What We Are Reading - Volume 2.013

The enclosed 2.013 version contains interesting articles on learnings from financial crisis, concentration in the asset management industry, India Strategy, Megatrends, Greed & Fear, Dyson: a British inventor pivots to Asia, How Mark Zuckerberg Became Too Big to Fail and Why Omnichannel Retailers Face a Steep Learning Curve.

- 10 Years Later — 25 Lessons We Learned From The Financial Crisis
- The Asset Management Industry Is Getting More Concentrated
- RWC Equity Income Investor letter
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- Dyson: a British inventor pivots to Asia
- How Mark Zuckerberg Became Too Big to Fail
- Why Omnichannel Retailers Face a Steep Learning Curve

Jefferies
Institutional Investor
RWC
Morgan Stanley
Axis Capital
Blackrock
CLSA
Financial Times
The New York times
Wharton
10 Years Later — 25 Lessons We Learned From The Financial Crisis

Dear Clients and Employee-Partners,

It has been 10 years since the nadir of the global financial crisis. In some ways this feels like ancient history that we can barely remember (nor want to). In other ways, it feels like it happened yesterday and the wounds are still open and painful. The world has changed tremendously this past decade and every one of us has learned, adapted, re-invented, and evolved as a result of living through this tumultuous period of history. We think the ten-year anniversary of such a globally devastating event is a good excuse to step back and reflect on the things that we learned from having a front row seat in the financial services industry throughout this period of time.

1. **There is no such thing as a “slight liquidity crisis.”** We have said this before and it sounds trite, but it is drop dead serious. It is always ideal to raise capital when you don’t need it and never when you must have it. **It is very easy to forget when times are as good as they are today, but capital markets do close and funding does disappear.** We are not talking about having to accept a higher coupon when issuing bonds or being forced to take a bigger discount on a stock deal. We are talking about the window being closed shut with no chance of it opening to raise capital. Do everything humanly possible to never allow yourself to be in the position of a margin call, whether personal or corporate. This means you must sacrifice some short term upside when things are good.

2. **Culture does matter.** You need to surround yourself with smart, high quality people who are aligned in motivation, have access to all relevant information and are empowered to raise questions, champion contrarian ideas, and challenge the status quo. Otherwise your odds of surviving when chaos hits are greatly diminished. If you insist on being the smartest person in the room and are looking for supplicants to remind you about how brilliant you are, it’s only a matter of time. Arrogance is the ingredient that guarantees eventual destruction.

3. **When your competitors fall, it is not always a good thing.** At first it may appear to be your good fortune when bad things happen to your competitors. The reality is that sometimes when your competitors are challenged, or in fact collapse, they can fall right on top of you. Contagion is real. The global ecosystem is important and healthy competition from well-funded and well managed companies allows for vibrant markets. It is not necessarily a zero sum game and healthy competition forces everyone to work harder, be smarter and avoid making big mistakes.

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4. The world can act in a coordinated and mutually beneficial manner. One of the few benefits of the financial crisis is that we saw countries around the globe eventually act in a coordinated, intelligent and collaborative manner. It took bringing the world’s financial system to the brink, but at least we know we are capable of working together and putting our differences aside. Lately we worry that this symbiotic mindset has been badly frayed for a variety of reasons. Hopefully, it won’t take another massive global panic to cause us all to realize that we do need to work together to optimize our collective global opportunity.

5. Keep It Simple Stupid (KISS)! Anytime reasonably smart people can’t understand the complexity, nuance, volatility, or ramifications of new products or businesses—DANGER!!! It is great to be smart and clever, but you can be too smart and too clever, especially if you are not also governed by common sense and a sense of responsibility. If you can’t really fully understand something, it probably isn’t because you aren’t smart enough.

6. There are no secrets and news travels instantaneously. Good news travels fast and bad news travels faster. All the amazing technological advances that have made our lives so much better also mean our problems get virally transmitted in real time. The more serious the problem, the faster it is disseminated. Never forget this and always be prepared.

7. It’s all about the bonds. Today everyone only cares about stock prices and wealth creation. When things are calm, we worry about how we get more growth, profits, ROE and valuation. In good times few focus on bonds, covenants, liquidity, ratings or downside. This will change. If you pay attention to your bonds (in good times), you will be just fine when the painful periods return. Debt is not your money. You have to pay debt back. On time. Never forget that.

8. Momentum is a very hard thing to change. When there is wind at your back, the sailing is fast and fun. When it rains, it pours and pours and pours. There isn’t a lot to do to prepare proactively about this lesson. It is just important to always be aware how hard it is to change direction.

9. Don’t try to be anyone else. Many of the firms that had the hardest time in the financial crisis were firms that had brand envy of larger or more established competitors. If you are always looking ahead and the goal is to become someone else, shortcuts are often taken and then mistakes occur. Shortcuts include excess leverage, bad hires, ignoring culture, and a win at all costs attitude. Be the best firm you can be, not the best firm someone else already is.

10. It’s all about integrity. Your word is everything. In times of stress, people will give you the benefit of the doubt (for a while) if you have always told the truth. This means consistently under-promising and over-delivering. This means owning your mistakes and coming clean on a real time basis. This means you will publicly look like an idiot at times and people will question whether you are still competent. It means you probably won’t have any periods of time when you are considered brilliant. It does mean that over the long term, people may allow you the benefit of the doubt to keep building and doing your very best to create value. Never mislead, shade the truth, create false impressions, or lie. It’s kind of crazy we have to even list this as a lesson but just look at some of the current news stories if you think this is blatantly obvious.

11. Diversification may limit upside, but it allows for a long race which could/should eventually result in even more value creation. It’s not as much fun and may not be the quickest way to create value/wealth, but diversification is a good thing and increases the likelihood you can always stay in the game.

12. Relationships do matter. At the end of the day, business is people. If you always treat people with respect, courtesy, and integrity, you can handle almost any crisis. If you take short cuts with people, you will pay the price. For some reason that price seems to always come when times get challenging. Everyone is with you when you are on top of
the world. You only know who is truly with you when you are down in the dumps. If you are the type of person who is always there for people when they are in need—you have character, and thankfully the world always rewards true character.

13. **Never disrespect experience.** When you are a young, overly-ambitious, and a “damn the torpedoes,” “fireball” looking to make your mark on the world, it is really hard to deal with many of the older, set in their ways, parochial folks who seem to be obstacles to your success. Actual experience is one of the most valuable assets an individual can have and a great company can never have enough of these people in key positions. We wish we were nicer to people our current age when we were younger. We should have asked more questions and latched onto more of their wisdom.

14. **History does repeat.** Santayana was a genius. The only thing he may have missed is that if you forget history in the financial industry, you may not have the luxury of repeating it.

15. **It’s amazing how much you can accomplish quickly when you have no choice.** Many people worked non-stop in a frenetic, focused, and highly efficient manner during the crisis because there was no alternative. While that pace is not sustainable for prolonged periods of time, it does provide a glimpse of what we are truly capable of achieving when there is a vital sense of urgency.

16. **Everything in life is fragile.** Companies are living, breathing organisms that can thrive or die. Business rule #1: Don’t blow up your company. In addition to corporations, everything else in life is also delicate. Personal health is fragile. Families are fragile. Friendships are fragile. Never take anything for granted.

17. **You can only play offense if your defense allows for it.** Fortunes are made and lost in times of severe panic. If your company’s foundation is well thought out and you protect the fort from irrationality during the good times, you will then be in a position to truly take advantage of the bad times. One must also have the conviction and the backbone to actually play offense in the bad times. It is easier said than done and requires a long term perspective, confidence the sun will once again shine, and the strongest team possible to execute a contrarian plan.

18. **Leading an organization is a privilege and a responsibility.** Leaders work for everyone else. They have countless bosses. Clients, bondholders, shareholders, boards, rating agencies and employees are all higher up on the food chain than corporate leaders. If you don’t see it this way, you should not be in a position of authority.

19. **Sometimes bad things happen to good people.** There were so many innocent people who were honest, hardworking and dedicated to their companies, co-workers, and clients . . . and they still wound up losing a great deal in the financial crisis. People should not be asked/forced to invest a disproportionate amount of their net worth in the same company they rely on to support their family. Individuals can make informed choices and decide for themselves and the most senior people need to be “all in.” For others, skin in the game is valuable but excessive skin for prolonged periods should not be a requirement. In finite and unique periods, flexibility may be necessary. However, personal diversification is a good thing and not something to be admonished, judged, punished or frowned upon.

20. **Stress tests are not theoretical exercises.** Before the crisis, people went through the motions on the analytics of “what if” scenarios to basically “check the boxes.” The crisis taught us that these exercises are crucially important and while never perfect representations, can be the deciding fact between bankruptcy and living to fight for another day. Nobody should just “check the boxes” because these tests at times will become reality.
21. **Carry trades work until they don’t.** Whether it is funding inventory positions just to achieve a positive carry spread or having a mismatch in duration in the funding of your company to maximize profits, eventually there will be a problem. Don’t delude yourself otherwise. If you maintain proper cost of capital charges (which are never popular in good times), all the people who complain the loudest will still have jobs in bad times. An important corollary to this is: Never overly rely on unsecured funding—it is certain to disappear—but only at the time you need it the most!

22. **Recurring revenue businesses with reasonable margins are much more valuable than highly profitable one-offs.** This is one of the hardest things to achieve, especially in the financial services industry. It is easy to get seduced by people and businesses that have the ability to generate highly profitable “one off” events that act like a narcotic as everyone pushes to attain ever higher targets. All revenues and businesses are not created equally. The ones most sustainable and valuable are always the hardest to build.

23. **Everything is liquid in good times and almost nothing is liquid in the worst of times.** This is why you need excess cash, secured long term funding, a smart capital structure, dispersed debt maturities, business diversification, credibility with all of your constituencies, and a culture that will serve as the glue to hold everything together.

24. **The world keeps turning.** The hours turn into days, which in turn become weeks, and months, and years, and then even a decade(s). What was life and death for one period slowly becomes ancient history or even forgotten over time. We don’t want to get overly philosophical, but time does provide context to everything we do in life.

25. **Priorities and perspective.** All said, the final and most important lesson we would like to share from the financial crisis is what gave us the strength to power through an incredibly difficult period: The realization that at the end of the day life is about health, families, friendships, legacy, giving back, and being the best person one can be every day.

Thank you for taking the time to read our thoughts. We greatly appreciate every one of you.

Sincerely,

Rich and Brian

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Economics and Strategy

Buying BTPs and Intervening in FX Markets: What’s Next in the Trade War?

According to the Italian newspaper Corriere della Sera, Trump offered to help finance Italy’s 2019 public borrowing when he met with Giuseppe Conte at the end of August. And while most folks have brushed off this purported overture as “incompetent bluster,” there are plenty of reasons why he might consider such an action.

First, though, there is the question of whether he can even unilaterally execute such a move. And the answer is firmly yes. Now, he could NOT direct the Federal Reserve to purchase BTPs (Italian government bonds) in the System Open Market Account (SOMA). He has no authority to do so, and further, the SOMA can hold only Treasuries, Agencies, and short-dated Munis. However, he can ask the Treasury secretary to direct the NY Fed (as its agent and banker) to buy BTPs on behalf of the Exchange Stabilization Fund (ESF).

For those unfamiliar, the ESF contains assets held in Treasury accounts at the Federal Reserve. It is a fund with approximately $100 billion in assets (and $50 billion in liabilities), and it has long history going back to the 1930s. And as its name suggests, it is used primarily for operating exchange rate policy via the purchase and sale of assets denominated in foreign currencies. If you want to brush-up on the details, here are the descriptions of the fund on both the Treasury and NY Fed websites:

https://www.treasury.gov/RESOURCE-CENTER/INTERNATIONAL/ESF/Pages/esf-index.aspx
https://www.newyorkfed.org/markets/international-market-operations/foreign-reserves-management

I suppose it’s worth noting that the NY Fed seems to believe it has some decision-making power with regards to the ESF, while the Treasury thinks nothing of the sort. My best guess here is that this is just typical NY Fed mandate overreach and that the Treasury can largely do whatever it wants. As such, it’s worth reading this particular passage from the Treasury description of the ESF carefully:

“The ESF can be used to purchase or sell foreign currencies, to hold U.S. foreign exchange and Special Drawing Rights (SDR) assets, and to provide financing to foreign governments. All operations of the ESF require the explicit authorization of the Secretary of the Treasury ("the Secretary"). The Secretary is responsible for the formulation and implementation of U.S. international monetary and financial policy, including exchange market intervention policy. The ESF helps the Secretary to carry out these responsibilities. By law, the Secretary has considerable discretion in the use of ESF resources.”

As stated above, the secretary can basically do whatever he wants. But let’s consider the “whatever he wants” bit in a moment. First, what’s actually inside the ESF at present? Here are the annual and monthly balance sheet reports:

https://www.treasury.gov/resource-center/international/ESF/Pages/reports.aspx

Right now it appears the fund contains about $6 billion in EUR-denominated securities and $6 billion in EUR-denominated deposits/repo. It also has about $2 billion in JPY-denominated securities and $6 billion in JPY-denominated deposits/repo. The rest of the nearly $100 billion in assets are held in SDR and USD. For the purposes of the BTP discussion, it’s worth noting that the EUR securities are only of the German, French and Dutch varietals. So what stops Trump from saying, “Hey, let’s dump 6 yards of negative-yielding core stuff to buy 6 yards of 3%-yielding BTPs.” NOTHING AT ALL. Further, why are his folks at Treasury holding all this SDR? After all, 10% of the SDR is RMB now (does Trump even know he is long RMB?!?). Maybe he can help out his friend Giuseppe by knocking out some SDR, too (or at least the Chinese portion of the SDR for a start).

All of this said, we are not talking about large sums: maybe $20-40 billion in purchases of BTPs max before the capital buffer wears thin. And with Italy needing to refinance something like $400 billion next year, it hardly seems helpful.
Nonetheless, the symbolism and the “announcement effect” could be extremely powerful, especially initially.

Now let’s get a little more serious and think about how far Trump can go with this fund. Can he just do whatever he wants in terms of sizing? In particular, what I want to consider here is, can the Treasury Secretary add additional capital to the fund in order to grow the asset base, or would Congress need to approve this? I don’t know, but he could certainly try. Or could he figure out a way to let the fund run a negative capital position by pledging other assets to the Fed, such as gold. (There is probably about $400 billion if they consider going down that path.) This little ESF piggy bank, aka the “trade war chest,” could become a behemoth.

Continuing down this hypothetical ESF behemoth path, let’s imagine that once he is done with NAFTA and China, Trump goes for Germany – the country with the largest trade surplus by far! With Germany deemed a “manipulator,” he could seek to weaken the USD versus the EUR through intervention – in large scale! But instead of taking the EUR proceeds from USD sales and rolling them into Bunds, he could help his buddy Giuseppe and any other peripheral country that wants to play ball. After all, they are not the manipulators, they are just part of the veil being used by the Germans to create a weak currency for themselves.

What’s the bottom line here? Well, if Trump wants to build a “Weapon of Mass Destruction” for the trade war, a bigger and badder ESF is just the ticket. He could topple ANYONE with that ballooned asset base. And if he plays his cards correctly with Europe, he may even bring an end to the existing structure of German-imposed fiscal and monetary discipline that has destroyed an entire generation of peripherally domiciled European citizens. I for one am very excited to watch the coming trade fireworks!

— David Zervos, Chief Market Strategist

Scaling New Highs?

Through the summer doldrums, global indices bottomed out as investor sentiment turned positive with the MSCI World, a broad market cap weighted stock market index, attempting to surpass its February peak. However, the breadth of the rally has deteriorated with market leadership dominated by the U.S. while Emerging Markets (EM) have faltered. Just as importantly, the rise in U.S. benchmark indices has been accompanied by strong inflows.

The bifurcation in equity index performance during the current rally has been due to oil and a strong dollar which has undermined some of the emerging markets while China flirted with a mini-credit crunch early in the third quarter of 2018. Despite the ongoing trade disputes between the U.S. and other regions, there was no evidence that this had eroded global trade let alone sentiment.

Looking forward it is the move in U.S. Treasury rates that will matter as equities are long duration assets. Helped by changes to the corporate tax code, U.S. equity valuations have fallen while EM and European equities trade on fair multiples. Moreover, equities are enjoying a period of pricing power while better wage growth and capital expenditures mean a broader earnings base. We still prefer Japan, Central Europe and selective sectors in the U.S.

— Sean Darby, Global Head of Equity Strategy

U.S. Outlook – Tariffs and Inflation

A tariff on $200 billion of U.S. imports of Chinese goods went into effect on September 24. The tariff is structured as a step function: a 10% tariff will be in effect until year-end 2018 with the level rising to 25% in January 2019 if the U.S. and China do not reach a trade agreement by the end of the year.
The tariff very much complicates the U.S. inflation picture, and it is important to differentiate the effect of the threat of tariffs from the actual implementation of tariffs.

The threat of U.S. tariffs and the consequential fear of the effects of these tariffs on China economic growth have caused weaker commodity prices since June. Weaker global commodity prices, in turn, have caused weaker import prices, which have caused weaker domestic core commodity prices in the U.S. inflation data. This linkage was quite pronounced in the U.S. inflation data released in September and will continue to be pronounced in the months immediately ahead.

Now that tariffs on China have been imposed, the tariffs will exert upward pressure on U.S. inflation with an expected lag.

There are some lessons to be learned from the U.S. tariff imposed earlier this year, with washing machines serving as a case study. In January, the administration put a 20% tariff on the first 1.2 million imported washing machines, and a 50% tariff on all subsequent imports. Consequently, U.S. washing machine prices fell in February and March, but began to rise in April and surged in June, July and August. This surge is quite impressive because these prices had been soft in previous years.

The washing machine case study suggests that tariff on China goods is likely to have no effect on U.S. inflation in the months immediately ahead but would then begin to gradually put modest upward pressure on inflation by year-end. The upward pressure would accelerate in 2019 if there is no trade agreement and the tariff were to be increased to 25% as is currently intended.

Jefferies estimates that the 10% tariff on $200 billion of imports from China will add roughly 0.2% to the year-over-year change in headline U.S. inflation between December of this year and the end of Q1 2019. Were the tariffs to accelerate to 25% in January, we estimate that the U.S. inflation effect would also accelerate, with the higher tariff adding an additional 0.5% to headline U.S. inflation.

Because the tariffs are strictly on imports from China and set to accelerate from 10% to 25%, the structure of tariffs on Chinese goods will moderate the effects on U.S. inflation. First, there is a strong incentive for importers to accelerate imports from China before the higher tariff is put in place. Second, importers will also be incentivized to look to no-tariff or low-tariff markets for import substitutes.

Finally, the White House has indicated that U.S. tariffs on another $267 billion of Chinese imports are “ready to go.” This threat will also incentivize importers to both accelerate imports of other Chinese goods faced with the threat of U.S. tariffs, as well as accelerate the search for substitutes for these goods from no-tariff or low-tariff countries.

— Ward McCarthy, Chief Financial Economist

European Outlook – ECB Starts to Shift Expectations for 2019; Brexit Enters its Final Approach, BoE on Stand-by Whatever the Final Destination

The ECB lags the U.S. Fed in terms of where it is in the policy cycle, but its intentions to normalize policy are clear. The market’s immediate focus is on the final months of QE, however, the ECB is starting to frame the big picture: when, and how quickly, it should be raising interest rates. Given the changes required to forward guidance, and the departure of Draghi, Praet and Coeure, 2019 is shaping-up to be an eventful year as the ECB resets policy.

In the meantime, in the upcoming meetings (October 25 and December 13), there are several technical issues for the ECB to address: the new capital key weights (which may need further adjusting after Brexit) and whether it plans to correct the deviations from the capital key that have built-up during the QE program. For some Euro-area countries (Portugal, Ireland,
Finland and Slovenia), these decisions could make a meaningful difference in terms of how much sovereign paper is bought by the domestic National Central Banks next year.

In terms of the ECB’s reading of the incoming data, the slowdown in the quarterly GDP numbers was expected, but what matters more at this point is a tightening labour market and higher wage growth. Its forecasts for core inflation two years out may still be too optimistic; but, as with the U.S. Fed, inflation will be viewed as a lagging indicator, and will have only a limited bearing on the ECB’s decisions next year.

Domestically, the risks of another general election are ever-present in Italy, but the ECB will make every attempt to stay above the political fray. Internationally, a messy Brexit is an obvious hazard, but the bigger challenge from the ECB’s perspective is developments in the U.S.: the pace of Fed tightening, the spillover effects from reduced capital flows as QE comes to an end, and the potential disruptions to global trade flows.

In the UK, with six months to go before the March 29 Brexit date, the Government is struggling to present a vision for the UK-EU relationship acceptable to either Brussels or the majority in Parliament. The negotiations will go down to the wire, but even assuming a deal between the two sides can be agreed on the basic terms of trade after the two-year transition period, what happens if members of Parliament still vote it down? Another general election cannot be ruled out, but is not likely; another referendum is possible, but what options would be put to the voters? In terms of monetary policy, if the Brexit process is managed successfully, the BoE will look to raise rates several times in 2019; if it isn’t, the Bank’s reaction function is anything but straightforward. FULL REPORT

— David Owen, Chief European Financial Economist
— Marchel Alexandrovich, European Financial Economist

Actionable Ideas for Companies and Sponsors

MERGERS AND ACQUISITIONS

Dual-Track M&A Processes Increasing Due to Strong IPO Market

With renewed investor interest in IPOs and record equity valuations, the option to publicly list a business has gained credibility as an actionable alternative for sellers. As a result, dual-track processes are returning as a preferred exit strategy and being utilized by both private equity as well as by corporates for executing carve-outs.

In addition, the expansion of confidential IPO filing flexibility to all potential issuers last year, has favorably altered the mechanics of implementing a dual track strategy. Confidential filings allow the IPO issuer to delay or eliminate a significant amount of the cost of preparing a publicly filed S-1. In addition, with the greater flexibility of a confidential filing, sellers are able to customize the timing of the sale process to (1) maximize number of participating buyers, (2) minimize time for sellers, or (3) adjust the amount of time up or down between final offers in the M&A process and IPO pricing.

Minority Investments by Financial Sponsors on the Rise

Viewed as an attractive hybrid between venture capital and buyouts, minority investments have moved into the mainstream for private equity investors. In the first half of 2018, growth equity accounted for 23% of all private equity deals and are on pace to exceed last year’s record. Companies that are logical candidates for minority investments are those where control is paramount but who nevertheless (1) need to provide early investors partial liquidity, (2) need to raise capital to fund new initiatives, or (3) require expertise to guide executive teams at companies that have grown substantially in both size and complexity. Technology companies have been the traditional focus for private equity
minority investments but other rapidly expanding companies, particularly in the consumer sector, have also benefited from increased private equity interest in non-control investments.

**Growing Activist Resistance to Announced M&A Transactions**

Public attempts by activist investors either to scuttle or to sweeten existing deals has become an increasing part of shareholder activism. Activist strategies have been particularly focused on conflicts of interest and the negative impact of conflicts on value maximization in order to force parties to the negotiating table. Recent examples include: (1) Elliott Management’s successful opposition to Hyundai’s sale of two highly valued assets within its Mobis subsidiary to another Hyundai subsidiary, focusing on the low value paid to Mobis and the value destruction to Mobis’ remaining minority shareholders, resulting in Hyundai agreeing to scrap the proposed transaction; (2) Carl Icahn and Darwin Deason’s successful opposition to the announced Xerox-Fujifilm merger, focusing on Xerox’s CEO actions during the negotiation of the deal, resulting in the deal being cancelled, Icahn and Deason gaining five board seats and the CEO’s resignation. As a result of the influence and success of activists, Boards and managements of public companies, upon the announcement of any significant M&A transaction, need to have a clear, proactive communication strategy to shareholders and to proxy advisory services articulating the value creation potential of the proposed transaction.

**DEBT CAPITAL MARKETS**

**The Syndicated Loan Market is Opening for Middle Market Issuers**

Historically, a significant portion of middle-market issuers (~$50 Million EBITDA) have placed private debt with direct lenders. Direct lending solutions often include restrictive terms with higher interest rates and result in the issuer being largely captive to one lender. However, increased demand for middle market issuers from the broadly syndicated loan market is allowing these issuers access to looser covenants, including covenant-lite transactions, while offering competitive interest rates. The syndicated market also offers the ability to syndicate among several lenders to drive competitive terms while retaining flexibility for the issuer in not being captive with one lender. Recent syndicated loan transactions for middle-market companies have been used both to refinance existing privately placed debt at more competitive terms as well as for dividend recapitalizations.

**Issuers Achieving Greater Covenant Flexibility in the Unsecured High Yield Bond Market**

The record strength of the high yield bond market has allowed issuers to achieve looser bond covenants in areas previously not negotiable, including more flexible restricted payment covenants and builder baskets. In September, Akzo Nobel issued unsecured notes which included a provision that provides increased flexibility to use proceeds from asset sales for restricted payments. Traditionally, asset sale proceeds have been required to be reinvested into the company or offered to bond investors to redeem bonds at par. Also, in September, Refinitiv issued notes excluding market standard protections around using their restricted payment builder basket. The builder basket grows or “builds” as either 50% of Net Income or 50% Excess Cash Flow and is commonly subject to a minimum fixed charge coverage ratio of 2.0x, pro forma for the transaction, but in the case of Refinitiv, the basket can be used at any time.

**High Growth, Negative EBITDA Companies Accessing the Leveraged Finance Market**

The leveraged finance market has shown increased receptivity for issuers that have demonstrated strong growth but have no material EBITDA. Issuers like WeWork, Uber, and Tesla have used their high-growth profile to support debt offerings via the leveraged finance market, and recently, Carvana, an online platform for buying and selling used cars that has grown rapidly the past few years but does not generate any significant cash flow or EBITDA, successfully accessed the debt
markets. High growth issuers are using the leveraged finance market as an attractive and large source of nondilutive capital to help support their growth initiatives prior to going public.

**EQUITY CAPITAL MARKETS**

**Record Growth in Primary Forward Issuance**

Capitalizing on strong equity valuations, $12 billion of primary forward equity has been raised in 2018 YTD through 14 deals, compared to three primary forward deals for $973 million in all of 2017. Primary forwards are relevant to issuers considering acquisition financing alternatives or other potential contingent equity needs, such as capital expenditures or debt repayment. Executing a forward sale allows companies to lock-in their current share price, without market risk exposure or dilution until proceeds are drawn down.

In addition, issuers are including the primary forward mechanism into their at-the-market (ATM) offerings to enhance the precision with which they fund acquisitions or pay down debt. Under this construct, an issuer can choose to sell stock off the ATM on a regular-way basis, as a forward or a combination of the two. When equity is sold as a forward, the issuer can either aggregate sales over a pre-determined time into one forward contract or source a single block of demand. The issuer can choose a maturity based on future funding needs, typically six months to one year in length, with the flexibility to draw the proceeds in part or in full at any time prior to maturity. Public disclosure of stock sales under the forward is the same as an ATM – i.e. in the issuer’s subsequently quarterly financial statement.

**Optimizing Convertible Issuance Through Concurrent Private Convertible Repurchases**

Repurchasing an existing convertible with the proceeds from a new convertible issue enhances deal execution and is the most efficient way to retire an upcoming convertible maturity. This strategy avoids the shorting pressure typically seen alongside a convertible issuance, as investors are able to roll their hedged position into the new deal. Additionally, issuers are able to avoid double interest expense and create anchor demand on a new transaction. Consequently, this private repurchase strategy has accounted for nearly 80% of convertible refinancings over the last three years. With $45 billion of upcoming convertibles maturing in the next three years and rising interest rate expectations, we expect to see a continued acceleration of convertible refinancing activity using this strategy. Jefferies has recently employed this strategy on several convertible transactions, including Retrophin’s $275 million and CalAmp’s $230 million convertible offerings.

**Growth in European Closed-End Investment Funds Issuance Capitalizing on Investor Interest in Alternative Asset Classes**

Investment funds are used by issuers to raise capital for newly created companies that invest the proceeds in alternative asset classes or in a specific sector. So far this year, European listed investment funds have raised $6 billion, and the percentage of total European equity issuance accounted for by investment funds is the second highest in the six years. The UK remains the dominant market in Europe for investment fund issuance and represents 55% of fund issuance. The growth of closed-end investment fund issuance is supported by institutional investors’ continued interest in listed companies with strong management teams that provide exposure to alternative asset classes, including credit strategies, healthcare, real estate, infrastructure and private equity. Jefferies continues to be a market leader in underwriting listed investment funds, having raised approximately $6.3 billion in Europe since 2012.

**RESTRUCTURING AND RECAPITALIZATION**

**Highly Levered Companies Pursuing Transactions Utilizing Permitted Investments into Unrestricted Subsidiaries**

As a result of borrower-friendly credit market conditions, many levered companies now enjoy unusual flexibility within their credit documents to make permitted investments of cash or other assets into an unrestricted subsidiary. As their
name suggests, unrestricted subsidiaries sit outside of the issuer’s “credit box”, i.e. they are generally not subject to the covenants and other restrictive provisions of the company’s credit agreement, indentures, etc.

This flexibility is particularly helpful for companies with limited liquidity or covenant headroom, which are preventing them from pursuing otherwise attractive financial or strategic alternatives. Levered companies are increasingly making permitted investments into unrestricted subsidiaries which they are then using for debt exchanges, new money capital raises, shareholder dividends/distributions, or M&A. The goal is to end up with an asset-rich, unrestricted subsidiary with which they can transact. Recent examples of issuers utilizing such permitted investments in unrestricted subsidiaries include Sanchez Energy (acquisition), J. Crew (exchange offer), Hot Topic / Torrid (spin-off), PF Chang’s / True Food Kitchen (spin-off), and PetSmart (dividend).

**MUNICIPAL FINANCE**

Maximizing Realized Earnings from Carefully Planned Investment of Bond Proceeds

Today’s flat yield curve and rising short term investment rates provide attractive opportunities for Issuers to maximize investment returns, including potentially generating and keeping positive arbitrage (earnings in excess of the bond issue arbitrage yield) earned on the proceeds of their tax-exempt issues. The arbitrage regulations limit, but do not fully eliminate, the ability of Issuers to earn and retain positive arbitrage. That said, the investment goal for bond proceeds should be to maximize earnings net of any rebate and not to simply minimize the rebate paid. Issuers can maximize realized investment returns through carefully planned investment strategies including 1) spending proceeds quickly enough to meet the permitted exceptions from rebate, up to 24 months for construction funding issues, 2) opting to pay a 1.5% penalty in lieu of rebate to permit any positive arbitrage to be retained, or 3) waiving the temporary period from the investment of proceeds so that the investments are immediately yield-restricted, potentially resulting in less rebate in a rising interest rate environment, since for yield-restricted funds negative arbitrage incurred now can be combined with positive arbitrage earned in the future.

**Best Research Ideas**

**AMERICAS**

**U.S. Insights – Prefer Bottoming to Peaking Margins? Malls Have Ideas and Greasy Pretzels**

Jefferies U.S. Equity Research published a report analyzing the margin expansion opportunity for retailers. S&P 500 operating margins are currently in the 87th percentile and tech margins are at all-time highs, but the story is different for retail, with many retailers’ operating margins at half of 2012/2013 highs. Jefferies found that retail inventory growth has decelerated to close to zero, and this, in combination with accelerating sales growth, e-commerce scale and store closures, argues for accelerating margin gains. Jefferies highlighted KSS and URBN as two retailers that particularly stand to benefit from margin expansion. [FULL REPORT](#)

— Jefferies U.S. Equity Research

**Industrials – Marine Fuel Chaos Decades in the Making: Pick the Fork**

Jefferies’ analysts collaborated on a report looking at the implications of new shipping fuel standards on the supply chain. Both complex refiners such as MPC and chemical stocks like LYB are likely to benefit through higher refining margins, but the benefits will likely be farther reaching. Carbon black producers including CBT and OEC could see lower input prices, and the firm estimates long-term tailwind could add 35% and 25% to CBT and OEC EPS, respectively. Jefferies also highlights that the costs for shippers could rise 50-80%, though they would likely be passed
down through the supply chain to charterers and ultimately to end users. Additionally, shipping capacity will be reduced by the adoption of slow steaming and retirement of less fuel-efficient vessels. Jefferies believes product tankers ASC and STNG are best positioned to benefit from higher demand for clean products. FULL REPORT
— Jefferies U.S. Equity Research – Industrials, Materials and Energy Teams

**Chipotle Mexican Grill (CMG) – Ready to Deliver SSS & EPS Power: Upgrade to Buy as Top Mid-Cap Pick**

Jefferies upgraded shares of CMG to Buy with the view that the company is increasingly likely to improve both same store sales (SSS) and restaurant level margins. The firm believes CMG is one of the better positioned companies to benefit from the ongoing shift to digital/off-premise sales. Jefferies forecasts mid-single digit SSS in 2019 and 2020, with digital, delivery and loyalty adding another 3.5-4% to SSS in 2019. In addition, these trends should drive restaurant-level margin to 20%, which would still be well below the peak of 27%. The firm also highlights Merchant Centric data which shows continued positive review sentiment, and SimilarWeb traffic data shows better mobile app usage trends. Jefferies’ 2019 CMG EPS estimate is 20% ahead of consensus. FULL REPORT
— Andy Barish and Alex Slagle, Jefferies U.S. Equity Research – Restaurants

**EMEA**

European Franchise Picks List – Time to Refresh!

Jefferies reviews recent performance and adds Amplifon, Subsea 7 and Diageo to the List. These names join EDF, Burford Capital, Lonza, Royal Dutch Shell, Novartis, Meggitt, Anglo American, Royal Bank of Scotland, Beazley, Arcelor Mittal, Generali, Sophos and Volkswagen. Sky and Siemens are removed. FULL REPORT
— Jefferies European Equity Research

**Beverages: Winners in Global Spirits Value Pools**

Exposure to stocks with diversified brand/country portfolios offers greater resilience to absorb category/country volatility. Growth stories that are dominated by a single category are attractive if current trends remain unchanged but do not provide the same optionality if there is a generational shift between categories. Jefferies’ top idea in spirits is DGE where we see accelerated top-line, margin expansion, and it is the cheapest spirits stock under coverage. FULL REPORT
— Edward Mundy, Jefferies European Equity Research – Beverages

**ASIA**

**Electrical - Metamorphosing into Holistic Consumption Plays: Initiate on FNXC, HAVL, VGRD**

Jefferies believes Indian electricals is one of the key sectors to benefit significantly from the GST (Goods and Services Tax) and its new required E-Way Bill, given its sizeable unorganized penetration. As the price differential between branded and unbranded products shrinks, Jefferies foresees an accelerated demand transition to a more organized segment, providing a fillip to volumes. Also, a key emerging trend among electricals is rapid diversification into durables and appliances, which helps de-risk provider business models and optimize product mix. Initiating coverage on Finolex Cables (BUY), Havells (HOLD) and V Guard (BUY). FULL REPORT
— Sonali Salgaonkar, Jefferies Asia Equity Research – Industrials

**Japan Equity Strategy - Board Structure Reform: Can Activist Shareholders Win Round Three?**

Jefferies published version 4.0 of the Board Structure Reform report in which the boards of all TOPIX500 index companies are rated and ranked. After a strong initial start, progress in board structure reform is stalled because
obstructive companies meet the current low benchmarks and have been able to block key revisions to the Corporate Governance Code. Nonetheless, Jefferies remains hopeful because shareholder activism is on the rise. FULL REPORT

— Zuhair Khan, Jefferies Asia Equity Research – Japan Equity Strategy
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**NOTABLE RECENT TRANSACTIONS**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Date</th>
<th>Transaction Description</th>
</tr>
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<tbody>
<tr>
<td>Energy</td>
<td>July 2018</td>
<td>$1,173,000,000 Common Stock Offering of KKR and Williams</td>
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<tr>
<td>Technology</td>
<td>August 2018</td>
<td>$447,000,000 Common Stock Offering of The Washington Group</td>
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<tr>
<td>Industrials</td>
<td>June 2018</td>
<td>$1,600,000,000 Credit Facility to Finance Acquisition of The Washington Group</td>
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<tr>
<td>Media</td>
<td>July 2018</td>
<td>$2,300,000,000 Merger with Fairfax Media Limited</td>
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<tr>
<td>Healthcare</td>
<td>August 2018</td>
<td>€1,085,000,000 Credit Facility to Finance Acquisition by CVC Capital Partners</td>
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<tr>
<td>Industrials</td>
<td>August 2018</td>
<td>€660,000,000 Credit Facility to Orange Group</td>
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<tr>
<td>Real Estate</td>
<td>July 2018</td>
<td>£300,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<tr>
<td>Healthcare</td>
<td>July 2018</td>
<td>$830,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<tr>
<td>Consumer</td>
<td>August 2018</td>
<td>$1,750,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<tr>
<td>Finance</td>
<td>August 2018</td>
<td>$450,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<tr>
<td>Industrials</td>
<td>July 2018</td>
<td>$3,300,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<td>Healthcare</td>
<td>August 2018</td>
<td>$1,245,000,000 Credit Facility to Finance Acquisition by Oak Hill Capital</td>
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<tr>
<td>Consumer/ Technology</td>
<td>August 2018</td>
<td>$240,000,000 Initial Public Offering of Sandusky NovaFSI</td>
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<tr>
<td>Industrials</td>
<td>July 2018</td>
<td>$500,000,000 Senior Unsecured Notes Offering of Sonos</td>
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**JEFFERIES KEY FACTS & STATISTICS**

(as of August 31, 2018)

- Founded: 1962
- Total Long-Term Capital: $11.3 billion
- Number of Employees: 3,526
- Companies under Global Equity Research Coverage: 2,000+

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The big continue to get bigger, a new study shows, with the top 500 fund managers in the world growing assets by 15.6 percent last year — the most significant increase since 2009.

By Julie Segal  October 29, 2018

The assets controlled by the 500 biggest fund management firms in the world grew by 15.6 percent last year — and the top 20 firms now manage a big chunk of that total.

Last year the combined assets of the 500 biggest asset managers reached $93.8 trillion, but the top 20 firms now control a record 43 percent of assets, according to an annual study.
The top 20 firms now control a record 43 percent of assets, according to an annual study released today by research and advisory firm Willis Towers Watson and Pensions & Investments. Industry asset growth hasn’t been this high since 2009.

That may be depressing news for any small or medium-size manager looking to expand in an industry facing a lack of organic growth. The concentration of assets in the top 20 firms in 2017 is the highest since the consultant’s first study of the top 500 asset managers, released in 2000.

This is the fourth straight year that the share of assets managed by the Top 20 firms has grown. These firms’ assets under management grew 18.3 percent, to reach $40.6 trillion.

Amanda Tepper, founder and CEO of Chestnut Advisory Group, a business advisor to asset managers, isn't worried about the concentration of assets in the top 20 managers and its effect on smaller managers.

“It’s still a really inefficient and heterogeneous business,” said Tepper in a phone interview. “A lot of firms in the top 20 actually own a bunch of boutiques themselves. They tend not to integrate them, because then you kill what’s special,” said Tepper. “It’s a model that can work because the parent company can turn them into a profitable business and the manager can focus on investing.”

[II Deep Dive: Declining Fees Take Big Bite Out of Asset Manager Revenues]

The growth of passive investing has bedeviled active managers since the financial crisis — and last year was no different. Passive assets grew by a stunning 25 percent in 2017, according to the study.

“The asset management industry is facing a period of massive change and disruption resulting from the confluence of several global megatrends: technological, demographic, economic, environmental and social,” wrote the authors of the report. “The successful asset management firms over the next few years won’t dodge these industry realities.”

Even as investors have been rushing into index funds because of their low cost and
simplicity, asset managers have been busy with product development and dealing with regulatory initiatives. Almost two-thirds of managers surveyed by Willis Towers Watson said they introduced new products last year, and 60 percent said they experienced more oversight from regulators. Seventy-four percent spent more money on technology and big data projects.

Assets in factor-based strategies, one of the most popular product launches, grew at 14.5 percent in 2017. Strategies that invest according to environmental, social and governance issues increased by 10.7 percent, less than overall growth. At the same time, 81 percent of survey respondents said they saw increased interest from clients in sustainable investing, including proxy voting.

Willis Towers Watson also found that aggregate investment management fees decreased for 27 percent of managers. Eleven percent of survey respondents reported an increase in fees.

Managers in North America represent the majority of assets, at 58.1 percent. European managers control 31.8 percent of assets and Japanese managers control 4.8 percent. The rest of the world controls 5.2 percent of assets.

Even though passive strategies grew by double digits last year, 77.6 percent of total assets are in active strategies. Over the past five years, passive has gone from 19.5 percent of the total to 22.4 percent.
Thoughts and Reflections on Thirty Years in Fund Management

RWC Equity Income
Investor letter Q3 2018
Portfolio Managers

Ian Lance, Nick Purves and John Teahan have managed funds together for over 10 years. Their loyalty and experience is leading within the industry and has awarded them a number of accolades. Ian, Nick and John joined RWC Partners in 2010 to establish the Equity Income team and now manage c. £3 billion for their clients.

The team’s approach fully integrates conviction led, value-based stock selection with a distinctive and technical approach to stabilising assets, with the aim of delivering investment solutions that both grow investors’ assets and protect the purchasing power of capital and income.
Thoughts and Reflections on Thirty Years in Fund Management

Two months ago I proudly watched the comedian Sanjeev Bhaskar (Chancellor of Sussex University) hand my daughter her Economics degree.

By strange quirk of fate, it was almost thirty years to the day that I had also graduated with an Economics degree and after a few weeks island hopping in Greece with my girlfriend (now wife), I stumbled into the fund management industry unaware that I would still be doing the same job some thirty years later.

The last three decades have been mostly enjoyable, sometimes stressful, often frustrating but always interesting. There are, however, some things that I would not repeat if I had my time over again and other things that I would have begun sooner. So what follows are a few observations from thirty years in the industry that will hopefully also serve as advice to anyone entering the industry today.

Early Career Advice

• The first thing I would say is ‘Congratulations’ because you have chosen a potentially fabulous career and one that I have found endlessly fascinating for several reasons. Firstly, I have enjoyed the disparate nature of the business which requires some knowledge of economics, accountancy, business studies, history, psychology, maths and these days quite a bit of politics! Secondly, I have enjoyed the variability; the investing world is constantly changing and no two days (let alone two years) are the same. In the last thirty years I have had a ring side seat for momentous events from the Asian crisis to the Dot Com bubble, and the Housing Bubble to the Global Financial Crisis. Companies have come (Facebook and Apple) and gone (Enron and Worldcom). This constant state of change means the job is never boring. Finally, I have met and worked with many interesting and very talented people. So this is a career that has the potential to be highly stimulating.

“ In my whole life, I have known no wise people (over a broad subject matter area) who didn’t read all the time - none, zero. ”

CHARLIE MUNGER

• The best way to develop yourself in the early years is to try to get yourself in a position where you are working alongside some outstanding investors and then learn by listening to them, watching what they do and asking questions. If you have the choice between a better paid job with people you have little time for or a worse paid one with people you respect, choose the latter every time. You will enjoy going to work each day and in the long run it will pay off and make you a better investor.

• The next best thing you can do to develop yourself is read. Lots. Having spent the last ten years of your life taking exams, it’s quite disheartening to know that you are now expected to spend the next three years taking the CFA most of which you will forget within minutes of leaving the examination room and never use again. Whilst this might make you more marketable from a career standpoint, I am not convinced it makes you a better investor and therefore an alternative is to spend the time reading books about investing. I have had the luxury of a two hour daily commute for the last thirty years which means I have had ten hours a week to get through plenty of books (as my wife will testify given the extent to which they have over run our house!). I would recommend you try to read about a broad range of investing issues; financial history, the methods of successful investors, behavioural finance but also try to include non-financial reading in your list to give you a broader knowledge base. Of course these days, you can also listen to some
great podcasts and watch video interviews that take you inside the minds of successful investors as well. As Charlie Munger once said “In my whole life, I have known no wise people (over a broad subject matter area) who didn’t read all the time – none, zero.” And finally never stop reading, learning and trying to improve your knowledge (I am currently reading a book by the Spanish value investor Francisco Garcia Parames and how he applies Austrian economics to investing).

• Figure out early on what works in investing and what doesn’t. Spend your time on the former not the latter and become expert at it. There are plenty of studies of what works but to help you the chart below (Figure 1) is representative of most of them which will tell you that value works, momentum or trend following works and size works. Quality doesn’t and growth doesn’t because no stock is so good that you can pay any price for it and expect to make good returns.

**FIGURE 1**
**Long-Only Portfolio Value-Add versus Cap-Weighted Benchmark, 1967-2016**

Source: Research Affiliates, LLC, based on data from CRSP and Compustat.
• Two of the most important concepts to learn about are the power of compounding and the impact of reinvesting dividends. It’s worth getting a copy of the Triumph of the Optimists or similar early on. Most people regard these as too dull to be worth bothering with and yet they are some of the most important investing principles to learn (see Figure 2).

FIGURE 2
Impact of reinvested dividends on cumulative US and UK equity local-currency returns, 1900-2016

- US real total return 6.4% p.a.
- UK real total return 5.5% p.a.
- US real capital gain 2.1% p.a.
- UK real capital gain 0.8% p.a.


• Even if you convince yourself that value investing works, you need to consider whether you have the right personality to practise it; not everyone does. You need to be patient, inquisitive, modest but bold at the same time. Humans are hard wired to run with the crowd, and very few have the mental fortitude to zig when everyone else is zagging. Value investors have a terrible habit of romanticising their experiences, when the reality involves long periods of watching glamour stocks soar to the skies whilst the boring old value stocks you own go nowhere (or down). This can go on for months (if not years) and can be very dispiriting especially when others start to question your investing acumen. This is another reason why so few people choose to follow a value style despite its long term merits. There’s no disgrace in admitting it’s not for you.

• Next think hard about your objectives and priorities – what do you actually want to achieve throughout your career? The second part of the study above concludes that, despite generating the best long-term returns, value investing is the strategy most likely to get you fired because of the variability in those returns. If you want to achieve the greatest risk adjusted returns for your investors over the long run, become a value investor. If you want to minimise your chances of losing assets and getting fired, then choose another investment style. This is an example of the principal agent problem that is common throughout the industry – what is in the best interests of the people who own the assets is not necessarily in the interests of the people they hire to manage them. Self-preservation goes a long way to explaining why so many fund managers in the industry end up as closet trackers.
So you want to be a value investor

If, despite all my warnings above, you still decide you want to become a value investor, the following guidelines may be of use to you.

- **Have a healthy respect for the markets as they represent the collective wisdom of millions of people, some of whom are very smart and therefore much of the time they are brilliantly efficient.** The collective wisdom of the crowds can sometimes understand the implications of certain events far quicker than I and most individuals can (the FTSE soaring on the afternoon of 16 September 1992 when UK interest rates hit 15% as the crowd had worked out that the government had ‘lost’ to the forex markets and would be forced to withdraw from the ERM, devalue sterling and cut rates). Don’t let markets become your master, however, for there can also be a collective loss of sense when herd mentality takes over. Knowing when the market is being brilliantly rational and when it is being ludicrously irrational is something that cannot be learnt in a book but is rather gained from experience.

- **One of the main things is to figure out is how unpredictable the future is so that you don’t waste large amounts of time trying to forecast the unforecastable.** This will seem very strange since most in the industry spend their time confidently making predictions about the future. I rarely hear a fund manager on Radio 4’s Today programme say “I really don’t know” in reply to a question on his outlook or admit that his recent outperformance was down to a) luck or b) the waxing and waning of investment styles. Robert Rubin once said: “Some people are more certain about everything than I have ever been about anything” and that is exactly how I feel after thirty years. I have seen interest rates at +15% and -1%, the oil price at $10 and $150 and the FTSE 100 at 6400 and 3500 in the same twelve month period. Many things that I felt sure would happen have not come to pass and there have been things that have occurred that I never would have predicted in a million years (central bankers printing money to buy equities, fund managers buying negatively yielding bonds). Once you have accepted that it’s difficult to make predictions, especially about the future, you will be more inclined to build an investment strategy that is robust to a range of outcomes.

- **Investing is always going to involve some sort of forecasting but once you have acknowledged how unpredictable most things are, you should realise the futility of using thousand line spreadsheets to forecast a company’s earnings five years out.** My approach to forecasting changed when someone I worked with gave me a paper called Intuitive Prediction: Biases and Corrective Procedures by Kahneman and Tversky (long before the ‘Thinking Fast and Slow’ and ‘The Undoing Project’ became best sellers). This taught me that the accuracy of predictions can be improved by pulling them towards the class average and hence using base rate rather than singular data.

- **Many value investors proudly boast that they ‘completely ignore the macro’ and in some ways that makes sense.** Getting the timing and direction of inflation, currencies, interest rates etc is hard enough without then trying to fit a portfolio of stocks around that view. Companies’ profits and share prices are, however, impacted by cycles (credit, commodity, and business) and it is investors’ overreaction to these cycles that periodically throws up opportunities. It is crucial, therefore, to know which cycles impact a potential investment and where we currently are in that cycle.

- **You are going to make lots of mistakes along the way, I certainly have and will continue to do so.** Try to admit your mistakes, learn from them and move on. Hopefully that way you won’t repeat them. Try not to succumb to hindsight bias – was it really obvious that Trump would win the election and the US stock market would explode higher for two years or are you re-inventing history? To overcome this it helps to record the reasons that you took investment decisions as you can then re-visit them later.

- **You can put yourself at a fundamental advantage by thinking and acting longer term than the average market participant and thus exploiting their extrapolation and over-reaction.** When a company
or industry is doing badly, investors often struggle to see a future in which conditions have improved and thus price in a permanent state of decay; the reality is that companies adapt and by a combination of reducing costs and retiring capital, the outlook usually improves.

- Probably one of the most important things needed for a value strategy to be a success is the right clients i.e. those with a long-term orientation and a focus on process over outcome. There’s no point trying to be a long-term contrarian value manager if your investors are short term performance junkies. You can help by writing to your investors and helping them understand what you have been up to and why (this is the reason I have been writing these letters for the last eight years). When things go sour (as they inevitably will) they are more likely to stay with you if they agree with your logic and reasoning. Your viewpoint could end up being right but if you have lost all your money, this becomes largely academic.

- Performance over short periods of time is almost meaningless and yet plenty of people will place great weight on it. There is almost nothing you can do to change this mind-set, believe me I’ve been trying for 20 years. This is particularly problematic for the value investors whose cautious approach often sees them missing out on the highly speculative tail end of a bull market. We have now resigned ourselves to losing a portion of our assets at the end of every cycle and usually just before our style comes back in to favour.

- The longer you do this job, the more questioning and cynical you become and I believe this is a very important character trait to evolve. This is a natural function of repeatedly seeing over-optimistic promises by brokers, fund managers and corporate executives subsequently disappoint. It’s probably a good thing to acquire this cynical nature earlier rather than later.

- Remember that if the future turns out as you expected, but that has already been priced in by consensus, you might not make any money. In horse racing, you don’t make money by betting on the favourite all the time but rather on the horse that has been incorrectly handicapped and the same

“Performance over short periods of time is almost meaningless and yet plenty of people will place great weight on it.”

is true for investing. The company you are looking at might be high quality and with fabulous growth prospects but if the market can also see that, it is probably priced in. Now ask yourself what happens if they disappoint that cheery consensus. No-one would dispute that Microsoft has been a fabulously successful business but if you bought it in 2000, you had to wait sixteen years to get your money back simply because you over-paid for it on day 1.

- Beware leverage in all its forms, debt is an absolute killer. Nearly all of my worst investments have involved companies where a decline in profitability combined with a vulnerable balance sheet. The same is also true at the macro level. After we came close to blowing up the world’s financial system through excessive use of leverage, one might have thought a lesson would be learned and leverage would have been reduced. Instead, the lesson that was learned is that central banks will always come to the rescue of the reckless business or investor and hence the quantity of debt has significantly surpassed 2007 whilst the quality has simultaneously declined.

- Don’t be afraid to do nothing. We work in an industry where frenetic dealing activity is somehow taken as a sign of confidence and ability. Doing nothing is sometimes the hardest thing to do but frequently the best.

- Much has changed in the last thirty years; availability of huge amounts of information, algorithmic trading, centrally planned financial markets etc but one thing that hasn’t changed is human nature. The forces of fear and greed, hindsight bias, loss aversion are still there and they still cause the over-reaction which provides the opportunity for the contrarian investor. If you are clear what you are looking for and disciplined in its application, then volatility is your friend.
Some personal advice

• Try to remain humble. As investing is a fascinating and potentially lucrative career, it is competitive and those who do manage to get into the industry tend to be high achievers who are already quite self-confident. Many fund managers therefore have an inclination towards arrogance but particularly those who have enjoyed recent success even if this is a function of being in the right place during a bull market rather than any individual brilliance. One well-known fund manager went to press this year to compare the Prime Minister to Adolf Hitler, whilst another well-known growth investor is sounding off to anyone who will listen about ‘the death of value investing’. Pride comes before a fall and this sort of hubris is often a sign that things are coming to an end and best avoided. People in this industry have long memories and a sense of schadenfreude; if you act like a jerk you are likely to find that it will come back to bite you one day.

• Enjoy your career but don’t let it take over and try to achieve an appropriate work life balance. No one lies on their death bed wishing they had spent more time at work so try to get that work life balance sorted early on. Markets can be all consuming and sometimes it is hard to switch off.

• Never forget your responsibility to the investors who have entrusted you with a portion of their hard earnt savings. When the perma-bull strategist at a bulge bracket investment bank is telling you to eke out the final few points of a rampant bull market even though there could well be 5% upside and 50% downside, try to think about the man or lady who has worked on the checkout at Tesco for years in order to put something by for her retirement. How would they feel if they knew what you were doing? How would it affect them if you did lose half their money?

• Try to do something good for society along the way. This industry currently has quite a poor reputation for over charging and under delivering whilst making super-normal returns. In addition, the current crisis of capitalism can in part be traced back to city short termism and fund managers have played their part in this by pressurising corporate executives to maximise shareholders returns over those of other stakeholders. You have the ability to be better than that and to try to do some good for society. There is no shortage of fund managers pressurising business to cut investment, lay off employees, buy back shares and gear up just so that they can make their quarterly performance target. A less common but more responsible approach is to support management and encourage them to think and act long term to the benefit of all stakeholders in the business. The irony is that this route almost certainly doesn’t sacrifice any long term returns but should earn you more respect from both your investors and the companies you invest in. You will probably feel better about yourself as well.

Conclusion

I hope that the advice above does not come across as lecturing or patronising as that was certainly not my intention. As I stated earlier, I have made plenty of mistakes and this is my attempt to help others avoid them. It’s been a great thirty years and I have been very privileged to be able to do it. Here’s to the next thirty!

"Never forget your responsibility to the investors who have entrusted you with a portion of their hard earnt savings."
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Will We Rally into Year-End?

**EM fixed income is a bit of a sideshow relative to global equity markets. We stick to our bearish credit and neutral local markets view for now. A strong USD is a key risk. We think the weakness in Mexican assets has further to go.**

**How close are we to the end of the bear market?** In our framework, a correction in US equities was the 'last leg' in the bear market of 2018. EM absorbed the initial phase of US market weakness well, but sensitivity has picked up since mid-October with the strong DXY. We are not yet ready to turn bullish EM fixed income. Importantly, there is also no evidence to suggest that the weakness in US equities is sufficient to cause a switch in US monetary or trade policy. This would be an important catalyst.

**Latin change in the air:** The victory of Jair Bolsonaro in the Brazilian elections comes as no surprise and early comments from economic adviser Paulo Guedes that the incoming administration will focus on pension reform should be positive for the market. Investors should now watch for key cabinet appointments and whether the BCB governor will remain in place. In Mexico, the results of the public consultation on the new airport are a negative for the market and we stay long USDMXN, remove our 2y2y TIIE receiver but keep our 5s10s steepener, and move credit to a dislike stance. The 2019 budget is the next risk event.

**We stick to the bearish EM credit stance but make some portfolio rotations:** The DM correction that pushes US spreads wider will likely weigh on EM credit. We also expect EM sovereign issuance to pick up into year-end, which will be a headwind. We make some rotations in exposure. Among the oil-linked credits, we move KSA up to like, given recent underperformance, and move Russia down to neutral given outperformance. We also move Indonesia to neutral from dislike as it has underperformed EM peers by almost 30bp in past two months, and move Mexico to dislike with the increased policy uncertainty. Lastly, we move Ukraine to like as its supply is out of the way and move Egypt back to neutral from like, as supply is likely in January, which would take its debt stock over the EMBI ICA. We also look to buy Ukraine 2027 versus Egypt 2027.

**Neutral on local markets:** We do not expect to see new lows for EM local markets this year. However, we do think there are some downside risks for FX in particular markets with negative domestic stories. We maintain long USDKRW, USDMYR, USDZAR and USDMXN positions. Local rates should be protected by the rally in core duration in line with higher risk-aversion. In rates, we would pay on the dip in INR rates given our bullish forecast on oil and ongoing equity outflows. Poland yields now trade at the bottom of its long-term range, providing an opportunity to fade the rally, and thus we move to a dislike stance. Lastly we turn neutral on KRW rates given the downside surprise in GDP and dovish comment from the BoK.

**Could we rally into year-end?**

Historical returns and flows: Seasonality suggests caution

Sovereign credit: Rotating credit exposures
Mexico: Fade the rallies
Asset allocation, Trades overview
Snapshots, Live trades: Rationale and risks

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Could we rally into year-end?

James Lord, Ioana Zamfir

EM has mostly shrugged off the decline in US equity markets over the past month, raising the question of whether a year-end rally is possible should US risk markets stabilise. We don’t think that the timing is right and stick to a neutral stance in local markets and bearish stance in EM credit. First, our colleagues see further losses in US equities before year-end. Second, a close inspection reveals that EM ‘resilience’ starts to fade as DXY strengthens. Third, we do not see a catalyst as it is too early to expect any shift in Fed or US trade policy, while stimulus efforts from China are not significant enough to help EM. Fourth, we see poor technicals into year-end as sovereign supply is likely to remain high and November-December are typically weak months for flows and returns. Fifth, an analysis of EM equity market sensitivity to declines in the S&P shows that they continue to show higher sensitivity to declines in the S&P than advances. This negative skew in the beta is not consistent with the idea of ‘resilience’. A similar analysis for currencies reveals that it is just ARS, TRY and BRL that are proving ‘resilient’. The main factor arguing for a rebound is that indicators of risk-aversion such as the GRDI (Global Risk Demand Index – US Pat. No. 7,617,143) are reaching extreme levels, which historically has suggested a short-term decline in the VIX.

Overall performance in October suggests EM resilience... In our framework for EM this year, the correction in US asset prices was likely to represent the final leg of the EM bear market for 2018. At times it felt like that correction might not come through, particularly when the EM bear market ran out of steam in early September without any spillover into DM, and globally risk assets subsequently put in a strong performance. For a brief period, the reflation trade looked as though it might be back in play. However, patience among bears was ultimately rewarded and EM investors have since been watching nervously for spillover. However, considering the extent of weakness in US assets, the damage in EM has been limited.

So far in October, total returns on the EMBI have come in at -1.7%, the GBI-EM at -1.1% and MSCI EM at -10.3%, all in USD terms. Indeed, EM fixed income has been something of a sideshow compared to the volatility seen in DM equity and credit markets. The valuation and performance gap between EM and DM across equities and credit has narrowed. Within EM, while the returns for local markets have not been great, relative to credit and equities the performance has been good. Exhibit 1 shows that during October EM credit has been more correlated with the performance of EM equities – and thus more correlated with US risk assets – while EM local markets have been more resilient. This is also illustrated in Exhibit 2, which shows the one-month change in total return for the EMBI and GBI-EM since the market sell-off began at the start of the year. The volatility of total returns between the two indices is different but the beta between them during the bear market has been fairly consistent. This changed in October, with local markets staying more resilient for longer. This is consistent with our bearish stance on EM credit and neutral stance on EMFX/rates, both of which we maintain. While we think that a neutral stance on local markets is appropriate, there are downside risks and thus we continue to recommend some short positions in key markets where we see
The sell-off resumed in October...

Exhibit 1: The sell-off resumed in October...

...but local markets are outperforming credit

Exhibit 2: ...but local markets are outperforming credit

...but it is a tale of two halves: When we look at October’s performance overall, it is clear that EM local markets have been resilient to the decline in US assets. However, October has also been a month of two halves. Exhibit 3 and Exhibit 4 show the dynamics clearly. Exhibit 3 shows EM performing reasonably well in the first half of October, despite a sharp decline in the S&P. The correlation between the two was evidently very weak. However, from October 17 onwards, the correlation flipped positive and has seen EM weaken in line with another sharp correction in the S&P. The reason for the sudden change in relationship is likely down to USD, which also had a month of two halves. Exhibit 4 illustrates the DXY compared to EMFX versus USD (this time the time series is inverted to make it directionally consistent with DXY). The stronger first half performance of EM came during a period of DXY weakness, while the weaker second half came during a strong rebound in the greenback.

Exhibit 3: EM FX* correlated with US equity from October 17 onwards...

Exhibit 4: ...but the DXY is in the driving seat*

This is not to deny that EM has been trading well since the beginning of September. EM currencies have rallied since the September 4 trough even as the DXY has rebounded. Exhibit 5 shows that for most of the past year USD’s performance versus EM and in DXY terms has been highly correlated (the Exhibit shows the performance measured as a
one-month percentage change). This was the case during the first phase of the EM bear market from March-June this year. After a decent performance from EM in July, it was the August sell-off where EM performance diverged significantly from that of DXY. This primary catalyst was the sharp sell-off in Turkey as its relations with the US deteriorated sharply, with contributions from South African and Brazil too. The good performance since early September (and resilience against DXY strength and US equity volatility) is simply unwinding part of the underperformance seen during August (underperformance versus what would be implied by DXY, that is).

**Exhibit 5**: EM FX trades in line with DXY but underperformed in August and outperformed in September-October

So where would EM be if it had been trading in line with the DXY? To judge this we take beta between the daily changes of the GBI-EM FX versus USD index and the DXY since the beginning of the year up to August 1 (i.e., up until the point that EM started to diverge strongly from the DXY). We then applied this beta to the observed changes in the DXY from August 1 onwards, to calculate how EM currencies would have performed had they just moved in line with the performance of the DXY. The result is shown in **Exhibit 6** and also illustrates that much of the ‘excess’ weakness relative to the DXY that occurred in August has now been eroded (from 6% excess weakness to 1.9% now).

**Don’t expect any US policy help either: It is too early to expect the Fed or change in trade policy to boost EM**: The decline in the S&P 500 has got market participants wondering about US policy. Could the tightening in financial conditions be enough for the Fed to take notice? Might the US administration think twice before imposing an additional round of trade tariffs? We have been flagging that a dovish switch on policy would likely lead to a sustained rebound in EM. However, it is too early to expect any help on this front. On Fed policy, two of the most recent comments we have had come from the President of the Cleveland Fed Loretta Mester and Richard Clarida, the recently appointed Vice Chair of the Federal Reserve. For Mester, in comments made toward the end of last week on CNBC, the recent market volatility is not something that changes the economic outlook and she characterised it...
as "a natural thing", while posing a "risk" that she would "monitor". Growth will remain above trend in her outlook.

As for Clarida, comments made last Thursday struck an optimistic note on the economy. Our US economists noted three important points related to Clarida’s comments and market volatility. First, Clarida did not address recent equity market weakness or financial market volatility in his prepared remarks. Second, Clarida noted that "risks to monetary policy...are now more symmetric and less skewed to the downside in light of robust growth, low unemployment, and inflation at or near the Fed’s 2% symmetric goal". The comment that risks are "less skewed to the downside" does not indicate any significant concern about recent market weakness. Third, in the Q&A Clarida indicated that he believes market weakness would have to be "sustained" in order for it to be taken into account by the central bank. While the size of the move has been large, since it has only been ongoing for just one month it is difficult to argue that it could be characterised as "sustained" yet.

Meanwhile, there have not yet been many comments on the US-China trade relationship since the worst of the US equity market sell-off took place. As such, there is not yet any evidence that the US administration is changing tack. The Trump-Xi meetings at the G20 meeting in Argentina towards the end of November could potentially be a catalyst for a market turnaround, but this is still one month away. Neither the US or China has given much indication recently of softening the approach.

**China measures not enough to boost EM either:** If the Fed isn’t going to help, could China? China’s stimulus measures have certainly boosted sentiment to an extent and represent the start of a policy response to recent economic and market weakness. However, we believe that these measures will only help to keep China on a soft landing and not actually cause economic growth to increase. The fiscal deficit is expected to widen to 3.7-4.0% of GDP compared to 3.4% currently while credit availability to the SME sector is expected to increase and aid equity, bond and bank loan financing of the private sector in general. Despite these measures, our economics team expects credit growth to only stabilise at around 11-12% rather than accelerate and sees GDP growth continuing to slow.

**Year-end technicals are not supportive, as EM hard currency supply and seasonality should weigh on the market:** Increased supply was a reason why we expected EM credit to underperform. The supply has picked up and the underperformance has come through. However, we expect supply to pick up further from here and with gradual outflows from the asset class continuing we expect this to remain an important headwind. As we highlighted in our recent EM Technical Watch, the cash balance has dropped by 0.3pp to stand at 4.1%, below the two-year average for 4.6% on a simple average basis and therefore not looking all that comfortable in case volatility picks up further. We expect another US$22 billion of EM sovereign supply for the remainder of 2018. In the last three months, 70% of supply has been IG-rated. We expect this to fall as more HY issuers come to the market. Moreover, as we outline in Historical returns and flows: Seasonality suggests caution, November and December are typically not good months

![Exhibit 7: Monthly sovereign issuance, 2018 versus five-year average](image)
for inflows into the asset class, with both hard currency and local markets funds seeing outflows on average in the past 15 years. November is usually bad for returns, while December is often better.

**ARS, TRY and BRL safe havens?** For most of 2018 EM local markets and EM equities have yet to receive much lift from the (prior) optimism in US equity markets. Both EM local and equities showed a persistent negative skew in their sensitivity to the S&P 500, meaning that they tended to decline more on days that the US equity market went down than they rose on the days that the US equity market went up. We show this by splitting the daily performance of the S&P 500 into up days and then down days. We then took a rolling 90 ‘day’ (i.e., the last 90 instances) beta of daily changes in the S&P 500 with both different EM currencies and EM equity markets (measured in local currency terms), for both the ‘up’ and the ‘down’ time series. The different between the two betas for each market shows the ‘skew’ and is represented in Exhibit 8 and Exhibit 9. As is clear, currencies have persistently shown a higher sensitivity to declines in the S&P than advances throughout the year. As the earlier discussion showed, this was likely down to the USD more than anything else. In October, as US equity markets declined sharply, the performance of EM overall has been better. However, the data clearly show that it has been just ARS, TRY, BRL and to a very small extent RUB that have proven resilient to the US equity drop, while the rest of EM appears to struggle more on the down days than up days. In equities, it is a similar story. The local equity sensitivity is measured in local currency terms, and shows that with the exception of Brazil and to some extent Hungary, many of the markets continue to show higher sensitivity to S&P weakness than strength and in fact show a higher negative skew in October than they have done for the year as a whole. In other words, the ‘resilience’ of EM in the equity space is not evident, and for local markets it is mainly relevant for just a few countries.

**However, risk-aversion is reaching extremes:** DM volatility has been a factor limiting the recovery in EM. This has kept us on the sidelines in EM local markets and is a factor behind our bearish view on EM credit. Idiosyncratic risk events in some of the larger countries can weigh on sentiment (Mexico is particularly relevant here) but a rebound in core markets would likely help EM to move more meaningfully off the lows relative to the more recent sideways price action.
The main factor arguing for a bounce is that risk-aversion is starting to reach stretched levels. Indeed, Morgan Stanley’s GRDI is consistent with extreme risk-aversion, coming in at -2.68 as of last Friday. A reading in excess of -2/+2 generally signals caution that a reversal in sentiment is possible.

Exhibit 10: GRDI at levels suggesting some risk moderation

The back-testing of GRDI shows that it tends to deliver a reliable signal with respect to the VIX. Exhibit 12 shows the average change in the VIX in the week subsequent to hitting a particular level (shown as ranges along the x-axis of the Exhibit). Negative readings on the GRDI that indicate risk-aversion tend to result in the VIX coming lower in the subsequent week, while positive readings for the GRDI, indicating risk appetite, tend to result in the VIX moving higher in the following week. These are average indications from April 1995 to present day and certainly not foolproof. However, the negative readings on the GRDI would suggest that the chances are tilted towards a lower VIX in the coming weeks. We ran similar tests for EM to see if EM fixed income and equity assets tended to rebound in the week following negative readings on the GRDI. We tested EMFX versus USD from 2003, EMBI total returns and the MSCI EM equity index. The results are inconclusive, with no clear trend when looking at weekly or monthly returns following any given reading on the GRDI. This potentially reflects the fact that in recent years strength in DM risk assets (which dominate the GRDI series) has not typically resulted in positive outcomes for EM. For example, the rally in the S&P in recent years has not had an obvious positive effect on EM performance. We therefore do not put too much significance on the GRDI on its own. In any case, our US equity strategists continue to see new lows for the S&P 500 before the year is out, advising clients that “rallies should be sold until the liquidity picture improves, valuations compress further or 2019 earnings estimates are reduced”. The team considers 2450 “a reasonable downside target to consider”.

Exhibit 11: Bearish S&P sentiment reaching extremes

Exhibit 12: Negative GRDI tends to see a fall in VIX

What to watch after Brazil elections? The outcome of this weekend’s election has not come as a surprise to the markets, which had already fully priced in a Bolsonaro victory. In our view, the focus will now shift towards gauging his ability to pass the much-needed fiscal reforms, which will likely depend on Bolsonaro’s ability to gain Congressional support. In particular, market will be looking out for what type of pension reform the
new administration will target, ranging from small tweaks that could more easily pass yet not provide any meaningful longer-term impact to a more thorough one that will take much longer to pass and encounter high resistance. Newsflow suggesting strong coalition backing for the new president should be supportive for Brazilian assets, with BRL potentially testing the 3.50 level. Moreover, while Bolsonaro has already announced his Economy Minister, he should introduce the remaining cabinet names over the next few weeks, which could provide more clarity around his intended macroeconomic policies. Last but not least, it will be important to see who is elected as Lower House Speaker in February, as they could be instrumental in helping Bolsonaro to push his reform agenda and get new motions approved. The new president and Congress will assume office next year, on January 1 and February 1, respectively.

**Staying short South Africa following the budget:** The market was complacent about the MTBPS, which surprised on the downside with respect to both the fiscal deficit and bond issuance. The biggest risk to SAGBs and ZAR is the unbalanced supply/demand dynamics: Local demand has absorbed the most supply from the Treasury in 2018, leaving foreign investors as the price setter for the SAGBs market. Should they start to leave the market, given their current heavy positioning, SAGBs bond yields and USDZAR would move higher. We remain bearish on SAGBs and long USDZAR.
Historical returns and flows: Seasonality suggests caution

Gilberto Hernandez-Gomez

**Bottom line:** Flows seasonality over the past 15 years suggests that November and December should continue to show weakness in flows. Returns seasonality is more mixed, with November seasonality suggesting negative returns and December positive returns. However, given the lacklustre year we have had in EM, with net flows negative and total returns also in the red, we took a look at performance in November and December after negative flows and returns through October. Although only having three observable instances in the last 15 years, two of the three suggested trend continuation, with the only exception being 2008, when returns skyrocketed although flows remained subdued by the global crisis.

**Key points on flows:**

- In hard currency, the average debt-dedicated flows for November and December over the past 15 years have been -US$39 million and -US$116 million, respectively.
- In local currency, the average debt-dedicated flows for November and December over the past 15 years have been -US$428 million and -US$562 million, respectively.
- In all years where flows are net negative through October, monthly net flows for November and December remained negative.

**Key points on returns:**

- In hard currency, the average return for November and December over the past 15 years has been -0.43% and 1.31%, respectively.
- In local currency, the average return for November and December over the past 15 years has been -0.04% and 1.04%, respectively.
- For hard currency, only two years showed total returns being negative through October (2008, 2013), not giving very conclusive results. 2008 had a 8.04% rebound into year-end while 2013 had a 1.17% decline into year-end.
- For local currency, for all years where total return was negative through October (2008, 2013, 2015), returns on average were +0.19% (-3.94% excluding the GFC).

The results also have shown a tendency for hard currency to perform better than local currency into year-end, particularly in risk-off scenarios such as the 2008 GFC, 2013 taper tantrum and the 2015 Chinese stock market turbulence. Some points to note, which we also made in Flows versus returns...who’s right? September 17, 2018:

1. **There is a rotation within EM from local currency to hard currency in stress episodes:** The opposite happens in episodes when liquidity is expanding, suggesting that hard currency behaves as a ‘safe haven’ within the asset class.

2. **Returns do lead flows,** but evidence is only statistically significant for LC.
**Exhibit 13: Local currency flows**

<table>
<thead>
<tr>
<th>USDbn</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
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</tr>
<tr>
<td>Nov</td>
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<td>1.039</td>
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**Exhibit 14: Hard currency flows**

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**Exhibit 15: EM debt-dedicated flows seasonality (US$ million)**

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<td>0.232</td>
<td>-0.312</td>
<td>1.577</td>
<td>-0.908</td>
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<td>December</td>
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<td>-1.148</td>
<td>3.095</td>
<td>3.886</td>
<td>143</td>
</tr>
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</table>

Source: EPFR, Morgan Stanley Research
Exhibit 16: Local currency returns (GBI-EM Global Diversified)

Exhibit 17: Hard currency returns (EMBI Global Diversified)

Exhibit 18: EM debt-dedicated returns seasonality (US$ million)

Source: Datastream, Morgan Stanley Research
Sovereign credit: Rotating credit exposures

Jaiparan Khurana, Simon Waever

Rotating oil exposures: Move KSA up to like, move Russia down to neutral

KSA risk/reward is balanced: Saudi Arabia’s fundamentals are strong, with a current account balance already in a surplus and a shrinking budget deficit. The authorities in fact revised the 2019 targeted budget deficit lower to 4.1% from 5.9% previously. Geopolitical uncertainty has led to wider spreads and it is something to monitor closely, but the risk/reward seems balanced at this stage. The KSA 5y CDS is now trading at 96bp, which is 23bp over QATAR 5y CDS versus trading just 0-5bp wider before. On the other hand, the QATAR 5y CDS widened to 125bp during 3Q17 when the GCC diplomatic rift broke out, which can be seen as a risk scenario for KSA, notwithstanding the higher oil prices now versus 2017. As such, we think that risk/reward in KSA credit is now 20bp versus 25bp, which seems balanced. KSA credit will also benefit from EMBI inclusion in 2019. We have highlighted previously that investors would likely seek to underweight Kuwait and UAE, given their tight spreads, and add long-end benchmark KSA bonds to match duration times spread of the composite of the new entrants (see GCC index inclusion: How much is priced in? October 1, 2018).

Russia risk/reward deteriorating: The reason to stay engaged with Russia is that fundamentals are resilient given where the oil price is and its impact on the fiscal balance (our economist expects a 1.9% surplus in 2019) and the external balance (our economist expects a 5.8% current account surplus in 2019). That said, the growth outlook is clearly not encouraging, with our economist only expecting 1.5%Y growth in 2019. This resilience has to be balanced against the risk of sanctions, which could lead to material downside. With the US election now very close, news flow related to this could pick up, even if our expectation is that actual legislation would only materialise in 2019. With Russia’s 10y spreads moving from being around 70bp wide to BBBs to now trading only 30bp wide, by nature of widening less than its comparables, we no longer see spreads as attractive enough to warrant a like stance and thus move to neutral positioning.
Rotating policy risks: Move Indonesia up to neutral, move Mexico down to dislike

**Indonesia has adjusted wider already:** We turned to a dislike stance on Indonesia sovereign credit on August 15 and since mid-August it has underperformed EMBI by 30bp, and most of the BBB rated peers in Asia and globally. Given the extent of the move for an investment grade credit, we turn back to a neutral stance. Our key concern on the Indonesia sovereign was the likelihood of large supply amid scheduled EMBI index rebalancing in 2019 in which the sovereign loses over 40bp in index weight. While the bulk of the anticipated supply is yet to materialise, in line with our expectations, the sovereign and multiple quasi-sovereigns (PLN, Pertamina and Inalum) have announced their intent to issue and conducting investor meetings. Accordingly, we think that this risk should now be well reflected in spreads. Pertamina pulling out of its tender offer and delaying the bond issuance reflects this.

Given this backdrop, we think that investors should in fact now look to add risk in the upcoming new issues. We don't look to go above neutral, given elections in 2Q19. We would avoid on-the-run bonds in the secondary curve, given the inverted curve, and prefer the sukuks. We continue to recommend our sell INDON 5y CDS, sell INDON 10y cash trade as the anticipated supply should still lead to curve steepening. For our economists' views on Indonesia's buffer against external funding pressure, see *India & Indonesia Economics: Will Funding Pressure Derail Growth?* October 28, 2018.

**Mexico should underperform further:** As we review in more detail in *Mexico: Fade the rallies*, we think that with the outcome of the airport consultation, the risk premium will remain high to account for the uncertainty about future policy-making. Positioning is already around neutral yet Mexico may very well come to the markets in the coming weeks with a new issuance.

---

**Exhibit 21:** Indonesia has underperformed EMBI and broader BBB rated peers significantly while Mexico has outperformed

<table>
<thead>
<tr>
<th>Spread change from 15-Aug until current (bp)</th>
</tr>
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<tbody>
<tr>
<td>Indonesia</td>
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<tr>
<td>-----------</td>
</tr>
<tr>
<td>-50</td>
</tr>
</tbody>
</table>

Source: Datastream, Morgan Stanley Research

**Exhibit 22:** Indonesia trading cheap to Mexico (10y spreads, bp)

Source: Bloomberg, Morgan Stanley Research
Rotating within HY: Move Ukraine up to like, move Egypt down to neutral

**Trade: Buy Ukraine 2027 versus Egypt 2027:** From current levels of 177bp, we target 100bp with a stop at 225bp. Risks include Ukraine's 2019 budget not being in line with IMF expectations and Egypt being able to diversify its supply away from US$ bonds.

**Ukraine – near-term support:** Two out of four concerns behind our cautious view have been addressed, namely confirmation of the gas hike and 2019 budget progress to ensure IMF co-operation and a completed 2018 bond issuance. Supply pressure will not disappear yet further issuance should now be a 2019 affair. We expect US$3 billion in eurobonds to come in 2019, yet with upside risks given that this assumes US$2 billion from IFIs and US$1 billion in net domestic FX bond issuance which has only just seen above 100% roll-over YTD. Potential for Clearstream access for local bonds in 1Q19 could help. The third concern, heavy **investor positioning** by EM debt-dedicated funds, remains – currently 0.9% OW versus the benchmark. An uncertain political outlook is the fourth concern and also remains. However, with elections still five months away and polls fairly stable, a negative surprise seems unlikely in the coming months. If anything, the emergence of new candidates with the ability to rise quickly in the polls could represent a positive surprise. What makes us more comfortable to take on the remaining risks is that valuations are now more attractive, with 10y bonds (using the existing 2027) now trading at their widest level year-to-date versus single Bs at 130bp, compared to a 12-month average of 80bp. Outright yields of 9.4% are back to the highs not seen since early 2016. We therefore move Ukraine to a like stance and also move our preference from the short end to the long end of the curve given recent steepening. In particular, we recommend adding 2027s. We don’t think that the 40bp pick-up to the new 2028s compensates for the 9 point higher cash price at 100 and potential early sellers on any rally. The 2032s also look ok yet only a 5bp pick-up and 5 point lower cash price versus 27s does not make them more attractive.

**Egypt supply likely in January:** We argued in our last update on the Egypt sovereign that if Egypt is unable to attract fresh portfolio inflows into local bond markets, the sovereign’s reserve coverage will likely remain strong but it will have to increase its reliance on G3 markets from a fiscal perspective. We have seen continued portfolio outflows with foreign holdings now standing at US$13.1 billion as of end-September, down US$8.5 billion from the peak in early 2018. We think that this increases the pressure on the sovereign to issue external debt and think that a US$5-6 billion issuance in January is likely. Any new issuance will have to come at a discount, given that Egypt is a large overweight among EMBI investors and another issuance will increase the face value of Egypt’s EMBI-eligible debt over and above the index country average (ICA), meaning that its weight will not increase as much as prior issues. With the EGYPT 10s30s credit curve being steep, we think that supply could be skewed towards 10y. Now, in the 10y part of the curve the EGYPT 27 has a higher cash price than the EGYPT 28 and hence we think that it could underperform a bit. Nigeria is also expected to issue US$2.75 billion before 2018 and an issuance wider than Egypt could also put pressure on the spreads.
Exhibit 23: We expect Ukraine to reverse the recent underperformance versus Egypt.

Exhibit 24: EGYPT and UKRAIN both still large OW allocations among EMBI funds.

Source: Bloomberg, Morgan Stanley Research

Source: EPFR, Morgan Stanley Research
Mexico: Fade the rallies

Andres Jaime, Simon Waever

We turn bearish on Mexican assets (see FX Pulse: Risk Rebound, AUD Rally, October 25, 2018) as we think that the uncertainty generated around the airport consultation and the actual outcome of it has raised concern among investors about policy implementation in the future. Confidence has been affected and portfolio allocations to Mexico across both local and hard currency will likely be reduced to neutral.

We've so far been long USDMXN through options (see Mexico Economics & Strategy: In a Holding Pattern, October 17, 2018). We now also like short MXN positions (see FX Pulse: Risk Rebound, AUD Rally, 25 Oct 2018) as we see USDMXN approaching 20.50 in the days to come. In local rates, we stick with our 5s10s steepener but close our 2y2y receiver. In credit, we move Mexico to a dislike stance, see further downside risks for MEXCAT and have been stopped out of our Pemex versus Mexico trade at our tightened stop.

Budget the next catalyst: Outside of the airport consultation results and the rhetoric of the administration relating to the outcome, we see the upcoming budget as an important catalyst. On this, we argue that details are ultimately what matter, as even if a balanced budget is presented for 2019, potential concerns about assumptions on growth and/or savings from spending reengineering will likely tilt risks to the downside. Details in the budget on the plans for Pemex will also matter, particularly given recent concerns highlighted by rating agencies, including the areas that future capex will be used for. Outside the budget, a risk to watch would be the prospects for USMCA trade deal approval in the US after the midterm elections.

Mexico portfolio overweights likely going to neutral: As the recent honeymoon of investors with Mexico likely begins to come to an end, we do think that there is space for positioning reduction in the weeks to come. We expect any potential rally to be faded quickly and Mexican assets to lag its peers.

In local rates, our GBI-EM tracker shows that investors still hold a decent overweight in Mexico, particularly in Mbonos at 1.3% versus the benchmark (Exhibit 25), something mirrored by Banxico data which show offshore accounts owning the long end primarily. In credit, positioning is already around neutral yet Mexico may very well come to the markets with an issuance in the coming weeks.
Close 2y2y TIIE receiver, keep 5s10s steepeners and short MXN: As uncertainty increases, we expect Banxico to be more cautious, limiting the room for any indication of easing in the near future, and actually do see risks of additional hikes. However, as the risk premium in rates is substantial, we prefer to keep relative value trades with an increased risk for bear steepeners.

We remain short MXN through options and spot (see Mexico Economics & Strategy: In a Holding Pattern and FX Pulse: Risk Rebound, AUD Rally) in line with our two-factor model which triggered a sell signal on August 20 (see EM Quant Strategy Update). The MXN risk premium looks too low compared to risks and we see asymmetric risks ahead for MXN.

After breaking the 19.40 resistance level, we now see it as a support, with MXN probably gravitating towards 20.50.

Move Mexico credit to a dislike stance: Mexico is already among the cheaper IG credits, showing that some uncertainty related to future policy-making is already priced in. It’s 70bp wide to Peru (similarly rated) and now 15bp wide to Colombia (rated two notches below). However, as long as uncertainty about policy continuity persists, this cheapness is likely to stay. While there are not many IG credits wider than Mexico, we think that Indonesia currently trading 25bp wider shows that there is scope for further underperformance (we prefer Indonesia to Mexico). Across the sovereign and quasis, we maintain our preference for Pemex over the sovereign, given that any weakness in Pemex should impact the sovereign as well.
**Pemex to stay cheap:** We had been expecting Pemex to claw back some of the underperformance within the Mexico complex and recommended buying Pemex 47 versus Mex 47 on September 24. Helped by the recent bond issuance being smaller than expected and only via a 10y bond, this view started to play out. This view was not driven by a positive longer-term outlook but rather expectations of a tactical rebound due to cheap valuations. This looks trickier now given that the market could be extrapolating the handling of the airport to how future energy policy will be dealt with. Specifically, it increases the likelihood of the government pushing ahead with its intention to increase Pemex's refining capacity and not allow increased foreign participation, both very detrimental to the already shaky fundamentals of Pemex. These concerns were also highlighted by Fitch and Moody's in recent weeks. We were stopped out of our tightened stop on the trade and we would now look for wider levels if we were to re-enter.

**MEXCAT still at risk:** In our piece ahead of the consultation we reviewed the different scenarios for the airport and concluded that valuations were not attractive enough to risk adding the bonds ahead of the consultation. At 125bp over the sovereign (using 2028s) we are close to the 130-150bp we think bonds would trade to initially in case of an adverse outcome. However, we refrain from turning bullish as the very probable cancellation of the current project after the consultation results will likely add further pressure as uncertainty remains high.

The main driver of spreads will be how the new administration intends to deal with the creditors of the new airport. Comments ahead of the consultation were supportive yet it’s likely to be a complicated progress in any case.

Rating risks are clearly to the downside and will be another driver of spread widening versus the sovereign. The main impact will come via downside risks to passenger numbers and hence TUA revenues and in turn leverage ratios. This could impact S&P as well, despite it noting that only cash flows from the existing airport are taken into account in its numbers, due to the potential for disruptions, particularly if airlines will need to split passengers between the existing airport and Santa Lucia. Currently all three rating agencies rate the bonds at BBB+, meaning that loss of IG would still be some time away. A one-notch downgrade would seem likely. However, it's also worth noting that if the assumptions about government support changed from the current "very high likelihood" there could be further downgrades, as Moody's for instance has a stand-alone credit assessment of Ba1.
INDIA STRATEGY
Beyond lens of hope

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October 25, 2018
**Core portfolio amid chaos**

While the excesses of CY18 have been wiped off by the recent fall, we yet haven’t got "value" out of this crisis. There has been no “apathy/depression” among investors so far. It is rather “just a bad month" mentality and there is still speculation whether stocks have bottomed or not. A classic market cycle is playing out, wherein leading sector disappoints, credit tightens, and PEs compress despite satisfactory earnings.

Though Nifty is now below fair value (15-year mean bond equity earnings yield at 1.2, implying ~10400 Nifty), we expect volatility to continue as headwinds lurk – macro NOT benign (adverse oil, rupee, and rates), global uncertainties (trade wars, etc), and domestic elections ahead.

While we have tweaked forecasts and reduced target multiples across our coverage, we still bake in earnings CAGR of 15% for our universe and 21% for Nifty over FY18-20 which could be suspect if growth slows. We recommend using the volatility to buy into quality businesses for the long term. Refer page 30.

**Downside risks: Upward shift and flattening yield curve portends lower growth**

If headwinds intensify and NBFC discomfort spills over, they are bound to have repercussions on the economy and markets. In that case, the bottom is still to be tested...we mainly rely on three metrics to arrive at this conclusion:

1) Historically, markets have found bottom at ~12x PE (currently ~16x forward consensus sans likely earnings cut) which equals to 1x bond equity earnings yield ratio (BEER) implying 8300 on the Nifty

2) Our intrinsic value bands for the market plotted over 15 years indicate 10600 - 8000 for the Nifty (bottom-end PE equals to bond PE and top-end is averages of the highest PEs over 15 years)

3) <10% of the companies trade below book value at top of the market, while ~50% trade below book at bottom. Currently, ~20% are below book value

**Key upside triggers:** Headwinds waning and favorable elections outcome to catapult both sentiments and Nifty.
Upward shift and flattening yield curve portends lower growth

- We are getting into the next phase of market cycle where money supply tightens, demand concerns emerge and earnings growth becomes suspect. Yield curve has already shifted upwards by ~60 bps CYTD and is now flat/inverted implying lower growth phase, higher cost of funds, and consequently compressing multiples ahead.

- The Rupee has depreciated by nearly 15% YTD after appreciating by 4% in the previous year. Our analysis shows that the Rupee was a lot more stable pre-Global Financial Crisis (GFC) when it depreciated at CAGR of 2.7%; whereas post-GFC there is increased FX volatility leading to faster pace of depreciation (4.5% CAGR). During both periods, growth averaged near 7% which means FIIs investing in India have to build in higher return expectations for same underlying growth trends. Meaning, minimum return thresholds would be higher for FIIs. In the current context, FIIs turning a lot more choosy about their investment plans adversely impacts CAD financing especially in a year when a BoP shortfall is projected. On the positive side, we should not see a complete strike out in capital flows since the economy continues to grow and inflation remains well managed.

- Growth rate meanwhile is likely to slow in the coming quarters due to higher capital costs and fuel prices. Whereas, the sharp depreciation of the Rupee on the other hand would support growth, but with a lag of 3 quarters.

NBFC spillover...

- Our interactions with market participants suggest that all is not well in the NBFC space (refer our recent note) and the pain can have long term repercussions. ALM mismatches, aggressive growth, days of easy money, irrational pricing will have to go. Weak and marginal players will have to recalibrate the business models whereas 'large & quality' NBFCs will have to follow a more stable growth model with risk-based pricing approach. NBFCs will have to slowdown growth rates and many marginal / weak players will witness balance sheet contraction. Availability and pricing of liquidity will also be a challenge for weak players. Risk-based pricing will become more prevalent and can have run down impact on consumption segments (like auto, consumer durables, etc) that were benefiting from easy availability of credit. Despite these issues, our channel checks reveal liquidity and interest pressures faced by NBFCs aren’t witnessed on the ground with business as usual for now. Hence while we have tweaked forecasts and reduced target multiples across our coverage, we still bake in earnings growth of 15% CAGR over FY18-20 which could be suspect if growth slows.
...Summary

♦ …and macro headwinds escalating are risks staring at us; Bottom still to be tested
  • Bond Equity Earnings Yield Ratio (BEER) is a metric used to evaluate the relationship between bond yields and earnings yields. During bull market peaks, this ratio has been 1.6-2x while at recent market bottoms it has been at 0.6-1. The mean BEER over the last 15 years has been 1.2. Assuming a 10-year bond yield of 8.25% would imply market multiples of ~15x (at 1.2x BEER) indicating NIFTY levels of ~10400 as fair value, and this is after considering no cuts in Nifty earnings. Historically, markets have generally found at bottom at ~12x PE which equals to 1x BEER implying ~8300 on the NIFTY
  • A study of peaks and troughs of the market cycle across last 15 years indicates only 5-10% of the companies trade below book value at top of the market, while 40-50% trade below book value at bottom of the market. Currently, ~20% of the companies are below book value
  • Our intrinsic value bands for the market plotted over 15 years point out to a range of 10600 - 8000 for the Nifty (bottom-end PE equals to bond PE and top-end is average of the highest PEs of the market over 15 years). We are still at the top-end of the band. Growth and quality (high ROIC) paid off in the last cycle but favored stocks have also been the ones that got overpriced. Finally, we are reaching a point where it isn’t what we buy, but what we pay

♦ How to position portfolios
  • Growth investing style would take a back seat, while markets increasingly focus on GARP/Value investing. Our bias would be to invest 70% in core portfolio plays – businesses one would like to own for 3-5 years (buy at a price) focusing on (1) consumption (especially under-penetration plays) like durables, cars, insurance, AMCs, media, etc, (2) IT, (3) Pharma; and 20% in contrarian plays like (1) Real estate, (2) power utilities, (3) Engineering, (4) PSU banks, mainly SBI; and maintain 10% cash levels

♦ Our overweights and contrarian bets
  • Core portfolio – Aurobindo, Cipla, Dabur, Eicher, HDFC Bank, ICICI Bank, Infosys, Maruti, Nestle, SBI Life, Tech Mahindra, Zee Ent.
  • Contrarian – Bajaj Auto, Bharti Airtel, DLF, LIC Housing, SBI, Sun TV, Tata Power
Bottom still to be tested…
Classic market cycle playing out

As hope gives way to despair, it would be over to earnings growth trajectory to rescue. For now, markets would increasingly polarize towards quality names.
Upward shift and flattening yield curve portends lower growth

AAA corporate bond yield

Capital costs have increased by more than 200 bps at the short end

Change in Market interest rates since July 2017

Market rates have run up far more than policy tightening

Corporate bond to Gsec spread

Spread between AAA and Gsec has increased by 70 bps indicating risk aversion

Gsec vs. policy rate

Markets anticipating more rate hikes from RBI

Rapid rise in cost of capital implies PE compression cycle ahead

Source: CEIC, Bloomberg, Axis Capital
<table>
<thead>
<tr>
<th>Start date</th>
<th>End date</th>
<th>INR depreciation (%)</th>
<th>Nifty index chg (%)</th>
<th>1year fwd Nifty EPS Start</th>
<th>1year fwd EPS Chg (%)</th>
<th>Nifty 1yr fwd EPS Start</th>
<th>Nifty 1yr fwd EPS End</th>
<th>Nifty 1yr fwd PE (x) Start</th>
<th>Gsec 10yr Chg (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-08</td>
<td>Mar-09</td>
<td>(32)</td>
<td>(57)</td>
<td>317</td>
<td>270</td>
<td>(15)</td>
<td>19</td>
<td>10</td>
<td>(49)</td>
</tr>
<tr>
<td>Apr-11</td>
<td>Dec-11</td>
<td>(22)</td>
<td>(18)</td>
<td>382</td>
<td>390</td>
<td>2</td>
<td>15</td>
<td>12</td>
<td>(20)</td>
</tr>
<tr>
<td>Feb-12</td>
<td>Jun-12</td>
<td>(17)</td>
<td>(3)</td>
<td>394</td>
<td>419</td>
<td>6</td>
<td>14</td>
<td>12</td>
<td>(9)</td>
</tr>
<tr>
<td>Feb-13</td>
<td>Aug-13</td>
<td>(30)</td>
<td>(11)</td>
<td>435</td>
<td>423</td>
<td>(3)</td>
<td>14</td>
<td>12</td>
<td>(9)</td>
</tr>
<tr>
<td>May-14</td>
<td>Nov-16</td>
<td>(18)</td>
<td>12</td>
<td>491</td>
<td>528</td>
<td>8</td>
<td>15</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Jan-18</td>
<td>Oct-18</td>
<td>(15)</td>
<td>(3)</td>
<td>587</td>
<td>642</td>
<td>9</td>
<td>18</td>
<td>16</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Note: Nifty EPS and PE multiple data are from Bloomberg

Though not built into our estimates, our worry is growth slowing down

Brace for a time/ price correction
### Valuation Axiscap sectors method 28-Aug-18 (Recent peak) Current Chg (%)

<table>
<thead>
<tr>
<th>Axiscap sectors</th>
<th>Valuation method</th>
<th>28-Aug-18 (Recent peak)</th>
<th>Current</th>
<th>Chg (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals</td>
<td>EV/E</td>
<td>5.3</td>
<td>5.0</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Power Utilities</td>
<td>PB</td>
<td>1.4</td>
<td>1.3</td>
<td>(6.4)</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>PE</td>
<td>25.3</td>
<td>23.2</td>
<td>(8.5)</td>
</tr>
<tr>
<td>IT Services</td>
<td>PE</td>
<td>20.0</td>
<td>18.3</td>
<td>(8.6)</td>
</tr>
<tr>
<td>Telecom</td>
<td>EV/E</td>
<td>10.6</td>
<td>9.6</td>
<td>(9.6)</td>
</tr>
<tr>
<td>Logistics</td>
<td>PE</td>
<td>24.5</td>
<td>22.1</td>
<td>(9.7)</td>
</tr>
<tr>
<td>Banks - Pvt</td>
<td>PB</td>
<td>3.2</td>
<td>2.9</td>
<td>(9.7)</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>PE</td>
<td>12.4</td>
<td>11.0</td>
<td>(11.3)</td>
</tr>
<tr>
<td>Cement</td>
<td>EV/E</td>
<td>14.7</td>
<td>13.0</td>
<td>(12.0)</td>
</tr>
<tr>
<td>Media</td>
<td>PE</td>
<td>23.8</td>
<td>20.9</td>
<td>(12.3)</td>
</tr>
<tr>
<td>Engineering</td>
<td>PE</td>
<td>22.8</td>
<td>19.9</td>
<td>(13.0)</td>
</tr>
<tr>
<td>Nifty Index</td>
<td>PE</td>
<td>19.0</td>
<td>16.1</td>
<td>(15.3)</td>
</tr>
<tr>
<td>FMCG</td>
<td>PE</td>
<td>47.8</td>
<td>40.5</td>
<td>(15.3)</td>
</tr>
<tr>
<td>Retail</td>
<td>PE</td>
<td>61.7</td>
<td>52.1</td>
<td>(15.5)</td>
</tr>
<tr>
<td>Oil &amp; Gas - OMC</td>
<td>PE</td>
<td>9.2</td>
<td>7.7</td>
<td>(16.1)</td>
</tr>
<tr>
<td>NBFC</td>
<td>PB</td>
<td>3.3</td>
<td>2.7</td>
<td>(16.2)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>PE</td>
<td>21.6</td>
<td>17.8</td>
<td>(17.9)</td>
</tr>
<tr>
<td>Banks - PSU</td>
<td>PB</td>
<td>1.1</td>
<td>0.9</td>
<td>(19.5)</td>
</tr>
<tr>
<td>Autos</td>
<td>PE</td>
<td>19.5</td>
<td>15.4</td>
<td>(20.8)</td>
</tr>
<tr>
<td>Real Estate</td>
<td>PB</td>
<td>1.7</td>
<td>1.3</td>
<td>(24.3)</td>
</tr>
</tbody>
</table>

1-year forward valuations still not cheap…

… and still bake in 15%+ CAGR over FY18-20. If headwinds persist they could be at further risk.

Source: Bloomberg, Axis Capital
Nifty still trades at the upper end of intrinsic value band

Market has over/undershot ~25% either side of the intrinsic value band* in the previous two episodes

* Floor of band = reciprocal of 10-yr Gsec; Ceiling = average of higher PEs during the year and based on Bloomberg estimates

Source: Bloomberg estimates, Axis Capital
We estimate 10-yr Gsec at 8.25 - 8.0%. At 1x BEER, it would imply 8,300 on Nifty (12x 1-year forward).
~80% of stocks still trade > 1x book value. Have we bottomed yet?

At the bottom of the markets, 50% of stocks trade below 1x book value.

Source: Bloomberg, Axis Capital
Headwinds lurking but earnings growth still holding up
FII investors need to build in 3-5% pa INR depreciation

Pre-Global Financial Crisis
USD/INR CAGR = 2.7%
Avg. GDP growth = 6.7%

Post-Global Financial Crisis
USD/INR CAGR = 4.6%
Avg. GDP growth = 7.0%

Average GDP growth has remained roughly at 7% before and after the crisis, but increased FX volatility post the crisis means FII investors would seek a higher hurdle rate of return from Indian investments

Source: CEIC, Axis Capital
Rupee is under pressure due to adverse flows and FX policy

While the fundamental value of Rupee is anchored to inflation differential, the exchange rate can remain stable and overvalued especially when capital inflows are plenty. But, when financing begins to dry up the Rupee corrects in sharp step moves.

Source: CEIC, Axis Capital
Inflation remains under control despite 60% rise in crude in INR terms and 15% depreciation. This is further evidence that Rupee decline is largely externally driven so far. As it becomes increasingly clear that the economy is in good shape, FX flows should turn positive due to strong growth.

Source: CEIC, Axis Capital
Economy responds positively to INR depreciation after 3 quarters

We tested the relationship between USD/INR (% y-o-y) on IIP (% y-o-y) since 1980s. We find that industrial production tends to pick up 3 quarters after a rupee shock. This is due to exporters gaining market share and imports being substituted with domestically produced goods.

Source: Axis Capital
Gross margins dip during high oil price regimes

If growth slows and oil remains elevated, pricing power and hence margins could be at risk

Source: Bloomberg, Capitaline, Axis Capital
Our assumptions still build in growth

<table>
<thead>
<tr>
<th>Macro</th>
<th>FY19E</th>
<th>FY20E</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>7.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Inflation</td>
<td>4.1</td>
<td>5.0</td>
</tr>
<tr>
<td>USD/INR</td>
<td>70.7</td>
<td>72.7</td>
</tr>
<tr>
<td>10y Gsec</td>
<td>8.25</td>
<td>8.00</td>
</tr>
<tr>
<td>Nifty Index EPS</td>
<td>544</td>
<td>693</td>
</tr>
<tr>
<td>Nifty EPS growth (%)</td>
<td>16</td>
<td>27</td>
</tr>
</tbody>
</table>

**Sector – expected volume growth in FY19**

**Sector – expected volume growth in FY20**

Source: Axis Capital
Assumption: Sector rationale...

**Autos - 2W**: Growth in FY19 largely driven by strong growth in motorcycles. Expect industry growth to slow down marginally in H2 relative to H1. For FY20, expect a recovery in scooters and continued momentum in motorcycles.

**Autos - Cars + UVs**: PV growth in FY19 expected to be hit by slowing growth in UVs. For FY20, we expect growth to pick up on new product launches by key OEMs and some pre-buy impact prior to BS6 changeover which will lead to significant price hikes for diesel PVs.

**Autos - CVs**: CV growth expected to remain strong in FY19 on the back of continued infra push. We expect FY20 growth to also be strong benefitting from the pre-buy prior to BS6 changeover which will lead to significant increase in prices.

**Banking (Credit)**: Retail and services segments to aid credit growth. Slowdown of growth in NBFCs will also aid pick-up of growth in banking sector.

**Cement**: Industry to deliver strong volume growth on individual housing segment recovery; however, cement prices to continue to be subdued on rising competition.

**FMCG**: Consumer demand remains robust and significant push towards new product launches is likely to drive high-single digit volume growth. We expect price action to negate the pressure from the inflationary environment.

Source: Axis Capital
**Assumption: Sector rationale**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Services</td>
<td>Expect Industry to deliver 8.5% growth in FY19 driven by rebound in BFSI and Retail verticals. For FY20, expect growth to moderate owing to probability of hard Brexit and looming fears from trade wars impacting client spends.</td>
</tr>
<tr>
<td>Metals - Ferrous</td>
<td>Volume growth to be driven by capacity ramp-up at JSPL and Bhushan Steel (now acquired by Tata Steel). Organic volume growth for Tata Steel and JSW will be near zero. USD price of steel to increase by 7% in FY19, but decrease by 4% in FY20 on slower global growth due to trade wars.</td>
</tr>
<tr>
<td>Metals - Non-Ferrous</td>
<td>Zinc/Lead/Silver India volumes to grow at 4%/4%/16% for FY19 and 9%/9%/15% for FY20 on capacity ramp-up in Hindustan Zinc and Vedanta. Aluminum growth to remain muted on capacity constraint. Non-ferrous metal prices to remain subdued on escalation of global trade wars.</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>Revenue growth expected to be robust on the back of 29%/7% higher crude prices in FY19/20. FY18-21E, we see gradual improvement in core GRMs across companies on impending IMO regulation for marine fuel, optimization and high-gradation of refineries. For upstream companies, we estimate crude production to improve marginally but natural gas production to improve 5% on an average.</td>
</tr>
<tr>
<td>Real Estate</td>
<td>Steady growth in volumes expected in FY19 driven by new launches and continued polarization in demand towards Tier 1 developers. Expect no change in pricing as demand continues to be driven by mid-income/affordable projects (higher focus on volumes).</td>
</tr>
<tr>
<td>Telecom</td>
<td>FY19 volume (subscriber) addition to be muted due to consolidation in the sector and smaller players moving out. ARPU to decline in FY19 due to continued competitive intensity. Subscriber addition expected to pick up in FY20 led by Reliance Jio and rise in rural penetration. We expect slow ARPU recovery in FY20, as competitive intensity subsides.</td>
</tr>
</tbody>
</table>

Source: Axis Capital
Capacity utilization levels imply capex cycle still sometime away

RBI capacity utilization trend

Credit demand remains below nominal GDP

Sector capacity utilization

Source: RBI, FICCI, Axis Capital
Improving micro: Quality of earnings better, with investment in growth

Axiscap companies: RoE contribution FY10 to FY18

Axiscap companies: RoE contribution FY18 to FY20E

<table>
<thead>
<tr>
<th>Dupont (Axiscap cos)</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19E</th>
<th>FY20E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ebit margin (%)</td>
<td>12.3</td>
<td>12.2</td>
<td>11.1</td>
<td>10.3</td>
<td>10.7</td>
<td>10.7</td>
<td>12.0</td>
<td>12.6</td>
<td>12.3</td>
<td>11.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Asset turnover (x)</td>
<td>0.92</td>
<td>0.99</td>
<td>1.06</td>
<td>1.03</td>
<td>0.99</td>
<td>0.89</td>
<td>0.75</td>
<td>0.77</td>
<td>0.79</td>
<td>0.89</td>
<td>0.93</td>
</tr>
<tr>
<td>ROA (%)</td>
<td>11.4</td>
<td>12.0</td>
<td>11.7</td>
<td>10.7</td>
<td>10.6</td>
<td>9.5</td>
<td>9.1</td>
<td>9.7</td>
<td>9.8</td>
<td>10.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Interest burden (x)</td>
<td>1.05</td>
<td>1.04</td>
<td>1.02</td>
<td>1.01</td>
<td>0.99</td>
<td>1.00</td>
<td>0.99</td>
<td>1.01</td>
<td>1.00</td>
<td>0.96</td>
<td>0.97</td>
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<tr>
<td>Tax burden (x)</td>
<td>0.71</td>
<td>0.73</td>
<td>0.72</td>
<td>0.71</td>
<td>0.72</td>
<td>0.72</td>
<td>0.79</td>
<td>0.72</td>
<td>0.70</td>
<td>0.71</td>
<td>0.71</td>
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<tr>
<td>Financial leverage (x)</td>
<td>2.34</td>
<td>2.29</td>
<td>2.38</td>
<td>2.46</td>
<td>2.48</td>
<td>2.50</td>
<td>2.47</td>
<td>2.45</td>
<td>2.43</td>
<td>2.35</td>
<td>2.28</td>
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<td>ROE (%)</td>
<td>20.1</td>
<td>20.9</td>
<td>20.5</td>
<td>19.0</td>
<td>18.7</td>
<td>17.1</td>
<td>17.5</td>
<td>17.2</td>
<td>16.7</td>
<td>16.5</td>
<td>17.6</td>
</tr>
</tbody>
</table>

Source: Company data, Axis Capital
Corporate India earnings to post 15% CAGR over FY18 to 20

Corporate India earnings to post 15% CAGR over FY18 to 20

FY19 & 20 based on our broader coverage (171 cos; ex PSU Banks): **Top Contributors** – Autos, Financials, IT, Metals, Oil & Gas; **Muted expectations** – Cement, FMCG & Retail, Realty, Cap Goods, Pharma, Power; **Decline** – Telecom (Loss)

Source: Company data, Axis Capital
Historically bottom up investing works for India

Nifty-50: Long term dollar returns far lower than INR index

- Nifty index - INR terms
- Nifty index - USD terms

CAGR: Low of Mar-09 till date
- Nifty Index : INR terms 15%
- Nifty Index : USD terms 11%

Companies where Mcap > USD 5 bn and price (USD terms) have outperformed vs. Nifty (Mar-09 till date)

Outperformance a function of stock/business selection

Source: Bloomberg, Axis Capital
Megatrends

A research study looking at structural shifts in the global economy and how they affect our investment thinking.

Any opinions, forecasts represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research, investment advice or a recommendation. Forecasts may not come to pass.
Megatrends change the world

It’s almost impossible to contemplate life without electricity. Yet we only need to go back as far as the late 19th century, to the rapid advancements in electrical engineering, to identify one of the most significant megatrends of all time.

With inventions such as the lightbulb (Thomas Edison), the induction motor (Galileo Ferraris), and the electric transformer (Ottó Bláthy), along with many, many others, electricity became the driving force behind the Second Industrial Revolution, rapidly changing the world around us.

Today we could be on the cusp of an equally ground-breaking development – unleashing the power of data.

Megatrends demand patience

Megatrends rarely creep up on us. They are developments that we know will change our world, but we don’t always know how or when. So, when it comes to investing, patience and informed decision-making are key.

Take the dot-com bubble as an example. Investors were right at the time about the future, but their enthusiasm was premature. Technology companies were making no money, and their valuations made little sense.

It has taken nearly 20 years for those businesses to start to deliver on their promises, and some are now very well positioned for the future.
What are megatrends and why are they relevant to investors?

Megatrends – powerful, transformative forces that could change the global economy, business and society – have been affecting the way we live for centuries.

Because of that, they also influence our investment decisions – from the businesses, industries and countries we invest in, to the way we go about finding opportunities.

Identifying the potential for change is a key driver of investment decision-making. Most of these evolutions occur in a cyclical manner and over the short to medium term. Occasionally, though, we’re faced with structural shifts that are longer term in nature and have irreversible consequences for the world around us. These are called megatrends.

Cynics might dismiss this as the stuff of think-tanks and policymakers. But we believe the awareness of megatrends in investment processes offers real insight and helps us to identify investment opportunities, which may ultimately provide the potential for attractive risk and return profiles.
The five megatrends shaping our investment thinking

‘Technological breakthrough’ is a catalyst for other trends while also being key to resolving many of the global issues we face.

The interconnectivity that characterises the world today means that none of these megatrends exists in isolation; when the trends collide and overlap, new investment themes appear.

The following pages discuss these trends in more detail.
The rapid advancement of technology, especially that of artificial intelligence and machine learning, is arguably at the centre of all megatrends. According to Klaus Schwab, Founder of the World Economic Forum, we’re amid a fourth industrial revolution, which will become known as the digital revolution.¹

The impact
The pace of change is exponential, not linear
The extent and pace of technological change is likely to have wide-reaching implications across almost all industries. People will be replaced with machines, and machines, robotics and AI will learn faster than humans.

Data is the new oil
Data is the key enabler of this fourth industrial revolution. Indeed, it’s hard to imagine how powerful it could become. Jack Ma, the founder and executive chairman of Alibaba, likens data to the discovery of electricity. He said, “The world is going to be data. I think this is just the beginning of the data period.”²

Information created worldwide = expected to continue accelerating

Source: IDC Data Age 2025 Study, April 2017, sponsored by Seagate (3/17) (Note: 1 petabyte = 1MM gigabytes, 1 zeta byte = 1MM petabytes).


The total amount of global data is expected to increase tenfold by 2025, the majority of which will be created and managed by business.

**Disrupting the labour market**

One thing is for sure - the fourth industrial revolution looks set to do more than just disrupt the labour market. Many repetitive jobs can already be done by a machine, but with the rise of Artificial Intelligence, human expertise can now be learned and mastered by a system. Yes, this means that certain jobs will be replaced by machines, but it also means that the potential for new and emerging industries and opportunities is greater than ever before.

**Data security**

Data breaches and hacking episodes are already rife in the connected world - the recent Facebook scandal being a good example of this. With a significant increase in connectivity and potentially billions more insecure devices, data security will be the difference between success and failure for many businesses.

**Technology start-ups will replace traditional manufacturers**

‘Old’ industries like appliance and car manufacturers are facing a serious situation - they either invest in the next era, or risk obsolescence. The CEO of Trimble (U.S. automation company) said that “companies that don’t invest in automation now, will not exist in 5 years’ time”. The race for ‘edge’ through technological advantage is on, and the incumbents will have to fight to hold their position.

**The outlook**

In many respects, when standing on the brink of such rapid and significant change, it’s very hard to predict the future. Even policymakers and governments find it almost impossible to keep abreast. Here are just some potential implications:

**The emergence of the ‘Internet of Things’**

By the year 2020, our world will be even more connected to the internet. Our cars, coffee machines, fridges and central heating will all be controlled from our tablets and smartphones. To put this into context, Gartner estimates that in 2014 there were 7 billion ‘things’ connected by the internet. By 2020, that will rise to 26 billion.

**Improved standards of living through robotics and AI**

*As robots and artificial intelligence take on more jobs, costs should decrease, and more people will be able to afford better products. At the same time, dramatic improvements could be made to infrastructure, and transport costs might plummet.*

**Healthcare improvements**

People will live longer and better lives, as healthcare technology improves patient outcomes and eradicates certain diseases. This will mitigate some of the issues of long-term care we discussed in the previous chapter.

> “Thriving in this new world requires the best people, the best computing systems and the best algorithms - all working together. It’s not “either / or.” It’s “and.”

JOSEPH KOCHANANSKY, HEAD OF THE ALADDIN PRODUCT GROUP

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Demographics and social change

Changes in global demographics (world population, density, ethnicity, education level and other aspects of the human population) will bring about significant social change, and therefore challenges and opportunities, for both government and business. This megatrend underpins other structural shifts, such as technological development and shifting economic power. While the changes will vary by region, they will have a profound effect on local and global markets and societies.

The impact

There will be many more people in the world

According to the UN, the global population is forecast to increase by over 1 billion by 2030, with most of this growth coming from the emerging markets. By 2050, the UN estimates that 80% of the global population over the age of 60 will be in countries that are currently deemed to be ‘less developed’.

An ageing population

Japan is the only country in the world where 30% of the population is over the age of 60. The UN’s latest demographics report forecasts that, by 2050, this will be the case in 55 countries. People will be living longer in retirement, which will result in the need for large-scale changes in government policy. This will also create a strain on healthcare services and providers, with many nations enforcing laws to ensure the elderly are properly cared for.

Number of countries with >30% population aged over 60, 2015-2050


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A global retirement savings gap
According to analysis by the World Economic Forum (WEF)\(^6\), the retirement savings gap across eight major economies is growing by $28 billion* every 24 hours and could reach $400 trillion* by 2050 – around five times the size of the global economy today.

Producing fewer children
As the graph overleaf shows, we’re having fewer children – particularly in wealthier and educated sections of society. This potentially has far-reaching consequences for business, including lower productivity, less labour-force participation, and less investment growth. Younger generations will be increasingly burdened with the expectation of looking after the elderly, which in turn could further reduce productivity.

The outlook
The impact of changing demographics is far-reaching. From the demand for products, to changes to the workforce and family structures. While many businesses are particularly adept at identifying the threats and opportunities of such change (they don’t, after all, happen overnight), governments may find the process more challenging, particularly if it means making unpopular policy changes that could influence voters.

Here are some of the key changes that may impact investors in the medium to long term:

Healthcare spending
In the U.S. alone, healthcare spending is set to rise by 8% of GDP each year between now and 2040. That’s around $3,400 billion* every year.\(^9\)

Pension income solutions will increase in importance
There will be a renewed focus on saving for retirement and finding effective ways of drawing an income when people retire. As a result, there could be a greater need for financial help, and the rise of robo-advice solutions.

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\* Figures shown in US$


An ageing population will have a dramatic impact on our workforce


Replace people with robots

As populations age, it becomes increasingly likely that businesses will use technology to plug the shortfall in labour supply. Robots are more productive (they don’t sleep, get sick or need performance reviews, although they may have technical problems). As a result, there will be a greater need for skilled jobs such as data scientists.

Consumer preferences are changing the food industry

Consumers are increasingly focussed on what they eat, how they are eating it and how it is produced; creating significant changes in the food supply chain. For instance, organic foods sales in the U.S. has risen 224% from 2005 to 2016.\(^\text{10}\) Fresh food is being preferred over processed foods and products with specific health related benefits, such as avocados and berries, have seen outsized growth. Consumers want their food to be more convenient, resulting in more online delivery, meal-kit solutions and convenient snacking options at supermarkets.

Shifting economic power

In less than a generation, emerging markets and developing economies have gone from being producers of goods and trading hubs for developed countries, to becoming an important destination for consumer goods and services in their own right. They now account for nearly 80 percent of global economic growth, and 85 percent of growth in global consumption – more than double their share in the 1990s.11

The impact

China will be the new global superpower

Two centuries ago Napoléon Bonaparte said, “China is a sleeping giant... when she wakes, she will move the world.”12 How right he was. Only 15 years ago, China’s economy was one tenth the size of the U.S. economy. If it continues to grow as predicted, it will be bigger than the U.S. economy by the late 2020s.12

As a result, and as an example of the urbanisation megatrend, China expects to have 200 cities with a population of over one million people by 2025.12 To tackle overcrowding in Beijing, China is building a new city from scratch 100km southwest of the capital. Initially it will be double the size of Manhattan and is expected to become twice the size of New York and Singapore.13

Global demographics will change

In 2016, Asia’s population was estimated at 4.4 billion, having quadrupled in size during the 20th century. As the graph overleaf shows, it is forecast to grow to over 5 billion people by 2050.14

Asia benefits from a wealth of resources, and has an ecological variety which makes it well-placed to support this growth. As a result, we can expect to see further economic growth across this region.14

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13 China Daily USA, April 03 2017, New area to be ‘historic development’. Accessed at: http://usa.chinadaily.com.cn/epaper/2017-04/03/content_28783856.htm
Shift in investor preferences
Traditionally investors preferred the relative safety of developed economies, and particularly the U.S., believing they offered longer-term sustainable growth potential. Emerging markets offered tactical opportunities that came with increased risk, but potentially greater reward. We’re already seeing a shift towards emerging markets in investment portfolios and this is likely to accelerate as China makes equities more accessible to foreign investors and improves their global trading policies.

The outlook
Population growth is at the heart of the shift in economic power. The influence of emerging and developing economies will mean huge changes for business, society and the way we invest.

Opportunities for investors to benefit from these rapid changes means that the small allocations to these areas of the globe in investment portfolios could swell in the coming years.

From west to east
Despite some challenges for the Chinese economy driven by debt levels and property market valuations, among other things, the potential long term growth of the Chinese economy relative to the U.S. and Europe looks likely.

China is already on a path to usurp the U.S. as the world’s leading superpower. When it does, political agendas, global trade and the sphere of influence are likely to shift towards Beijing from Washington.

Mandarin could become the setting language
The continuing liberalisation of the Chinese economy means the assumption that the world speaks English will likely become a thing of the past.

The U.S. and Europe will steadily lose ground to China and India
Share of world GDP (PPPs) from 2016 to 2030

Source: IMF for 2016 estimates, PWC analysis for projects to 2050

Chinese business growth proves unstoppable
China now boasts at least 100 unicorns (private companies with a $1 billion* valuation), and by the end of 2019 it is forecast to be the largest user of the international patent system. It currently lies in second behind the U.S.

An impressive six million enterprises were registered in China last year, up from 2.5m in 2013. The fastest growing sectors included science and technology, entertainment, sport and finance, whilst the number of mining, electricity and gas companies showed a slight decline.

* Figures shown in US$

16 Financial Times, Tom Hancock, April 11 2018. Accessed at: https://www.ft.com/content/16094eb4-3d61-11e8-b9f9-de94fa33a81e
Climate change and resource scarcity

The impact of climate change has been discussed for some time now. Barely a day goes by without major coverage of it in the press, and it can be difficult to separate the real issues and challenges from headline-making conjecture. Here we provide our view based on recent research, which gives greater detail on the effects of climate change and insight into the potential outcome:

The impact

Increased strain on the planet’s resources

The global population is expanding rapidly and becoming increasingly prosperous. This is leading to significant demand for energy, water and food, which is putting a strain on the traditional, finite resources of the planet. According to The United Nations Food and Agriculture Organization (FAO), the global population will surpass 9.1 billion by 2050, at which point they predict the world’s agricultural systems will not be able to supply enough food for everyone.\(^\text{17}\) And the UN projects that the global demand for fresh water will exceed supply by 40% in 2030, with some cities, like Cape Town, already suffering from ‘water stress’.\(^\text{18}\)

The world is heating up

The average surface temperature of the planet has been on an upward path since the late 19th century and this trend looks set to continue.\(^\text{19}\)

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\(^{19}\) NASA. Accessed at: https://data.giss.nasa.gov/gistemp/graphs/ in May 2018

Increased emissions
The human practice of burning fossil fuels is thought to be the primary cause of global warming. Carbon dioxide and other gases are released and trapped within the atmosphere, which in turn means heat can’t escape. As the graph shows, atmospheric carbon dioxide levels have rocketed since the time of the industrial revolution and show no sign of abating.

Average temperatures are forecast to rise by more than two degrees before 2100, creating significant and irreversible damage and increasing strain on global resources. A study by Pricewaterhouse Coopers (PwC) estimates that this two-degree threshold could be reached as early as 2036.

Data from NASA shows that global warming is currently outpacing efforts to curb it. This warming is distinct from other periods of climatic change (of which there have been many, such as the ice age) because there’s a 95% probability that its predominant cause has been human activity since the mid-20th century.

“Curbing carbon emissions requires significant spending on green infrastructure and a reduction in fossil fuel subsidies. This creates large investment opportunities in areas that attract capital or industries at risk of disruption.”

ISABELLE MATEOS Y LAGO
BLACKROCK INVESTMENT INSTITUTE

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21 NASA. Accessed at: https://climate.nasa.gov/evidence/ in May 2018
22 NOAA. Accessed at: https://www.ncdc.noaa.gov/monitoring-references/faq/indicators.php in May 2018
23 PWC. Accessed at: https://www.pwc.co.uk/issues/megatrends/climate-change-and-resource-scarcity.html in May 2018
24 NASA. Accessed at: https://climate.nasa.gov/evidence/ in May 2018
The outlook

The impact of global warming should not be underestimated. Rising temperatures could eventually have a significant impact on crop yields, causing food prices to surge, which in turn could impact poorer communities. At the same time, coastal areas will be increasingly susceptible to regular flooding as sea levels rise. This is a global problem, and is further exacerbated by other megatrends, such as urbanisation and the significant growth in consumption in emerging markets. The UN believes that the changes required to adequately address the issue have no documented historical precedent. Some of the changes identified will indeed require a step-change in consumer behaviour and the development of new technologies to replace existing resources and infrastructure.

More produce, less inputs

In order to meet the increased food demands of the future, the agricultural industry will need to continue to innovate to become more productive with less resources and inputs. Technology is playing a key role via the rising adoption of precision agriculture. Precision variable rate technologies such as one that can detect weeds with sensors and spot sprays could slash herbicide usage by up to 95%. McKinsey published that with a 20-40% adoption rate for precision, agriculture yields could be boosted by 10-15% globally by 2025.

Utilisation of clean energy

Sustainable energy sources are increasing in importance as the rhetoric condemning fossil fuels continues and changes in commodity consumption occur. But change is also about using energy more efficiently in everything we do.

Goodbye to cars as we know them

As tariffs are placed on internal combustion engine vehicles, experts predict that by 2040 we will all be driving electric vehicles. And while the idea of driverless cars still feels like science fiction, the UK Government has set a target of having the first autonomous cars on the road by 2021, with companies such as Daimler planning ‘full production of autonomous vehicles by the early 2020s’.

Beijing

As China becomes a new superpower (see Shifting Economic Power), it has increased global responsibility. Beijing became the first city in China to be coal-free for heating and electricity. It has also spent $1.3 billion to convert its 70,000 car taxi fleet to electric power.

* FIGURES SHOWN IN US$.

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Perhaps somewhat ironically, as we become better connected, and the world becomes a smaller place, our populations are increasingly concentrating themselves in cities and large urban areas. This will further drive technological advancement and impact climate change, having its own influence on other megatrends.

### The impact

**There’s a massive migration to cities underway**

Globally, more people live in urban than rural areas, and as the graph below shows, that trend looks set to continue. In 1950, 30% of the world’s population lived in urban areas, and that’s forecast to increase to 66% by 2050.\(^{33}\)

### Urban and rural population of the world, 1950-2050

![Urban and rural population graph]


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Self-fulfilling prophecy
In the U.S., the patient-to-primary care physician ratio in rural areas is 39.8 physicians per 100,000 people, compared with 53.3 physicians per 100,000 in urban areas. This uneven distribution of physicians has proven to have an impact on the health of the population. With better healthcare outcomes likely, urban populations consequently grow faster than rural populations organically (without migration) as people are motivated to migrate towards them.

At the same time, urban areas tend to have better employment opportunities, education and access to social and cultural activities. This makes them more attractive places to live; it is easier for businesses to flourish. In China, for example, the urban per capita income is more than double the rural figure, according to the National Bureau of Statistics.

The outlook
These large-scale shifts in population lead to both opportunities and challenges for society. The requirements of future urban populations will be remarkably different to the cities of today, with citizens demanding connectivity to everything – every device, every entity and every object. Wireless connectivity will be paramount to improving quality of life in cities.

Here is what else it could mean for urban life:

New infrastructure
Mass migration will mean the need for new infrastructure and services. Transport infrastructure and networks will require upgrades due to the dominance of autonomous vehicles and the greater concentration of people.

| No car ownership |
| A lack of space and the rise of autonomous cars will mean fewer people will own a car, preferring to use ‘summon-able’ services instead. |

Healthcare systems will have to change
As population density grows to unprecedented levels, existing healthcare systems will need to be radically overhauled to deal with this influx. Traditional hospitals will come under significant strain if they do not utilise new technologies available to them.

Personal security will be a focus
With higher crime rates in cities than rural areas, governments will employ elevated levels of surveillance on citizens in cities, increasing connectivity means that every activity is logged and monitored.

‘Smart Cities’ emerge
Cities will emerge, driven by modern urban populations that embrace technology to improve the efficiency of infrastructure and services.

More than half of the world’s population now lives in towns and cities, and by 2030 this number will swell to about 5 billion. Much of this urbanization will unfold in Africa and Asia, bringing huge social, economic and environmental transformations.

UNITED NATIONS POPULATIONS FUND (UNFPA)*

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* UNFPA, October 03 2016. Accessed at: https://www.unfpa.org/urbanization


Megatrends at a glance

Technological breakthrough

- Machines will learn faster than humans
- Personal data will be a valuable commodity

60%\(^{37}\)
Nearly two-thirds of all occupations could see a third or more of their constituent activities automated.

Megatrend in action

- Traditional consumer goods produced by technology companies
- The global economy should grow as the world becomes more productive
- Technology will enable solutions to climate change and population problems

Demographics and social change

- Labour shortage
- Demand on healthcare
- Changing consumer demands

1bn\(^{38}\)
The global population could increase by over 1 billion by 2030, and by 2050 a third of the population of 55 countries will be over 60 years old.

Megatrend in action

- Substantial healthcare spending will create huge opportunity in this sector
- Robots will replace people to plug the labour gap
- People will need more money to fund a lengthy retirement


Shifting economic power
- Emerging markets will overtake developed markets, taking a greater share of investor’s money and gaining global influence

2030
China could become the new world superpower by 2030, with India rivalling the U.S. by 2050.\(^{39}\)

Climate change and resource scarcity
- Crop failure
- Widespread flooding
- Destroyed habitats
- Energy shortage

5.8°C
If predictions are correct, by 2100 the average surface temperature of the planet will have risen 5.8 degrees since the late 19th century, and the planet’s resources will become increasingly scarce.

Urbanisation
- Space and accommodation will become more of an issue in major cities

66%
Two-thirds of the world’s population will live in urban areas by 2050. In 1950, only 30% lived in urban areas.\(^{41}\)

Megatrend in action
- The political sphere of influence could shift from Washington to Beijing
- Businesses could become more powerful than countries

Megatrend in action
- Western diets will become increasingly plant-based
- Renewable energy will fully replace fossil fuels
- Technological advancement will yield man-made materials

Megatrend in action
- A whole new city infrastructure could be required
- Car ownership will become obsolete
- The healthcare system will need to change


Conclusion

It’s almost impossible to ‘conclude’ a paper on megatrends. We’re arguably living through one of the most significant periods of change in the history of our planet. The sheer pace of technological advancement will far outstrip any change we have experienced before, and these megatrends will continually evolve, with some becoming obsolete as others emerge.

One thing we can be sure of is that structural change will impact and influence the direction of everything we touch - from the future of economics and business, to global demographics, the environment, politics, lifestyle and finance.

We think there’s potentially significant value in aligning portfolios to these longer-term structural trends. The future will be full of megatrend-related change - some of which will present significant challenge, while others will yield opportunity. The only way to prepare for this is to stay informed and open-minded.

As the business landscape adapts and changes, investors must focus on the opportunities presented, while making rational decisions that are well-thought-out. A knowledge of the trends, their breadth, interconnectivity and potential effects can add value to an investment portfolio.

The world will adapt because of these trends, and our portfolios will too. Studying megatrends is just one way of keeping our eye on the horizon, so that we can be confident we’re making the right choices for our clients.
About BlackRock

BlackRock helps investors build better financial futures. As a fiduciary to our clients, we provide the investment and technology solutions they need when planning for their most important goals. As of 31 March 2018, we managed approximately $6.3 trillion* in assets on behalf of investors worldwide.**

* Figures shown in US$.
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Deadlines and the Donald

Bangkok
There is clearly the potential for more of a technical rally with the bogey month of October having now concluded, most particularly if the Republicans maintain control of Congress next week. The S&P500 has risen by 4.2% from its low reached on Monday, after declining by 11.4% since early October.

Still CLSA technical analyst Lawrence Balanco remains of the view that there has not yet been the evidence of panic or capitulation that would likely mark a bottom for Wall Street in this cycle, while also noting that both the Nasdaq 100 and the Philadelphia Semiconductor Index (SOX) have broken this past month below key support levels (see Figures 1 & 2 and CLSA research Price Action Global – Red October, 29 October 2018). GREED & fear agrees.

Figure 1
Nasdaq 100 Index

Source: Bloomberg

Figure 2
Philadelphia Stock Exchange Semiconductor Index (SOX)

Source: Bloomberg
Balanco also notes a pickup in high yield credit spreads relative to Treasury bond yields, albeit from ultra-low levels. The Barclays US High Yield Corporate Bond spread over the 10-year Treasury yield has broken out of its basing pattern with a rise above 3.60-3.72%, supporting a minimum upside target of 4.89% (see Figure 3). The spread has so far risen from 3.09% in early October to 3.79%, the highest level since December 2016. Balanco further observes that widening credit spreads have historically been associated with over 10% corrections in the S&P500 as was the case in 2007-2009, 2011 and 2014-2015.

In the face of these negative technical signs perhaps the best argument for an extended rebound on Wall Street, aside from an unexpected (by investors) deal on trade between China and America, remains a resumption of share buybacks after earnings season. This is a reminder that companies remain the major buyer of shares in America this year, as they have been since 2009 (see Figure 4). The latest US GDP data was a reminder of this pattern. While the headline data was positive at an annualised 3.5% QoQ and 3.0% YoY growth, though the number was swollen by inventories, the most interesting detail was negative. That was the renewed weakness of business investment. Real private non-residential fixed investment rose by only 0.8% QoQ saar in 3Q18 and was up 6.4% YoY, down from 8.7% QoQ saar and 7.1% YoY in 2Q18 (see Figure 5). This supports those such as GREED & fear who have been arguing that the major consequence of the corporate tax cut, and related corporate repatriation of offshore dollars, will be to boost share buybacks rather than capex.
Meanwhile the other near-term issue is next week’s mid-term Congressional elections to be held on 6 November. Logically, the Republicans should win because of the stronger economy though the word is that the tax cut, the major achievement of the Trump presidency thus far and certainly the most important driver of relative returns in financial markets this year, is not a vote winner on the street. Hence, the Donald’s sensible strategy to re-energise his base by focusing on immigration issues and the like. This is necessary since Trump needs to motivate his supporters to vote since his opponents are definitely motivated to vote against him.

So, turnout remains key with the turnout at the last mid-term elections four years ago only 36.7%, the lowest turnout since World War II. Still it is worth noting that Trump’s popularity rating is back above the trend line, as defined by the 200-day moving average, running at 44% (see Figure 6). A by now unexpected win for the Republicans in both houses would in GREED & fear’s view definitely be bullish for US equities. The expected result, where the consensus now expects the Democrats to win back the House of Representatives, will mean renewed gridlock which is neutral for the stock market at best.
Angela Merkel’s decision this week to step down as head of the CDU is no surprise since, as discussed here when GREED & fear was in Berlin recently (see GREED & fear – Continuing correlation watch, 19 October 2018), her leadership of the party was going to be challenged at the CDU party conference to be held in early December. The question now is whether she can hang on as Chancellor until the end of the current term of the present coalition government in 2021. That looks at this juncture extremely unlikely since the result of last weekend’s state election in Hesse makes it more likely that the SPD will leave the current coalition. As in Bavaria, the SPD was the big loser. The SPD lost 10.9ppt and 8 seats from its 2013 result, polling only 19.8% of the vote in Sunday’s state election. Still the CDU also did badly. While it won 27% of the vote and 40 seats, that was down 11.4ppt from the 2013 level (see Figure 7). Meanwhile, the SPD’s national support rating currently stands at only 14%, compared with 25% for the CDU, 20% for the Greens and 17% for the anti-immigration AfD.

The question is now who will replace Merkel as CDU leader. GREED & fear has no particular insight. But investors should assume that the party will adopt a more conservative tone, particularly on the immigration issue, given the rise of the AfD and given the fact that the major grievance against Merkel is that she has moved the party too close to the political centre in terms of the various coalitions with the SPD. Meanwhile if the latest events are another signal that German politics is becoming less stable, they also mean that Mario Draghi risks losing a friend in Berlin since the master manipulator would not have been able to do “whatever it takes” in 2012 without the German Chancellor’s political support when Merkel was at the height of her political powers.

This is another reason why Draghi will be glad he is due to step down as ECB president at the end of October 2019. Still, as discussed here last week (see GREED & fear - Machine watch and pledged shares, 25 October 2018), the risk remains that the Eurozone’s existential crisis is renewed prior to his departure, not because of Brexit, which remains a sideshow from a Eurozone perspective, but because of Italy. Still for now, Draghi remains on course to end ECB quantitative easing at the end of December despite an acknowledgment in last week’s statement that growth momentum is “somewhat weaker”. Eurozone real GDP growth slowed from 0.4% QoQ and 2.2% YoY in 2Q18 to 0.2% QoQ and 1.7% YoY in 3Q18 (see Figure 8). There also remains a lack of evidence of a meaningful pickup in core inflation. Eurozone core CPI inflation slowed from 1.1% YoY in July to 0.9% in September though it picked up again to 1.1% in October (see Figure 9).
Meanwhile the scheduled end of quanto easing in the Eurozone is an important development from a global perspective since it means that G7 central banks’ aggregate balance sheet contraction is likely to accelerate in 2019. On this point, the aggregate balance sheets of the Fed, the Bank of Japan, the ECB and the Bank of England actually peaked in US dollar terms at US$15.8tn in March and have since declined by 4.4% to US$15.1tn in October, mainly as a consequence of the US dollar strength (see Figure 10).

Still it should be noted that ongoing Federal Reserve balance sheet contraction this year has been mostly offset in local currency terms by continuing quanto easing by the ECB and the Bank of Japan. The Bank of Japan’s total assets have increased by ¥27.6tn so far this year, while the ECB’s assets are up by €153bn, compared with a US$275.6bn contraction in the Fed balance sheet. It is also worth highlighting that, while the BoJ continues to state, as it did in its monetary policy statement on Wednesday, that it plans to increase its JGB holdings by about ¥80tn a year, the reality is that its actual JGB holdings have increased by only ¥42.3tn in the 12 months ended 20 October with its balance sheet increasing by only ¥33.6tn over the same period. If the BoJ balance sheet continues to contract at such an annual pace, and the Fed continues to reduce its securities holdings by US$50bn a month, the G7 aggregate balance sheet will contract by about US$300bn in 2019 at...
current exchange rates. Meanwhile, the ECB will continue to reinvest the principal payments from maturing bonds after the end of the net asset purchases at the end of 2018.

Figure 10  
Major G7 central banks' aggregate balance sheets

Still Draghi did indicate one possible mean of renewed easing in his comments in the post-meeting press conference last week. GREED & fear refers to his reference to the fact that two of the ECB’s Governing Council members had raised the possibility of a new series of targeted long-term refinancing operations (TLTROs) for banks. These TLTROs have enabled profitable carry trades for balance sheet-challenged Eurozone banks in recent years albeit at the cost, from a purist perspective, of allowing these banks to defer addressing some of their balance sheet problems.

Such a renewed TLTRO operation is likely to be implemented by a Draghi-led ECB if the market pressures driven by the Italian confrontation with Brussels on its proposed budget get worse, as is likely. This will in turn trigger renewed concerns about the so-called “doom loop” created by the Italian banks’ large holdings of Italian government bonds totalling €392bn at the end of July (see Figure 11).

Figure 11  
Italian general government securities held by Italian banks

Source: CLSA, Bloomberg, Federal Reserve, Bank of Japan, ECB, Bank of England
On the same topic, it is also worth noting that foreign holdings of Italian government bonds have declined significantly as concerns about the current Italian government’s stance towards Brussels have escalated. Italian general government securities held by foreigners declined from €722bn at the end of April to €672bn at the end of July, the latest data available (see Figure 12). Still Italy represents a challenge for “passive” strategies in fixed income since the country still accounts for a not so insignificant 4% of the Bloomberg Barclays Global Aggregate Bond Index, the most widely followed global bond index in the fixed income world.

Figure 12
Italian general government securities held by foreigners

This raises another issue more usually associated with passive investing in equities. That is the gross misallocation of capital caused by the mob investing in stocks or bonds just because they are in a particular index, which is why it remains correct to view indexation as a form of investor socialism. This has resulted in extreme overvaluation for market leaders, which in this cycle has been the FANG stocks, raising the risk of a dramatic fall from grace should passive go out of fashion. Regulators have further encouraged the passive bandwagon by their active support for “cheap” investment products, otherwise known as ETFs, which are perfect vehicles for passive investing. The mistake here is to focus on “cost”, as if investing is equivalent to shopping at a discount store. But with plain vanilla ETFs and index funds now being seemingly marketed for free, this trend would appears to have fully run its course.

The American deadline for the world to stop buying Iranian oil is 4 November, and therefore only three days away. But there has been a lack of noise on this issue of late as the media has focused on recent events in Istanbul and the Turkey-driven pressure on Saudi Arabia as regards the alleged murder of Jamal Khashoggi. Meanwhile, the Brent crude oil price has corrected by 14% from its recent high of US$86.7/bbl reached on 3 October (see Figure 13). This decline suggests that the oil market is not expecting the US ultimatum on Iranian oil to be enforced as aggressively as previously assumed. In this respect, while Iran’s oil exports have definitely fallen, they have not yet gone into freefall with Iranian crude oil exports running at 1.6m barrels a day, down from the recent peak of 2.5m reached in April, according to tanker-tracking data compiled by Bloomberg (see Figure 14).

If the Americans are not enforcing the ultimatum as aggressively as originally assumed, this is perhaps not so surprising given that a surging oil price is the last thing Donald Trump wants in the run up to the mid-term elections. There is also the issue, as previously discussed here, of whether Saudi really has the ability to increase production that it claims to have (see GREED & fear -
Continuing correlation watch, 19 October 2018). Another signal that the US is re-assessing its former ultra pro-Saudi stance was yesterday’s announcement by the Trump administration calling for peace talks on Yemen "within 30 days".

As to who is complying with the US demand as regards Iranian oil, Korea appears to have stopped buying Iranian oil entirely, while India’s purchases have fallen from 787,000 barrels/day in July to 488,000 barrels/day in September (see Figure 14). Meanwhile the key player is China, which is Iran’s biggest buyer of oil, purchasing nearly 620,000 barrels/day in 2017 and 700,000 barrels/day just before the US announcement in early May. So far China still appears to be buying from Iran, albeit at a reduced rate, despite the threat of secondary sanctions from America which could theoretically threaten the ability to transact in US dollars. China bought 500,000 barrels/day of Iranian crude in September. It should be noted that China buys almost one-third of Iran’s total crude oil exports.

If China will, therefore, be the test case of whether the US sanctions will be really effective, the issue has become even more charged because of the unresolved trade dispute between Washington and Beijing. True, it is clearly possible for China to buy Iranian oil with renminbi or via barter arrangements. But such manoeuvres would not prevent an enforcement of US sanctions if a political
decision has been made by Washington to enforce the threat of secondary sanctions aggressively. In this respect, the risk for both Sinopec and China National Petroleum Corporation (CNPC) is that they are both listed on the New York Stock Exchange. Meanwhile, investors should be aware of recent press reports saying that China’s oil majors have stopped buying Iranian oil (see, for example, Reuters article: “As US sanctions loom, China’s Bank of Kunlun to stop receiving Iran payments”, 23 October 2018).

This is a further reminder, if it was needed, of the power of using the US dollar as a weapon. In the long term, such an approach, if sustained, as advocated by the national security hawks in the Trump administration, will mark the end game for the US dollar paper standard. But in the short term it is highly effective. This is also why a proposal emanating out of Europe to set up a special purpose vehicle (SPV) for handling payments of Iranian oil and other Iranian-related trade will likely go nowhere if Washington pursues the hard-line approach (see European Council on Foreign Relations article: “Bankless Task: Can Europe stay Connected to Iran?”, 10 October 2018 by Ellie Geranmayeh and Esfandyar Batmanghelidj). On this point, EU foreign affairs chief Federica Mogherini said in late September at the UN general assembly that EU member states would set up a legal entity to facilitate legitimate financial transactions with Iran and that this would “allow European companies to continue trade with Iran”. Clearly, Europe, Russia and China have not yet pulled out of the 2015 nuclear agreement with Iran, and neither, so far at least, has Iran.

Meanwhile the damage done to the Iranian economy by the renewed US sanctions is evident from the collapse in the exchange rate, with inflation running at nearly 40% based on the official data and probably more like 60% in reality. The Iranian rial has depreciated by 62% against the US dollar since May based on the “unofficial” market (see Figure 15). While CPI inflation has risen from 7.9% YoY in April to 36.9% YoY in October (see Figure 16). The Washington hardliners will be hoping that these economic pressures, with negative GDP growth of 3.6% forecast by the IMF for next year (see Figure 17), will trigger “regime change”. But given that the current leader of the Iranian regime, Hassan Rouhani, is a moderate, the real risk is perhaps that the hardliners take control on the view that Rouhani’s strategy of agreeing to the nuclear deal with the Obama regime has proved an abject failure. The other risk is that the pro-reform Iranian middle classes will become anti-US because of the renewed economic pain from sanctions.
“Property peaks” was the headline in the Hong Kong country section of the latest Asia Maxima (Crossroads, 4Q18). It increasingly looks like this is indeed the case, as it relates to residential property, in line with the forecast of CLSA’s head of regional property research Nicole Wong for a 15% decline in Hong Kong residential property prices in the 12 months to August 2019. The Centaline Leading Index of apartment prices is down by 2.1% since peaking in mid-August (see Figure 18).

It is also interesting, as further noted by Wong, that the Centaline Valuation Index (CVI), a diffusion index of major banks’ valuations of residential property, has turned down. The index declined from 55 at the end of September and a recent high of 93 in May to 14 in the week ended 28 October, the lowest level since February 2016 (see Figure 19). Note that a reading below 50 means more banks are cutting property valuations on balance.
This reduced valuation will have a market impact since it will reduce the amount of credit banks will be willing to lend against residential property collateral. Meanwhile the rising cost of money is also a negative at the margin even allowing for the lack of leverage in Hong Kong residential property. The 3-month Hibor has risen by 80bp so far this year to 2.1% (see Figure 20), while HSBC announced in late September a 12.5bp increase in the prime rate to 5.125%, the first such rate hike in nine years. The rising risk-free return on cash will reduce the merits of residential property which currently yields a gross 2.9%. The one-year Hong Kong dollar fixed time deposit rate is now running at over 2%. 

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Figure 18
Centa-City Leading Index

![Centa-City Leading Index](image_url)

Source: Centaline Property Agency

Figure 19
Centaline Valuation Index and Centa-City Leading Index

![Centaline Valuation Index and Centa-City Leading Index](image_url)

Note: CVI is a diffusion index of major banks’ valuation of residential properties. Source: Centaline Property Agency
Another negative factor facing Hong Kong residential property remains declining purchases by mainland buyers. Mainland buyers’ share of primary residential market transactions has declined from 17% in 4Q17 to 13% in 2Q18 in volume terms and from 25% to 17% in value terms (see Figure 21), and has probably declined further since. A sign of waning mainland developer interests was the failure of a government land auction for a luxury residential property site on the Peak last month. The site was withdrawn because of a lack of appropriate bids. The Land Department announced on 16 October that the government had rejected all five tenders for the reason that “the tendered premiums did not meet the Government's reserve price for the site”. This is the first failed land auction since January 2016.

Meanwhile the policy address by Chief Executive Carrie Lam on 10 October will lead to a pickup in property supply, mostly for the public sector, with 70% of housing units in the government’s newly developed land to be made available for public housing, up from 60% currently. There are also, importantly, changes in the pricing mechanism for the sale of subsidised flats, where prices will no longer be linked to the market prices of private flats but will be related primarily to what is affordable for applicants (see CLSA research Hong Kong property – Government to take market share, 11 October 2018)!
There are also long-term ambitions for reclamation in terms of the construction of artificial islands with a total area of about 1,700 hectares. But this projected supply is still years away with the first phase of reclamation not due to begin until 2025. The other point is that, on the farmland conversion theme, developers will have to allocate 70% of the increased floor area to the public sector for sale of units, via such means such as increasing plot ratios or changing land use.

None of the above is exactly positive for Hong Kong’s property developers, though predictions of a collapse in Hong Kong residential property remain unlikely because of the fundamental lack of supply, and the lack of leverage. Private residential unit completions are projected by the government to increase from 17,791 units in 2017 to 18,130 units this year and 20,371 units in 2019, or only 0.8% of the total number of households (see Figure 22). While nearly 66% of owner-occupier households have no mortgages. The government also has huge room to ease in a downturn since government regulations still mandate only a maximum 50% loan-to-value (LTV) ratio for local borrowers with pre-existing mortgages for residential property worth less than HK$10m, and 40% for lending to homes exceeding HK$10m. As a result, the average LTV ratio of new mortgage approvals has declined from 66% in 2009 to 44.4% in September (see Figure 23).

Figure 22
Hong Kong private residential completions as % of households

Figure 23
Hong Kong new mortgage loan approvals: Average loan to value ratio

Note: Government projections for 2018 and 2019. Source: CLSA, Census and Statistics Department, Transport and Housing Bureau, Rating and Valuation Department

Source: HKMA, CEIC Data
Indeed the real leverage in Hong Kong property remains in the commercial property area, which is not surprising since this area has been much less impacted by government-induced regulatory property tightening. On this point, BIS data shows that Hong Kong’s corporate debt is not only large in absolute terms but also large relative to the territory’s household debt. Thus, private non-financial sector corporate debt has surged from 166% of GDP at the end of 2012 to 235% at the end of 1Q18, while the household debt-to-GDP ratio rose from only 61.3% to 71% over the same period (see Figure 24).

Still for now Wong remains positive on landlords over developers. One positive catalyst is the opening in late September of the high-speed rail link from West Kowloon to China. Another is the opening last week of the long-awaited 55km Hong Kong-Zhuhai-Macau Bridge on 24 October (see CLSA research Macau Gaming: HK-Zhuhai-Macau Bridge, 24 October 2018 by head of Asia gaming Jonathan Galligan).

All this is grist to the mill for the Beijing-driven Greater Bay Area theme (see CLSA research Bay of dreams – World’s first mighty gigalopolis, 14 May 2018 by head of China A/H strategy Steven Yang). Still, in GREED & fear’s view, if there is going to be a problem in Hong Kong property in this cycle, it is going to be in the areas outside residential property as a result of the regulatory arbitrage encouraged by tightening targeting only residential property. On this point, loans to non-residential property development and investment accounted for 14% of Hong Kong banks’ domestic loans at the end of September (see Figure 25). The grade A office rental yield and retail property yield are now 2.3% and 2.4%, respectively, according to the Rating and Valuation Department (see Figure 26).
Figure 25
Share of loans for use in Hong Kong (end September 2018)

Note: Excluding trade financing. Source: HKMA

Figure 26
Hong Kong grade A office and retail property rental yields

Source: CEIC Data, Rating and Valuation Department
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Netflix (N-R)
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James Dyson churned out 5,126 prototypes before perfecting the final version of the machine that would make his name and fortune. A quarter of a century after that bagless vacuum cleaner went on sale, his eponymous company’s attempt to enter the automotive arena with a series of electric cars from 2021 will allow for far fewer trials.

The privately held British engineering group has bet its future on breaking into one of the world’s most competitive markets, pitting the entrepreneur against corporations like Volkswagen, Toyota and General Motors.

Its £2bn gamble shifted up a gear this week, with the announcement that its first automotive manufacturing plant will be in Singapore, the city-state which has not made cars since Ford closed a plant there in 1980.

Singapore’s trade links with China, the world’s largest electric car market, as well as its abundance of engineering graduates, helped it overtake other shortlisted contenders that included Britain, home to Dyson’s headquarters.
Dyson believes that its specialisms in electric motors and aerodynamics will give it an edge in modern carmaking. Though genuinely considered, the UK was always regarded as a long shot and the decision has inevitably sparked questions over the country’s ability to safeguard its car industry as Britain prepares to leave the EU.

Such is the ambition of Sir James, arguably Britain’s most famous inventor and a vocal supporter of Brexit, that he believes Dyson cars will eventually outgrow the company’s range of hairdryers, vacuums and air filters and come to define the brand.

“If they make an executive decision that they will develop a product in a certain category, then they go all in,” says a former Dyson research engineer.

But the scale of the challenge is enormous. Established players still find making cars at a profit fiendishly difficult. The biggest newcomer in the field, Elon Musk’s Tesla, has burnt through...
billions of dollars of cash with only a handful of quarterly positive earnings to show for it.

Commercial failure, big cost overruns or even just unexpected hiccups on production lines could end up threatening the company that Sir James has built into an empire with £3.5bn of revenue.

“I think Dyson is underestimating the scale of the challenge, both in developing a new car and building it successfully,” says David Bailey, a professor of economics and industrial policy at Aston University.

“It is going to be a lot more expensive than they anticipate. It will gobble up a lot of resources,” he adds.
Dyson’s interest in cars goes back to the cyclone principle it uses in its vacuum cleaners to suck up dirt. In the 1990s, Sir James suggested this could be used to extract fumes from diesel exhausts, but his approaches to carmakers were rebuffed.

Today, the company can boast success in almost every product category it has entered with the notable exception of its washing machines, which sold at a loss and were discontinued.
Sceptics say there is a huge difference between high-end domestic appliances and an automotive industry undergoing radical shifts amid the rise of electric propulsion technology, artificial intelligence and new ownership models. Yet with far fewer moving parts than traditional internal combustion engine cars, battery-powered vehicles are easier to design and produce, opening the door to new entrants, from California’s Tesla to Croatia’s Rimac.

In China alone, which Dyson sees as its biggest target market, there are more than 300 registered electric car start-ups, many with rich backers and ambitious founders. They include names such as Lucid, Byton and Nio, which is backed by the internet group Tencent and recently listed on the New York Stock Exchange.

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“We know it is a crowded market,” Sir James said last year. “But if you produce a product that has technology that is genuinely better, and a performance and product that people want, you can make money”.

*Tesla has sought to cement a position by attacking the inefficiencies it saw in established manufacturers, from overreliance on suppliers to the traditional dealership model. Dyson is applying a similar disruptive mentality.*

“Dyson thinks, like Musk, the incumbent industry doesn’t know what it’s doing,” says one person who has worked on the project. “That’s quite a risk.”
The company's notorious secrecy — it took more than a year to agree a confidentiality agreement with one supplier on the project — means few details have been revealed about its maiden four-wheeler to roll off the production line in just three years. Scheduled to be the first in a planned series of three models, it will be pitched to the upper end of the market and produced in a small batch of several thousand, according to people familiar with the plans.

Unlike Tesla, which has suffered manufacturing problems, the British group already makes millions of products a year, and sources around 4bn parts annually from across the globe.

“He’s not a Silicon Valley start-up, he understands manufacturing,” says one supplier.

Dyson believes that its specialisms, in areas such as electric motors, batteries and aerodynamics, will give it the edge over companies with a century’s worth of experience in carmaking. But to
succeed, it will need to cast off some of its reluctance to collaborate with component providers.

Its fans and air purifiers have given Dyson knowledge in the physics of air flow, an important area for electric vehicles because drag is a key factor in battery range, the distance that an electric vehicle can eke out of its “tank” before needing to recharge.

For instance a Tesla Model S can travel 300 miles on a full battery, in part because of its sleek design. But when carrying bicycles, the distance falls significantly.

Most established car brands have distinctive grills, which allow cooling air to flow into the hot engines. Keeping the same design for their electric cars allows models to be recognised by the motoring public — an Audi electric car will still look like an Audi — but it will bring aerodynamic trade-offs that will hamper the cars’ range.

That should give those starting from scratch an automatic head start.
Dyson’s other forte is batteries. It already makes 7 per cent of the world’s lithium ion cells, to power devices such as its cordless floor cleaners.

However, it may be forced to scale back the extent of its technological ambitions — at least for now. The company originally intended for its cars to be powered by cells developed in-house as part of a £1bn investment, but has now admitted that it could buy them from an external supplier.
Many carmakers already buy-in their batteries to avoid being locked into a single battery type and the huge expense of building a cell production site, says Chris Robinson, a senior analyst at Lux Research.

“One alternative [for Dyson] could be licensing its [battery] material to have someone else make it for them — a contract manufacture,” he adds. “There are a lot of battery factories in China and elsewhere in Asia.”

Dyson’s reluctance to collaborate with other companies — borne out of years of defending its intellectual property — makes this approach unlikely.

This mindset played a crucial role in its decision not to build in Britain, because many of the UK government funding channels require collaboration with smaller partners, an approach designed to foster a domestic supply chain. Britain may need to change this approach to win future work.

“Where we are falling down is not having any capital money to put into these things,” says one government figure. “Other states cheat the system and find ways around that, but we don’t.”

Singapore’s incentives include tax breaks for five years, which can be extended, and R&D grants that can cover up to 30 per cent of the cost of projects that involve product, application or process development, according to the Singapore Economic Development Board. They also offer expensive land at discounted rates, says a person with experience of Singapore’s economic planning. “They definitely would have given [Dyson] a favourable tax break,” they add.
Dyson refuses to reveal the scale of its investment, though the EDB’s Kiren Kumar says the company would double its 1,000-strong workforce in the country through the investment.

**Advanced manufacturing is a priority** for Singapore, which deems it a way to raise productivity at a time when the city-state has struggled to maintain high levels of efficiency.

For Dyson, which says its Singapore investment was premised on market access rather than incentives, no amount of government support can remove the need to pour its own resources into the venture.

Sir James has ruled out an initial public offering to fund the project. Earnings before tax at **Weybourne Group**, the holding entity for Dyson’s commercial interests, rose 27 per cent to £801m last year, while revenue jumped two-fifths to £3.5bn.
Its debt levels are low by the standards of industrial companies, giving it room to borrow significantly, while the core business generates cash.

But still, Sir James is acutely aware of the challenge he has taken on. “Investing in new technologies requires many leaps of faith and huge financial commitment over long periods,” he told a Financial Times dinner this year. “En route, there can be multiple sleepless nights and lots of frustration,” he said before adding that at heart, “Dyson was never a vacuum cleaner company”.

Latest on Electric vehicles

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Facebook has had a turbulent two years. But almost no one in tech thinks Mr. Zuckerberg, the social network’s chief executive, should step down from the company he built.

A few weeks ago, after Facebook revealed that tens of millions of its users’ accounts had been exposed in a security breach, I began asking people in and around the tech industry a simple question: Should Mark Zuckerberg still be running Facebook?

I’ll spare you the suspense. Just about everyone thought Mr. Zuckerberg was still the right man for the job, if not the only man for the job. This included people who currently work at Facebook, people who used to work at Facebook, financial analysts, venture capitalists, tech-skeptic activists, ardent critics of the company and its giddiest supporters.

The consensus went like this: Even if Mr. Zuckerberg — as Facebook’s founder, chief executive, chairman and most powerful shareholder — bore most of the responsibility for the company’s cataclysmic recent history, he alone possessed the stature to fix it.

More than one of his supporters told me it was bad faith to even broach the subject — that Mr. Zuckerberg’s indispensability was so plain that the only reason I might have to ask whether he should still run the company was the clicks I would get on this article. But even critics were not that excited about the idea of Mr. Zuckerberg’s removal. Barry Lynn, executive director of the Open Markets Institute, an organization that fights monopoly power, argued that Facebook’s problems grew out of its business model and the legal and regulatory vacuum in which it has operated — not the man who runs it.

“To be blunt, if we took Mark Zuckerberg out and we replaced him with Mahatma Gandhi, I don’t think the corporation would change in any significant way,” Mr. Lynn said.

That few can imagine a Facebook without Mr. Zuckerberg, 34, underscores how unaccountable our largest tech companies have become. Mr. Zuckerberg, thanks to his own drive and brilliance, has become one of the most powerful unelected people in the world. Like an errant oil company or sugar-pumping food company, Facebook makes decisions that create huge consequences for society — and he has profited handsomely from the chaos.
Yet because of Facebook’s ownership structure — in which Mr. Zuckerberg’s shares have 10 times the voting power of ordinary shares — he is omnipotent there, answering basically to no one.

This fits a pattern. Over the last two decades, the largest tech companies have created a system in which executives suffer few personal or financial consequences for their mistakes. Big tech has turned founders into fixtures — when their companies are working well, they get all the credit, and when their companies are doing badly, they are the only heroes who can fix them.

There’s another way to put this: For better or worse, Mr. Zuckerberg has become too big to fail.

In America, it’s not unusual for executives to escape punishment for how they steer their corporations (see Wall Street after the 2008 financial crisis). Still, when companies step in it badly, there are often at least calls for their leaders’ dismissal. The chief executives of Equifax and Target were pushed out after data breaches. The chief executive of Wells Fargo was ousted after a scandal involving sham accounts.

Even in Silicon Valley, where company founders are revered as money-laying rainbow unicorns, there is some limit to corporate patience. In the 1980s, Apple fired Steve Jobs. Last year, Uber ousted Travis Kalanick, who was as closely aligned with his company’s culture as Mr. Zuckerberg is with his.

Facebook’s problems have not reached the level of lawlessness we saw at Uber, but they have been far more consequential. Besides the breach, Facebook has been implicated in a global breakdown of democracy, including its role as a vector for Russian disinformation during the 2016 American presidential election.

Investigators for the United Nations have said Facebook was instrumental to genocide in Myanmar; it has also been tied to violence in India, South Sudan and Sri Lanka. There have been privacy scandals (Cambridge Analytica most recently), advertising scandals (discriminatory ads, fishy metrics), multiple current federal inquiries, and an admission that using Facebook can be detrimental to your mental health.

Even though Mr. Zuckerberg has apologized and vowed again and again and again to fix Facebook, the company’s fixes often need fixing. In the last week, reporters showed that the company’s recent move to clamp down on political ads has not worked — Vice News bought Facebook ads falsely stating that they were “paid for” by Vice President Mike Pence and ISIS.

So given such failures, another question might be: Why haven’t any heads rolled at Facebook? Although there have been some high-profile defections — the co-founders of WhatsApp, Instagram and Oculus, all companies bought by Facebook, left in the last few months — Mr. Zuckerberg’s most loyal executives have been with him through thick and thin, many for more than a decade.
If Facebook admits now that its problems were caused by a too-idealistic, move-fast culture, and if it is conceding now that its culture must change, how can we be sure that’s happening if most of the people who run Facebook remain the same?

When I asked Facebook about this, the company argued that things were changing. It just hired Nick Clegg, a former deputy prime minister of Britain, as head of global affairs — a move that the company said imbued it with a serious outsider’s perspective.

The social network also put me on the phone with a top executive who argued boisterously for Mr. Zuckerberg’s leadership, but declined to do so on the record. The executive explained that fixing Facebook would involve deep costs. The company is hiring more people to review content, for example, and it might have to slow down some of its most ambitious projects to address its impact on the world. The executive argued that Mr. Zuckerberg’s total domination of Facebook’s equity, plus the reverence in which employees hold him, allowed him to weather the financial consequences of these changes better than any other leader.

Facebook’s stock price plunged nearly 20 percent on a single day this summer after it reported slowing revenue growth and increased operational costs. This week, Facebook repeated its slower-growth warning. A “professional C.E.O.,” one without such a huge stake in the company, would be tempted to try the easy way out, the executive suggested. But Mr. Zuckerberg was free to do what’s right.

Mr. Zuckerberg’s supporters also argued that he has shown a deep capacity to understand and address Facebook’s problems. After the company went public in 2012, its stock price languished for months because it had no plan to make money from consumers’ shift to mobile devices.

“Mark would tell you that he was too late in understanding the importance of mobile — but when that became apparent, Mark understood its gravity and he understood how to fix it,” said Don Graham, a former Facebook board member and former publisher of The Washington Post. “He changed the direction of that company incredibly fast, in detail, not by one action but by 20 actions — and if you looked at the quarter-by-quarter numbers of what percentage of Facebook’s revenue was coming from mobile, I couldn’t believe how fast it changed.”

The question at Facebook now is whether Mr. Zuckerberg has similarly seen the light on its current problems. He has said fixing Facebook was his personal challenge for 2018. But there are signs that its culture remains the same.

Consider its promise that a new home-hub device, Portal, which it unveiled this month, would not collect information on users that could be used in ads. It had to swiftly walk back that promise because Facebook’s data-collection system is so pervasive that even some of its employees don’t seem to understand it.

“I think he has demonstrably failed over the last two years, and the reason he’s failed is because he’s unaccountable,” said Sandy Parakilas, a former Facebook employee who is now chief strategy officer for the Center of Humane Technology, an activist organization. “Given a
scenario where shareholders and board members had more influence, it’s hard to imagine that there would not have been changes faster.”

One fix for Facebook might be to give the board greater power over the company. Trillium Asset Management, an investment firm, recently put forward a shareholder resolution supported by several state funds that would require Mr. Zuckerberg to step down as Facebook’s chairman, though he would still maintain majority voting control of the company.

“I think by taking the step to relinquish the position of the board chair, it’s a very important structural change so that he would not have a completely free hand to muscle his way through decisions,” said Jonas Kron, a Trillium senior vice president.

A Facebook spokesman said the company had not yet taken a position on the resolution. In the past, similar measures have been voted down by Mr. Zuckerberg and his allies.

Which leaves us here: Either Mr. Zuckerberg fixes Facebook, or no one does. That’s the choice we face, like it or not.

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When Sears filed for bankruptcy recently, many placed part of the blame on the iconic retailer’s failure to effectively integrate its online presence with physical stores. Omnichannel retailing has quickly become the industry standard as online-first operations open physical shops and brick-and-mortar chains try to better navigate the digital world. But many companies on either side still struggle to get the balance right. That learning curve is the focus of research by Santiago Gallino, a Wharton professor of operations, information and decisions. His research on the topic includes, “Offline Experiences and Value Creation in Omnichannel Retail,” and “Offline Showrooms in Omnichannel Retail: Demand and Operational Benefits,” which were both co-authored with former Wharton marketing professor David Bell and Harvard Business School professor Antonio Moreno, and “Integration of Online and Offline Channels in Retail: The Impact of Sharing Reliable Inventory Availability Information,” which was co-authored with Moreno. Gallino recently spoke to Knowledge@Wharton about the integration challenges for omnichannel retailers.

An edited transcript of the conversation follows.
Knowledge@Wharton: The term omnichannel has evolved over the years. It used to mean a brick-and-mortar with a website. What would you say it means today?

Santiago Gallino: I agree that the term has evolved, mainly driven by the fact that the customers have evolved. If you think of the customers today, they don’t see two independent companies, one running in a brick-and-mortar setting and the other one in an online setting. We see retail companies as one entity. That is why retailers should aspire to be one unique company facing the customer, either when the customer interacts with the online part of the business or the brick-and-mortar part.

Knowledge@Wharton: There are brick-and-mortar retailers that are trying to beef up and integrate their online operations. At the same time, there are a lot of online-first retailers that have been opening up brick-and-mortar stores in recent years. What are the unique struggles that each one faces?

“Running an operation in the real world is different than running an operation in the online world.”

Gallino: It’s a very interesting phenomenon, the fact that online-first retailers are now starting to develop a physical presence. When I first started looking at the issue of omnichannel retail, most of the focus was on the struggles that traditional retailers were having in trying to integrate with the online world, with the assumption that eventually the brick-and-mortar stores were going to die or fade away. Now, we see a lot of digital-native brands that are opening a physical presence. The struggles that these new companies have, the companies that are opening the physical presence, is that they haven’t had the experience of doing that. Running an operation in the real world is different than running an operation in the online world. But I think they are young companies with smart people running them, so they understand the challenges and are trying to overcome them.

For the traditional retailers, I think they have also realized that you cannot run your online component of the business as you used to run the brick-and-mortar part. I think that this adjustment is happening both ways.

Knowledge@Wharton: Your research looks at how interactions with both online and offline channels impact customer behavior, and you found that it does have some pretty big impacts. Could you describe those?
Gallino: We looked at what is happening with these initiatives that retailers were trying to implement to integrate the two channels. For example, we have looked at what happened when a company starts to offer buy online/pick up in store. That is very prevalent now.

One of the things that we noticed is that, of course, there are customers who use the option. The fact that the retailer discloses the inventory information and where the customer can get the products in the brick-and-mortar stores is driving customers to the stores before closing the transaction online. So, customers are using the information component of the online business to then drive to the store and pick up the item without necessarily closing the transaction online.

“A lesson that is key for the companies is the idea that you cannot evaluate actions that you make in one channel only in that channel.”

In the opposite direction, now we see many original online retailers starting to open showrooms where you can go visit, touch the product, but when you want to close the transaction you need to do it online. Basically, the customer is going to the store to experience the product, experience the interaction with the retailer, but the actual transaction will still be online.

Knowledge@Wharton: Given these changes in how customers are interacting with brands, what are the lessons here for the companies?

Gallino: I think a lesson that is key for the companies is the idea that you cannot evaluate actions that you make in one channel only in that channel. Going back to my example of the buy online/pick up in store, if you are the manager of the online part of the business and you start offering buy online/pick up in store, you will completely miss the fact that now there are customers going to directly find the product in the store. This is telling you that, when you make an action in an omnichannel context, it needs to be evaluated in an omnichannel fashion. You need to think of the impact that these particular actions can have on your operation, meaning online plus brick-and-mortar, not just the channel or the part of the business where you took the action.

Knowledge@Wharton: To use the example of buy online/pick up in store, if you’ve got that person now coming to your store, it creates an opportunity for you.
**Gallino:** Absolutely, and we do find that in our research. When someone goes to pick up something in the store, they end up buying more stuff that they were not originally planning to buy. They don’t go to the store simply to pick up the item, but they buy additional things. Again, this speaks to the fact that retailers need to consider the implications of the action more broadly and not only in the channel that they’re thinking about.

The second issue that is important to consider when retailers are planning and deciding what to do next is to be aware that today, customers are omnichannel. This idea that you can understand your own company and your business as two separate sections, the online and the brick-and-mortar, is no longer sustainable because customers don’t think of the retailer that way. If something I buy from a retailer online arrives home and I don’t like it, I can drive to the store and try to return it. And if the retailer is not offering this option, it will be awkward for me because I actually bought it from you. You are one company, so if the answer is, “Oh, you bought this online. We don’t accept the returns,” that is signaling to the customer that you haven’t understood yet that we are in an omnichannel context.

**Knowledge@Wharton:** 2017 was defined by retail closures, and there have been a lot more of them in 2018. But we’ve also seen some retailers posting pretty strong earnings news recently. Do you feel like that’s simply a reflection of increased consumer spending, or is there also a pattern here that some of the retailers are getting rewarded for doing it right?

**Gallino:** Yes, I think that last thing is what is going on. I think there are retailers that, unfortunately, were not able to adjust and to adapt for different reasons, and now they’re closing. Others had the ability to transform themselves, to put emphasis where customers are seeing value, and that is making them thrive. Best Buy is an example of a retailer that everybody thought was going to be going through some rough patches. In fact, I think they’ve been working hard and understood the value of their physical presence and trying to leverage that when they put their offerings on the online world.

“This idea that you can understand your own company and your business as two separate sections, the online and the brick-and-mortar, it is no longer sustainable because customers don’t think of the retailer that way.”

Companies have reacted differently. Unfortunately, some of them failed. But I think there are many retailers that have been able to adapt, transform and are going to be healthy in the long run.
Knowledge@Wharton: A lot of what is written about omnichannel focuses on brick-and-mortar retailers trying to move into the digital world and sometimes not doing a great job. But do you see in the trend of online-first retailers trying to move into the physical world any warning signs for them?

Gallino: Yes, I think so. I think that many of these online-first retailers are jumping into the physical world with the assumption that they can learn as they go and that the experience from retailers that have been running their businesses for many years is not so relevant.

In my experience, they very quickly find that there are some retail fundamentals that are still there. You still need to learn how to manage your inventory, your assortment, your staff, how to train them, how to have the right people in the right place. All of those things are not trivial. You can design and think of an offering now in the physical world that is attractive, is more engaging, has high touch with the customer, and that’s all good. But you need to have the fundamentals right. I think that that’s what the online-first retailers are learning when they’re trying to grow in the physical world.

The advantage is that most of them are doing this gradually. They’re opening five, then 10, then 15 stores, so they are learning as they go. The challenge for the traditional retailers is that they already have more than 300, 500, thousands of stores and need to adjust all at once. So, I think that there is a little bit of advantage in the flexibility of the online-first retailer and more of an opportunity of learn as you go.

Knowledge@Wharton: What are some future lines for your research?

Gallino: The focus of my research going forward is still going to be very much around the omnichannel experience. I don’t think that we are there yet. I think that we are going to see a lot of changes going forward. I am eager to be following those changes and trying to do research about that. My sense is that the retail industry is not stable at this point, so the transformation is still going on. That is exciting because if there are changes and transformations and challenges, those are great conditions for good research.

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