

India's Acceleration Phenomenon

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Opportunities will unfold unevenly, at different times and in different segments

As incomes increase smoothly, the demand for particular goods and services rises in leaps and bounds

As China's market grows more mature, multinationals and investors are increasingly looking to households in emerging economies elsewhere to deliver the next big growth surge in demand for consumer goods and services. Above all they are pinning their hopes on India. With a population of 1.3bn, most aged under 30, and a GDP forecast by the International Monetary Fund to expand by 7.4% in 2019, India is easily the world's fastest-growing major economy. It's no surprise, then, that MNCs are crowding in. In May 2018, Walmart paid US\$16bn to acquire a local competitor to Amazon, which itself entered the Indian market in 2012. Other US consumer giants and their Chinese peers—including Starbucks, Apple, Alibaba and Tencent—are all focusing on India in the search for their "next billion" customers.

Inevitably, some will get the market wrong. The development of India's consumer demand over the next decade or so offers great potential. But the trajectory of India's consumption growth will differ from China's. And the opportunities will unfold unevenly, at different times and in different segments of the market. In this paper, we fall back on economic principles tried and trusted in other countries, and apply them to India to illuminate how local consumer demand is likely to evolve over the coming years and to identify where the most promising opportunities will arise.

Step changes

The key to understanding how consumer markets in developing economies evolve is the observation that household spending on particular products and services does not increase smoothly with smoothly increasing incomes. Instead it surges in discrete leaps and bounds.

This is because households earning just above a critical threshold are far more likely to purchase certain products than households earning just below the same level. So, for example, once a household's income surpasses US\$15,000 a year, it can afford to buy a sedan automobile for the first time.

Now, imagine a population with a normal "bell curve" distribution of incomes. Say the average income rises 25% from US\$10,000 a year to US\$12,500. The number of households earing more than US\$15,000 does not increase by 25%. Because the entire bell curve shifts to the right, and the number of households earning more than a certain amount is determined by the area under the bell curve, the share earning more than US\$15,000 rises by far more, from 2.3% to 15.9%—an increase of almost seven times.

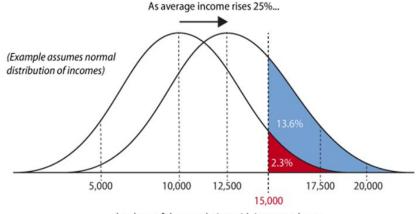
This effect, illustrated by the chart overleaf, gives rise to what is known as the "acceleration phenomenon". As incomes rise at a steady pace, the demand for products at particular price points, whether smart phones, air conditioners, or foreign holidays, can grow at many times the overall rate of income growth. The trick for investors is to identify the correct shape of income distribution, and so to pinpoint the income cohorts set to grow disproportionately fast.



Illustrating the acceleration phenomenon

Why growth in some markets can be much faster than total income growth

How the acceleration phenomenon works



...the share of the population with incomes above US\$15,000 jumps nearly 7 times, from 2.3% to 15.9%

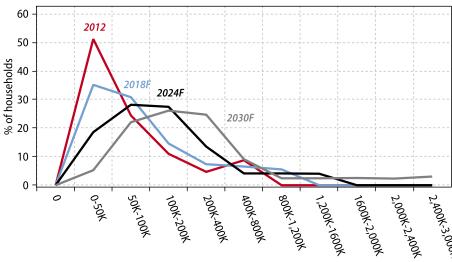
Gavekal Dragonomics

In India, the first point to note is that the distribution of incomes is far from a normal bell curve. Although gross domestic product per capita was forecast to surpass US\$2,000 in 2018, more than two-thirds of the population earned less than half that amount. In other words, India's income distribution curve has a long tail on the right, peopled at its extreme by the country's 119 billionaires (who are worth, according to *Forbes*, a collective US\$440bn).

However, detailed income data is hard to come by. To get around the problem, we derive incomes using expenditure and consumption figures from government surveys and the World Bank. This allows us to plot estimated income distribution curves, shown below under a "medium growth" scenario which projects GDP growth of 7.9% until 2023, slowing to 7% by 2030.

The evolution of India's income distribution curve

Estimated income distribution of urban households under a medium growth scenario



Real annual income, 2016 INR prices

NSSO, World Bank, Gavekal Data/Macrobond

India's income distribution curve has a long tail...

...which is set to get fatter over time





The next step is to determine the income thresholds at which demand for different products takes off. Here, we borrow a few ideas from a useful <u>report</u> from the Boston Consulting Group to help identify the products people start to consume once they cross a particular income threshold.

This leads us to classify households into three broad categories, based on their earnings in 2016 prices:

- 1) Emerging consumers, with a household income between INR200,000 and INR500,000 (roughly US\$2,810 to US\$7,030). As households enter the emerging bracket, they start to purchase basic smartphones costing less than INR10,000, refrigerators, and motor scooters. While they are typically not yet in the market for branded clothing and toiletries, they do spend on generic products. And they begin to go on domestic holidays.
- 2) Aspiring consumers, with a household income between INR500,000 and INR1.2mn. As households enter the aspiring cohort, they upgrade to mid-range smartphones, begin to buy branded clothing and toiletries, and take short-haul trips abroad. Most characteristically, aspiring consumers are able to afford an entry-level compact car for the first time.
- 3) Affluent consumers, with a household income above INR1.2mn. After crossing the affluent threshold, households start to buy high-end smartphones, washing machines, and luxury brands. Increasingly, they prize "experiences" including long-haul foreign vacations.

Now we've determined income distribution and identified the key consumption thresholds, we can track how the acceleration phenomenon has played out over recent years, and project how it is set to develop in the future. According to our estimates, in 2016 India had roughly 71mn emerging consumer households, 33mn aspiring households, and 18mn affluent consumer households—giving a total of 122mn households actively participating in the modern consumer economy.

Urbanization and growth

Two main factors influence how the numbers in these cohorts—and therefore consumer demand for different goods and services—will evolve:

- The first is **the urbanization rate**. Given that average household incomes in India's cities are twice those in the countryside, the speed at which the urban population grows relative to the number of rural inhabitants is a key determinant of consumer demand. For this exercise, we use the urbanization rate according to United Nations projections.
- The second is **the overall GDP growth rate**. We use three growth scenarios:
 - 1) A **high growth** scenario, in which the GDP growth rate accelerates to 8.3% by 2023, before slowing to 7.8% by 2030;
 - 2) A **medium growth** outlook, with growth until 2023 of 7.9%—roughly in line with the average rate since 2005—slowing to 7% by 2030;
 - 3) A **low growth** scenario in which the GDP falls to 6.3% between now and 2023, slowing further to 5% by 2030.

Whereas emerging consumer households buy motor scooters...

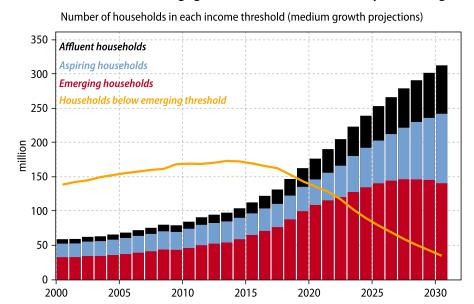
...newly affluent households begin to go on foreign vacations

The speed of urbanization is a crucial consideration

Gavekal Data/Macrobond



Number of households engaged in the consumer economy are taking off



By the end of the coming decade, more than 300mn Indian households will be active modern consumers Putting these two factors together, the chart above shows how under our medium growth scenario, by the end of the 2020s the number of households active in India's consumer economy will have grown by 190mn, from 122mn today to 312mn. Within this total, the number of emerging consumer households in India will double from 71mn to 141mn. Aspiring households will triple from 32mn to 101mn. And the number with incomes above the affluent threshold will leap almost four-fold from 18mn to 71mn.

From emerging to aspiring

But there is a powerful wrinkle to consider: the acceleration in demand for particular goods and services is determined not by the net growth rate of the relevant income band, as some households move up into the bracket, and others move up out of it. Instead, the acceleration phenomenon is driven by the gross numbers entering the cohort from below for the first time.

As the chart overleaf shows, currently the cohort growing the fastest in terms of the greatest number of new entrants is the emerging consumer category, which is likely to gain more than 12mn new households in 2019. This flow will pick up over the next few years hitting some 15mn a year towards the middle of the 2020s, providing a powerful boost to the demand for basic consumer goods in the first half of the coming decade. After that, as Indian society becomes wealthier, the numbers entering the emerging consumer class each year will begin to tail off steeply.

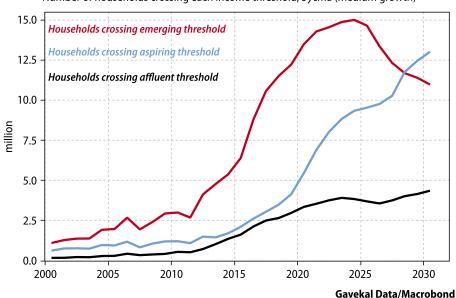
Even more interesting, our model indicates that under India's medium growth scenario, the number of households surpassing the income threshold for the aspiring consumer group is set to take off over the coming years. From around 4mn households in 2019, numbers graduating from the emerging to the aspiring cohort are set to increase to almost 10mn a year by the middle of the coming decade, overtaking the numbers entering the emerging consumer group to reach some 13mn annually by 2030.

Growth in the emerging consumer cohort will peak at some 15mn households a year



Acceleration is driven by the gross numbers entering each income band

Number of households crossing each income threshold, 5ycma (medium growth)



By the end of the coming decade, growth in the aspirational class will overtake the growth of emerging consumers

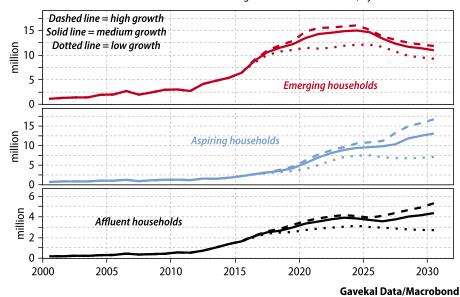
Finally, the pace at which the affluent consumer group is growing is also accelerating, with the number of new entrants each year having grown from around 500,000 at the beginning of the current decade to hit an expected 3mn in 2019. Under our medium growth scenario, the pace will accelerate further to exceed 4mn a year by the late 2020s.

The opportunities may be even greater than the official urbanization rate implies...

We should repeat that these numbers will vary with GDP growth, and the urbanization rate. With high growth, by 2030 there will be 193mn households in our top two income brackets; under our low growth, just 136mn. Moreover, we have used official statistics for India's urbanization rate, even though these may understate the true figure (see <u>The Alchemist's Apprentice</u>).

Different growth assumptions yield different results

Gross number of households crossing each income threshold, 5ycma



...while GDP growth will be a critical factor



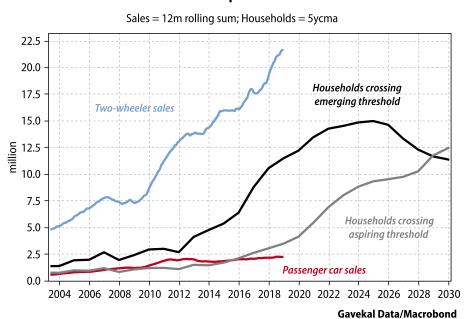
Idiosyncrasies in the data notwithstanding, the acceleration phenomenon helps us to understand how consumption patterns in India are evolving. For example, over the last 10 years the market for two-wheelers, which typically sell for under INR100,000, has almost tripled in size, with annual sales rising from just over 7mn to more than 21mn. Over the same period, sales of passenger cars—an entry level hatchback costs around INR300,000—have been much slower, climbing from 1.2mn to just under 2.2mn.

Accelerating auto sales

Given the traffic congestion in major Indian cities (as well as the rise of ride-sharing services like Uber and its local competitor Ola), the transition from a predominantly two-wheeler market to a four-wheeler market is likely to remain slow. Nevertheless, our projections indicate that the annual number of households crossing the aspiring threshold (with household income between INR500,0000 and INR1.2mn) is set to triple from around 4mn in 2019 to more than 12mn in 2029. With so many households able to upgrade their two-wheelers to small cars for the first time, it appears inevitable that automobile sales are poised to accelerate significantly over the next 10 years.

Despite India's epic traffic jams, more and more aspirational households will look to buy their first car...

Automobile sales are positioned for take-off



...and to take their first foreign holiday

India's spending on tourism is likely to follow a similar trajectory. In 2008, Indians made over 309mn domestic trips. With the rapid increase in the number of households crossing the emerging consumer threshold over the years that followed, by 2016 that number had exploded to 1,615mn. And with the cost of flights between cities falling and the pace of highway construction rising, the domestic tourism market continues to grow. Now, in the coming decade, the growth in aspiring households with their demand for foreign travel means that outbound international tourism is likely to enter a new attention-grabbing growth phase. Between 2007 and 2017, the number of outbound departures by Indians doubled to 22mn. By 2030, the number will more than double again (see Why Indian Tourists Are The New Chinese).



For now, the numbers remain modest relative to China...

...but in the next 10 years, India will throw up rewarding opportunities in specific consumer market segments These developments should be kept in perspective. While the rise of India's aspiring class is set to accelerate over the coming decade, for the time being the scale of the opportunity it represents will remain modest in global terms. For example, India's outbound tourist numbers are small relative to China's, and their per capita spending pales in comparison. And unlike China, where in recent years the big consumption opportunity has been the growth of the affluent class (see The Glory Days For Affluent Consumers), India's consumer story remain predominately a mass-market, high-volume, low-margin tale.

Conclusion

Nevertheless, as India grows richer, patterns of consumption are changing. All three categories of economically active household—emerging, aspiring, and affluent—are expanding and will continue to do so over the coming years. In time that growth will create a modern consumer giant. As it does so, the greatest rewards for investors will come from understanding which segments of the consumer market are set to grow disproportionately fast as incomes rise and the structure of demand shifts. For those who gauge this acceleration phenomenon correctly, India is likely to offer the biggest consumer growth opportunity in the global economy over the next 20 years.

Technical appendix: Our workings

Reliable income data for Indian households is not available. As a result, we derive our income figures from the Consumption and Expenditure Surveys compiled by the Indian government's National Sample Survey Office. These give data for both urban and rural households, although data is not available for every year, and is only available until 2011, which means some interpolation and extrapolation is required. We also use the World Bank's PovcalNet Database for consumption share by deciles.

We then use the National Data Survey on Savings Patterns from 2003-04 to calculate the consumption-to-income ratio, which gives us total income and income distribution by deciles. Households tend to understate their expenditure in surveys in order to hide black income. As a result, our numbers fall short of those in the national accounts. Borrowing our methodology from a similar study by our colleagues in China, we adjust our data for black income in order to reconcile total income with total household disposable income in the national accounts.

While this methodology may have some shortcomings in terms of absolute accuracy, the results for income distribution are broadly in line with estimates from other sources. For example, we find that in 2015 the richest 10% of urban households earned 47% of total urban household income. This equates to a GINI coefficient of 0.55. The International Monetary Fund estimates that India's GINI coefficient for 2013 was 0.51.

After making these adjustments, we obtain the per capita income by decile for every year since 2000, deflated in constant 2016 prices. Then we estimate the number of households above each income threshold over time, generating a curve for each different growth scenario.

Further details are available on request.



Summary of model income distribution

Millions of households in each group, 5ycma (medium growth)

Year	Emerging	Aspiring	Affluent	Total
2012	52	30	12	95
2018E	88	35	24	147
2025E	140	62	50	253
2030E	141	101	71	312

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