Vol. 119

23rd Dec' 2016

WHAT WE ARE READING – Vol.119

- ✓ **PIMCO Cyclical Outlook**

Five Guiding Principles for investment strategy for 2017

- ✓ **Curing the Addiction to Growth**

Understanding how retail companies can increase profits without growth

- ✓ **The Oil Industry is bouncing back after OPEC's meeting**

What the oil company needs to understand from Silicon Valley…

- ✓ **Will Higher Oil Prices Lead to Macro Stability Risks?**

India's macroeconomic sensitivity to increasing oil prices

- ✓ **Demonetization: Faith & Fear**

Understanding & reinforcing the positive 'psychological' impact of demonetization

- ✓ **China's E-Commerce: The New Branding Game**

Transformation of E-com in China

- ✓ **Walmart vs. Amazon: Is India the Next Battleground?**

The Walmart – Amazon fight for the online market coming to India

- ✓ **Amazon Prime Video: Queering Netflix India's pitch?**

How Amazon is changing the game for Netflix in India

- ✓ **The CEO of Uber-competitor Gett tells why he thinks humans will be banned from driving in the future**

On coming of self driving cars globally

- ✓ **Alphabet's Google is searching for its next hit**

The rise of voice computing may threaten its lucrative search business

- ✓ **Investing**

An Art or Science or Both?

AUTHORS

Joachim Fels
Global Economic Advisor

Andrew Balls
Chief Investment Officer Global Fixed Income

A U.S. President-elect Donald Trump, a euphoric market response and a resounding "No" to Italian constitutional reform – the stage was perfectly set for lively discussions when PIMCO's investment professionals gathered in Newport Beach or in front of the video screens in our 12 global offices for the December Cyclical Forum to deliberate on our outlook and strategy for 2017.

The assembled crowd was acutely aware that the "stable but not secure" macro environment that we had envisaged for the next three to five years at our annual Secular Forum in May had arrived – and with a vengeance! Since May, all three key risks that we saw on the secular horizon – elevated and rising debt levels, monetary policy exhaustion and the ascent of populism – have either already materialized or become more real, and markets have woken up to our long-held view that inflation risks over the secular horizon were seriously underappreciated and underpriced.

Who would have thought back in May that within the following six months the UK would vote for Brexit, Donald Trump would be elected president of the United States, Italy would vote "No" on reform, and that markets would like it? And who would have thought that both Bank of Japan Governor Haruhiko Kuroda and European Central Bank President Mario Draghi would acknowledge (through their actions rather than words) so soon that quantitative easing (QE) and negative interest rates are reaching the limits of their effectiveness and that these central banks' inflation targets are essentially unachievable (see PIMCO Blog post, "ECB Policy: 1% Is the New 2%")?

FIVE GUIDING PRINCIPLES AND THREE DIFFICULT TRANSITIONS

Against this unprecedented backdrop, we decided at our December forum to base our cyclical outlook and our investment strategy on five guiding principles, which we will review regularly as events start unfolding:

The first principle is that the distinction we normally make between secular (three to five years) and cyclical (six to 12 months) forces and timeframes is fuzzier than usual in this new macro environment. Both **hopes and fears of what the Trump presidency might bring over the secular horizon** are driving current market moves, which in turn might create powerful feedback loops between markets, the economy and actual policies over our **cyclical horizon**, both in the U.S. and abroad. And so we spent more time than usual at a Cyclical Forum discussing secular forces and their interaction with cyclical trends, aided by the presence and insights of several of PIMCO's advisors, including Ben Bernanke, Michael Spence, Gene Sperling and Ng Kok Song.

The second principle, agreed by a majority but not unanimously after a heated debate, is that while markets are romancing a "New Paradigm" of permanently higher U.S. growth, inflation and equilibrium interest

rates, **we believe that our secular New Normal / New Neutral theme remains intact,** at least for now. Many of the secular drivers of low New Neutral interest rates – demographics, inequality, the global savings glut, elevated debt levels and technology – are unlikely to change anytime soon (see also the December *Macro Perspectives,* "New Paradigm?"). However, there were several dissenting voices arguing forcefully in favor of a "New Paradigm," and most PIMCO investment professionals acknowledge both the possibility of a regime shift if the right set of policies gets implemented, and even more so the potential for markets to try to anticipate such a secular shift.

The third principle guiding our cyclical outlook is that even though it is likely that The New Neutral will remain intact, we have to be alert to **cyclical over- and undershoots** versus that secular baseline. Recall that earlier this year, markets had clearly undershot our New Neutral estimate of the real policy rate of 0% by pricing in a below-neutral real fed funds rate for many years to come. This form of "irrational despondency" is now in the process of being corrected. At minimum, **we see increased risk that the Federal Reserve will step up the pace of rate hikes compared with market expectations** in anticipation of fiscal stimulus that comes late in the cycle when wage inflation is already accelerating.

The fourth principle is that **not only the secular but now also the cyclical outlook in the new political environment is characterized by very high uncertainty, or "Radical Uncertainty,"** to use the phrase coined by our Secular Forum speaker Mervyn King – which resounded with our own "stable but not secure" secular theme back in May. As Chicago economist Frank Knight pointed out in the 1920s, uncertainty is fundamentally different from risk: The latter can be quantified and priced based on statistical analysis and historical experience. As investors, we are used to attaching probabilities to "known unknowns" and positioning portfolios accordingly. Uncertainty, however, consists of the "unknown unknowns," the stuff that hits you before you know it, the things to which it is difficult or impossible to attach probabilities. And to the extent that we can still attach probabilities to different macro outcomes, it is important to acknowledge that the tails of the distribution have become fatter. Fatter tails and a lower probability of the baseline scenario unfolding imply that, more than ever, we have to think about the outlook in terms of different scenarios and be open to scenario switching depending on the actual policies that get implemented.

In Brief

With Trump, Brexit, Italy's "No" and China's currency woes, the world economy and markets have embarked on a journey into the unknown. Our baseline prognosis for 2017 is broadly unchanged from September, but our confidence in any particular economic scenario is low. The reason: The world has now fully arrived in the radically uncertain, "stable but not secure" predicament we described in our *Secular Outlook* back in May.

The only certainty in our view is that the tails of the distribution of potential macro outcomes have become fatter. Left-tail risks are defined by rising debt, monetary policy exhaustion and the populism-powered transition from globalization to de-globalization. By contrast, right-tail opportunities may emerge from potential deregulation, awakening animal spirits and the accelerating transition from exhausted monetary to growth-supportive fiscal policies.

Rather than betting big on one direction or the other, investors today should consider a patient approach and aim for capital preservation until the veil of uncertainty over future policies starts to lift. With markets prone to overshooting and undershooting and likely to swing back and forth between our secular New Neutral and a potential "New Paradigm," better opportunities to deploy liquidity should emerge in the course of 2017.

ABOUT OUR FORUMS

PIMCO's investment process is anchored by our Secular and Cyclical Economic Forums. Four times a year, our investment professionals from around the world gather in Newport Beach to discuss and debate the state of the global markets and economy and identify the trends that we believe will have important investment implications. We believe a disciplined focus on long-term fundamentals provides an important macroeconomic backdrop against which we can identify opportunities and risks and implement long-term investment strategies.

At the Secular Forum, held annually, we focus on the outlook for the next three to five years, allowing us to position portfolios to benefit from structural changes and trends in the global economy. Every Secular Forum, we invite distinguished guest speakers – Nobel laureate economists, policymakers, investors and historians – who bring valuable, multi-dimensional perspectives to our discussions. We also welcome the active participation of the PIMCO Global Advisory Board, a team of five world-renowned experts on economic and political issues.

At the Cyclical Forum, held three times a year, we focus on the outlook for the next six to 12 months, analyzing business cycle dynamics across major developed and emerging market economies with an eye toward identifying potential changes in monetary and fiscal policies, market risk premiums and relative valuations that drive portfolio positioning.

This leads us to our fifth principle before we dive into the outlook for 2017. We agreed that the path for the economy and markets will likely be determined by how **three difficult transitions** will play out on the cyclical horizon:

- The transition **from monetary to fiscal policy,** which has gained speed with the European Central Bank (ECB) tapering the monthly run-rate of its asset purchases to €60 billion, the Bank of Japan (BOJ) abandoning its money supply target in favor of a yield target, and the next U.S. administration likely to embark on a more expansionary fiscal policy.
- The transition **from globalization to de-globalization,** which has been underway for some time but now looks set to accelerate as governments in the U.S. and elsewhere are likely to become more inward-looking.
- **China's currency regime transition from** what was a U.S. dollar peg until August 2015 to the current quasi basket peg to what may become a managed or even free float of the yuan.

JOURNEY INTO THE UNKNOWN

Once we had agreed on our guiding principles and key macro transitions, we sought to bring some order into the radical uncertainty by discussing our baseline view of the cyclical outlook, as well as the bull and bear scenarios, each powered by different assumptions on how the three difficult transitions would play out. Helped by our economic models, decades of experience and plenty of creative thinking, our regional portfolio committees constructed specific forecasts for growth, inflation and economic policy in these scenarios.

Baseline scenario: *'Stayin' Alive'*

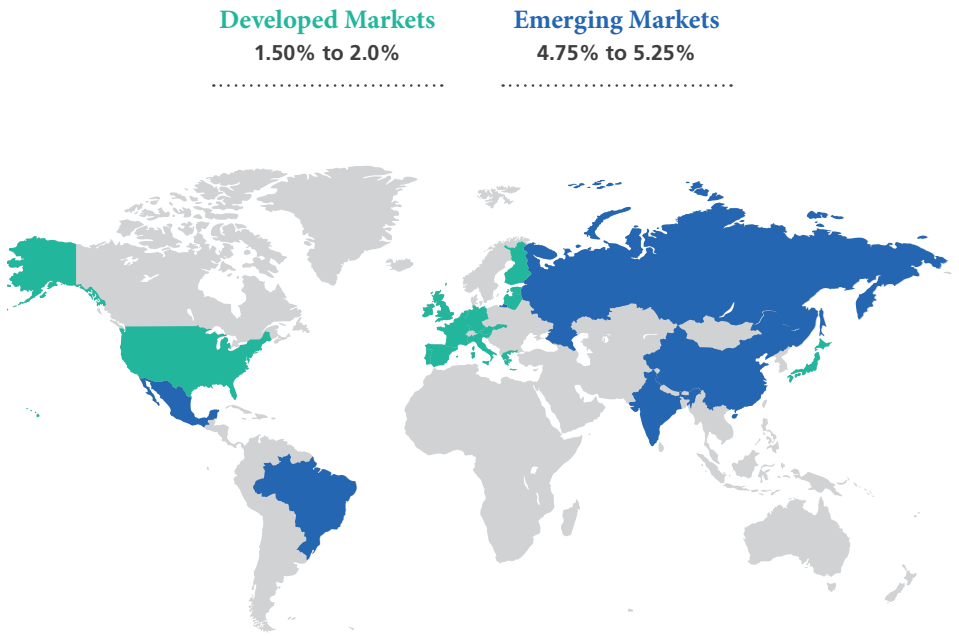
In our baseline scenario, the aging economic expansion, now already in its eighth year, becomes the third-longest in postwar history next March and stays alive and kicking during the remainder of 2017. Why? Because in this scenario, **all three transitions are assumed to progress in relatively orderly and gradual fashion** rather than becoming disruptive:

"The path for the economy and markets will likely be determined by how three difficult transitions will play out on the cyclical horizon."

- Fiscal policy becomes supportive, even though fiscal stimulus in the U.S. on the order of $1.5 trillion over the next 10 years only passes Congress around midyear and is enacted from the start of fiscal year 2018 (i.e., October 2017).
- Central banks play ball and largely maintain their stimulus, thus limiting the rise in bond yields.
- A full-blown trade war is avoided, and the Chinese yuan depreciates only gradually by about 7% over the next 12 months.

Based on these assumptions, world nominal output growth accelerates by one percentage point to 5% in 2017. **World real GDP growth remains in the 2.5%–3% range that has held over the past five years,** but headline inflation in developed markets (DM) picks up from the depressed 2015–2016 levels while high inflation in emerging market (EM) economies like Brazil and Russia ebbs significantly. Growth, inflation and policy divergences become more pronounced both within and between DM and EM, but the world economy keeps muddling through. More specifically (and also see the baseline forecast table):

GROWTH OUTLOOK FOR 2017 (GDP RANGE)



	REAL GDP GROWTH (% YOY)			CPI INFLATION (% YOY)		
	2015	2016 FORECAST	2017 FORECAST	2015	2016 FORECAST	2017 FORECAST
DM[1]	**2.1**	**1.5**	**1.5-2.0**	**0.2**	**0.7**	**1.5-2.0**
U.S.	2.6	1.6	2.0-2.5	0.1	1.2	2.0-2.5
Eurozone	1.9	1.6	1.0-1.5	0.0	0.2	1.0-1.5
UK	2.2	2.0	0.75-1.5	0.0	0.7	2.25-2.75
Japan	0.6	0.8	0.75-1.25	0.8	-0.3	0.25-0.75
EM[2]	**4.7**	**4.9**	**4.75-5.25**	**3.8**	**3.6**	**2.75-3.25**
China	6.9	6.7	6.0-6.5	1.4	2.1	1.75-2.25
Brazil	-3.8	-3.6	0.25-1.25	9.0	8.8	5.0-6.0
Russia	-3.7	-0.6	0.5-1.5	15.5	7.1	4.5-5.5
India	7.2	7.5	7.0-8.0	4.9	5.1	5.0-6.0
Mexico	2.6	2.2	1.75-2.25	2.7	2.8	3.25-3.75
World[3]	**3.0**	**2.6**	**2.5-3.0**	**1.3**	**1.6**	**2.0-2.5**

Note: All data for real GDP and headline inflation are year-over-year (YOY) percentage changes.
[1] DM is the GDP-weighted average of U.S., eurozone, UK and Japan.
[2] EM is the GDP-weighted average of China, Brazil, Russia, India and Mexico.
[3] World is the GDP-weighted average of all countries listed in table above.
Source: Bloomberg, PIMCO calculations

Harvard
Business
Review

STRATEGY

Curing the Addiction to Growth

by Marshall Fisher, Vishal Gaur, and Herb Kleinberger

FROM THE JANUARY–FEBRUARY 2017 ISSUE

Companies in all industries eventually see their revenue growth slow. Retailers are no exception. Fickle consumers, intense competition, changing markets, and the rapid encroachment of online retailing all combine to exert pressure on the top line. The retail graveyard is filled with chains

such as Circuit City, Austin Reed, Linens 'n Things, Loehmann's, British Home Stores, RadioShack, and the Sports Authority—that expanded rapidly and then, faced with declining growth, couldn't find ways to change course.

What should a retailer do when growth slows? Is it doomed, or is there a way to prosper when its business matures? To answer these questions, we examined the financial data of 37 U.S. retailers with recent sales of at least $1 billion whose top-line annual growth rate had slowed to single digits. Some of these retailers had seen their bottom lines fall even faster than their top lines; others had achieved double-digit earnings growth and above-average stock market returns. Our analysis showed that the less successful retailers had continued to chase growth by opening new stores far past the point of diminishing returns. By contrast, the successful retailers had drastically curtailed expansion and instead relied on operational improvements at their existing stores to drive additional sales. This allowed them to increase revenues faster than expenses, which had a powerful positive impact on earnings.

That may seem like a simple strategy, but it's one that most retailers do not follow, for three reasons. First, Wall Street and the capitalist culture celebrate—and demand—growth. Indeed, slow growth is regarded as something between a disease and a moral failing. When faced with declining growth, companies are urged to go back to the drawing board, rethink the business, and come up with a new strategy to pump up the top line. Second, leaders of many retail chains don't know *when* to make the transition. Consequently, they keep expanding until their chains begin to collapse under their own weight. And third, growth companies and mature businesses require very different operating strategies. Many companies that excel at growth lack the capabilities to make the switch.

In this article, we explain when living with slow growth makes sense, providing metrics that can help retailers determine when and how to move from a high-growth to a low-growth strategy. We also offer a framework for creating a low-growth strategy that allows retailers to increase revenues faster than expenses by leveraging their existing resources. If retailers do this, they can stay in the maturity stage of the life cycle for a very long time, forestalling decline. Though our focus here is on the retail industry in the United States, we hope that companies in other industries will take the broad lessons to heart.

When Growth Stalls

The retail life cycle follows a classic S-curve. Successful companies grow quickly in their early years by opening stores and penetrating new markets. Once the most attractive sites have been exploited, they add stores in increasingly less attractive locations. As their store networks become ever more dense, new stores begin to cannibalize the sales of existing ones, reducing the net sales gain for the entire chain.

Walmart followed just this pattern. In the fiscal year ending January 31, 1968, its 24 stores generated $12.6 million in sales and $482,000 in net profit. By fiscal 1988, it had 1,198 stores, sales of $16 billion, and net income of $627.6 million. The compound annual growth rate (CAGR) of its revenues and earnings for the 20-year period was exactly the same: 43%. This illustrates that value creation in the growth phase comes from scaling the business, not necessarily from increasing profitability. But growth cannot continue forever. (Had Walmart continued to grow at that rate, its 2015 revenues would have been $246 trillion, more than three times the world GDP!) Data shows that by 2006 new stores had begun to cannibalize the sales of existing stores, and Walmart was entering the maturity stage. So it's not surprising that its top-line growth slowed, falling to an average CAGR of 2.7% in the 2011–2015 period.

Walmart operates in more than 30 countries, and clearly growth rates differ by country, but this doesn't counteract the fact that its overall recent growth rate has been in the low single digits.

The Unappreciated Formula for Success

This analysis looks at the financial data of 37 U.S. retailers with recent sales of at least $1 billion whose top-line annual growth rate had slowed to single digits in the period from 2011 to 2015. The retailers are split into two groups based on their performance: those with average annual total shareholder returns above 12%—the average annual TSR of the S&P 500 index over this period—and those with below-average returns. The data reveals a formula for success: The retailers with above-average performance tended to curb the expansion of their chains and focus on improving the operations of existing stores, which allowed them to grow revenues faster than expenses.

Our study focused on what happens to retailers when growth stalls. We examined the sales growth, stock market returns, and other publicly reported financial data of the 37 U.S. retailers whose recent sales were at least $1 billion and whose sales growth from 2011 through 2015 had dipped to single digits. (We excluded companies that, growing at greater than 10% per year, hadn't yet reached maturity, and those with negative sales growth that were clearly in decline.) We then split the retailers into two groups based on their performance from 2011 through 2015: those with average annual total shareholder returns (TSR), including stock returns, dividends, and stock splits, at or above 12.4%—the average annual TSR of the S&P 500 index over this period—and those with below-average returns.

The data vividly shows that slowing growth can engender stagnation: The operating profit of the 20 underperforming

ABOVE-AVERAGE STOCK RETURN Average compound annual growth rates, 2011–2015

Company	Stock return	Sales	Operating expense	Operating profit	Store count	Average comp sales
L Brands	34.1%	4.8%	3.7%	9.5%	4.7%	5.4%
O'Reilly Auto Parts	33.2	8.1	6.7	14.1	5.1	5.2
Foot Locker	33.0	8.0	6.2	23.6	0.1	8.0
Home Depot	30.4	5.4	4.4	12.8	0.2	5.1
Ingles Markets	27.9	2.1	2.0	4.9	−0.1	1.8
AutoZone	27.8	6.7	6.4	8.0	3.9	3.4
Lowe's	25.6	3.9	3.6	6.3	1.2	3.1
Costco Wholesale	23.5	8.3	8.2	10.6	4.9	5.6
Dollar General	22.3	9.3	9.4	8.7	5.9	3.9
Caleres	18.0	0.6	0.1	7.3	−2.4	1.8
Cato	15.0	1.8	1.8	1.8	1.4	−0.8
Kroger	14.3	6.0	5.9	8.3	1.5	4.4
Macy's	14.1	1.6	1.8	0.2	0.5	1.7
Dillard's	13.8	1.5	1.4	3.3	−0.7	1.6
Stein Mart	13.3	2.9	2.6	11.3	1.0	1.9
DSW	13.1	7.5	7.8	5.3	5.0	3.3
McDonald's	12.4	1.1	1.3	0.7	2.2	1.9
AVERAGES	21.9	4.7	4.3	8.0	2.0	3.4

BELOW-AVERAGE STOCK RETURN Average compound annual growth rates, 2011–2015

Company	Stock return	Sales	Operating expense	Operating profit	Store count	Average comp sales
TJX	9.6%	7.1%	6.6%	10.3%	4.8%	4.2%
Target	8.4	1.8	2.0	0.0	0.5	1.7
Nordstrom	7.7	8.3	9.1	2.8	9.6	4.7
Gap, Inc.	7.5	1.5	2.4	−3.0	2.8	1.4
Fred's	6.1	3.2	3.6	−12.4	−0.5	0.1
Walmart	6.0	2.7	2.9	0.1	5.1	0.9
Village Super Market	5.4	4.7	4.8	2.1	2.2	2.8
Weis Markets	5.1	1.9	2.0	−0.2	−1.0	1.3
American Eagle Outfitters	4.8	3.5	4.1	−0.1	1.8	1.6
Big Lots Stores	4.7	0.9	1.3	−3.1	0.7	−0.3
Tiffany & Co.	3.8	5.9	6.0	5.5	5.7	5.2
Buckle	2.5	3.3	3.9	1.7	2.2	1.2
Kohl's	2.4	0.9	1.5	−2.6	1.3	0.0
Finish Line	2.2	9.0	10.3	−4.6	9.7	4.8
Office Depot	0.9	4.5	3.8	24.3	8.1	−2.5
Chico's	0.8	6.8	7.8	−0.3	5.7	2.4
Bed Bath & Beyond	−0.1	6.7	7.4	2.8	6.1	3.0
Ross Stores	−2.0	8.7	8.1	12.2	6.5	4.2
Urban Outfitters	−7.5	8.7	10.8	−0.6	9.0	3.2
Pep Boys	−11.6	1.2	2.4	−17.8	6.7	−1.4
AVERAGES	2.8	4.6	5.0	0.9	4.4	1.9

NOTE While some companies in both lists own multiple chains, have operations in multiple countries, or both, retailers should apply the recommendations made in the article "Curing the Addiction to Growth" to each chain and each geography.

FROM "CURING THE ADDICTION TO GROWTH," BY MARSHALL FISHER, VISHAL GAUR, AND HERB KLEINBERGER, JANUARY–FEBRUARY 2017

companies grew only 0.9% per year, on average, and their average annual TSR was a mere 2.8%.

But the 17 successful retailers demonstrate just as persuasively that it's possible to prosper with modest top-line growth. These companies grew their operating profit 8% a year, on average—more than eight times the rate of the unsuccessful ones—and their average annual TSR was a whopping 21.9% over the five-year period. That is nearly double the S&P 500 growth rate.

To understand what differentiated the more successful companies from the underperformers, we examined their public information and interviewed current and former executives of Dillard's, Foot Locker, Home Depot, Kroger, Macy's, and McDonald's. Despite very different businesses—some retailers are diversified (for example, L Brands), and several have operations in many different countries (for example, McDonald's)—we found remarkable similarities in their approaches.

Track the Right Metrics

When you're a retailer, nobody tells you that your chain's high-growth days are over and it's time to switch to a maturity strategy. To detect when you should begin transitioning from high growth to slow growth, you need to track the right metrics.

At first glance, it seems obvious that the time to make the move is when new-store productivity has declined to the point that the investments made in opening new stores hurts, rather than helps, the bottom line. But knowing exactly when new stores have become unprofitable is far from easy. It takes time for a new store to mature; consequently, early sales may not be indicative of eventual sales. Also, extenuating factors, such as economic downturns or natural disasters, can have a huge temporary impact on sales.

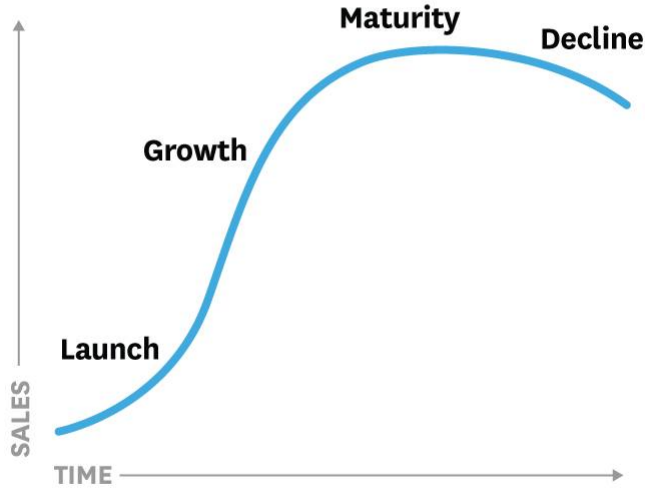
Our study revealed one measure that can reliably tell retailers when to slow the pace of expansion: return on invested capital. Not coincidentally, it's a metric that research has shown is strongly correlated to the long-term appreciation of stock price. For retailers, ROIC is the ratio of adjusted operating income (operating income plus rental expense for the new store) to average invested capital (the sum of investments in property and equipment, capitalized leases, and inventory net of payables). To compute ROIC for a new store, a retailer needs four things: a sales forecast for the new store over time, operating expenses, the required capital investments, and how much the new store will cannibalize the sales of nearby stores.

Many of our exemplar companies—including Foot Locker, Home Depot, Kroger, Macy's, and McDonald's—track ROIC and adhere religiously to relatively high hurdle rates for new stores (the minimum rate of return that a proposed investment would be expected to generate).

Some retailers, however, ignore the capital requirements of new stores and focus solely on growth in earnings. This can lead to bad decisions. Karen Hoguet, Macy's chief financial officer, told us that she was surprised when a competitor began to open new stores in locations that Macy's had rejected. Later she learned that the

The Retail Life Cycle

Retailers grow quickly in their early years by opening new stores. As attractive sites become scarce and new stores begin to cannibalize existing ones, growth falters.



FROM "CURING THE ADDICTION TO GROWTH," BY MARSHALL FISHER, VISHAL GAUR, AND HERB KLEINBERGER, JANUARY–FEBRUARY 2017 © HBR.ORG

competitor had based its decisions on projections of growth in earnings per share rather than return on invested capital. The new stores turned out to be poor performers. "We were right," she observed. "They weren't great stores."

In addition to ROIC, we recommend that retailers track two others metrics. The first is revenue per store, which is simply total revenue in a year divided by the total store count. The second is estimated revenue added per new store, which is the difference between total actual revenues and the estimated revenues from existing stores that would have been achieved if no new stores had been opened, divided by the number of new stores. To calculate the estimated revenue from existing stores, take the prior year's revenue and add the increase in comparable store sales (the revenue increase at stores that were open for at least 12 months prior to the current fiscal year, which are known in the industry as "comps" and reported on retail financial statements) and add an estimate of the cannibalization of existing stores that is due to new stores—a loss in revenue that would be avoided if no new stores were opened. Walmart is one retailer that tracks and reports a cannibalization effect.

Savvy retailers can use all three metrics to detect signs that they should be slowing the growth of new stores. If a retailer has significant international operations, it should use as the revenue number what the revenues for a year would have been absent currency fluctuations. Alternatively, a retailer can compute this metric for each country in which it operates, using the revenues in the local currency of the country.

Stop Opening New Stores

As a retailer tracks the three metrics we've just described, its managers will see when new stores in a particular chain and in a given country are having a diminishing impact on total revenues and ROIC. When it reaches the point at which most or all options for expansion have an unacceptable ROIC, it's time to slow the rate of store openings—or stop opening them altogether.

Both groups of retailers in our study slowed their store-opening rate from 2000 to the 2011 to 2015 period. But the retailers with above-average stock-market performance slowed their rate more: They added just 2% more stores per year while the below-average retailers added 4.4% more.

We cannot emphasize strongly enough how hard it is for a retailer that has spent decades in high-growth mode to turn off the store-opening machine. It has a large team in place dedicated to planning and managing the opening of stores. Employees throughout the company feel the excitement of producing double-digit growth year after year and worry that if growth slows, opportunities for advancement will dry up too. A host of consultants constantly urge senior managers not to shift strategy but rather to redouble their efforts to reignite growth. That includes making acquisitions—which all too often don't work out. And the CEO, who has been selling a growth story to investors for years, worries about coming up with a new tune to sing.

Can Acquisitions Reignite Growth?

Retailers chasing top-line growth often resort to acquisitions to pump up revenues, despite overwhelming research showing that in all industries the majority of acquisitions do not create value. So it's no surprise that the retailers with above-average stock-market performance in our study of 37 U.S. companies were much more conservative with their acquisitions than those with below-average performance. Our research did show, however, that some types of acquisitions deliver more value than others.

Fill-ins.

We found that acquisitions that strengthened the core business by filling in underserved areas with new stores or by adding new capabilities were the most successful. Nine of the 17 above-average performers used this type of acquisition to enhance their existing markets. Dillard's, for example, executed this strategy successfully in Texas, the Southwest, and the Midwest.

Diversification.

Only four of the better performers made acquisitions to diversify into new businesses—and most of them

For all these reasons, retailers often go through a long, painful period of denial before they acknowledge that growth has ended and it's time to switch strategies. It's likely that many of the underperforming retailers in our study are in this denial stage now. Indeed, in Walmart's 2016 annual report, CEO Doug McMillon asserts: "We are a growth company; we just happen to be a large one"—a remarkable statement given that the fiscal year ending January 31, 2016, was the first in its history that Walmart's sales declined.

Many of the high-performing retailers also went through a rocky denial period. Let's look at two examples: McDonald's and Home Depot.

McDonald's grew rapidly and successfully through 1998 by opening new stores. In 1999, growth began to slow, but McDonald's continued down the growth path, also acquiring other restaurant chains, despite the fact that this strategy was eroding its earnings and depressing its stock price. A new CEO (Jim Cantalupo) reversed that course in 2003. He divested

were eventually spun off or shut down. L Brands is one of the few companies to have diversified successfully. Its acquisitions included Abercrombie & Fitch, Henri Bendel, Lane Bryant, Lerner Stores, and Victoria's Secret.

Many of the 20 underperforming companies, including Nordstrom, the Gap, Finish Line, Bed Bath & Beyond, and most recently Walmart, have pursued diversification with generally poor results. Although the reasons for their lackluster performance are difficult to ascertain using public data, their acquisitions, even if profitable, seem to have diverted capital and management attention from their mature businesses.

Geographic expansion.

Target and Walmart attempted to expand into Canada and Germany, respectively, through acquisitions. Both efforts were colossal failures. The main reasons were significant differences between customers, competitors, and government regulations in those countries and the United States.

the acquisitions, stopped opening new stores, and focused on increasing the sales of existing stores through improved service and customer satisfaction. Over the ensuing five years, this strategy resulted in a doubling of the company's profit margin and a quadrupling of its share price. (During the tenure of CEO Don Thompson, who headed the company from mid-2012 until January 2015, the company's performance deteriorated. It now seems to be back on track.)

Home Depot's story is similar. Under founders Arthur Blank and Bernie Marcus, it was a store-opening machine and quickly grew to be the second-largest retailer in the United States. Decision-making authority was delegated to store managers, which made rapid (albeit somewhat chaotic) expansion easy. But after two decades, the board of directors was evidently weary of chaos, and Bob Nardelli was brought in as CEO to inject order. While Nardelli did that, he also continued to vigorously pursue top-line growth by doubling the store count in six

years and creating, largely through acquisitions, Home Depot Supply, a wholesale division serving professionals.

During Nardelli's 2001 to 2006 tenure, store productivity lagged that of arch competitor Lowe's. For example, comparable store sales at Home Depot increased an average of 1.4% per year versus 4.6% at Lowe's, which had a stronger sales staff. (To cut costs, Nardelli replaced hardware experts with part-timers and reduced the overall staffing levels of stores.) As a result, earnings at Lowe's over this period grew at nearly double the rate Home Depot's did, and the stock price of Lowe's also doubled, while Home Depot's stayed flat.

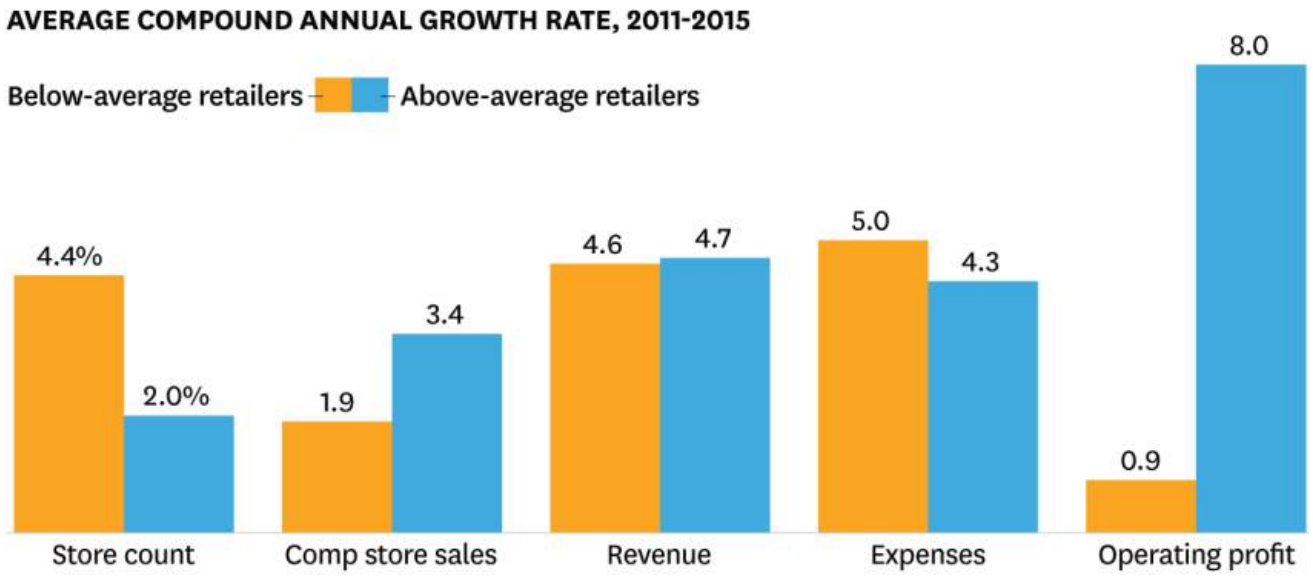
Home Depot's denial phase ended in early 2007, when its board appointed Frank Blake to replace Nardelli. Since then, Home Depot has delivered phenomenal financial results. Blake reversed Nardelli's strategy of opening new stores—and as we've said, this is no easy feat. It meant stopping many stores in the pipeline and writing off assets—tough actions for a company with a growth culture. Mark Holifield, Home Depot's executive vice president for supply chain and product development, told us: "It required looking in the mirror and saying, 'We're somebody different today.'"

Boost Sales from Existing Stores

Where does earnings growth come from when a retailer can no longer drive up the top line by opening new stores? The answer is through operational improvements that allow the company to increase its revenues from existing stores faster than its expenses.

The Leverage Strategy

By slowing their store-opening rates and improving existing stores, the above-average retailers in our study were able to grow revenues faster than expenses, yielding strong operating profits.



FROM "CURING THE ADDICTION TO GROWTH," BY MARSHALL FISHER, VISHAL GAUR, AND HERB KLEINBERGER, JANUARY–FEBRUARY 2017

This approach helped our above-average group outperform the others. Though the higher-performing companies grew their store count only 2% per year, they posted 3.4% comparable store sales increases. This meant that the majority of their 4.7% average annual sales growth came from existing stores, so that expenses grew four-tenths of a percentage point less than sales. The below-average retailers had the opposite results. With a store growth rate of 4.4% and comp sales increases of only 1.9%, most of their 4.6% sales growth came from new stores—a major reason their expenses grew four-tenths of a percentage point more than revenues. By leveraging their existing stores, the above-average retailers grew operating profit 8% a year, compared with a mere 0.9% for the below-average group.

A comparison of Foot Locker and rival athletic-shoe retailer Finish Line illustrates the importance of preventing expenses from growing faster than sales. From 2011 through 2015, Finish Line actually grew sales at a higher annual rate than Foot

Locker—9% versus 8%—but most of Finish Line's increase came from opening new stores. Almost all of Foot Locker's growth came from existing stores. As a result, Foot Locker grew sales 1.8 percentage points more than expenses, whereas Finish Line grew expenses 1.3 points more than sales. The differentials between sales and expense growth rates might seem small, but they are significant relative to operating margins, which were in the range of 10% for both companies, and completely explain why Foot Locker's operating profit grew at a 23.6% rate while Finish Line's declined at a 4.6% rate.

> Foot Locker's strategy to improve operational performance relied on leveraging real estate, inventory, and staffing.

Ken Hicks, who served as the CEO of Foot Locker from 2009 until late 2014 and then as executive chairman until May 2015, told us that his strategy to improve operational performance relied on leveraging real estate, inventory, and store associates. His rules of thumb were that inventory should grow half as fast as sales and controllable expenses 70% as fast as sales. He remarked that it's possible to leverage low- to mid-single-digit increase in sales growth to produce strong profits and stock returns. An implication of this is the need for at least some sales increase. In other words, this is a *low-growth,* not a *no-growth,* strategy.

There are many ways a retailer can boost sales from existing stores. Let's look in detail at the most important.

Real estate.

Even if a retailer is not increasing its store count, its real estate group should not be idle. It should be closing unproductive stores, expanding and remodeling stores in the best locations, and carefully vetting locations for the few new ones. Under Frank Blake and his successor, Craig Menear, Home Depot has concentrated on refreshing existing stores and catching up on deferred maintenance. Foot Locker has focused on rationalizing the location of its stores, closing some and adding space where it would do the most good.

Analytics.

The extent to which customers can find the products they want at a reasonable price and get help from sales associates as needed is a crucial determinant of whether they buy something or leave a store empty-handed. Many analytics tools are available today that help retailers decide what assortment of products to carry in what quantities, how to price those items, and how many sales associates should work in each store, at what hours.

Kroger's use of analytics is noteworthy. In 2010 it began deploying infrared technology that tracks when customers enter the store and then uses predictive analytics to estimate when they are likely to reach the checkout lanes. This allows Kroger to determine how many lanes need to be operating at any given time in order to meet its exacting wait-time standards. A large dynamic display informs customers and associates of the current wait time. Since the technology was implemented, average wait time has dropped from four minutes to 26 seconds, and customer satisfaction with checkout has improved significantly. Initiatives such as this one have helped Kroger achieve more than 50 straight quarters of positive increases in comparable store sales.

New-product development.

Retailers seeking improved sales at existing stores often develop new products to boost revenues. To do so effectively, they need highly disciplined methods for identifying and testing potential offerings. Consider Home Depot's process for adding private-label products. The retailer first identifies market-brand items that are performing poorly and examines customer complaint data to see how the products could be improved. It then develops private-label products—for example, Hampton Bay ceiling fans, Husky tools, and Glacier Bay toilets—and continually refines them to improve quality and lower costs. Instead of using the cost savings to boost gross margin on the products, it often passes the savings on to customers in the form of lower prices. That drives more sales at existing stores and takes share from competitors. If a new private-label product consistently gets a 3 out of 5 or lower in customer ratings or fails to take significant share from the branded item, Home Depot kills it.

Staffing.

The effectiveness of your sales force depends on whom you hire, how you train them, what technology you deploy to make them more effective, and how you staff each department in each store during each hour of the day.

It all starts with hiring the right people. Ken Hicks told us that all Foot Locker applicants take an online test that measures their disposition toward selling and their fit with the Foot Locker culture. The company refined the test over time by giving it to current associates and correlating the results with their actual productivity. Company data shows that people hired after the program was put in place in 2013 had higher sales per hour and stayed with the company longer than people who had not been

hired through the program. Foot Locker also optimizes productivity by assigning the associates with the highest sales per hour to work the most important shifts. L Brands, which takes a similar approach, calls this practice "putting the aces in their places."

Training is also a critical piece of the puzzle. Well-trained sales associates who have deep product knowledge can significantly increase the percentage of customers entering the store who actually buy something—what retailers call the "close rate." Dillard's, which offers online product training to its sales associates, has found that each hour associates spend on training increases their sales rate by a remarkable 5%.

Another common way to improve the performance of salespeople is to remove non-value-added work from their responsibilities so that they can devote more time to helping customers. An exemplar here is Foot Locker. In most shoe stores, sales associates make many trips to the back room to check on product availability and retrieve items that customers want to try on. Those trips consume precious time, and many impatient customers leave without making a purchase. To reduce the time associates spend off the floor, Foot Locker introduced scan guns that allow them to check what's available in the back room, online, and in other stores without leaving the customer's side. The guns are estimated to have added 2% to sales.

Macy's also uses technology to facilitate the sales process. Its "smart fitting rooms" are equipped with iPads that allow customers to request additional items or different sizes, which sales associates then deliver to them in the fitting room.

Channel strategy.

Most brick-and-mortar retailers would be happier if the internet, which made online shopping possible, had never been invented. But smart retailers understand that a strong omnichannel strategy can increase overall sales by giving customers additional ways to gather information, make purchases, and receive products.

For example, allowing customers to buy products online and pick them up in a store not only enhances online sales but also boosts store sales. That's because customers tend to make additional purchases when they come to the store to pick up their items. Retailers also benefit from the opportunity to fulfill online orders with inventory in stores. This can help them avoid markdowns on overstocked items and minimize the need to expand distribution center capacity during seasonal buying surges.

Omnichannel retailers can also increase sales by optimizing their distribution networks to speed up order fulfillment. A study of one retailer showed that opening a new distribution center that cut average delivery times of online sales for some customers from seven days to three produced an additional 4% in sales from the customers in that segment. The gross margin on the additional sales was more than enough to cover the cost of adding a distribution center.

One retailer that understands this is Home Depot. It recently replaced two older direct-fulfillment centers with three new ones. The location of these centers and the stocking strategies and operational processes they use have been optimized for faster delivery to customers. Home Depot has also improved the accuracy of lead-time information provided to customers. Previously, it would tell all customers in all zip codes that delivery for a given item would be in the range of seven to nine days. Now it provides customized delivery times that can be as short as two days. "There is no doubt from our data that reducing delivery time is driving higher sales," Holifield told us.

Customer-facing policies.

Things like your return policy, acceptance of credit cards, and store hours need to be continually monitored and revised to enhance sales. McDonald's, for instance, made numerous improvements during the 2006–2011 period, including switching from a cash-only payment policy to accepting credit cards, expanding some stores' period of

operation to 24 hours, and doubling lanes for drive-through business at busy stores to relieve congestion. Bob Marshall, the former vice president of McDonald's U.S. restaurant operations, estimates that these changes yielded a double-digit sales increase.

Allocate Capital Wisely

The good news about mature retailers is that they generate a lot of cash, which can be used to fund the types of operations-improvement projects described above. The challenge is making sure that the available capital is allocated to the most promising initiatives.

Companies should formulate and follow a disciplined capital allocation process that starts with idea generation. Retailers should begin by mining all areas of the business for process-improvement ideas, as well as take inspiration from other retailers. Some companies, such as Macy's and McDonald's, have innovation groups to find and evaluate improvement ideas. McDonald's also has an innovation center, where it replicates store equipment and processes to test the effect of new products on service times in a given type of restaurant. According to Bob Marshall, the innovation center was instrumental to the successful introduction of the McCafé line of drinks in U.S. restaurants in 2007 and 2008. He estimates that they generated a mid-single-digit annual sales increase in the United States.

Further Reading

Impact of return on invested capital (ROIC) on share price

"What Explains Superior Retail Performance?"
Marshall Fisher, Ananth Raman, and

Once ideas have been generated, the next step is to evaluate the ROIC of each initiative and fund only those that exceed the desired hurdle rate. "The things you don't do are often more important than the things you do," Hicks says. Pilot projects should be conducted for each

Vishal Gaur
New York University working paper, October 1999

Optimizing product assortment and pricing

The New Science of Retailing
Marshall Fisher and Ananth Raman
HBR Press, June 2010

"Which Products Should You Stock?"
Marshall Fisher and Ramnath Vaidyanathan
HBR, November 2012

"Competition-Based Dynamic Pricing in Online Retailing"
Marshall Fisher, Santiago Gallino, and Jun Li
University of Michigan working paper, November 2016

Staffing and Training

"Why 'Good Jobs' Are Good for Retailers"
Zeynep Ton
HBR, January–February 2012

"Does Online Learning Work in Retail?"
Marshall Fisher, Santiago Gallino, and Serguei Netessine
INSEAD working paper, October 2015

initiative, and the results should determine whether the initiative is rolled out to all stores. Foot Locker first put its scan-gun technology only in pilot stores. At the same time, it worked with Motorola to reduce the cost of the scanner, from $1,200 to $300. Only after the technology was thoroughly refined was it rolled out companywide.

McDonald's, by contrast, seems to have forgotten the need for a disciplined process during Don Thompson's tenure. "Management fell in love with their own ideas and lacked the discipline to kill products like Mighty Wings whose test results were questionable," Marshall told us.

Mature retailers generate a lot of cash, which can be used to fund operational improvements.

"Setting Retail Staffing Levels"
Marshall Fisher, Santiago Gallino, and Serguei Netessine
University of Pennsylvania working paper

Experimentation

"The Discipline of Business Experimentation"
Stefan Thomke and Jim Manzi
HBR, December 2014

Omnichannel retailing

"The Future of Shopping"
Darrell K. Rigby
HBR, December 2011

"Integration of Online and Offline Channels in Retail: The Impact of Sharing Reliable Inventory Availability Information"
Santiago Gallino and Antonio Moreno
Management Science 2014

"The Value of Rapid Delivery in Online Retailing"
Marshall Fisher, Santiago Gallino, and Joseph Jiaqi Xu
University of Pennsylvania working paper, May 2016

"Optimal Retail Location"
Marshall Fisher, Chloe Kim Glaeser, and Xuanming Su
University of Pennsylvania working paper, September 2016

As internal improvement projects with acceptable ROIC begin to outnumber attractive new-store options, capital allocation will evolve smoothly from a scaling strategy to a leverage strategy. To successfully make this shift, however, retailers must clearly communicate their strategy to Wall Street. Investors like companies that beat expectations and hate those that fall short. Mature retailers should set conservative annual sales targets and explain their logic for focusing on ROIC. During Blake's tenure, Home Depot began announcing increasingly high targets for ROIC, starting with 15%, then 24%, and now 35%. It has been meeting those targets ahead of its announced schedule.

What happens when a retailer has more capital than attractive internal or external investment opportunities? After putting aside cash for a rainy day (retailing is cyclical, and it's easy to burn cash during downturns), the retailer should distribute the remainder to shareholders via dividends or stock buybacks, which the above-average performers generally did, undoubtedly helping their stock prices.

Home Depot, for example, announced a policy to return at least half of available cash each year to shareholders.

CONCLUSION

The destructive obsession with high growth pervades virtually all capitalist economies. Although this article focuses on the retail industry, we hope it will spark managers and investors in all sectors to pause and reconsider when high growth is good—and when it's bad.

Our analysis offers just a snapshot in time. It certainly does not mean that the poorer performers can't join the ranks of the better performers or vice versa. (Even the more successful retailers have experienced periods of lackluster performance.) That said, making the switch from an expansion to a leverage strategy is a huge challenge for retailers. It often requires a new CEO—one who delights in the nitty-gritty work of improving operations. Sadly, all too many leaders of mature retailers just can't seem to come to grips with the reality that their companies' go-go days are behind them and that it's time to kick the growth addiction.

A version of this article appeared in the January–February 2017 issue (pp.66–74) of Harvard Business Review.

Marshall Fisher is the UPS Professor of Operations and Information Management at the University of Pennsylvania's Wharton School, the coauthor (with Ananth Raman) of The New Science of Retailing, and the cofounder and chairman of 4R Systems, a retail analytics firm.

Vishal Gaur is a professor at Cornell's Johnson School of Business.

Herb Kleinberger is an adjunct professor at New York University's Stern School of Business.

This article is about STRATEGY

FOLLOW THIS TOPIC

Related Topics: GROWTH STRATEGY | RETAIL & CONSUMER GOODS

Comments

Leave a Comment

POST

0 COMMENTS

JOIN THE CONVERSATION

The Economist

Fit at $50

The oil industry is bouncing back after OPEC's meeting

But it has many lessons to learn from Silicon Valley, other industries

Dec 10th 2016

PROUDLY, they call themselves elephant hunters. They are the geologists who scour the treacherous depths of the Arctic, or Brazil's Atlantic pre-salt fields, or offshore west Africa, or the deep waters of the Gulf of Mexico, hoping to bag giant oil discoveries that can generate billions of dollars of cash for their firms over a span of decades. In some cases, they get naming rights. The Gulf of Mexico is peppered with fields named after geologists' wives (risky if they are duds), or their favourite albums, bands, stars and football chants. They are part of the industry's folklore. The question is, are they a dying breed?

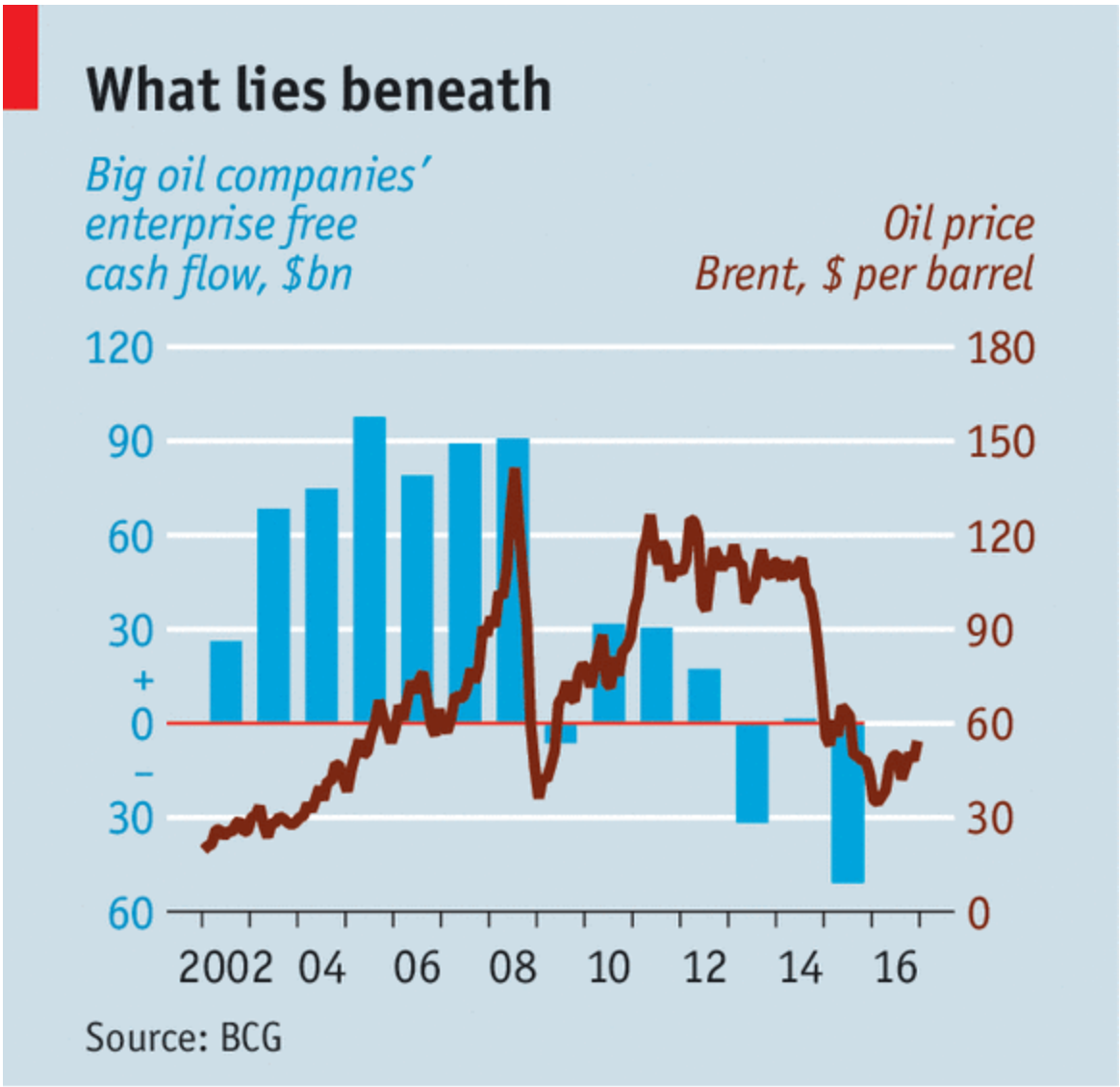
Several prospective deals announced this month, from the deep waters of the Gulf of Mexico to onshore Iran, suggest that the industry may be shying away from expensive forays into uncharted territory, and taking a more cost-conscious approach to exploration and production. It remains to be seen whether they can maintain their discipline if oil prices recover. But, for now, “they’ve all gone back to the drawing boards,” says Andy Brogan, an oil-and-gas specialist at EY, a consultancy.

On December 1st BP, a British oil major, approved a $9bn investment to install a second drilling platform in its Mad Dog field in American waters of the Gulf of Mexico (it put in the first in 2005). The field was discovered in 1998 and contains up to 4bn barrels of oil and gas. When BP first proposed the new project earlier this decade, the projected cost was $20bn.

Days later some of the world’s largest oil companies, including BP, bid generously for exploration and production blocks in Mexican waters of the Gulf, which Mexico hopes could realise up to $40bn in deepwater investment from companies. Until 2014, private investment in Mexican oil had been banned since the 1930s, so there is a pioneer’s excitement about exploring for oil there. But it is also familiar territory, with some blocks lying just across the maritime border from America.

Adding to the sense of action, on December 7th Royal Dutch Shell, an Anglo-Dutch firm, signed a preliminary memorandum of understanding to develop oil in Iran, despite Donald Trump’s hostility to Barack Obama’s nuclear deal and the possibility of renewed sanctions. It followed a similar deal between Iran and France’s Total last month.

Such forays show that, for the first time since oil prices plunged in 2014, Big Oil is putting its head above the parapet to seek substantial new sources of crude that will tide it through the 2020s. It comes days after OPEC, a producers’ cartel, struck an agreement to rescue oil prices, which executives say has bolstered confidence that the market is stabilising.



Economist.com

Yet these bullish signals have not brought cheer to the elephant hunters. For years the industry has struggled to cover its investment needs and dividend payments (see chart). It barely broke even in 2012-14, though oil prices at times exceeded $100 a barrel. Now, at half that price, it is having to scrape the barrel to satisfy shareholders who rely on its dividends. The result has been a historic plunge in oil-and-gas investment. It was a record $780bn in 2014. Since then it has fallen by about $340bn.

Oil executives say they are trying to embark on a new investment cycle without squandering money. Tim Callahan of BHP Billiton, an Australian oil-and-mining firm that won the bidding on December 5th for an $11bn project to develop the Trion field in Mexico with Pemex, the state oil company, says the aim is to be "fit at 50", ie, able to make plenty of money at $50 a barrel—or less.

The 60% cut in the proposed cost of BP's Mad Dog Two project suggests that there is plenty of fat to trim. Initially the company intended to install a state-of-the-art floating "spar" tailored, in the words of one official, like a "Savile Row suit". That project was shelved in 2013. The alternative is a standard "off-the-peg" version, though BP promises not to have compromised on safety. It will be the company's first new platform since its Deepwater Horizon oil spill, also in the Gulf, in 2010. Aware that OPEC's control over the oil price may diminish, and that longer-term pressures on oil come from climate change and "peak demand", BP is aiming to ensure that three-quarters of such cost-savings are structural, and that only a quarter of them are subject to cyclical upswings.

There is scepticism about the industry's ability to keep its belt tight. Share prices of oil-service companies, including offshore-focused ones like Schlumberger, have jumped since the OPEC deal, suggesting investors expect them to be able to raise the prices they charge their paymasters.

BP executives discuss several ways of keeping costs under control, though they admit they are only "scratching the surface" on these. The firm has pulled out of potentially expensive greenfield projects, such as the Great Australian Bight, and opted for better-known territories instead. (Shell, meanwhile, has given up on the Arctic.) BP may not add to its 45bn barrel stock of resources, which at current rates of production could last 52 years. It may replace uneconomic barrels with cheaper ones, but will also draw 15bn of them by 2030.

Executives have been scouring other industries—from Silicon Valley to carmakers—for examples of how to become leaner. That will involve streamlining inventories and manpower. For instance, in parts of America, BP has cut the number of people monitoring wells by three-quarters, using mobile apps instead. It plans to run fibre optics down its wells to "listen to" problems, such as the seepage of sand, far below the surface, thereby forestalling the need for expensive work.

Andrew Latham of Wood Mackenzie, a consultancy, says that as well as cost-cutting, Big Oil's best bet on a more economically-sustainable future is gas, which can be cheaper to produce and easier to find than oil. There may be still plenty more gas elephants to bag. They won't, however, have quite the cachet of the oily ones.

This article appeared in the Business section of the print edition under the headline "Fit at fifty—or less"

Will Higher Oil Prices Lead to Macro Stability Risks?

Oil prices have nearly doubled from the lows of Jan-16. In this note, we take another look at the macro sensitivity to oil price increases.

Higher prices tend to weigh on inflation, current and fiscal balance outlook: As of the three months ended Nov-16, India's net oil imports were at 2.5% of GDP, down from the peak of 6.5% of GDP in 2012. We estimate a 10% increase in oil prices will widen the current account deficit by 0.25% of GDP (US$ 6.5bn). Assuming full pass through for gasoline and diesel price increases to consumers, we expect WPI inflation to increase by 80-100bp, CPI inflation by approximately 40bp, and the fiscal balance by approximately 5bp of GDP. Moreover, if the increase in oil prices is accompanied with a rise in other global commodity prices (CRB commodity index is up 12% from the low in Jan-16) it would add greater pressure on commodities trade deficit. Indeed, the pace of decline in commodity imports has lessened in the last four months, reducing the downward pressure on the commodity trade balance.

Macro impact dependent on whether oil price rise is due to supply or demand factors? In the past, when oil prices rose due to a global demand pickup, offsetting positive external factors such as stronger exports and capital inflows meant that the overall impact was not necessarily net negative. If a rise in oil prices is driven by supply-side factors, that would bode negatively, especially from a macro stability standpoint – current account deficit, inflation trend and fiscal balance. To the extent that the recent rise in oil prices is partly driven by announcement of supply adjustment by oil producers, we view it as negative for India.

Starting point of macro stability position matters: With the current account deficit at 0.6% of GDP and the CPI inflation trend at around 4-4.5% being in a comfortable position, we believe a rise in oil prices to US$65-70/bbl will not create major concern on macro stability indicators. However, under this environment, we see a high risk of RBI not being able to reduce policy rates further.

Productivity and capex cycle to determine economy's ability to absorb higher oil prices: For example, during the 2003-2006 period, oil prices rose 105%, in part due to supply constraints (Iraq war in 2003). However, overall macro stability indicators, including CPI inflation and current account balance, remained well within their comfort ranges as productivity growth accelerated with increases in private capex and FDI. Exports growing at an annual average of 25% during the same period also provided a positive offset.

Bottom-line: We believe the recent oil price rise, to the extent that it is partly driven by supply factors, will be negative for India. However, comfortable starting points for inflation and the current account deficit should keep the overall macro stability trend manageable as long as oil prices are below US$ 65-70/bbl.

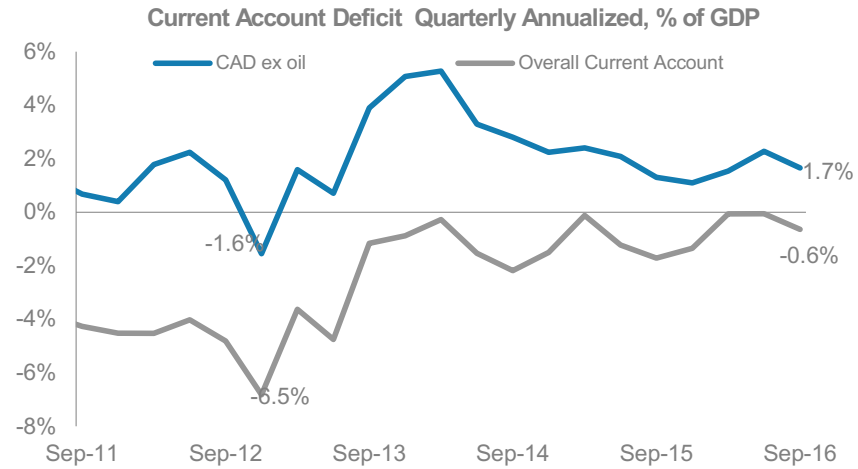
Sensitivity of Key Macro Variables to Oil Price Rise

Exhibit 5: Sensitivity of Macro Variables to Oil Price Rise

--Inflation (WPI)	0.8-1ppt if the government were to pass the full increase on to consumers (a cascading effect of a similar amount would also be felt).
--Inflation (CPI)	+0.4%pt
--External Balance	US$6.5 bn (0.3% of GDP)
--Subsidy Burden	US$1.1 bn (0.05% of GDP)
Gross Oil Import as % of Total Goods Import, 2016 (12M trailing)	20.8%

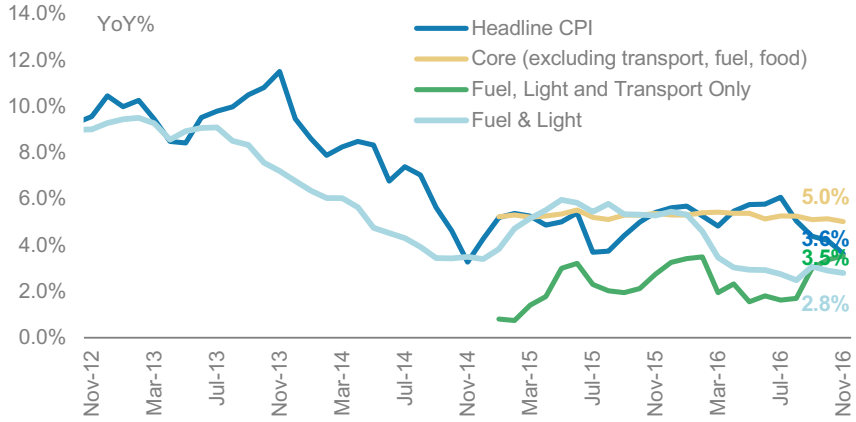
Source: Morgan Stanley Research

Exhibit 6: Starting Point of Macro Stability Is Better - #1 Current Account Deficit Remains Benign



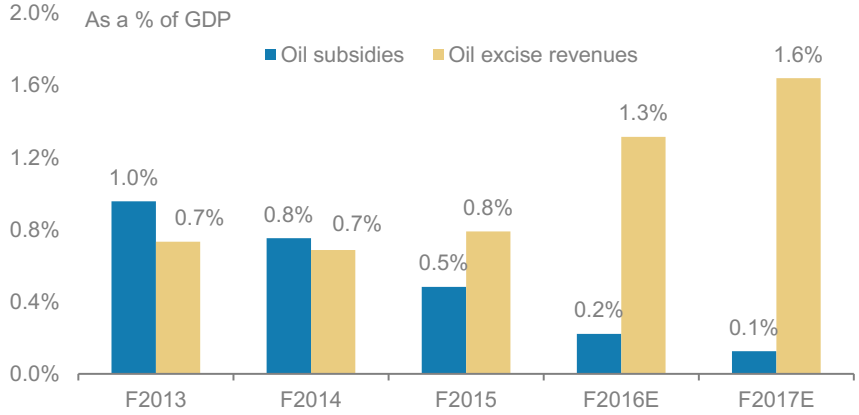
Source: CEIC, Morgan Stanley Research

Exhibit 7: #2 CPI Inflation on a Moderating Path



Source: CEIC, Morgan Stanley Research

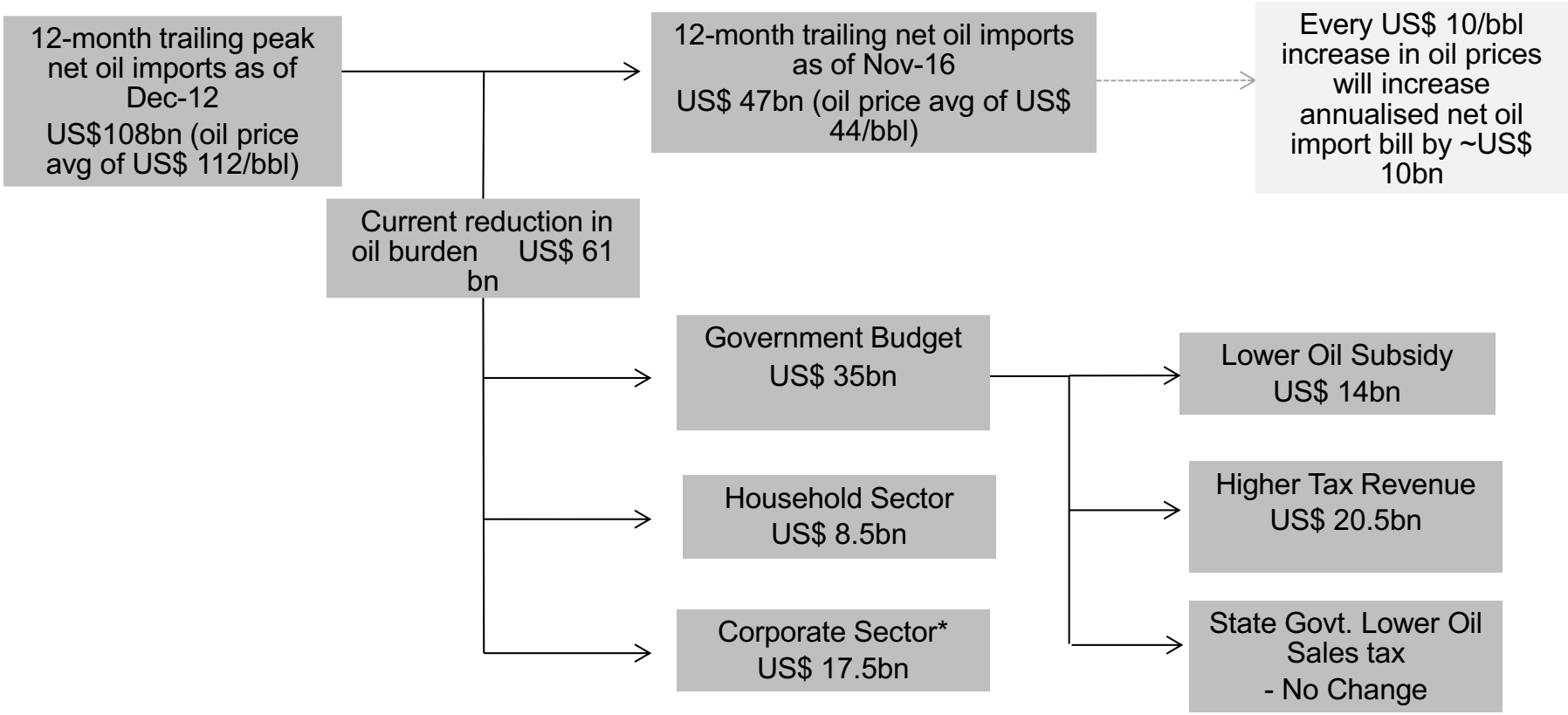
Exhibit 8: #3 Oil Subsidy Burden Has Declined Significantly



Source: Budget Documents, PPAC, Morgan Stanley Research

How Are the Savings from the Decline in Oil Prices Distributed?

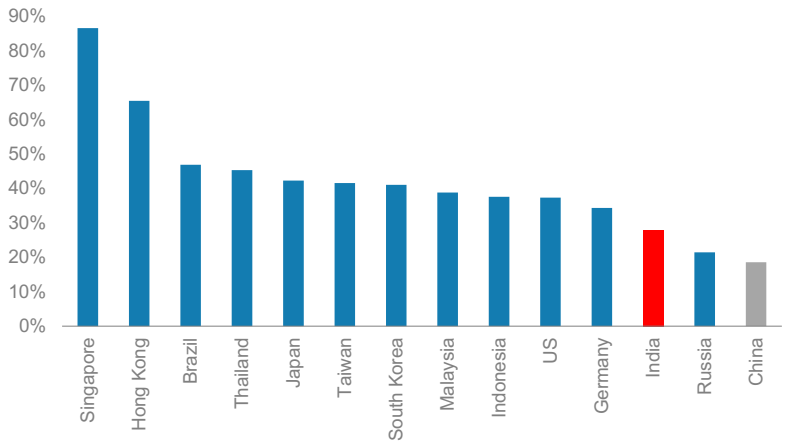
Exhibit 9: Lower Oil Prices Have Led to Significant Saving for All Sectors of the Economy



Source: CEIC, PPAC, Morgan Stanley Research. *saving for corporate sector is defined as residual (total saving less that of consumers and government).

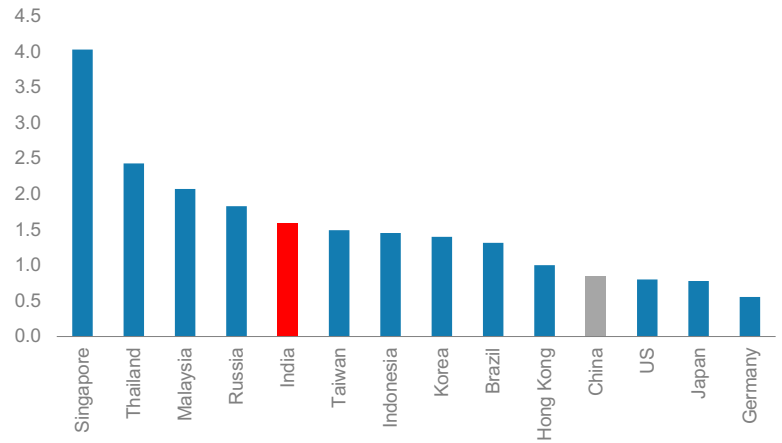
India' Share of Oil In Energy Consumption Is Relatively Low, but Oil Import Deficit Is Third Highest in the Region

Exhibit 10: Share of Oil as an Energy Source (2015)



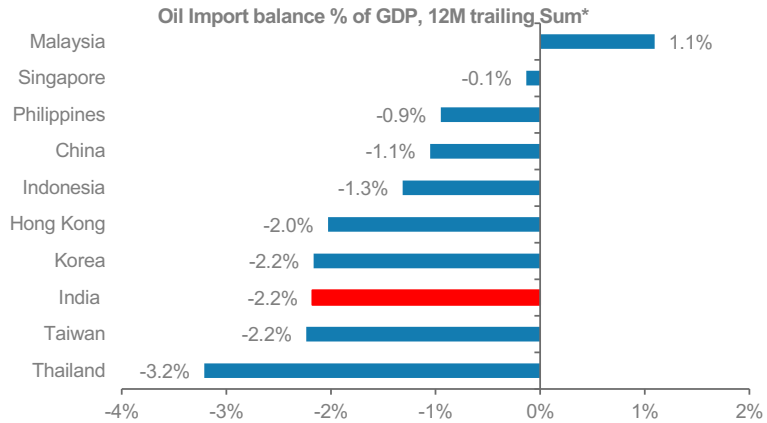
Source: BP Statistics, Morgan Stanley Research

Exhibit 11: Oil Intensity (Primary oil consumption per unit of GDP, 2015)



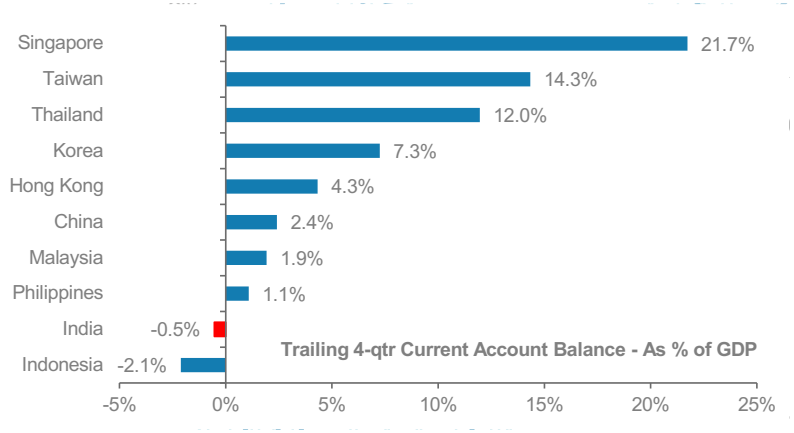
Source: BP Statistics, Morgan Stanley Research

Exhibit 12: India's Oil Import Deficit Third Highest in the Region



Source: CEIC, Morgan Stanley Research *as of latest month

Exhibit 13: India's Current Account deficit Lower Than Indo's, While Other Countries Run a Surplus



Source: CEIC, Morgan Stanley Research

kotak Institutional Equities

Strategy

Macro

INDIA

DECEMBER 19, 2016

UPDATE

BSE-30: 26,653

Demonetization: Faith and fear. We see large social and economic benefits of the demonetization exercise in the medium term, which should offset short-term economic disruption. We believe critics underestimate the positive 'psychological' impact of such a measure on the broader society. In our view, this will (1) reinforce the faith of the general population in the government's efforts to clean up the system and (2) instill fear in a section of the society, which hitherto has had little regard for the laws of the land.

QUICK NUMBERS

- India's tax-to-GDP ratio is a low 18%
- 14% tax contribution to corporate tax revenues from companies with PBT of <₹100 mn
- 50% tax and penalty on unexplained bank deposits under new income disclosure scheme

Demonization of demonetization misses the point completely

The focus of the critics of demonetization on (1) 'faulty' execution, (2) economic disruption and (3) limited visible economic benefits (most of the demonetized cash may come back to the banking system) misses the larger recurring economic and social benefits to the country. On the point of execution and related economic disruption, we wonder how the government could have prepared beforehand without telegraphing its intentions to the whole wide world. Critics would have alleged inability to handle vital economic and national secrets in that case!

Enormous recurring economic and financial benefits in the medium term

We see large benefits for India's (1) GDP as a large part of the unreported economy becomes part of the reported economy, (2) tax revenues as the unreported economy starts paying higher taxes, boosting India's low tax-to-GDP ratio (see Exhibit 1) and (3) household financial savings rate as households would have low compulsion to invest in physical assets to hide wealth once they report their true incomes. As discussed before, we believe businesses and self-employed professionals in the 'black' economy may have to reassess their finances in the context of (1) large losses suffered by them from the recent demonetization measure, (2) the government's previous actions against black money and (3) worries about future measures against undisclosed income and wealth.

Plentiful financial gains for the government even if most of the cancelled currency comes back

Critics of demonetization have touted the large amount of the old currency (see Exhibit 2) that has been returned to the banking system as a proof of failure of the demonetization measure. That is hardly relevant, in our view. The government will have access to the records of deposits and any unexplained bank deposit post November 8, 2016 will likely see imposition of 50-87% tax on the deposit under the revised taxation laws (see Exhibit 3 for details). That should make up for any disappointment on the expected gains from 'cancellation' of unreturned old currency.

Social impact is an unquantifiable but potentially large invisible benefit

In our view, the demonetization measure will instill some fear of the law, if not respect of the law, in the broader society. The economic and social potential of any nation depends on (1) the quality of its democratic institutions and (2) the society's attitude towards the laws of the land. The brazen methods to launder 'black' money into the banking system show (1) the utter disregard for law or the limited fear of the law in a section of the society and (2) the ubiquity of corruption in the general society. Exhibit 4 is a list of the more egregious cases unearthed by India's IT and investigation agencies. We would advocate stiff penalties on the individuals concerned in order to instill some fear and/or respect of law in the rest of the society.

Sanjeev Prasad
sanjeev.prasad@kotak.com
Mumbai: +91-22-4336-0830

Suvodeep Rakshit
suvodeep.rakshit@kotak.com
Mumbai: +91-22-4336-0898

Sunita Baldawa
sunita.baldawa@kotak.com
Mumbai: +91-22-4336-0896

Kotak Institutional Equities Research
kotak.research@kotak.com
Mumbai: +91-22-4336-0000

Facilitation of the formalization of the informal (unreported) economy

We would recommend that the Indian government adopt a more 'facilitative' attitude towards the informal sector to facilitate the entry of the participants in the informal (read unreported) economy into the formal (reported) economy. We suspect that a large number of entities in small-scale manufacturing, services and trade and self-employed professionals would be keen to make the transition and start paying full taxes if they have (1) assurance of immunity for their past actions (avoidance of taxes) and (2) sufficient financial 'support' to make the transition. Many of these entities would have had to deal with this problem on the implementation of GST in any case.

From a government's perspective, it would be in the country's best interests to facilitate the entry of the informal economy participants into the formal or reported economy. We note that these entities are a vital part of the economy in both the distribution and supply chains of the formal economy and more importantly, an important source of employment in the country. The formal economy is seeing limited new job creation and the government may want to contain the negative fall-out of the demonetization measure in the form of large-scale job losses in the informal sector and related economic and social unrest.

We note that companies will have to raise prices of their products and services if they start reporting their true incomes and pay full taxes. This would anyway weaken their competitive positioning versus the larger companies in the organized sector. As such, they may require some 'hand-holding' to make the transition.

We make a few recommendations in this regard.

- **Reduce corporate and income tax rate as part of 'stick-and-carrot' policy.** We would suggest the government reduce overall taxation rates in the country by about 2.5% each year for the next two years. This would bring down the tax rate in the highest corporate and income slab to 25% from 30% currently. We believe this could be an attractive taxation rate ('carrot') for businesses and households that are part of the unreported economy to start reporting their true incomes. The government has already wielded a big 'stick' through the recent decent monetization measure and other measures before that (see Exhibit 5 for a list of measures against black money over the past two years).

  The government had announced its intention to reduce corporate tax rate by 5% (to 25%) over a four-year period in the February 2015 budget speech of the finance minister. The government did not make any changes to corporate tax rates in the February 2016 budget (see Exhibit 6 for details of tax rates for companies and individuals in different income categories). However, it has removed several exemptions from April 1, 2017 (see Exhibit 7 for details).

  We see the reduction of income tax at a time of general economic weakness as a calculated gamble to boost direct tax revenues over a period of time. We believe the buoyancy effect of lower tax rates and contribution from the hitherto unreported economy will make up for any losses in taxation revenues from lower tax rates. The government will gain from additional excise/GST or service tax/GST revenues as the case may be in addition to corporate taxes

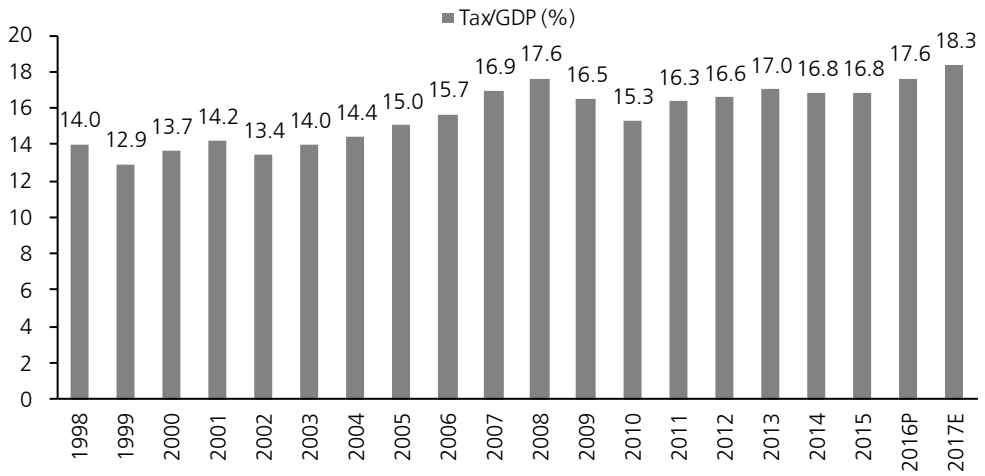
- **Reduce tax rate for companies below a certain threshold PBT or revenues.** We would recommend the government explore the option of lower corporate tax rates for companies below a certain threshold PBT or revenues. We note that the smaller companies (below PBT of ₹100 mn) account for only 14% of total corporate taxes (see Exhibit 8 for breakup of the government's corporate tax revenues by size of company in terms of pre-tax profits).

We would suggest the government cut the tax rate to 10-20% (graded or slab structure) for companies with PBT below ₹100 mn. It may want to consider an alternative approach based on revenues. In any case, the government will have better records of the tax payment to devise a proper graded structure. We note that the government's current tax structure for companies does not differentiate much between companies on the basis of size. The basic tax rate of 30% is common for all companies, only the surcharge amount varies (7% or 12%) depending on the size (revenues below or above ₹100 mn) of the company.

- **No scrutiny of accounts of previous years.** The government may want to consider a 'scheme' under which businesses can (1) re-file their income tax returns for the previous three years with revised incomes and (2) pay related higher corporate taxes (with some moderate penalty) over a period of time. We note that a key deterrent for business entities that have been under-reporting their incomes in the past to report their true incomes could be a scrutiny of the books of previous years by the IT authorities and consequent prosecution if they were to suddenly start reporting much higher incomes compared to the incomes filed in the income tax returns of the previous years.

  We note that the declarations of undisclosed income under a new scheme (Pradhan Mantri Garib Kalyan Yojana), which will be in force between December 17, 2016 and March 31, 2017, will not entail any additional liability for the person declaring the undisclosed income under the scheme. We reproduce the relevant section from the CBDT's (Central Board of Direct Taxes) press release, "*The declarations made under the Scheme shall not be admissible as evidence under any Act (eg. Central Excise Act, Wealth-tax Act, Companies Act etc.). However, no immunity will be available under Criminal Acts mentioned in section 199-O of the Scheme.*"

Exhibit 1: India's tax-to-GDP ratio is around 18%
Consolidated (central + states) tax-to-GDP ratio, March fiscal year-ends, 1998-17E (%)



Notes:
(a) For FY2017 we assume state taxes to grow in line with nominal GDP growth of 10%.

Source: CEIC, Kotak Institutional Equities estimates

Exhibit 2: 80% of the demonetized currency has been cancelled
Summary of amount deposited and withdrawn during the de-monetization exercise in India (Rs tn)

	Nov 10-Nov 27	Nov 10-Dec 5	Nov 10-Dec 10
Old currency cancelled	8.1	11.6	12.4
New currency introduced	2.5	3.8	4.6

Source: RBI, Kotak Institutional Equities

Exhibit 3: Salient features of Pradhan Mantri Garib Kalyan Deposit Scheme, 2016 and Taxation Laws (Second Amendment) Act, 2016

Under the Pradhan Mantri Garib Kalyan Deposit scheme, 2016: (a) Declaration under the scheme can be made by any person in respect of undisclosed income in the form of cash or deposits in an account with bank or post office or specified entity (b) Undisclosed income in the form of cash or deposits can be declared. 30% tax on undisclosed income + 33% surcharge on tax + penalty of 10%. Total rate comes to 50%. Additionally, mandatory interest free deposit of 25% of the undisclosed income will be blocked for four years (c) The income declared under the scheme shall not be included in the total income of the declarant under the Income-tax Act for any assessment year (d) The declarations made under the scheme shall not be admissible as evidence under any Act (for example, Central Excise Act, Wealth-tax Act, Companies Act etc.). However, no immunity will be available under Criminal Acts mentioned in section 199-O of the Scheme
Non-declaration of undisclosed cash or deposit in accounts under the scheme will render such undisclosed income liable to tax, surcharge and cess totaling to 77.25% of such income, if declared in the return of income
In case the same is not shown in the return of income a further penalty of 10% of tax shall also be levied followed by prosecution
It may be noted that the provisions for levy of penalty for misreporting of income at the rate of 200% of tax payable under section 270A of the Income-tax Act have not been amended
The Taxation Laws (Second Amendment) Act, 2016 has also amended the penalty provisions in respect of search and seizure cases. The existing slab for penalty of 10%, 20% & 60% of income levied under section 271AAB has been rationalized to 30% of income if the income is admitted and taxes are paid. Otherwise, a penalty of 60% of income shall be levied

Source: Ministry of Finance, Kotak Institutional Equities

Exhibit 5: Crackdown on undisclosed income and wealth
Various initiatives have been taken to curb domestic and foreign black money

Initiatives	Description
Special Investigation Team (SIT) on black money	The Supreme Court-appointed SIT was formed to investigate assets abroad and come up with guidelines to curb generation & circulation of black money. SIT has recommended various administrative and institutional measures through various reports
Foreign Black money compliance window	A 90-day window was provided in 2015 to declare undisclosed foreign assets; Rs42 bn was disclosed at a penal tax rate of 60%
Black Money Act, 2015	Aims to create a framework to tackle and ensure compliance with regards to black money abroad by residents. CBDT is the currently the administrative authority. Stringent provisions: Undisclosed foreign assets to be taxed at 30%; penalty at 3X of tax payable with imprisonment from 3-10 years
Income Declaration Scheme, 2016	A one-time window was provided for resident Indians to declare their undisclosed assets and pay taxes on them without incurring punitive actions. More than Rs650 bn was disclosed under this scheme
Mandatory PAN requirements	Government has made it mandatory to use PAN for all transactions done through cash or prepaid cards, including jewelry, above Rs0.2 mn. PAN is mandatory for purchases of immovable properties above Rs1 mn
New DTAAs signed along with renegotiation of old ones	India has signed DTAAs with Cyprus, Mauritius and Singapore, which are aimed at limiting round-tripping of money into capital markets. Government has negotiated an automatic information exchange agreement with Switzerland and is negotiating similar treaties with other tax havens
Using FEMA to regulate exports earnings	In line with the recommendations from the SIT nearly 788 exporters (as of July 2016) were being probed for not bringing back earnings to India within the stipulated timeframe
Amendments to Prevention of Money Laundering Act 2002, vide Finance Act, 2015	The act has been amended to enable attachment and confiscation of equivalent assets in India wherever assets located abroad cannot be confiscated
Enforcement measures	Ministry of Finance notified that surveys (until May 2016) over past two years have led to disclosure of around Rs450 bn of undisclosed income. There has also been a significant rise in criminal prosecutions filed
Ban of extant Rs500 and Rs1,000 notes	Indian government announced that currency notes of Rs500 and Rs1,000 denomination would not be a legal tender from November 8 midnight. New notes of Rs500 and Rs2,000 will be introduced
Pradhan Mantri Garib Kalyan Yojana, (PMGKY) 2016	Undisclosed income in the form of cash or deposits can be declared. 30% tax on undisclosed income + 33% surcharge on tax + penalty of 10%. Additionally, mandatory interest free deposit of 25% of the undisclosed income will be be blocked for four years

Source: Press releases, Kotak Institutional Equities

Exhibit 6: No changes to income tax rates and deductions for FY2017
Income tax rates for individuals and companies for FY2017

Individual tax rates	Up to Rs250,000 - Nil
	Above Rs250,000 - Rs500,000 - 10%
	Above Rs500,000 - Rs1,000,000 - 20%
	Above Rs1,000,000 - 30%
Senior citizen (60 years)	Exemption limit - Rs300,000
Very senior citizen (80 years+)	Exemption limit - Rs500,000
Surcharge	15% on income exceeding Rs10 mn
Education cess	3%
Corporate tax rates	Up to Rs100 mn - 30% + surcharge of 7%
	Over Rs100 mn - 30% + surcharge of 12%

Source: Ministry of Finance, Kotak Institutional Equities

Exhibit 7: Government has proposed measures to phase out deductions and exemptions to companies
Measures to phase out deductions

Section	Proposed phase out measures/amendments
Sec 10AA: Profit linked deductions for units in SEZ for profit derived from export of articles or things or services	No deduction shall be available to units commencing manufacture or production of article or thing or start providing services on or after April 1, 2020
Sec 32: Accelerated depreciation	To restrict the highest rate of depreciation to 40% for all the assets (whether old or new) falling in the relevant block of assets with effect from April 1, 2017
Sec 35: Deduction for expenditure on scientific research	To reduce the weighted deduction under section 35(1)(ii), 35 (2AA) and 35 (2AB) to 150% from FY2018-20 and 100% from FY2021. Deduction under section 35(1) (iia) and (iii) shall be reduced from 125% to 100% with effect from April 1, 2017
Sec 35AC: Deduction for expenditure on social projects	No deduction shall be available from FY2018
Sec 35AD: Investment linked deduction for specified business	To reduce the deduction from 150% to 100% in the case of a cold chain facility, warehousing facility for storage of agricultural produce, an affordable housing project, production of fertilizer and building and operating hospitals with effect from April 1, 2017
Sec 35CCC: Deduction for expenditure on agricultural extensions project	To restrict the deduction to 100% from FY2018
Sec 35CCD: Deduction for expenditure on skill development project	Weighted deduction of 150% shall be available up to FY2020, the deduction shall be restricted to 100% from FY2021
Sec 80-IA: Deduction for development of infrastructure facility	No deduction shall be available to enterprise which starts development, operation and maintenance of any infrastructure facility on or after April 1, 2017. It is further proposed to provide that the development, operation and maintenance of an infrastructure facility beginning on or after April 1, 2017 shall be eligible for investment linked deduction under section 35AD
Sec 80-IAB: Deduction for development of Special Economic Zone	No deduction shall be available where the development of SEZ begins on or after April 1, 2017
Sec 80-IB: Deduction for production of mineral oil and natural gas	No deduction shall be available to an undertaking engaged in production of mineral oil or natural gas if the production commences on or after April 1, 2017

Source: Union Budget documents, Kotak Institutional Equities

Exhibit 8: Effective tax rate of Indian corporate is low at 24.7% for FY2015
Effective tax rate of Indian corporate, March fiscal year-end, 2015

	Companies	Share in (%)			Eff. tax rate
PBT	(#)	PBT (A)	Total Income (B)	Corp. tax payable	(%)
Less than Zero	254,079	—	0.6	0.5	—
Zero	18,080	—	6.5	2.8	—
Rs0-10 mn	276,531	2.7	3.4	3.3	29.4
Rs10-100 mn	26,983	6.8	7.5	7.4	27.0
Rs100-500 mn	5,130	9.2	9.1	9.5	25.5
Rs500 mn-Rs1 bn	894	5.2	5.0	5.3	25.1
Rs1-5 bn	895	15.6	14.6	15.1	24.0
Greater than Rs5 bn	297	60.6	53.3	56.2	22.9
All sample companies	**582,889**	**100**	**100**	**100**	**24.7**

Source: Ministry of Finance, Kotak Institutional Equities

Executive summary

Every single day of every week, an estimated 150,000 new Chinese shoppers join the ranks of the hundreds of millions in the country who have discovered the world of e-commerce. Online retail penetration in China reached 11% in 2014 and surpassed RMB 2.9 trillion in total value. Penetration is expected to double by 2020, according to our estimates, with the total value skyrocketing to RMB 10 trillion. But this dramatic adoption of online shopping is not the biggest news to emerge from Bain & Company's latest research on China's e-commerce market. The exciting finding is the way that e-commerce is now shaping consumer behavior and the profound influence those shoppers are having on online sellers. Despite the massive and steady growth in penetration and value, China e-commerce is rapidly evolving to become more than a numbers game for both consumers and sellers.

In the earliest days of e-commerce, the major reason consumers went online was for lower prices on generic goods than they could find in physical stores. Now, in record numbers, they're swiftly growing in taste and sophistication, turning to online commerce for quality products and brand names and looking for a satisfying shopping experience. In response, sellers have made a similar shift from the quantitative to the qualitative. Sure, it's still important for them to grow the number of shoppers, but it's no longer an aggressive and single-minded land grab. Now it's critical for them to develop the best brand strategies and investments to serve an increasingly savvy market, seeking valuable customer insights that can help them hone their branded offerings and improve everything from marketing to supply chains.

To help us understand how brands are adapting and transforming their strategies amid these changes in the world's largest digital marketplace, we partnered with AliResearch, Alibaba Group's research arm. We focused much of our research on six major trends in the e-commerce market that we expect to intensify in the next few years:

- **The market is becoming increasingly structured.** The changes in today's e-commerce market are not dissimilar to those that occurred when shoppers made the leap from wet markets to shopping malls. E-commerce started out as a vast C2C marketplace but has steadily given way to sophisticated B2C players. Today, B2C accounts for half of all online sales, a portion that is expected to grow to 70% by 2020, with B2C heavily concentrated among a handful of players.

- **Online shopping is becoming better integrated into daily life.** The year 2015 will be remembered as the one in which mobile e-commerce outgrew PC sales for the first time, as Chinese consumers took advantage of their ability to buy online—anytime and anyplace—via mobile phones. Chinese consumers now make 55% of their online purchases from their mobile phones, and that figure is expected to grow to 70% by 2020.

- **The era of branded[1] Internet goods is upon us.** Chinese consumers are trading up, and the Internet is playing a key role by providing easier, less expensive and more efficient access to brands. The share of online branded products increased by 7 percentage points in the past three years to 65%, accounting for RMB 1 trillion in sales. This translates into approximately RMB 750 per capita for branded goods bought online, or 4% of China's retail market size.

- **Contributing to this boom in branded online sales, smaller brands find themselves unrestricted by the many barriers to entry and route-to-market obstacles they often encounter in the offline world.** As a result, they're growing quickly online, leveraging lower-cost channels such as product reviews for communication and branding. In the old world, only the biggest brands had the scale that enabled access to distribution, marketing and the other capabilities required to win in the offline world. As such, they had a significant advantage over smaller brands. What's now changed is that smaller brands are on equal footing. They can reach and serve consumers—the same consumers targeted by top brands—anywhere, instantly and directly, by making the most of such newly available capabilities as digital advertising. This development has served as a wake-up call for bigger brands, who are watching advances in sales and influence among smaller brands. The figures are impressive. Regional and pure-play online brands grew by 74%, and lesser-known brands grew by 69%—surpassing the 53% gains made by top brands. To be sure, top brands still dominate in highly standardized categories like consumer electronics, where they control a 70% share of online sales. However, smaller brands claim a higher share in more personalized categories. In apparel, for example, smaller brands have achieved about 50% share compared with bigger brands' share of less than 10%.

- **While the Internet helps smaller brands by offering them ease of entry, it also provides a huge boost to top brands by giving them greater access to lower-tier cities.** Lower-tier cities are the new major battlefield, thanks to rising household incomes and a growing number of consumers who are discovering online shopping and the value of top brands. E-commerce allows these bigger brands to compensate for the lack of physical distribution networks in these areas, delivering higher penetration and strong sales. In most categories, top brands performed as well as smaller brands in lower-tier cities; they even surpassed smaller brands in the consumer electronics and food categories.

- **Online-to-offline commerce (O2O) is becoming a reality, organically and through M&A and partnerships.** Over the past year, horizontal platforms such as Amazon and Alibaba—which sell multiple product categories—have responded to the new emphasis on brands by building closer alliances with vertical and brand-owned platforms, as well as with offline retailers, which focus on a limited number of categories and typically are closer to their customers. For example, Alibaba invested in Suning, JD.com invested in Yonghui, and Tencent and JD jointly launched "Jing Teng plan." These moves allow horizontal platforms to acquire consumer information and create more customer touchpoints via physical stores or social platforms, helping to deliver the long-promised era of O2O retailing.

- **Sales generated from overseas sites are on the rise.** This trend has continued to gain momentum as Chinese consumers look to retailers outside the country for products that deliver higher assurances of health and safety. Shoppers are turning to sites in Australia and New Zealand, for instance, for baby food and to US-based sites for apparel and electronics. Such global sales are expected to grow annually by 30% in the years ahead, reaching a total value of RMB 1 trillion by 2020.

As consumers in all city tiers increase their reliance on e-commerce and their preference for quality goods, online retailers and brands are responding. They're finding it necessary to match their consumers' growing sophistication with innovative business models. It's no longer a matter of just making generic products available at a low price. Emerging leaders are breaking their old patterns of indirect communication with consumers and developing creative ways of co-creating brands with consumers, making the most of multiple touchpoints across the value chain.

The leaders see this as a transformation process that starts with a clear digital ambition and requires defining a digital operating model along the value chain (including R&D and supply chain, marketing and CRM, sales and channel), supported by a digital organization and infrastructure. Our analysis of Alibaba data, combined with executive interviews, enabled us to identify the common patterns that leading companies are using across the Internet value chain. We found that winners typically focus their efforts in different areas depending on their phase of development.

- **Beginners** build standalone online marketing and sales systems, supplemented with a small digital sales team.
- **Intermediates** integrate online and offline channels for more targeted, proactive and efficient consumer engagement across multiple touchpoints. They rely on a full-function digital team or an integrated team for both online and offline channels.
- **Experts** disrupt the established business model with an innovative, consumer-led value chain configuration, supported by project teams that are focused on multiple consumer segments.

Among the biggest changes in China e-commerce is the emergence of the new model of co-creation between brands and consumers. We find that some companies aim to just keep pace with the fast-changing market, while others strive to disrupt it. Either way, the most successful companies work to change their company mindset, creating a culture of learning, risk-taking and innovation. Winners focus on finding new ways to engage with customers and integrate customer feedback into new products. Based on our research, we see that leaders follow a rigorous three-step process to design a digital transformation manual and develop the digital transformation roadmap tailored to their brands. The journey begins when they ask and answer a list of key questions involving overall strategy, industry and company digital transformation progress assessment, digital vision, available resources and mobilization approaches.

1 Throughout this report, top brands refers to multinational and national brands with national distribution and high awareness across China; regional and pure online brands refers to those with distribution or brand awareness only in a few provinces; lesser-known brands refers to those with legitimate brand logos and registered trademark, no brand awareness beyond a few original cities or no brand propositions, with limited distribution network and brand and marketing investments; no brand refers to those with no registered trademark, unidentifiable or no brand logos, also including categories with weak brand attributes (such as agriculture products, handicrafts, DIY products, customized furniture, hardware tools, books and video).

KNOWLEDGE@WHARTON

MANAGEMENT

Walmart vs. Amazon: Is India the Next Battleground?

Dec 05, 2016 Asia-Pacific, India

Amazon is on overdrive in India. Earlier this year, the world's largest online retailer became the second-largest online marketplace in the country by shipments and gross merchandise value. (Flipkart remains number one in India.) It also announced an additional $3 billion investment, taking its total investment in India to $5 billion; it launched its popular subscription-based program Amazon Prime to drive customer loyalty; and it announced that it would be soon be introducing its Prime Video service. Recently, in October, the firm launched its "Global Store" for Indian customers enabling them to buy products sold on its U.S. website while paying in Indian currency. Prior to this, while customers from India could buy on Amazon's U.S. website, they had to pay in dollars.

Amit Agarwal, Amazon India's vice president and country head, says that "enhancing shopping experience" for customers is "one of the key pillars" for the company. With the Global Store, customers in India will have direct access to thousands of international brands and a starting selection of over 4 million global products. While initially the Global Store will

have products from the U.S., over time, products from other key markets such as the U.K., Germany and Japan are also expected to be listed. India, which is one of the fastest growing e-tail markets around the globe, is the third country after China and Mexico to get the Amazon Global Store. This move will no doubt help Amazon compete more vigorously against Flipkart.

More importantly, perhaps, it will also help strengthen the company's arsenal against the imminent entry of Walmart — the world's largest brick-and-mortar retailer and its arch rival.

Amazon, though, is silent on Walmart's reported entry into this segment. "We are not competition-focused, but customer-obsessed," says Agarwal. "Our goals and our targets are only focused on our building a better experience for our customers and sellers."

Walmart's Entry: A Matter of Time

According to media reports, Walmart is all set to join the Indian e-tail party soon. While the company is reported to be talking to several Indian e-tailers like Snapdeal and Shopclues, the strongest buzz is around Walmart entering into a strategic alliance with Flipkart or making an investment in the company, possibly to the tune of $1 billion. While both Walmart and Flipkart refuse to comment on what they term as "speculations," Rajneesh Kumar, senior vice president and head of corporate affairs at Walmart India, says: "E-tail is undeniably a very big change and is here to stay. Understandably, that is where the consumer is going. We believe the next five years will belong to those who commit to provide an omni-channel experience to customers."

> **"Think of it as an alliance of the 'Amazon-worrieds.'"**
>
> –Kartik Hosanagar

Walmart currently has 21 cash & carry wholesale format stores, called Best Price, across nine states in India. This number is expected to increase to 70 over the next three to five years. According to Kumar, currently all stores (which are open only to commercial and institutional customers) provide an omni-channel shopping experience to the members. "B2B e-commerce is a major driver of growth for us in India," says Kumar. He adds: "For us, India is

a long-term commitment. It is a growing economy and hence an important market. We

continue to look at all opportunities and keep scanning the business environment on how we can serve our business members better."

Industry observers and experts believe that it is only a matter of time before Walmart makes a foray into online retail in India through some kind of an investment or partnership with a leading Indian e-tailer. Kartik Hosanagar, Wharton's professor of operations, information and decisions, whose research focuses on the digital economy, in particular Internet media, Internet marketing and e-commerce, notes: "Walmart has been interested in India for quite some time now. They explored a partnership with Bharti but that fell through. [In 2007, Walmart had entered into a 50:50 joint venture with Bharti Enterprises. The partnership broke off in 2013.] Internet companies that are more used to a different pace and greater transparency are a better partner for Walmart."

Hosanagar believes that Walmart's India strategy will borrow heavily from its China experience: It will "partner with local companies that have better local knowledge." He points out that in China, Walmart started with a small investment in Yihaodian. Later, it purchased Yihaodian in its entirety. And more recently, it has partnered with JD.com, including selling Yihaodian to JD.com. "This way, it has partnered with China's second largest e-commerce company to take on Alibaba (the e-commerce leader in China). This also allows Walmart to focus on its offline stores and simply set up an online store on JD.com."

Hosanagar also points to Walmart's recent acquisition of Jet.com in the U.S. for $3.3 billion. He notes that even though Jet.com is unproven, Walmart was willing to pay a considerable amount because "it finally found a proven [individual, Jet.com co-founder] Marc Lore, who is willing and capable of taking on Amazon.com." A partnership with a player like Flipkart will seek to do the same in India, says Hosanagar. "Think of it as an alliance of the 'Amazon-worrieds.'"

Ankur Bisen, senior vice president for retail at Technopak Advisors, considers Walmart's reported moves in India to be in line with its global strategy. He says: "With the acquisition of Jet.com in the U.S., Walmart has put e-commerce at the heart of its growth strategy. It wants to protect its status as a dominant global retailer and recognizes the need to align with the rapidly changing world of retail. It also signals that it will not shy away from either building this capability in-house or pursuing acquisition opportunities, or both." In India, Bisen notes, Walmart has organically built a cash & carry business that has "grown reasonably well" and has also started piloting "multi-channel options" in this business. Says Bisen: "This is in line with Walmart's global approach of re-modeling brick businesses into multi-channel businesses."

Rishikesha Krishnan, professor of corporate strategy and policy at the Indian Institute of Management (IIM) Bangalore and currently director of IIM Indore, sees Walmart partnering

with Flipkart as a logical move. The current policy environment in India is not conducive for Walmart to make a direct entry into physical retail. But since the policy allows marketplace models in e-tail, Walmart can have a piece of the market via Flipkart. "There is a saying that an enemy's enemy is a friend. Besides, Flipkart has shown the ability to compete strongly with Amazon for the Indian market. And India is the "next big thing" in retail. So it makes sense for Walmart to have a position in this market," says Krishnan. S. Raghunath, professor of corporate strategy and policy at IIM Bangalore specializing in strategic alliances and strategic leadership, adds: "Walmart has been trying very hard to up the ante in online retail. The acquisition of Jet.com in the U.S. followed by the news about Walmart's interest in acquiring a stake in Flipkart fits with the company's thrust to increase its play in the online retail space and add to its competitive strength."

Power of Global Sourcing

The big question is: What impact will the entry of the world's largest retailer have on online retail in India?

"The Indian e-tail ecosystem will have a superior supply chain and a wider variety of products than what is currently available," says Sreedhar Prasad, partner-business consulting at KPMG India. Prasad notes that while players have been investing in the last mile, customer experience and so on in recent years, there has not been much action in terms of bringing in newer and different products to Indian customers; e-tailers are sourcing from the same suppliers or the same type of suppliers. Prasad believes that this is where global players like Walmart or Tesco can add a lot of value in India.

> **"The Indian e-tail ecosystem will have a superior supply chain and a wider variety of products than what is currently available."**
>
> –Sreedhar Prasad

"If it is just an investment by a global player in a big Indian e-tailer, then it is not of much interest. But if there is an alliance between two [big players], then I am very bullish about it because the global supply chain giants enabling Indian e-tail can be a very powerful trend in the sector. The power of global sourcing, including sourcing from India itself, can be a big impetus to the e-tail ecosystem in India," says Prasad.

Devangshu Dutta, chief executive of consulting firm Third Eyesight, notes that since its breakup with Bharti, Walmart in India has been restricted to its cash & carry wholesale business, Best Price, which primarily sells to small businesses. It has also been experimenting

with overlaying e-commerce as an extension to the Best Price business. "An investment into an e-commerce platform could give it additional inroads into the consumer retail market by proxy. For a platform such as Flipkart, Walmart can provide additional product expertise and also allow it to diversify the merchant base as Flipkart needs to under the foreign direct investment (FDI) regulations."

IIMB's Raghunath suggests that Walmart can use the Flipkart connection to turn its current B2B stores in India into online retail business opportunities and warehouse locations for delivery. "Flipkart data can be useful for Walmart to project buyer behavior and preferences. Flipkart can be the front end with Walmart at the back end," says Raghunath, adding that if the relationship works out, Walmart may look at deepening it further and "become a major player" in the Indian online retail market. Krishnan believes that any alliance between Flipkart and Walmart would be a "win-win" for both. "We don't know the terms of Walmart's investment in Flipkart, but if [Walmart] can get access to Indian retail/consumer data through this association that would be invaluable to them should they re-enter conventional retail."

Third Time Lucky?

But Walmart's India foray has not created any big waves up to now. As noted earlier, its partnership with Bharti Enterprises broke off in 2013 and since then, while it has been growing its cash & carry business, Walmart has been a fairly low-key player in India. Dutta, however, feels that its new partnership could work out differently. "Partnerships are an outcome of the objectives and behavior of both partners being in sync. The Bharti-Walmart joint venture broke up because the two partners viewed the Indian market, growth plans and investment needs very differently, within the constraints placed by the FDI policy. Any other potential relationship Walmart creates will be driven by the dynamics of that specific relationship, and their respective leadership teams at the time," he notes.

> **"Retail is a dynamic and intensely local business, and success in one market is no guarantor of success in another."**
>
> –Devangshu Dutta

Bisen adds that e-tail in India has matured to a level where entry barriers are significantly high for a new entrant to gain market leadership. Walmart will be looking to "get a foot in the door in [what is] perhaps the last significant market opportunity for e-commerce where the pecking order is yet to shape up." According to Bisen, Technopak's view is that 80% of the e-

pecking order is yet to shape up." According to Bisen, Technopak's view is that 80% of the e-commerce market is almost always marketplace driven and most major e-commerce markets are dominated by two players. He believes that the Indian market will also evolve towards this direction in the next four to five years. He expects Flipkart, Amazon and Alibaba backed ecosystems to occupy 80% of the Indian e-commerce market. "Who among the three will lead is an interesting narrative that will unfold and will solely be dependent on the strategies of these individual players," says Bisen. What role Walmart plays in this remains to be seen.

According to the New York-based market research firm eMarketer, Walmart is the second largest online retailer in the U.S. after Amazon. However, while Amazon's pure e-commerce revenue represents 74.1% of total sales, Walmart has e-commerce revenue of just 2.8% of its total sales.

Can Walmart's entry in Indian e-tail help it in its battle with Amazon worldwide? Not necessarily, says Dutta. "To my knowledge, there are no retail rivalries that are truly global in nature. While companies may be multinational, retail is a dynamic and intensely local business, and success in one market is no guarantor of success in another."

SECTOR UPDATE

MEDIA

Amazon Prime Video: Queering Netflix India's pitch?

India Equity Research | Media

India's OTT market is at a nascent stage, but different players have been launching their apps to test the waters here. The global player, Amazon Prime Video is the latest entrant (launched recently) after Netflix which marked its entry in Jan 2016. Meanwhile, local players like *Hotstar*, *Voot* and *Sony Liv* continue to explore their niche in the OTT space. Balaji Telefilm's *ALT digital* (to be launched in Q4FY17) is producing exclusive content for online viewers. Given that the market is likely to get crowded very soon, we expect consolidation once the initial euphoria wanes. We believe OTT will be an additional revenue stream for broadcasters like ZEE, Sun TV and TV18. Further, we believe OTT will have limited impact on DTH/cable TV players as: (1) local content is still limited; (2) pirated/free content is easily available; (3) consumption of video on second screen will rise; and (4) consumer spending on video viewing will increase.

Netflix versus Amazon Prime Video

Amazon Prime Video, Netflix's new rival, promises to change the rules of game. **Amazon Prime Video's unlimited ads free and on-demand services come for an annual subscription of INR499 versus Netflix's INR500 (basic pack) per month. This works out to ~INR42/month.** Amazon Prime Video is bundled with Amazon Prime (offers shipping discounts, etc). Also, existing subscribers of Amazon Prime can access video streaming at no extra cost. **Amazon Prime Video will also participate in IPL bidding, which if it wins, will help in customer acquisition.** However, Amazon Prime Video lags Netflix in terms of original content.

Improving internet speed to drive OTT

In India, even as internet penetration has been improving, **internet speed (average internet broadband speed is 3.5mbps) has been lagging many Asian counterparts** (South Korea tops with 29mbps speed, which is more than 4x the global average of 6.3mbps). **However, with internet speed improving (RJio is addressing the issue), we expect consumption of video (TV, laptop and desktop) in India to increase to ~5.0 hours per day from ~3.5 hours per day, aided by higher OTT consumption.** Hence, we expect OTT to complement traditional TV viewing and act as a second screen. Also, we expect India to track some of the trends visible in the US markets including: i) increase in digital content origination; and ii) binge viewing.

Will OTT trigger higher consumer spending?

Today, India is what US was 7 years ago. We expect the Indian OTT companies to gain traction over longer 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 levels of INR300-450 to INR600-750 to access content from different platforms.** However, we expect negligible loss of traditional subscribers (TV) due to affordable cable ARPUs of INR300-450 per month. Hence, **the cord-never phenomena seen in the US will be significantly low in India.**

Abneesh Roy
+91 22 6620 3141
abneesh.roy@edelweissfin.com

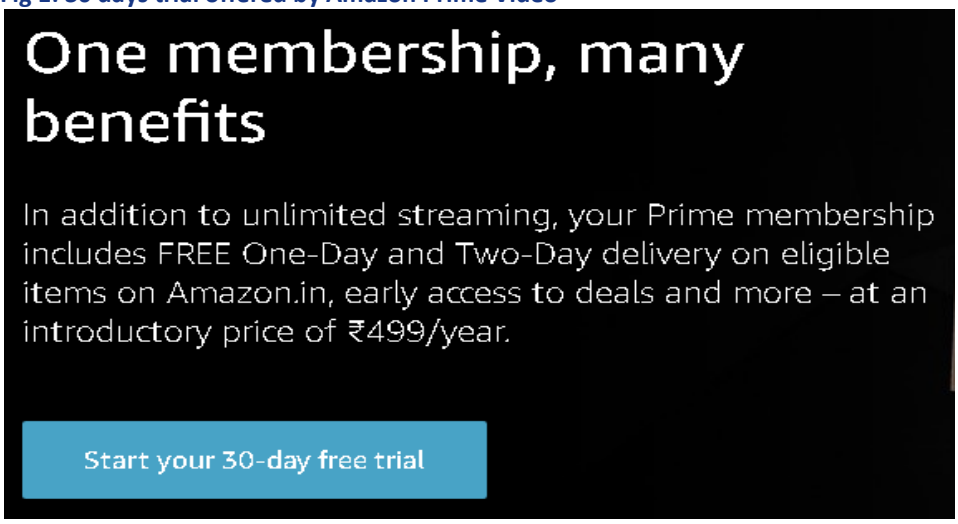
Rajiv Berlia
+91 22 6623 3377
rajiv.berlia@edelweissfin.com

December 21, 2016

Netflix versus Amazon Prime Video

Amazon Prime Video is Netflix's latest rival which promises to change the rules of the game. E-commerce player, Amazon, launched its video streaming service - Amazon Prime Video - across 200 countries including India. Amazon Prime Video is bundled with Amazon Prime, a subscription that offers shipping discounts among other benefits. Those who already subscribe to Amazon Prime can now also avail of video streaming and at no extra charge. Amazon Prime Video's unlimited ad-free on-demand service comes **much cheaper** for an **annual subscription of INR499 versus Netflix's INR500 (basic pack) per month. This works out to ~INR42/month.** Amazon Prime Video membership rates are expected to go up to INR999 annually, which works out to INR83/month, still a fraction of what Netflix subscribers shell out. However, **Amazon Prime Video lags Netflix in terms of original content (*Narcos, Orange Is The New Back, Jessica Jones, House of Cards* in Netflix versus *Transparent, Good Girls Revolt, Mozart in the Jungle* in Amazon Prime Video).** *Hotstar*, Star's OTT platform, too offers its premium content at INR199/month.

Fig 1: 30 days trial offered by Amazon Prime Video



Source: Amazon, Edelweiss research

Fig 2: Movies and shows offered by Amazon Video Prime

Source: Amazon, Edelweiss research

Table 1: Netflix, Amazon Prime Video compared

	Netflix	Amazon Prime Video	Winner
Launch date	Jan-2016	Dec-2016	
Pricing	INR500 (basic pack) per month	INR499 per annum	Amazon Prime Video
TV shows	Breaking Bad, Suits, and Dexter	Mr Robot, The Night Manager, The Vampire Diaries, Seinfeld	Tied
Original content	Narcos, Orange is the new Back, Jessica Jones, House of Cards	Transparent, Good Girls Revolt, Mozart in the Jungle	Netflix
Movies	Antz, Argo, Catch Me If You Can	Godfather Part I and II, and Chinatown	Netflix
Indian Originals	MCREAM, Talvar, Uturn, BA Pass, Dhanak, Raman Raghav 2.0	Kabali, Sarabjit, Fan, Dil Dhadakne Do, Shaandaar, Talaash	Amazon Prime Video
Language	English, Hindi, Tamil, Bangla	English, Hindi, Tamil, Telugu, Marathi, Bangla	Amazon Prime Video
Offline options	Present	Present	Tied
Trial period	30 days	30 days	Tied
HD channels	Not present in basic pack	Available (available)	Amazon Prime Video
Other benefits	None	Amazon Prime (a subscription that offers shipping discounts among other benefits	Amazon Prime Video
Sports	No plans	Will bid for IPL	Amazon Prime Video
Screens you can watch on at that time	1 (Basic)	3	Amazon Prime Video
Payment	No option of Cash on delivery	Cash on delivery accepted	Amazon Prime Video

Source: Edelweiss research

Obstacles to OTT

There is lot of bugaboo about the proliferation of digital media in India. India too is estimated to follow the same consumption pattern as in US with surge in internet penetration. However, currently, broadband infrastructure in the country is too inadequate due to which internet penetration is limited to ~27.5%. Further, available wired broadband speeds to paying consumers in India are far below what the service providers promise. A data service package that promises 8mbps typically max out at 5mbps. This is due to high contention ratio (that measures the number of internet users sharing a fixed amount of bandwidth) given limited availability of bandwidth.

Nonetheless, mindset of consumers is rapidly shifting from '*what is on TV*' to '*what do I feel like watching on digital*'. **Hence, with the improvement in broadband infrastructure, promise of 4G and enhanced bandwidth speeds we expect OTT players to do well in India**

Low internet penetration in India

India has ~350mn internet subscribers out of which ~162mn are broadband subscribers (as per TRAI, internet speed above 512kpbs is defined as broadband). Further, ~21m are wired subscribers while the rest ~330mn are wireless subscribers. **We expect internet penetration to improve to ~55% in CY20 (at current 27.5%), aided by launch of 4G by Reliance Jio and infrastructure improvement in India.**

Table 2: Internet subscribers in India

(mn)	Q1FY15	Q2FY15	Q3FY15	Q4FY15	Q1FY16	Q2FY16	Q3FY16	Q4FY16	Q1FY17
Total Internet Subscribers	259	254	267	302	319	325	332	343	350
Narrowband subscribers	190	179	182	203	211	204	195	193	188
Broadband subscribers	69	76	86	99	109	121	137	150	162
Wired Internet Subscribers	19	19	19	19	19	20	20	20	21
Wireless Internet Subscribers	241	236	249	283	300	305	312	322	330
Urban Internet Subscribers	NA	NA	175	191	205	213	220	231	237
Rural Internet Subscribers	NA	NA	92	112	114	112	112	112	114
Urban Internet Subscribers per 100 population	NA	NA	45.3	49.1	52.5	54.4	55.7	58.3	59.5
Rural Internet Subscribers per 100 population	NA	NA	10.7	12.9	13.2	12.8	12.9	12.8	13.0
Total Internet Subscribers per 100 population	20.8	20.4	21.4	24.1	25.4	25.7	26.2	27.0	27.5

Source: TRAI, Edelweiss research

Another prominent offering by Reliance Jio apart from wireless internet services is wired broadband. The company has laid 0.25mn kilometres of fibre optic cables. Over next 3 years, Reliance Jio will more than double its fibre footprint. We believe the company will focus first on wireless broadband and then roll out its wired broadband businesses. Given this, companies like Hathway and Den Networks will expedite their broadband expansion which will in turn improve the wired infrastructure in India.

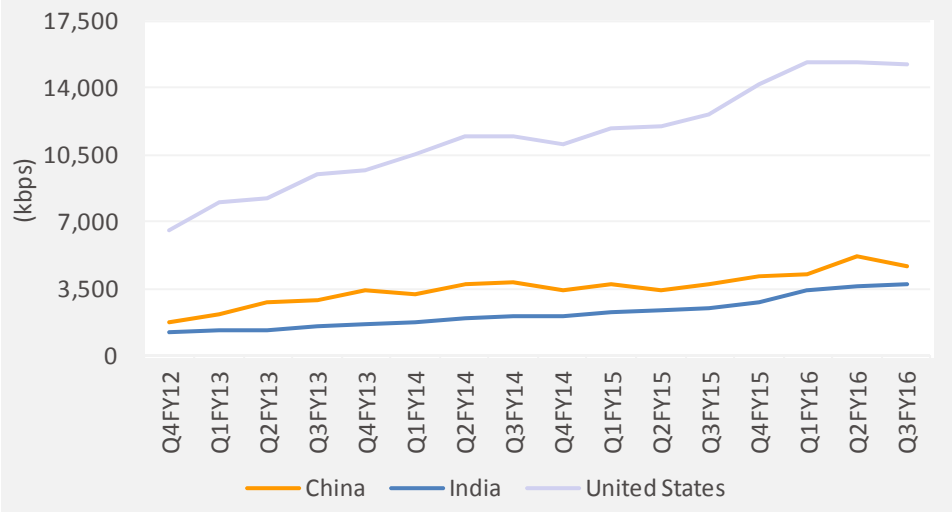
Infrastructure rickety

According to a global survey by Akamai, **India's average internet broadband speed is 3.5mbps.** While internet penetration has been improving in India, the country's internet speed lags far behind its Asian counterparts. The Indian government is looking to mandate a 4-fold increase in minimum broadband speed from 512kbps to 2mbps, which will exert pressure on internet providers to enhance speeds. The last time minimum internet speed was revised was in August 2014 when it was doubled from 256kbps to 512kbps. **South Korea tops with 29mbps speed, which is more than 4x the global average of 6.3mbps.**

As per the latest figures reported by Telecom Minister, there are ~350mn internet subscribers in India. While urban India has 237mn internet subscribers, rural India has 114mn subscribers accessing the internet. Given the total rural population of 876mn, an insignificant ~13% have internet access in rural India. This leaves much room for India to grow in terms of internet subscribers.

We expect migration to 4G services to help improve the internet speed (4G services promise data speeds in excess of 10mpbs). Further, 4G enabled smartphones are now available for as low as INR3,000 which will further aid internet speed.

Chart 1: Average connection speed



Source: state of the internet, Edelweiss research

Broadband ARPUs not favouring OTT companies

In the US, per month cable TV ARPU is USD60. This is one of the primary factors that drive the success of OTT companies (especially Netflix) in the US. The US cable industry saw dramatic rise in ARPU, partially aided by the analog-to-digital cable TV transition and additional fees for HD boxes. The pay TV providers have also passed on higher costs from the TV networks, in part due to higher prices for premium programming, such as, live sports and high-budget original content. Thus, when Netflix was launched with lower ARPU, it gained traction in US.

In India, however, OTT subscription rates (for SVOD) vary from INR50-500/month/subscriber. Further none of the OTT companies provide complete TV content. In addition to this, the subscribers have to pay broadband charges which are very steep. Broadband charges in India are ~INR250 per GB. In addition to this, subscribers pay ~INR300-450/month/subscriber for cable TV (including sports channels).

Our calculation suggest that broadband charges have to fall as low as INR2.4 per GB for users to consume 3.5 hours of video per day on internet.

Table 3: Data consumption while viewing on TV

Content quality	Time spend	Data consumed
SD content	1 hour	1GB
HD content	1 hour	2GB
4K content	1 hour	7GB

Source: Media sources, Edelweiss research

Table 4: Broadband ARPU not favoring OTT players

TV time spent per day (hours)	3.5
GB consumed per hour	1.0
Total GB per day	3.5
Total GB consumed per month	105
Data price per month (INR)	250
Per GB price (INR)	2.4

Source: Edelweiss research

Will TV consumption habits change in India?

An emerging trend known as cord cutting is being witnessed in the developed markets. OTT companies poaching the traditional TV viewers is called cord cutting. At times, consumers subtly trim their pricey cable packages to more basic cable packages. This is called cord shaving. Concerns are also emerging about new consumers opting for OTT instead of traditional TV due to ease, affordability and good content. Therefore, growth of traditional media is curtailed. The question is will a similar trend roll out in India too?

Table 5: Emerging phenomenon in developed markets

Phenomena	Description
Cord Cutting	OTT companies are poaching TV subscribers. Hence TV subscribers are switching off the cable subscription.
Cord Shaving	Instead switching off the cable subscriptions, consumer more subtly trim their pricey cable packages into more basic cable packages
Cord Never	New consumers are opting for OTT rather than traditional TV

Source: Edelweiss research

Consumer ARPU to increase

Currently, India spends ~INR300-450 per month on video viewing. Further, the current habit of Indians is to watch video primarily on TV. Therefore, we can safely assume that currently the entire ARPU spends go towards TV. **In next 5 years, we expect video ARPUs to increase from INR300-450 to INR600-750** driven by 2 factors: i) increase in per household income; and ii) higher video spends (as a % of per household income).

Table 6: Monthly ARPU in India to increase

	GDP (USD bn)	Population (mn)	No. of households (mn)	Per household income (USD)	ARPU annual (USD)	Video spends (% of per household income)	Monthly ARPU (USD)	Monthly ARPU (INR)
	A	B	C=B/4	D=A/C				
CY06	949	1,162	291	3,267				
CY07	1,239	1,180	295	4,200				
CY08	1,224	1,197	299	4,090				
CY09	1,365	1,214	304	4,498				
CY10	1,708	1,231	308	5,552				
CY11	1,816	1,247	312	5,823				
CY12	1,825	1,264	316	5,777				
CY13	1,863	1,279	320	5,825				
CY14	2,042	1,295	324	6,307				
CY15	2,074	1,311	328	6,326				
CY16E	2,289	1,331	333	6,880	65	0.94	5	350
CY17E	2,488	1,351	338	7,368				
CY18E	2,725	1,371	343	7,950				
Cy19E	3,007	1,392	348	8,644				
CY20E	3,315	1,412	353	9,389	88	0.94	7	478
Our assumption (Video spends to increase to 1.38% as % of				**9,389**	**129**	**1.38**	**11**	**700**

Source: World Bank, Edelweiss research

1USD = 65INR (assumption)

Video watching to increase

We expect video consumption to increase aided by digital viewing consumption. However, we believe the concerns on cord cutting is far stretched for India given that cable prices are still affordable and broadband prices are still steep. Further, in case of India, it is largely a single TV home market where not everyone in the family gets to watch what they want during prime time which will aid OTT space. Hence, we expect no impact in viewership and therefore no loss in TV ad revenues. **We expect video consumption in India to increase to 5.3hours/day (as seen in the US) as consumption in OTT picks up. OTT at best will act as a second screen.**

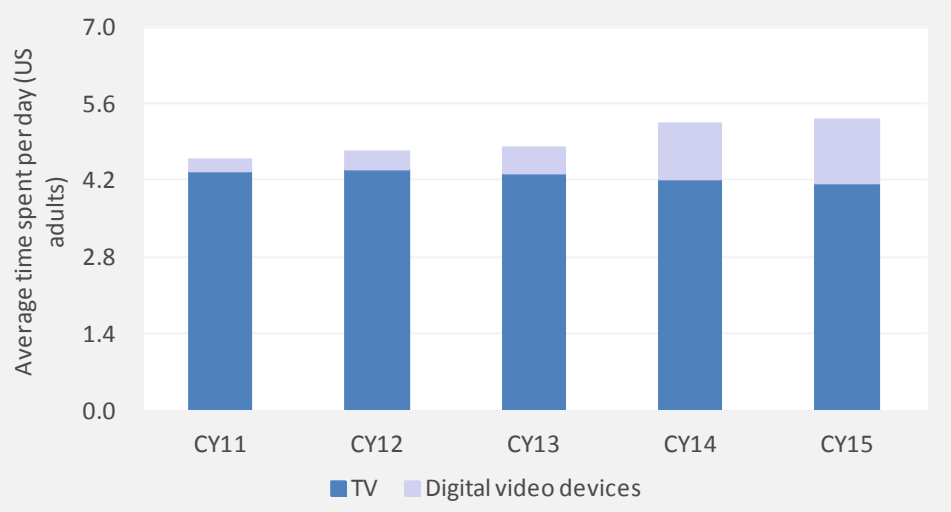
What's trending in the US?

In the US, proliferation of OTT companies has resulted in some loss of subscribers though the video consumption on TV hasn't changed much. In fact, video consumption in the US increased aided by proliferation of OTT players. However, loss of subscribers is resulting in lower TV ad revenues.

TV consumption in US

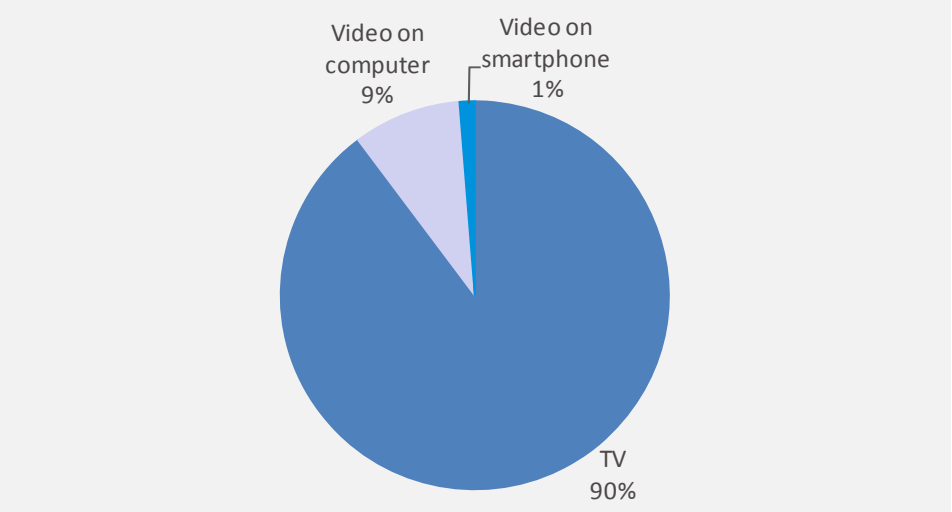
Average TV consumption in the US is ~5.3 hours aided by digital video. In CY11, the time spent on watching video on digital devices (mobile phones, tablets, laptops, etc) totalled 21 minutes per day. It increased to average viewing on digital devices to 1:16 hours per day in CY15 mainly aided by video viewing on mobile phones. Though there are some signs of cord cutting in US, the data on video viewing suggests (as of today) that digital video consumption is growing not at the expense of TV, but because video contents on digital devices are more popular.

Chart 2: Average TV consumption in US is ~5.3hours/day aided by digital video



Source: emarketer, Edelweiss research

Chart 3: Time spent monthly on device by 18 plus age group



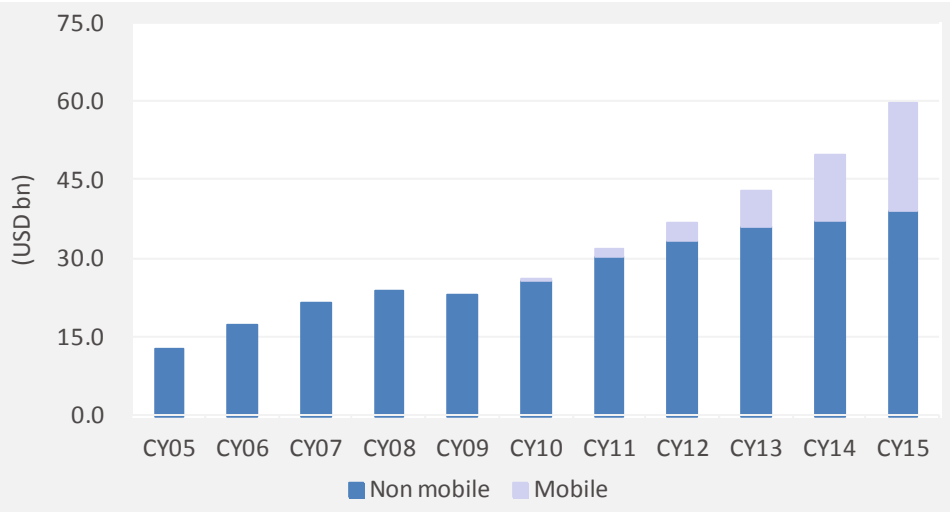
Source: Nielsen Total Audience Report 1Q16, Edelweiss research
** Total video=TV + internet video and smartphone video*
*** Even though digital use is up, Television still commands 90% of total video time*

Cannibalisation in the US

Though we expect digital video consumption to grow aided by popular video content, broadcasters are afraid of cannibalisation of their pay TV revenue. In fact, many distributors (cable and satellite companies) are securing channel rights to deliver content over the internet. Even with this step, the US pay-TV continues to lose subscribers. CY15 marked the third consecutive year of loss of pay TV subscribers.

To further unravel cannibalisation of US TV market, we analysed the shift of ad revenues from TV to online medium or drop in TV viewership. We observe that TV ad spends are growing, but ad spends in digital media is growing at faster rate than TV ad spends.

Chart 4: TV ad revenue growth slower than digital media in US



Source: IAB/Pwc internet ad revenue report, FY15

The CEO of Uber-competitor Gett tells why he thinks humans will be banned from driving in the future

ROB PRICE0DEC 13, 2016, 02.13 PM

Rob Price/BI

LONDON - At the start of December, Stephen Hawking issued a stark warning: Automation and AI are going to destroy middle-class jobs, risking massive political upheaval.
"The automation of factories has already decimated jobs in traditional manufacturing," the famed physicist wrote, "and the rise of artificial intelligence is likely to extend this job destruction deep into the middle classes."

It's an issue that Shahar Waiser knows about first-hand: In the coming years and decades, almost his entire workforce will become obsolete.

The Russian-born entrepreneur is the CEO of Gett - a taxi app used by thousands of cabbies in more than 100 cities around the world. And all of their jobs are at risk of being replaced by self-driving cars.

"The irony is I believe that 10 years after we will be allowed" to use autonomous vehicles, he said, "I think humans will be prevented from driving."

Gett isn't developing self-driving technology in-house. But following a $300 million cash injection from Volkswagen this year it is now positioned to leverage the German automaker's tech once it reaches maturity.

Business Insider sat down with Waiser at the TechCrunch Disrupt conference in London to discuss Gett's ambitions, the future of the taxi industry, and what this all means for its drivers.

Gett versus Uber: Two companies, two approaches

Uber and Gett take two very different approaches to the ride-hailing app business. While Uber has openly waged war on the established taxi industry around the globe - the "Big Taxi cartel," as CEO Travis Kalanick once put it - Gett has worked hard to court traditional taxi drivers. (Shahar claims half of all London's black cabbies currently use Gett.)

Launched in 2011, Gett has revenues of $500 million - and has had a series of major cash injections recently as it tries to keep up with $66 billion Uber's huge cash reserves.
In May 2016, it took $300 million from Volkswagen. And in November, it topped this up with a $100 million loan from Russian bank Sberbank, which will help fund expansion in Eastern Europe and Russia.

Interestingly, Sberbank is also an investor in Uber - a detail Waiser shrugs off. "They are professionals not to share information and different things. But more importantly you see hey have an interest in the space ... so it's great to see."

On the same day as our interview, Volkswagen - still recovering from its emissions scandal - announced a new initiative: Moia. It's a standalone mobility company that aims to build electric consumer shuttles and autonomous mass-transit vehicles.
Does the exec feel threatened by the fact VW seems to be hedging its bets in the space - and is creating a potential competitor? "No, not at all ... we are working really hand-by-hand," he said. "So the actual relationship between us is where we need each other to develop and progress over the vision each of us have." Gett has been speaking to Moia on a near-weekly basis pre-launch, Waiser said.

Volkswagen's interest in Gett was born out of the inescapable fact that the automotive world is changing fast. Ride-hailing offers people (in cities, at least) a viable alternative to car ownership. And the promise of self-driving cars - being developed from everyone from Audi to BlackBerry - means even greater shifts are on the horizon.

Shahar Waiser said he expects to see self-driving cars on the roads in significant numbers in between five and seven years. "You will see it happening in the major cities, and again as part of VW we want to be a big part of it."

There are some short-term gig-economy headaches

Transport companies like Uber and Gett might look forward to the day when they can dispose of drivers - but right now, they're part-and-parcel of the job. And in London, they've been causing headaches for Uber in a court case over their rights.
In October, an employment tribunal ruled that its drivers are workers, and entitled to certain benefits like sick pay, the minimum wage, and paid time off - a decision that Uber is appealing. It's part of a broader debate over the so-called "gig economy" - increasing numbers of people working in short-term, on-demand jobs, often enabled by smartphones. Advocates argue it gives workers unprecedented freedom in how and when they work, though critics counter that the model also causes insecurity and deprives people of their rights.

Unsurprisingly, Waiser is supportive of the business model. "I think what on-demand marketplaces actually produce is the opportunity for people to work on their own terms," he said.

Asked about Uber's legal woes, he said he didn't want to "comment on someone else's businesses," but very pointedly (and repeatedly) used the term "legal" to describe Gett's operation.

"Gett was always different, by the fact that we've always been operating legally, and we're actually living proof of the fact that we can be both disruptive and legal. And that's what's unique about Gett," he said. "I think these values we share growth - healthy growth, profitable and legal growth, that's what's special about Gett. And I think you know authorities see eye-to-eye and they are very supportive."

Gett's latest development is Gett Together - a ride-sharing option that acts as a kind of UberPool competitor. Riders share a cab to save cash (Waiser says they want it to cost similar amounts to public transport), and it will follow pre-defined routes like buses (unlike UberPool, which dynamically sets routes on the fly).

It launches in London in January 2017, and has one major advantage over UberPool - its black cabs will be able to use bus lanes.

What do you do when your drivers face planned obsolescence?

Gett's vision is to provide "ubiquitous transportation solutions." And if it succeeds in this - or gets anywhere close, long-term - it will eventually be embracing automation and leaving behind the human worker base that got it there. So how do you manage the fact you're working towards the obsolescence of your workers?

"What is great with Gett and our relationship with drivers is we have full transparency and trust ... Within the framework, within the market, if market is changing and the whole market will be in 25 years autonomous - that's the reality."

In short, Shahar Waiser believes it's all about communication.

"They know it's coming in time, so they can adapt and adjust, and they also aware that Gett is doing everything for them, and always doing that and will continue doing that, and that's very public and will continue doing that."

At this point, Waiser revises back his estimates for the extinction of human drivers. "I think the transition specifically for taxi drivers will happen in like 25 years," he said - arguing that many of its current drivers may not even be working any longer at that point, and so will be unaffected.

Recent strides in self-driving technology - including the first symbolic delivery by Uber-owned autonomous truck company Otto - have shone a spotlight on the consequences of automation on the sector. But numerous other industries will also be drastically affected.
Amazon recently opened up a physical store without any cashiers or checkouts - sparking consternation as to whether retail employees' jobs may also be in the firing line in the not-so-distant future.
Some argue that universal basic income - a guaranteed income for all - is the only solution to a coming wave of unemployment. Others, like The Wall Street Journal's Christopher Mims, argue that automation actually has the potential to create jobs - but only so long as we're prepared.
The problem is not "mass unemployment," Boston University economist James Bessen told the WSJ, "it's transitioning people from one job to another."
Shahar Waiser says Gett isn't helping its drivers retrain ("I think it's more about being public and I think the market is changing, until then, we will provide the best") - and realistically, as a single profit-seeking company, there's only so much it can do.

But as a society, we can't sit still while industries that have provided stable jobs for millions for decades are replaced by machines. Retraining and major education programs are needed soon, whether it's the public or the private sector that provides them - or Stephen Hawking's prediction could come disastrously true.

http://www.businessinsider.in/The-CEO-of-Uber-competitor-Gett-tells-why-he-thinks-humans-will-be-banned-from-driving-in-the-future/articleshow/55957702.cms

The Economist

Harder than ABC

Alphabet's Google is searching for its next hit

The rise of voice computing may threaten its lucrative search business

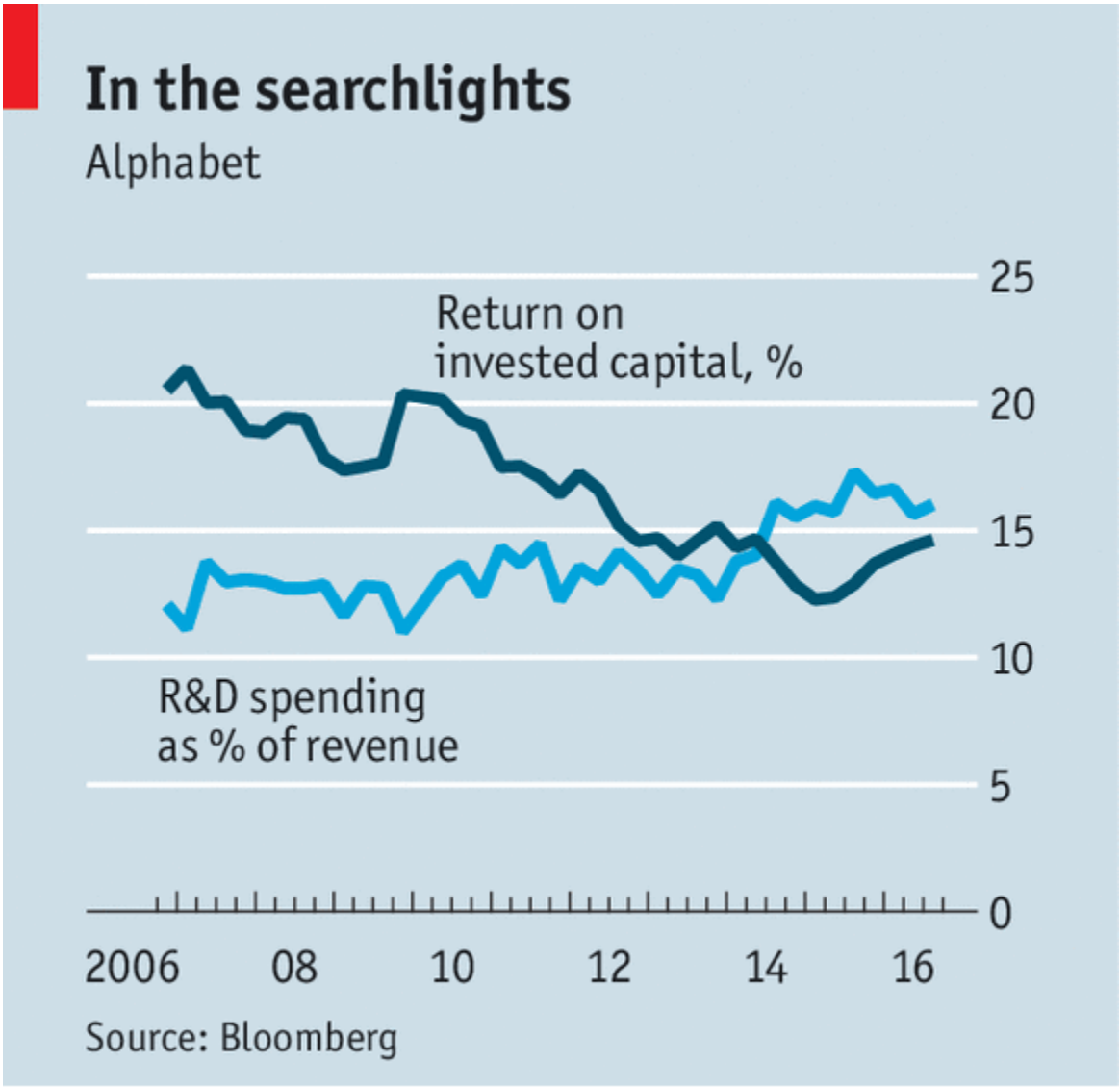
Dec 17th 2016 | SAN FRANCISCO

Deflated hopes

"JUDGE a man by his questions, rather than his answers," Voltaire advised. Google has become one of the most successful firms in history by heeding that advice. It evaluates the intention of web-surfers' queries and returns relevant advertising alongside search results. But for years there has been a lingering question about Google: can it create a new, highly profitable unit to rival its search business?

Not yet. In the past five years, Alphabet, formed as a holding company for Google and other disparate projects in October 2015, has spent $46bn on research and development (see

chart). Much has gone to so-called “moonshot” projects, such as self-driving cars, smart contact lenses and internet delivered via balloons. Its British artificial-intelligence unit, DeepMind, also falls into the category of other projects. Since the start of 2015, these bets have together recorded a loss of $6bn.



Economist.com

Advertising still accounts for nearly 90% of Alphabet’s revenues and almost all of its profits, according to Brian Wieser of Pivotal Research Group in New York. Search advertising in particular makes up around three-quarters of Alphabet’s total ad revenues. (YouTube, a video site, and a business that places ads on non-Google-owned sites are other contributors.)

On December 12th Alphabet put its self-driving car project into a separate unit called Waymo so staff can better focus on achieving commercial viability. In truth it is not much of a separation, as the firm will still be inside Alphabet and will not disclose more financial

details. Other splits have been more drastic. In the past six months executives overseeing several initiatives, including those focused on venture capital, drones, self-driving cars, high-speed internet and smart thermostats, have left. Alphabet has also been trying to sell its malfunctioning robotics business, Boston Dynamics.

The reason for these departures is Alphabet's ambivalence about how tightly it should manage costs, say people close to the firm. When Nest, the thermostats maker, was acquired for $3.2bn in 2014, its executives were promised they could invest and expand their business for years. But when the Alphabet structure was suddenly adopted, the message changed. Overnight, units were expected to pay for their share of overhead, which irked some executives who remembered how the parent company had itself doled out big salaries and other luxuries (like free food). Few at the firm are optimistic that Alphabet is closer to devising a business as lucrative and large as search continues to be. As one former executive says, "You're unlikely to win the lottery twice."

Meanwhile, the way that people navigate their way around the internet is also changing, which could eventually pose a threat to Google's search-advertising business. There are two big impending shifts. One is the use of voice as a way to get information, and the other is the rise of virtual assistants. Already, around a fifth of searches on Android devices are done by voice (as opposed to text), and that share will grow as speech recognition improves. Voice will also become more important with the spread of stand-alone devices that answer questions, such as Amazon's Echo and Google's own new product, Google Home, which do not support advertising.

As interactions with devices like these become more complex, people will be able to rely on them to complete tasks they might have done online, such as ordering gifts, booking flights and locating nearby stores. Although Google has helped bring about this future with its Home device, its snazzy virtual assistant that predicts users' needs and its messaging app, called Allo, it is unclear that these offerings will be healthy for its bottom line. In future, "searches" will be more focused on completing tasks and fetching information in environments where it will feel dissonant for ads to appear, such as in messaging apps or on smart-home devices. "As Google shifts more away from being a search engine to an answer service, its utility will go up. But the business model will fall apart," argues Ben Thompson, who writes Stratechery, a blog on technology.

As well as the fact that Amazon delivers ad-free information via the Echo, the retail giant poses a direct threat to Google because more people are starting searches for electronics and other kit directly on its site, rather than through a general search engine. By one estimate,

55% of internet users now begin researching products on Amazon, depriving Google of the opportunity to deliver an ad.

Alphabet has confronted worrisome transitions before, such as the shift from desktop PCs to mobile. Its ad business is still booming, because it devised a way to deliver ads on small screens. It is possible that Google's ad model could in future shift to taking a fee for each transaction it facilitates. This is already the case in air travel: people searching for flights scan options via one of Google's tools, and airlines pay if a person books a ticket. Google could do the same if someone said to their phone, "order me a pizza". But how it would choose which firm to place the order with, and whether consumers would be happy with that order being routed to the firm that paid most, are tricky questions, to which it is unlikely that even Google knows the answer.

This article appeared in the Business section of the print edition under the headline "Still searching"

Investing: An Art or a Science or Both?

There are three approaches to science: The approach of observation popularized by Darwin. Darwin observed things around him and came up with the theory of evolution. The approach of experiments which entails conducting experiments to postulate theories. Newton's and Galileo's experiments on behavior of matter is a classic example of the use of experiment to evolve theory. The approach of imagination or thought is a third way to postulate scientific theory. Einstein imagined the theory of relativity - it wasn't until decades later that the science world proved Einstein's theory. In the stock market too, investors and analysts use observation, experiments and imagination to construct portfolios.

How I wish I was tossing a coin: Investment by observation is the most common approach. We use historical data to arrive to conclusions about the future. But this is a faulty approach in our view since the historical distribution of share price returns may have little resemblance with its future distribution unlike the toss of a coin. Yet it is popular because of ease of use as well as the confidence it generates through quantification of likely outcomes.

Market participants know the future in advance: Conducting experiments is difficult in stock markets since live markets are not subject to alteration of factors or inputs like in science experiments. In science, inputs can almost be changed at will to test results in a different environment. Stock markets do not permit this. What we can observe is historical behavior and fit the observations to a proposed experiment. This process is prone to magnified errors since the fitting is usually done to prove a priori conclusions.

Beauty lies in the eye of the beholder but stock returns don't: In contrast, imagination is a powerful tool in stock market investing. That said, ex post proof of imagination is not subject to testing like in physical sciences. This leaves us with a lot of thumb rules which seem to work but proofs remain elusive. A classic example is the PE frown. It postulates that low PE and high PE stocks tend to underperform the market most of the time over longer durations - the sweet spot for PE valuations is in the middle - low PE stocks underperform because the market is efficient and knows that the underlying business is not attractive whereas high PE stocks miss the market since a lot of the future growth is in the price. This theory is very appealing but temporal evidence is missing. Imagining creatively about how businesses can evolve is an edge in stock picking but hardly a guarantee to better returns.

Applying scientific principles: This does not mean that the markets are not subject to scientific principles. These principles straddle areas ranging from biology, mathematics to social sciences. So let us see what we can borrow from the various sciences to apply to stock picking (far from an exhaustive list and certainly not prescriptive):

a) Evolution theory: Time cooks share price returns. This works both ways but in the end given that the market pays equity risk premium for owning equities over the truly long run, in a portfolio context, time is an investor's friend like it is for a surviving species.

b) Medicine: Like in medicine, every patient is idiosyncratic, so in stock picking, every

investment is unique. Like doctors, avoid generalization traps is the insight from medicine with application to stock picking.

c) Mathematics: Continuous compounding, which long-term investors are so familiar with, was something that Jacob Bernoulli discovered. If there are n compounding intervals, the interest for each interval will be 100%/n, and the value of one unit at the end of the year will be 1 X (1 + 1/n)^n. Bernoulli noticed that this sequence approaches a limit as n becomes larger and compounding intervals become smaller (all the way from a year to say minutes). The LIMIT (mathematical function) as n grows large is the base to natural logarithm, i.e., "e". Thus $1 if compounded at infinitely small intervals for a given rate of interest will become $2.7182818…. by the end of a year. Thus, for an annual interest rate or return of R (expressed as a %) for T years will yield a value of e^RT at the end of T years with continuous compounding. Compounding is the secret of wealth creation and its principle and discovery is rooted in mathematics.

d) Probability theory: Return distribution is not normal (Bell curve). Stock returns more likely follow a Pareto distribution and non linear path. This means risk management yields superior returns.

e) Psychology: Making money in stocks is about managing greed, fear, boredom and envy - very basic human emotions. Being aware of them creates two advantages - avoiding mistakes and capitalizing on the crowd's follies.

f) Physics: Ultimately, Einstein challenged Newton's insights on gravity. What operates at the gross level is different from the finer level even though there is inter dependence. Macro and Micro in stock markets have a similar relationship. Professional stock pickers have a disdain for macro and vice versa. Flexibility is the best tool in this regard.

g) Decision theory: Path dependence is crucial to stock market investing. Washing a shirt and then ironing it gives a completely different result from first ironing it and then washing it.

h) *Information theory*: This made Claude Shannon the father of the Internet but it also inspired John Kelly to engineer the Kelly Criterion which arguably remains the most potent tool for portfolio managers.

In the end we quote Sir Isaac Newton who upon losing a princely sum of 20000 Pounds in the South Sea Bubble in the 18th century said, “I can calculate the motion of heavenly bodies, but not the madness of people”.