

FinShiksha

Monthly Update – May 2016

Every month, we will come out with a collection of articles that are also available on our blog, as well as some of the good articles that we come across the web. These may help you put the global events in perspective, as well as add to your skill set when it comes to the financial services industry.

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1- Should we blame Raghuram Rajan for his stance on interest rates?

Off late there has been a lot of clamour around Raghuram Rajan, and the extension of his term as the RBI governor. Now the broad charge that has been led against him is that he has allowed interest rates to remain too high for too long. He should have focused on WPI and not on CPI, and reduced interest rates since all global economies have done so.

Such simplistic analysis very obviously misses the macro factors that affect the decision making of any central bank. For one, cutting interest rates is useful if the higher cost of money is stifling investments. [Capacity utilization across companies in India is around 72%](#), hardly a level where companies would go about adding capacity, regardless of where the interest rates are. If a steel company is working at 60% capacity, what is the point of adding capacity. Any logical business would wait for demand to pick up. Now demand cannot pick up unless there are structural reforms on the fiscal side. Unless there is infrastructure, I cannot buy a car. The interest rate is not what stops me. Unless there is house price reform, I cannot buy a home. Again, the interest rate is not what stops me.

So the second major reason why interest rates should not have been lowered in India, is that it forced the government to make structural changes on the fiscal front. Fiscal prudence was maintained. Imagine the RBI had cut rates, and the government would continue to spend rashly. The government would have had to borrow more, there increasing bond issuance, and supply, thereby dropping bond prices, and increasing yields (Bond yields and prices are inversely proportional). Higher yields would result in higher interest rates. So on one end RBI would cut rates, and on the other the rates would rise again as the government continues spending. So in a way, by not cutting rates, the RBI was sort of nudging the government to put their house in order. To us that seems like a logical move.

So in a nutshell, lower interest rates are welcome, but unless the economy sees structural reforms, just lowering interest rate is not going to take us out of our problems. For this policy itself, Raghuram Rajan deserves credit. He was added much needed transparency to India's central bank operations, and has been fairly logical in his approach. Unfortunately, central bankers have to make decisions in advance and get judged on those events post the events, where everyone has the benefit of hindsight. It may pay India well if we did not play too much to the gallery, and focus on the good work that the RBI Governor has done.

2-Analysis of Debt – Why certain industries are at higher risk?

Why does analysis of debt become so important for both company analysis and valuations? More so with companies in certain sectors? To understand this, and how debt impacts the survival of the firm, we pick up some data from a few really good articles, talking about debt of companies in India. The following articles are picked up, and we recommend you read them to get a gist of the overall problem that high debt creates, and why analysts should be careful in the analysis. We also try and reason why some sectors face more troubles when debt is high, as compared to others.

Article Links

[Interest servicing ability deteriorates further for firms – article on Livemint](#)

[The debt-servicing capabilities of India's conglomerates -article on Livemint](#)

[A fifth of corporate debt in troubled waters – article on Business Standard](#)

Top 10 business conglomerates of India are neck deep in debt. Companies like Lanco, JP and GMR are in serious stress. Nearly 20% of corporate debt in non-banking companies is under stress (this is slightly dated – the numbers may have changed a bit in the last year)

Some of the key learnings we find are

1. Interest Coverage Ratio (EBIT/Interest) is below 1 for many of these firms. That is technically default zone. Any ratio below 1.5 to 2 is considered stressful; here many firms are below 1. More than analysing the debt, it is important to understand the capacity of the firm to service it. **So Interest Coverage Ratio is more important than the debt equity ratio itself.**
2. Nearly 60% of the stress is in sectors such as Metals and Infrastructure. These are **heavy capital intensity sectors**, and **cyclical in nature**. Some of them are also **dependent on global prices**. That is what makes analysis of these companies very different from say a consumer products company. A company like Unilever may take a debt and get away with it, due to the inherent nature of the business – consumer oriented, asset light, fast turnover and brand conscious. However, that is not true to a company making roads, or selling steel. Steel prices are decided based on global demand and supply, and local dynamics may have less bearing. Roads will generate cash over a long gestation period. **Any business where there are external shocks possible, and the inherent business is capital intensive, debt creates a dangerous cocktail.**

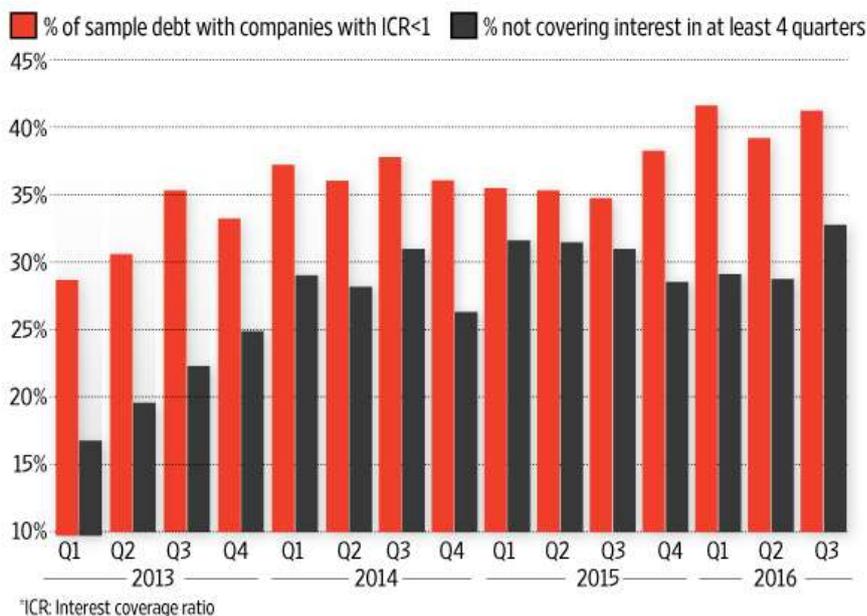
So the broad understanding that we get is – based on the sector, debt may create different impacts. **For capital intensive sectors, cyclical sectors and sectors with possibilities of external shocks, we need to use both Debt Equity and Interest Coverage ratio while analysing.** Analysts also need to be more sceptical of firms in any of the above sectors when they try to raise a lot of debt and fuel expansion / acquisitions based on this. We have examples of Tata Steel – Corus, Jaiprakash Associates to show us the problems with debt led expansions. Finally, cash generation ability of a business is of primary importance when analysing debt repayment capacity. Any risks to this will sooner or later create trouble.

The following images from the above articles outline the findings.

INDIAN FIRMS' ABILITY TO PAY INTEREST DETERIORATES

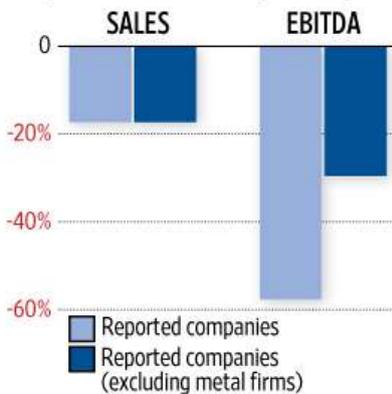
Ability of Indian companies to pay interest on their loans continued to deteriorate in the December quarter, and there is more pain left for banks that have outstanding corporate loans. A Credit Suisse report shows a slight decline in corporate health, with the share of debt having interest coverage ratio (ICR) less than 1 increasing to 41% in the December quarter compared with 39% in the preceding quarter.

SHARE OF DEBT WITH COMPANIES HAVING ICR <1 INCHED UP TO 41%

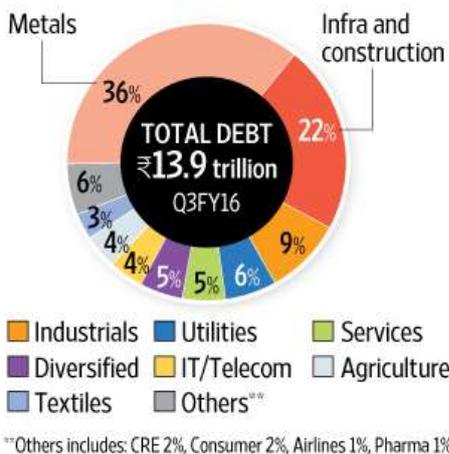


PROFITABILITY OF STRESSED COMPANIES REMAINS WEAK

Q3FY16 year-on-year performance of companies with ICR <1 in the previous quarter



METALS AND INFRA ACCOUNT FOR ~60% OF STRESS



Source: Credit Suisse

Image source: <http://www.livemint.com/Money/cWHZyYwDZ3Nlx4wPwRKpVJ/Interest-servicing-ability-deteriorates-further-for-firms.html>

STILL IN THE WOODS

Debt with House of Debt groups under high stress

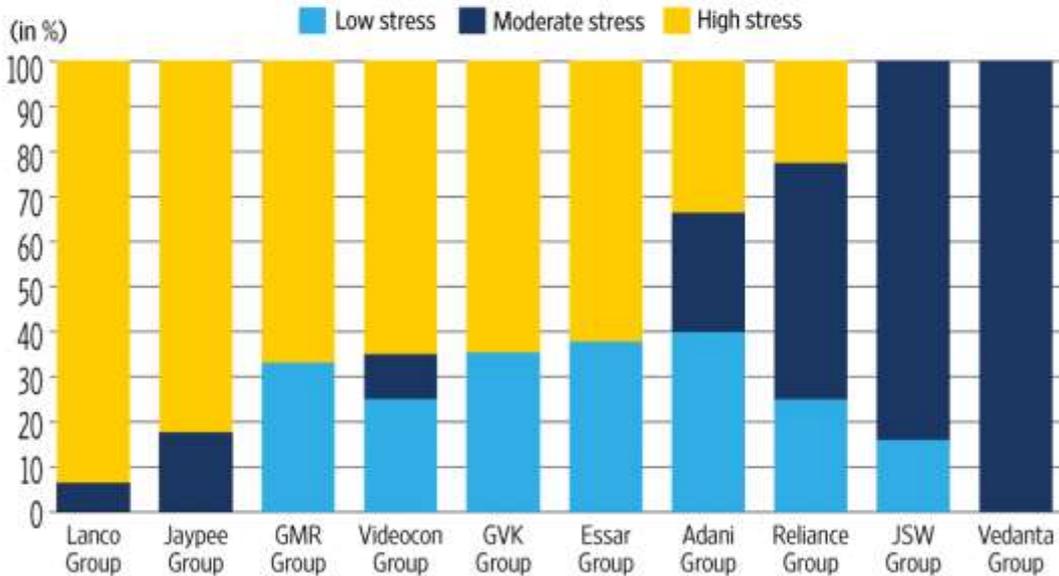
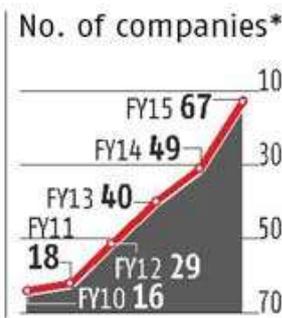
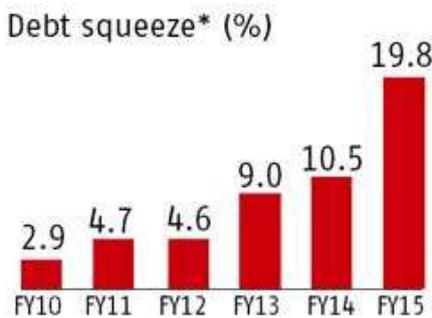


Image source: <http://www.livemint.com/Companies/HUVqfE3mAsgC3HA7amq9M/The-debtservicing-capabilities-of-Indias-conglomerates.html>

SINK OR SWIM: DROWNED IN CORPORATE DEBT

PROPORTION OF STRESSED CORPORATE DEBT GROWING



RETURN ON ASSETS FALLING RAPIDLY**



** For all 441 indebted companies in the sample

- *For companies with interest coverage ratio 1.0 or less in respective financial years
 - **Return in capital employed and average interest cost for all 441 indebted non-financial companies in the sample
 - RoCE and interest cost based on respective financial year total assets, profit before interest and taxes, gross debt and interest cost
- Source: Capitaline; Compiled by BS Research Bureau

Image Source: http://www.business-standard.com/article/companies/a-fifth-of-corporate-debt-in-troubled-waters-11512250034_1.html

3-Book Review – Fault Lines by Raghuram Rajan

Raghuram Rajan, the RBI governor, starts this book with an incident where he was asked to present a paper in front of the US Federal Reserve Board. He presented a paper on **“Has financial development made the world riskier?”** and goes on to mention that, no one in the room liked the findings as they didn't boast the working of the then Federal Reserve Chairman Alan Greenspan; rather it criticized the complexity of the financial system created by the policies. Time however tells us that Rajan was one of the few who foresaw the financial crisis of 2008.

Coming to the book, he has written this book not from the point of view of an economist, but from the point of view of a layman. He has not used any models or any technical jargon that could make reading difficult; rather he has analysed every situation in a simple and logical manner and reached to a conclusion. In a nutshell, he has just tried to connect the dots and provided sufficient content to readers as to how one can use this knowledge and at least identify the fault lines in the system, that can endanger the entire financial system. The simple flow of the book makes it a compelling read for anyone who intends to build a career in finance, and understand the macroeconomic linkages in the world economy.

He starts the first section by dissecting what he thinks is the first fault line, which is **rising inequality** and **dream of politicians to provide affordable housing** for all. He argues that rising inequality in income is because of technological advancement and the labour force not acquiring enough skills to be in the race. He further points out that the education system is to be blamed for this. We need a robust education system which adopts the nuances of any advancement that happens so that skills can be acquired and this gap reduces. However, skill enhancement can't happen overnight, and hence people are rendered with smaller incomes. Politicians feel their pain and hence they started to reduce interest rates so that debt and housing become affordable. And this excessive credit with stagnant pay checks creates a tension in the system which is inherently a sign of fault line. His stance where he has urged students not to pursue any random qualifications but to focus on skills is a testament of what he has written in the book.

He adds another fault line, which is of **Dependence on Exports**. Countries rely on export for faster growth as it generates income for country as well as creates employment. But what export oriented countries don't understand is, if you rely more on exports and less on domestic consumption then you are likely to be at risk from global factors. At present, the examples of Brazil, China shows that, where cooling commodity prices and slowing global growth are creating trouble. He also makes a point that when you are growing, as an administrator you have to make sure that you have enough competition and you are not dependent on few companies to drive this growth. He explains this with the example of Japan, who grew fast but failed to produce companies across sectors which are efficient at global level. While it does boast of companies such as Sony and Toyota, Japan doesn't have any global bank like HSBC or Citi. The top 10 banks as listed by Forbes do not have a single Japanese bank. Japan doesn't have any global retailer like Walmart.

He then raises very critical point of **Transparency** during growth phase. He argues that the reason why countries like US or UK attracts more foreign money is because the system is very transparent. Public information is widely available and this information is accurate. Compare that to developing countries where information is very opaque and not publicly available. The outcome of this is that the foreign investor will try to minimize risk by providing only short term investments in global currencies. This lack of transparency never allows developing countries to transact in their currency which will deteriorate any chances of the currency

becoming a globally accepted currency. Also, the risks of short term money moving out will put constant pressure on local currency, which is precisely what is happening with the Indian Rupee. As a governor, he is trying to put a system in place which has a lot of transparency, that enables creating a confidence necessary to encourage foreign investors to fund long term assignments and investments.

He also criticizes popular politics, like providing jobs for the sake of it and free Medical Assistance. He argues that actual focus should be on creating jobs by growing the industry as well as economy. It may take time but that's the ideal way to do it. Pushing political agenda may work in the shorter duration but it will create a tension in the financial system. He also criticizes political agenda of keeping interest rate low for considerably longer periods. Firstly, when interest rates are too low, chances of a bubble in asset prices increase. Secondly, with interest rates being too low, investors will move away from short term deposits as it will not fetch decent returns, thereby reducing the funds available for lending in the system.

He finally connects the dots as how the US Subprime Crisis unfolded, with low interest rates, unnecessary risks taken by financial institutions, skewed payment structure of agents and corporations, popular politics, involvement of credit agencies, complex financial products and not enough tools in the system to contain the risk (which he thinks is linked to payments made to officials who ignore the implementation of tools).

All in all, a very good book from one of India's finest brains, that should be read by anyone who is even remotely interested in the policy making that drives success and failure in the global economic system.

4-Articles we read: Here's How Electric Cars Will Cause the Next Oil Crisis

A shift is under way that will lead to widespread adoption of EVs in the next decade.

By Tom Randall | Feb. 25, 2016

Source Article here: <http://www.bloomberg.com/features/2016-ev-oil-crisis/>

With all good technologies, there comes a time when buying the alternative no longer makes sense. Think smartphones in the past decade, color TVs in the 1970s, or even gasoline cars in the early 20th century. Predicting the timing of these shifts is difficult, but when it happens, the whole world changes.

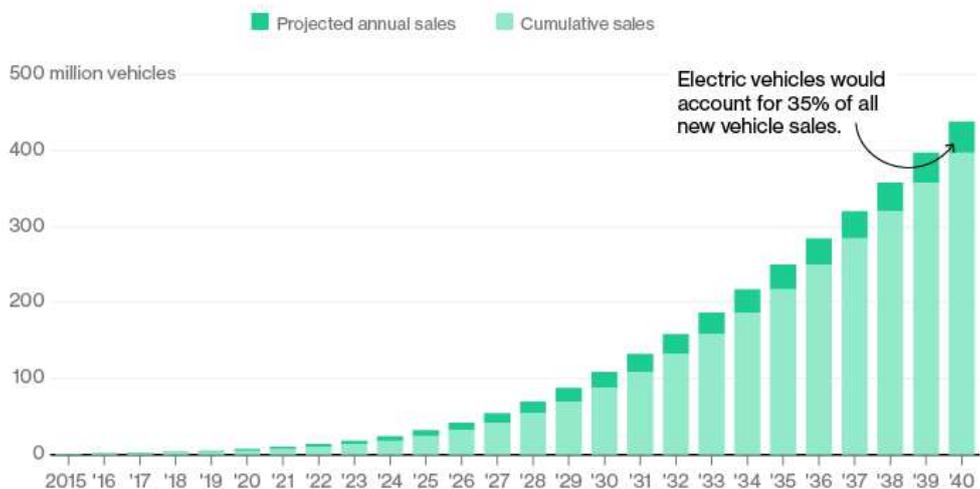
It's looking like the 2020s will be the decade of the electric car.

Battery prices fell 35 percent last year and are on a trajectory to make unsubsidized electric vehicles as affordable as their gasoline counterparts in the next six years, according to a new analysis of the electric-vehicle market by Bloomberg New Energy Finance (BNEF). That will be the start of a real mass-market liftoff for electric cars.

By 2040, long-range electric cars will cost less than \$22,000 (in today's dollars), according to the projections. Thirty-five percent of new cars worldwide will have a plug.

The Rise of Electric Cars

By 2022 electric vehicles will cost the same as their internal-combustion counterparts. That's the point of liftoff for sales.



Sources: Data compiled by Bloomberg New Energy Finance, Marklines

Bloomberg

This isn't something oil markets are planning for, and it's easy to see why. Plug-in cars make up just one-tenth of 1 percent of the global car market today. They're a rarity on the streets of most countries and still cost significantly more than similar gasoline burners. OPEC maintains that electric vehicles (EVs) will make up just 1 percent of cars in 2040. Last year ConocoPhillips Chief Executive Officer Ryan Lance told me EVs won't have a material impact for another 50 years—probably not in his lifetime.

But here's what we know: In the next few years, Tesla, Chevy, and Nissan plan to start selling long-range electric cars in the \$30,000 range. Other carmakers and tech companies are investing billions on dozens of new models. By 2020, some of these will cost less and perform better than their gasoline counterparts. The aim would be to match the success of Tesla's Model S, which now outsells its competitors in the large luxury class in the U.S. The question then is how much oil demand will these cars displace? And when will the reduced demand be enough to tip the scales and cause the next oil crisis?

First we need an estimate for how quickly sales will grow.

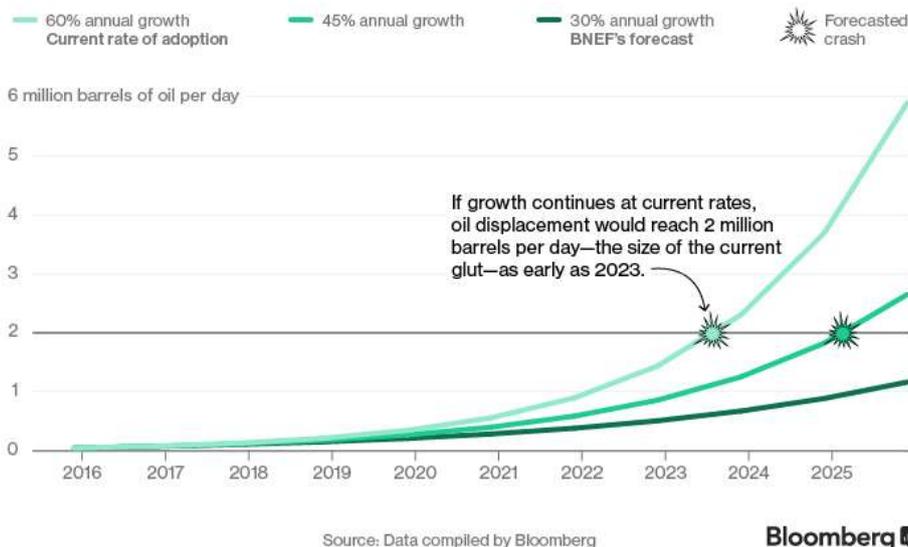
Last year EV sales grew by about 60 percent worldwide. That's an interesting number, because it's also roughly the annual growth rate that Tesla forecasts for sales through 2020, and it's the same growth rate that helped the Ford Model T cruise past the horse and buggy in the 1910s. For comparison, solar panels are following a similar curve at around 50 percent growth each year, while LED light-bulb sales are soaring by about 140 percent each year.

Yesterday, on the first episode of Bloomberg's new animated series Sooner Than You Think, we calculated the effect of continued 60 percent growth. We found that electric vehicles could displace oil demand of 2 million barrels a day as early as 2023. That would create a glut of oil equivalent to what triggered the 2014 oil crisis.

Compound annual growth rates as high as 60 percent can't hold up for long, so it's a very aggressive forecast. BNEF takes a more methodical approach in its analysis today, breaking down electric vehicles to their component costs to forecast when prices will drop enough to lure the average car buyer. Using BNEF's model, we'll cross the oil-crash benchmark of 2 million barrels a few years later—in 2028.

Predicting the Big Crash

The amount of oil displaced by electric cars depends on when vehicle sales take off. Here are three scenarios for rising EV sales.



Predictions like these are tricky at best. The best one can hope for is to be more accurate than conventional wisdom, which in the oil industry is for little interest in electric cars going forward.

“If you look at reports like what OPEC puts out, what Exxon puts out, they put adoption at like 2 percent,” said Salim Morsy, BNEF analyst and author of today’s EV report. “Whether the end number by 2040 is 25 percent or 50 percent, it frankly doesn’t matter as much as making the binary call that there will be mass adoption.”

BNEF’s analysis focuses on the total cost of ownership of electric vehicles, including things like maintenance, gasoline costs, and—most important—the cost of batteries.

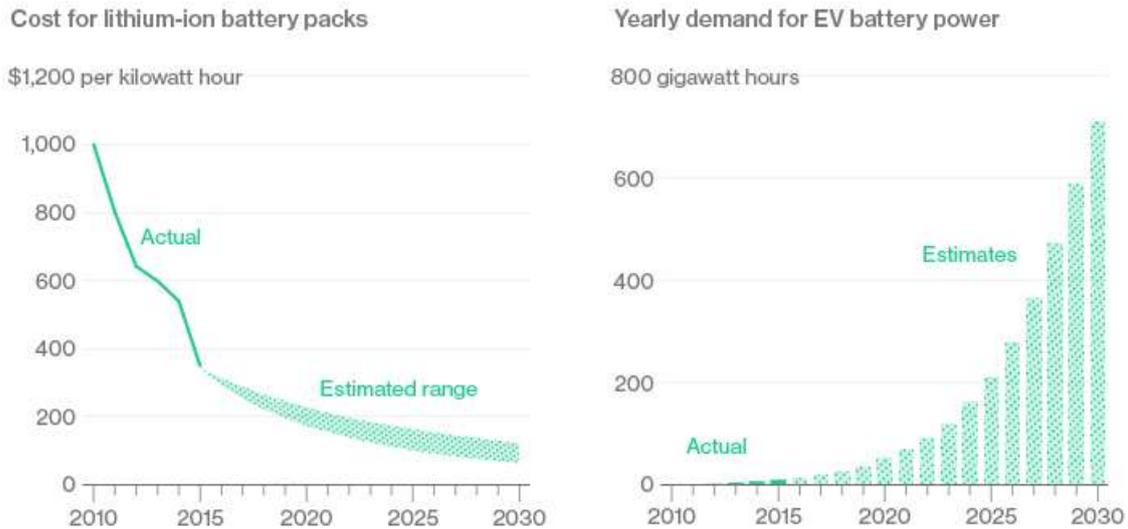
Batteries account for a third of the cost of building an electric car. For EVs to achieve widespread adoption, one of four things must happen:

1. Governments must offer incentives to lower the costs.
2. Manufacturers must accept extremely low profit margins.
3. Customers must be willing to pay more to drive electric.
4. The cost of batteries must come down.

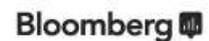
The first three things are happening now in the early-adopter days of electric vehicles, but they can’t be sustained. Fortunately, the cost of batteries is headed in the right direction.

It's All About the Batteries

Batteries make up a third of the cost of an electric vehicle. As battery costs continue to fall, demand for EVs will rise.



Source: Data compiled by Bloomberg New Energy Finance



There's another side to this EV equation: Where will all this electricity come from? By 2040, electric cars will draw 1,900 terawatt-hours of electricity, according to BNEF. That's equivalent to 10 percent of humanity's electricity produced last year.

The good news is electricity is getting cleaner. Since 2013, the world has been adding more electricity-generating capacity from wind and solar than from coal, natural gas, and oil combined. Electric cars will reduce the cost of battery storage and help store intermittent sun and wind power. In the move toward a cleaner grid, electric vehicles and renewable power create a mutually beneficial circle of demand.

And what about all the lithium and other finite materials used in the batteries? BNEF analyzed those markets as well, and found they're just not an issue. Through 2030, battery packs will require less than 1 percent of the known reserves of lithium, nickel, manganese, and copper. They'll require 4 percent of the world's cobalt. After 2030, new battery chemistries will probably shift to other source materials, making packs lighter, smaller, and cheaper.

Despite all this, there's still reason for oil markets to be skeptical. Manufacturers need to actually follow through on bringing down the price of electric cars, and there aren't yet enough fast-charging stations for convenient long-distance travel. Many new drivers in China and India will continue to choose gasoline and

diesel. Rising oil demand from developing countries could outweigh the impact of electric cars, especially if crude prices fall to \$20 a barrel and stay there.

The other unknown that BNEF considers is the rise of autonomous cars and ride-sharing services like Uber and Lyft, which would all put more cars on the road that drive more than 20,000 miles a year. The more miles a car drives, the more economical battery packs become. If these new services are successful, they could boost electric-vehicle market share to 50 percent of new cars by 2040, according to BNEF.

One thing is certain: Whenever the oil crash comes, it will be only the beginning. Every year that follows will bring more electric cars to the road, and less demand for oil. Someone will be left holding the barrel.

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Do visit our website www.finshiksha.com for more updates, as well as details on our programs.

About us

FinShiksha is an IIM Calcutta alumnus venture, and specializes in education in the financial services domain. But we are more than just education providers; we help you build a career – and work with you during the process. Our programs help a candidate evaluate his/her strengths and hone them, at the same time spotting weaknesses and eliminate them. We teach, we hand-hold and we guide. And yes – we simplify finance.