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INDIA 2025
ANOTHER TRYST WITH DESTINY

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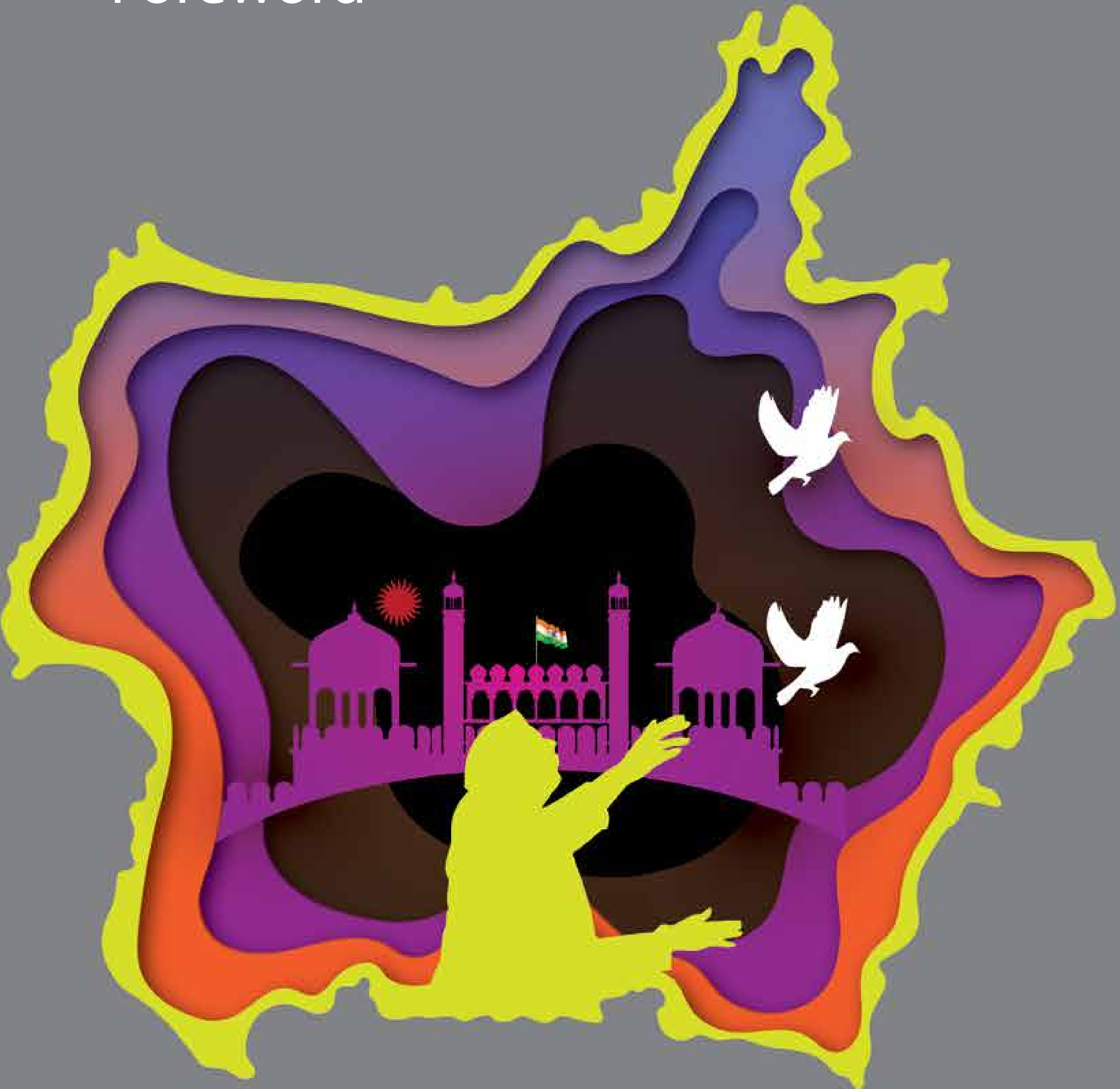
February 2018

Foreword



India's first Prime Minister Jawaharlal Nehru's speech on August 14, 1947, on the eve of India's independence… and how true a near-verbatim speech would sound in 2025, when India makes another **Tryst With Destiny**

Long years ago, ***India*** made a tryst with destiny, and now the time comes when ***she*** shall redeem ***her*** pledge, not wholly or in full measure, but very substantially. At the stroke of the midnight hour ***2025***, when the world ***grows steadily***, India will awake to ***economic scale, momentum and sophistication***. A moment comes, which comes but rarely in history, when we step out from the old to the new, when an age ends, and when the soul of a nation, long ***economically*** suppressed, finds utterance. It is fitting that at this ***celebratory*** moment, ***when the GDP crosses USD5tn, India*** takes the pledge of dedication to the service of her ***consumers and companies,*** and to the still larger cause of ***the Global Economy.***

At the dawn of ***independence in 1947, then economic liberalisation in 1991***, and reinvigorated reform from 2014, India started on her unending quest, and trackless decades are filled with her striving and the grandeur of her success and failures. Through good and ill fortune alike, she has never lost sight of that ***opportunity*** or forgotten its ***needs***, which gave her strength. We ***will end by 2025*** a period of ***missed opportunities*** and India would have discovered her true potential. The achievement we celebrate today is but a step, an opening of opportunity, to the greater triumphs and achievements that await us. ***Will India*** be brave enough and wise enough to grasp this opportunity and accept the challenge of the future?

Freedom and power bring responsibility. The responsibility rests upon its ***corporate-political-social balance, the framework that will represent the soverign and economically rising consumers of India.*** Before the birth of ***this*** freedom and ***prosperity, India has*** endured all the pains of labour and her heart is heavy with the memory of this sorrow ***and missed opportunities.*** Some of those pains continue even now. Nevertheless, the past—***an inconsistently reforming and under-delivering economy***—is over and it is the future that beckons to us now.

That future is not one of ease or resting, but of incessant striving so that India may fulfil the pledges ***she has*** so often taken—***to grow rapidly***—and the one we shall take today—***to become a middle-income country, before long.*** The service of India means the service of the millions who ***economically lag.*** It means the ***completion of financial inclusion—to the last Indian, improvement in financial and economic literacy, the financialisation of savings and the democratisation of credit.*** The ambition of the greatest ***men*** of our generation has been to wipe every tear from every eye. That may be beyond ***India***, but as long as she ***becomes a middle-income country with disparities, there will remain significant work to do, and growth opportunities***.

And so, ***India still has more to reform—on labour, agriculture and administration***—and to ***execute***, and ***execute well,*** to give reality to ***her*** dreams. Those dreams are for India, but they are also for the world, for all the nations and peoples are too closely knit together today for anyone of them to imagine that it can live apart. Peace has been said to be indivisible; so is freedom, so is prosperity now, and so also is disaster in this One World that can no longer be split into isolated fragments ***or leave India untouched***.

To the people of India ***and investors***, whose representatives ***the government, corporations and policy makers are,*** we make an appeal to join us with faith and confidence in this great adventure. This is no time for petty and destructive criticism, no time for ill will or blaming others. We have to build the noble mansion of free India ***with competition, convergence, quality and equality of opportunity***, where all her consumers may dwell ***and all her investors will prosper***.

The appointed day ***will*** come—the day appointed by destiny—and India ***will*** stand forth ***taller***, after ***receding*** slumber and struggle, awake, vital, free and independent. The past ***will*** cling on to us still in some measure—***still a USD3,500 per capita economy, significantly under-leveraged for the consumer*** and as a whole, ***and only at the middle stages of what should be a hockey stick growth trajectory***. And, India will have to do much before she redeems the pledges and promises her ***many constituents—governments, businesses, global investors and more recently domestic investors***. Yet, the turning point is past and history begins anew for us, the history which we shall live and act and others will write about.

It is a fateful moment for us in India, for all Asia and for the world. A new star rises, the star of freedom in the East, a new hope comes into being, a vision long cherished materialises. May the star never set and that hope never be betrayed!

We rejoice in that freedom, even though clouds ***have*** surrounded us in ***the past*** —***hard reform pains (GST, demonetisation, RERA), growth challenges*** and many of our people are sorrow-stricken; job creation and difficult problems encompass us. But ***India's economic*** freedom brings ***with it demographic dividend***, with its potential and responsibilities and burdens, and ***India has*** to face them in the spirit of a free and disciplined people, ***as it only heightens the asks and expectations***.

On this day, our first thoughts go to the ***architects*** of this ***economic*** freedom, ***the policy makers, the businesses and entrepreneurs, the engineers, doctors and scientists, and the ever-aspiring consumer***, who, embodying the old spirit of India, held aloft the torch of ***economic possibilities*** and lighted up the darkness that surrounded us. We have often been unworthy followers of this and have strayed from its ***many unspoken messages***. But not only we, but succeeding generations will remember this message and bear the imprint in their hearts of ***these*** great ***sons*** of India, magnificent in ***their*** faith and strength and courage and humility. We shall never allow that torch of ***economic opportunity*** to be blown out, however high the wind or stormy the tempest.

The future beckons to us. Whither do we go and what shall be our endeavour? ***To make every Indian a real consumer, be he a farmer, a worker, an entrepreneur in a growing urban centre, an expanding semi-urban one or in an upgrading farm. To bring world-class infrastructure to his doorstep, on roads, in the skies and through public transport—the freedom to travel in comfort—and in clean and converging energy. And, to bring more joy to the Indian as he eats and lives better, enjoys, informs and entertains himself with rapid technology convergence and life-style premiumisation***. To build up a prosperous, democratic and progressive nation and to create social, economic, ***corporate***, ***market*** and political institutions which will ensure justice and fullness of life to every man and woman.

There is hard work ahead. There is no resting for anyone—***policy maker, business or consumer—till India achieves her economic destiny, intended and expected of India now as a big economy, great country on the verge of bold advance, and she will need to live up to these high standards and expectations. India is also a very diverse economy across scale, businesses, consumers, regions and purposes. These will have different needs, expectations, opportunities and growth rates, but should be equal in rights, privileges and obligations, for India's next Tryst With Destiny to have character, speed and well-being.***

To Indians, investors and economies of the world, India is now making another Tryst With Destiny in 2025, and sends ***economies and investors of the*** world greetings and pledges ***to become an even more dominant and stable economy, be a leader in global economic expansion, collaborate with them in furthering growth, opportunity and investment options***.

And, to India, our much-loved e***conomic home***, the ancient, the eternal and the ever new, we pay our reverent homage to what ***she has achieved***, and we bind ourselves afresh to her service.

Another Tryst With Destiny

Our foreword—a near verbatim exposition of India's first Prime Minister Jawaharlal Nehru's speech on the eve of India's independence in 1947—is often considered one of the world's greatest political speeches. It is in part the occasion—independence of one of the world's largest peoples from a dominant colonial power that had ruled large swathes of the world. It is in part the speech itself—the language, its peaceful and non-victorious character in a violent era. But it is, most of all, the possibilities, unsaid or obvious, that India's independence offered to its people, its economy and the broader world at large. This 'Tryst With Destiny' was also particularly bold and striking, because the belief came in the face of a lot of global scepticism, and some from within, about India's ability to cement itself as a nation and build a modern, socially just and economically developed and prosperous nation state.

So, has India's Tryst With Destiny played out? Was the self belief of its founding fathers, the optimism of its people warranted? This, like most such questions, does not have a right answer and can be debated a long time, and we are no exception. We would, however, argue that politically, India has had a momentous Tryst With Destiny. It is by far the largest and amongst the smoother running political systems, has only strengthened as a nation state even as its population has quadrupled since independence, and even as it has weathered numerous challenges. India has long established itself as an independent and well-functioning nation state, a role model for many, and a stand-out in the world order.

But economically, has India made its **Tryst With Destiny**? After all, it's a USD2tn plus economy, has been amongst the fastest-growing countries over the past two decades and is an economic force and influence to reckon with, globally. But, after all, a **Tryst With Destiny** is really the ability to achieve what one is capable of. While India has done admirably well, it does remain an economically low-income country, its economic policy framework has had its ups and downs, its ability to reform has over decades been questionable. Its 'two feet forward, one foot back' pace has seen it lag some of its best performing peers, albeit not always comparable in size, political system or need for equity. So, while India has probably had a tryst with progress, and in patches with destiny, we would believe that tryst with its economic destiny has not played out, as yet.

Is this changing? We would argue that with the new Modi government in 2014, its no longer business as usual. India is being reimagined, reformed and reset. And, it's happening through relatively aggressive and long-delayed structural reform, an expansion and maturing of India's economic and legal institutions/frameworks and stepped-up execution. That it is coming at a time of huge technological change and opportunity—one that is being aggressively pushed and adopted—is only adding to India's economic revitalisation. That the change and opportunity are more visible to all—government, corporate and consumer—indicates that India has stepped-up more than just a gear. But, how will this play through?

We believe, India will make its **Tryst With Economic Destiny in 2025**, a significant 75 years from it becoming a republic, and an economic landmark. It is when India is likely to claim its rightful place in the global economic order—on scale, per capita incomes, and most importantly, in the quality and opportunities in life that the average Indian can aspire for. We see a significantly larger and more prosperous India, and one that will create even larger markets, high growth levels and efficiency and consumption parameters that will increasingly move up the global order. In effect, we believe another India, as it exists today, will quite literally be created by 2025. Or, India will offer more growth over the next 8 years than it has generated over the past 70 years since its first **Tryst With Destiny**. Few can match this opportunity, no one should miss it.

India, inspite of its stunning political success, its scale and its 'soft' cultural power, has in many ways on the global stage, been held back by its relative modest economic stature. Could that, with India's likely Economic Tryst With Destiny, also be set to change? That its government comes with more economic muscle and opportunity to offer, its businesses stride, and meaningfully invest in global markets and businesses and its consumers influence global trends and mean more for global companies. A lot of this already happens, but as India makes its Tryst With Economic Destiny, it is likely to occupy the global high table for influence that goes well beyond economics.

So, what will drive India? We take a closer look, top-down and through key thematics that we believe will drive this tryst. We foresee and forecast trends, scale changes and shifts that will create this new opportunity and disrupt and leave little room for status quo. That, like India, should serve up a lot, as we take you through this multi-hued journey

Vikas Khemani
President & CEO, Edelweiss Securities Ltd.

Aditya Narain
Head of Research

What's inside

2025 The Big Picture
Tryst with Scale & Capitalisation

- India's growth model to be a la US in the 1980s
- Households' leverage cycle will drive debt
- Deregulation is laying the foundation of a modern economy
- India will add a combined UK and Germany workforce by 2025
- USD5tn economy, with consumption doubling and investment tripling
- Market capitalisation to reach USD5-8tn with over 10 USD100bn and 100 USD10bn companies

It's The Economy

India was a USD21bn economy when it won independence in 1947. It has since grown at differing rates over various cycles. However, it gained palpable momentum only after economic liberalisation in early 1990s. Today, India's GDP is over USD2tn, making it the fifth-largest in the world. It took India 60 years to add USD1tn to GDP; it has taken only eight to add the next USD1tn and will add another USD3tn over the ensuing eight years. We believe, a unique ***combination of favourable demographics, low debt and deregulation/ reforms set the stage for sustained growth cycle*** *over the next 8 years, catapulting the output size to USD5tn by 2025—third-largest economy. In effect, India's GDP expansion itself of almost USD3tn in the next eight years will be more than its current GDP. Read another way, India will add another India over this period. We believe, the* ***growth model will be more inward looking and services led****, more akin to the US of the 1980s rather than China of 1990s/2000.*

We are especially enthused by the deregulation and reforms that are underway, which are laying the foundation of a modern, capitalist economy – building state capacity, enabling businesses and empowering households. We are convinced that a big household leverage cycle is in the offing aided by democratisation of credit, and this will be accompanied by financialisation of savings. Consumption is expected to double to USD3tn and investment spending will scale up 3x to USD1,800bn by 2025.

A Suitable and Tested Growth Model

India is one of the most promising macro-stories of today. Labour force in large parts of the world is shrinking and many of the larger economies are overburdened with debt. India is clearly unique in this regard – an extremely favourable demography and relatively low level of debt. Besides, countries which have demography in their favour are either too small or do not have an open political system. Here again, India stands out with its large size as well as a functioning democracy. This is not all. Deregulation and reforms are laying the foundation of modern economic institutions. We perceive all these elements as building blocks of a big transformation.

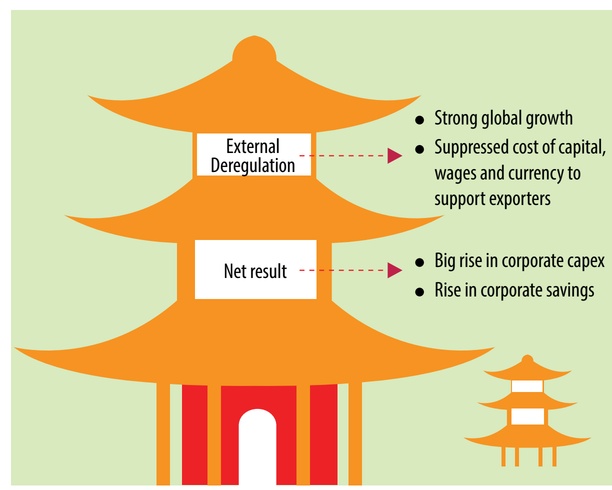
The question is, how will the economy evolve amidst this transformation and what opportunities it will throw up in the process. A look across the world reveals that different countries have adopted various growth strategies at different times, and no two strategies can be strictly identical. Still, broadly, two models stand out:

Outward-looking industrialisation such as China (late 1990s), Japan (1970s & 1980s), Korea (late 1990s). This was driven by strong and purposeful industrial policy by governments supporting industries that can rapidly absorb technology as well as labour at large scale and produce massive surpluses to sustain exports.

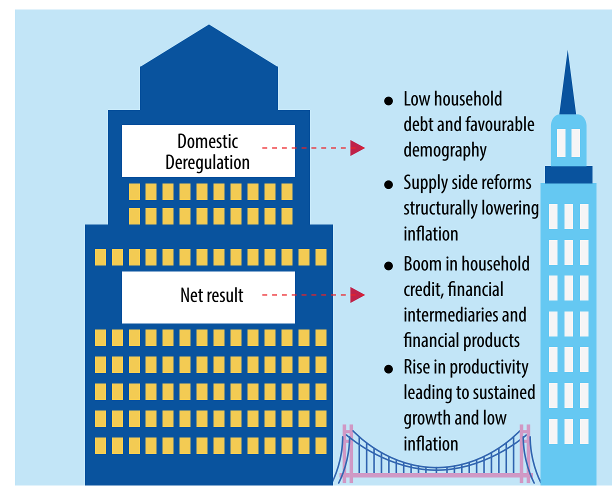
Inward-looking services-led growth model as is often seen in industrialised economies, especially the US (particularly after 1980s). The policy approach was relatively less interventionist and these countries have generated current account deficits on a sustained basis.

That said, growth experience of countries is too diverse to fit into a simple model.

Growth models



China (1990s/2000s)



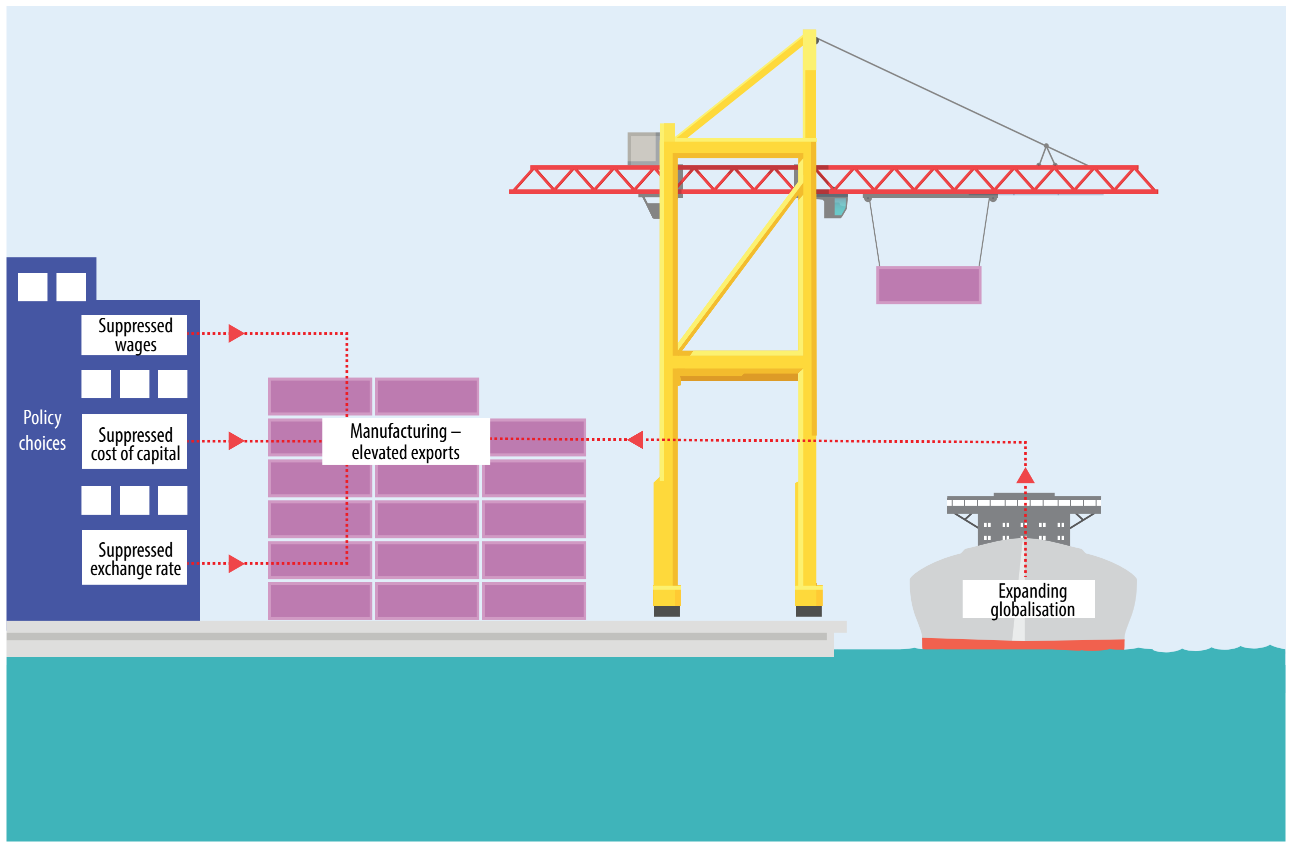
US (1980s)

Export-led industrialisation: The China Model of the 1990s

The biggest success story of this model is China in this regard. Broadly speaking, China's policy set up involved heavy government intervention to direct the economy towards export-oriented industrialisation. This entailed

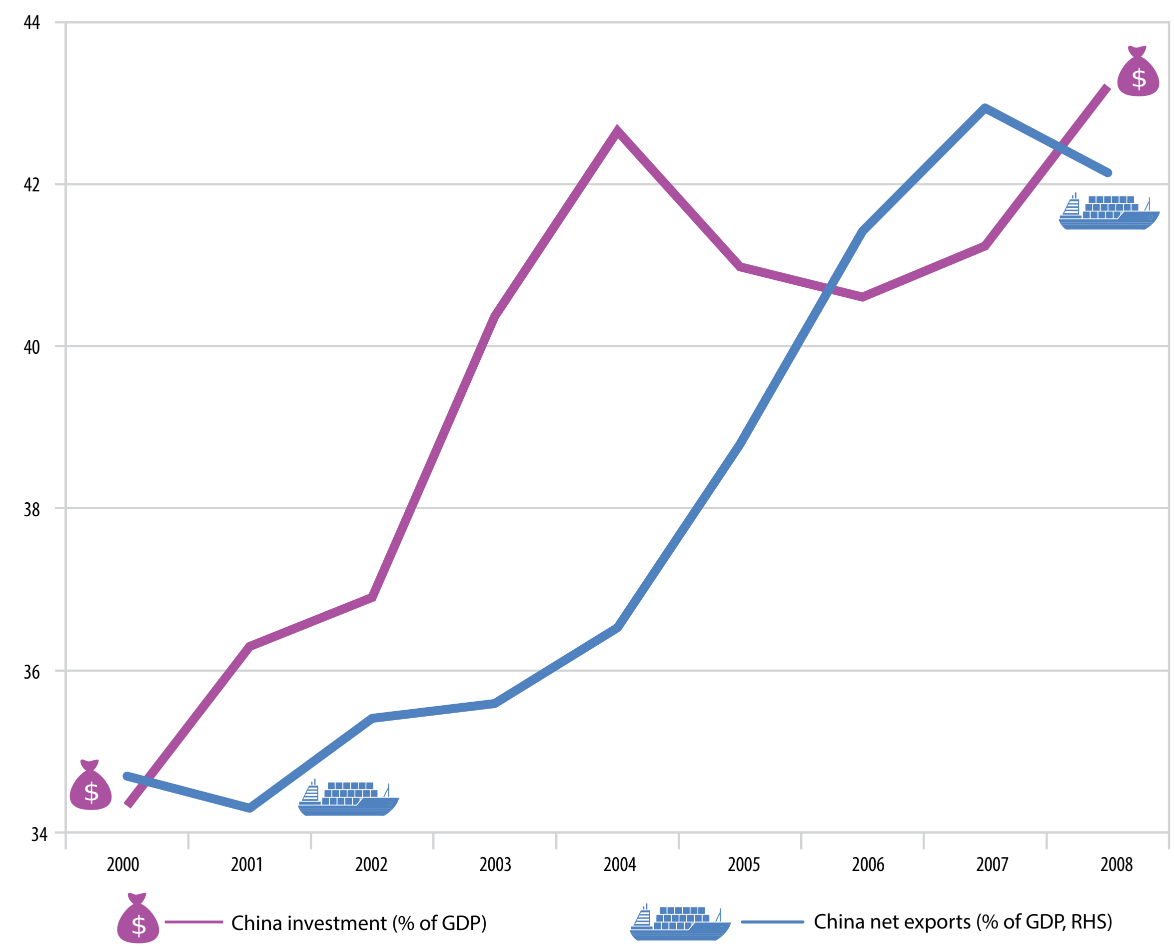
- boosting domestic infrastructure in order to sustain economies of scale,
- keeping exchange rate competitive,
- financial repression to sustain low cost of capital,
- state directed credit to the 'winning' industries and
- suppressing domestic wage growth.

China Growth Model



Such an approach ensured that China's manufactures achieve economies of scale and become the engine of labour absorption from the rural sector. Notice that China did not follow the path of neo-liberal reforms such as free exchange rate, open capital account, deregulation of the domestic financial sector, liberalisation of the labour markets, monetary policy reforms, among others.

China Growth Model (as % of GDP)



And there's the US services model of the 1980s

This growth model has been observed in countries which are already industrialised/developed – US and UK. In that regard, the example may not be strictly comparable when one is talking about India, which is not industrialised. But, there are certain aspects which can be relevant or instructive for it. And also, there are developed countries which are still heavily dependent on industry and trade such as Japan and Germany.

US, especially in the 1980s, adopted relatively less interventionist and more market-friendly policies – more conforming to markets rather than intervening to guide them, be it in terms of international trade or finance or even domestic markets. UK has had similar experience.

Specifically in the US, there were essentially three attributes in the 1980s which contributed to sustained growth—demographic bulge, low debt level of households and deregulation across sectors (reduction of trade barriers, taxes, liberalisation of labour markets, deregulation of the financial sector and so on). At the fundamental level, this entailed curtailing the government's role in the economy.

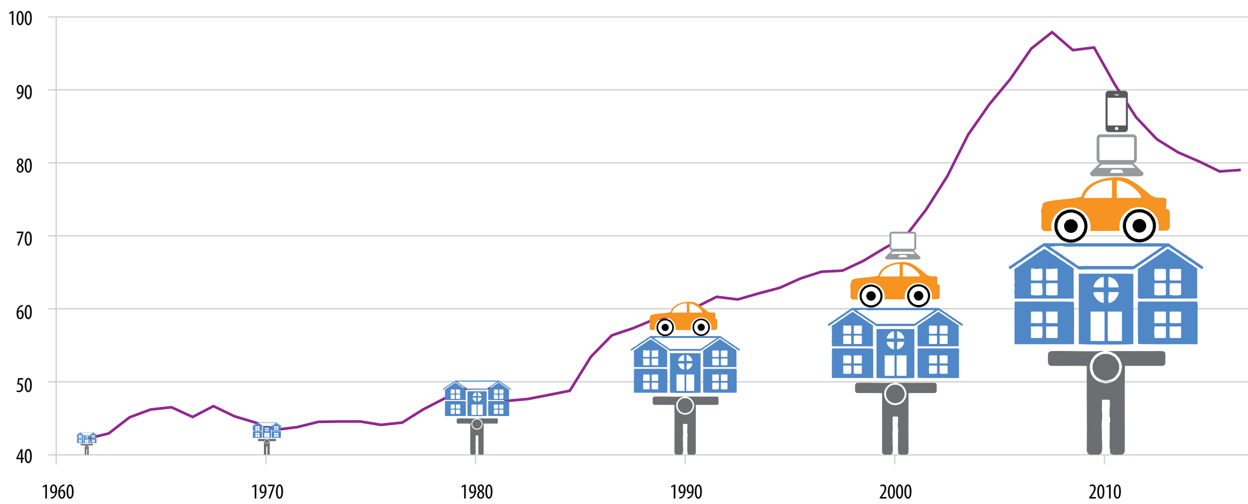
Below, we dwell on the evolution of US growth in some detail starting 1970 and 1980.

1980s US macro backdrop: 3Ds

There was low household debt

The starting point for the US economy in the 1980s was very low and stable level of household debt relative to GDP. During the 20-30 years in the run up to 1980s, household debt to GDP ratio remained stagnant at under 50%. This could partly be the result of heavy social welfare orientation of US government policies in the post WW2 period, followed by Great Society push in 1960s, which aimed at eliminating poverty through heavy government spending on education, health and other social areas. This entailed income transfers to the US household sector and, perhaps, that kept debt levels under check.

US household debt was low before 1980s (%)



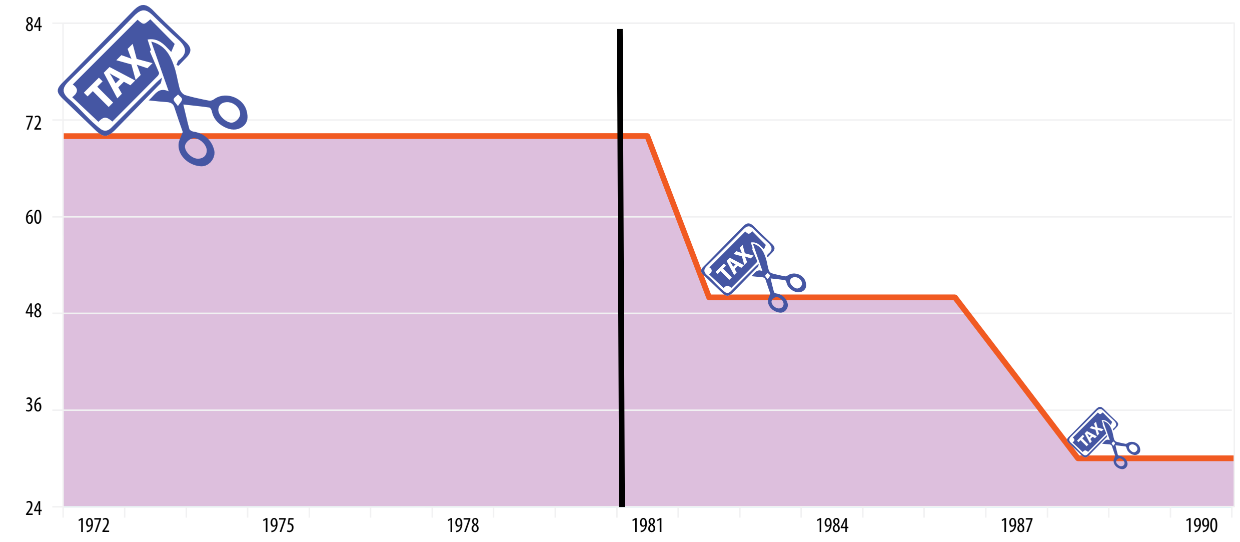
And Reagan aggressively deregulated

The second aspect that stands out during the US of the 1980s is the wave of deregulation involving several parts of the economy. This primarily involved supply-side reforms, especially massive tax cuts for businesses, monetary reforms to lift Central Bank's credibility, financial sector reforms including deregulation of interest rates, breaking the power of labour unions, etc.

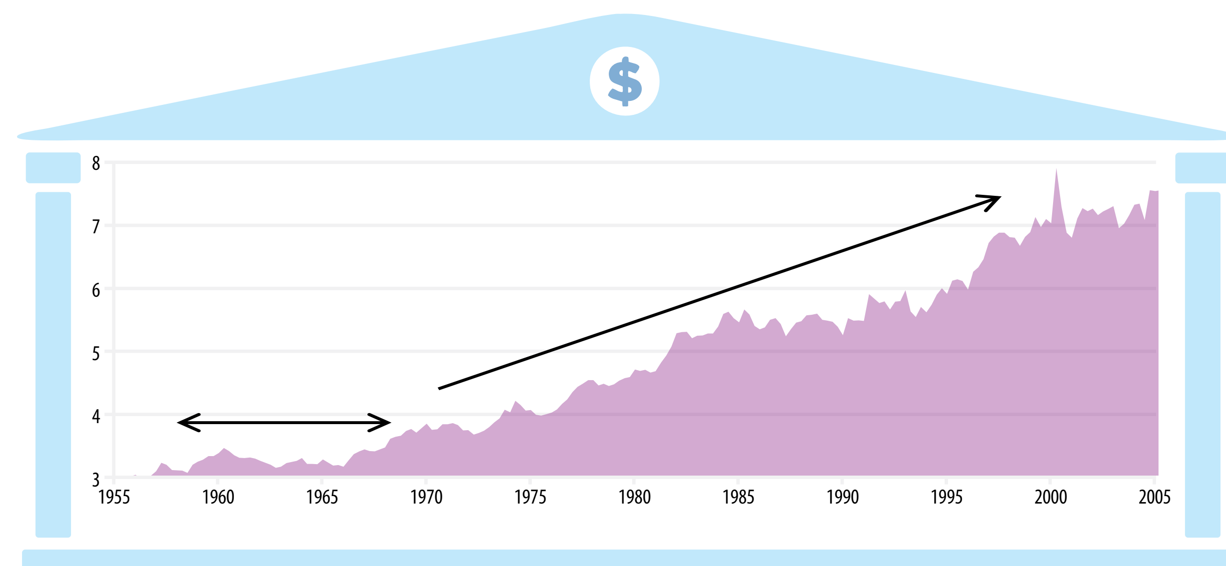
And also structurally cut tax rates: This was the mainspring of supply-side reforms initiated under Ronald Reagan, where the top marginal tax rate was cut from nearly 70% in early 1980s to under 40% in a decade.

While financial sector reforms had been in the works: This entailed liberalisation of deposit rates, expanding the scope of banking activities, etc. It is in this period that an asset-backed securities market began to take roots and picked up pace in the 1990s.

Sharp reduction in US top marginal tax bracket rate (%)

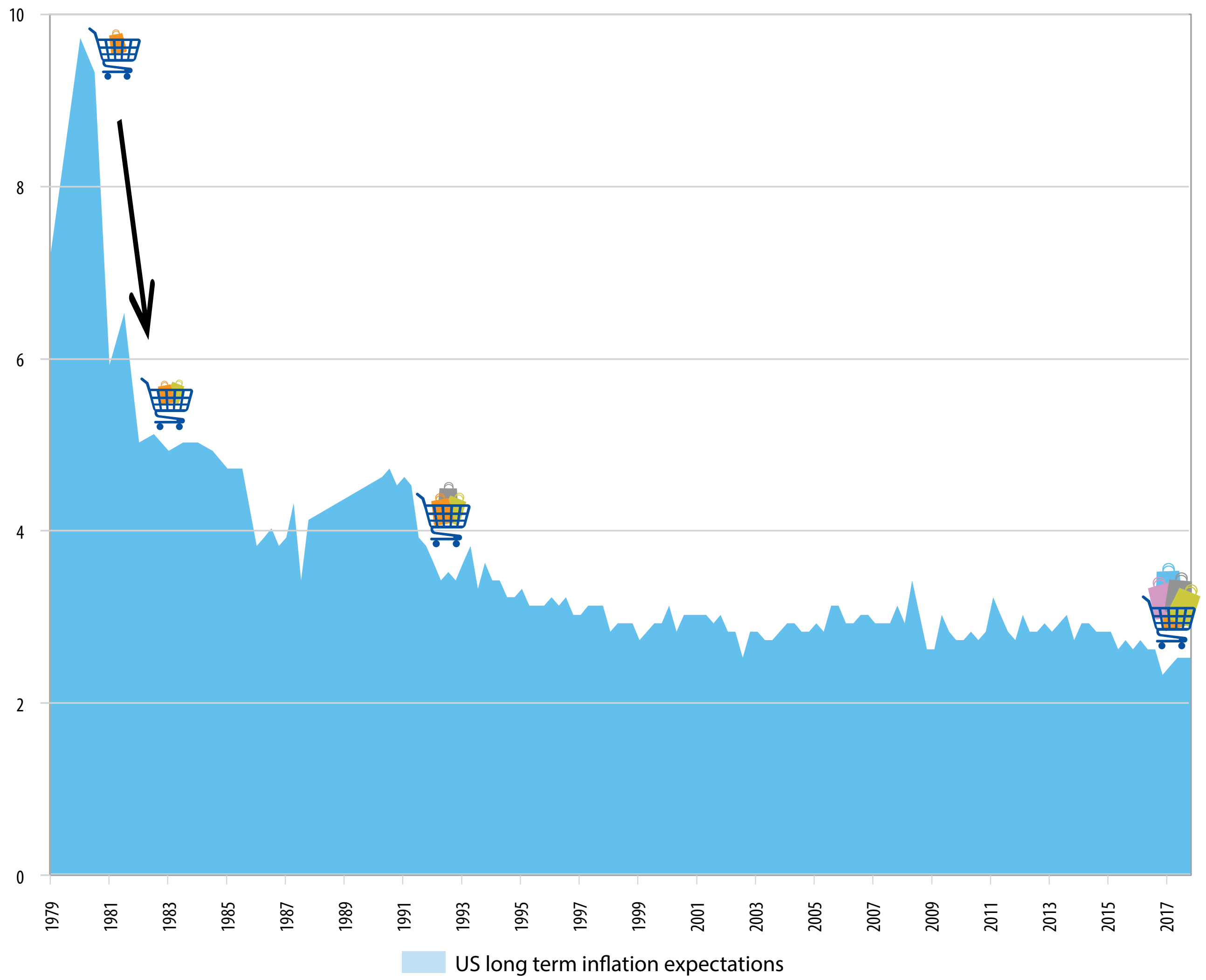


US financial sector came of age in 1980s (% of GDP)



And the Central Bank, with action and credibility, had lowered inflation expectations: Volcker's famous fight against inflation even if it entailed deep recession helped a great deal in cementing Federal Reserve's inflation fighting credentials. This helped lower inflation expectations and set the stage for lower interest rates on a sustainable basis.

Central Bank's credibility helped tame inflation expectations

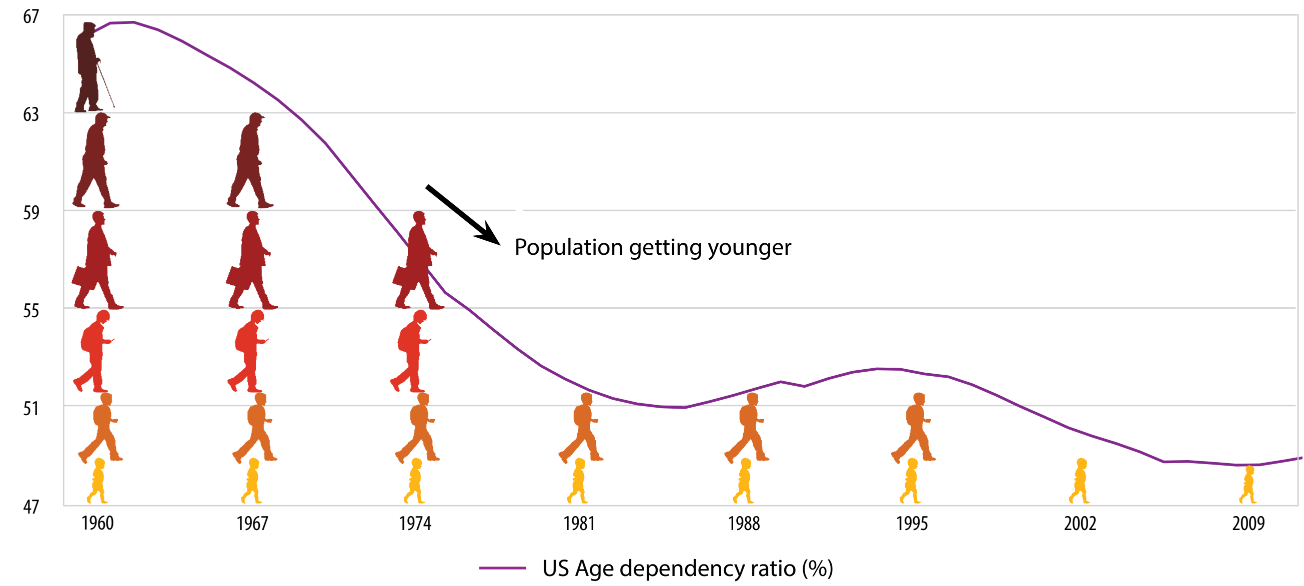


All these reforms set the stage for sustained decline in inflation, progress on financial innovation and boom in US household leverage and consumption.

US was a young nation with good demographics

Finally, US demography improved significantly between 1960 and 1980 with working age population almost doubling in a span of 20 years (1960: 61mn, 1980: 109mn). During this period, US dependency ratio also improved dramatically – plummeted to 52% in 1980 from 66% in 1960.

US demography was at its best in 1980



Which way will India economically evolve: US or China?

China is vacating space in low-cost manufacturing as its cheap labour advantage is eroding. And, India seems to be a natural candidate to fill this space. However, we see a few challenges.

Export-oriented industrialisation is, today, a challenging proposition

Manufacturing is becoming increasingly capital and skill-intensive and, therefore, its traditional lure as an engine of job growth is fading. At the same time, as experts like Dani Rodrik have argued, environmental concerns are playing much important role at the global level than 20 years ago. And, this requires technological solutions which work against the comparative advantage of developing economies.

As regards global trade, several experts have argued that incremental gains and benefits are ebbing as trade barriers are already at record low now. At the same time, distributional costs (in terms of income) arising from trade continue to persist (Rodrik, Krugman). In such a scenario, it is possible that global trade is plateauing as % of GDP on trend basis.

Even if India does attempt to embark on the manufacturing-exports nexus, the question is, whether it is prepared to undertake a set of interventionist policy choices which China and others have pursued – suppressing the exchange rate as a policy, keeping cost of capital unnaturally suppressed to support manufacturing, keeping wages suppressed in an institutionalised way (China has concept of domiciled labour which curtails their bargaining power) – to make it successful. This seems unlikely.

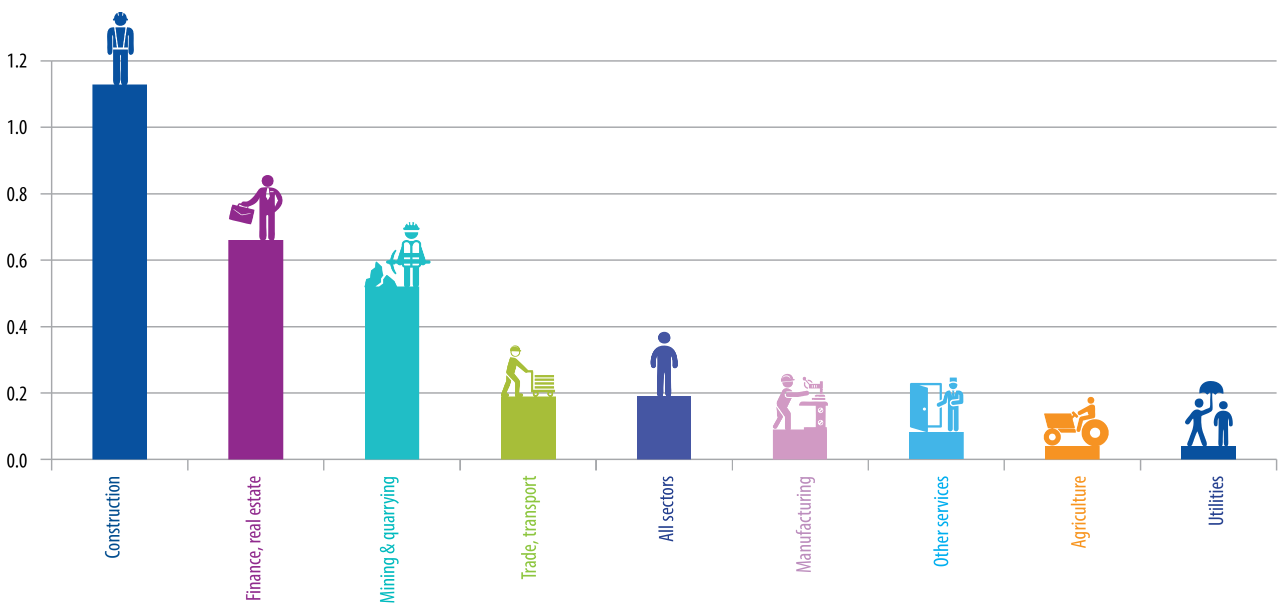
Thus, the success which China and other Asian economies achieved through export-oriented industrialisation over the past 20-30 years may not be easy to replicate anymore. This is not to suggest that India cannot ramp up its industrial base, but it may not be adequate for absorbing the demographic bulge.

While a services-led approach is probably more suitable

A reasonable case can be made that while India will certainly ramp up its manufacturing prowess over the next decade, the engine of job generation may still lie elsewhere, which we believe could be services (financial services, retail trade, transportation, tourism) and other non-tradable sectors of the economy, i.e., construction such as infrastructure and real estate. Note that employment elasticity of the construction sector is amongst the highest, although productivity may not be as high as manufacturing.

A few of the services such as health, education and financials will require only skilled labour, but others such as retail trade will have to rely on adopting technologies and also absorbing a large number of low-skilled labour.

Employment elasticity of construction and services is high



Sectoral employment elasticity from 1999-2000 to 2009-10

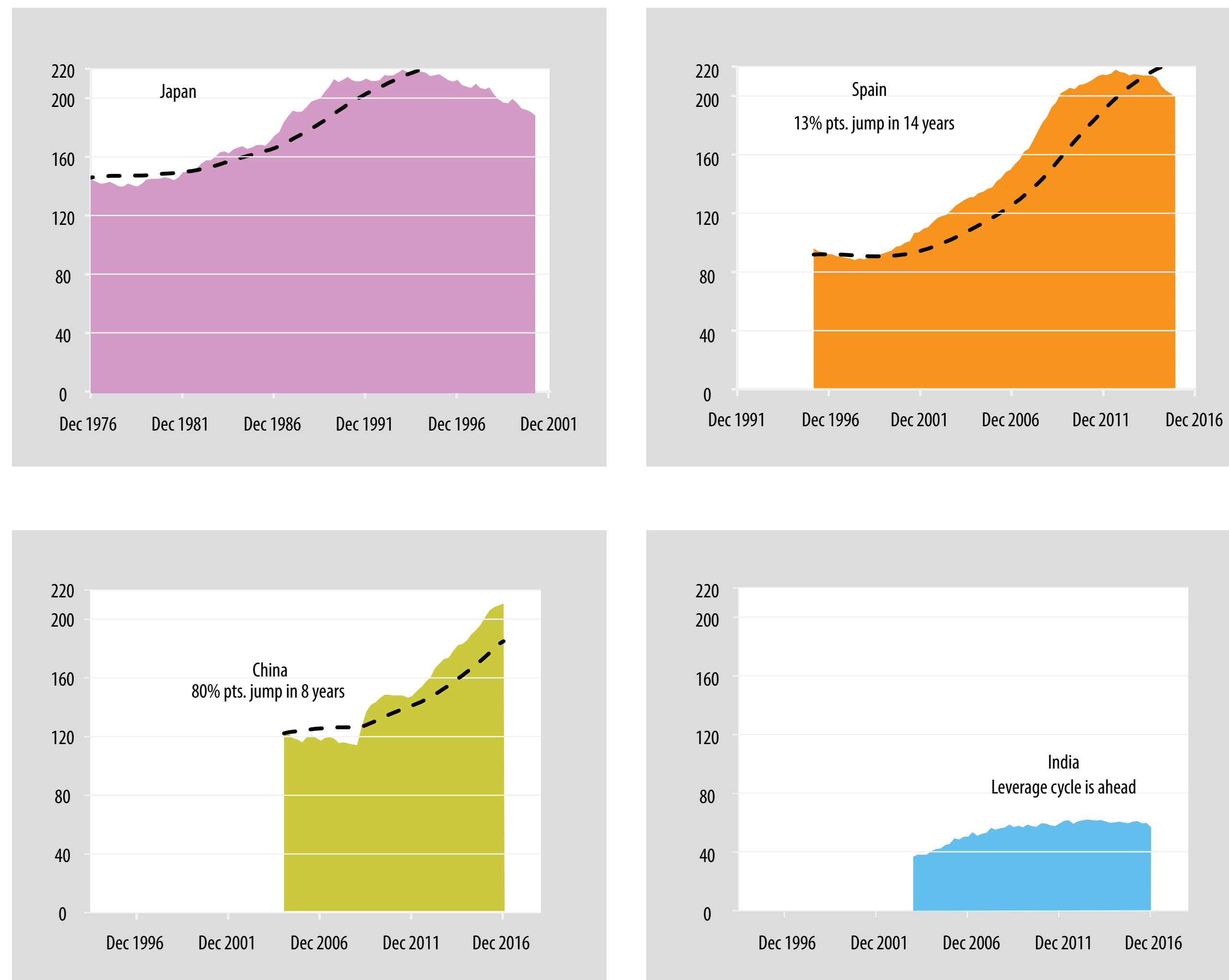
India has today a very striking resemblance to the US of the 1980s

- Herein lies some similarity with the US model as discussed above. Specifically, there are three aspects in which India's current set up is broadly similar to the US of the 1970s and 1980s – **Debt, Deregulation and Demography.**

Debt Is The Opportunity, Not The Concern

Today, while large part of the world is saddled with high debt, India stands out in terms of low leverage. Large parts of the world seems to be hitting debt capacity, implying a long phase of deleveraging and, hence, perhaps subdued growth. Once India sorts out its cyclical issues, it is likely to create a long runway for India's growth for many years to come.

India is hardly levered compared to rest of the world (%)



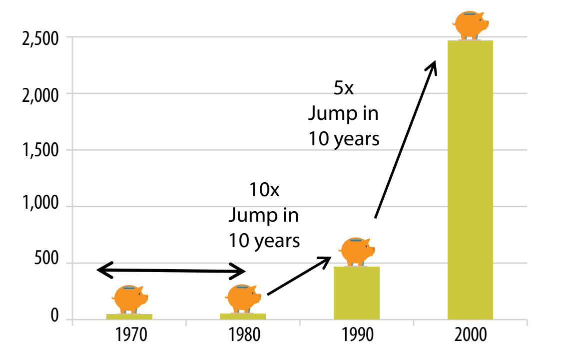
Private sector Debt to GDP

Currently, in India, household leverage is extremely low, and there is a lot of headroom for it to rise. Government policies will only help it rise further. Massive drive towards financial inclusion – JAM trinity, opening of accounts (Jan Dhan), credible identification mechanism (Aadhaar) and enabling transactions (mobile) – augurs well for the financial sector. This, along with a young population, is a harbinger of a big leverage cycle among households in India, something which was seen in the US in the 1980s.

Assets to see diversification of savings

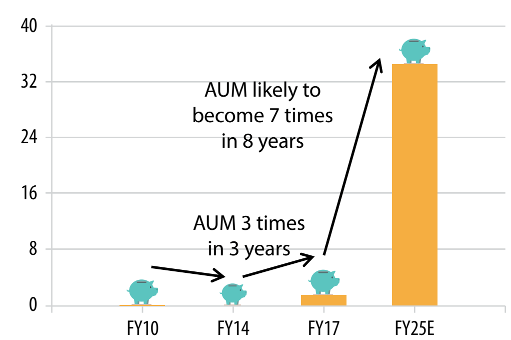
Financialisation and diversification of savings will be important themes that are likely to play out over the next ten years. This will be aided by not only a young population, but also by a stable inflation and interest rate regime.

US equity mutual fund AUMs have catapulted post 1980... (USDbn)



US total stock of household investment in equity mutual funds

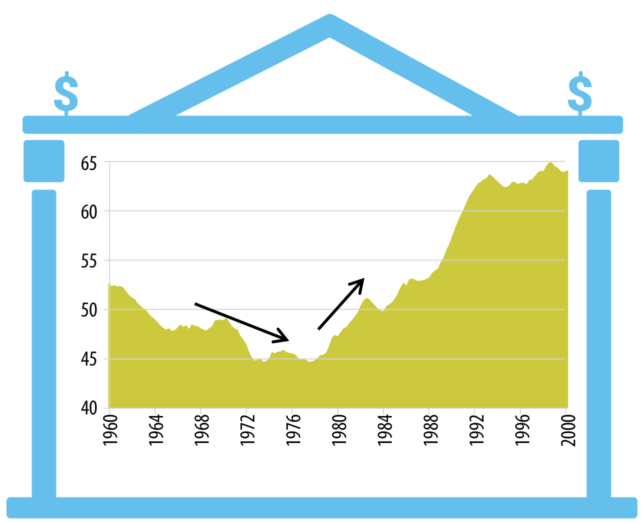
...early signs visible in India as well (INRtn)



India equity mutual fund AUM (INRtn)

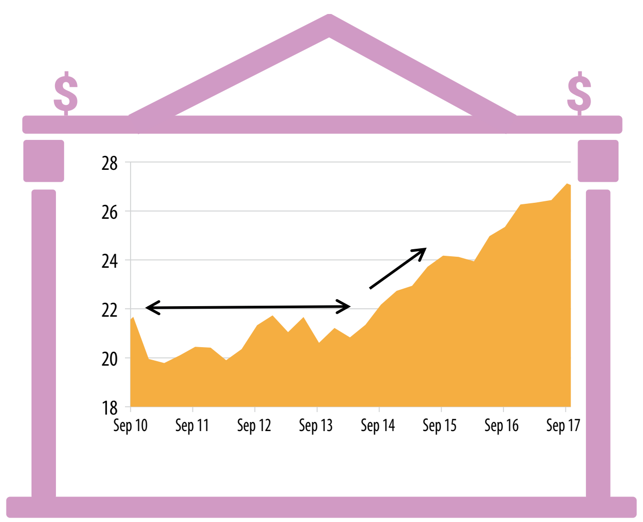
Parallelly, with diversification of savings, the credit market will diversify, especially from bank lending to other sources of financing such as corporate debt and non-bank financing companies. And, early signs of these trends are already apparent.

Non-bank source of funding gained market share post 1980 (%)



Share of non-banking pvt. sector credit in US

Early signs visible in India as well (%)



Share of non-bank sources in India's aggregate credit

Deregulation and Reforms Are Laying A Strong Foundation

The second important pillar is deregulation and reforms, again very much akin to the US in 1980s. Over the past three years, several policy measures have been initiated for each of the stakeholders – government, corporates and households. These reforms can be broadly classified into three categories.

Building state capacity: Improving capacity to collect as well as spend

India's fiscal capacity is one of the lowest in the world. Its tax to GDP ratio, is significantly lower than global peers. Also, in expenditure, India ranks very poorly with very high leakages and corruption. This clearly indicates that India's fiscal capacity needs a big revamp and that too quickly. The good news is that transformation is underway with reforms being undertaken to improve tax collection as well as plug leakages. One should reap its rewards in years to come.

Deep seated reforms across Government, Corporates and Households.

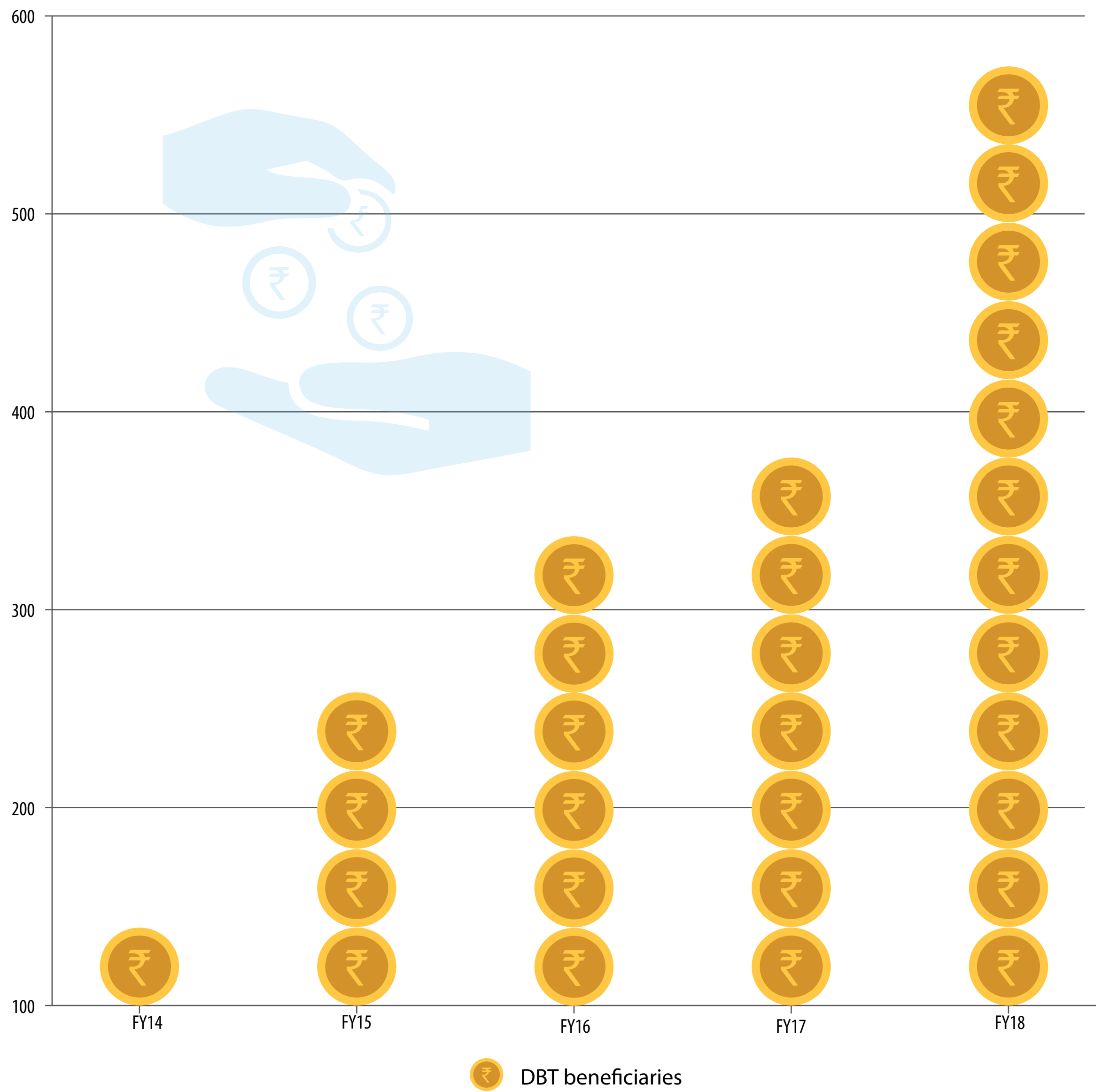
Improving state capacity to collect (GST): GST is one of the biggest indirect tax reforms undertaken by the government since independence, which has subsumed 17 central and state level indirect taxes and introduced a single unified indirect tax (one nation, one market, one tax). With introduction of GST, businesses will become more competitive led by increased transparency, efficiency and elimination of a multi-layered tax structure, resulting in easing in compliance burden. Further, it will add to the formalisation of the economy and widen the tax base.

Improving state capacity to spend (DBT, Aadhaar): In India, there are big leakages in government spending and pilferage of subsidies owing to a large number of fake accounts. However, this is being addressed by Aadhaar. Currently, ~99% of Indians have an Aadhaar card, a unique identity number. Given its widespread reach, Aadhaar is now used to deliver a large number of public goods, helping weed out fake accounts and thus plug leakages. Further, the government has opened a large number of bank accounts and linked most of them with Aadhaar. Hence, it now directly transfers money to bank accounts of beneficiaries, eliminating middlemen. In FY18, the number of bank beneficiaries stood at nearly 600mn.

Enabling corporates: Increasing the ease of doing business

With regards to corporates, India is notorious for its high red-tapism and bureaucracy. As a result, it has ranked very poorly on this front. However, over the past three-four years, there has been a big change in the same owing to various reforms. We believe, this will only accelerate going ahead.

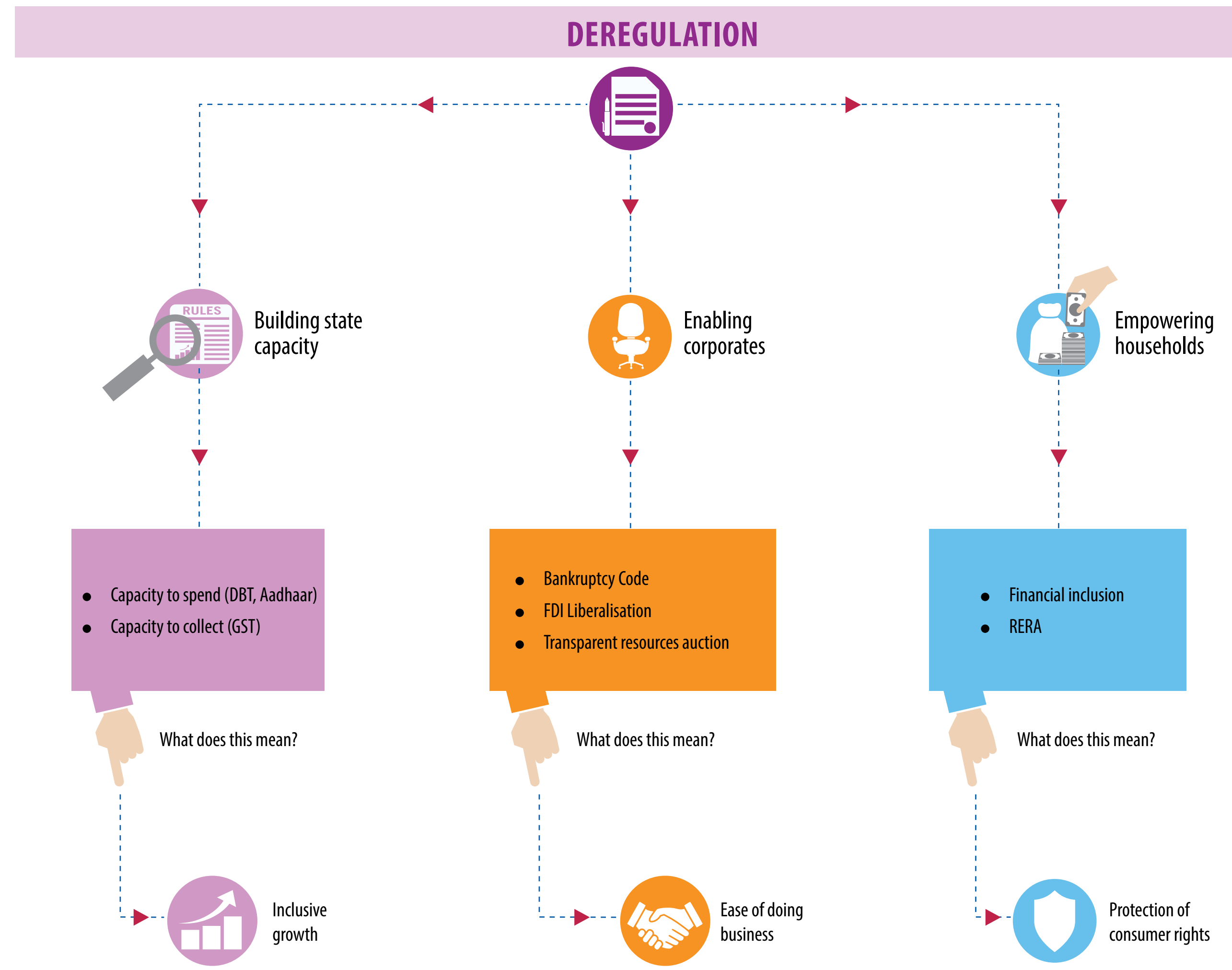
Number of DBT beneficiaries has increased multifold in past 3-4 years (Mn)



Monetary policy framework: After a long episode of high inflation and unanchored inflation expectations, India adopted formal flexible inflation targeting monetary regime with the aim to restore RBI's credibility and anchor inflation expectations. A structural shift in inflation to lower levels augurs well for the financial sector's expansion. Recall that once Volcker restored Fed's credibility in 1980s, inflation and inflation expectations remained well anchored.

Bankruptcy Code: Prior to introduction of the Insolvency and Bankruptcy Code, there was no single law dealing with the issue in India. Existing laws were inadequate for pertinent and quick resolution of these issues. The Bankruptcy Code is likely to play a pivotal role in tackling the banking sector's current NPA problem.

FDI liberalisation: Foreign Direct Investment (FDI) is one of the best forms of long-term capital. Apart from being sticky, it also entails technological know-how. Despite opening up, India has lagged China in FDI flows. One of the biggest impediments has been its bureaucratic machinery and low 'ease of doing business'. However, this has changed and will further improve going ahead. Over the past few years, the government has relaxed FDI norms in various sectors such as defence, retail, aviation, etc. This opening up is already visible in the sharp increase in FDI over the past three-four years.



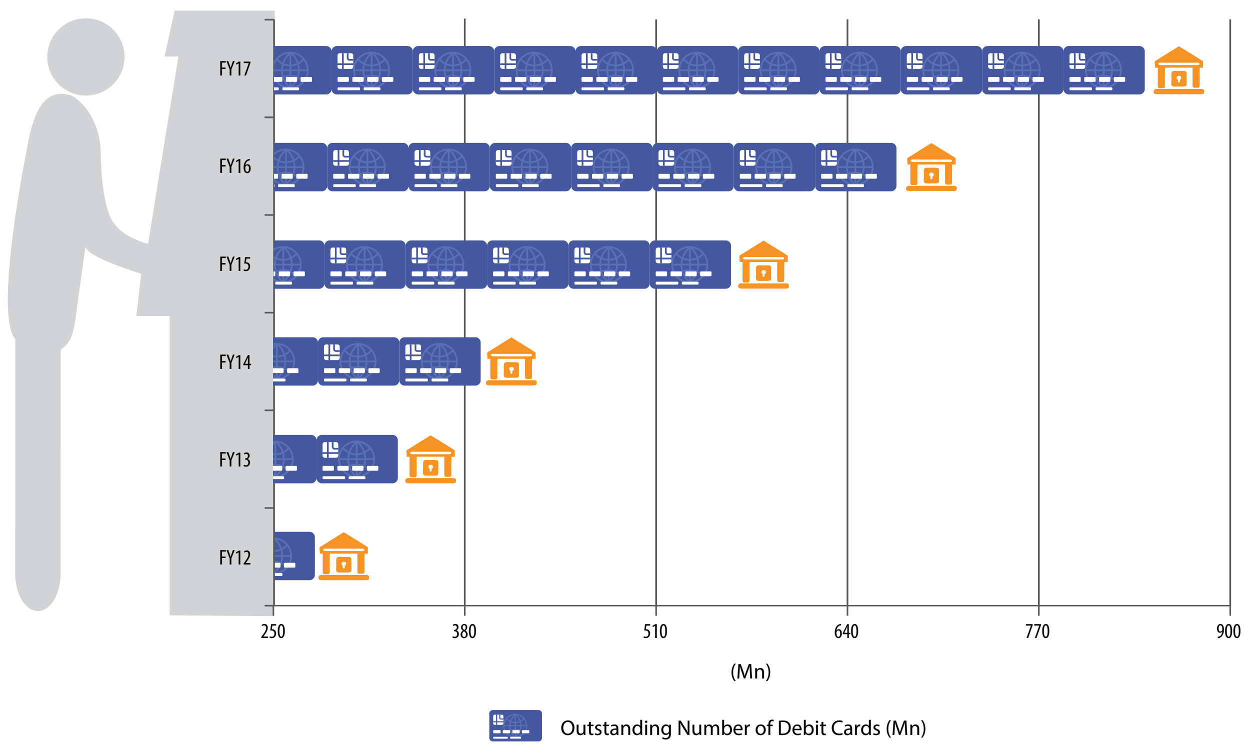
Empowering households

For a growing and modern economy, it is important that household rights and interests are protected. Here two key steps come to mind which will go a long way in empowering households.

RERA: With RERA implementation, the real estate industry has got its first regulator. It aims to protect home buyers and also boost investments in the real estate sector by enhancing transparency.

Financial inclusion: Schemes like Jhan Dhan account, various insurance schemes (Pradhan Mantri Jeevan Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, etc.), Atal Pension Yojana, reflect the government's continued commitment towards financial inclusion in India.

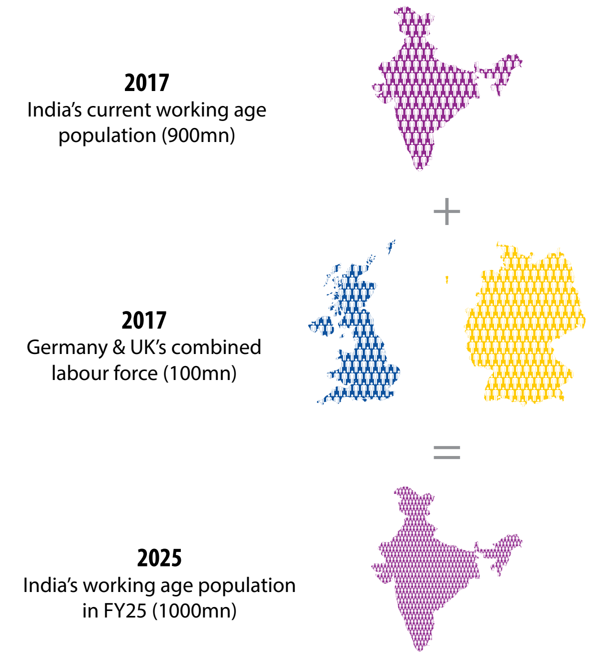
Sharp rise in the number of debit cards...



Demographic Bulge Ahead is the Booster

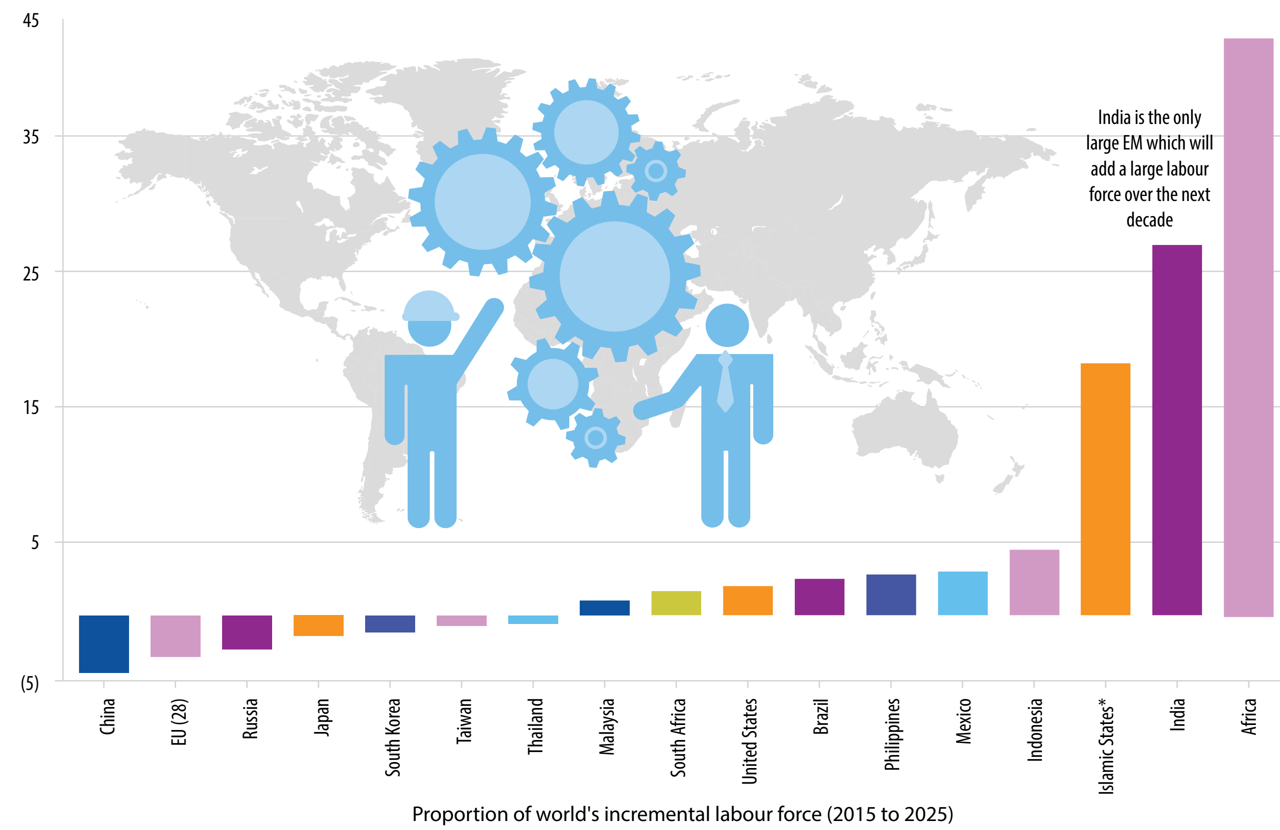
Finally, India is amidst its demographic bulge. It will be adding a million people a month to its labour force over the next decade. This is quite large; to put these numbers in global perspective, India will add the current UK + Germany's labour force to its labour pool over the next decade.

In fact, what's unique is that India will be one of the very few destinations in the world where the demographic bulge is so large. Over the next decade, it is likely to contribute ~25% to the world's incremental labour force. It is one of the very few Emerging Markets (EM) which is making such a large contribution to the world's labour pool. Africa and Islamic nations (Pakistan, Saudi Arabia, etc.) are the other countries which have such a large demographic bulge.



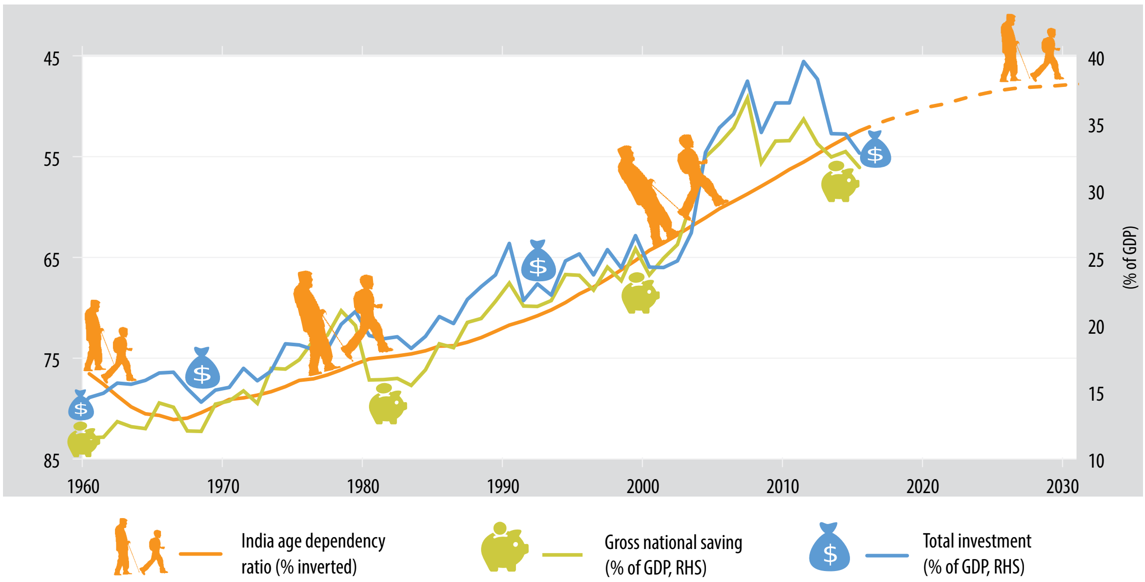
Graphical representation not to scale

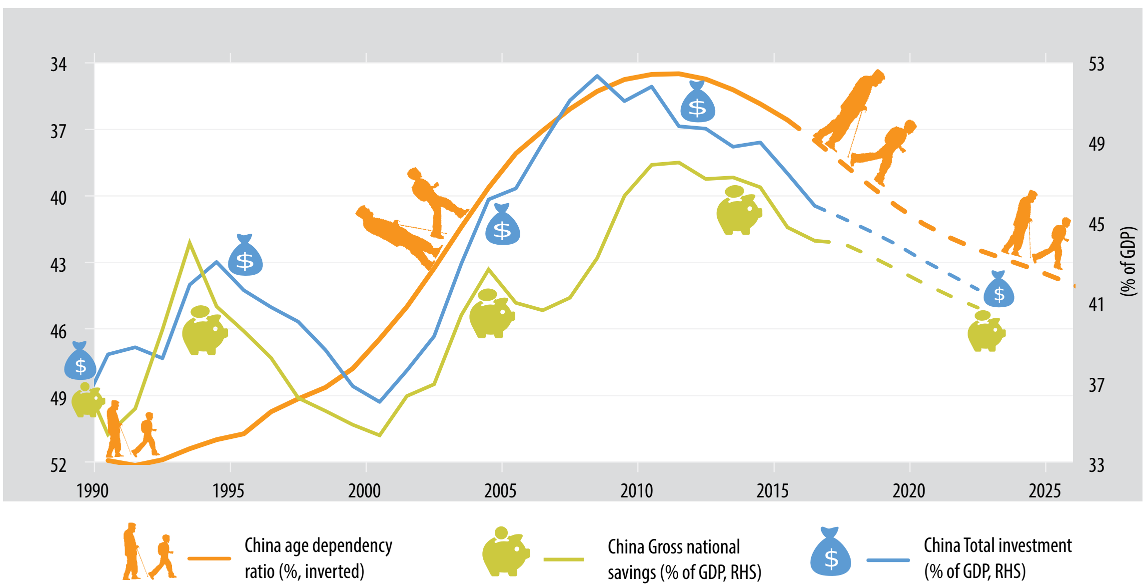
India to account for one-fourth of world's incremental labour force by 2025



Historically, it has been observed that favourable demographic trends are often associated with rising investment and savings rate, which eventually form the basis of high growth rate on a sustained basis. This has been seen in India, China, Japan, etc. And, there's no reason why the next decade will be different from the past.

Historically, phases of high savings and investments have been associated with periods of favourable demographics (%)

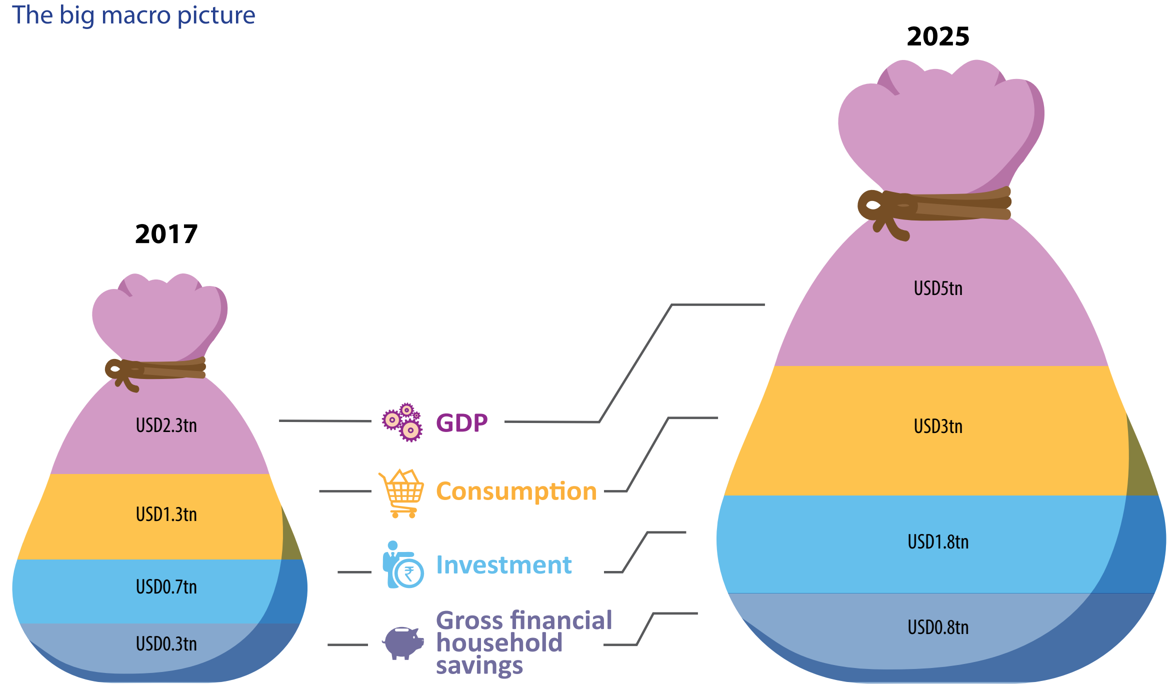




And, at USD5tn in 2025, India will be a Grand Economy…

Over the next eight years, India's GDP will scale up to USD5tn, following a domestic-demand and services-led model, akin to the US of 1980s and 1990s. Demography, debt and deregulation will form the springboard of sustained growth, much on the lines of the US in the 1980s and much different from China's export-oriented industrialisation. Historically, India's phases of high growth have been undermined by spurt in inflation and inflation expectations, but what is particularly promising this time is the institutional framework of flexible inflation targeting that is now in place. This should help bring down inflation expectations gradually, thus setting the stage for lower cost of capital – a phenomenon seen in the US.

The big macro picture



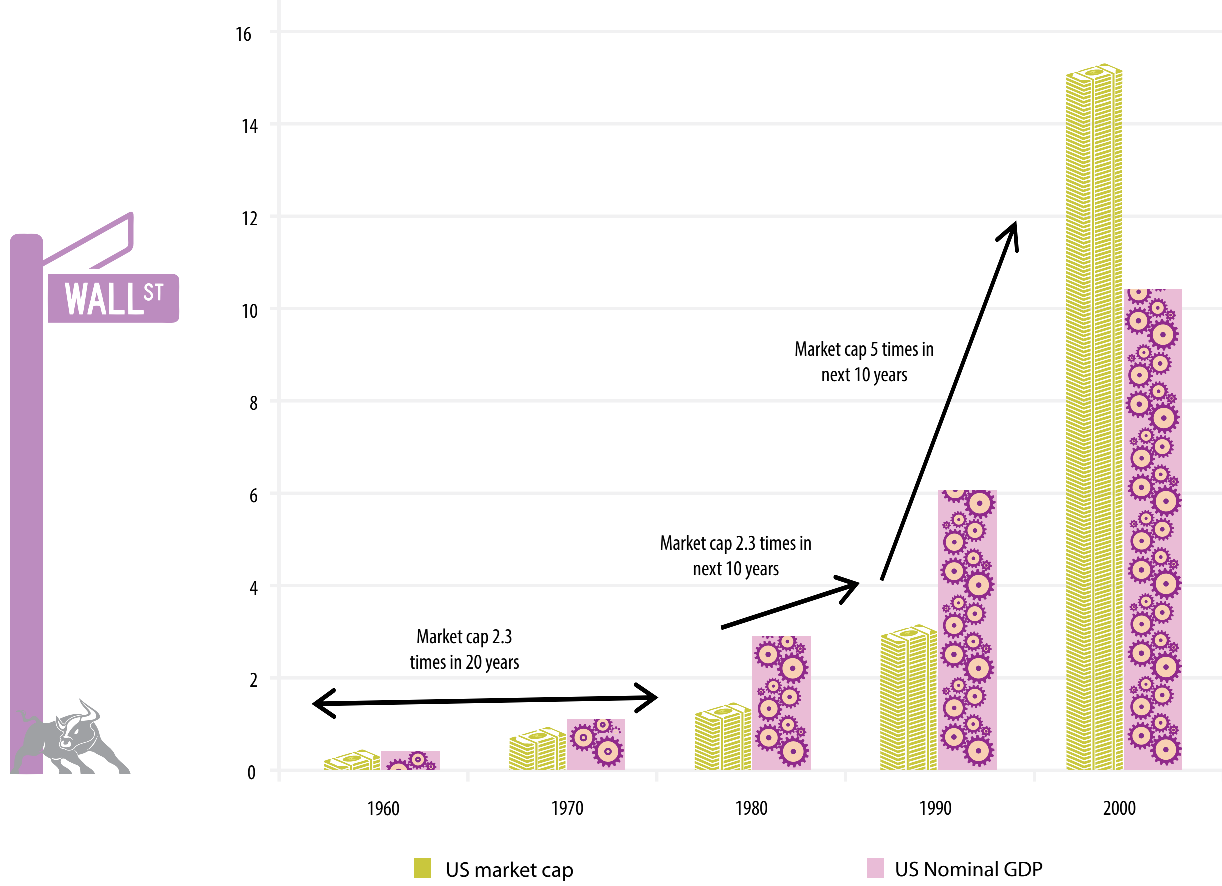
Over the coming 8 years, per capita income will catapult to USD3,500 from USD1,700 currently. Investments, particularly centered around domestic oriented/non-tradable sectors such as residential and infrastructure, will spearhead the growth cycle. Investments of households will rise led by residential sector and, more importantly, we foresee rapid strides in the mass-transit infrastructure and road and rail network, which in turn will unleash significant productivity gains in the economy. The consumption pie will expand broadly in line with nominal GDP growth, but the nature of consumption will change materially with rising per capita incomes, expanding young population, accelerating urbanisation and democratisation of credit. This holds the promise of rapid growth in aspirational consumption.

…With Even Bigger Markets and Businesses

So how will India's economic expansion translate into market capitalisation? How rapid will this be? Will the market's expansion only mirror the economy, lead it, or like the US in 2000, grow significantly beyond? Or could it lag economic expansion, as has been the case in the previous decade. Equally importantly, irrespective of the pace, what will define the market's expansion? Will it be broad based or there are going to be enduring themes or will it be led by individual businesses? And, will history be the guide?

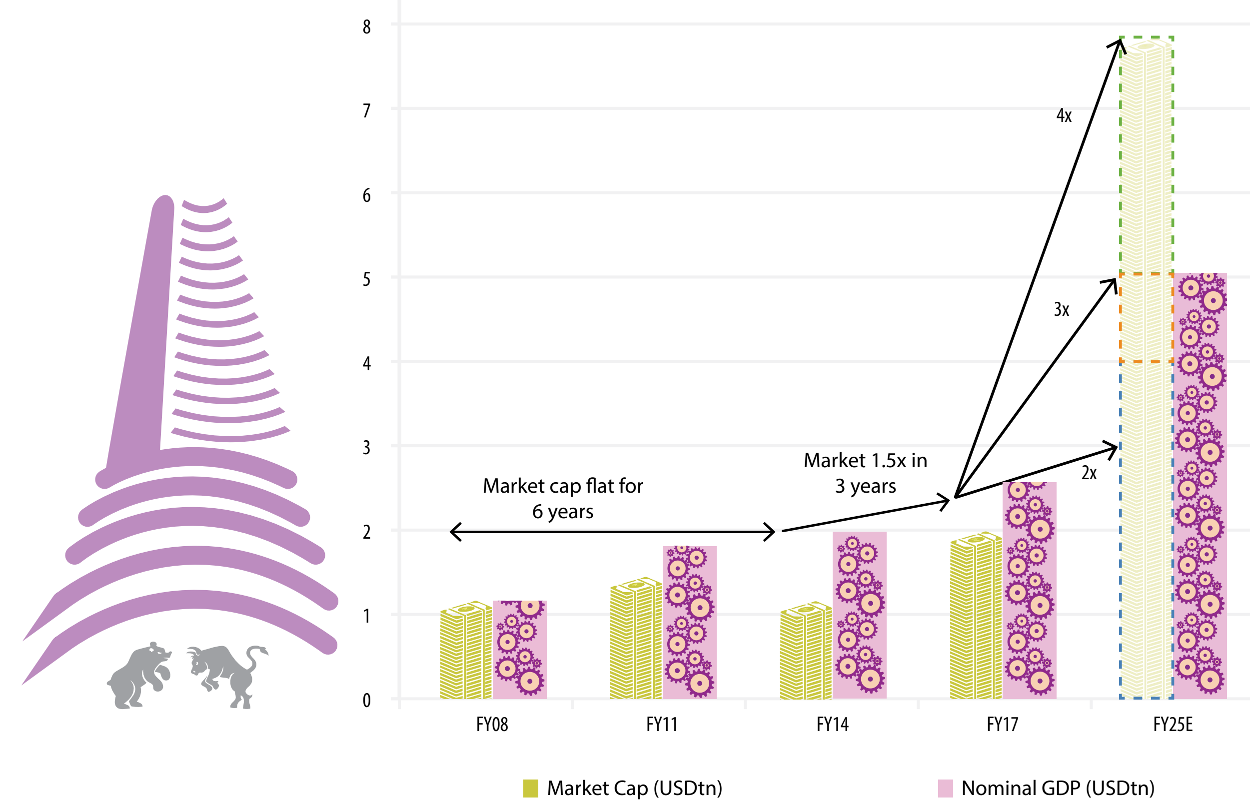
In sync with our proclivity for the US model of the 1980s, we do see the fuelers of its economic expansion – Debt, Deregulation and Demographics to be likely drivers of market expansion. If anything, these drivers should well add more fire to equity markets than to the economy. It was the case with the US – with early market expansion in the decade of the 1980s leading the economy. But more tellingly, the market's expansion into the decade beyond was even more aggressive, significantly outpacing the economy. If the US' market capitalisation once debt, deregulation, demographics and a share of technology played through is anything to go by, where could India go from here?

In US, equity markets reaped rich dividends from reforms done during 1980s (USDtn)



So, what is India's starting point? It has lagged the economy over the previous decade. Even adjusted for the high at which the market was a decade ago, the market's expansion has lagged the economy and India currently trades off its GDP. While starting valuations across traditional measures (PE) are a caveat, India's market cap valuation is still less than its GDP. The US did start its decadal market at relatively lower market cap to GDP measures, but then it did go a lot higher and peaked well above GDP. We could, conservatively, expect India to trade at GDP as its growth plays through by 2025, but if benchmarked to the US at its peak in 2000, there's a lot of market capitalisation creation ahead.

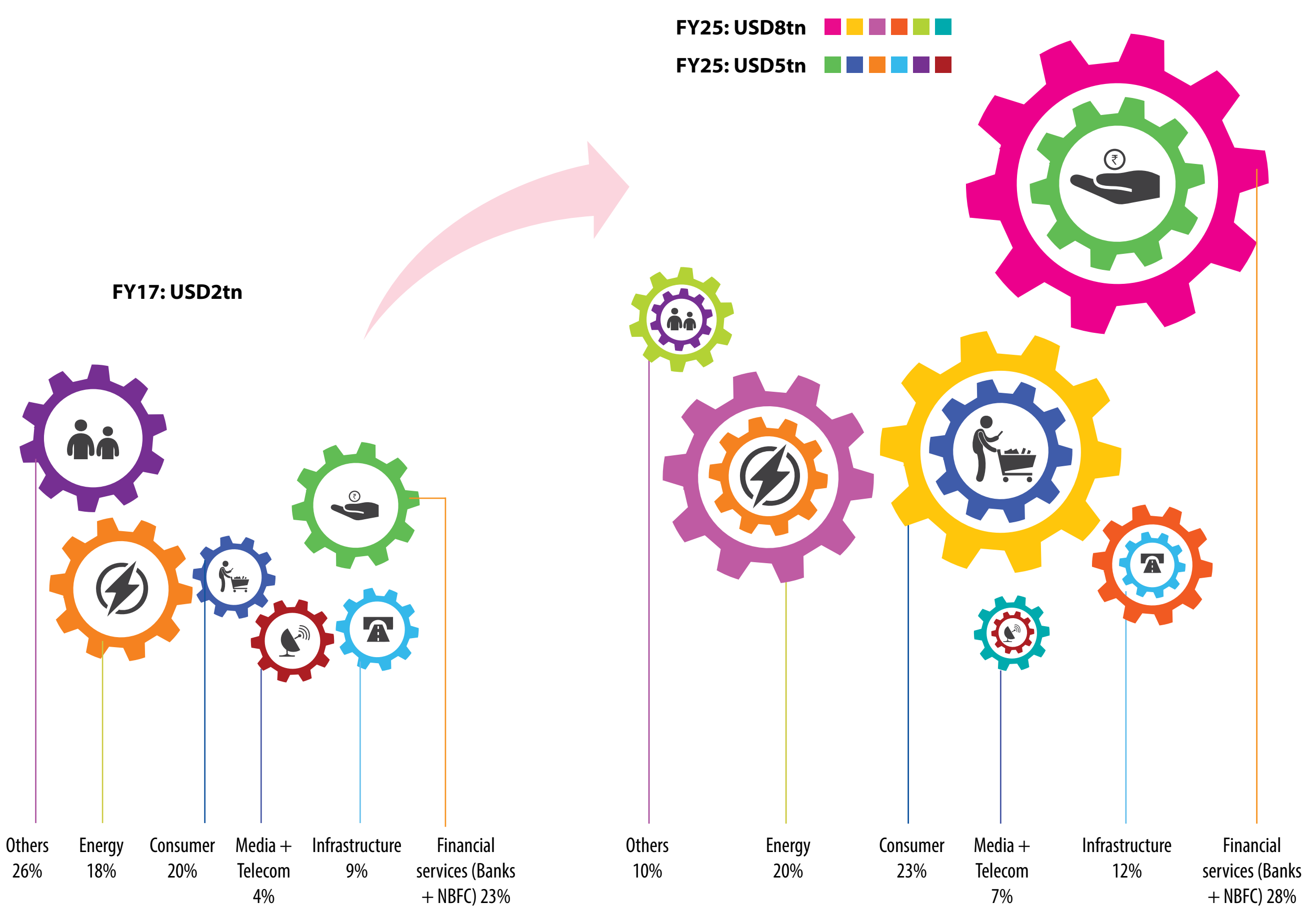
In India as well, markets could see returns similar to US (USDtn)



But, what will bottom-up drive these gains – will it be themes, sectors, businesses, companies, capital market activity or global flows? It will likely be a mix of all the above. But, we do see defining themes driving the Indian economy, which we extensively detail in this report, which lead market capitalisation creation. They will be a big driver of India's economic destiny and likely an even bigger driver of the market's capitalisation. We see the Financial, Consumer, Infrastructure, Telecom and Energy sectors being lead elements of India's **2025 Tryst With Destiny**, and even more significant components of the market's capitalisation and its composition.

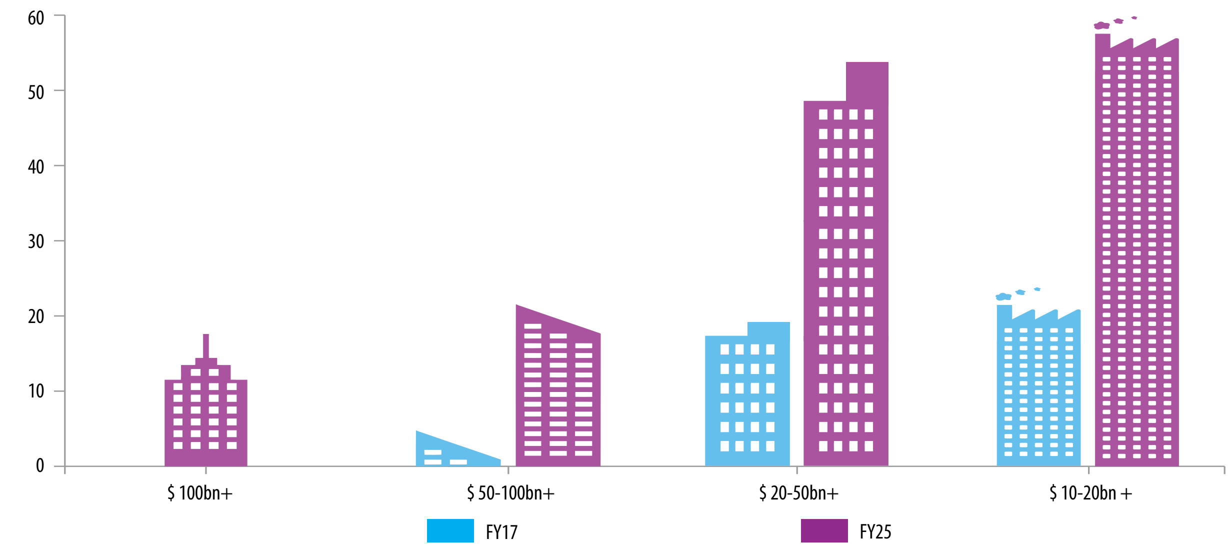
But, is it just themes or will there be businesses that lead the way, drive the sectors and generate and capture a disproportionate share of growth and capitalisation? If so, who will these leaders be and how can they be defined or identified? We believe, there will be significant market consolidation at the leadership level with the leaders taking a disproportionate share of gains and value. But, it will not just be size or scale. It will be only those companies that know how to manage scale, maintain the balance between growth and risk and are agile enough to adapt to change. With India's GDP size expanding current leadership will simply not be enough. Only those that lead incrementally, will disproportionately influence the market's capitalisation, particularly as the economy changes very significantly over this period.

Capitalisation and Composition is likely to change as well



As India becomes the world's third-largest economy in 2025, it should also start creating amongst the world's largest companies. A large number of India's companies are already there in volume terms. But 2025 should see Indian business making the world leadership tables, in value of business and market capitalisation. While India's leading companies and banks already trade at high valuations, combined with scale, they will move beyond their current EMs leaderships and standings, to the global stage. India in 2025 will be more than about just the world's third-largest economy at USD5tn, but it will have some of the world's most valuable companies too. We believe, India's largest companies should be over USD250bn, there could well be over 10+ USD100bn companies, 25+ USD50bn plus companies, and a plethora of USD10bn companies. India, in 2025, will not just be a USD 5tn economy, but one with world leading and scaled companies in a global context, some of the wealthiest individuals in the world and collectively a middle class, that should be the bigger driver of economic growth and value creation globally.

Spread of companies with different market caps (number)



Number of companies across different market caps

2025 Banking & Finance

Tryst with Saving & Spending

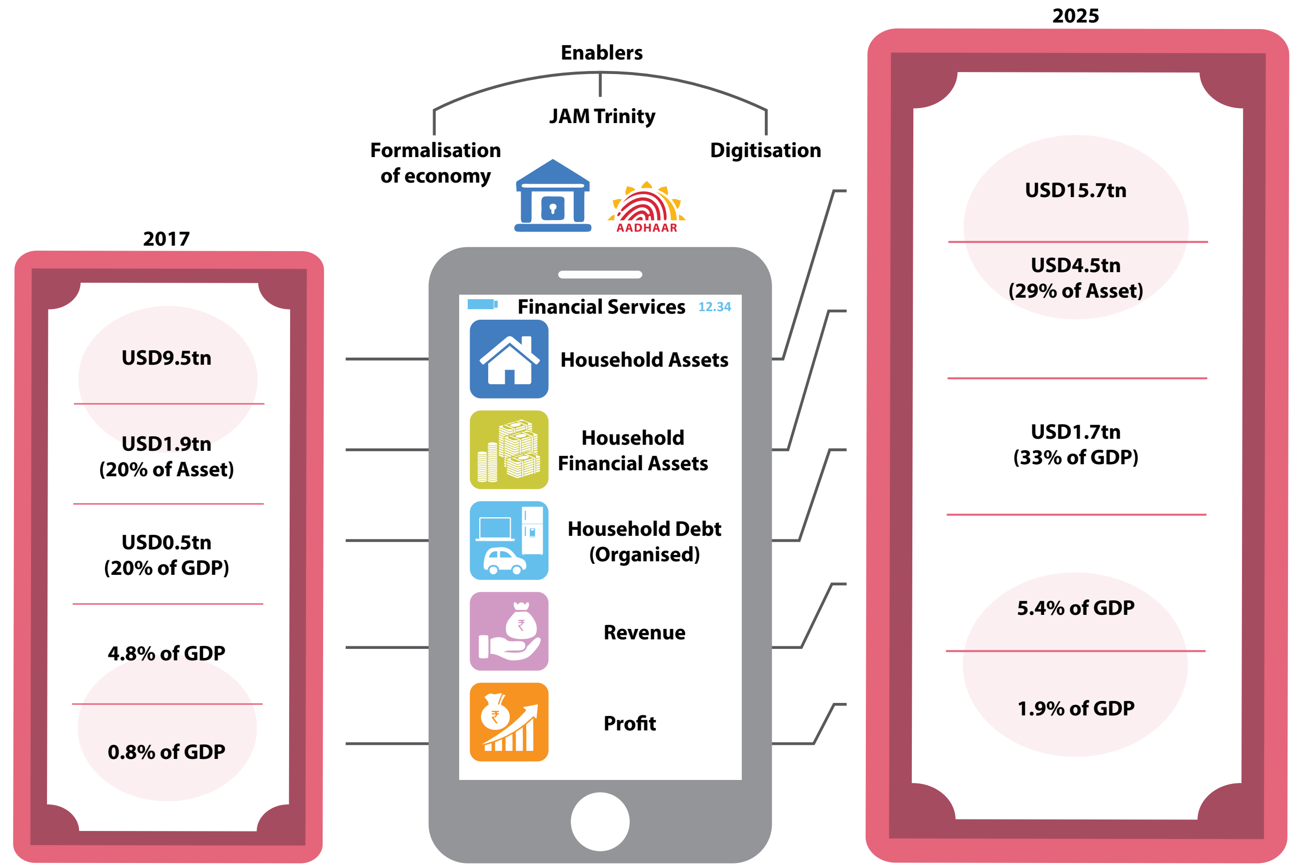
- Financialisation will drive savings 3x
- Democratisation of credit will drive loans 4x
- Market privatisation by stealth
- Transaction velocity rising 4x, digital leaping 5x
- A 3x larger and 5x more profitable financial sector

Money multiplier

The financial sector is in a unique position – it's both the primary driver and also a big beneficiary of India's economic expansion. It's a mix of being the backbone of a consumer-centric, but reasonably industrial heavy economy and significant deregulation over recent years. This expansion is being further precipitated with aggressive reform – GST and demonetisation – and digital and reach enhancing initiatives – the JAM trinity (Jan Dhan, Aadhaar and Mobile). That the private sector easily attracts capital and the government is extending its institutions a lending hand will provide the platform for a cleaner and faster growing financial system, for whom the time has likely come.

We envisage four defining trends that will drive the space. ***These will be led by: Financialisation of savings:*** *In its early days, but significantly changing the return, risk and liquidity profile of India's savings. This will be accompanied by* ***Democratisation of credit:*** *As credit moves beyond banks, the access to borrowers widens dramatically and providers grow. There will be* ***Privatisation, but by stealth:*** *With the private sector progressively dominating lending, funding and services market, in market shares, leadership, and progressively, in reach. And, this will all be* ***accelerated by Digital revolution****, at some level a global phenomenon, but being dramatically spurred by the broader JAM revolution in India, changing the reach, efficiency and small-ticket economics. These will significantly shape the sector's size and profitability, and we estimate will drive the system's assets 3x and its profit pool 5x as India makes its Tryst with Destiny in 2025.*

Financial sector revolution – Its only just begun

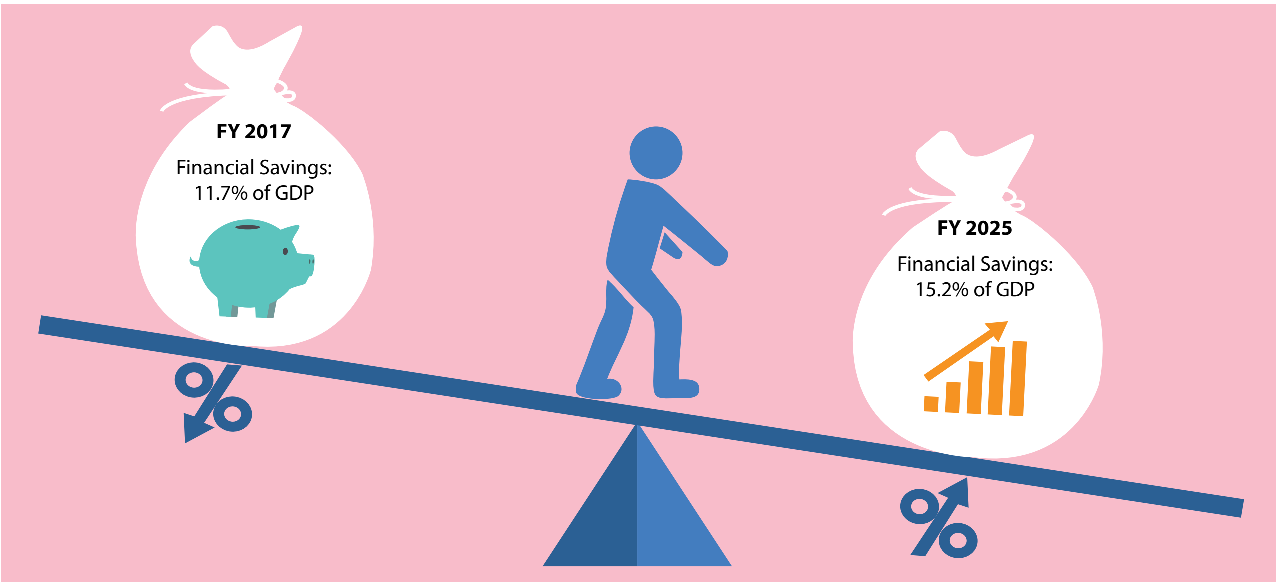


A Time Comes when the Household Changeth

India is set for a quantum leap bolstered by underlying catalysts like favourable demographics, government reforms, economic policies, corporate investments, amongst others. While expansion in the savings pool reflects this trend, a more palpable transformation is apparent in the pattern of household savings – the allure of physical savings is waning in favour of financial savings.

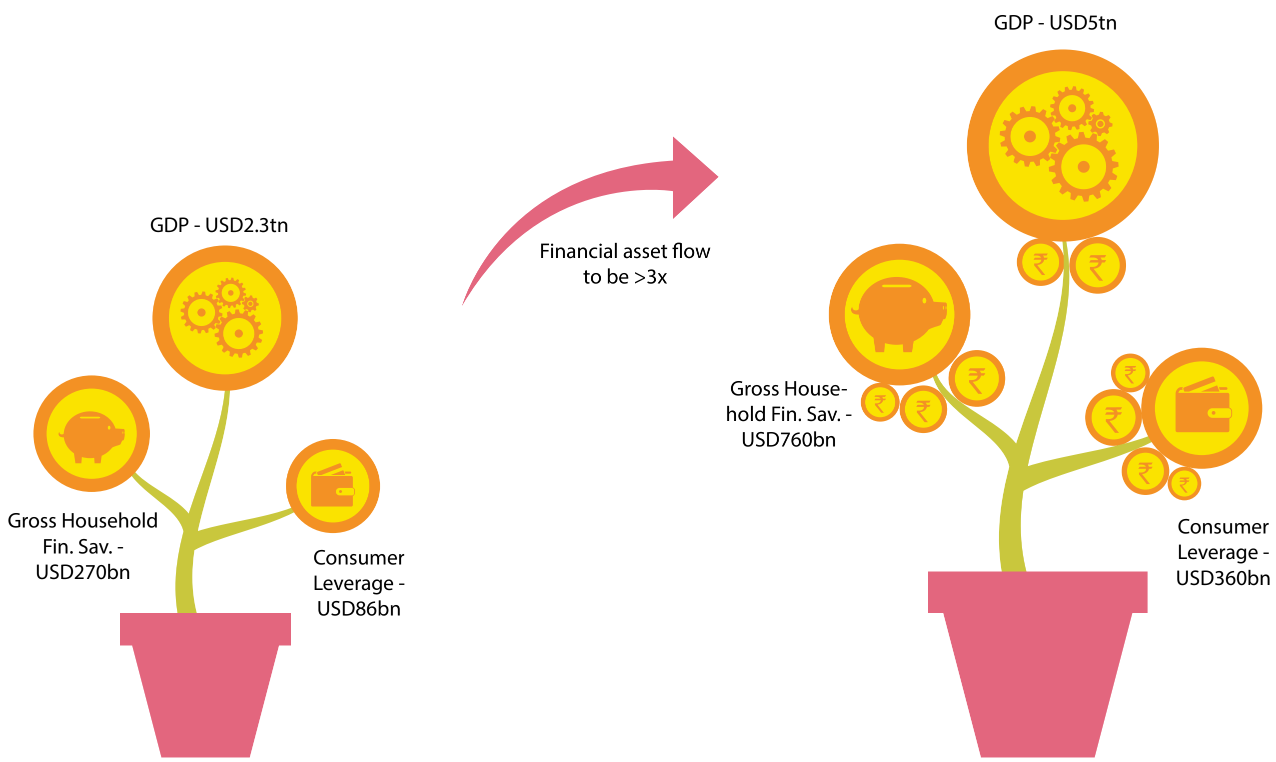
A few catalysts turning the tide in favour of financial savings are government reforms like GST, RERA and Benami Transaction Act, which have set the ball rolling for formalisation of the economy. Moreover, relatively weak sentiments and activity along with moderating housing prices have taken the winds out of real estate's sails. Finally, the recent deceleration in inflation, and inflation expectations, has had a cascading effect of propelling real incomes and returns of households, which will invariably incentivise financial savings.

Gross financial savings to rise >3x forming >15% of GDP



Even within the financial savings bouquet, bank deposits, by virtue of their inherent low risk nature, are still the most preferred source of investment. Thus, there is ample scope of expansion of financial savings.

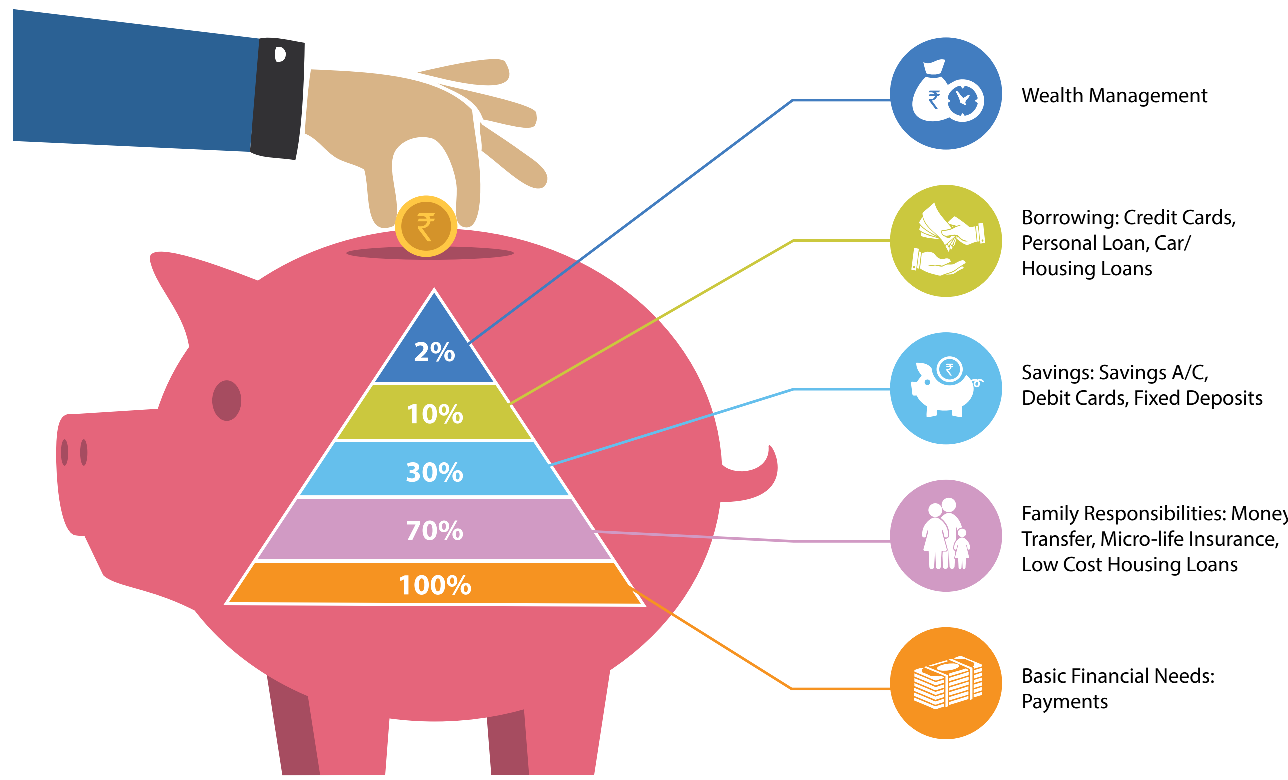
Financialisation of savings (rising 3x) coupled with rising household leverage (growing >4x)



With the Financialisation of Savings

The balance sheet pattern of Indian households is unique compared to other countries. In India, household assets are skewed in favour of physical assets – 69% in real estate and 8% in gold. However, an economy's productive capacity is determined by aggregate stock of household capital available for product purposes, which is relatively lower in India – merely 20% of wealth is concentrated in financial assets.

Indian household and its financial activities



Source: Committee on Digital Payments, Payments Council of India

However, retail investors are gradually awakening to the power of investing and are open to exploring new avenues of investment. Regulators and organisations, on their part, are doing their bit to educate investors about financial investments. This will be leveraged with a strong sense of direction to promote financial products – mutual funds, insurance, etc.

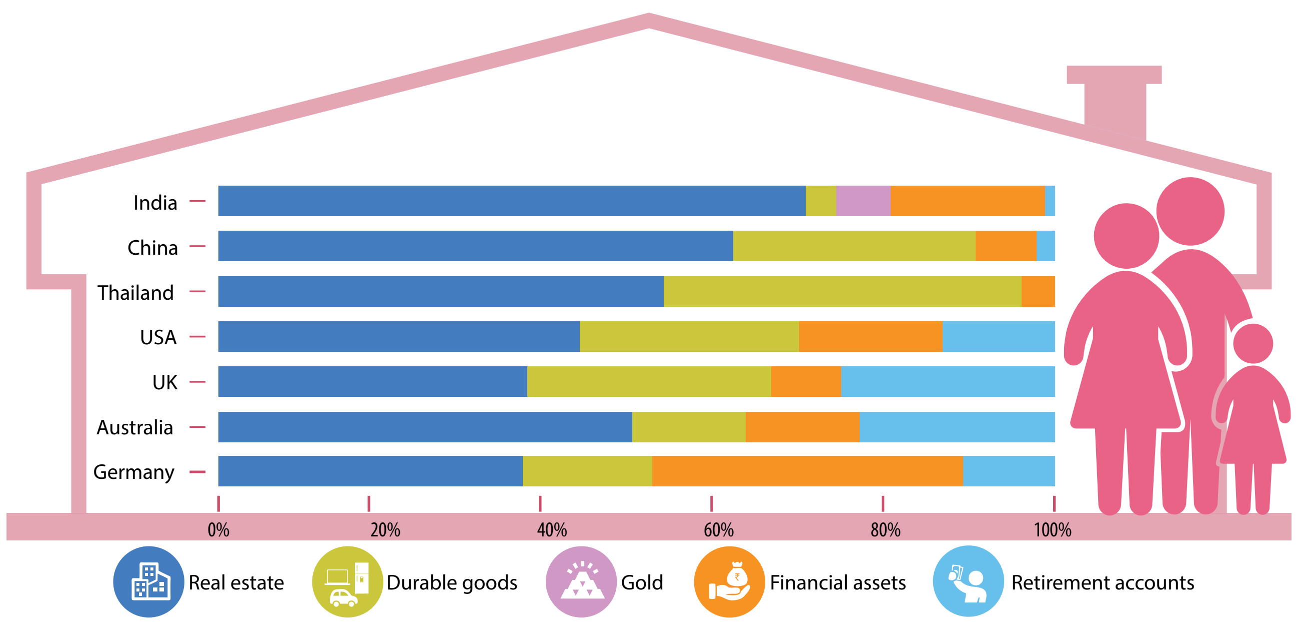
And the change, though gradual, is gathering speed. Mutual funds are now a favoured avenue for investing in equity. This is amply reflected in the 50% jump in mutual fund folios over the past 3 years from 40mn to 60mn. Monthly SIP flows are now around INR60bn, an annual inflow of more than INR700bn. Moreover, higher market returns and stronger flows have markedly improved the domestic mutual funds market's CAGR over the past three years.

Savings to get a financial twist

Which significantly lags peers

Indian household's assets tilt in favour of physical assets is comparable to that of China and Thailand. The only difference is that, on an average, Chinese households have a higher share of durable assets (28%) and negligible gold (0.4%).

India comparable to China, but distinct from US, UK, Australia



In more advanced economies, their holding of wealth in real estate is relatively low – US (44%) and Germany (37%). Also, these households hold substantially more financial assets than their Indian counterparts. In addition, they allocate a sizeable portion of their wealth to retirement savings over the course of their lifetime. Retirement assets account for relatively large share of wealth in Australia (23%) and UK (25%). In these economies, state-sponsored schemes act as a substitute for private savings in non-retirement financial assets.

Household assets to tilt in favour of equities & MF

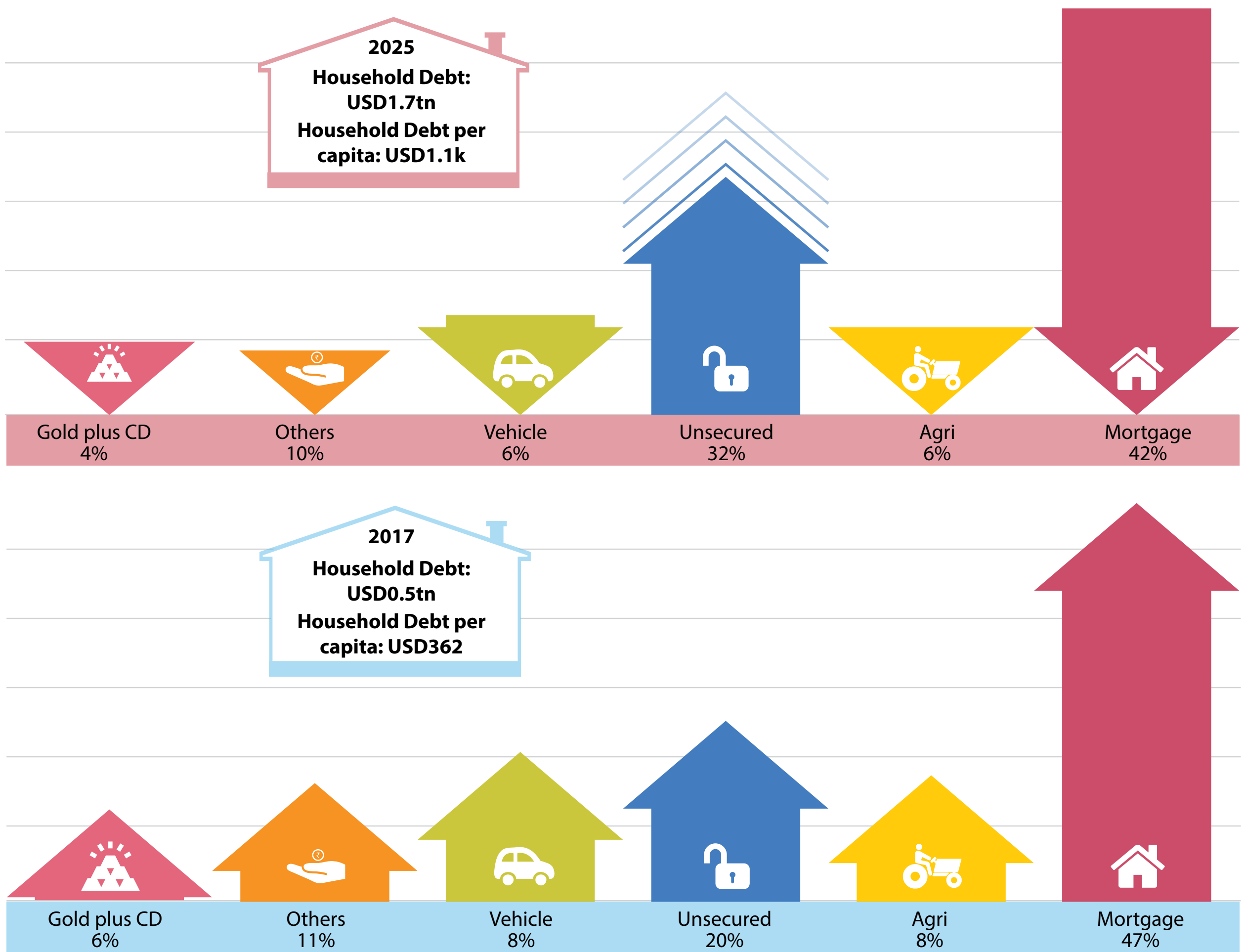
The penetration of mutual funds in India as a proportion of GDP is less than a quarter of the global average and way below that of many other emerging markets. This provides a long runway for growth. Demand for financial products required by percentage of population indicates huge potential

Indian households will benefit immensely by reallocating assets in favour of financial markets rather than gold. If households in the middle third of the gold holdings distribution reallocate a quarter of their existing gold holdings to financial assets, on an average, they could earn an amount equivalent to 0.8% of their annual income per year (on an ongoing flow basis). In other words, the wealth gain in real present value terms accruing from this shift will be sufficient to move these households roughly 1% point up the current Indian wealth distribution.

And the household starts borrowing

Indian households' liabilities too are quite distinct from the international pattern. Mirroring the dominance of real estate as the significant component of wealth, mortgage loans are households' largest liability in China, US, UK and Australia. In these countries, an average household's mortgage holdings account for close to 60% of its total debt exposure.

Household liabilities (Organised)



However, in India, despite the prominent role of non-financial assets in a household's balance sheet, mortgage loans account for lower portion of total liabilities (sub 47%). And, the role of other secured personal debt too is well below level of other countries. These traditional structures are increasingly under pressure from shifting consumer behaviour wherein debt now has a characteristically hump-shaped pattern over the lifecycle (rather than being skewed towards later part of life).

Indian household getting more comfortable with leverage

Another stubbornly persistent pattern is debt from non-institutional sources such as money lenders with households getting trapped in a long cycle of interest repayments. For the median Indian household, shifting from non-institutional to institutional debt can lead to gains equivalent to between 1.9% and 4.2% of annual income on an ongoing basis or equivalently when capitalised, to upward moves along the current Indian wealth distribution of 2.5-5.5% points.

However, households are now growing more comfortable with the concept of leveraging, confident in their ability to invest and earn a better return than the cost of borrowing. The structural moderation in inflation and the consequent lower interest rate environment have been the underlying factors effecting the change.

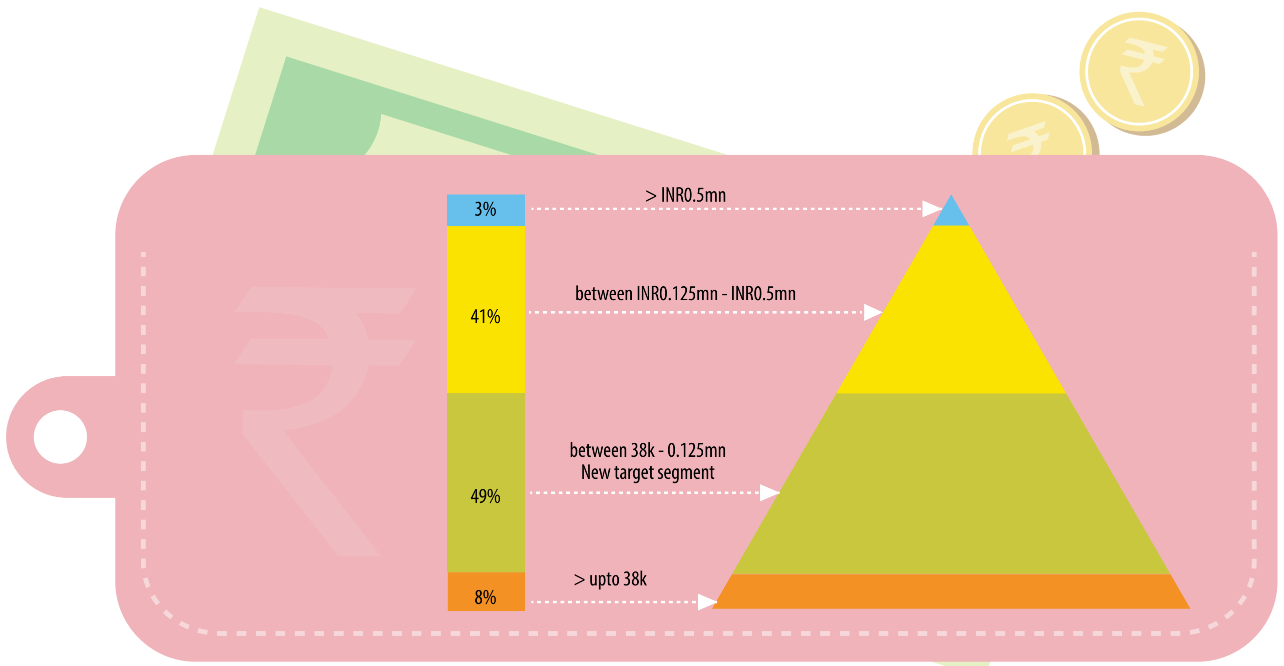
This, along with the South-bound interest rate regime, should trigger two tectonic shifts in India – financialisation of savings on the assets side and democratisation of credit on the liabilities side.

Along with Democratisation of Credit

An equally pivotal facet is democratisation of credit allocation in the economy. Democratisation of financial markets has been an evolutionary process in India. However, credit markets continue to lag in this aspect. A large part of the credit is still concentrated with large borrowers, who constitute ~40% of outstanding credit. Untapped opportunity in retail lending, which includes loans to individuals and SMEs, is significant.

Allocation of capital is now set to transform, particularly because of the sizeable leveraging ability of households. Indian household is the only segment with borrowing capacity. The scope for financial institutions to broaden their horizon by deepening their reach in the socio-economic pyramid and providing access to the bottom of the pyramid of same credit instruments as those available to middle-class and mainstream Indians is immense.

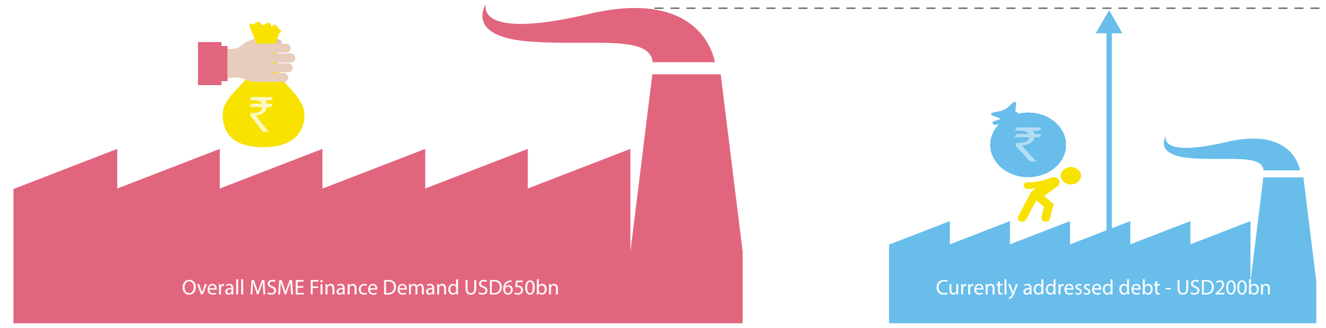
Indian households' income profile



Particularly, access to credit for the underserved and unserved segments has been on the rise. This has been driven by better data access through agencies like CIBIL, improved credit underwriting mechanisms and the government's digital push, underpinned by Aadhaar and the JAM trinity.

Numerous catalysts are at work shaping the future of financial democratisation and deepening penetration of credit, insurance and investment to unserved and underserved segments. Data-driven intelligence is an important tool for deeper comprehension of consumer demographics and markets. Aadhaar, in conjunction with the JAM trinity, has helped bring a large part of the population under the financial umbrella.

MSME demand and addressable market

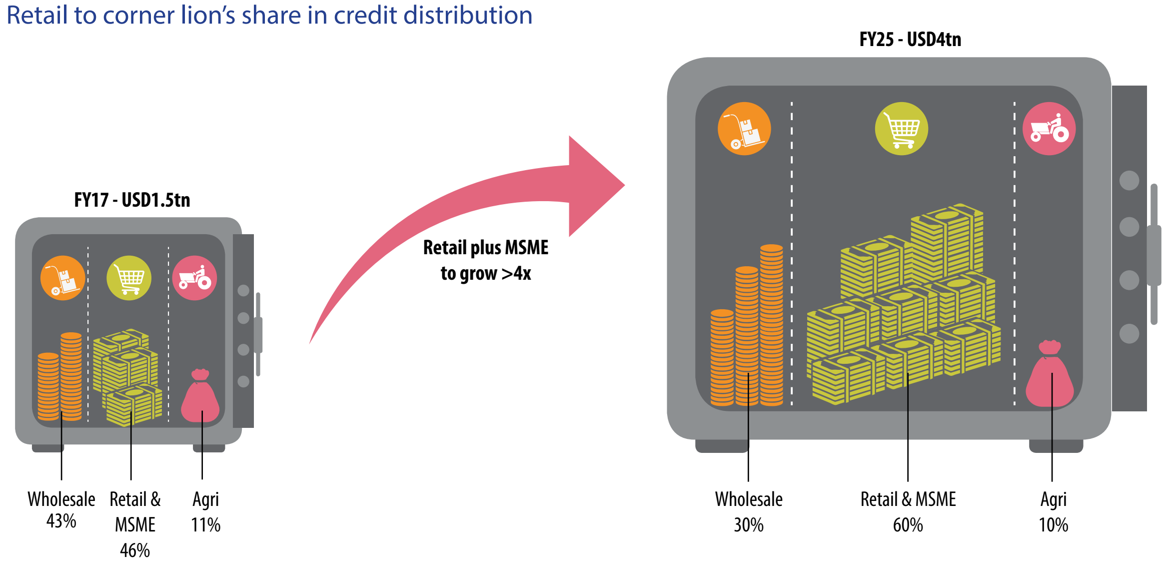


Moreover, use of technology can engineer a paradigm shift. Virtual reality and robotics will soon expand fintech offerings by leaps and bounds. People will increasingly embrace wealth management solutions like robo-advisors and companies will leverage technology to make the process even easier and more convenient.

This, along with GST implementation, will enhance financial creditors' access to financial data, thereby increasing the scope for lending.

CIBIL continues to gain muscle, credit underwriting mechanisms are constantly evolving and improving and a plethora of data points are now available to assess the credit worthiness of individuals and small businesses. These effective enablers will help credit-deficient sections of the society to gain access to credit. Also, cross-utilisation of distribution channels is an effective tool to accelerate penetration.

Retail to corner lion's share in credit distribution



By 2025, credit markets could be more akin to equity markets – capital allocation to corporate and individuals will be more market based, flexible and will reach deeper. This will help expand capital to vast sections of the society, paving the way for a USD5tn economy.

While there's Market Privatisation by Stealth

The Indian financial services space is evolving and undergoing a paradigm shift. Public Sector Banks (PSU) are fast losing ground as they desperately need capital for growth and manage asset quality, which is not forthcoming from a financially-strained government. At the same time, private banks are growing at a rapid pace.

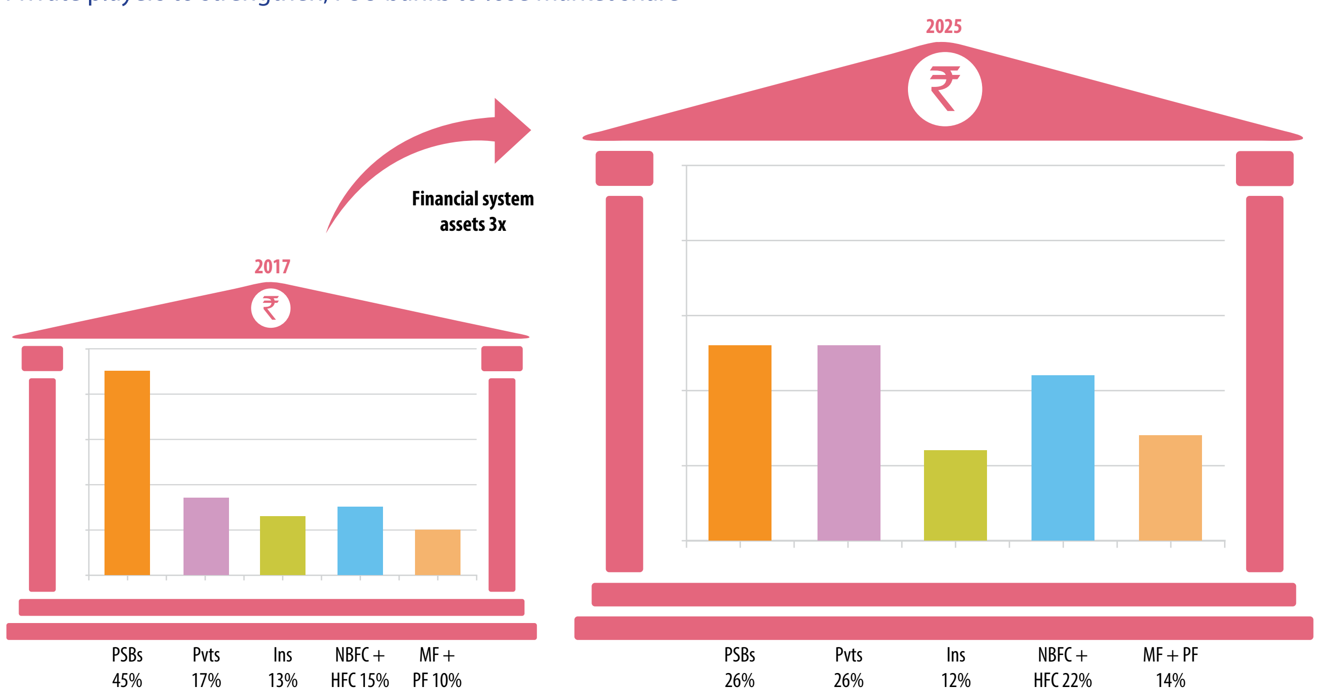
Other more subtle shifts too are underway, which are also effectively reducing the dominance of PSUs - increased borrowing via bond markets and NBFCs and nimble financial technology firms making inroads in the payments business. All these indicate disintermediation from the banking sector in general and from PSU banks in particular.

Moreover, the advent and rapid evolution of new players like small finance banks, payment banks, reinsurance players, among others, is too strong a phenomenon to be ignored. Regulators are constantly introducing decrees to strengthen the sector in a bid to expand financial inclusion.

To achieve high degree of financial product penetration, intermediaries will have to become multi-dimensional and offer lucrative options for all stakeholders. Product manufacturers continue to adapt and change their strategy to garner higher market share and be the preferred choice of consumers.

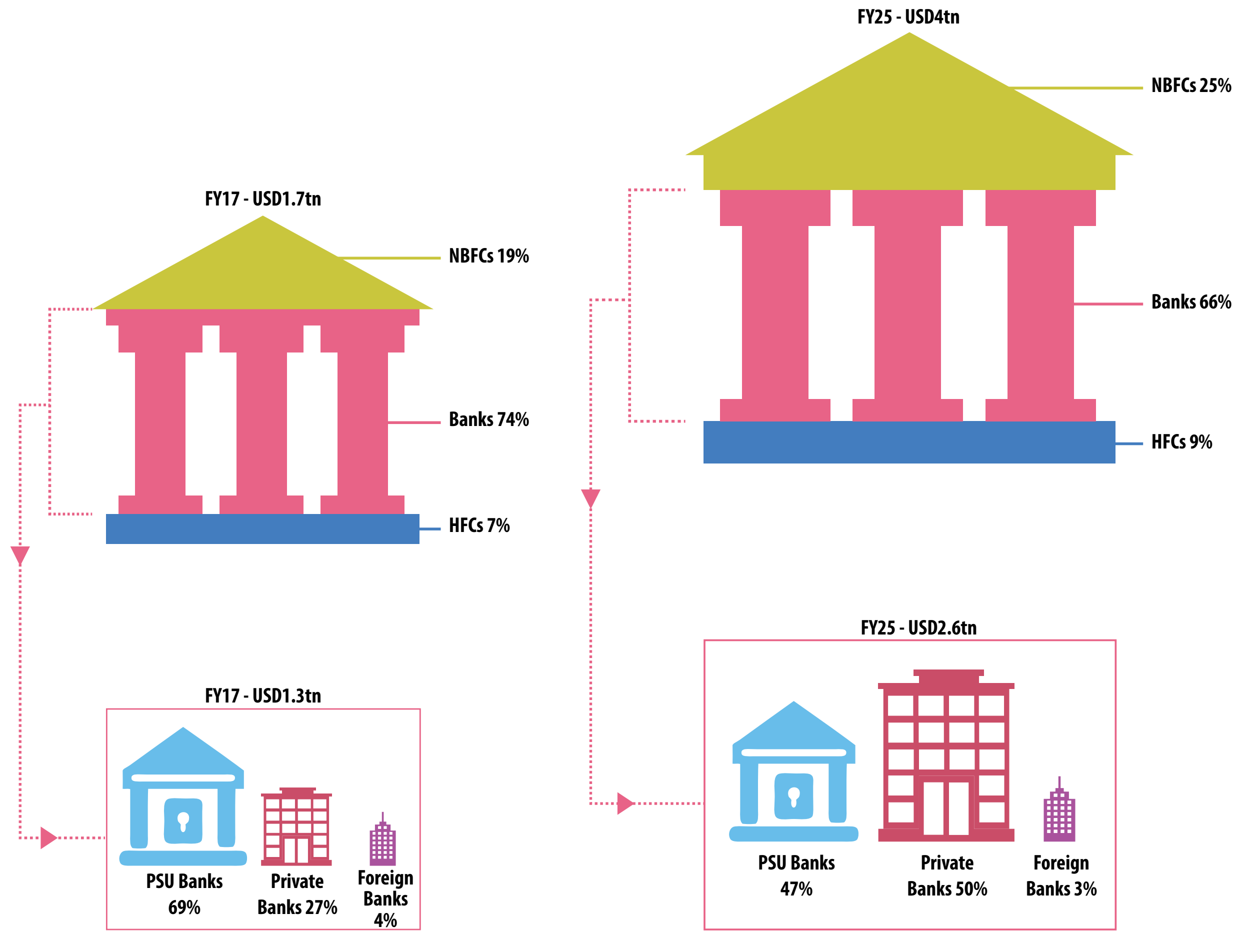
Incumbents, technology disruptors and new players will have to work in tandem to harness the immense potential of the financial services sector and reap rewards from the changing landscape.

Private players to strengthen, PSU banks to lose market share



From the financing perspective, we expect system-wide credit growth to be ~13% over 2017-25, implying an average credit multiplier (of nominal GDP) of 1.1x – an achievable feat.

Private players to wrest market share from PSU banks



As growth will be led by retail assets (particularly affordable housing, unsecured loans, etc.) and increased financing requirement of MSME, we believe private banks (including new small finance banks), NBFC and HFCs will be in a better position to grab this growth opportunity and gain market share. At the same time, PSU banks with largely corporate focussed balance sheets, asset quality challenges and lagging digital initiatives will be ill-equipped to tap emerging opportunities.

As NBFCs (diversified as well as niche) are becoming more nimble with state-of-the-art processes/technologies and HFCs leverage the affordable housing opportunity, both will gain market share from >19% and 7% in FY17 to closer to 25% and 9% respectively, by 2025.

Within banks, we expect the credit share of PSU banks to fall to 47% (from over 69% in 2017) and private peers' proportion to rise from ~27% in 2017 to 50% by 2025. In a nutshell, we anticipate private players to corner a lion's share of the banking system and that of PSU banks to shrink significantly.

Catapulted by the Digital Revolution

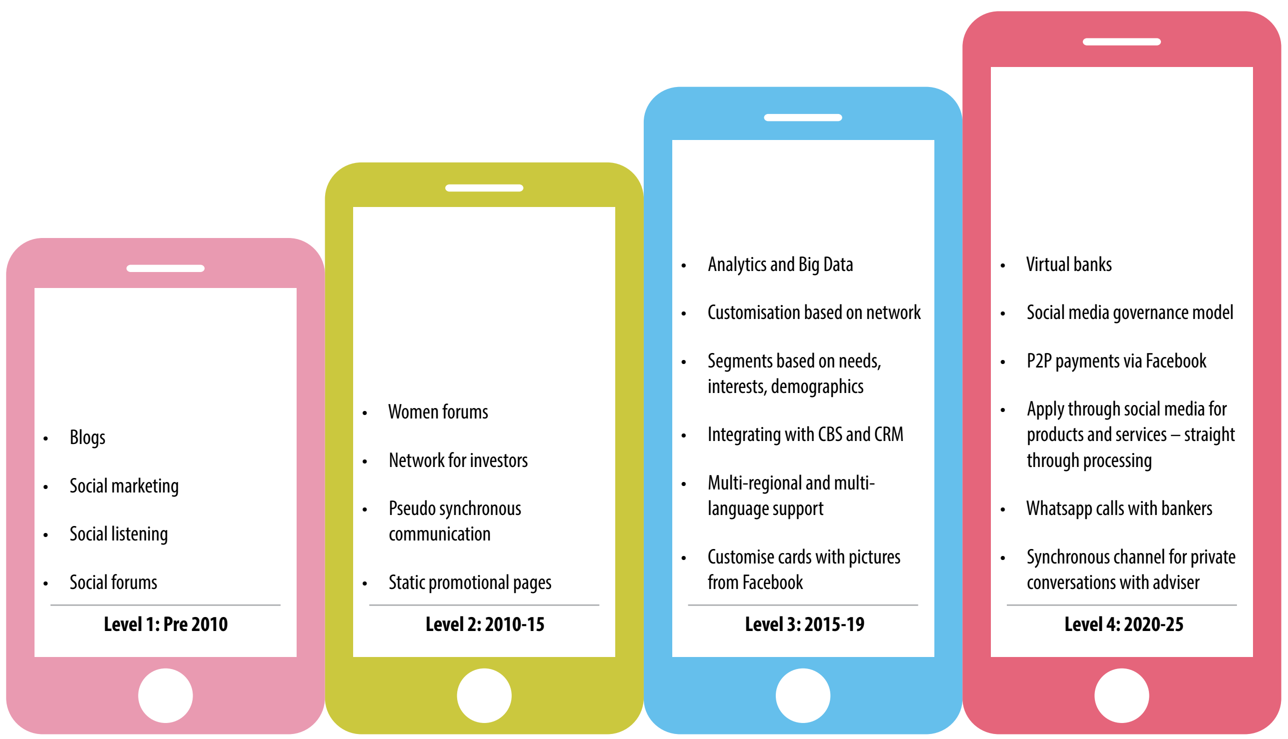
The financial industry, by virtue of dealing with data (or information) and money, is an ideal candidate for rapid digitalisation. Even new-to-banking customers (new generation) have grown up in a digital marketplace and demand different services and new ways of accessing them. What clients seek today is an agile service in real time that is competitively priced and personalised. And, all this in a safe environment, where data is protected.

Hence, digital banking has become a must-have offering with rising competition among banks and new emerging players – e-commerce, payment banks, etc. It is an imperative as it entails the potential to affect all aspects of banking – customer acquisition, customer retention, revenue generation and cost control.

While it is more of a necessity for banks, limited number of differentiated offerings is a challenge given the shortening product replicating time. As is aptly said, in digital offerings, banks need to be on their toes as "what is innovation today is a commodity tomorrow."

Among technologies used are mobile computing (smartphones becoming preferred means of accessing bank transactions), biometrics (secure identification eschewing documentation or physical presence), big data and cloud computing (offer scalable, efficient computer services to everyone) and block chain (automate many banking processes).

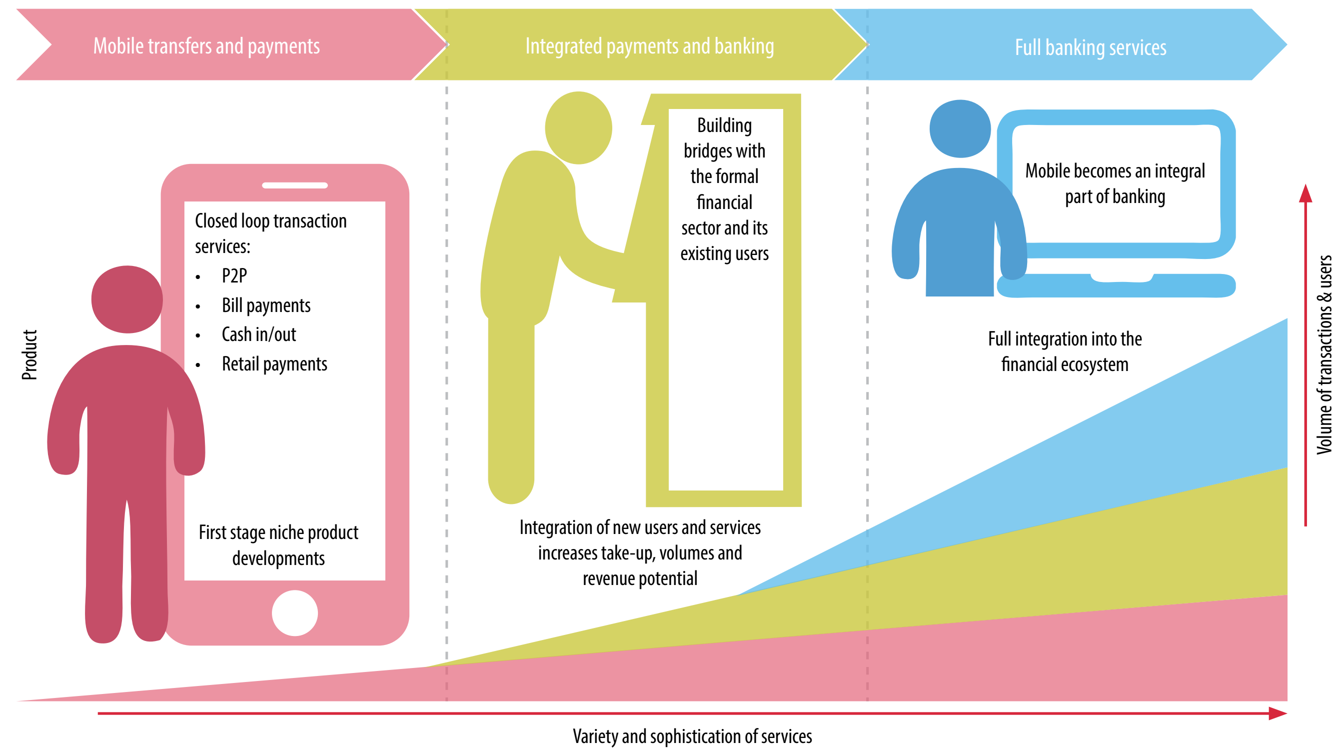
Digital push – Social media to be next frontier



Technology is largely utilised in following areas for development of digital banking – conversational interfaces to improve end-user experiences, automated complex reasoning permitting automated decision making, advanced systems for fraud detection and risk scoring.

Moreover, evaluation of the current transition of the Indian consumer and evolution of its demographics indicates that the next wave will be driven not only by **Digital**, but also **Social Media and Mobile** (DSM), which will enable banks to capture customers through their lifecycle. Thus, it is imperative for them to align their products, services and payment mechanisms with this strategy.

India in sweet spot to leverage exponential surge in digital ecosystem



"S" of DSM will be next big thing: Banking on social media is increasingly gaining prominence. From being a mere medium for marketing of banking products, it can actually be developed into a platform for execution of banking services. Though banks are aligning to this thought process, and are actively engaged in targeting this market – we see it gaining momentum, scale and strategic and P&L differentiation over 2025.

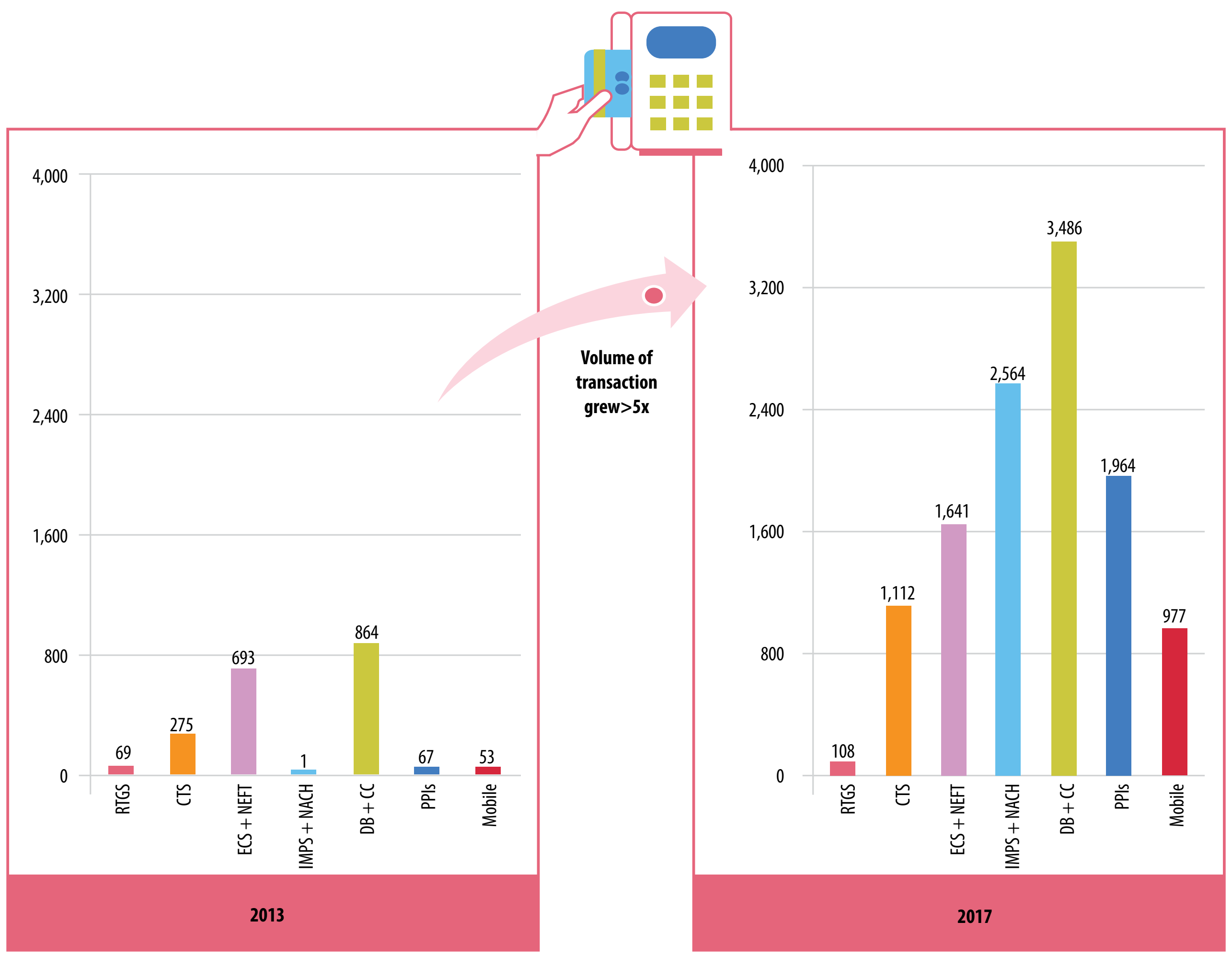
The base "M" of DSM: In an increasingly mobile world, "Mobile" will play a pivotal role in the banking sector by 2025. With rising penetration of mobile and data acting as catalysts, India has huge potential to fully integrate mobile banking in the financial ecosystem as a world leader. The backbone is already in place.

We envisage the currently emerging mobile banking trend to not only become a mainstream payment mode, but also evolve as a major source of digital-only credit and savings. Evolution of the ecosystem will be supported by rise of fintech companies, which will accelerate the disintermediation process.

With various initiatives being customer-centric, we believe the single biggest driver of banks' success will be their ability to become the primary banker of customers. We believe, players who focus on innovation and are quick to adapt to the disruptive trend will emerge winners.

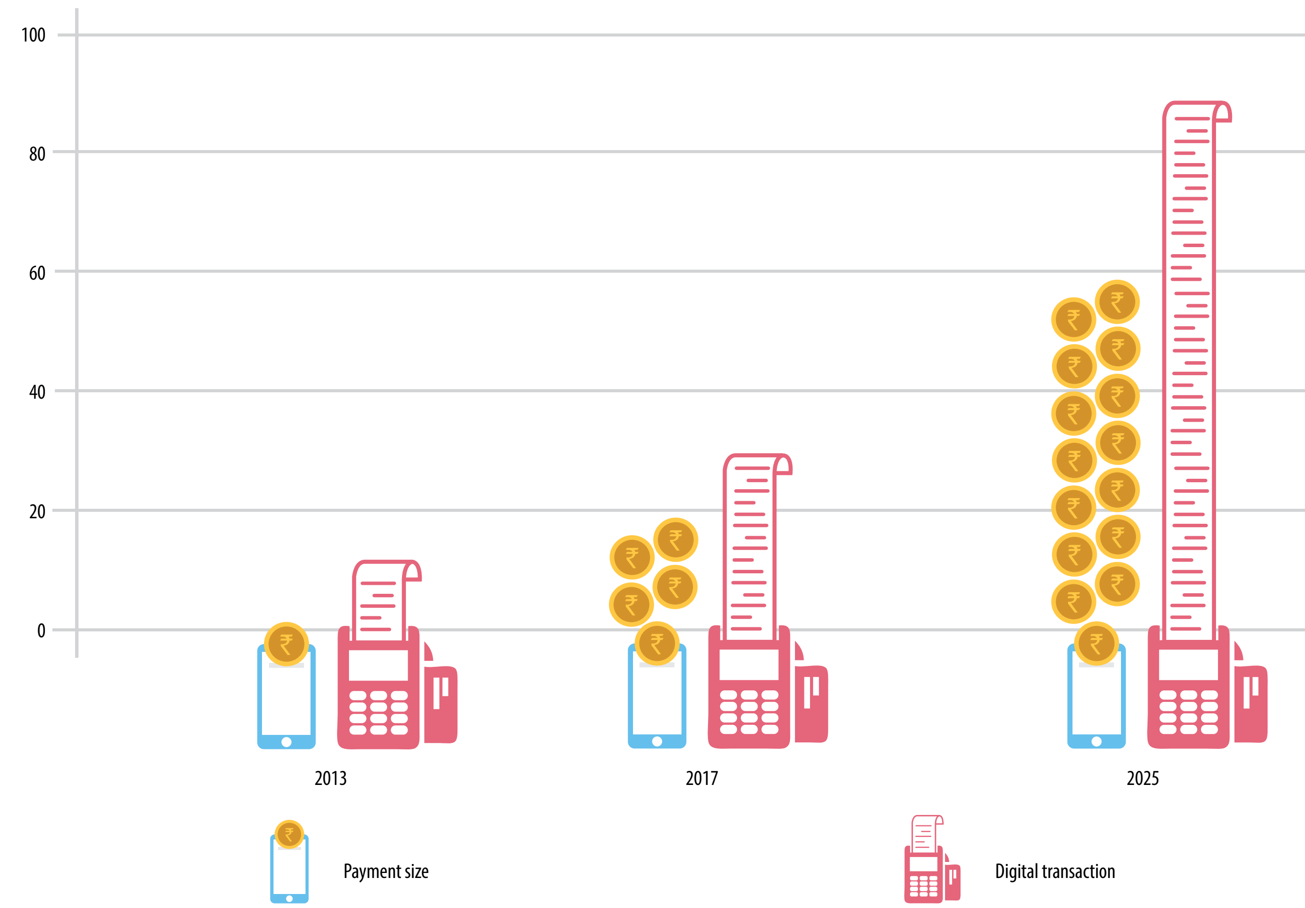
Currently, private banks have a head start by virtue of various initiatives undertaken by them. PSU banks (except State Bank of India), to large extent, are lagging. We anticipate a lot more consolidation, tie ups and innovations in the banking space, and players spearheading the same will emerge winners.

Payment system volume transactions surged over 5x in last 4 years



Using the current size of the payment systems (already >5x over past 5 years) as a benchmark, we anticipate number of transactions to rise manifold (as more people come into the banking fold) and anticipate >4x rise in payments transaction in India by 2025. The share of digital transactions will rise to 70%, eventually translating into >5x surge in digital transactions.

Payment to grow 4x, digital transaction to grow 5x (in Mn)



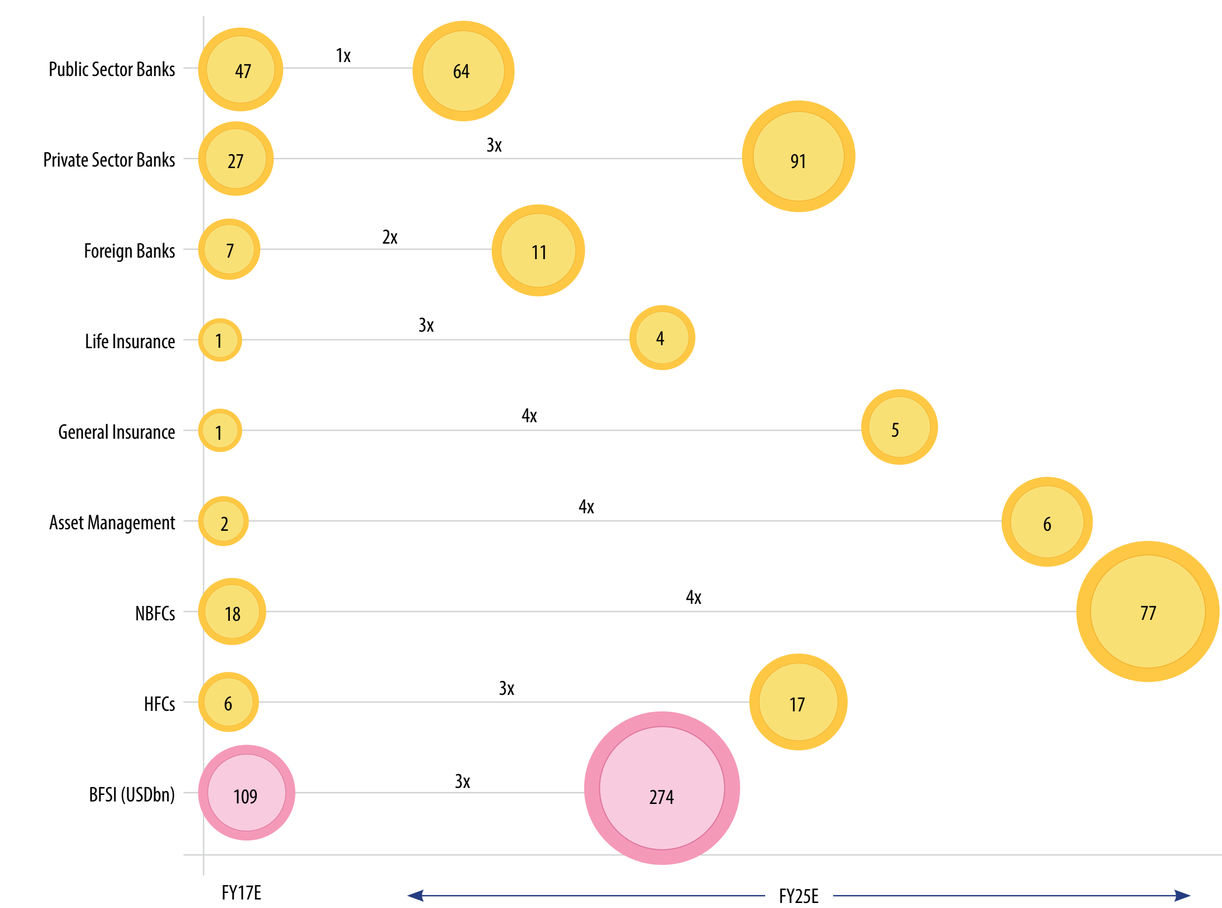
Changing Face of Industry – Scale, Structure, Scope

The Indian financial services segment is set for a bright future with the growth story becoming bigger and better as the country continues to be one of the fastest-growing major economies in the world. All the ingredients necessary for a strong and sustained financial services growth are in place. And, the regulatory/economic reforms underway will only add to this potent mixture.

Given the underlying triggers viz., financialisation, democratisation, digitisation and privatisation, we believe the financial services industry will simply not be a scaled-up version of today, but will take on new shape and significantly change in scope.

There will be dramatic value shifts within the industry, be it with respect to asset categories (in favour of MFs/insurance etc.) or product categories (retail/SME to outgrow corporate) or customer profile (from higher and upper middle consumer segment to equally lucrative bottom-of-the-pyramid segment with differentiated offerings). The cumulative effect of the way value will migrate within financial services will result in shifts in revenue, profits and capital across business verticals.

Banking sector revenue pool breakup (USDbn)



Industry revenue will jump 3x to USD275bn, representing roughly 5.4% of GDP in 2025 compared with 4.8% in 2017. Historically, banks have been dominant intermediaries between savers and users of capital. This will change as aggressive NBFCs take the lead in meeting financing needs and asset management companies, investment banking, among others, capture lion's share in asset allocation.

There will be a far more complex pattern of value migration from traditional PSU banks to other players. With efficiency, robust risk management and operating leverage playing through, earnings of the financial services industry are estimated to catapult >5x to USD96bn, equivalent to ~2% of GDP.

Banking sector profit pool breakup (USDbn)

2025 Consumer
Tryst with Incomes & Aspirations

- Consumption to surge ~2.5x by 2025
- Eat Better, Live Better and Feel Better paradigm
- Distribution to get leaner, meaner and fitter; E-commerce to grow 10x
- Shifts to niche and naturals
- Discretionary spends to rise 4x on back of >4x leverage

Rising To The Opportunity

A potent combination of ***favourable demographics, expanding per capita incomes and rapid urbanisation*** *holds immense promise of rapid growth in aspirational consumption, especially as India is on the cusp of crossing the USD2,000 per capita GDP mark. The consumption pattern will evolve in several ways and the challenge lies in successfully understanding and presciently identifying what constitutes a flood, an eddy and a one-time ripple as the evolution progresses. We believe, the* ***'Eat Better, Live Better and Feel Better' paradigm*** *is already upon us and consumption will be a driving theme along the way.*

In 2025, India's per capita income will hit over USD3,500 and with it will come structural changes. The wallet share of discretionary spending will jump to ~35% then from ~25% currently, translating into discretionary spending catapulting ~4x over the next eight years. Moreover, we expect ***consolidation within the trade channel****, i.e., distributors/super stockiest and wholesalers merging and cornering a larger pie, thereby reducing multiplicity and hence time to reach market. E-commerce is likely to be the next growth driver, with its share moving from 2% of overall retail market currently to nearly 10% by 2025 with apparels and lifestyle products leading the way. Finally, powering this expansion in discretionary consumption will be the* ***financing boom****, which could rise >4x to USD600bn by 2025. With these levers in place, we expect overall consumption to jump to INR218tn by 2025 from current INR80tn.*

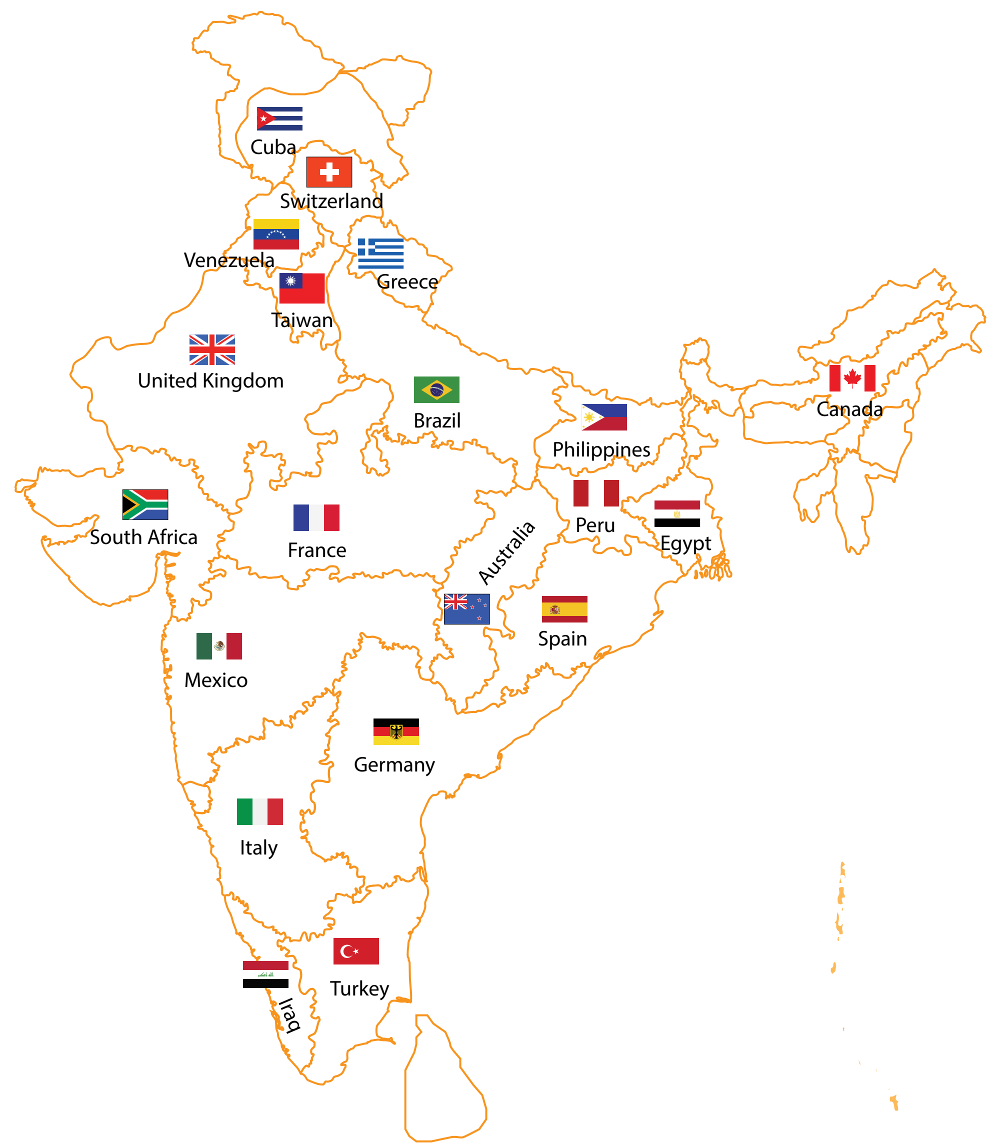
Rising On The Macros

A country's output can be either domestic and/or export driven. The former is more stable and its key drivers are overall population, their prosperity, demographics and per capita GDP.

Reaping the demographic dividend

With a population of >1.3tn, India's domestic market itself offers immense growth opportunities. As is often said, India's each state is equal to a country in terms of population.

India's state wise potential – many a country



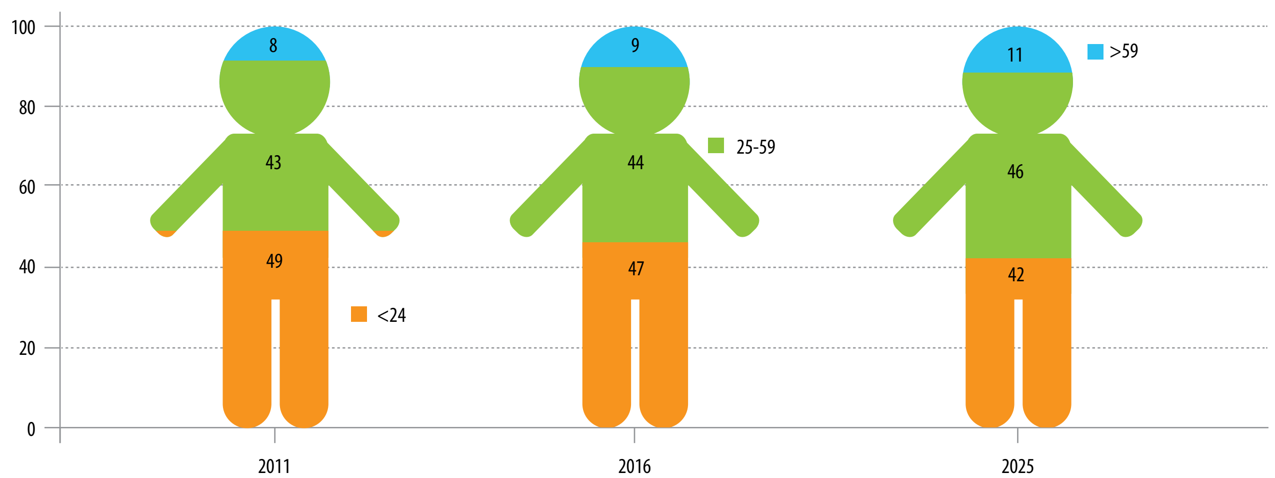
Graphical representation not to scale

Source: Edelweiss research

Though this population is characterised by immense diversity, we believe this demographic will become a pivotal force driving consumption as India's economic indicators improve and so does its per capita GDP.

Unlike many countries that are grappling with an ageing population and rising dependency ratio, India has a young and rapidly growing population – a huge demographic dividend. Demographically, India is in a sweet spot with 44% of the population in the working age bracket of 25-59. Over the past five years, this proportion has expanded ~200bps. This expanding working age population, we believe, will initially boost consumption of basic necessities. And, subsequently, of discretionaries such as shopping, travel, movie tickets, etc.

India's demographic mix (%)



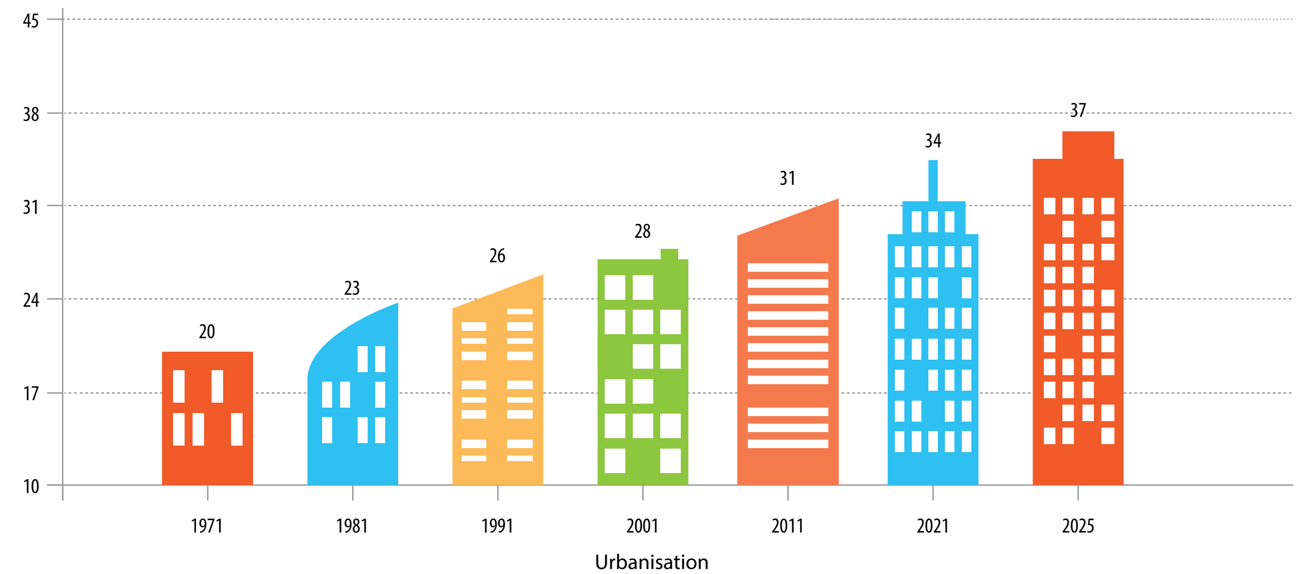
Source: CMIE, Edelweiss research

Urbanisation: A demographic multiplier

While naysayers oppose urbanisation on grounds that it puts severe strain on infrastructure of cities, we believe urbanisation is not a side effect, but integral to economic development. As in most countries, India's urban areas contribute majorly to its economy – about two-third to its economic output, are originators of innovation and technology, are major recipients of FDI, etc. This has resulted in an increasing number of people migrating from rural to urban areas.

In search of the proverbial 'streets of gold' (better growth and earning opportunities) a large chunk of the rural population is migrating to urban areas at a rapid pace. And, this deluge will sustain as cities' surging growth and lucrative employment opportunities will continue to be powerful magnates. Urbanisation, as a trend, has also been on an uptrend on back of semi-urban and a few rural areas transforming into urban/semi-urban riding improving infrastructure, education, healthcare facilities, among others.

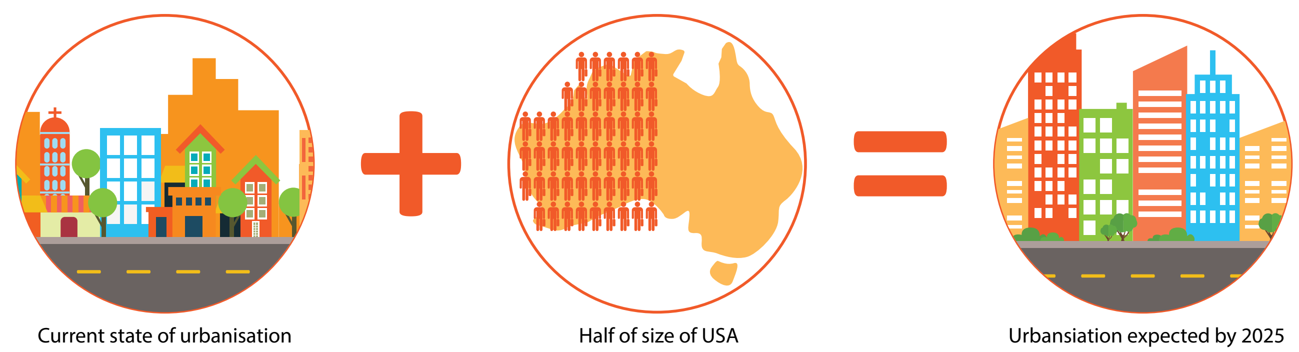
Urbanisation to gather significant momentum by 2025 (%)



Urbanisation in India, which stood at 20% in 1971, has reached 31% by 2011 (>275bps expansion per decade) and this pace is set to accelerate as time progresses. This, coupled with government initiatives such as Smart Cities, Housing For All, etc., are steps in the direction, which we believe will further propel urbanisation.

We envisage 37% of India's population to live in urban areas by 2025. This will catapult urban population to >525mn from ~375mn currently – ~150mn will be added, equivalent to 50% of US population.

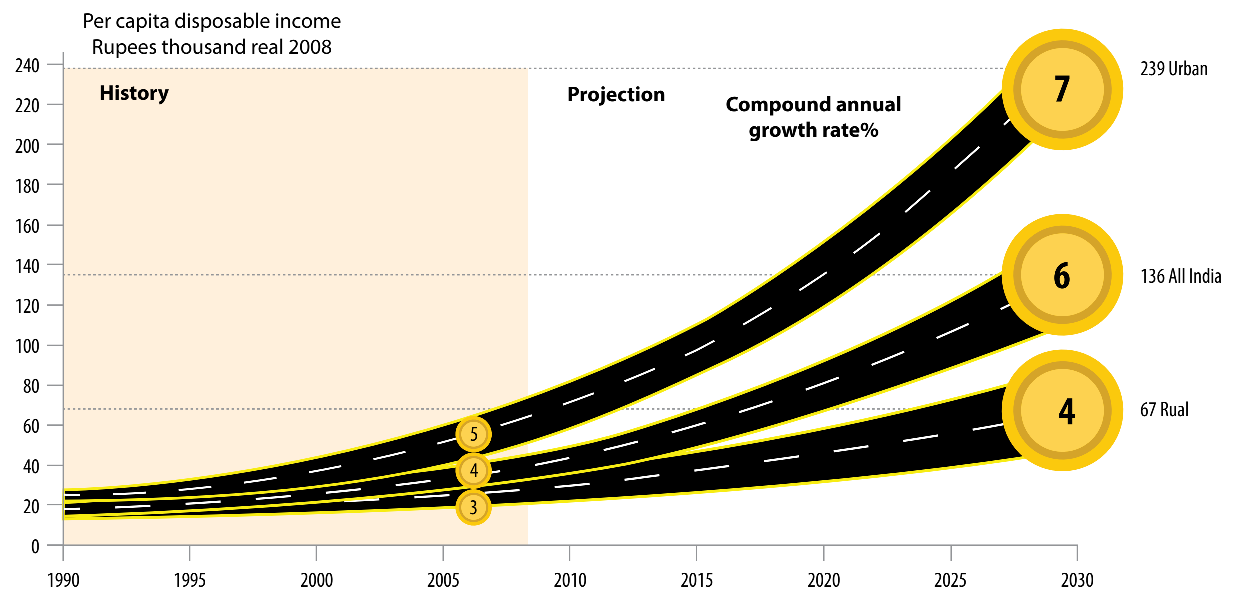
India's urban population to zoom; to add equivalent of 50% of US population



Source: CMIE, Edelweiss research

Further, we envisage urban per capita disposable income to boost pan-India disposable incomes. We estimate urban India's per capita disposable income to post 6.5% CAGR over 2008-30 and peg rural India's print at 4.3% CAGR, leading to national CAGR of 6.2%.

Urban India to drive increase in average national income

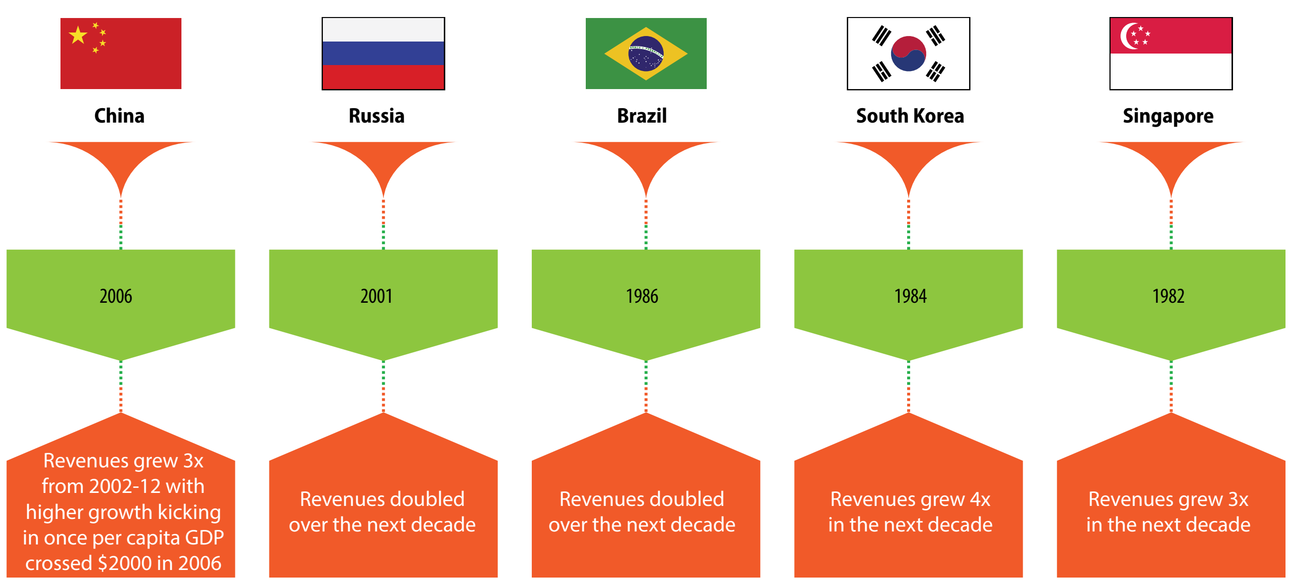


Source: Edelweiss research

GDP per capita: On the cusp

India has twin strengths–strong domestic consumption, low cost structures and reasonable competitive advantages in exports. India's GDP per capita currently stands at ~USD1,700. Globally, it has been observed that the moment a country's per capita GDP crosses USD2,000, the proportion of discretionary expenditure rises disproportionately .

Global comparison when GDP per capita crosses USD2,000

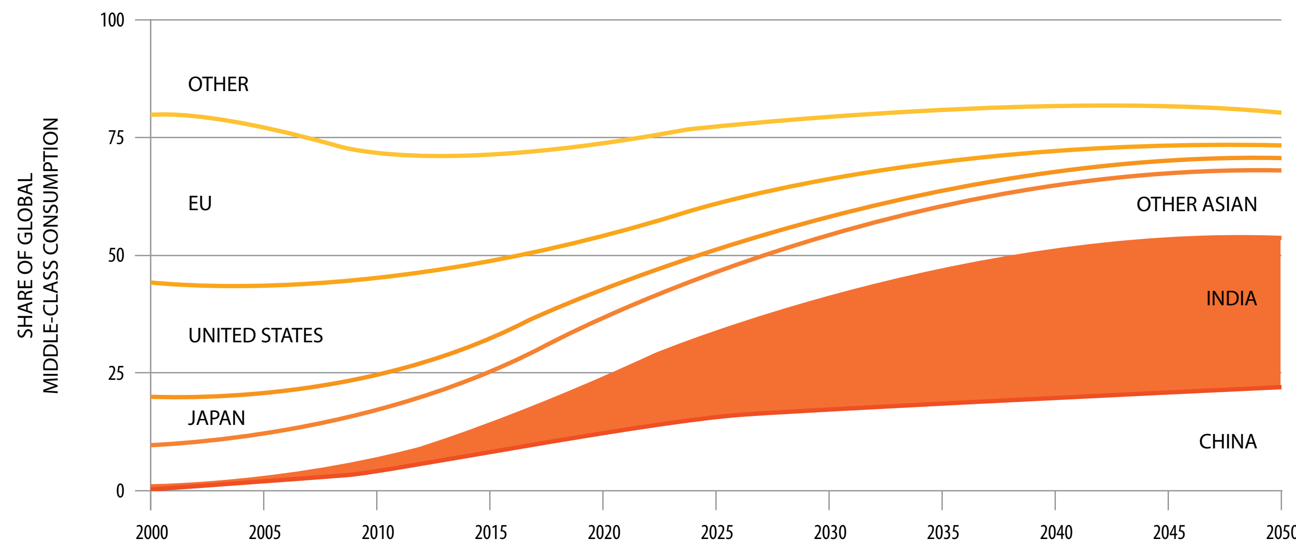


Source: Future Lifestyle Report

And, this is expected to play out in India as **its GDP per capita will cross USD2,000 by FY18/19.** Post crossing this threshold, discretionary spending should surge at a much steeper clip since consumers' basic needs for staples would have been satiated by then. And, the average Indian moves to the discretionary spending zone.

Our thesis of urbanisation, increasing working class population as well as burgeoning middle class is seconded by various global studies as well which estimate global middle class consumption to shift towards China, India and other Asian countries (ex-Japan) and dip in high income countries such as US, Japan and EU.

The middle class rises (%)

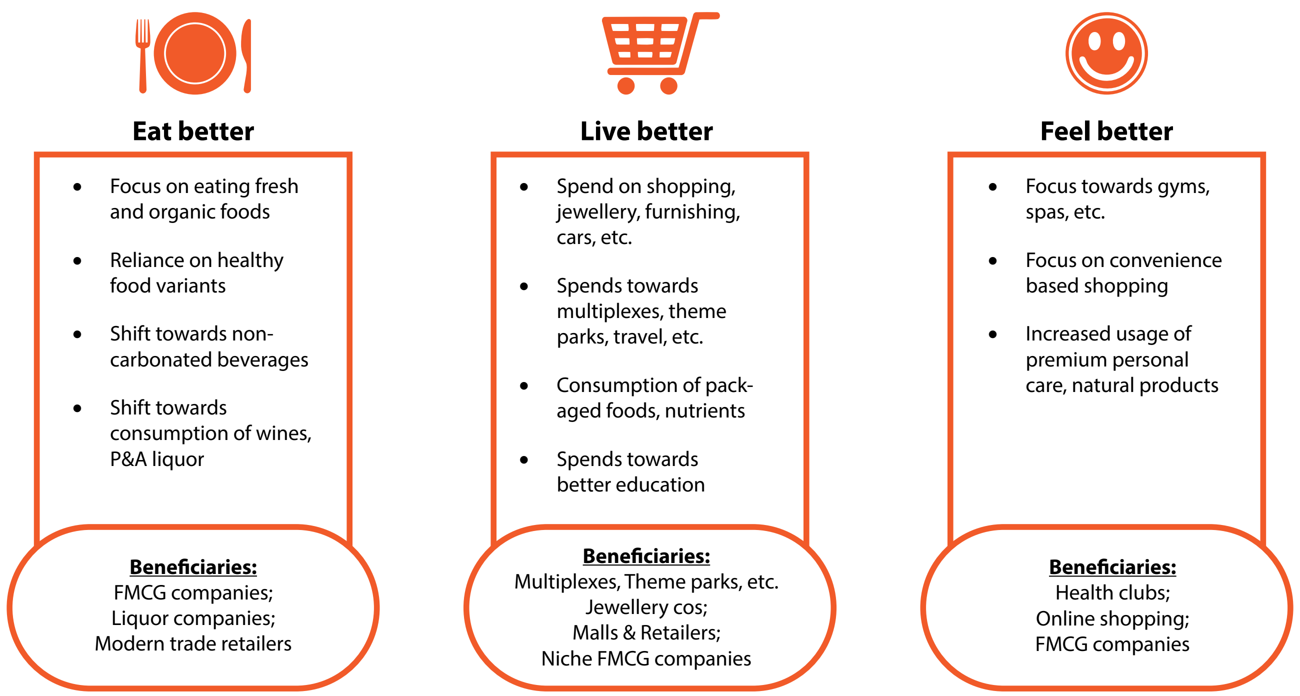


Source: OECD

Eating, Living and Feeling Better

On back of above levers, how will consumers spend their money? As their incomes grow, what will they prioritise? We believe, the overarching theme in this regard will be, 'Eat Better, Live Better and Feel Better'.

Mapping the consumption trend



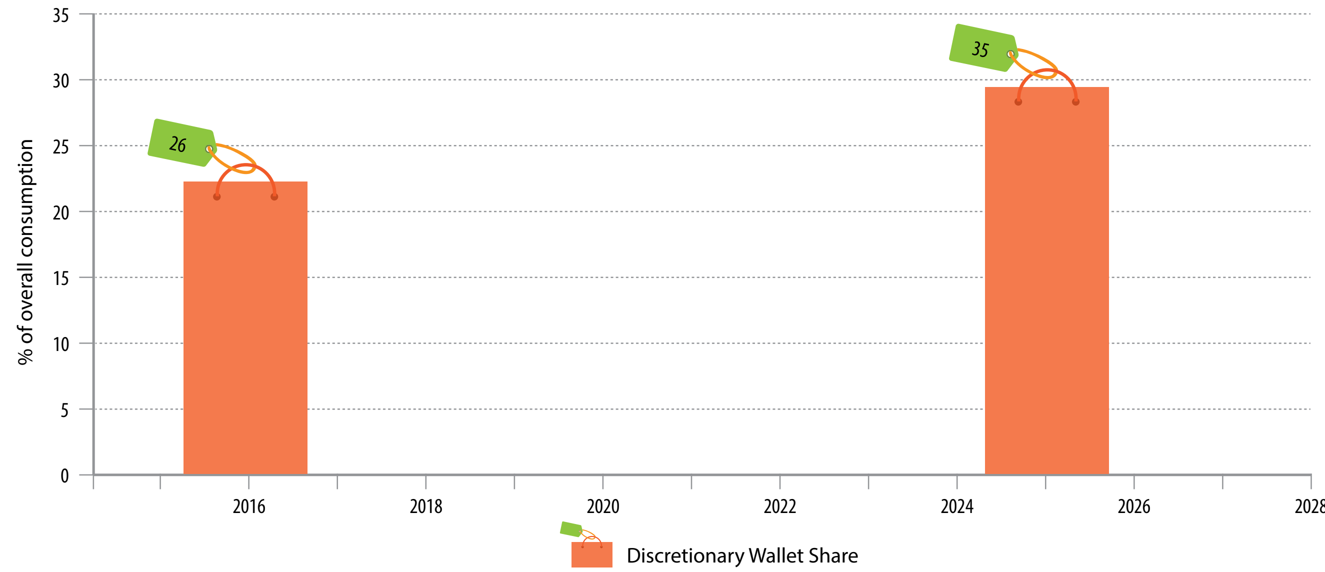
Source: Edelweiss research

Discretionary spends to catapult >4x by 2025

We estimate discretionary spending to shoot up a whopping >3.5x by 2025 led by consumers' spends tilting in favour of discretionary items.

By 2025 India's GDP per capita would have crossed the USD3,500 mark. Hence, we expect discretionary spending to capture higher wallet share, thereby improving from 26% in 2016 to 35% by 2025. While this percentage may look small, when seen on an absolute basis, we are talking of a >4x jump over the next 8 years.

Wallet share will shift decisively in favour of discretionaries by 2025 (%)



Source: CMIE, Edelweiss research

Mapping the growth pattern

As incomes increase, infrastructure improves and product availability and awareness rise, we expect India to experience different waves of growth in various categories. Our sense is that different product categories within each basket will grow at diverse pace.

By 2025, within staples, packaged food & beverages (F&B) and personal care will clock healthy (15% plus) growth with sustained shift to packaged products and category expansion. On the other hand, basic staples such as hair oil, toothpaste, etc., will grow at a much slower place (<10%).

The growth rate will also hinge on the proportion of penetration achieved till date and its expansion going ahead. While we have tried to extrapolate the growth rates for different consumption items, we have also tried to evaluate the scope for premiumisation. The latter is identified as follows – if shampoo sachets are available from price point of INR1-5, premiumisation potential is ~5x. If the price of a bottle of whisky ranges from INR100-50,000, scope for premiumisation is ~500x. These premiumisation estimates are based on multiple assumptions and hence should be seen more on trend basis.

High and varying degrees of growth

High growth rate (>15%)

- Packaged foods
- Non-carbonated drinks, juices
- Liquors
- Beauty products
- Apparel & accessories
- Jewellery
- Smartphones
- Restaurants & QSRs
- Travel, Leisure & Theme Parks
- Health clubs
- Consumer durables such as ACs, Washing machines

Stable growth rates (10%-15%)

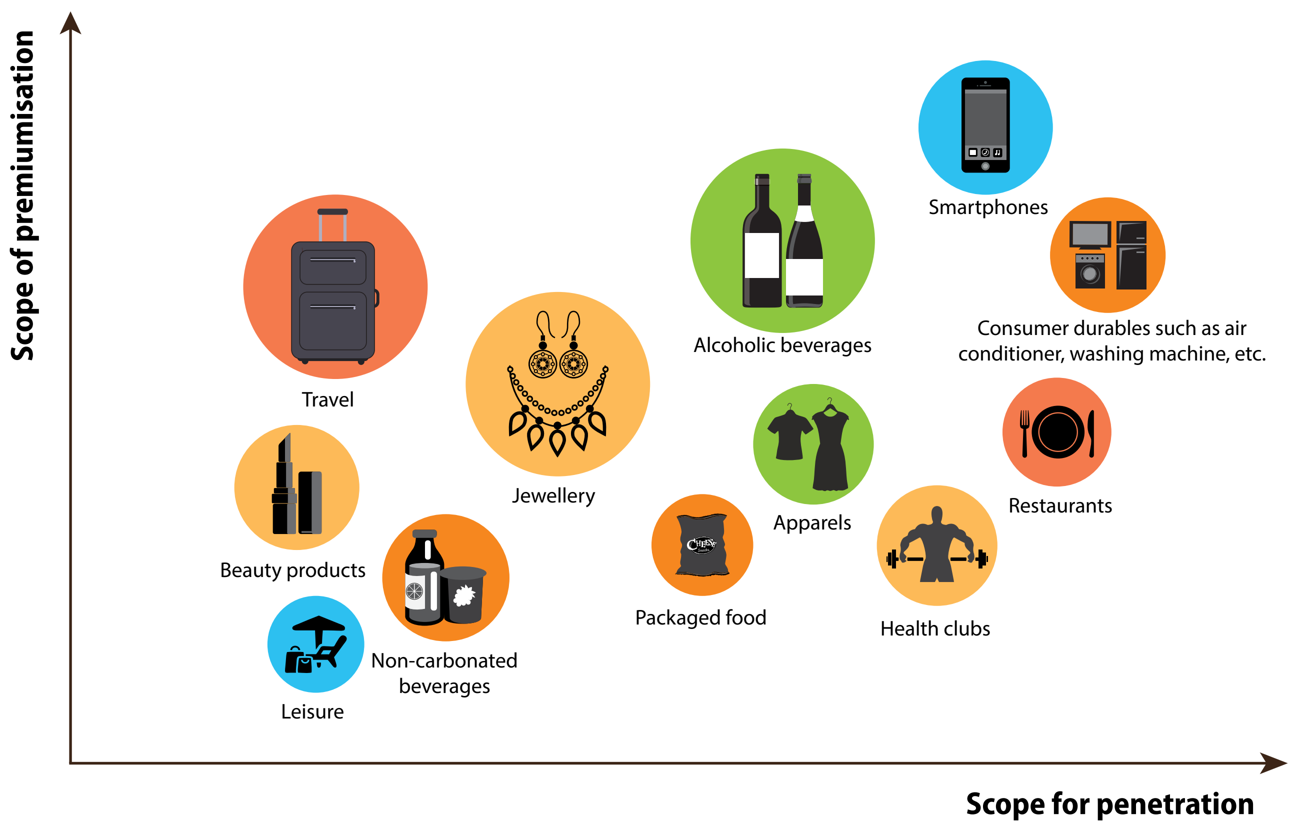
- Detergents
- 2W & 4W
- Chocolate & Confectionaries
- Tea
- Coffee
- Certain consumer durables such as Air coolers, TVs, etc.
- Furniture & fixtures

Low growth rates (<10%)

- Hair oil
- Tooth paste
- Soaps - bath as well as utensil
- Certain consumer durables such as fans, tubelights

Source: Edelweiss research

High growth entails superior premiumisation and penetration scope



With Leaner, Meaner and Fitter Distribution

Recast of traditional distribution channel

Any distribution/delivery channel from factory to end consumer typically involves multiple intermediaries–distributors → super stockiest → wholesalers → retailers. While some products may entail all of these, others may involve only a few. Distribution channel is vital as it helps push the stock to the end consumer, while simultaneously deepening penetration.

The two recent economic reforms – demonetisation and GST – have severely singed distribution channels as most middlemen deal predominantly in cash. This has, in turn, compelled manufacturers to rely either on direct distribution chains or on modern trade, cash & carry and e-commerce channels.

We anticipate a complete recast of the trade channel by 2025 led by consolidation – distributors/super stockiest and wholesalers will merge and corner larger pie, thereby reducing multiplicity and hence time to reach market. We also expect the changing distribution dynamics to significantly benefit modern trade channels and cash & carry players.

Distribution channel – To get leaner and faster by 2025

Source: Edelweiss research

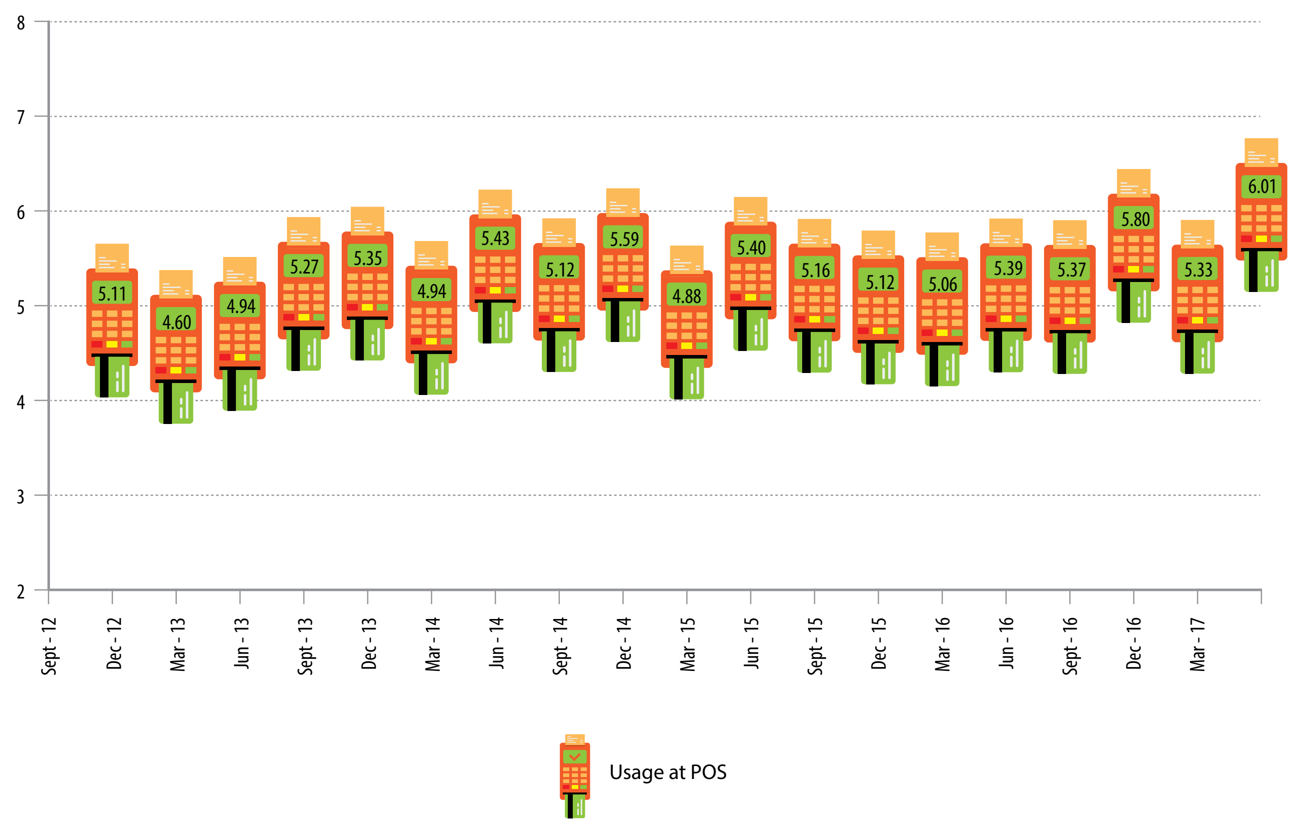
E-commerce: The new growth frontier

In 2012, the e-commerce market was pegged at mere USD0.6bn with the then key categories like electronics, books, stationery and music cornering nearly 50% market share. Circa 2017, it accounts for 2% (USD14bn) of the overall retail market (USD616bn) and projected to jump to 4-6% (USD43-65bn) by 2020 and 8-9% (~USD140bn) by 2025.

In relatively mature markets like US where organised retail penetration is high, multi-channel retail chains lead the online market. In a relatively newer market like China (with 20% organised retail market), pure play e-tailers lead the online market. India is likely to go the China way in terms of web-only players dominating the online market given the low organised retail penetration (around 9%).

The growth in e-tail is driven by improvement in mobile and internet penetration, increasing number of internet habituated consumers, improved supply-side and limitations of organised brick and mortar stores. E-tailing initially offered products online without any specific focus on customer service and experience.

Steady growth in credit card transactions (%)



Source: Industry, Edelweiss research

The defining moment in India's e-tail space was the entry of Flipkart and Myntra in 2007, followed by Amazon in 2012. Now, flush with funds and deeper comprehension of the market size, scope and dynamics e-commerce companies are expanding into more segments and product categories, thereby expanding the overall market.

Consumer electronics, being a highly standardised category, currently constitutes a major chunk of the e-commerce market in India. This is followed by apparels and lifestyle. These two categories are expected to lead the online space till 2025 as well. However, other categories such as furniture, jewellery, etc., too have started gaining traction in the online space.

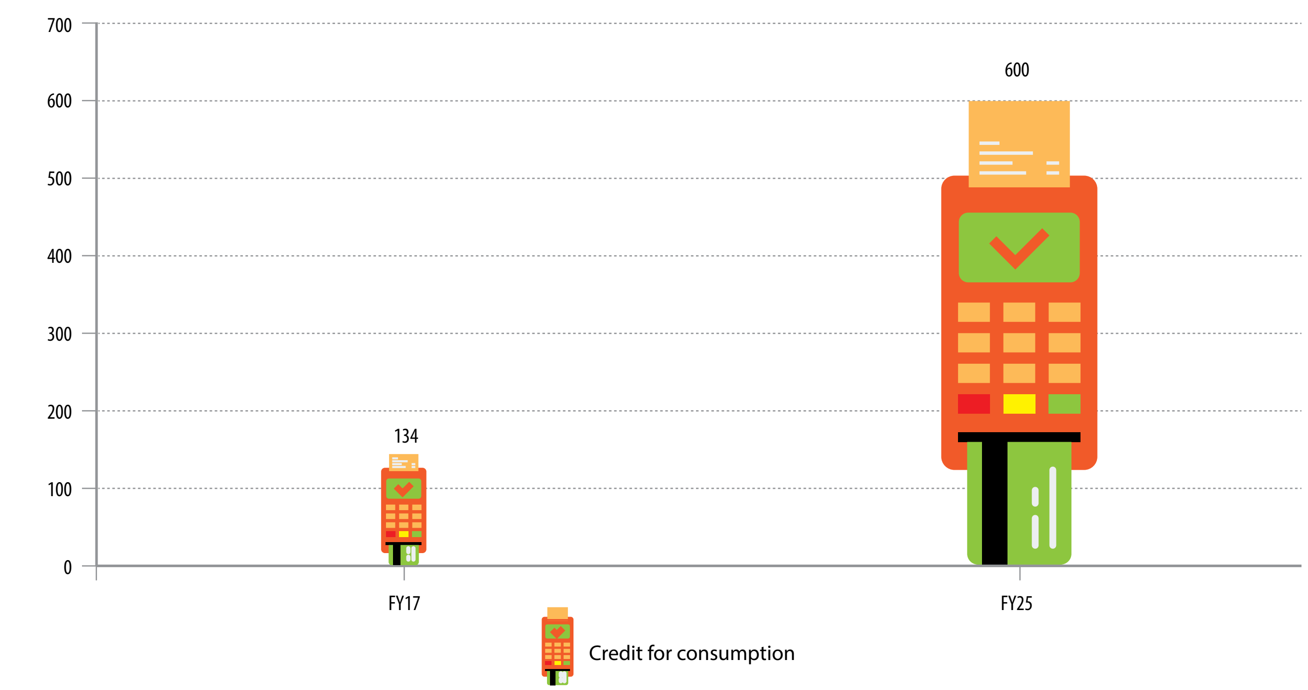
Consumer electronics and apparels to lead E-commerce boom

Historically, the growth of e-commerce was a bit calibrated since usage of cash was prevalent in India. For shopping on e-commerce platforms, use of credit cards/debit cards had to be ramped up. Now, demonetisation has essentially exposed a huge section of the population to debit as well as credit cards. While there seems to be hardly any growth in usage of POS over the last 5 years, demonetisation has ensured this growth rates to fillip from here on. This, in conjunction with the rising working segment, will continue to fuel use of debit and/or credit cards.

As Indians Shop Now and Pay Later

A decade ago, consumers would think of buying a TV, air conditioner, etc., only once they had sufficient savings. However, easy and lucrative financing options such as zero interest and 12/18 monthly EMI options have revolutionised the consumer durables buying habits of Indian consumers.

Expanding personal financing pie to boost consumption (USDbn)



The financing option has expanded the consumption power of middle class and upper middle class segments. And, what's more interesting is that it is no longer confined to consumer durables, but has extended to purchase of cars, two wheelers, foreign travel, as well. Thus, with finance becoming incrementally easy, the possibility of expansion in discretionary expenditure too is imminent.

We estimate personal financing (loans for passenger vehicles, education, consumer durables, credit card outstanding and loan against security) to jump >4x to ~USD600bn by 2025 from USD134bn in 2017. This, in turn, will also change the skew of overall credit towards personal financing. Our calculations peg this ratio to rise from 9.6% to 14.9%, a >500bps expansion, by 2025.

With Swings to Niche and Naturals

Back to 'Natural' roots

Ramdev Baba can be truly termed as the propagator of the naturals theme in India. Patanjali's unprecedented success in wresting market share from well established MNCs forced the latter to take notice and launch 'me-too' natural products. Today, within FMCG, the natural theme is fast gaining prominence and has become a USD2.8bn category, 41% of total personal care market (as per AC Nielsen).

Naturals to have dominant 50% of personal care market

Various studies indicate that the contribution of the natural segment has increased 1% every year over the past. And, if the current trend sustains (we do not see any reason for it not to), **natural as a category within personal care can become ~50% of the overall segment by 2025. Even within food staples, natural category could catapult to 12-15% of the overall pie by 2025**.

As consumers and lifestyles evolve, as more and more natural products enter the market and with consumers' spending appetites and awareness expand, natural will undoubtedly be a big trend fuelling consumption.

Organised value retailing to be crowded

Many foreign retailers are still mulling India entry. However, it's only a matter of time before they realise the Indian consumer's spending potential and go full throttle to capture the same. Today, while Zara, H&M, United Colors of Benetton, among others, have set shops in India, their stores are restricted to the Top 8-10 cities. But once they realise the potential of beyond Top-10 cities, they are bound to expand their reach. Of course, their entry in those cities is not going to be a cakewalk as they will have to contend with well entrenched domestic retailers.

We believe, foreign retailers who delay their India entry will lose out to domestic organised retailers who will corner a larger pie of value retailing format in India. This will be aided by increasing malls/shopping stores across the country and consumers warming up to this format.

Making a niche and moolah as well

Till five years ago it was largely a seller's market. Customers had no option but to buy a product available and that too at the price point dictated by manufacturers. Case in point is male grooming products. While the segment's potential was never in doubt, manufacturers gave it a pass due to the high cost of delivery.

However, proliferation of e-commerce players has spurred startups offering niche products to resort to the online channel to sell their differentiated wares. And, many of them have emerged winners. Behemoth Unilever's buy out of Dollar Shave Club and Marico's acquisition of Beardo are ample testimony to the burgeoning opportunities in niche products.

Apart from new differentiated and niche products, this leaner market delivery channel has ensured that incumbents are on their toes in terms of product repertoire, quality and prices.

It's time for organised play

A highly prevalent unorganised segment, flourishing by circumventing labour laws, flouting regulations and evading taxes, has for long been the bane of organised businesses. However, the stage has been set for the tables to turn and the baton to pass to the organised segment at an accelerated pace.

The game changer is the government's various policy initiatives – streamlining of corporate taxes and business regulations, curbing black money menace, implementing GST, among others – that are bound to propel this shift. These reforms, in conjunction with burgeoning urbanisation, booming e-commerce and an expanding aspirational middle class, will undoubtedly move the pendulum emphatically in favour of organised players, offering them humongous opportunities over the next five-ten years.

Organised players to grow 4x over next 8 years

We peg the opportunity over the next decade spanning 10 sectors at ~USD300bn (4.2x current size). We envisage organised players in diagnostics, dairy, branded apparels, building material, plastic and packaging sectors to reap palpable benefits of the shift.

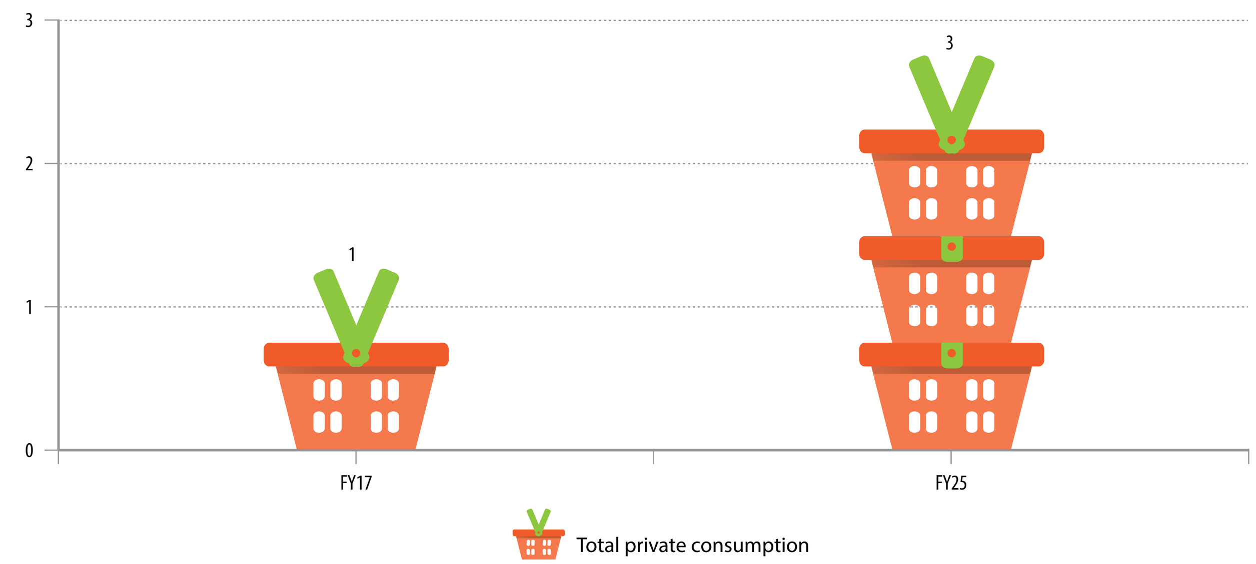
Tepid agricultural growth and vibrant growth opportunities in service and manufacturing sectors are fuelling rapid urbanisation. Since organised players have dominant presence in urban areas, urbanisation is bound to spur their revenues. Moreover, with rise in real per capita incomes, food expenditure as a percentage of total expenditure is declining, leaving surplus funds with consumers to purchase branded products. Also, preference for branded products is gaining ground with a rising consumer preference to shop from organised retail locations like malls and large format stores, entailing bright prospects for organised products.

Expanding Appetite: Consumption To Surge ~2.5x by 2025

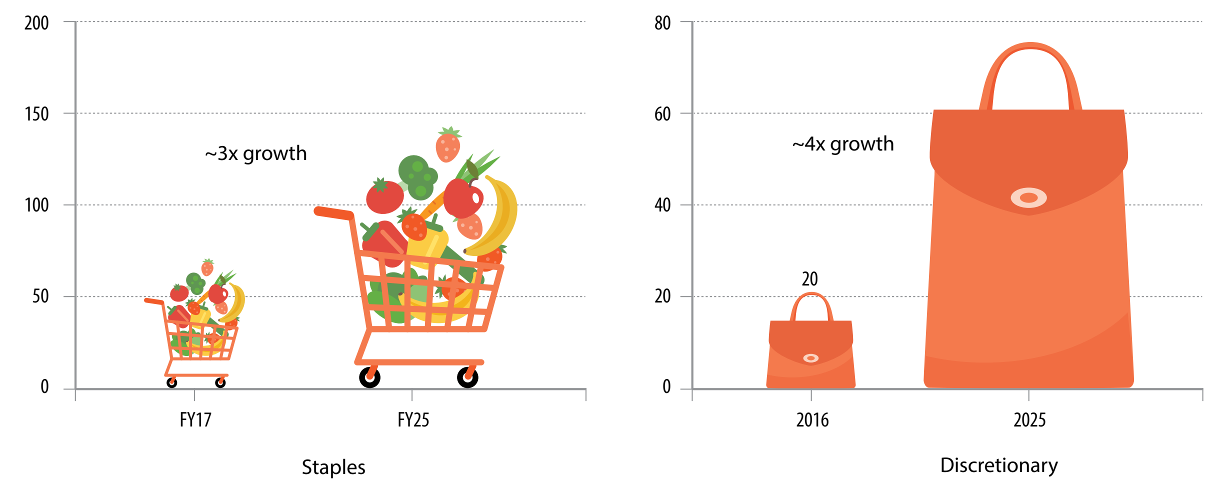
Underpinned by the above levers, we expect overall private consumption to expand from USD1.3tn in 2016 to USD3.0tn by 2025, ~11% CAGR.

Within the overall consumption basket, while we estimate staples to clock ~10% CAGR, discretionaries will post ~16% CAGR by 2025. While staples as a basket will broadly grow ~2.5x by 2025, discretionary, the major driver, will surge 3.7x.

Overall consumption poised to propel ~2.5x by 2025 (USDtn)



Staples and discretionary segments – Up, up and away (INRtn)



2025 Infrastructure

Tryst with Speed & Efficiency

- Public transport explosion – cleaner, faster and cheaper
- The Metro way – 25 cities, ~3x traffic, 4x rail length
- 300mn fliers, 150 airports and the world's third-largest market
- Expressways across and high speed trains to key Metros
- Freight transit times will drop upto 50% and railways' tonnage will double

The Grey Revolution

Infrastructure development has been a perennial challenge for India across the board – on scale, quality, funding, ownership and regulatory and economic considerations. A burgeoning work force and unchecked migration to urban centres has further worsened the situation. Recognition of this though is complete. ***There's policy push, significant improvement in execution,*** *emergence of scale, development of regulating institutions and transparent bidding processes. A mix of models – ownership, pricing and standards – across infrastructure classes, is gearing India into catch-up mode and in readiness to start leap-frogging, ahead of peers and conventional expectations. We believe, including a pronounced thrust on housing, India is set for a Grey Revolution.*

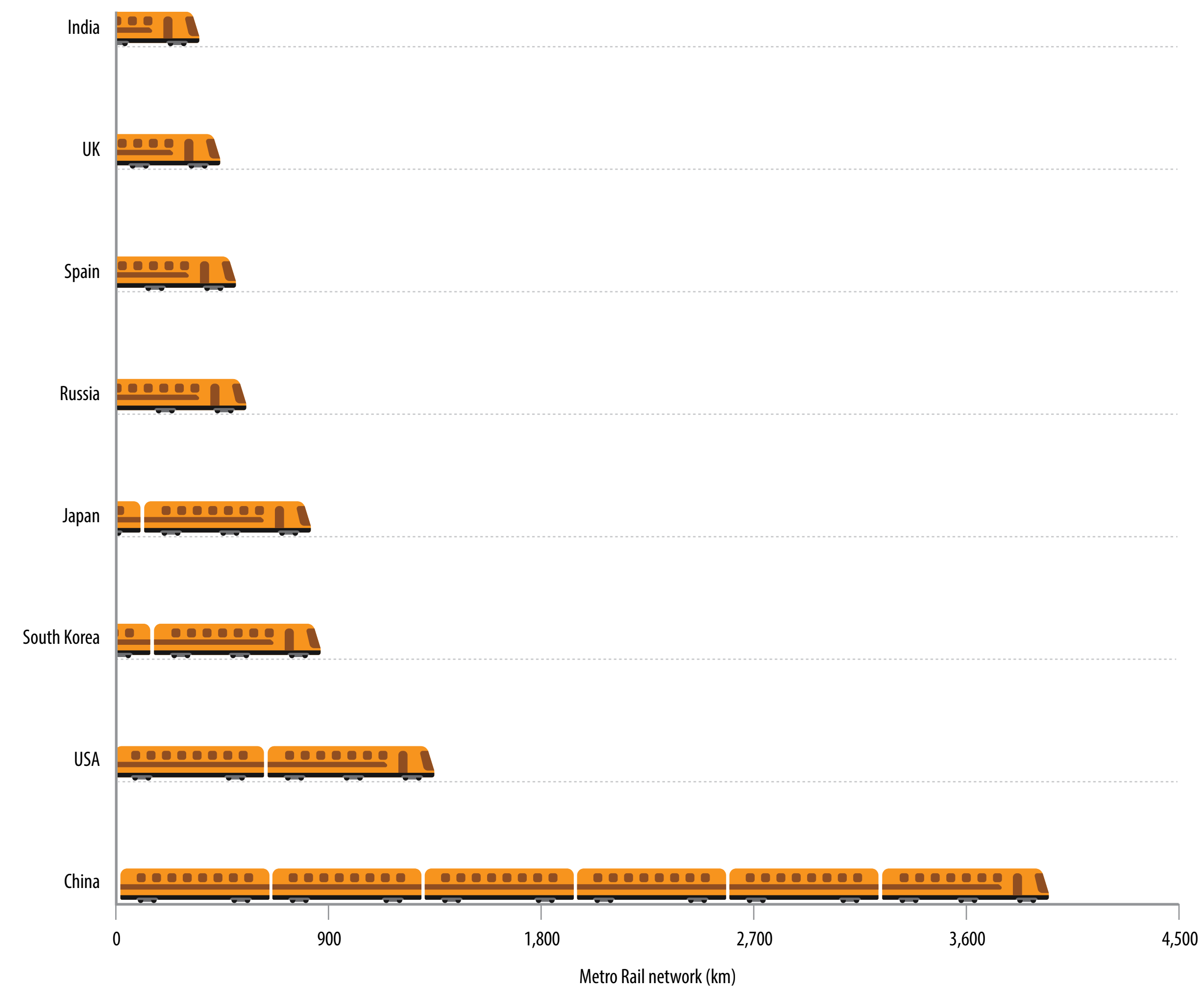
We anticipate radical changes in India's infrastructure landscape by 2025. ***Road connectivity****, already the second longest in the world, will expand significantly with concerted efforts on eliminating passenger and freight transport bottlenecks.* ***Major cities will be connected by expressways****, revolutionising travel. Moreover, the rail network will be completely overhauled, being 100% electrified, and* ***Dedicated Freight Corridors will cut travel times to less than half*** *from the current on select routes. And, then there will be the highly anticipated high-speed trains. This will be rounded off in the skies with the number of passengers flying soaring to 300mn p.a. – the third largest in the world across 150 airports.* ***The urban commuter will travel quicker****, the rural will be closer to the city, and the travel more comfortable. In 2025, India's physical mobility and appearance will be of a higher order – in scale, quality and efficiency. Long a laggard, it will be setting standards and in many cases leading them.*

Urban Mobility will get Democratic

Currently, urban traffic in India crawls at ~15-25kmph. Reliance on private transport, at the expense of public mode, is a major reason for the gridlock in metros. Delhi alone adds more than 1,000 cars every day. Studies indicate that average speed during peak hours has been cut by half and if more cars clog the already saturated road network, traffic in Delhi will move at barely 5kmph in the next ten years.

The missing link in Indian cities is a widespread Metro rail network. Globally, ~170 countries have an operational Metro network currently. India was a laggard in this regard. It jumped on the Metro bandwagon, in earnest, only in the previous decade.

India's current Metro network abysmally low

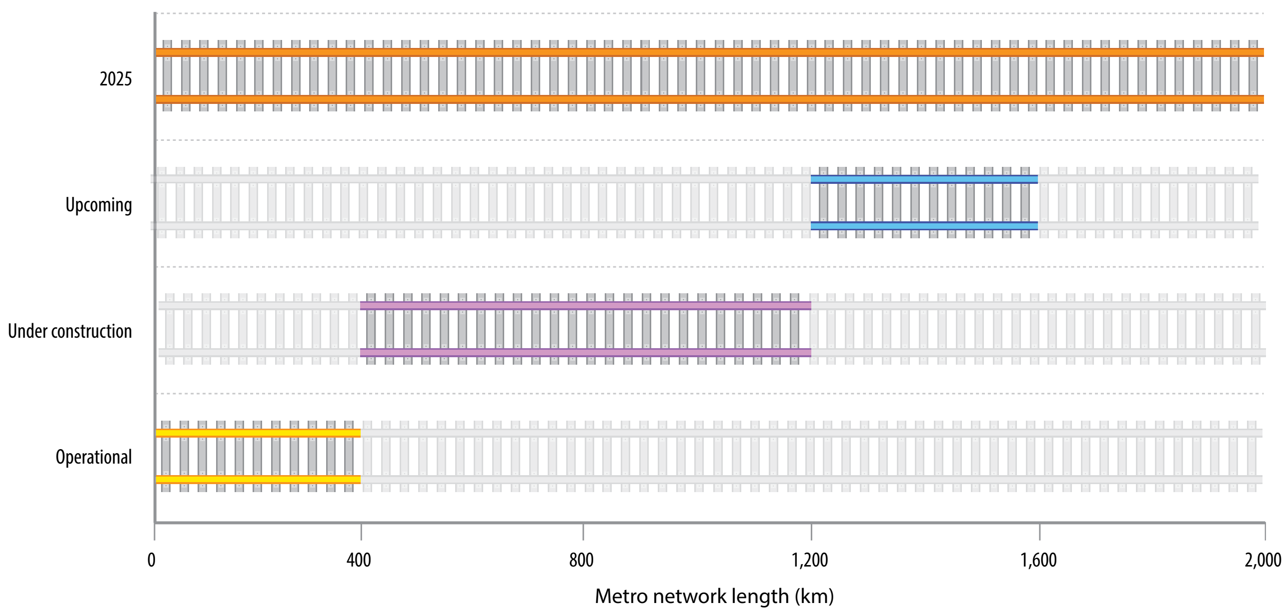


Source: Government documents, Edelweiss research

Except in Delhi, Metro rail development is in its infancy in other Indian cities. Currently, the network is operational in ten cities; by 2018 end, four more cities will have Metros.

By 2025, we anticipate a quantum leap in India's urban mobility space. Metro rail projects will be operational in ~25 cities and the overall network will catapult ~4x compared to the current. India will feature amongst the top 3 countries in terms of Metro rail network. Not only major cities, but a large number of tier-2 cities too will have an operational Metro network by 2025.

Metro rail to expand at break-neck speed by 2025



Source: Edelweiss research

Metro rail will carry 12-15mn passengers every day in 2025 - 3-4x jump from today

Moreover, major cities will have multiple Metro rail lines crisscrossing each other, significantly improving accessibility. Mumbai alone will have around ten Metro lines connecting the city and its suburbs, courtesy probably the largest and amongst the fastest Metro rail expansion programmes in the world. It will rival and possibly dwarf its famed suburban railway network in reach and carrying capacity. We envisage Metro rail to become the preferred choice of urban commuters and ferry 12-15mn passengers every day, ~3-4x the current number, by 2025.

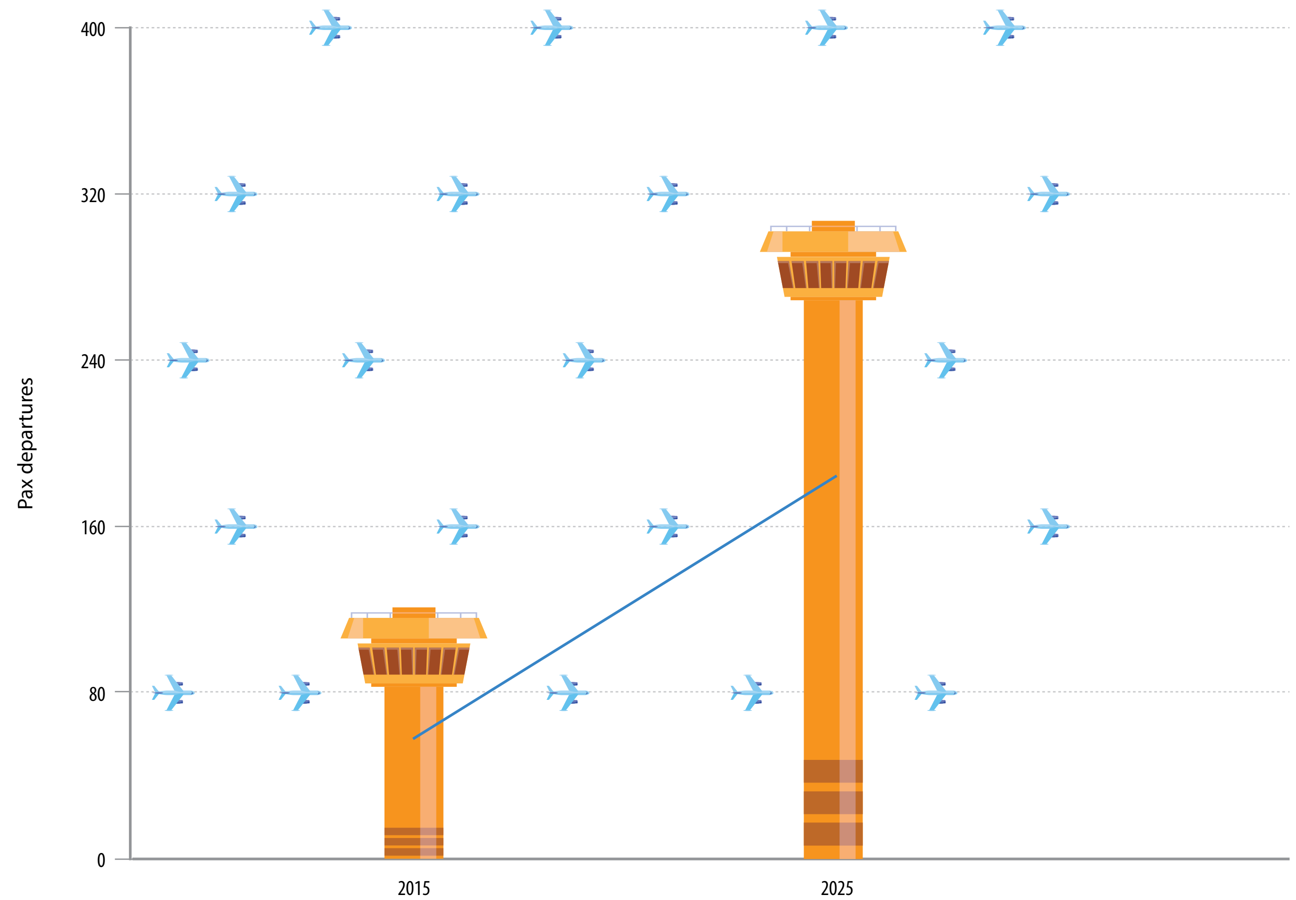
In essence, there will be seamless connectivity across modes, enhancing the attractiveness of public transport. As far as cars are concerned, the way forward is a combination of shared mobility (ride sharing) and personal ownership along with proliferation of EV. This will bring about immense changes in the way infrastructure facilities, public transport and energy systems are integrated. Dedicated traffic lanes reserved exclusively for EV could well be a reality in 2025.

As the Common Man takes to the Skies

India's status as the fastest-growing aviation market in the world is well acknowledged. From being the eight largest in 2013, it has already leap-frogged to the fourth position, clocking 131mn departures in 2016. And, by 2017-18, it is slated to overtake Japan to become the third-largest aviation market (by departures).

Soaring domestic air traffic, which has catapulted from ~23mn passengers in 2005 to 51mn in 2010 and a whopping ~100mn in 2016, has contributed a lion's share to this spurt. In terms of domestic air traffic, India has already become the third largest market globally.

India's air traffic to boom by 2025 (mn)



Source: Edelweiss research

By 2025, we envisage it to surpass UK to become the world's third largest aviation market (both departing and arriving passengers), just behind US and China. 300mn Indians will take to the skies every year and the number of airports will burgeon to ~150 compared to ~100 currently.

Trips per capita to sour 2x by 2025

Improving affordability underpinned by surging per capita incomes will continue to fuel substantial spurt in India's passenger growth. We estimate trips per capita in the under-penetrated Indian aviation market (one-fourth China's) to soar 2x by 2025. Not only this, India will share the distinction with US and China of being amongst the top 3 markets for acquisition of planes.

The government's ~USD60bn plan to set up 100 new airports over the next 15 years is undoubtedly a major catalyst that will spur air travel. This programme aims to double the number of airports in India and ensure that tier 2 & 3 cities become the aviation sector's new growth engines. Resolution of regulatory issues and learnings from airport privatisation drive will ensure that the government embraces private sector participation in airport development in a big way by 2025. This will ensure that even tier 2 & 3 Indian cities have world-class airports like Delhi, Mumbai, Hyderabad and Bengaluru. Even now, ~60% of India's airport traffic is handled under the PPP model (balance 40% by Airports Authority of India). And, we expect private sector's share to further jump going ahead.

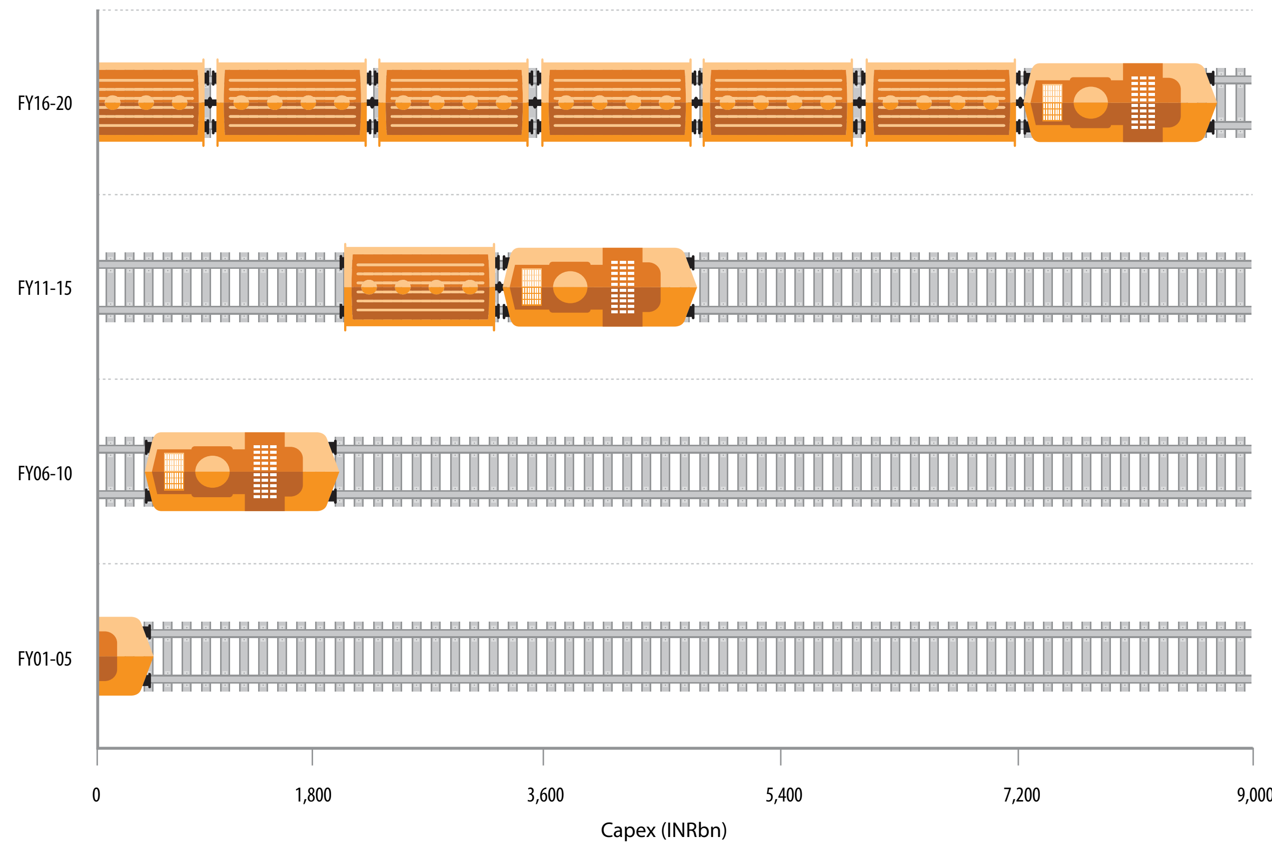
The government's UDAN scheme too is a potent enabler. Targeting development of new regional airports, enhancing existing regional airports and adding financially-viable, capped airfare new regional flight routes via Viability Gap Funding, will boost passenger traffic on regional routes.

And, Trains really take to the Rails

Indian Railways has, for years, battled lack of investments, depleting market share and failing financial health. Since FY51, its rail network has expanded mere ~24%, but the ever burgeoning traffic has led to severe congestion with 40% of all sections and ~65% of high-density sections running at >100% utilisation.

However, a paradigm shift is now underway, manifested in a ~USD130bn investment plan over 2015-19, 1.9x 2000-15. The plan, which focuses on freight-carrying capacity enhancement and improving passenger amenities and safety, is envisaged to revive the fortunes of beleaguered Indian Railways.

Quantum jump in railways' five-year (FY16-20) capex plan



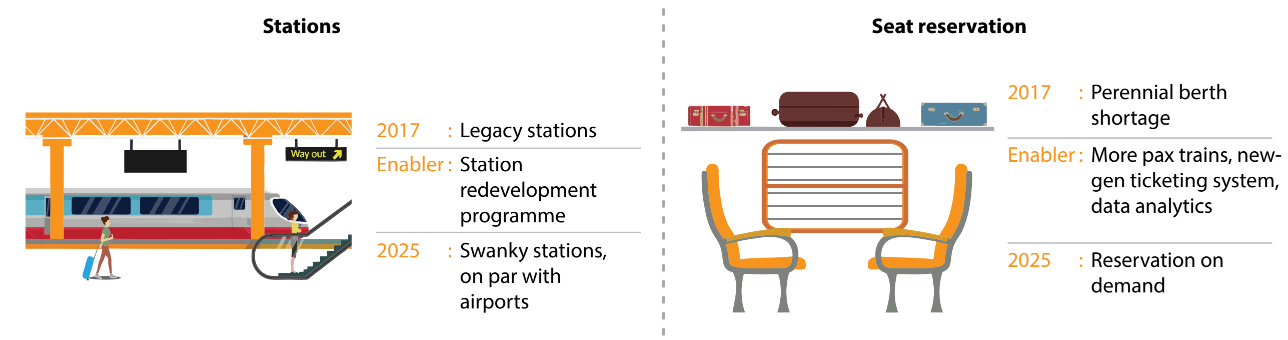
Source: Government documents, Edelweiss research

Investments in railways are envisaged to far outstrip those in National Highways over the next decade and the rail revolution will usher monumental changes in the country by 2025.

By 2025, the average Indian rail passenger's experience will be dramatically different from today and match global standards. He will board his train from a railway station packed with amenities on par with airports. These will include separate terminals for arrivals and departures like at airports, shopping malls, executive lounges, multiplexes, an office complex, eateries and larger parking lots. There will be hotels for stopovers and shopping arcades and malls for leisure and entertainment.

Display screens at railway stations across the country will transmit rail-related information on half the screen and advertisements on the other half. Cloud-controlled screens will enable Indian Railways transmit same content simultaneously all over India or same content in different languages, but simultaneously throughout the country or different content on separate screens.

Seat reservation process and stations to witness big transfromation

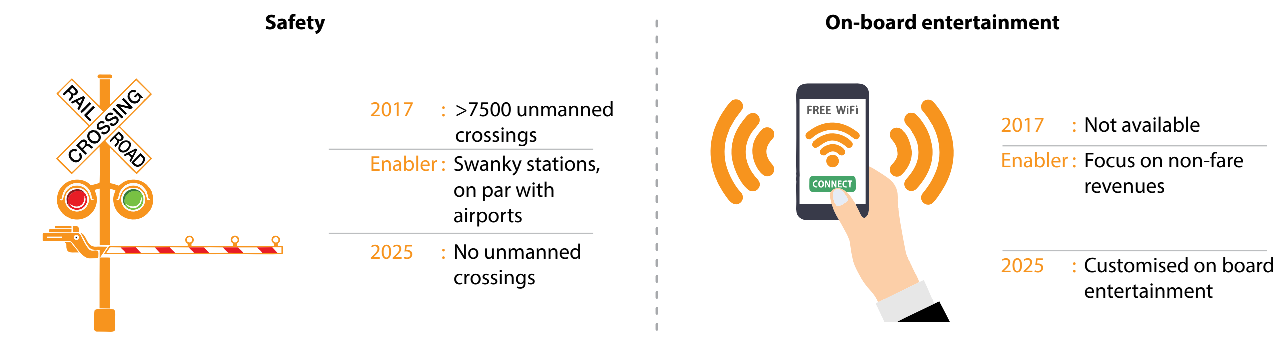


Source: Edelweiss research

He will be travelling in super safe LHB coaches (rather than ICF coaches used today), reducing casualties in case of an accident in a big way. Moreover, the number of rail accidents will plummet significantly with the elimination of unmanned level crossings.

The on-board entertainment options like movies, music, internet connectivity, etc., will leave him spoilt for choice. Moreover, trains will have radio broadcast facilities to provide free on-board and customised entertainment, which will also boost railway's advertising revenue.

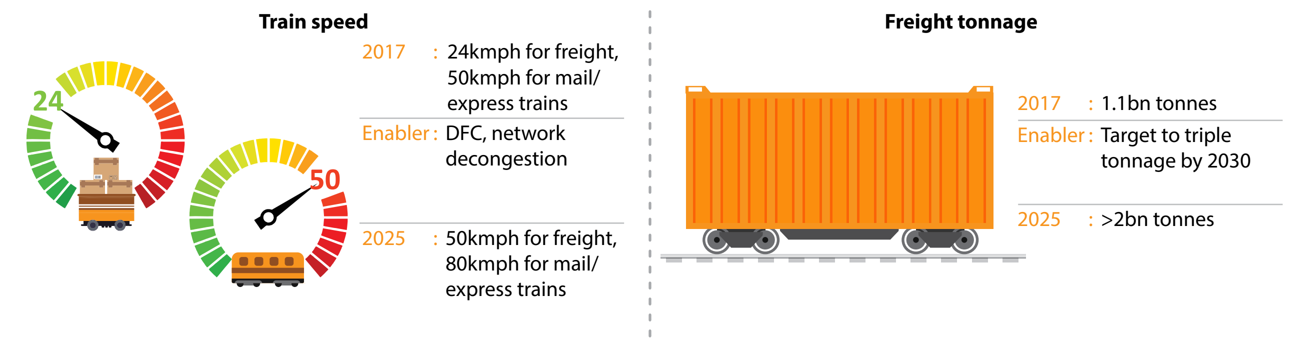
Safety and entertainmaint will be taken care



Source: Edelweiss research

For the freight customer as well, the makeover will be no less significant. For long bogged down by the rakes availability issue, Indian Railways' expanded network will have capacity to cater to much larger freight traffic. Large scale roll out of Private Freight Terminals (PFTs) will eliminate issues of inadequate mechanisation of terminals, supply of covered-type rakes and relatively inefficient turn round of rolling stock compared to open-type rakes.

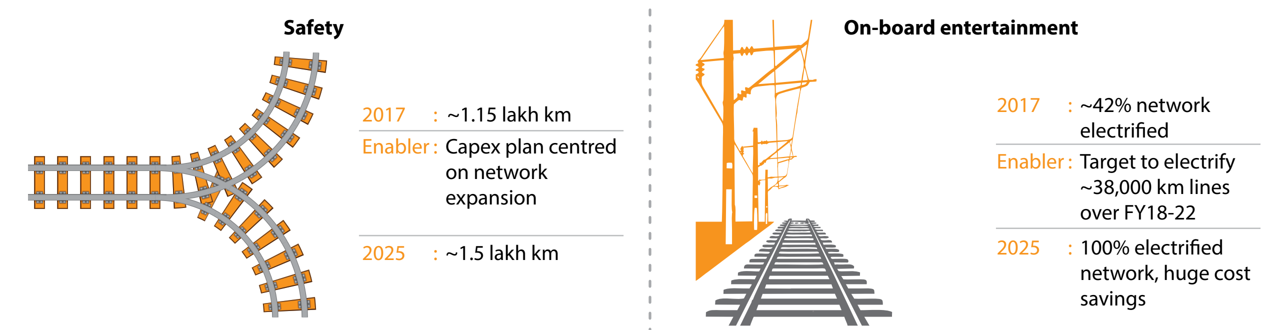
Freight capacity and train speed to increase multifold



Source: Edelweiss research

Network decongestion will improve efficiency substantially and help Indian Railways offer value-added/premium services such as guaranteed supply and transit. And cost optimisation (via electrification) will enhance its ability to compete effectively with other modes of transport.

Rail network to expand and electrified



Source: Edelweiss research

> *High-speed railways to trigger economic development of tier-2 cities which lie on the corridor*

High/semi-high speed rail: No flight of fancy

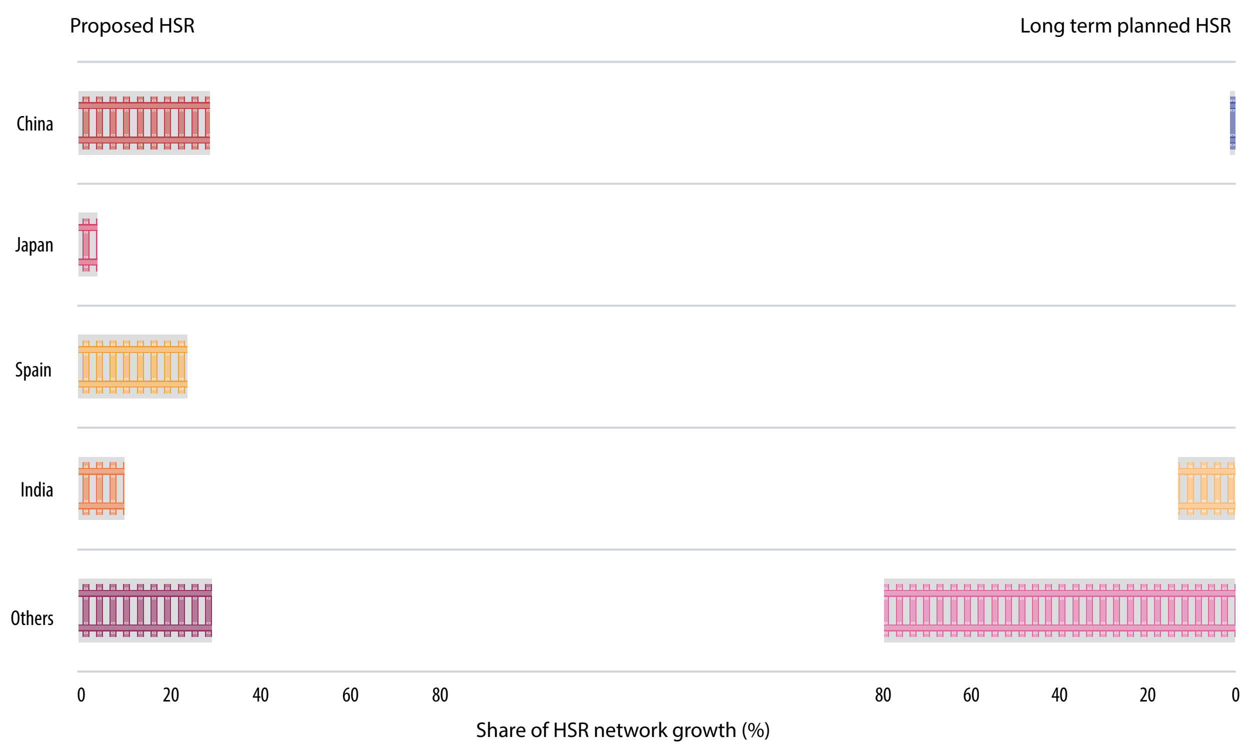
Operational speed in excess of 250km/hour qualifies as High-Speed Rail (HSR) according to international standards. India, unfortunately, does not have a HSR line. However, in a bid to usher in the next leg of rail infra development, ground work on the Mumbai-Ahmedabad High-Speed Rail (MAHSR) project has commenced recently.

By 2025, we expect commuters to actively use the MAHSR. Apart from that, we envisage work on at least some of the other proposed corridors like Delhi-Mumbai, Mumbai-Chennai, Delhi-Kolkata, Delhi-Chennai, Mumbai-Kolkata, among others, to have commenced.

Indian Railways has already identified certain corridors for feasibility of semi-HSR (150-180km/hr) lines. These include Delhi-Agra, Delhi-Chandigarh, Chennai-Bengaluru-Mysore, Mumbai-Goa, Chennai-Hyderabad, Nagpur-Secunderabad, among others. Semi-HSR on a few of these routes will commence by 2025.

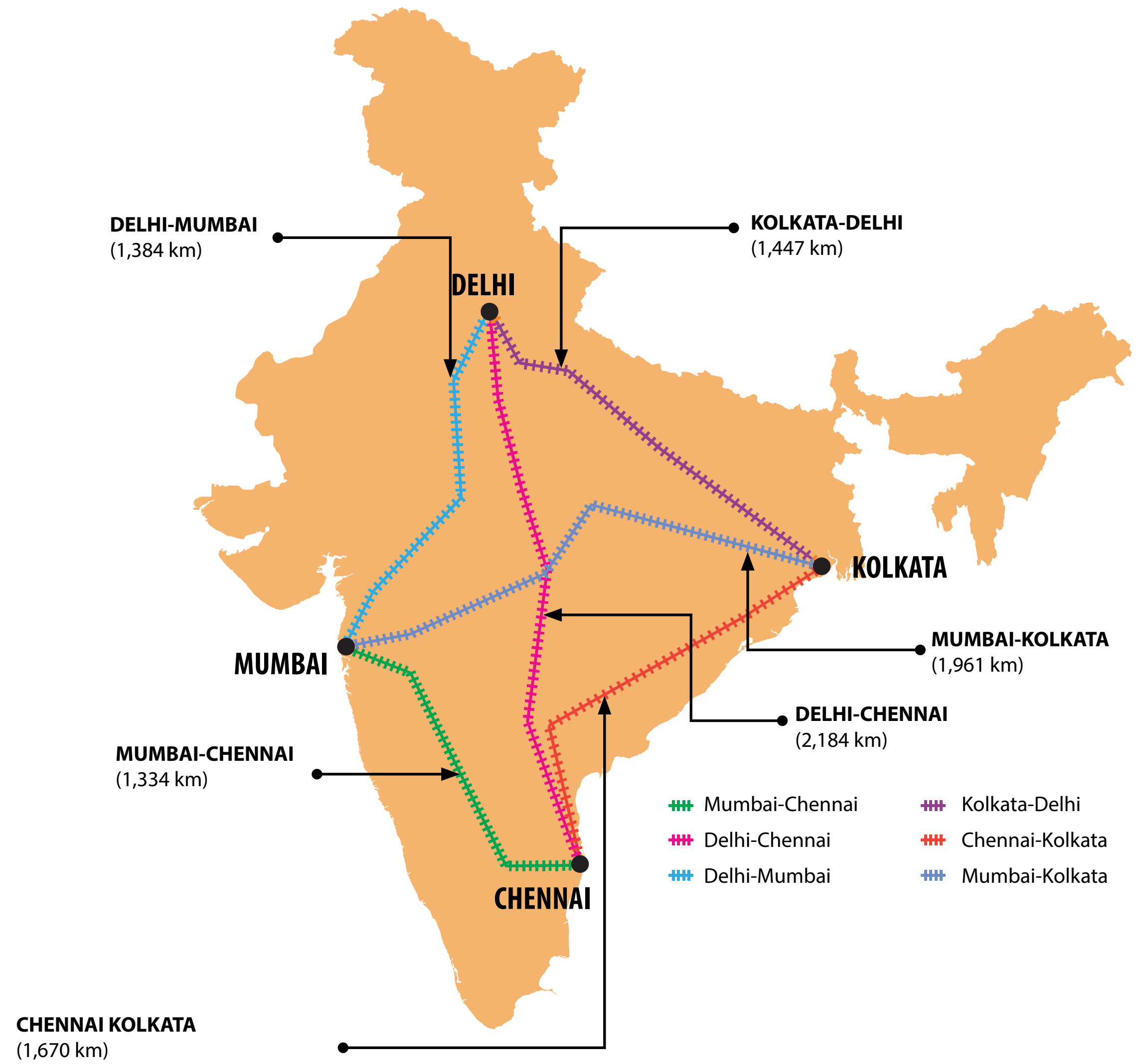
Commencement of HSR services will undoubtedly transform rail travel in India, not just in terms of speed, but also in perception of technology, safety, cleanliness and passenger comfort. Dedicated HSR lines will not only alleviate congestion on Indian Railways' existing network, but also trigger economic development of tier-2 cities which lie on the corridor.

India to emerge significant player in HSR space



Source: Edelweiss research

Charting the course – Proposed HSR routes



Graphical representation not to scale

Source: News reports, Edelweiss research

Railways will thus be equipped to capture the latent demand for high-speed travel and cater to passengers in cities which lack airports currently. In addition, with some passengers shifting to the HSR network, congestion on rail network will improve, enabling Indian Railways to serve higher number of passengers.

Moreover, the quantum leap in technological advancement brought about by commencement of HSR services will entail a host of ancillary benefits for rest of the rail network. More than the HSR network's absolute length, change in the mindset its operationalisation will engender in Indian Railways will have far reaching implications. It will definitely revolutionise the way Indians perceive rail travel.

While Freight Corridors Metamorphose Logistics

Lack of investments, a saturated rail network and priority to passenger trains have steadily eroded Indian Railways' freight market share. The situation is so grave that incremental solutions to fix the freight business will be futile. What's needed is a complete overhaul of the entire freight operations and a fresh start.

Indian Railways realised that if it has to effectively woo back lost customers, it will have to devise new models entailing better service provisions like faster speeds, better infra and timely delivery. This led to the genesis of Dedicated Freight Corridors (DFC).

Mapping the future – Current and proposed freight corridors in India

Graphical representation not to scale

Source: News articles, Edelweiss research

By 2025, we envisage India to have 2 operational corridors dedicated to freight movement. These will be the Western DFC (Dadri-JNPT) and the Eastern DFC (Ludhiana-Dankuni). In addition, work on 3 new DFC – East-West Corridor (2,328km; Kolkata-Mumbai), North-South Corridor (2,343km; Delhi-Chennai) and East Coast Corridor (1,114km; Kharagpur-Vijaywada) – will also be underway.

DFC will revitalise India's freight logistics. It will have freight trains of 1.5km length, 3,660mm width and 7.1m height clearance, a first and only in the world. There will be double-stack standard shaped containers which will be transported via electric locomotives with trailing loads of 15,000 ton and trains with 400 container capacity, again a first and only in the world. DFC will have 800 electric locomotives with 12,000 HP, biggest deployment of very high HP locomotives anywhere in the world. High speed freight trains will run above 100kmph plus, one of the few in the world. Also, there will be radio communication and GSM-based tracking of all trains – a first in India's railway sector.

Operationalisation of two DFC to yield substantial benefits

Higher carrying capacity
Load carrying capacity ~3.75x of traditional IR rake. Bigger dimensions and network's improved design features to reduce the unit cost of operations.

Operating costs
30-40% lower than current operations; we believe DFC in its first 5 years of operations will generate sufficient funds to create another DFC

Planning and network utilisation
Segregation of freight and passenger traffic will enable better planning and optimum utilisation of the network, eliminate inefficiencies/uncertainties

Higher speeds
Average speed of over 65kmph as against 24kmph currently, transforming logistics and boosting productivity

Source: Edelweiss research

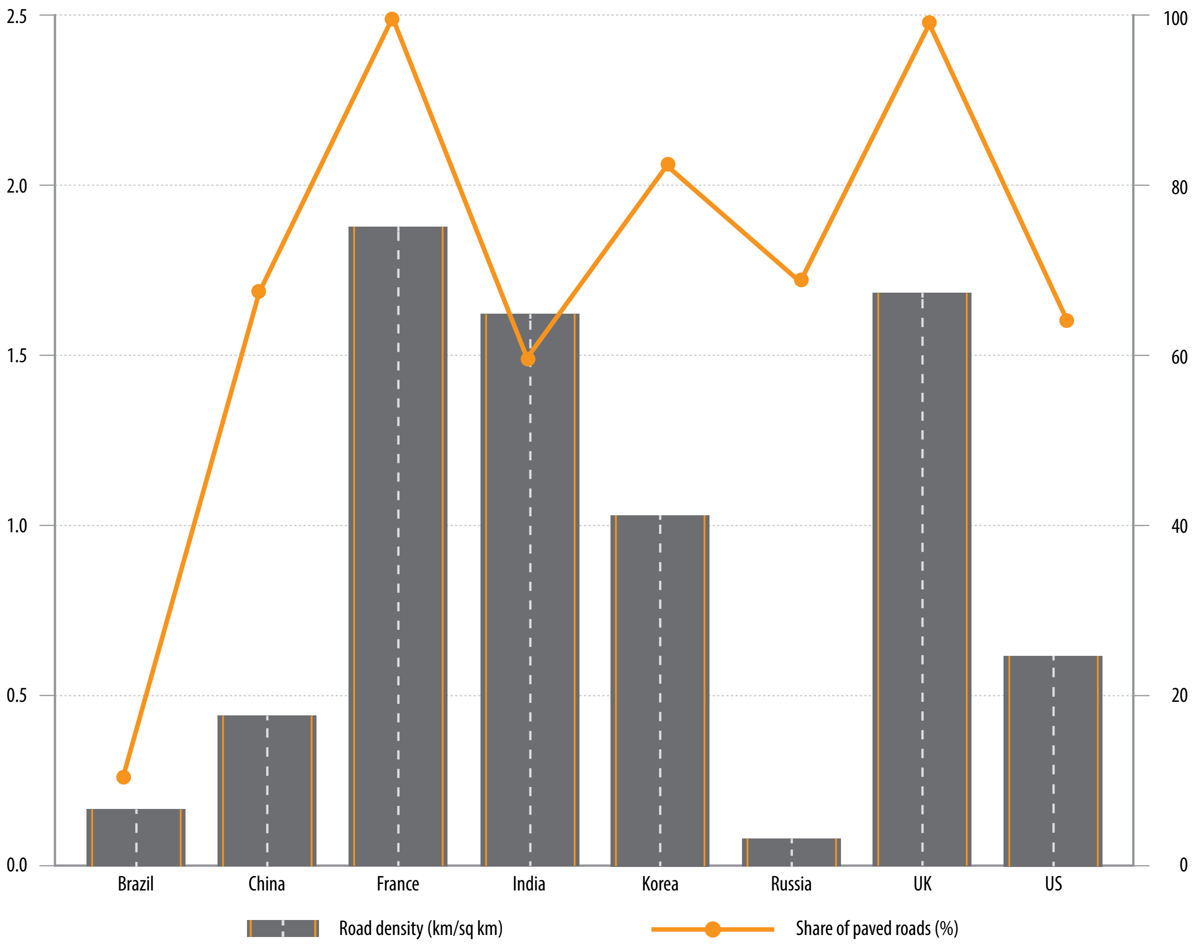
The rail network connecting 4 major metros – Delhi, Kolkata, Chennai and Mumbai (the Golden Quadrilateral) – and diagonals (with East-West diagonal extending to Guwahati) constitutes less than 16% of overall route network, but accounts for 58% of freight and 52% of passenger traffic. DFC along these routes will aid Indian Railways up the service quality for freight customers by reducing congestion.

With segregation of freight and passenger traffic, the DFC project will be a potential game changer for India's logistic landscape. Apart from cutting transit time, it will also enhance railways' load carrying capacity, significantly boosting its revenue generation potential. With operating costs being 30-40% lower than current operations, its commencement will enhance railways' profitability substantially and, hence, internal accruals.

And Smooth Roads Widen and Expand Networks

With ~5.5mn km of roads, India boasts of the second-largest road network in the world after US. However, their quality leaves much to be desired. National Highways, State Highways and Expressways, considered amongst the better of the lot, constitute mere 0.25mn km of the overall road network. And, National Highways, which constitute less than 2% of the overall road network, carry 40% of road freight traffic; ironically, less than 22% of these were 4 lane or above as at FY15 end.

India ranks high in road density

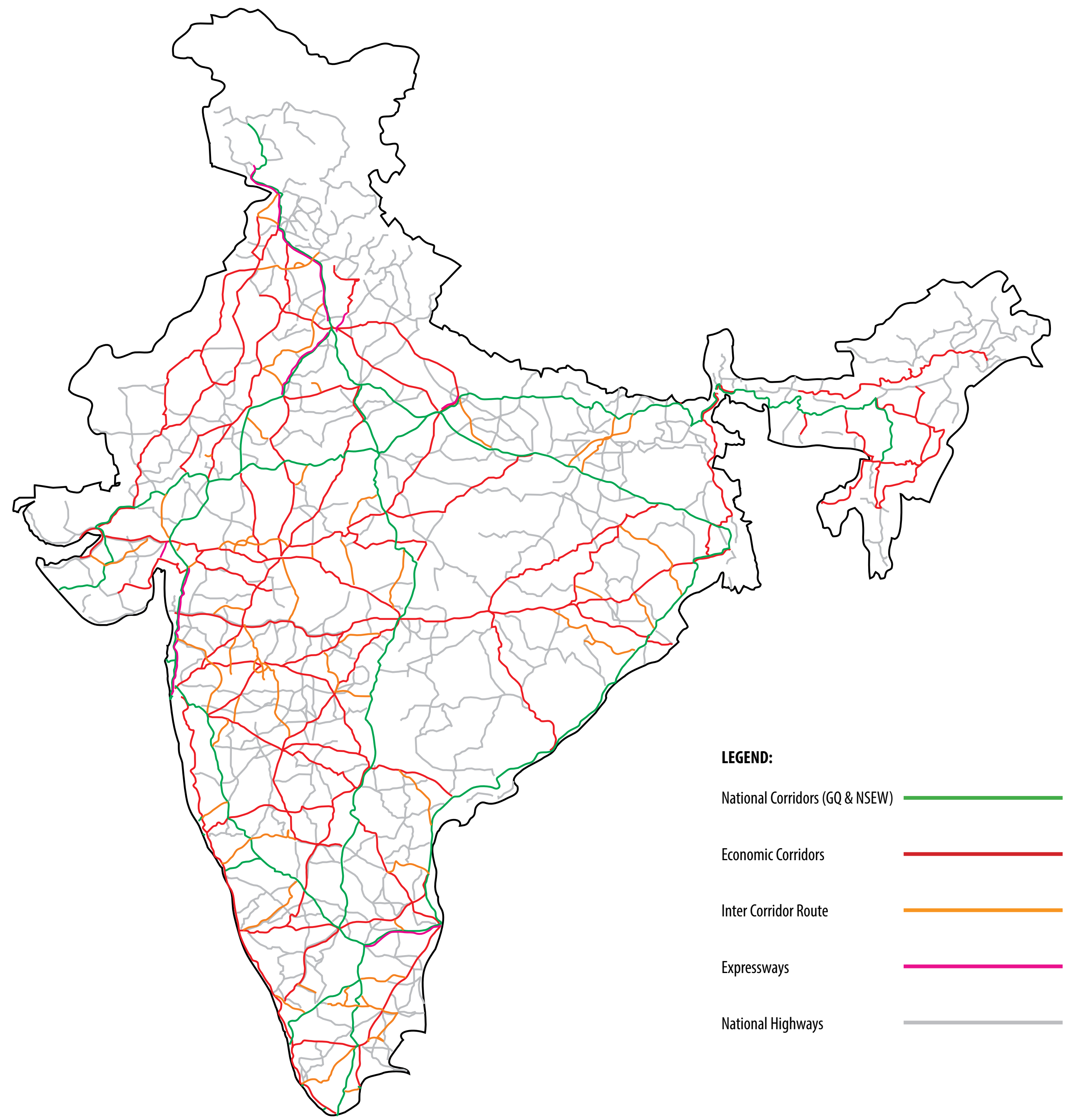


Source: Government documents, World Road Statistics 2015, Edelweiss research
Note: Figures for India are for FY15 while for other countries, it is CY15

While India's road density is higher than many countries, the surfaced road length is abysmally low.

In a bid to change this scenario, the government has chalked out an umbrella plan for road development – the Bharatmala Project – in 2018. The project will focus on qualitative, than quantitative, improvement in road network. Phase I is targeted to be completed in five years.

Bharatmala map – Joining the dots



Graphical representation not to scale

Source: Government documents, Edelweiss research

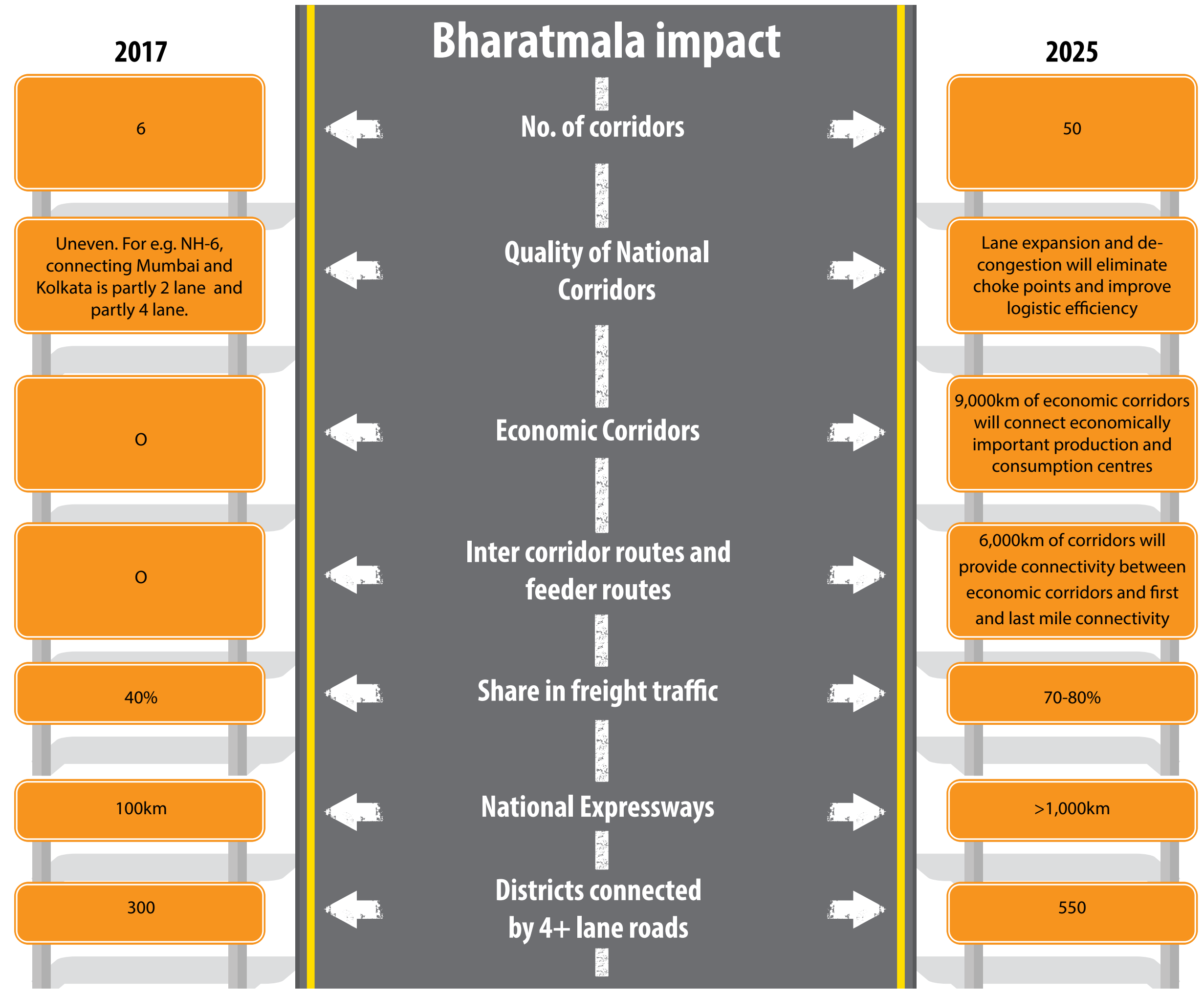
By 2025, we envisage Bharatmala Project to facilitate a smoother and integrated traffic flow on Indian roads. Once constructed, the National and Economic corridors along with their inter-corridor and feeder routes will carry 80% of India's road freight traffic. The Golden Quadrilateral and North South-East West corridors currently suffer from bottlenecks, severely hampering traffic movement. These will be resolved by 2025, improving logistic efficiency and ensuring substantial increase in speed and time of travel for freight as well as passenger traffic.

In addition, akin to major global cities, India will have a network of ring roads and bypasses/ elevated corridors around metros. Thus, long-distance traffic, plying on National Highways connecting major metros, will bypass these cities and zoom to their destinations, thereby significantly decongesting urban roads.

Similarly, the development of coastal and port connectivity roads will boost tourism and industrial development of coastal regions. This will also facilitate EXIM trade and improve connectivity to non-major ports.

Further, the development of logistics parks at strategic locations will boost logistics efficiency as they will cater to key production and consumption centres accounting for 45% of India's road freight.

Bharatmala Project – Huge benefits by 2025



Source: Government documents, Edelweiss research

2025 Energy
Tryst with Cheap & Green

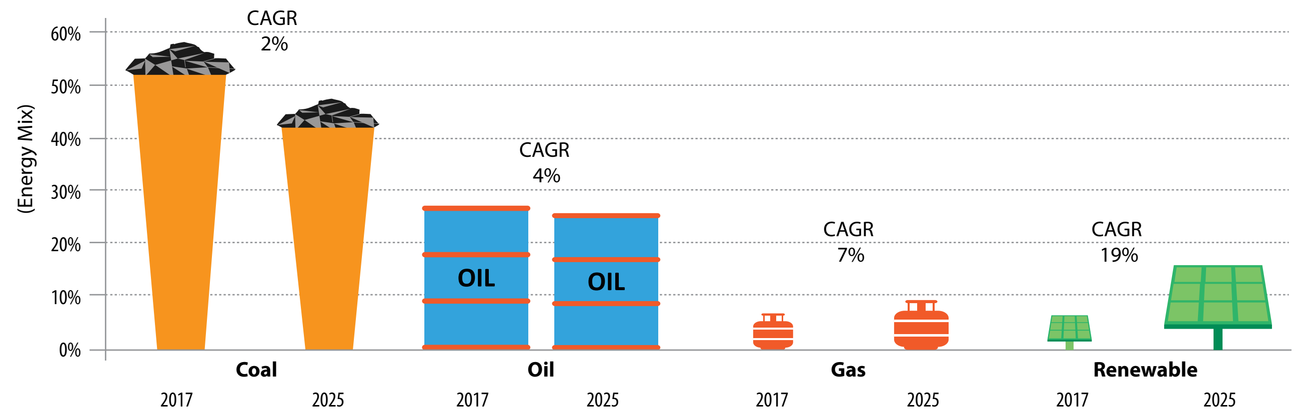
- Clean energy (solar led) to grow 4x overall power demand
- Solar tariffs will be 50% cheaper than thermal
- 11% of new vehicles will be electric
- EV to drive 4% of incremental electricity demand
- Carbon emission intensity to GDP to plummet ~30%

A New Paradigm

We envisage India's energy landscape in 2025 to be dramatically different from the current scenario – energy consumption will be cleaner, efficient and cheaper. Clean energy will catapult 4x traditional power demand led by solar, where costs have plummeted 80% since 2011 rendering it 20-25% cheaper than traditional coal energy. On the demand front, the number of electric vehicles (EV) will jump to ~4mn by 2025, displacing 12% of incremental auto fuel demand. Falling battery cost will be key enabler fuelling this sharp rise in EV. Moreover, rising penetration of clean energy will cut carbon emissions intensity of its GDP by 30%.

*Thus, by 2025, **energy will be cheaper and cleaner,** with people wearing masks only in hospitals rather than public places. It will entail global implications, particularly on solar panel prices and costs of EV and batteries. But India's **significantly supportive and aggressive policy framework and hunger for incremental and newer energy forms** will mean the gains will be greater, the financial implications more stark and the scale world leading. Over the next decade, we expect **renewable energy to grow at the fastest pace** and coal at the slowest. India's overall energy demand will jump 40% over 2017-25 (4% CAGR), with renewable energy to grow at accelerated 19% CAGR.*

India's energy demand to surge ~40% by 2025; renewable to capture share from coal (%)



Source: BP, Edelweiss research, Shutterstock

A Clean Renewable Sweep

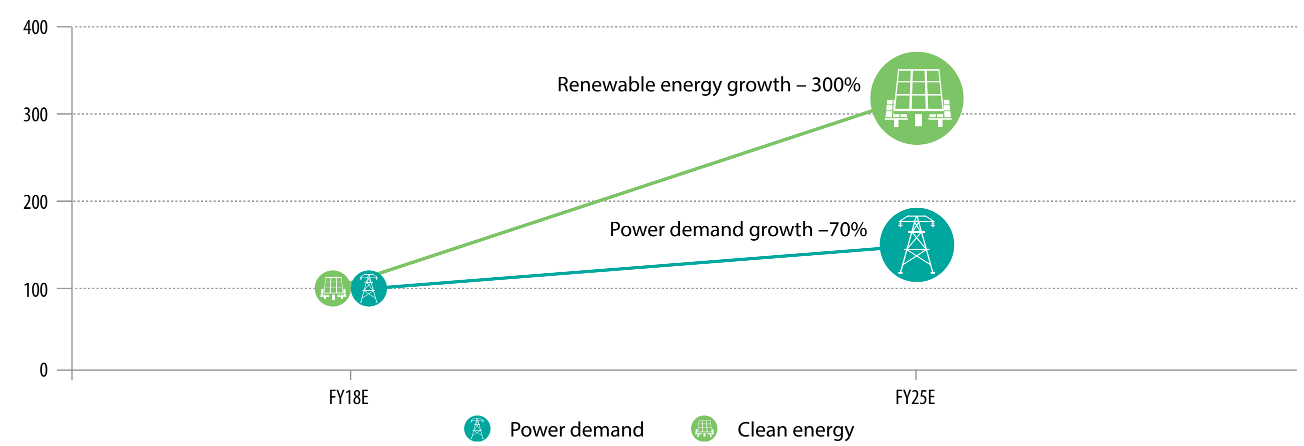
India will be bigger, cleaner and greener in 2025, as renewable energy will grow the fastest and coal the slowest.

Favourable economics and policies are potent catalysts

India's electricity sector is dominated by an over-reliance on coal-fired power generation, which constitutes 60% of installed grid capacity, but 75% of electricity generation. This picture is similar to China's five years ago, including all the threats and opportunities—rapidly escalating air pollution, water scarcity, current account deficit pressure from imported thermal coal and, most importantly, rising costs of thermal power generation.

In this backdrop, India's reliance on thermal power and cost competitive renewable energy generation do provide attractive opportunities for investments in the latter.

Renewables to catapult 4x conventional sources (%)

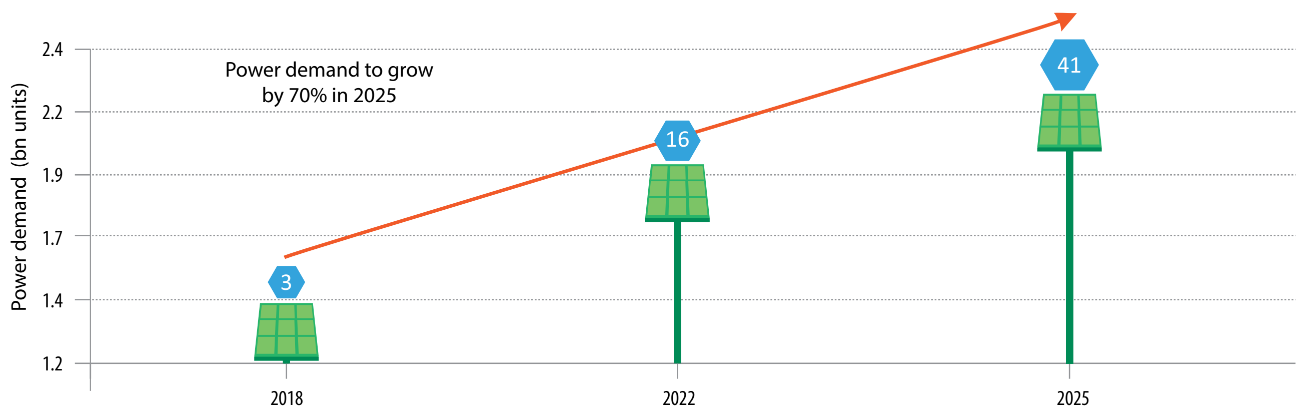


Source: Edelweiss research

We estimate electricity demand to surge 70% by 2025. Renewable energy growth will be 4x of overall electricity generation over 2017-25 and renewable penetration to double at 15% by 2025. The shift will be driven by economics and technology advancement. Currently, solar tariffs are 20-25% competitive versus traditional thermal coal power and favourable regulatory support is driving rapid addition.

Our base case pegs India's power demand to post 6.7% CAGR over 2017-25. This will be fuelled by successful implementation (in spirit) of government's last-mile connectivity programme unlocking latent demand and pick up in industrial/manufacturing activity, which constitutes ~28-30% of overall power demand.

Solar revolution to be driven by competitiveness



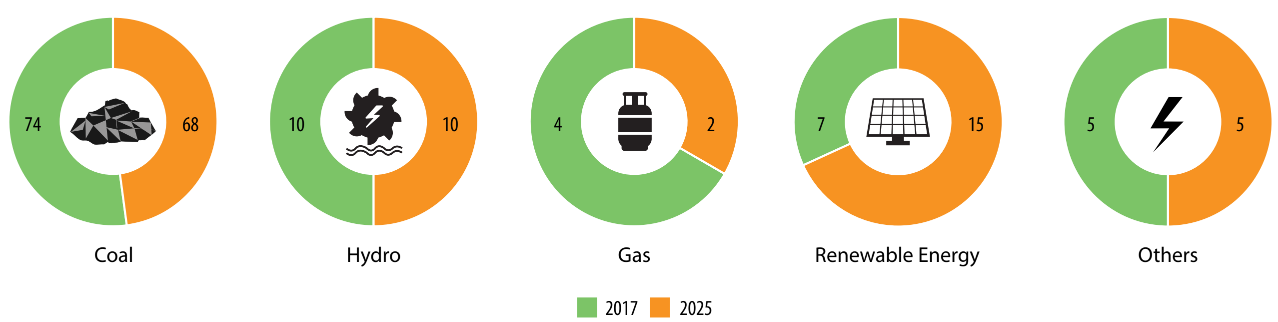
Source: Edelweiss research

*Note: *Size of bubble indicates % solar in incremental power demand*

While thermal will continue to spearhead demand (not factoring any major break in battery storage), we forecast renewable to contribute 30% to incremental power demand of 800bn units versus 7% in current generation.

While the second wave of technology innovation (battery storage) is waiting in the wings, **we expect 1GW of battery storage capacity to come on stream by 2025**.

Renewable's share in power mix to catapult to 15% in 2025E from 7% in FY17



Source: MNRE, Edelweiss research, IEA

With Bright Solar Besting Dark Coal

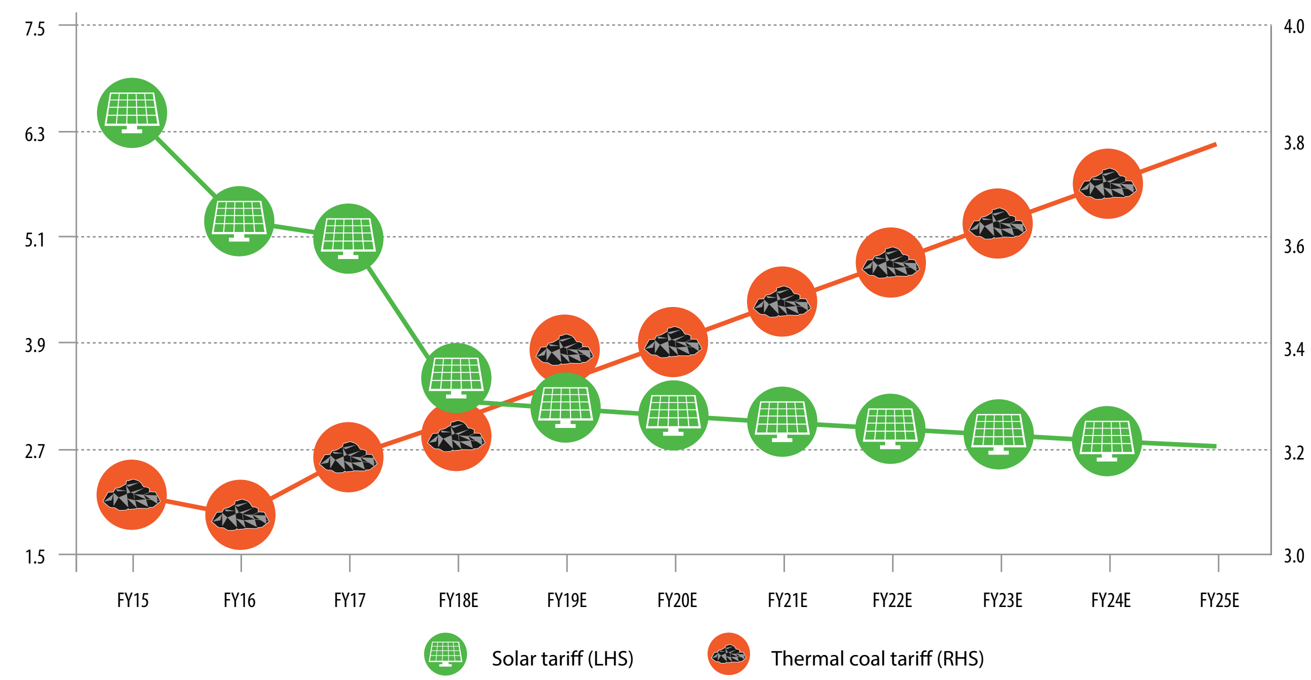
Tropical countries, such as India, are richly endowed with solar and wind energy resources that can be effectively harnessed to meet energy requirements at decentralised locations. In recent auctions, solar and wind energy prices have achieved grid parity at the generation end. Solar power is fast gaining ground as tariffs have plummeted significantly riding low solar panel costs and attractive financing options.

Cross-over: Solar tariff will continue to fall, while thermal will rise

Solar tariffs have corrected ~80% since 2011. While 35-40% of this can be attributed to efficiency, the balance is due to dip in equipment cost. We believe, solar tariffs will continue to fall and are likely to touch INR1.8/unit (5% dip every year). This will be triggered by falling capital costs on account of economies of scale and the learning effect and cheaper credit with assured purchase pacts.

On the other hand, we estimate thermal power tariffs to jump from INR3.2/unit to ~INR3.8/unit due to sustained rise in coal prices and increase in capital cost of thermal plants due to implementation of SOX and NOX norms. **We estimate the gap between thermal and solar tariffs to widen to more than 50% over the next seven years**.

Solar tariffs to fall below thermal tariffs (INR/KwH)



Favourable government policy will enable rapid adoption of renewable energy

Policy enablers: Favourable regulatory milieu driving rapid additions

Favourable regulatory support from state governments is enhancing renewable's attractiveness:

- **Solar Park initiative** has pruned project costs significantly as the state government acquires the land and also develops necessary transmission infrastructure. Time for bidders to familiarise with the site has been extended to 18 months versus 12 earlier.
- **State governments are offering guarantees** for grid availability and payment of dues by distribution companies. Case in point is the Rewa project, wherein the state government, RBI and Discoms have inked an agreement to guarantee dues.
- **Improvement in Solar Energy Corporation on India's credit rating** and lower counter-party risk are encouraging greater participation from private and international players.

We believe in order to further improve the renewable traction, government is likely to work on a few new initiatives:

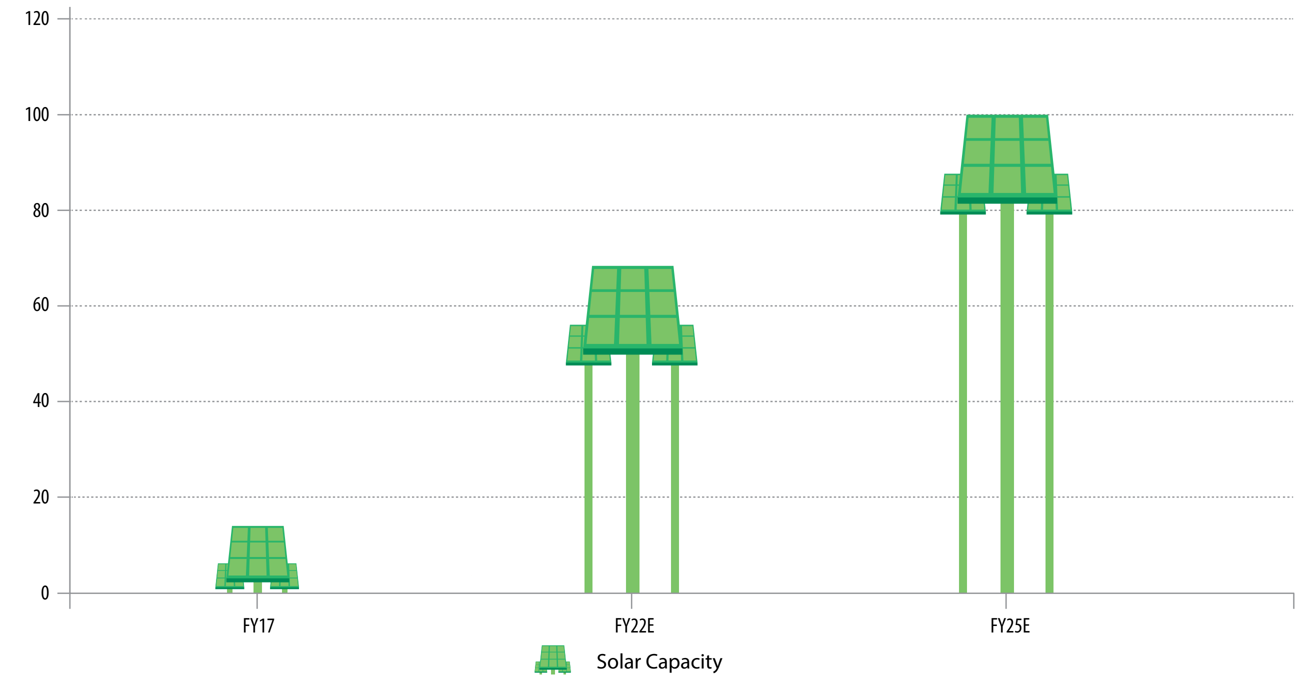
To encourage international finance, the government is exploring a new model that permits procurers to tender for solar power projects with tariffs denominated in USD and to hedge the currency risk through a pool of funds. This will lead to further reduction in cost of financing.

To make robust regulatory and administrative norms to discourage grid curtailment, which is meant to be the last resort. In case of any such event, renewable energy operators should be entitled to a compensation payment.

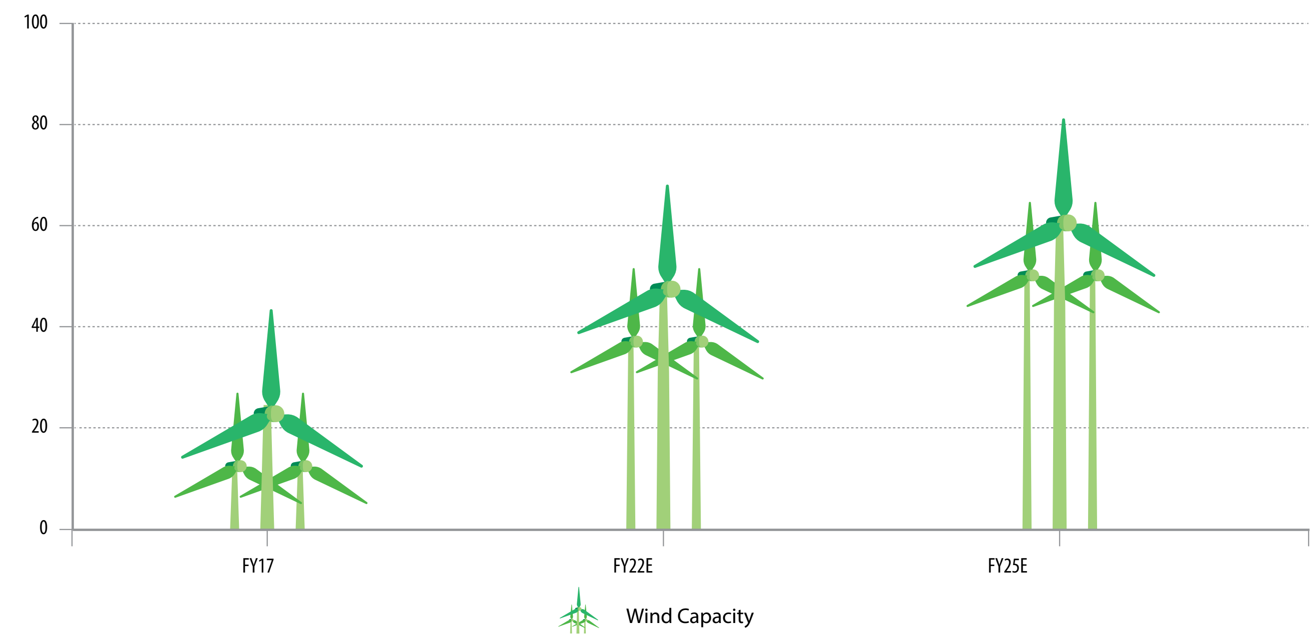
Renewable capacity to jump 3x by 2025

We believe, **India's renewable capacity will catapult 3x from an installed base of 60GW YTD to 180GW by 2025**. While wind is expected to add another ~25-30GW of capacity, solar will be a major growth driver adding ~75GW incremental capacity in the renewable space. The Ministry of Renewable Energy has decided to auction 30GW of solar and 10GW of wind each in FY19 and FY20, respectively.

Aiming for the sun… (GW)



...and the wind (GW)



Source: Edelweiss research

…And Electric Changing Gears

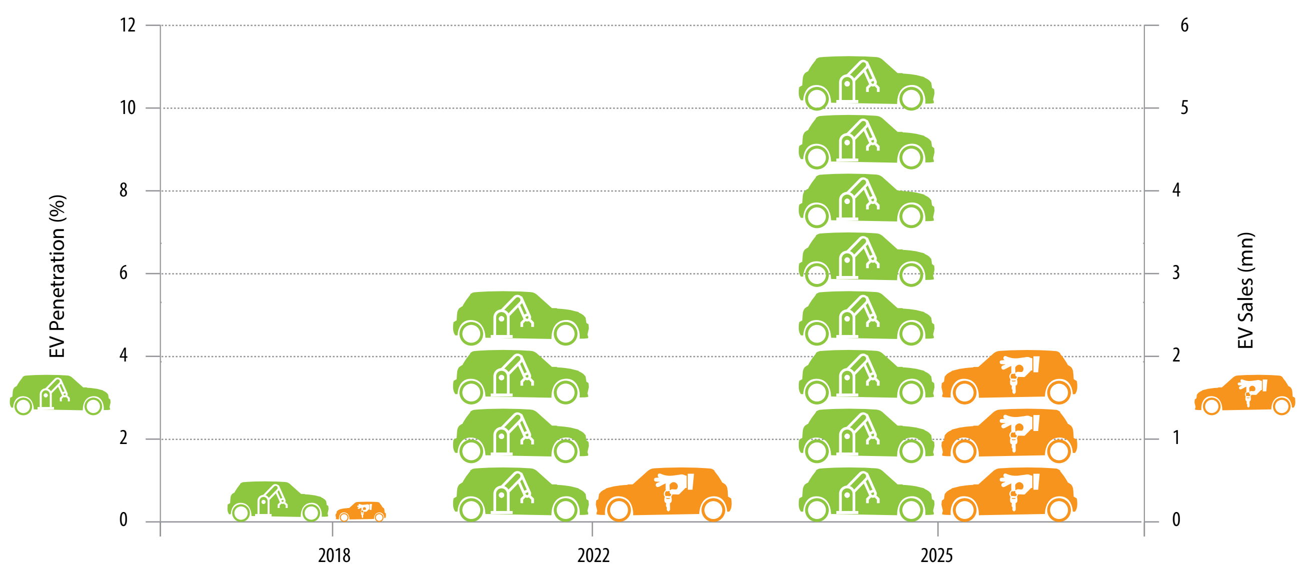
2017 saw numerous big-ticket announcements—from the marquee Ahmedabad-Mumbai HSR project to the ambitious Hyperloop. India has clearly seized its moment in the sun to announce big plans for next generation transportation solutions.

But nothing has caught the imagination of the industry and policy makers quite like the government's ambitious plans for a mass scale shift to EV by 2030 so that all new vehicles—personal and commercial—on Indian roads by then will be powered by electricity. The transformative push for EV brings with it numerous challenges as well as several opportunities.

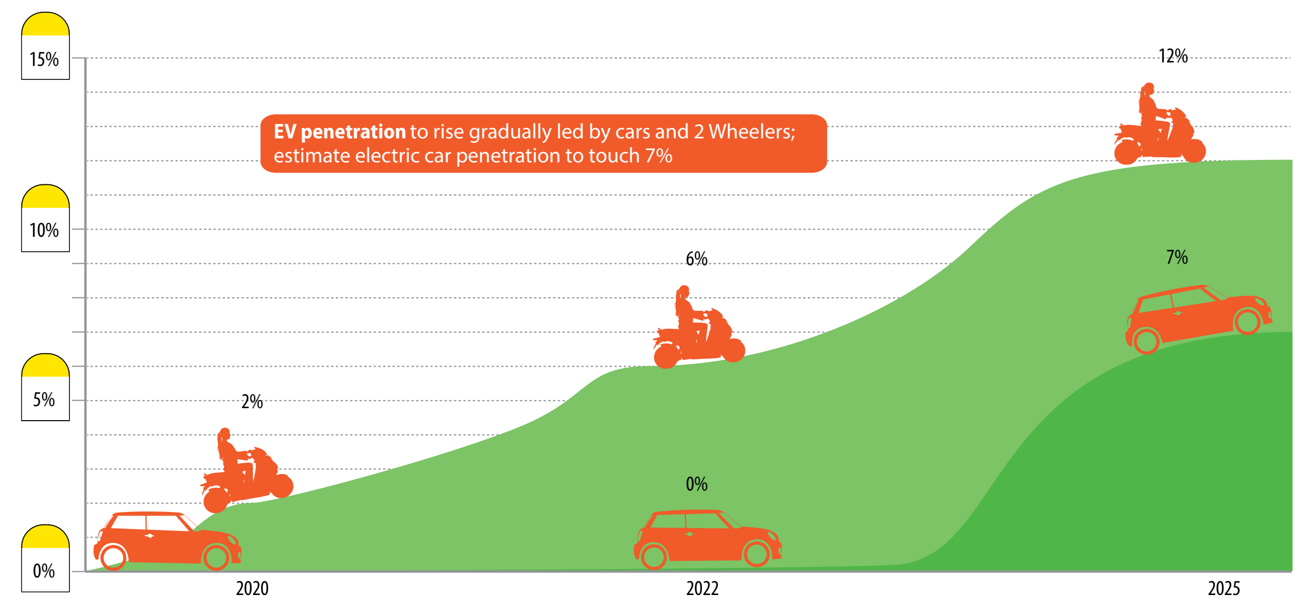
OEMs are likely to start planning capacities 1 year before breakthrough. Penetration will rise at a rapid pace once capacities are put in place. 2025 will see rapid strides in EV penetration, with 11% of new vehicles going electric. Two wheelers, given their affordability and ubiquity, should see even faster penetration and will be a function of the pace of capacity additions.

Given the scale of ambitions underlying the shift, we envisage **India to be at the forefront of the global shift towards electric mobility and global majors are already sitting up and taking notice**.

EV sales to surge post 2022 as they achieve price parity with ICE



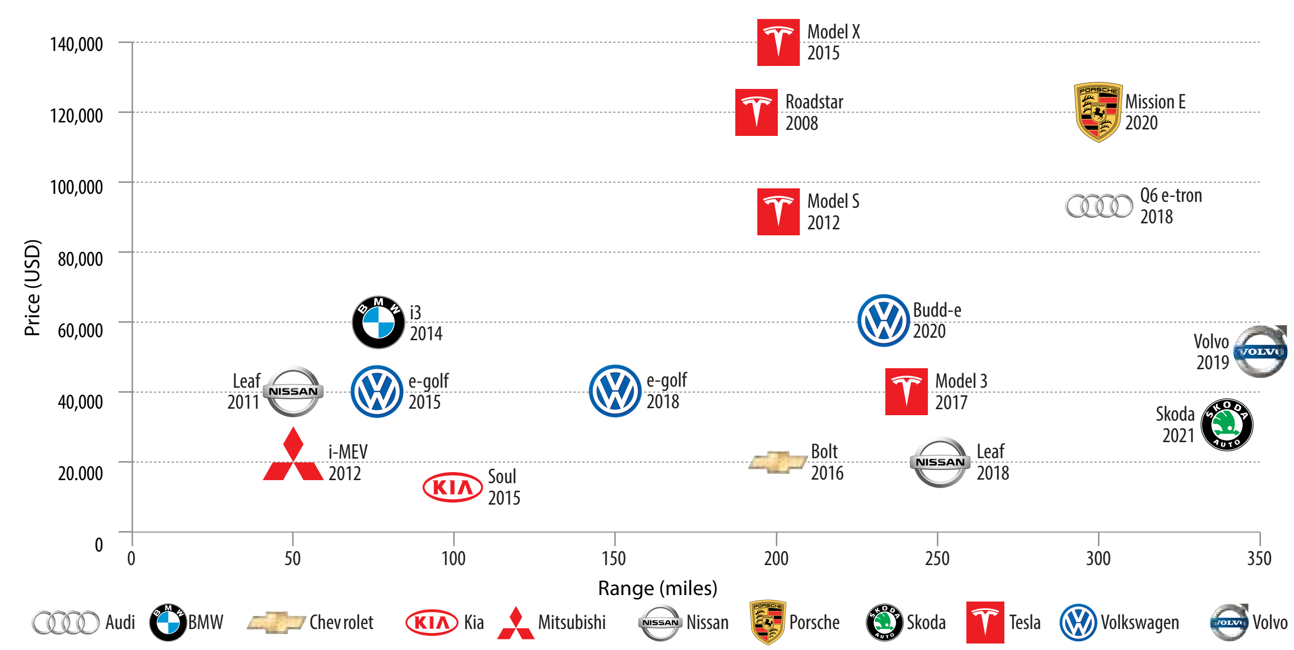
Cars and 2W Penetration to reach 7% and 12% by 2025E



Breakthroughs in battery technologies and development of charging infrastructure will significantly lower consumer apprehension on vehicle range and availability of the latter. Keeping that in mind, a number of automobile majors are already working on a significant pipeline of electric variants.

With range anxiety diminishing, improved economics and greater choice of vehicles, consumers will increasingly look at EV as their primary choice.

EV Range: Will India lead the way?



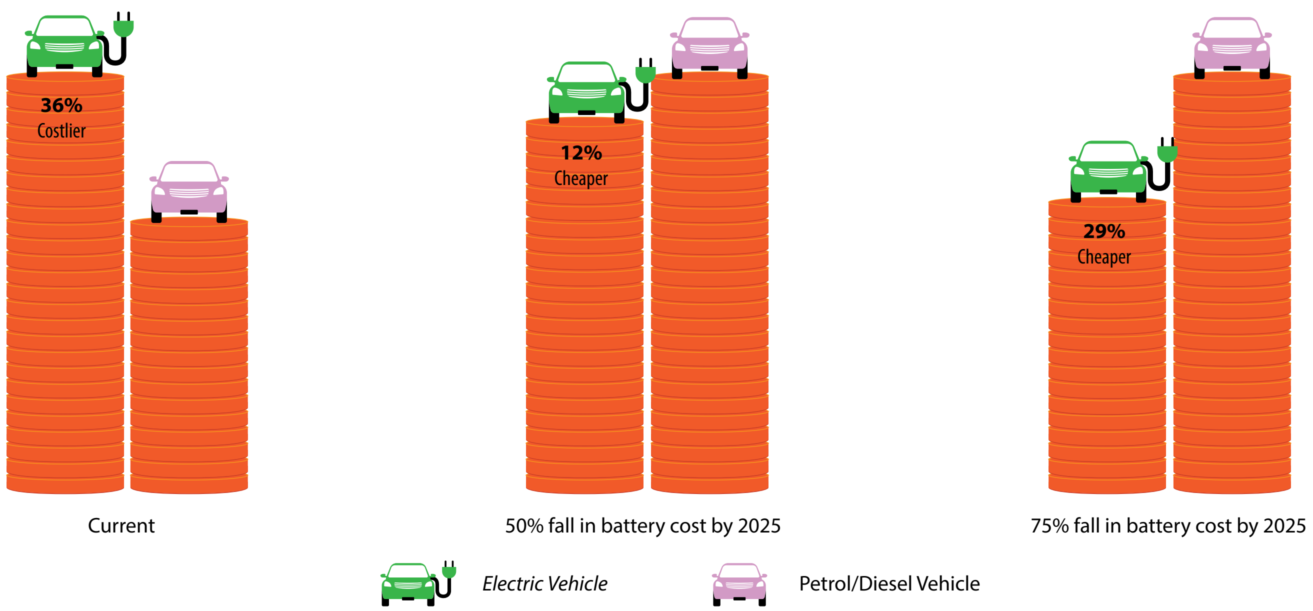
Source: Bloomberg

Dipping battery costs powering EV viability

Despite significant fall in costs, the battery pack still constitutes ~60% of the cost of an EV. We envisage battery costs to fall by ~50% (implying higher decline on per kwh basis) driven by sustained improvement in battery in terms of density, size, technology, chemistry, etc. We also assume 3% inflation in cost of an internal combustion engine (ICE) vehicle driven by environmental compliance and general inflationary pressure.

Cars: Current breakeven in cars is six years assuming a 20,000km annual run. For every 5,000km change in annual run of a vehicle, breakeven period changes by two years. An electric variant will be cheaper than an ICE if battery cost plummets 50%.

Breakthroughs in battery technology will significantly enhance competitiveness of EV



Source: AutoCar, Edelweiss research

*Note: *Assumed 3% inflation in other car components*

Bus: Breakeven falls from around 11 to three years assuming ~67,500km annual run. A 75% fall in battery cost will make it cheaper than ICE.

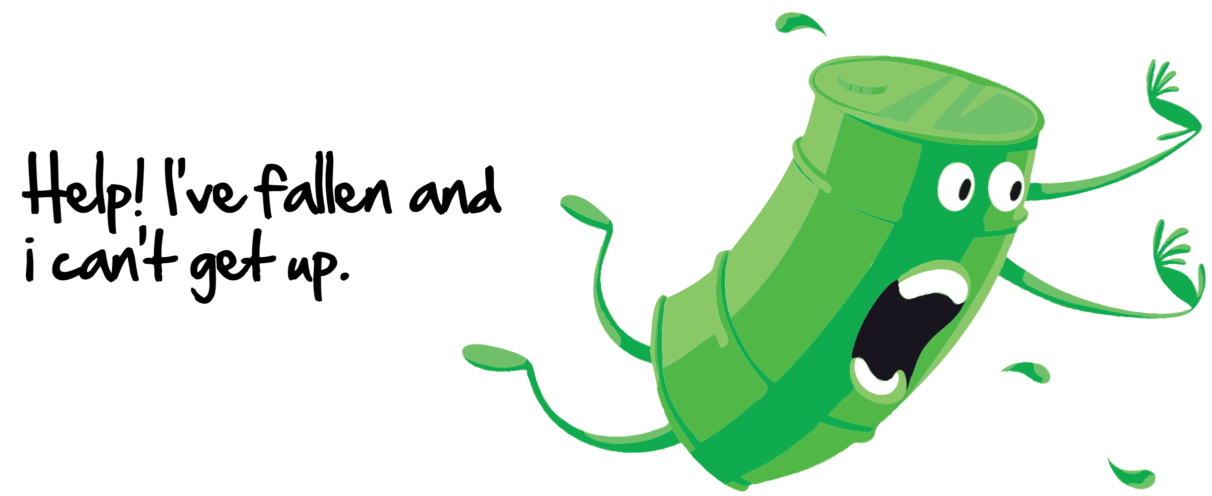
Two wheelers: Current breakeven stands at approximately one year. This bolsters our conviction of faster adoption of EV if issues with speed, range, etc., are addressed. Convenience such as battery swapping or movable batteries (can be charged at home) could be the single biggest driver of penetration.

We expect a significant breakthrough in battery technology by 2022-23. Thereafter, we foresee an extremely rapid adoption of EV across the chain. OEMs will start planning their capacities around a year before breakthrough and accordingly penetration is expected to rise once the capacity is in place.

As Oil Slips on its Slick

The transportation sector accounts for ~60% of India's oil demand. We expect faster adoption of EV driven by competitiveness, policy support and advancement in battery technology and peg annual EV sales at ~4mn across categories in 2025.

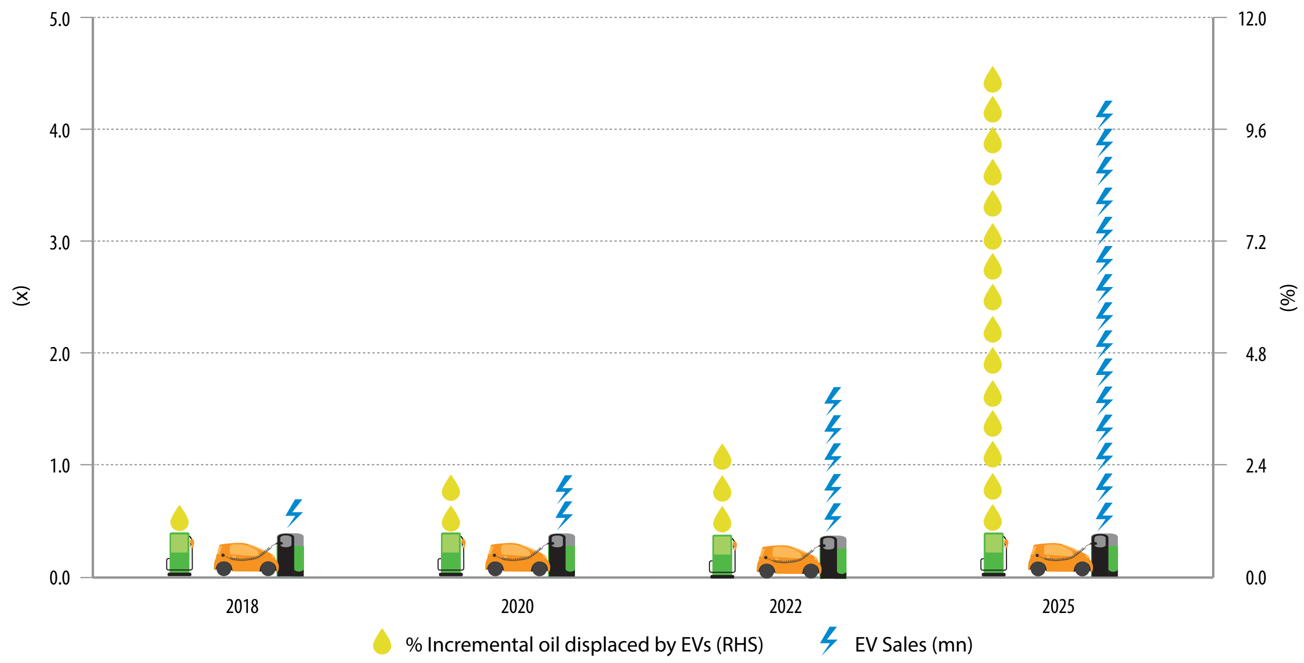
While oil consumption in the non-auto segment will continue to grow at a healthy 6% plus, we envisage rapid adoption of EV to incrementally displace oil demand in the transportation segment. **We estimate EV to displace ~12% of incremental auto fuel demand in 2025. We, therefore, expect oil demand to slowdown from ~6% in 2017 to 4% by 2025**.



Beyond 2025

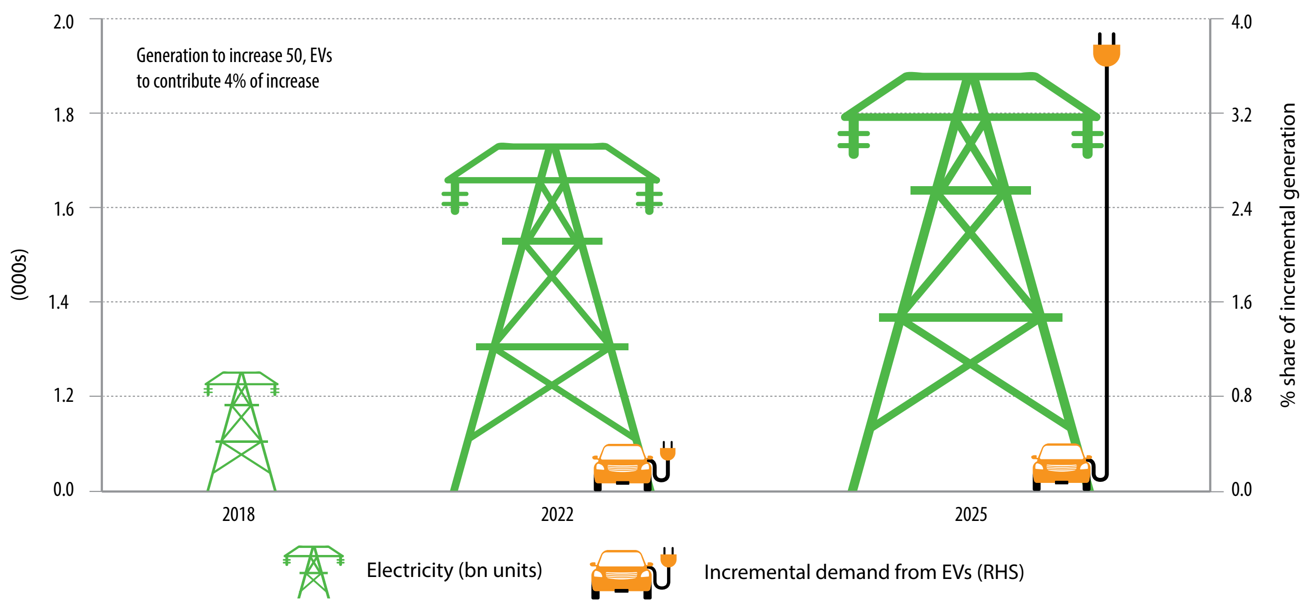
By 2030, we estimate EV to be ubiquitous spurred by breakthrough in battery costs and rapid development of charging infrastructure. Even our conservative estimates peg fuel demand to decline from 2034 and EV across the spectrum to number ~200mn.

Oil to trip on EV – Displace 12% incremental 2025 fuel demand



Impact on electricity consumption: While ~4mn new EV will incrementally displace oil demand growth by 12% in 2025, electricity requirement for EV batteries is pegged at only 5bn units, implying 4% of incremental electricity demand in 2025.

Power play – EV to constitute ~4% of incremental electricity demand



Source: Edelweiss research

And Carbon Footprints Shrink

Environment and emission drive: The overarching theme

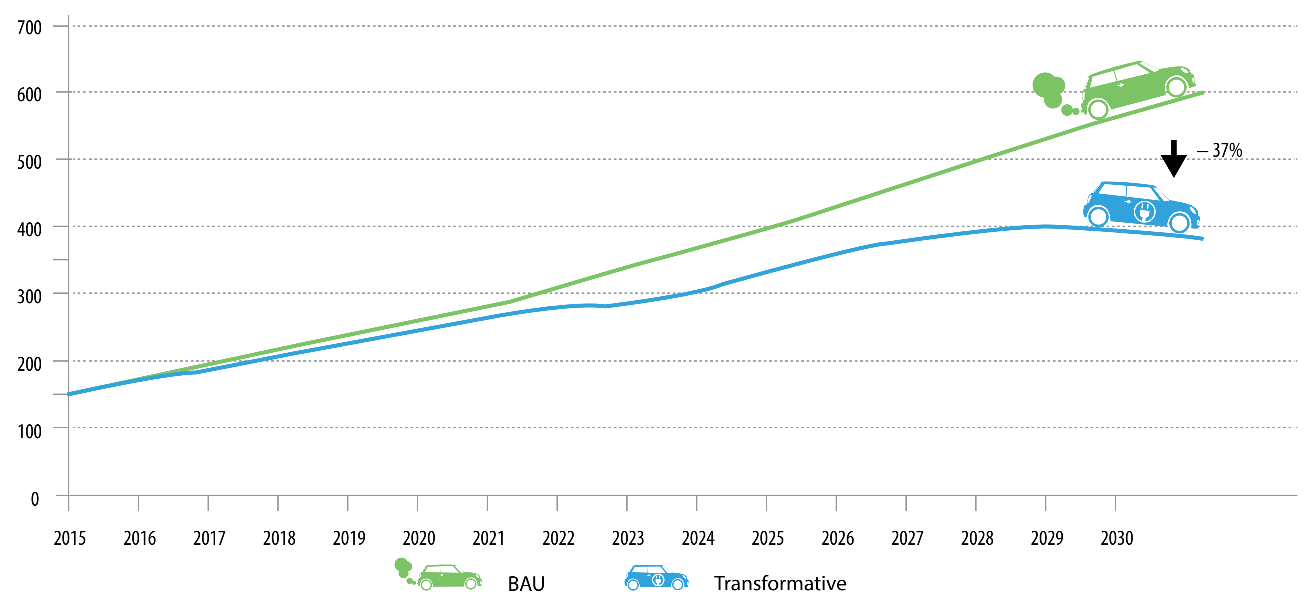
The heightened consciousness to fix poor air quality standards in Indian cities is amply reflected in tough administrative actions and court mandated orders. Furthermore, the Ministry of Petroleum is targeting 10% cut in oil imports by 2022 from 2014-15 levels and increase in share of gas in the energy mix from 7% to 15%.

India aims to reduce the emissions intensity of its GDP by 33-35% by 2030 from 2005 level and derive 40% of its cumulative electric power of around 350GW installed capacity from non-fossil fuel-based energy resources, mainly renewable. We, therefore, expect India to be at the forefront of significantly lowering carbon emissions, buoyed by robust renewable growth and cleaner fuels, given its Intended Nationally Determined Contributions (INDC) under CoP21.

With a larger share of the fleet running on electricity (11% of new vehicles to be electric by 2025) and growing renewable energy generation (jump 4x overall power demand), we expect sharp reduction in carbon emissions. Furthermore, with cleaner fuel quality standards (Euro VI petrol and diesel by 2020) and increase in share of gas in the energy mix, carbon emission from even conventional energy sources is bound to reduce.

As per NITI Aayog, India's CO_2 emissions will fall by 37% (cumulative reduction of 1 gigatonne) under transformative scenario versus base case scenario business as usual – (BAU), assuming India meets its INDC target of 100GW solar and 60GW wind.

Co_2 emissions from motorised passenger transport (mn)



Source: NITI Aayog

CoP21 targets: Towards a less warm future

India has set eight goals under the Global Climate Action as part of INDC

- To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and modernisation.
- To adopt a climate-friendly and cleaner path than the one followed by others at corresponding levels of development.
- To reduce the emissions intensity of its GDP by 33-35% by 2030 from the 2005 level.
- To achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 with the help of transfer of technology and low-cost international finance, including from Green Climate Fund.
- To create an additional carbon sink of 2.5-3.0bn ton of CO_2, equivalent through additional forest and green cover by 2030.
- To adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change such as agriculture, water resources, Himalayan regions, coastal regions, health and disaster management.
- To mobilise domestic and new additional funds from developed countries to implement adaptation actions and bridge the resource gap.
- To build capacities, create domestic framework and international architecture for quick diffusion of cutting-edge climate technology in India and for joint, collaborative R&D for such future technologies.

Reduce the emissions intensity of GDP by 35% by 2030 from the 2005 level

Some of these targets appear fairly ambitious and will require significant investments and appropriate policy direction. Despite the implementation challenges, the plan reaffirms India's intent to achieve bold targets.

However, India's carbon intensity target does not fully capture the emissions it will avoid if it succeeds in meeting its renewable energy goals. In other words, India can exceed its carbon intensity target in the course of shifting to non-fossil energy.

India's national action plan for climate change – Will it get there?

Source: NAPCC, Edelweiss research

2025 Telecom & Media
Tryst with Sight & Sound

- Video will explode as India consumes 112bn hours/week, over 7x currently
- OTT platform will dominate – over 77% of total video consumption
- Mobile broadband will cover 1.4bn – almost every Indian
- Advertising pie will expand by 3x
- Social media will boost digital advertising by 10x

A Convergence Foothold

Technological developments have brought about profound changes in human lives for many decades now. The most significant one in India, over the past decade, has been the sharp rise in connectivity and information access of people. Over the previous decade, TV, mobile and internet penetration have catapulted multifold, changing India decisively. It has brought information to a billion ears and eyes, connectivity to even more ears and identity to almost every Indian.

*We envisage **near complete convergence by 2025 between media and telecom** and well over billion active smartphone users (80% penetration). It will not be mere access, but use as well. We estimate India's video consumption to catapult to about 112bn hours per week or 7x the current level. We anticipate **substantially more content availability** even as the share of traditional broadcasters plummets from over 70% currently to ~10%. And, while the consumer is already spoilt for choice, and a cheap choice at that, **content creation will only get more fragmented** even as volumes expand manifold.*

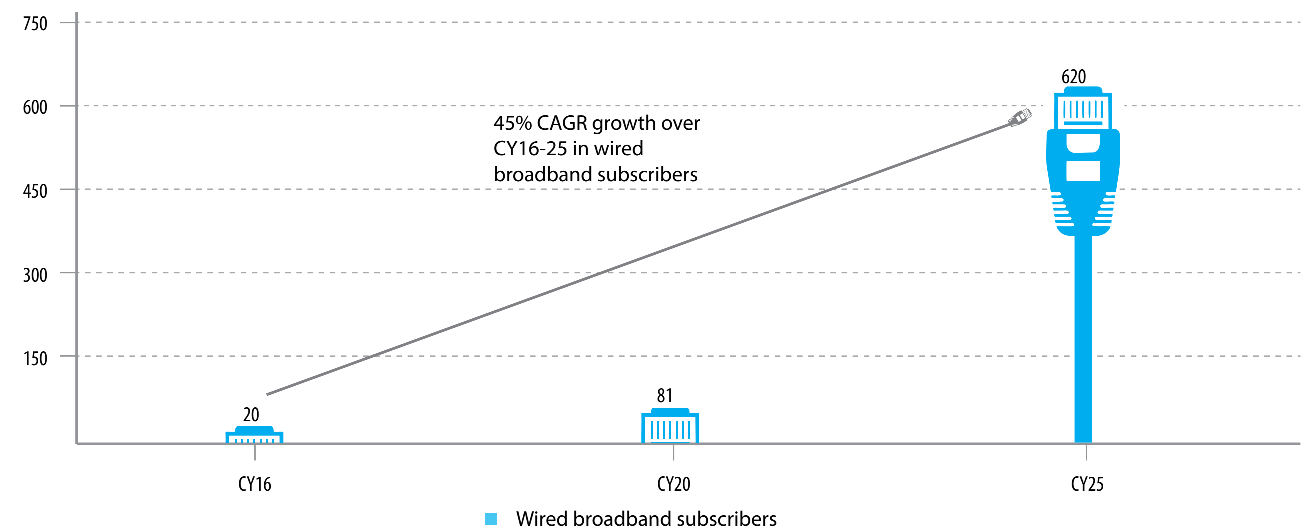
Video will go Viral

We envisage video consumption to catapult 7.2x to 112bn hours per week by 2025. This spurt will be triggered by improved broadband infrastructure (smartphone penetration to accelerate to 80% from 36% currently) and higher internet penetration (wired penetration to jump to 620mn from 20mn currently).

Wired broadband penetration has remained abysmally low in India as telecom operators have largely focussed on wireless broadband due to low rollout cost. However, as rising video consumption spurs data consumption, higher demand for wired broadband will encourage investments from telecom operators.

We estimate **wired broadband penetration to jump to 620mn by 2025 from 20mn currently**. Government's focus on strengthening the fibre backbone by connecting more towns via the Bharatnet Project will be a key enabler driving wired broadband penetration.

Wired broadband penetration – Growth to be back-ended (mn)

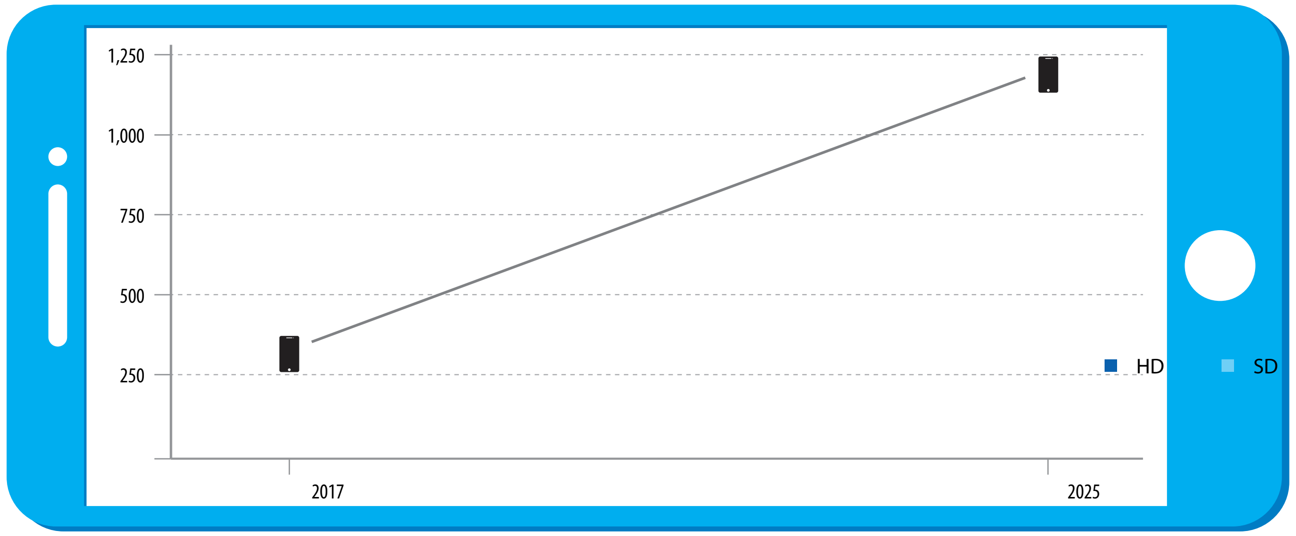


Smartphone and high definition TV penetration: Set for exponential surge

We estimate smartphone penetration to accelerate to 80% by 2025 from 36% currently, largely aided by consumers' expanding media consumption appetite and desire to avail various services. Enhanced data connectivity and rising consumer awareness will accelerate this shift.

In 2025, while we expect all devices to be 4G compatible, almost a fourth will be 5G enabled. The 5G ecosystem will start maturing in India as its launch in China will aid reduction in 5G device and equipment prices, making it attractive for telecom operators to leverage more efficient technology to cater to booming data demand.

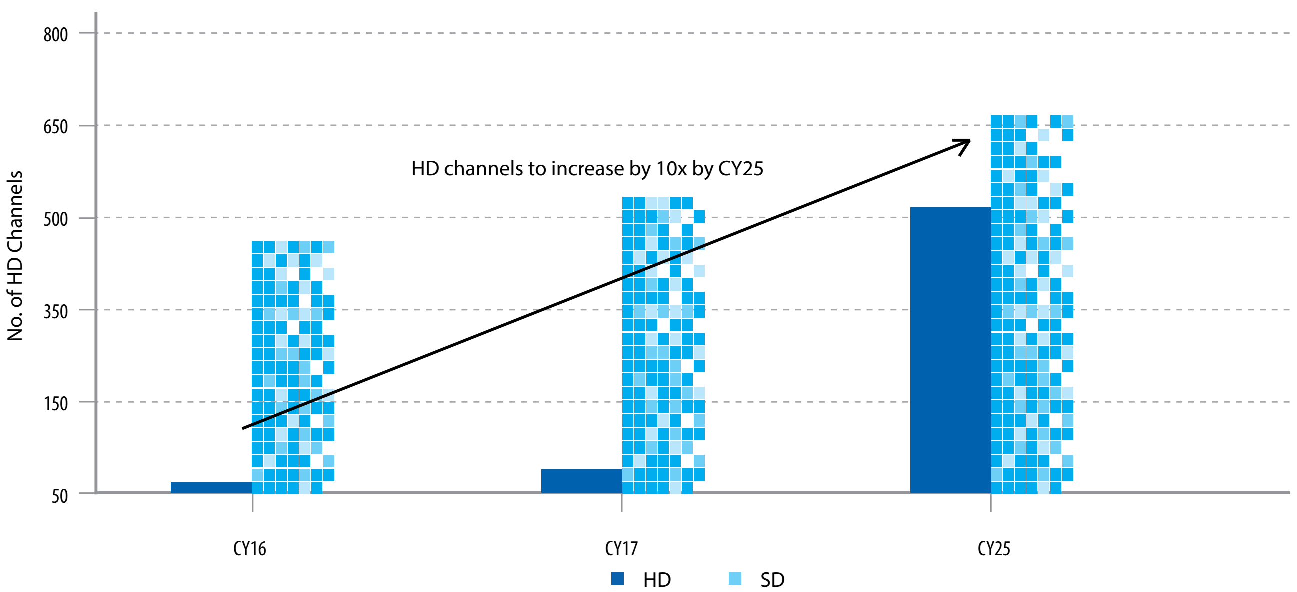
Smartphone base to expand 3.7x over 2017-25 (mn)



Source: IDC, Edelweiss research

We also believe, falling prices of flat panel displays will accelerate consumers' shift to higher sized displays with Ultra-High-Definition (UHD or 4K) and High-Definition (HD) video from current Standard-Definition (SD) video. **By 2025, we estimate more than 50% and 90% of installed flat-panel TV sets to be UHD and HD,** up from 5% and 15% in 2017, respectively. A shift to higher definition video entails exponential impact on data consumption as streaming video in UHD and HD consumes 9.0x and 3.6x more data, respectively, than SD.

HD panels to cross 90% by 2025 due to increase in HD channels



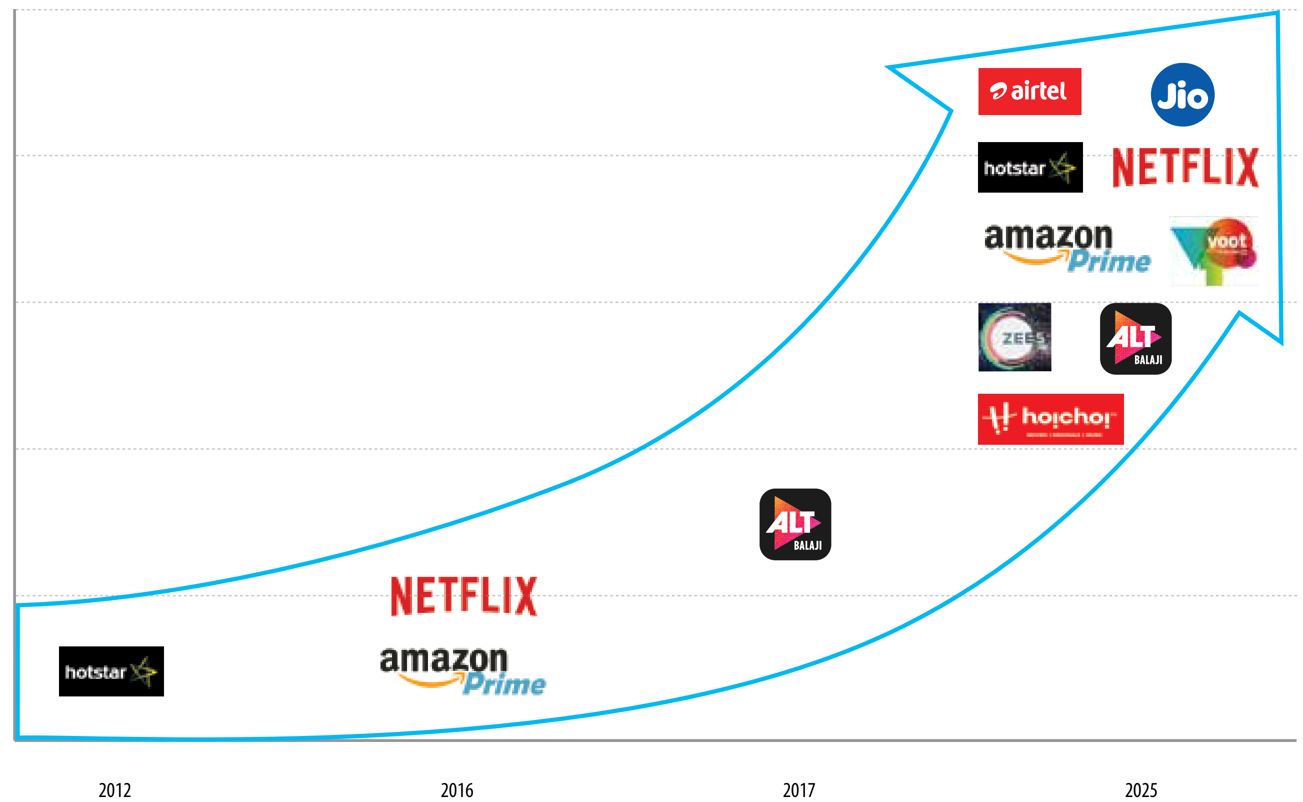
Source: Edelweiss research

Only Differentiated Content will Capture Eyeballs

Proliferation of content leading to fragmentation of creators

The diversity and mobility of the population limits the choice of entertainment in India. This results in significant cost for content distribution on account of limited number of channels carried by capacity-constrained cable operators/DTH players. This has made segmenting content below certain consumer threshold uneconomical, limiting consumers' content consumption choice. However, data penetration will eliminate such barriers and enable content creators segment their consumers at a much lower cost, thus creating significant variety of content.

Content creation to become more fragmented



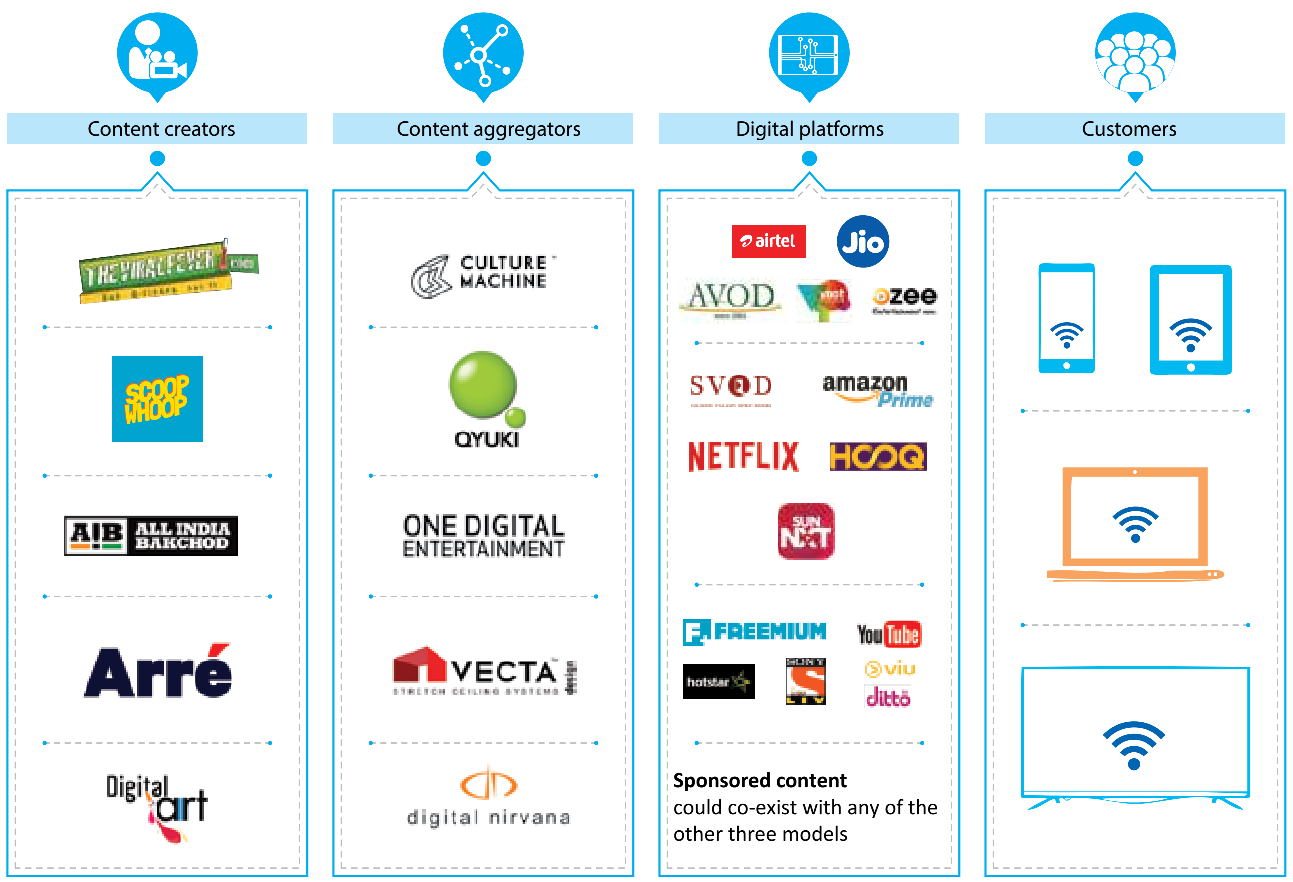
Source: Edelweiss research

Content discovery via digital platforms

We envisage fragmentation of content to lead to content discovery migrating to digital platforms versus current trend of channel surfing. Moreover, content discovery will be a lot more customised, leveraging big data analytics, based on earlier content consumption and other personal attributes such as age, sex, location, education, etc.

Various content aggregation and discovery platforms are emerging from a diverse set of companies.

Content is king



Source: Edelweiss research

Telco-owned platforms: Telecom companies are looking to dominate the content aggregation and discovery platform by leveraging exemption of Content Delivery Networks (CDN) from net neutrality regulation, as recommended by TRAI. Globally, content aggregators have garnered maximum wealth in the telecom supply chain over the previous decade, banking on the network effect giving them near monopoly. However, with possible exemption of private networks from net neutrality, telecom operators can give preferential treatment to their traffic on their network.

Reliance Jio (RJIO) has already launched its content platform such as JioTV, JioCinema, JioMusic, JioCloud, JioMags, etc. Bharti Airtel has Airtel TV, Wynk Movies, Wynk Music, among others. Idea Cellular has also launched Idea Movies & TV app to take on competition. We believe, exemption of CDN from net neutrality regulation, will give an upper hand to telco-owned platforms, but the platform's attractiveness will be crucial for its success.

Media company owned: Media companies are also launching their own content platforms, strategising forward integration of their existing business in a bid to retain customers on their platforms. Various media houses have launched their own content aggregation apps such as Hotstar, ALTBalaji, Eros Now, Voot, DittoTV, etc. However, there is a lot of fragmentation in this space as media houses are reluctant to put their content on a competitor's platform. Hence, chances of success of a media company owned content aggregation platform is limited.

OTT Companies driven by differentiated content to gain traction

Neutral platforms: Global content aggregation platforms are expanding their footprint aggressively. YouTube is an immensely popular platform, although it currently derives bulk of its revenue from advertising. Netflix has also launched India-specific plans and is gaining traction in urban upper middle class consumers. Amazon Prime too offers content discovery platform at a reasonable price.

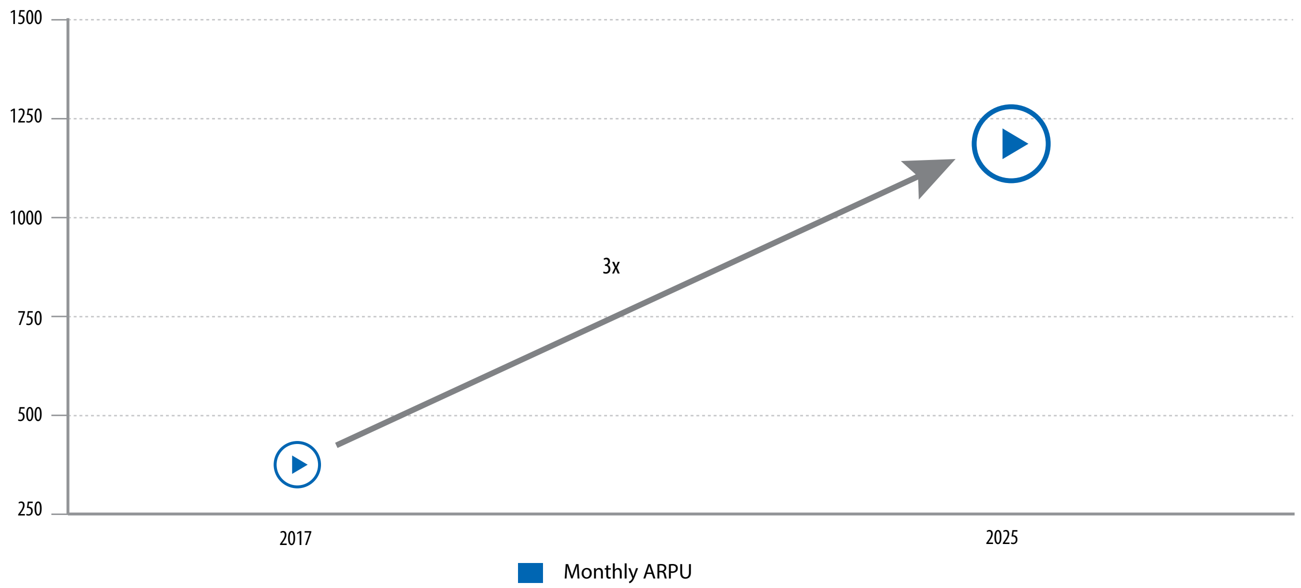
We envisage India to be a global melting pot of capital and various companies will try to gain share in the market leveraging diverse strategies. However, we do not anticipate much fragmentation in the content aggregation platform as the network effect will ensure that there will be one or, at the most, two final platforms eventually.

Consumer spending on video to jump 3x by 2025

Currently, India is at a juncture where US was 7 years ago. We expect Indian OTT companies to gain traction over the long term driven by differentiated content, a phenomena seen in the US as well. Further, we expect consumer spending on video viewing to increase from current INR300-450 to INR1,100-1,150 by 2025 to access content from different platforms.

By 2025, we estimate video ARPUs to jump to INR1,100-1,150 (INR300-450 currently) driven by increase in per household income and higher video spends (as % of per household income).

Spends on OTT to catapult 3x by 2025 (INR)



Source: Edelweiss research

Consolidation: Name of the game

Encouraged by the success of Netflix in the US and anticipating improved broadband infrastructure, many companies have launched OTT platforms in India. However, going forward, we expect consolidation in the segment, as subscription to two or more OTTs will increase a consumer's expenses by INR300-600 per month (unfeasible). Moreover, only players offering differentiated and good content will sustain (not all OTTs will provide this). And, consumers will prefer aggregators rather than pure play or broadcaster OTT given that all content will be available at one place (convenience to consumer will be the winner).

OTT subscription to boost consumer ARPU

In India, OTT companies charge between ~INR60 and INR200 per month. Netflix launched in India with subscription rates of INR500, INR650 and INR800 for basic, standard and premium packs, respectively, which are 2-3x the prevailing cable TV/DTH rates; subscribers in India pay ~INR300-450 per month for cable TV (including sports channels). Therefore, if a consumer subscribes to two OTT platforms (including pay TV), his overall ARPU will jump from INR300-450 per month to INR1,100-1,150 per month by 2025.

Only differentiated and good content to attract eye balls

In US, content like *House of Cards* and *Orange is the New Black* (Netflix originals) has done extremely well. We envisage differentiated content to gain traction in India as well. It will also lead to consumers increasing their spending on TV viewing.

Differential content like AIB and TVF has already gained traction. However, it is monetised by advertising mode rather than by subscription. We expect the trend to shift towards subscription by 2025 aided by differentiated content.

Differentiated content – Attracting eye balls

Aggregators to survive

A few OTT companies are providing aggregated content. However, there is not a single platform to provide all the content as cable TV does. From consumers' point of view, an aggregator makes more sense as they do not have to depend on a particular platform for specific content.

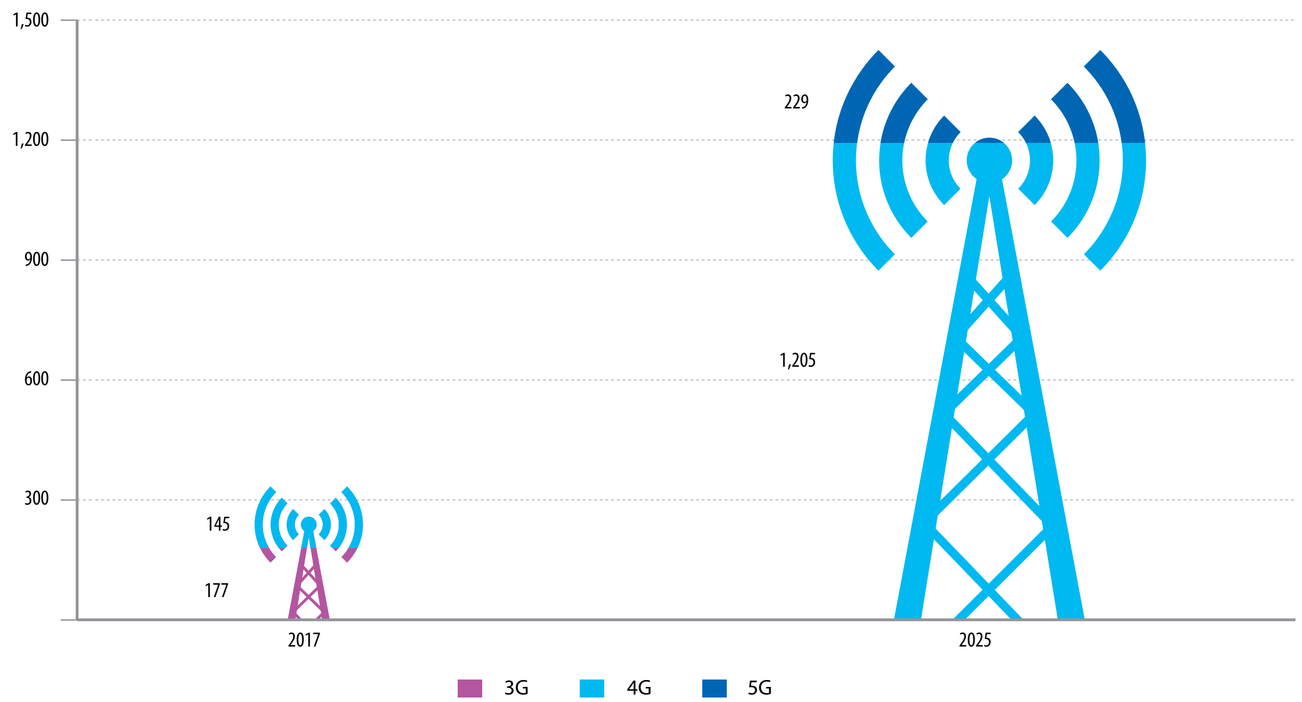
While Data Booms Content Consumption Blooms

A consumer connected to the internet consumes 37% higher media content than an unconnected one. Currently, India is home to mere 322mn **wireless broadband subscribers, which we estimate to jump to a whopping 1bn by 2025, leading to 4.1x spurt in content consumption**. Proliferation of internet-based video content consumption is expected to create segmented supply for specific markets.

4G technology will rapidly gain market share as operators gradually reduce their 2G and 3G footprint. We also anticipate commercial 5G launch by 2022, especially in urban areas, to cater to burgeoning data demand. However, its rollout will be slower in rural areas due to massive fibre requirements rendering it uneconomical for relatively low data demand in those areas.

China's commercial 5G launch plan in 2019 and subsequent acceleration in 5G capex, which is expected to peak out in 2023, will prune the cost of 5G devices and other network equipment in India.

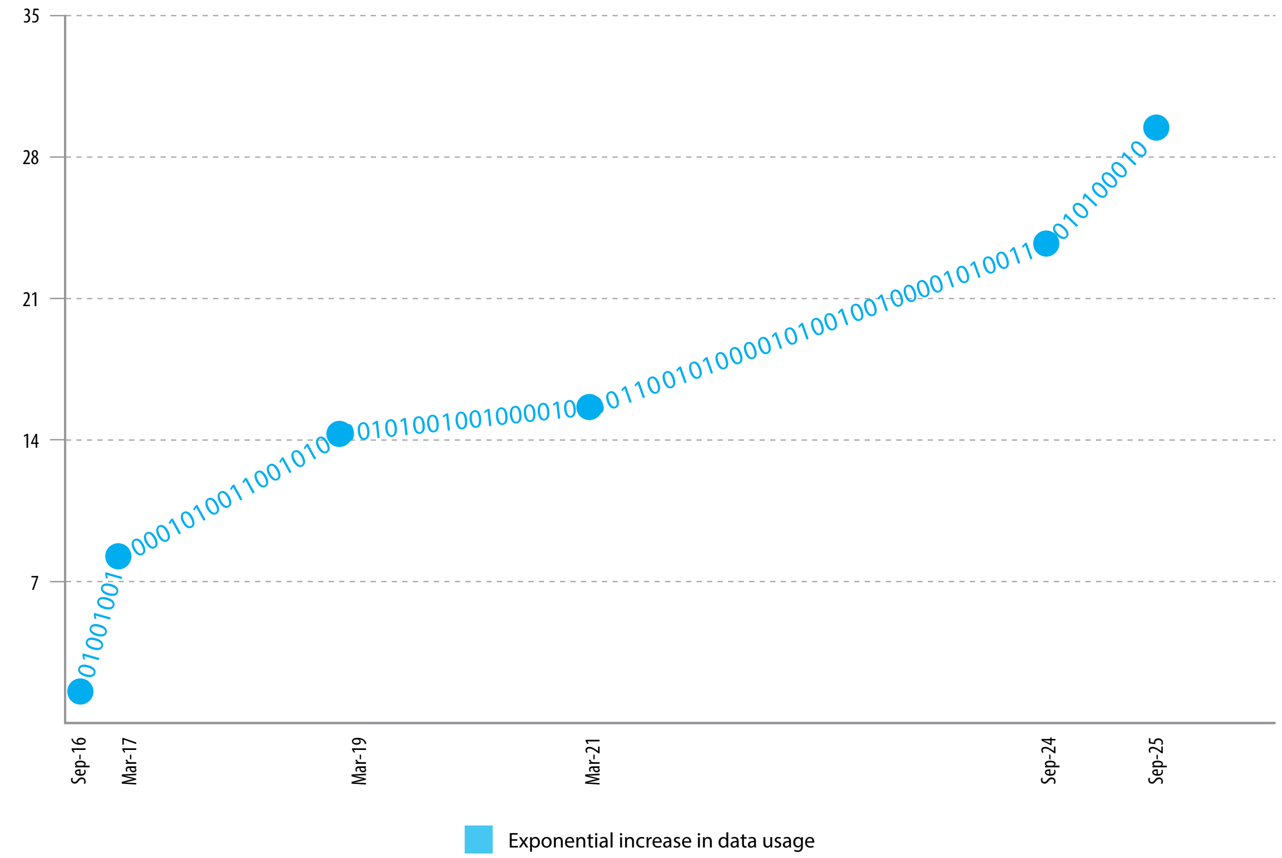
Massive 4G adoption to drive mobile broadband subscriber base expansion (mn)



Source: Edelweiss research

Apart from increasing internet speed, mass affordability of high speed data will be catalyst driving data consumption. Data prices are significantly higher in India compared to global peers. However, the fierce competition unleashed by RJIO's entry has brought down data rates to less than one-third in a short span of four-five months. This is envisaged to further spur data consumption.

Exponential surge in data usage (GB/monthly)

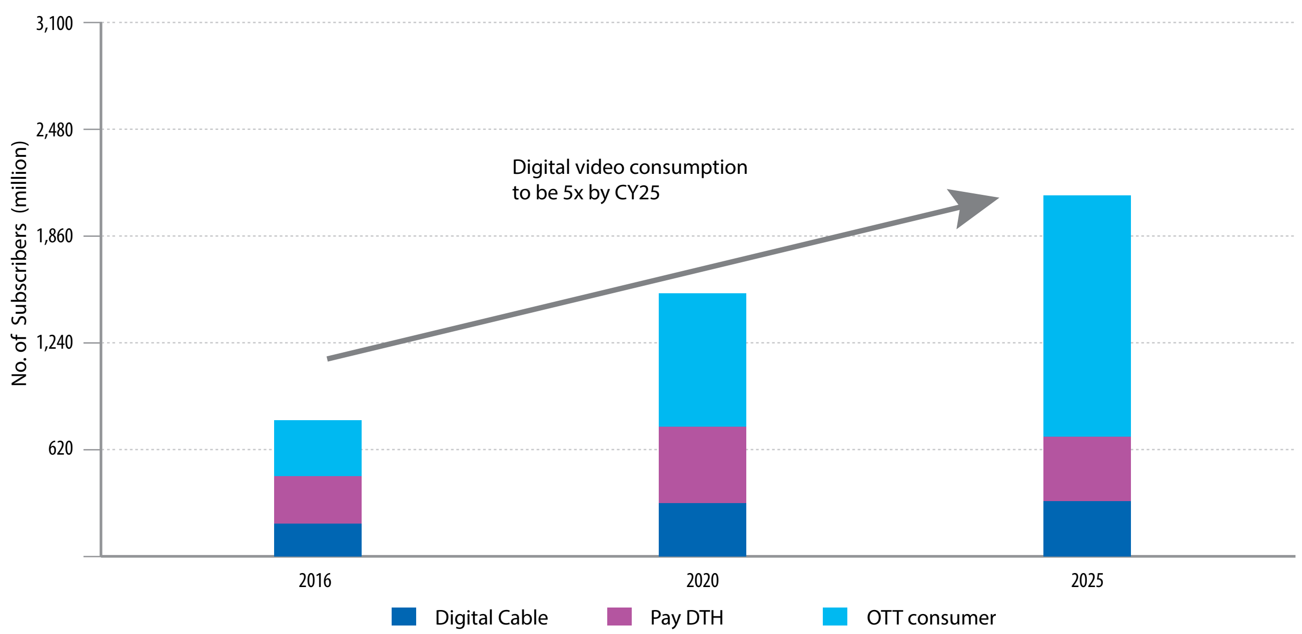


Source: Edelweiss research

Digital Fare to Titillate TV Households' Hunger

By 2025, we estimate digital video consumption to skyrocket as internet subscribers surge on rising wired and wireless internet penetration. We believe, faster rollout by telecom providers and increasing smartphone penetration will foster wireless broadband growth with **overall mobile broadband subscriber base catapulting to 1.4bn by 2025** from 322mn currently. In the past one year, the wireless broadband subscriber base has expanded by 122mn on increasing smartphone penetration and aggressive 4G launch by RJIO.

Digital video consumption to skyrocket



Source: Edelweiss research

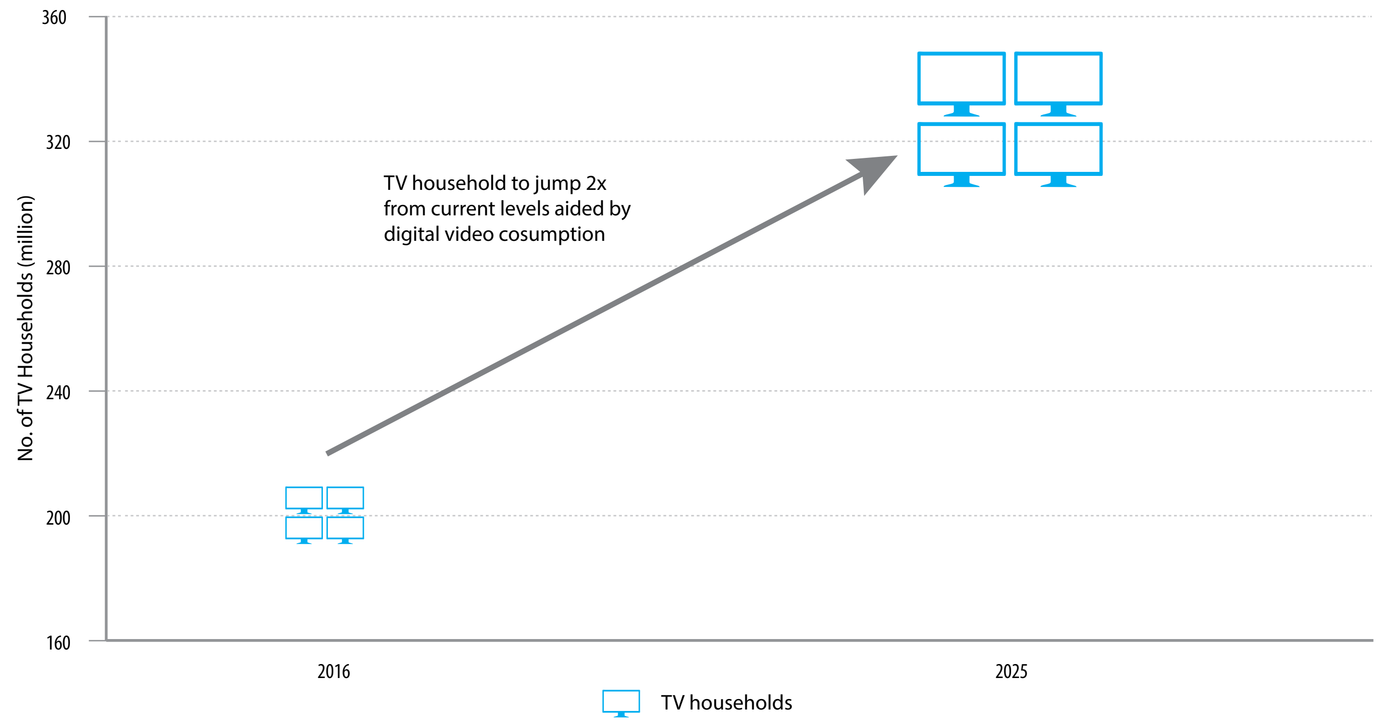
Most TV broadcasters have already launched their own OTT platforms to compete with pure play OTT companies. However, content on these platforms is rehashed TV content and does not include original digital content. Though a few broadcasters (Star India, Viacom18 and Sony) have started producing digital content exclusively for their digital platforms to win eyeballs, the quantum of investments is minuscule compared to that in traditional medium.

On the other hand, pure OTT companies are investing higher in content compared to broadcasters, though they do not enjoy the same brand equity as the latter. The OTT industry is at a nascent stage. We expect investments in original content by traditional broadcasters to perk up once the industry gathers momentum.

While most TV broadcasters follow advertising-led or 'freemium' model, only a handful have taken the challenge of following a subscription-based model. As digitalisation is at a nascent stage in India, players are experimenting with various revenue models to zero in on the right fit.

Apart from different revenue models, these companies are also focussing on diverse strategies. Most TV broadcasters have launched OTT platforms focussed on a certain genre to attract subscribers. We perceive this as a prudent move as it can act as a differentiator for TV broadcasters in the OTT space.

TV household to jump 2x



Source: Edelweiss research

As Digital Expands Advertising Pie 3x

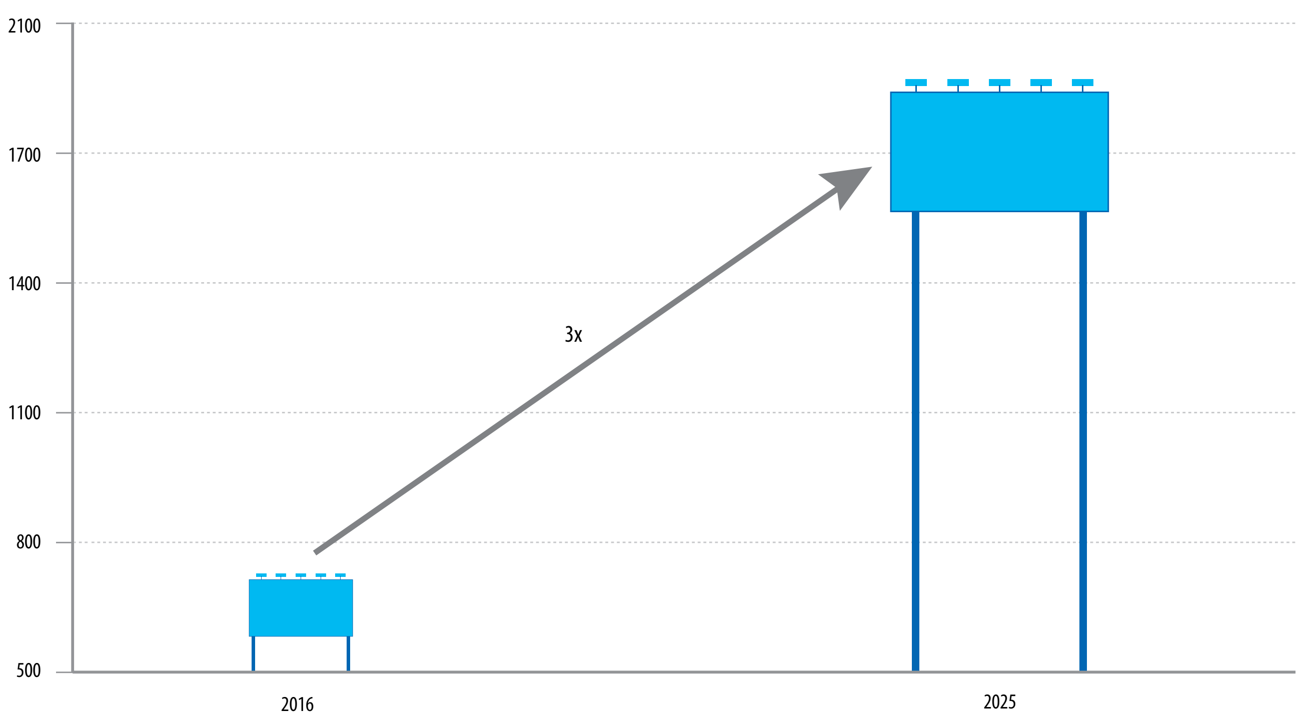
Indian SMEs have limited advertising opportunities due to absence of segmentation and targeted channels. Mass advertising targets a wider audience, resulting in higher ticket size, rendering it uneconomical for SMEs. There are only ~0.2mn advertisers in print and 12,500 advertisers on TV. This number is abysmally low considering ~48mn SMEs in India.

Even in this small advertisers' universe, media spends are extremely skewed with top-50 advertisers accounting for 35% of the advertising pie. This number is significant, considering that top-10 advertisers account for as much as 16% of the total market and contribute 45% to spends of top-50 in the list.

Given the steady increase in penetration as well as massive surge in content availability across digital, TV and radio in the future**, we estimate video ad industry to catapult 3x by 2025.**

Currently, advertising rates in India are at ~75% discount to other comparable markets. We expect sharper targeting to provide better value to advertisers. Matching advertisers with target audiences can create a win-win across stakeholders. In order to attract better advertisement rates, industry players will have to offer solutions that enable advertisers target the right customer segment and customisation of content.

Ad industry to catapult 3x by 2025 (INRbn)

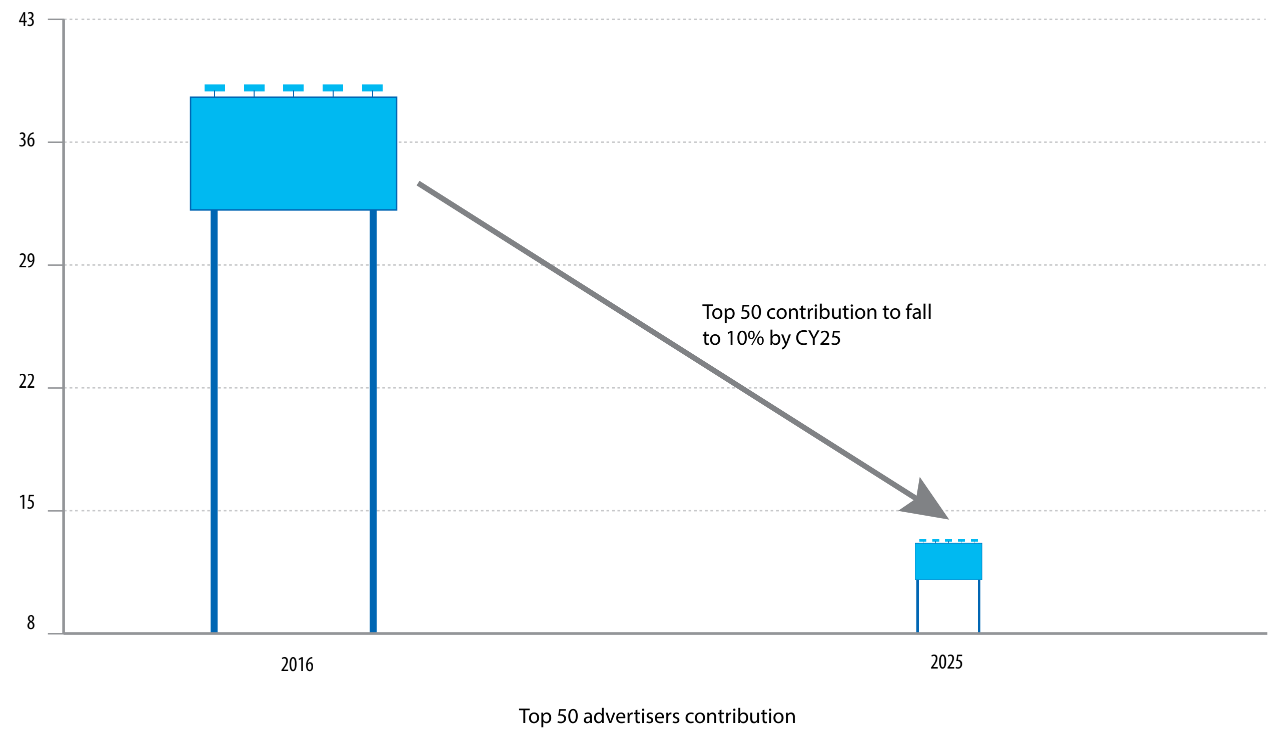


Source: Edelweiss research

We believe, emergence of advertising platforms and leveraging big data will enable smaller advertisers cater to specific segments of the audience. Smart advertising platforms will enable targeting of an advertisement based on a consumer's profile such as age, sex, location, consumption pattern, etc. This will encourage SMEs to start advertising with smaller ticket size, thus widening the net of advertisers.

The absence of small advertisers effectively ensures that the bargaining power stays in favour of major advertisers. An enhanced and targeted advertisement offering can bring smaller advertisers into the fold and expand the marketing pool. This will expand the advertising market, bringing in many SMEs on board. Thus, **we estimate share of top-50 advertisers to dip to ~10% of the total advertising pie by 2025.**

Contribution of top 50 advertisers to dip as advertisers' base expands (%)



Source: Edelweiss research

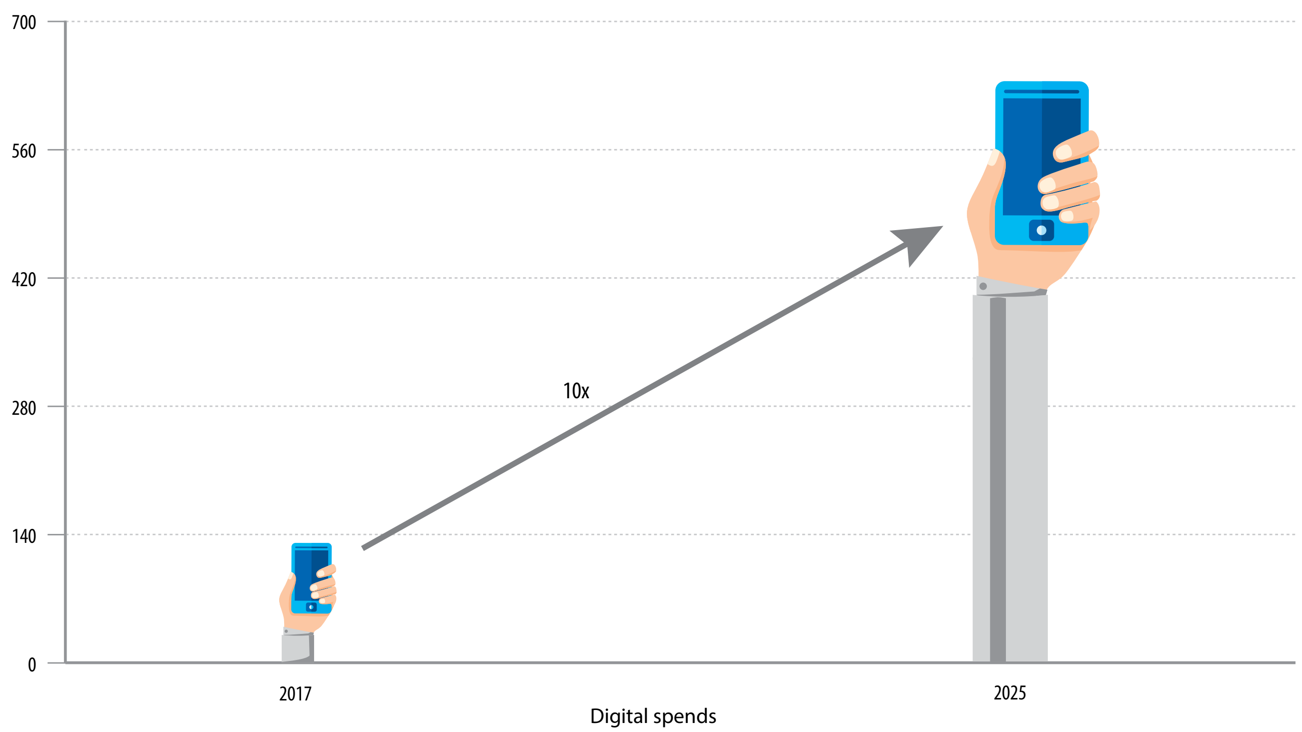
While Social Media Spurs Digital Advertising 10x

Social media to drive advertising spends

In India, social media's increasing traction amongst consumers is largely linked to platforms such as Facebook and Twitter, which have also tasted success by attracting the country's marketers. Monetising social media is becoming lucrative and brands are allocating increasing digital budgets to social media promotions. With improving digital infrastructure and falling data costs, digital consumption is expected to become more mainstream.

Advertisers are innovatively leveraging social media channels such as networking websites and blogs to connect with their target audience. Currently, digital ads on social media platforms contribute 28% to global digital ad spends, with Facebook accounting for 15%. **Digital ads are estimated to catapult 10x by 2025** riding growth in investment by advertisers, buoyed by evolution of audience measurement technologies in digital and use of analytics.

Digital ad spends to drive ad growth by 2025 (INRbn)



Source: Edelweiss research

Going 'live'

Live streaming over digital platforms is the new "in" trend. Major sports events, news, high-profile entertainment events, concerts and product launches are being streamed live. Its rising popularity has led to even social networking websites like Facebook, Snapchat, Instagram and YouTube to activate live streams where users can share their real life experiences.

Live streaming gives event organisers access to a larger audience and incremental revenues via a new distribution medium. Global brands, such as Target and BMW, have started using live streaming to launch products and run marketing campaigns. Recently, the launch of Vivo V7+ phone in India was streamed live on various social networking and OTT platforms. Hotstar also streams live news from Republic TV amongst other channels such as Fox News, Fox Business and the UK's Sky News. Traditional players such as Times Now and NDTV too are using their digital presence for events such as the budget speech, election results, etc.

However, the sports segment has a significant value for the consumer when viewed live and lends itself well to potential monetisation. Live sport broadcasts garner high advertiser interest and ad rates, both on linear television broadcast as well as live streaming. Case in point being ad rates on OTT platforms, which have nearly doubled YoY for IPL and Champions Trophy.

Net neutrality to be a game changer

By 2025, we believe, regulations pertaining to net neutrality, user data privacy and monopolies and restrictive trade practices will become key determinants of the ecosystem evolution. Amongst these, net neutrality will probably entail the most impact as it will be the determinant of pricing applicable for content, prioritisation of traffic on the internet. Hence, it could possibly decide the winners and losers in the ecosystem game, especially given the anticipated surge in data consumption. We believe that there is current trend of 'light-touch' regulation will give upper hand to internet service providers.

Current trend of 'light-touch' regulation should help internet service providers

Globally, there has been awareness about net neutrality with a section in favour of strong net neutrality rules prohibiting content and pricing discrimination, such as paid prioritisation, zero rating, etc. This had led to governments favouring strong regulations such as in 2015, the Federal Communication Commission (FCC) passed the (also known as the Title II Order), which classified ISPs as common carriers and expressly banned activities like throttling, blocking and paid prioritisation. Title II service providers are more rigorously regulated and held to standards similar to telephone, gas and electric providers.

India's next **Tryst With Destiny** will face lesser scepticism than it probably did that August eve in 1947. But that will not make the task any easier, the path more predictable or the outcome any less desirable. India's first **Tryst With Destiny** was, however, primarily a political moment. And, while there was significant economic experimentation–between models of the West & East, and its own amalgam, which India eventually chose–economics played second fiddle.

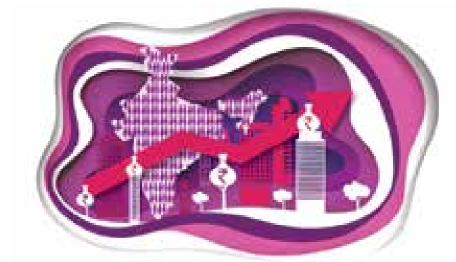
India's next **Tryst With Destiny** will, however, be distinctly economic, and that's what the world will watch for, as politics progressively edges off the spotlight. But, what will remain, and remain consistent, will be the economic model that it follows this time as well–more Western, fairly global, but very much its own amalgam. And one that matters.

India's first **Tryst With Destiny** has turned out to be a stunning political success, and has become entrenched with time. We expect its next **Tryst With Destiny**, in 2025, to be an even bigger economic success, that the world will likely follow and applaud, and one that should only strengthen with time.

We, at Edelweiss, will be closely following this journey, and invite you to travel along with us on what should be one hell of a ride.

India 2025

The Big Picture



- India's growth model to be a la US in the 1980s
- USD5tn economy, with consumption doubling and investment tripling
- Market capitalisation to reach USD5-8tn with over 10 USD100bn and 100 USD10bn companies

Banking & Finance

- Financialisation will drive savings 3x
- Market privatisation by stealth
- Transaction velocity rising 4x, digital leaping 5x

Consumer

- Consumption to surge ~2.5x by 2025
- Eat Better, Live Better and Feel Better to be over-arching theme
- Distribution to get leaner, meaner and fitter; E-com to grow by 10x

Infrastructure

- Public transport explosion – cleaner, faster and cheaper
- 300mn fliers, 150 airports and the world's third-largest market
- The Metro way – 25 cities, ~3x traffic, 4x rail length

Energy

- Clean energy (solar led) to grow 4x overall power demand
- Solar tariffs will be 50% cheaper than thermal
- EV to drive 4% of incremental electricity demand

Telecom & Media

- Video will explode as India consumes 112bn hours/week, over 7x currently
- OTT platform will dominate – over 77% of total video consumption

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