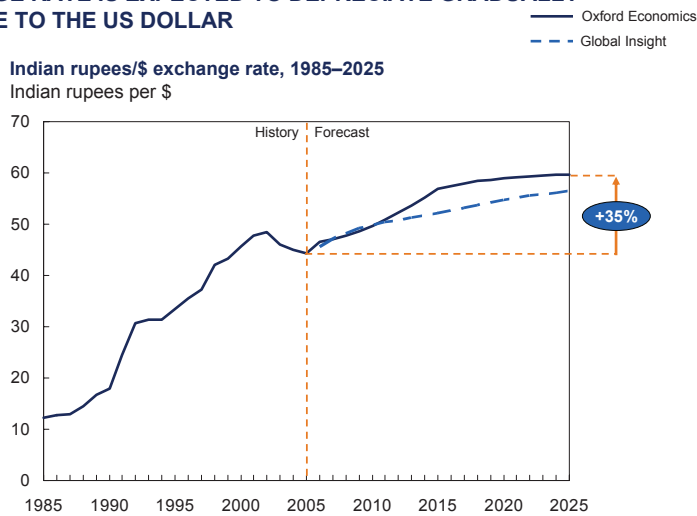
Exhibit B.4

CURRENT ACCOUNT DEFICIT IS EXPECTED TO RETURN TO BALANCE

Current account relative to GDP, 1985–2025
%
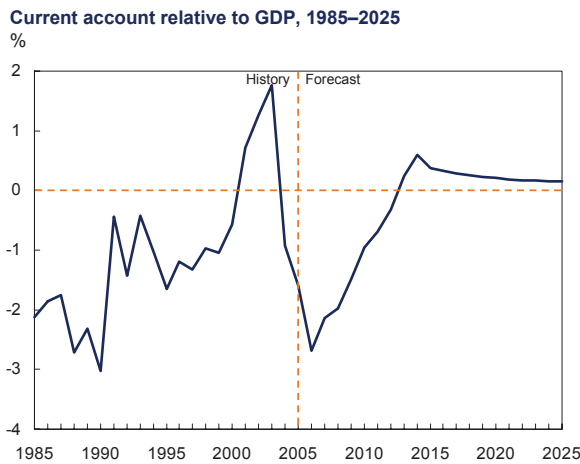
Source: MGI India Consumer Demand Model, v1.0

Exhibit B.5

EXCHANGE RATE IS EXPECTED TO DEPRECIATE GRADUALLY RELATIVE TO THE US DOLLAR

— Oxford Economics
- - - Global Insight

Indian rupees/$ exchange rate, 1985–2025
Indian rupees per $

Source: Global Insight; Oxford Economics; MGI India Consumer Demand Model, v1.0

Inflation

Double-digit inflation was a regular occurrence prior to 1991. Since India's economic reforms began to take hold, inflation measured by the consumption-price deflator has fallen steadily from 12.8 percent in 1991 to 3.3 percent in 2004. In 2005 and 2006 the spike in world oil prices increased inflation but, in the medium term, we expect a decline in fuel prices and continued modest tightening of monetary policy to moderate price increases. Over the longer term, our base case shows consumer inflation settling at approximately 4 percent per year.

In addition to market-based reforms, RBI's commitment to fighting inflation has played an important role in increasing price stability. In its *Report on Trends and Progress of Banking in India 2005–06*, RBI noted its "resolve to act in a timely and prompt manner on any sign of heightened inflationary expectations" and its recent tightening has provided evidence of that resolve.[6] RBI continues to adapt to domestic and international sources of inflationary pressure, and we assume that it will maintain its focus on price stability going forward.

Real interest rates

The real lending rate has fallen from 9.2 percent in 2000 to 4.9 percent in 2005. As interest rates have declined and India has begun a gradual modernization of its financial system, there has also been rapid growth in domestic credit. During this period, non-food bank-credit growth expanded at a compound annual rate of 27 percent, compared with 19 percent during the post-1991 period. This trend has fueled inflationary concerns at RBI, which noted recently that "demand for bank credit continued to remain high in view of strong macroeconomic growth". This has prompted RBI to take steps to restrain domestic-credit growth through higher interest rates as well as administrative measures such as the cash reserve ratio (CRR).[7]

While RBI has been emphasizing the role of interest rates in managing monetary policy, administrative distortions of interest-rate signals have remained. RBI reduced the statutory minimum for the CRR from 15 percent of net demand and time liabilities in 1992 to approximately 3 percent in 2006, but the actual CRR remains at approximately 5 percent. On top of the CRR, banks must effectively hold 25 percent of their deposits in government securities via the Statutory Liquidity Ratio (SLR). In the immediate post-1991 period, RBI was able to lower the SLR from 38.5 percent in 1992 to the current minimum of 25 percent. By

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6   *Report on Trend and Progress of Banking in India* 2005–06, RBI

7   The CRR requires commercial banks to hold a minimum share of their net time deposits in cash. RBI can vary the CRR within a band set by the government.

requiring banks to hold a greater share of their deposits in government securities than in other instruments, the SLR reduces the effectiveness of the interest-rate mechanism. In practice, banks end up exceeding the SLR because of other distortions in the financial system, such as targeted lending to priority sectors. At the end of March 2006, more than 31 percent of bank holdings were in SLR-approved securities.[8]

Despite these and other constraints on the financial system, RBI has made progress in other areas; interest rates have been deregulated, and the use of open-market operations through vehicles such as the Liquidity Adjustment Facility has expanded. Much remains to be done, but RBI has signaled that enhancing the allocation of capital via market-mechanisms is a priority.[9] As reforms to the financial sector proceed, interest-rate mechanisms will begin to play a more dominant role than administrative measures. Given the continuing need to finance sustained fiscal deficits and inflation rates near 4.0 percent, we expect that real interest rates will rise to approximately 6.5 percent (Exhibit B.6).

Exhibit B.6

**REAL INTEREST RATES ARE EXPECTED TO STABILIZE
AT APPROXIMATELY 6.5 PERCENT OVER THE FORECAST PERIOD**

Real interest rates, 1985–2025
Prime lending rate, adjusted for consumer-price inflation, %
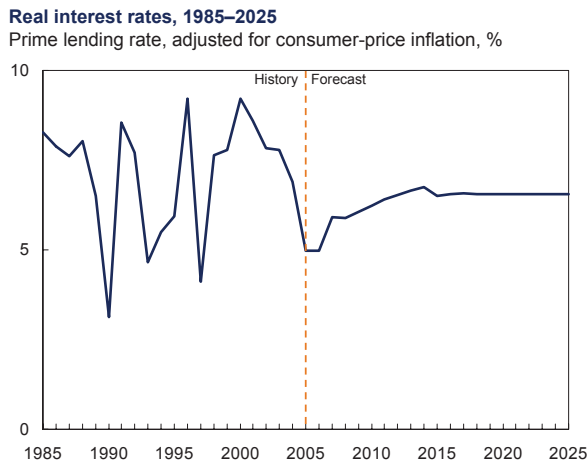
Source: MGI India Consumer Demand Model, v1.0

Working-age population

We use UN population forecasts to drive our estimates of demographic changes over the next two decades. The population will increase at a rate of 1.3 percent a

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8   This figure is lower for private banks than it is for state-owned banks.

9   *Report on Trend and Progress of Banking in India 2005–06*, RBI, p. 11

year over this period, so that India is expected to have 1.4 billion citizens by 2025. The demographic profile of India will transform rapidly over this time to become dominated by a young labor force entering its prime working years. In absolute terms, the number of children under 15 will increase steadily for the next decade, before beginning a gradual decline. In relative terms, the child dependency ratio will fall from 65 percent in 1985 to 36 percent in 2025. However, falling mortality rates will tend to counteract the impact of this on the overall dependency ratio over the next two decades as the proportion of elderly to working-age adults will increase from 8 percent to 12 percent. The overall effect of demographics on India's labor force is that the number of working-age adults will increase by 40 percent, or 270 million, over the course of the forecast.

MODEL-DETERMINED ECONOMIC AND DEMOGRAPHIC DRIVERS

Using the top-line macroeconomic drivers from OE and high-level demographic variables from the UN, we forecast a number of additional national and regional demographic variables, which we then use as drivers in our forecast of the distribution of income and consumption by spending category.
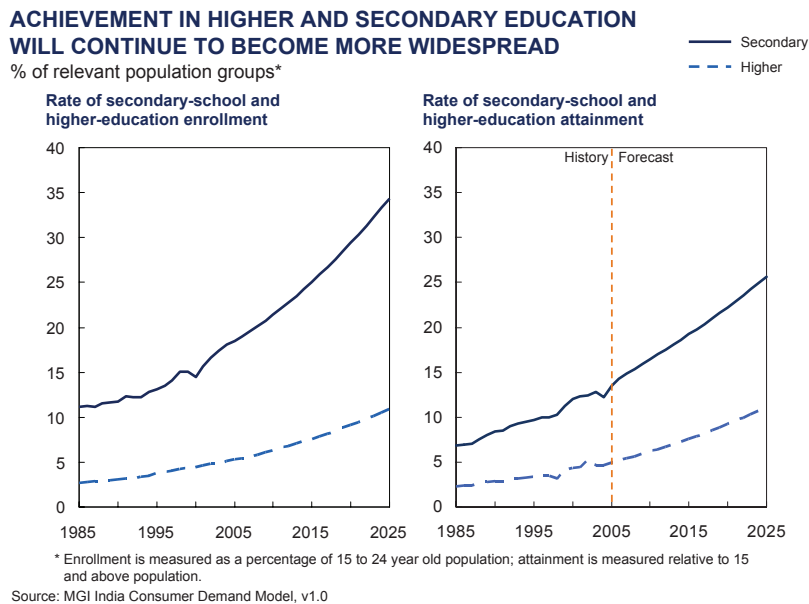
Educational enrollment and attainment

Public expenditure on education is an important driver of secondary- and higher-education enrollment rates (measured as the number of enrolled students relative to the population group aged 15–24). Historically, this spending has been increasing as a share of GDP, although it declined during the austerity period that followed the 1991 reforms. Since then expenditures have recovered to more than 4 percent of GDP. As the number of school-age children continues to rise, and as the major challenge in education transfers from literacy towards primary and secondary education, we expect that public spending on education will continue to rise to 5.6 percent of GDP. Illiteracy rates fell from 55 percent to 38 percent in 1985–2005, and we forecast a decline of another 20 percentage points by 2025.

Secondary-school enrollment rates will accelerate in the coming years, driving up attainment rates. Secondary-school attainment is an important driver of the rural-income distribution—higher levels of attainment push up household income. Furthermore, it is a prerequisite for higher-education attainment, which is itself an important indirect driver of urban and national income distributions. By 2025 nearly 26 percent of the population aged over 15 will have a secondary education as their highest level of attainment—nearly double the 2005 rate (Exhibit B.7). Urban attainment rates will continue to be higher than those in rural areas,

but the rate of growth will be more rapid in rural India. The relative growth of rural attainment rates reflects a lower starting point in these areas, as well as increasing migration to urban areas. By 2025 secondary-education attainment in urban areas will be 30 percent compared with 22 percent in rural areas.

Exhibit B.7

ACHIEVEMENT IN HIGHER AND SECONDARY EDUCATION WILL CONTINUE TO BECOME MORE WIDESPREAD
% of relevant population groups*

Secondary
Higher

Rate of secondary-school and higher-education enrollment

Rate of secondary-school and higher-education attainment

History | Forecast

* Enrollment is measured as a percentage of 15 to 24 year old population; attainment is measured relative to 15 and above population.
Source: MGI India Consumer Demand Model, v1.0

Higher-education attainment will also increase over the forecast period as higher-education enrollment rates, government spending on education, and secondary-education attainment rise. Higher-education attainment is a key driver of urban and national income distributions. By 2025 we forecast the national higher-education attainment rate will more than double to 11 percent, while that of urban areas will rise by 9 percentage points to 21 percent in 2025. The pace of increase in rural areas is more rapid, but the attainment rate will remain much smaller—5 percent in 2025, compared with 2 percent in 2005.

Labor-force participation

Labor-force participation is another important driver of national income distribution. We define this as people aged 15–64 who are economically active, whether employed or unemployed. We forecast participation rates by gender separately, and then compute the overall rate as a weighted average using the male and female shares of the 15–64 population. Overall labor-force participation declined 6 percentage points to 63 percent in 1985–2005. We expect the decline in participation over the past two decades to reverse over the forecast period, with

rising participation of women in the workforce pushing the overall labor-force participation rate to 66 percent by 2025. Male participation continues a steady, but slow, decline to 83 percent in 2025 from 88 percent in 2005, while female labor participation, driven by increasing education, increases by just over 10 percentage points over the forecast period to 48 percent.

Urbanization

We define the urbanization rate as the proportion of the population living in urban areas. As discussed in chapter 1, the definition of urban areas varies widely across countries, and we have chosen to use the official definition supplied by the Indian census. The rate of urbanization is an important driver for a number of key variables in the model. First, urbanization drives the division of income between urban and rural areas; a greater degree of urbanization implies more income captured by urban households and therefore a larger relative urban consumer market. Second, the rate of urbanization helps determine the size of urban households, and therefore their number. A higher urbanization rate increases urban incomes, and this lowers household size and increases the number of households. Third, urbanization affects the distribution of income in urban areas. A higher urbanization rate increases dispersion in the income distribution, as an increased influx of workers from rural areas fosters competition at the lower end of the distribution range, holding back wage gains. At the same time, higher urbanization raises the overall level of income in urban areas, and increases the incomes of middle- and upper-class urban residents. Finally, a higher urbanization rate implies increased education levels because educational attainment tends to be higher in urban areas.

We expect the urban population to continue increasing steadily at an annual rate of 2.5 percent over the next 20 years. As a result, almost 37 percent of the population will live in urban areas by 2025. While rapid, the annual increase in urban population has actually slowed over the past 20 years, reflecting a slowdown in overall population growth. Over the next two decades the expansion of the urban population will continue, in spite of an ongoing slowdown in population growth. As we discussed in detail in chapter 3, the expansion of industry and service activities, which tend to be concentrated in urban areas, will serve to attract more workers to those areas. Likewise educational improvements will expand opportunities for workers to obtain higher-paying jobs. Again, these tend to be concentrated in urban areas.

Households and household size

The number of persons per household is determined by dividing the overall population by the number of households. In 1985–2005 average household size at

the national level fell from 5.7 persons to 5.4. We expect this trend to continue at a similar rate, with average household size reaching 5.1 by 2025. This drop in average household size largely reflects a reduction in urban household size from 5.1 to 4.6 due to accelerating income growth. Meanwhile, the size of the average rural household remains stable.

Increases in per capita disposable income exert a powerful influence on household size, as higher incomes make establishing a new household more attainable. In addition, as we have noted, household size is an important determinant of labor-force participation, and consequently of national-income distribution and spending on certain consumption categories.

INCOME-DISTRIBUTION DRIVERS

To develop forecasts of category-by-category spending across income classes, we first projected the decile distributions of key national, urban, and rural economic and demographic drivers. This enabled us to translate our national perspectives on macroeconomic and demographic drivers into forecasts of disposable income and household spending by decile, by region, and by decile by region.[10]

To develop our forecast of decile distributions, we used pooled, cross-section time-series techniques. This allowed us to leverage a combination of annual household surveys back to 1985 and national time-series data. In all cases, we estimated the income-decile-specific variables relative to their total aggregate. For example, we forecast average household size by income decile in urban areas relative to average urban household size. This approach helped us ensure that the decile estimates remain bounded and consistent with our overall macroeconomic scenario. As discussed later in this chapter, this method is also deployed for our synthetic-equation approach.

The geographic component of the model introduces an additional layer of complexity. To ensure consistency across urban and rural regions, we first estimated all-India aggregates, and then urban and rural aggregates, subject to the all-India constraint. Once we had regional totals, we estimated decile distributions for each region.[11]

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10 India's National Council of Applied Economic Research (NCAER) tabulated the underlying data for the Marketing Information Survey of Households (MISH) and National Sample Survey (NSS) data to provide information on the less than 10, 10–20, 20–30, 30–40, 40–50, 50–60, 60–70, 70–80, 80–90, and 90 percent and above deciles.

11 Unlike the fixed-bracket distributions below, the decile cutoffs will be different for each region, and therefore no additional normalization for consistency is required.

Distribution of educational attainment

The decile distribution of secondary- and higher-educational attainment is an important driver of the distribution of income and labor-force participation. Relative secondary-education attainment rises with overall enrollment and increases in the school-age population. Similarly, higher-education attainment increases with higher-education enrollment and the school-age population.

Distribution of household size

The decile distribution of household size is an important driver of the distribution of consumption and the distribution of labor-force participation. Relative disposable income is the key driver of the household size of any decile relative to the average. Relative household size falls as relative income increases across deciles.

Distribution of household labor-force participation

The labor-force participation of households is a driver of income distribution. Over the forecast period, we determine the labor-force participation for each decile by its relative household size (relative to overall average household size) and its relative secondary-educational attainment rate (relative to average secondary education attainment rate).

Distribution of household personal and disposable income

The distribution of personal income across deciles is the underlying determinant of the decile and fixed-bracket distribution of disposable income. It is therefore the primary driver of the income and consumption distributions in our modeling framework. Different factors in each region drive personal income by decile, measured relative to the regional average:

- Education is a driver in all regions, but relative secondary education drives rural distribution, while relative higher education drives national and urban distributions;

- The ratio of agricultural to non-agricultural output, a proxy for changing income opportunities in the economy, affects national and rural income distributions;

- Change in real national wealth per household drives urban-income distribution. Real wealth includes net capital stock, stock of money, and stock of net foreign assets;

- Relative labor-force participation is a driver of national distribution.

Disposable income is, by definition, personal income less taxes and transfers. We use the overall effective tax rate for all deciles as a proxy for taxes and transfers, and calculate real disposable income at all regions with the consumption-price deflator.

CONSUMPTION BY CATEGORY AND ITS DISTRIBUTION

We provide forecasts for nine broad, and 30 detailed, spending categories derived from the National Accounts Statistics (NAS). The National Sample Survey (NSS) provides information about per-household spending in 32 detailed subcategories. We used a careful matching process to assign each of the detailed categories to one of the nine broad categories. We also consolidated household repairs, water payments, and housing payments into one household category to ensure comparability with national accounts data. To forecast household consumption, we followed the same process described above using pooled time-series cross-section techniques. First, we constructed projections of aggregate spending, and then the all-India distribution. We then built projections of the aggregate category for urban and rural areas, and then the regional distributions. Finally, we employed an iterative algorithm to ensure that consumption across categories, deciles, and regions aggregate to the totals within regions and nationally.

Consumption by category

We modeled consumption by category on an average per-household basis, in a top-down fashion to help ensure that forecasts of category consumption can be constrained to total consumption. We estimated broad categories relative to average consumption per household for all households, and then modeled detailed categories relative to their respective broad categories. For example, we modeled non-alcoholic-beverages consumption relative to food consumption, and food consumption relative to total consumption.

We also used this top-down approach to specify relative prices. We modeled prices in a detailed category relative to the broad category, and then prices in the broad category relative to the overall price index. We estimated category-level prices as linear functions of agriculture, industry, and service-sector prices, which we took as exogenous from the OE forecast.

We specified an equation for each consumption category. In addition to average disposable income per household and relative prices, we included long-term interest-rate forecasts as a driver in categories where financing plays a role. We also used additional drivers such as household size, urbanization, and national wealth per household where appropriate. See chapter 5 and Appendix A for a full description of our consumption forecasts at the consumption-category level.

Distribution of category consumption

To estimate the decile distribution of consumption by category, we combined our estimates of income distribution with those of category consumption. We then modeled the distribution of each category by decile relative to total category consumption. Disposable income and household size by decile relative to their respective averages drives this distribution. Consumption by each decile is assumed to be equally sensitive to relative prices.

Because we based our specifications on average household spending by decile relative to the appropriate regional aggregate average, the averages of our consumption forecasts by decile do not diverge appreciably from regional averages. Still, we had to ensure that we imposed adding up. We achieved this by using an iterative proportional-fitting algorithm, which ensured that the forecast satisfied three constraints:

- Sum of consumption by region was consistent with the overall total.

- Sum of consumption by decile in a given category and region equaled the total regional consumption in that category.

- Shares of category consumption in a given income class totaled 100 percent within each region.

Once we met these constraints, the decile-based consumption forecasts were complete.

FIXED-BRACKET TRANSFORMATION

A limitation of the decile model is that it defines the deciles by the number of households, so that the income cut-off point between deciles changes over time. This restricts our ability to understand the evolution of the income distribution, and to identify customer segments relevant to specific amounts of real disposable income. More meaningful comparisons are possible when we transform the data into fixed brackets based on constant inflation-adjusted cutoff points for disposable income. To do this, we estimated the underlying income distribution using a model based upon the Dagum distribution (described below). Once we had estimated this distribution, "synthetic equations" were used to estimate consumption per household by category, based upon the fixed-bracket distribution.

Dagum distribution

The Dagum function is a closed-form invertible, cumulative-distribution function, which has been found to provide accurate estimates of income distribution in

more than 60 countries.[12] The four-parameter cumulative distribution function derived by Dagum may be written as:[13]

$$F(\chi) = \alpha + \frac{(1 - \alpha)}{(1 + \lambda\chi^{-\delta})^{\beta}}$$

in which χ is the share of total urban disposable income; β and δ are shape parameters that reduce inequality as they increase; and λ is a scale parameter. The scale parameter allows for estimates of the function with different monetary units while leaving the other parameters unchanged. This in turn enables direct comparison of income distributions across time and between countries. The fourth parameter, α, can be used to adjust the distribution for null or negative income.[14] As the cross-sectional data used in this model does not have these null or negative values, we assumed $\alpha = 0$, and thus estimated a three-parameter version of the distribution.

The Dagum function produces estimates of household deciles given any disposable income share; the inverted form of the Dagum function produces disposable-income shares based upon household decile cutoff information. Since we had decile information from the survey, and we wanted to estimate the distribution of disposable income by fixed-bracket cutoffs, we estimated the parameters of the inverted form using non-linear least squares for each year in the sample. As lack of access to underlying micro-survey data limited the available observations for any year, we pooled observations for the current year with those of prior and following years. In addition, because of limited information in the upper tail, we imposed a constraint during the estimation procedure that ensured the upper tail of our estimate was well-behaved, and the distribution remained bounded.

Once we had an estimate of the Dagum parameters, we could derive the average income for any part of the distribution. To do this, we calculated Dagum estimates of income shares by very fine income percentiles and distributed them on a grid. Each cell in the grid represents one 100th of a percent of households, and is sufficiently fine to set income brackets. The value in each cell in the grid

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12 F. Campano and D. Salvatore, *Income Distribution*, Oxford University Press, 2006, p. 51. Dagum derived the function based on several observed properties of income distributions. Income distributions are consistently skewed rightwards and unimodal; distributions have a small number of households with null or negative income; and the income elasticity of the cumulative distribution function falls monotonically as incomes increase.

13 C. Dagum, "A New Model of Personal Income Distribution: Specification and Estimation," *Economie Applique*, 1977, Volume 30, pp. 413–437.

14 H. Gertel et al., "Unemployment and Income Distribution Analysis," paper presented at the AAEP Annual Conference, 2001.

is the share of income for that set of households. Since we knew total urban disposable income and the number of households in each grid point, we could then calculate the percentage of households and their total disposable income for any level of income per household we defined as a fixed-bracket cutoff point. For example, if we define a cutoff of 90,000 Indian rupees per household, we could "walk up" the grid, accumulating the income shares from each cell in the grid. Once we reached the cutoff, we could then determine the number of households and the average disposable income characterizing households in that income bracket. Overall, our estimate of the Gini coefficient, a summary measure of income distribution, is extremely close to values calculated using underlying decile data (Exhibit B.8).

Exhibit B.8

ESTIMATES OF FIXED-BRACKET INCOME DISTRIBUTION TRACK UNDERLYING PERCENTILE DISTRIBUTION CLOSELY
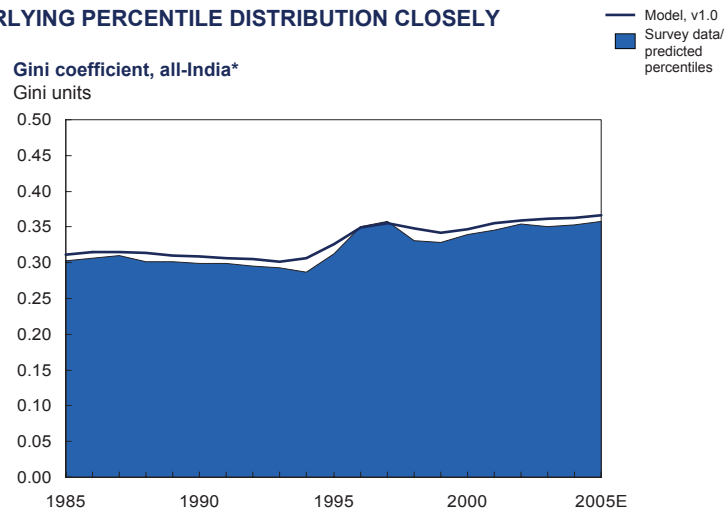
Source: MGI India Consumer Demand Model, v1.0

We used this method to estimate income distribution for three areas—national, urban and rural—and this introduced the additional complexity of reconciling the three distributions. To ensure that the distributions were consistent, we first estimated distributions for each area independently. We then scaled the urban and rural distributions so that a weighted average of the two regional grids equaled the national grid for each grid point. The number of households in each fixed bracket was calculated in each region and added up for the national total. Finally, we calculated national average disposable income for each bracket as a household-weighted average of disposable household income in the two regions.

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The synthetic-equation approach

To produce forecasts of category consumption by fixed-bracket income class, we leveraged the equations estimated using decile-based information. This synthetic-equation approach was possible because we had specified our category distribution equations in relative terms. For example, in urban areas, for each consumption category, we regressed average consumption per household by decile, relative to average consumption per household for all urban households, against average income per household and average household size by decile, relative to their all-urban per-household averages. In this way, we could use relative household income by decile or fixed bracket, and the equations were valid. This approach works providing that all parameter estimates in the pooled cross-section time-series specifications have common coefficients across income classes (i.e. there is no allowance for fixed effects).[15]

As in the percentile model, we used the iterative proportional-fitting algorithm to ensure that consumption shares for a given bracket added up to 100 percent in each region; that total consumption by bracket equaled total consumption by category in each region; and that regional consumption by category and bracket added up to national consumption by bracket and category. The distribution of consumption shares based on our estimate of the Dagum distribution is extremely close to the percentile-based shares from the underlying data (Exhibit B.9). Once this process was complete for each year from 1985 to 2025, the forecast of category consumption by fixed-income bracket was complete.

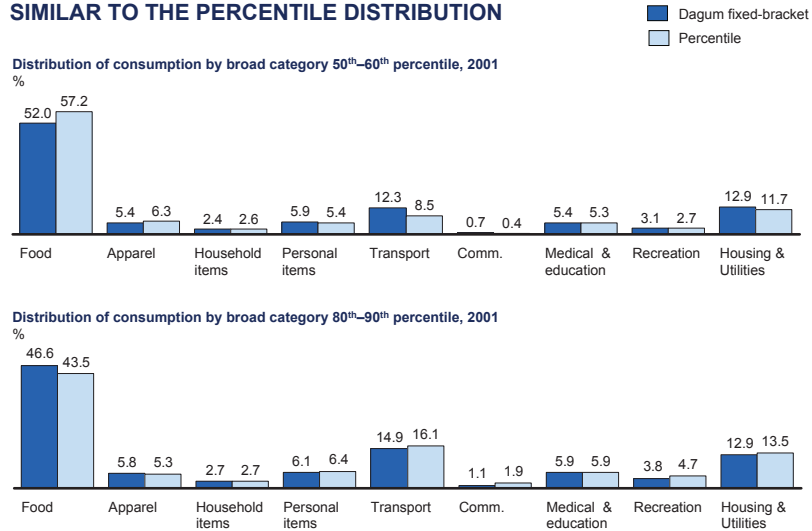## DATA SOURCES AND METHODOLOGY

In this section, we describe the data sources used in the model. Because we assembled data from multiple sources with varying coverage, we also describe the process used to develop a consistent historical database. We divide this section into five parts:

- Data sources

- Managing survey discontinuities

- Benchmarking survey data

- Reconciling sources and methodologies

- Imputing data

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15 The distribution of household size is also relative to disposable income, so the same argument would apply.

Exhibit B.9

DISTRIBUTION OF CONSUMPTION USING FIXED-BRACKET DATA IS SIMILAR TO THE PERCENTILE DISTRIBUTION

■ Dagum fixed-bracket
■ Percentile

Distribution of consumption by broad category 50th–60th percentile, 2001
%

	Food	Apparel	Household items	Personal items	Transport	Comm.	Medical & education	Recreation	Housing & Utilities
Dagum fixed-bracket	52.0	5.4	2.4	5.9	12.3	0.7	5.4	3.1	12.9
Percentile	57.2	6.3	2.6	5.4	8.5	0.4	5.3	2.7	11.7

Distribution of consumption by broad category 80th–90th percentile, 2001
%

	Food	Apparel	Household items	Personal items	Transport	Comm.	Medical & education	Recreation	Housing & Utilities
Dagum fixed-bracket	46.6	5.8	2.7	6.1	14.9	1.1	5.9	3.8	12.9
Percentile	43.5	5.3	2.7	6.4	16.1	1.9	5.9	4.7	13.5

Source: MGI India Consumer Demand Model, v1.0

Data sources

India's National Council of Applied Economic Research (NCAER) is the primary source of household data for the model. NCAER provided detailed integrated tabulations of their Marketing Information Survey of Households (MISH) and the National Sample Survey on Consumption Expenditures (NSS). We tabulated the MISH and NSS data by percentile at the all-India level, as well as for urban and rural regions.

We supplemented the NCAER data with information from the Indian Government's Central Statistical Organization (CSO), the Reserve Bank of India (RBI), the World Bank's World Development Indicators (WDI), United Nations (UN) Population Division, Oxford Economics (OE), and Global Insight (GI).

While there is general agreement among sources for key variables, there are some discrepancies and differences in coverage. For example, real aggregate consumption data from the CSO is available for 1993–2002 using the 1993–94 base year, and for 1999–2004 using the 1999–2000 base year. (When the analysis was carried out for this report, NAS 2006 was the most current data.) Complementary consistent data over a longer period is available from international sources in this case. Thus, we maximize the coverage and completeness of recent data reported directly by CSO with the use of extended and reconciled data compiled by various international agencies.

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We collected data in four categories:

1. **Macroeconomic data**—the model uses macroeconomic aggregates from the National Accounts Statistics (NAS) published by the CSO. The model uses NAS 2006 with 1999 as the base year, combined with data from the 1993 base year. Additionally, the model uses RBI data on the balance-of-payments, monetary aggregates, and government revenues and expenditures.

2. **Socio-demographic data**—we obtained population and education data from similar sources. Overall population and urbanization rates came from the Census, WDI, and the UN; detailed population data from the WDI and the UN; and detailed population projections from the UN. Enrollment and attainment data for primary and secondary education were obtained from the Census and the Government of India budget.

3. **Household income and expenditure data**— data on household incomes were obtained from NCAER's MISH survey and covered 1987, 1993–99, and 2001. NSS survey data covered 1987, 1993–97, and 1999–2004. Additionally, we used detailed NAS consumption data to calibrate the surveys to national accounts data.

4. **Price data**—we calculated implicit price indices for each category from the detailed NAS category-consumption data.

We developed a consistent database by formulating processes to reconcile different sources and those of their methodologies that vary over time.

Managing survey discontinuities

Differences in the design of the household survey over this period create discontinuities in the expenditure series. These arise from differences in sample size and in variations in the questionnaire given to households:

- **Sample size:** NSS data on consumption come from two different types of surveys: a "thick" survey with large sample sizes, and a "thin" survey with smaller sample sizes. The thick 1999 survey, or 55th round, had a sample size of 59,000 households, compared with the more recent thin 2002 survey with a sample size of 33,000 households. There were thick surveys in 1987, 1993, and 1999. Figures from the more recent 2004 survey are still in the process of being released.

- **Questionnaire changes:** NSS varied its survey design between 1994 and 1998 so that it assigned households one of two surveys randomly. One survey

had a fixed 30-day recall period for consumption goods. The other had a variable recall period, based on whether the good was high, low, or moderate frequency. Not surprisingly, the expenditure series exhibited significant volatility during this period; we factored this explicitly into the estimation process.

Benchmarking survey data

In assembling our historical database of income and spending, we needed to reconcile data from the NSS and MISH surveys, as well as the macroeconomic income and spending information provided in the NAS. In addition to differences in survey design, it is well known that household surveys underestimate income compared with national-account data. Reasons for this vary from incomplete reporting of income to under-sampling of wealthy individuals. To address these challenges, we calibrated the income and consumption surveys to NAS data.[16] This enabled us to bring together the NSS and MISH surveys using a common, internally consistent, independent benchmark, which in turn allowed us to ensure that we were able to generate distributional forecasts consistent with actual levels of income and spending in the economy, and to develop robust market-size projections for individual spending categories.

We followed different procedures in order to scale the income and consumption surveys (MISH and NSS, respectively). We scaled the survey income data proportionately so that aggregate personal income from MISH matched the NAS value. This preserved the most important sample information in the MISH survey—the relative income across deciles—whilst ensuring that we captured aggregate income creation in the economy.

We benchmarked consumption data using the same principle of preserving the most important information from each data source. However, in this case the process was more granular. First, we aligned each of the nine broad and 30 narrow NSS categories to their counterparts in the NAS data. Second, we scaled the nine broad NSS categories to their NAS counterparts, using a separate scaling factor for each category. Then we applied the broad category-scaling factor to component categories. Thus we ensured consistency with the total NAS, while preserving the survey data on the narrow category spending allocation. We also applied the category scaling factor to consumption by decile data in each region. This ensured that the decile consumption data by region added up to total NAS data.

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16 For a discussion about how differences between the NAS and NSS distort poverty estimates, see Angus Deaton and Valerie Kozel, "Data and dogma: The great Indian poverty debate," *World Bank Research Observer*, Fall 2005.

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Reconciling sources

To generate robust estimation results, we worked to reconcile and calibrate time series from different sources, imputing data where necessary. As a first step, we assembled data on a particular macroeconomic or socio-demographic series from as many sources as possible. We then used a hierarchical splicing process to reconcile the different sources. A key principle of this process is the use of a "ratio-preserving" method, which incorporates information from the source beyond the series of interest. In general, the hierarchical splicing process involved the following steps:

- Ranking sources by authoritativeness, using the most authoritative Indian data (MISH, NSS, NAS, and RBI as appropriate), and the World Bank's WDI as the next preferred source;

- Constructing a ratio using a reference series for each variable of interest and each source. For example, to build an extended urbanization series, we first took the census data on the urban population and divided them by the overall population. We constructed the same ratio using the WDI data, as well as other sources as necessary;

- Interpolating the gaps in the series using the ratios from the preferred source. For each gap, we looked at the points of overlap between the source and the base series to calculate a scaling factor. We then applied this factor to the spliced series so that it matched the base series smoothly.

Imputing data

The final step in producing a complete historical database was to impute any remaining missing data. The reconciliation process that we have described above produced consistent, and almost complete, historical-expenditure and consumer-price data for nine broad categories for 1985–2004. However, even this process left gaps in the consumption and income data, particularly at the decile level, because survey data did not exist for certain years. Where gaps in income, consumption, and prices existed, we followed a three-step procedure to impute the missing values:

- Estimating a simplified econometric model using available data. Specifications for the historical model are similar to those discussed above for the full forecasting model;

- Using the econometric model dynamically to generate back-casts of all variables over the 1985–2004 period;

- Using the ratio-preserving technique described above, and splicing in the back-cast estimates where data imputation was required.

Once the imputations were complete, we had an internally consistent historical database with complete time series information for all variables from 1985–2004, including by income decile and consumption category.

Bibliography

AC Nielsen, *Global Consumer Confidence Report,* September 2006 (www2.acnielsen.com/reports/documents/GlobalConsumerConfidence_Sept06.pdf)

Anderson, Jonathan, *India's Soft Landing,* UBS Investment Research, Asian Focus, January 2007

Athukorala, Prema-chandra, and Kunal Sen, *The Determinants of Private Savings in India,* World Development, 2004

Bajpai, Nirupam, and Jeffrey D. Sachs, "India in the Era of Economic Reforms—From Outsourcing to Innovation," CID working paper number 62, February 2001

Banga, Rashmi, *Critical Issues in India's Service-Led Growth,* ICRIER, Working Paper No. 171, October 2005

Basu, Kaushif, ed., *India's Emerging Economy: Performance and Prospects in the 1990s and Beyond,* MIT Press, 2004

Bhalla, G.S., Peter Hazell, John Kerr, *Prospects for India's Cereal Supply and Demand to 2020,* IFPRI, November 1999

Bosworth, Collins, Virmani, *Sources of Growth in the Indian Economy,* Discussion Paper, India Policy Forum, July 2006

Buiter, Willem, and Urjit Patel, *Fiscal Deficits, the Financial Sector, and Growth,* India Policy Forum, Suman Bery, ed., 2006

Campano, Fred, and Dominick Salvatore, *Income Distribution*, Oxford University Press, 2006

Chidambaram, P., *India's Economic Reforms: Recent Challenges and Future Challenges,* October 2006

Citigroup, Equity Research, India, Telecommunications Services, *Indian Wireless, Higher, Faster, Stronger,* April 2006

Citigroup, Industry In-Depth, *India Aviation, On a Wing and a Prayer,* May 2006

Consumer Durables, ICRA sector analysis, February 2005, (www.icra.in)

CRIS INFAC, *Retail Finance Annual Review,* March 2005

Dagum, Camilo, "A new model of personal income distribution: Specification and estimation," *Economie Applique,* Volume 30, pp. 413–437, 1997

Dahlman, Carl, and Anuja Utz, *India and the Knowledge Economy*, World Bank Institute, 2005

Datamonitor, *Apparel Retail in India*, August 2006, (www.datamonitor.com)

Deaton, Angus, and Valerie Kozel, "Data and dogma: The great Indian poverty debate," *World Bank Research Observer,* Fall 2005

Deutsche Bank Research, *India, A study in contrasts,* September 2006

Deutsche Bank Research, *India Rising: A Medium-Term Perspective*, May 2005

D'Souza, Dilip, A *Thin Indian Line,* India Together, March 2006

Economist Intelligence Unit, Viewswire (www.viewswire.com)

Fan, Shenggen, Connie Chan-Kang, Anit Mukherjee, *Rural and Urban Dynamics and Poverty: Evidence from China and India,* IFPRI, August 2005

Farrell, Diana, "Debunking myths about Asia's service industries," *Asia Wall Street Journal*, November 30, 2005

Farrell, Diana, "The hidden dangers of the informal economy," *The McKinsey Quarterly*, 2004

Farrell, Diana, Eric Beinhocker, Ulrich Gersch, Ezra Greenberg, Elizabeth Stephenson, Jonathan Ablett, Mingyu Guan, and Janamitra Devan, *From 'Made in China' to 'Sold in China': The Rise of the Chinese Urban Consumer,* McKinsey Global Institute, November 2006, (www.mckinsey.com/mgi/publications/china_consumer/index.asp)

Farrell, Diana, Noshir Kaka, Sascha Stürze, "Ensuring India's offshoring future," *The McKinsey Quarterly,* Special edition: Fulfilling India's Promise, 2005

Farrell, Diana, and Susan Lund, *A Tale of Two Financial Systems: A Comparison of India and China,* McKinsey Global Institute, September 2006, (www.mckinsey.com/mgi/publications/talefinsys.asp)

Farrell, Diana, Susan Lund, Ezra Greenberg, Raj Doshi, Jaeson Rosenfeld, and Fabrice Morin, *Accelerating India's Growth Through Financial System Reform,* McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/india_growth/index.asp)

Farrell, Diana, Susan Lund, Jaeson Rosenfeld, Fabrice Morin, Niyati Gupta, and Ezra Greenberg, *Putting China's Capital to Work: The Value of Financial System Reform,* McKinsey Global Institute, May 2006, (www.mckinsey.com/mgi/publications/china_capital/index.asp)

McKinsey&Company

FICCI, Food and Beverages Survey, February 2006, (www.ficci.com/surveys/food1.pdf)

Gentleman, Amelia, "Despair takes toll on Indian farmers," *International Herald Tribune,* May 31, 2006

Gertal, Hector, Roberto Giuliodori, Paula Auerbach, and Alejandro Rodriguez, *Unemployment and Income Distribution Analysis: New Evidences using a Dagum Parametric Income Distribution Model*, National University of Cordoba, presented at AAEP Annual Conference, 2001

Global Insight, *Asian Automotive Industry Forecast Report,* December 2005

Global Insight, *India, Country Intelligence Report*, 2006

Gordon, Jim, Poonam Gupta, *Understanding India's Services Revolution,* International Monetary Fund, November 2003

Government of India, Ministry of Statistics and Programme Implementation (www.mospi.nic.in)

Government of India, Planning Commission, *India Vision 2020,* December 2002

Government of India, Planning Commission, *Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan*, June 2006

ICICI Securities, Equity Research, FMCG, *India, Retail Counter,* August 2005

IFPRI, 2004-2005 Annual Report, *Essays: Lessons Learned from the Dragon (China) and the Elephant (India)*

India Brand Equity Foundation, *Entertainment and Media,* January 2006

India Brand Equity Foundation, *Gems and Jewellery,* January 2006

India Brand Equity Foundation, *Health Care, Apollo Group: India's first global health care major*

India Brand Equity Foundation, *Indian Middle-Class Dream Takes Shape*, 2005

India Brand Equity Foundation, *Training and Education, India, a potential education hub*

India Retail Report, Images-KSA Technopak, 2005, (www.imagesretail.com/india_retail_report.htm)

Industry Insight—Apparel Retailing, Cygnus Economic and Business Research, March 2004, (www.cygnusindia.com/Economy.asp)

ndustry Monitor – *Gems and Jewellery,* Cygnus Business Consulting & Research, January 2006

Industry Monitor – *Media and Entertainment,* Cygnus Business Consulting & Research, February 2006

International Monetary Fund, *Article IV Consultation—Staff Report, Country Report 06/55*, 2005

International Monetary Fund, *India: Selected Issues, Country Report* 06/56

International Monetary Fund, *World Economic Outlook 2006*, 2006

ITC Annual Report, 2006, (www.itcportal.com)

Kashyap, Pradeep, and Siddhartha Raut, *The Rural Marketing Book, 2007 edition*, Dream-tech Press, (www.wileyindia.com/)

Kochkar, Kalpana, Utsav Kumar, Raghuram Rajan, Arvind Subramanian, and Ioannis Tokatlidis, "India's Pattern of Development: What Happened, What Follows?", IMF working paper number 06/22, 2006

KPMG, *Consumer Markets in India – the next big thing?,* 2005

Lewis, William, Ranjit Pandit, and Vincent Palmade, *India: The Growth Imperative*, McKinsey Global Institute, August 2001, (http://www.mckinsey.com/mgi/reports/pdfs/india/India.pdf).

Maddison, Angus, *The World Economy, Historical Statistics,* (www.ggdc.net/maddison/other_books/new_HS-7.pdf)

Mergent Industry Report, *The Asia Pacific Telecommunications Sectors,* January 2006

Mishra, Deepak, *Can India Attain the East Asian Growth with South Asian Saving Rate?,* unpublished draft, 2006

Mittal, Surabhi, *Structural Shift in Demand for Food: Projections for 2020,* ICRIER, August 2006

Morgan Stanley India Economics, *Growth Re-acceleration – Is it Sustainable?,* 2006

National Commission on Population, *Population Projections for India and States 2001–2026*, May 2006

Poddar, Tushar, and Eva Yi, *Global Economics Paper No. 152, India's Rising Growth Potential,* Goldman Sachs Economics Research, January 2007

Prior-Wandesforde, Robert, *India: Pitfalls and Possibilities*, HSBC Global Research, July 2006

Public Report of Basic Education for India (PROBE), 1996

Purfield, Catriona, "Mind the Gap—Is Economic Growth Leaving Some States Behind?", IMF working paper number 06/103, 2006

PWC, *The World in 2050: How Big will the Major Emerging Market Economies Get and How Can the OECD Compete?*, 2006

Rao, K. Sujatha, S. Selvaraju, Somil Nagpal, S. Sakthivel, *Financing of Health in India,* Financing and Delivery of Health Care Services in India

Rawkins, Paul, *India's Public Finances: Do they matter?*, Deutsche Bank Research, 2006

Reserve Bank of India, *Report on Trend and Progress of Banking in India, 2005–06,* 2006

Rodrik, Dani, and Arvind Subramanian, "Why India Can Grow at 7 percent a Year or More: Projections and Reflections," IMF working paper WP/04/118, July 2004

Shukla, R.K., S.K. Dwivedi, and Asha Sharma (with assistance from Sunil Jain), *The Great Indian Middle Class: Results from the NCAER Market Information Survey of Households,* National Council of Applied Economic Research (in association with Business Standard), 2004, (www.ncaer.org/Downloads/PublicationsCatalog.pdf)

SSKI India Research, *Automobiles,* July 2006

Topiwalla, Hozefa, Padmanabhan Balasubramaniam, *India Textiles, Apparel and Footwear,* Morgan Stanley Research, Asia / Pacific, April 2006

UN Population Division, *World Population Prospects: The 2006 Revision Population Database,* (esa.un.org/unpp/)

UN Population Division, *World Urbanization Prospects: The 2005 Revisions Population Database*, 2006

Virmani, Arvind, *A Tripolar World: India, China and US,* ICRIER, May 2005

Vora, Nikhil, Bhushan Gajaria, *Indian Organized Retail, 'Fair're'tale',* SSKI, March 2006

Vora, Nikhil, Rohan Soares, *Alcoholic Beverages, Hic!! Hic!!! Hurray...,* SSKI, December 2005

Waverman, L., M. Meschi, and M. Fuss, "The impact of mobile phones on economic growth in developing countries," Vodafone Policy Paper No. 2, in Vodafone, *Africa: The Impact of Mobile Phones,* London, 2005

Wilson, Dominic, Roopa Purushothaman, *Dreaming with BRICS: The Path to 2050,* Goldman Sachs, October 2003

Wilson, William T., *The Dawn of the Indian Century,* Keystone India

World Bank, *India Inclusive Growth and Service Delivery: Building on India's Success,* 2006

World Economic Forum, *India and the World: Scenarios to 2025,* 2005

Zainulbhai, Adil, "Viewpoint: Equitable growth is not just a dream," *Financial Times,* November 28, 2006

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