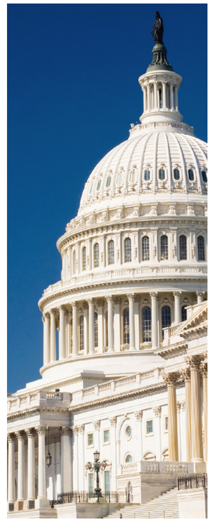
POTUS 45

Investment implications of likely Trump Administration priorities

CIO Wealth Management Research | 26 April 2017



Quick guide

Section	Page	Description
Introduction	Below	A funding challenge for new infrastructure spending
Infrastructure needs	Page 2	Needs are many, across all infrastructure categories
Civic capital	Page 5	A small but likely growing financing solution
Implications	Pages 6–7	**US equities** Minimal current impact **US fixed income** Relevant for munis, not rates
Implication matrix	Page 8	Summary of the likelihood and impact of potential policy changes
The first 100 days	Page 9	A look back at Trump's first 100 days

POTUS 45

The acronym POTUS (President of the United States) came into use during the late 1800s by telegraph operators and is now commonly used in media. Donald Trump is the 45th POTUS.

Above – the US Capitol. Both chambers of Congress met in the US Capitol for the first time on 18 November 1800.

New spending plans:
It's a funding challenge

By Jason Draho

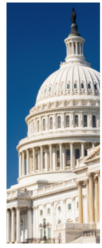
First as a candidate and now as president, Donald Trump has made bold spending promises: a USD 1tr investment in rebuilding US infrastructure and a USD 54bn increase in defense spending. Fulfilling these spending promises will be difficult. Large deficits and stretched budgets, potentially exacerbated by tax cuts, plus Republican opposition to new government spending, are high hurdles to overcome.

Like other aspects of President Trump's pro-growth agenda (i.e., tax reform and regulatory relief), the initial post-election market pricing linked to infrastructure spending appears to have largely reversed. However, the need for new investment hasn't changed, as physical deficiencies in America's infrastructure are plainly evident, nor has the desire to address the problem. Indeed, there is broad bipartisan and popular support for improving the nation's infrastructure. The challenge is for all three levels of government – federal, state, and local – to find cost-effective ways to deal with it.

We do not yet have clear details on how the Trump administration plans to pay for more infrastructure spending. In light of the current political and fiscal situation in Washington we expect the size of the plan to be much smaller than the USD 1tr requested. In our view, an aggregate program in the USD 300-600bn range, with spending not beginning until well into 2018, is more realistic.

The potential bright spot is the role that private capital can play as a funding solution. The administration's goal has always been to rely heavily on

Video Jason Draho discusses this report's highlights. *Click to watch.*



private sources of capital to finance new infrastructure investment, by creating tax incentives and structures to encourage such participation. In that vein, a recent *Revitalizing America* report outlined a multi-pronged approach for harvesting the growing base of global "civic capital" – roughly, the capital in sustainable investing, environment finance, impact investing, and philanthropic private wealth – as a way to fund the modernization of the nation's infrastructure.

These sources of civic capital may eventually become a substantial part of the solution, but for the time being a significant increase in infrastructure spending is unlikely at any level of government. Consequently, the investment implications for both equities and fixed income currently appear relatively modest.

While some may point to increased defense spending as also having broad economic and investment implications, we believe the impact would be minimal given the likely amount – with only a handful of companies clearly benefitting. We therefore focus our attention in this report primarily on the prospect of new infrastructure spending.

Infrastructure needs: An extensive list

President Trump's description of the "crumbling" state of America's infrastructure may be excessive, but is not entirely inaccurate. Every four years the American Society of Civil Engineers (ASCE) assesses the quality of US public works, highlights deficiencies, and assigns a letter grade based on physical conditions. Their most recent grade was a "D+." ASCE estimated that a USD 1.4tr investment over the next decade is necessary to modernize the nation's infrastructure.

The challenges are both the magnitude and breadth of the required investment. Our *Revitalizing America* report, published on 11 April,

Fig. 1: Infrastructure needs are many

ASCE grades appear in parentheses

America's airports (D)	Air travel is an essential mode of transportation for the US, and major commercial airports are a critical link for passenger travel. But, increasing congestion and overwhelmed air traffic control systems continue to burden US aviation infrastructure.[1]
Maritime ports (C+)	Ports play a vital role in the economy and trade: 76% of US exports are transported in seaborne containers, and the average American's annual consumption is now equivalent to 56 tons of cargo. Deficiencies in ports pose a steep challenge to America's competitiveness and increase the cost of goods for export and domestic consumption.[2,3]
Surface transportation (Rail: B; Bridges: C+; Roads: D; Transit: D-)	In 2014, traffic bottlenecks caused 6.9 billion vehicle-hours of delay across America. Congestion alone is estimated to waste 3.1 billion gallons of gasoline every year, spewing pollutants into the atmosphere and reducing worker productivity.[4]
Water utilities (Drinking water: D; Wastewater: D+)	Every day, nearly 6 billion gallons of treated water leaks through faulty pipes, and public waterways absorb over 2 billion gallons of untreated sewage. The Flint, MI, water system collapse reminds us that few public works are as essential to public health as safe and reliable drinking water.
Energy (D+)	America's energy system must generate and deliver over four trillion kilowatt-hours (kWh) of electricity each year. But the system struggles with aging equipment and capacity bottlenecks that hinder growing demand. America annually experiences hundreds of "significant power interruptions" that cost businesses around USD 150bn in lost productivity.[5]
Broadband access (No ASCE score)	The US faces a "digital divide" that leaves 34 million Americans with insufficient access to broadband, putting them at a disadvantage.[6] ASCE doesn't include broadband internet access as an infrastructure category, but it is widely considered to be a precondition to a fully participatory modern society.

Increased defense spending means less elsewhere

In March, President Trump put forth a "skinny budget" that proposes to reverse USD 54bn of defense-related cuts scheduled to take place in 2018. This budget is intended to outline administration priorities ahead of a formal proposal, and should serve as a starting negotiating position. As such, it is unlikely to become law.

To finance higher defense spending without touching mandatory spending, the proposal deepens sequestration cuts in non-defense discretionary (NDD) spending established by the Budget Control Act. Sequestration, which lowers federal spending at a pre-determined percentage, is set for 2018 at 16% below 2010 levels. The "skinny budget" deepens that cut to 25%.

The budget outline also proposes a 30% reduction to the State Department and EPA budgets, defunds 19 government agencies, and suggests eliminating scores of relatively small programs. Even in the unlikely event that all of these recommendations are adopted, the resulting savings would only pay for a 6-9% increase in the Defense, Veterans Affairs, and Homeland Security departmental budgets.

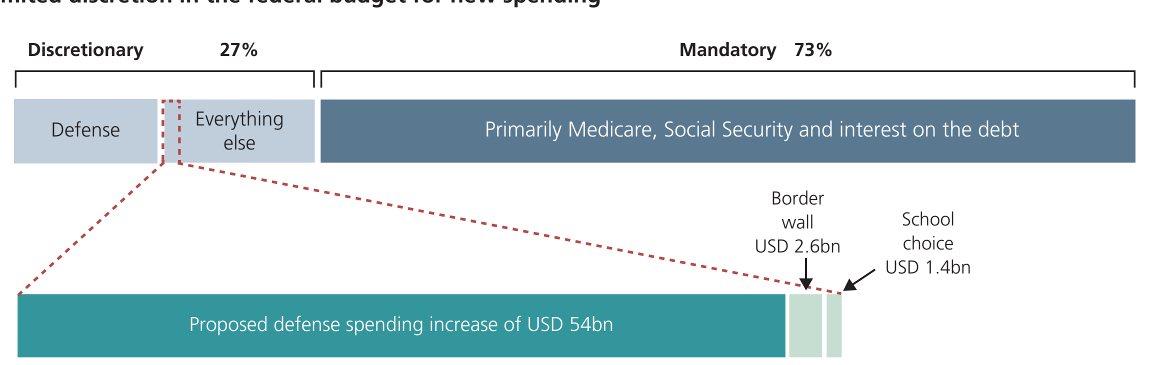
documents the aspects of physical infrastructure in need of new investment, such as roads, airports, seaports, and the electric grid (see Fig. 1). The paper also notes that Americans need access to information technology to fully participate in modern society, and a "digital divide" risks disadvantaging a segment of the population.

Failure to address these structural deficiencies could put Americans at a competitive disadvantage globally across many sectors, exacting a steep economic toll. If left unfilled, the cost of the infrastructure gap over the next decade could be USD 4tr in lost GDP and 2.5 million lost jobs.[7] Thus, it's not surprising that the idea of improving America's infrastructure garners wide support – 91% of respondents in our most recent UBS Investor Watch survey, *On your Mark…*, published on 25 April 2017, agreed that investing in infrastructure will positively impact the economy. But that support breaks down over the matter of how to pay for it.

Good intentions, meet fiscal realities

Simply put, the US federal government has limited fiscal bandwidth to meet Trump's spending promises – at least not without increasing the deficit, raising taxes, or cutting spending elsewhere. While Democrats may support the first two options to finance infrastructure investment,

Fig. 2: Limited discretion in the federal budget for new spending



Source: Office of Management and Budget, UBS, as of 26 April 2017

both are non-starters with Republicans. In contrast, Democrats and many Republicans have fiercely opposed the administration's proposal to finance higher defense spending with other budget reductions (see sidebar on previous page).

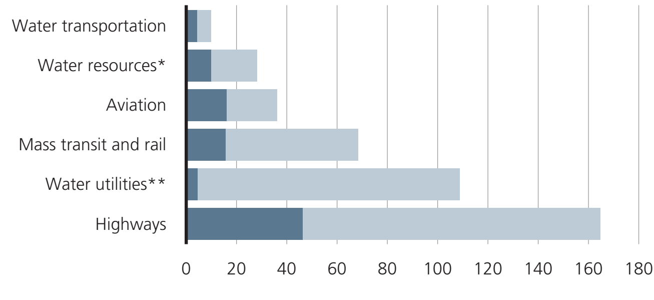
Over 70% of the federal budget is already dedicated to mandatory commitments to Social Security, Medicare, Medicaid, and interest on the national debt (see Fig. 2, previous page). With defense spending accounting for another 13%, that leaves only 14% of the budget, or about USD 630bn, for discretionary spending. A proposed USD 100bn annual increase in federal infrastructure spending, which was already USD 96bn in 2014, would account for over 20% of the NDD spend, a hard sell politically.

Our base case calls for a much more modest increase in federal infrastructure spending, with the headline figure totaling between USD 300-600bn over ten years. The actual amount of new federal spending is likely to be even lower. The administration has made clear that it wants to incentivize private capital to contribute to the investment in order to expand the impact of each dollar of government spending.

Ideally, civic capital could eventually contribute the bulk of infrastructure financing, but this is currently at the policy development stage

Fig. 3: Federal infrastructure spending is less in each sector than infrastructure spending by state and local governments

Infrastructure spending by level of government and by type of infrastructure, 2014, in billions of dollars



Federal

State and local governments

Source: Congressional Budget Office, UBS, as of 30 March 2017
* Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).
** Includes water supply and wastewater treatment facilities.

rather than a scalable policy solution. The administration is expected to release a specific infrastructure plan in the next couple of months, and may try to incorporate the plan, or aspects of it, into tax reform. But implementation of a new federal infrastructure program is unlikely until later in 2018, at the earliest, in our view.

This increase in infrastructure spending may appear underwhelming given Trump's proclamations of spending USD 1tr, but this needs to be put into perspective. State and local governments have historically accounted for about 70-75% of total infrastructure spending.[8] The percentage varies by sector, as Fig. 3 shows, but is significant and likely to remain that way. The reason for the large state and local government role is that municipal bonds' tax-exempt status makes them a highly competitive and cost-effective form of financing. We do not expect that to change with tax reform.

For now, limited investment implications

The prospect of higher infrastructure spending was a contributing factor to the "reflation" trade that began immediately after the election – the investment stance built upon hopes that US growth and inflation will advance further. As the challenge of translating campaign rhetoric into governing action became apparent, the market dialed back expectations. The stocks that benefitted the most from these reflation expectations initially after the election have since given back most of their outperformance.

Consequently, the current investment implications pertaining to Trump's spending initiatives appear quite modest, given our base case federal infrastructure spending program. The picture is a little better when looking at the long-term implications of increased infrastructure spending. Budgetary pressures are unlikely to ease at all levels of government. But even a modest increase in federal infrastructure spending, if amplified by growing contributions from civic capital, should improve the nation's infrastructure and help long-term growth. Just as it will take time for increased spending to materialize and for the economic benefits to become tangible, investors will need to take the long view if they want to play infrastructure as a theme.

Civic capital is a small but likely growing financing solution

We expect that infrastructure spending over the next few years will continue to be funded primarily by the federal government and by municipal bonds at the state and local government levels. However, as the population continues to age and demands on government programs grow (i.e., Medicare and Medicaid), already-constrained budgets will demand higher apportionment to non-infrastructure spending. Traditional government funding sources are then unlikely to be sufficient to meet infrastructure needs.

Civic capital can be an effective complement or supplement to direct government expenditures. In exchange for absorbing some of the risks associated with project design and construction, private investors would be rewarded with a reasonable rate of return. The Trump administration's infrastructure plan is likely to focus on mechanisms that encourage private investment (e.g., government guarantees, tax preferences, or matched spending). This is an appealing funding option because there is an estimated almost USD 100tr of global civic capital that could be invested in US infrastructure projects.[9] A number of policy ideas that aim to tap into this capital are being explored. Some of the options include:

Private activity bonds: These are municipal bonds issued by a public agency on behalf of a private project that can be designated "qualified" and thereby exempt from federal income tax. Expanding the volume of these bonds and easing constraints could reduce the cost of capital for private-sector investment in public infrastructure.

Revisit Build America Bonds (BABs): These are taxable municipal bonds with a federal subsidy toward the interest portion of debt service. Over the long term, the higher yield could help attract capital from institutional and foreign investors. The subsidy would need to be protected from sequestration, which hamstrung the original BAB program that ran from 2009-10.

The Trump administration's infrastructure plan is likely to focus on mechanisms that encourage private investment.

National Infrastructure Bank (NIB): A targeted mechanism for infrastructure financing could be funded by tying it to a repatriation tax holiday for companies. A handful of proposals have involved issuing NIB bonds in exchange for a tax credit that offsets companies' repatriated earnings. The NIB could then apply leverage through loans or guarantees made to public-private partnerships or state and local government projects.

Public-private partnerships (P3s): These are contractual agreements between state and local governments and the private sector that allow for greater participation of the latter in the construction, maintenance, and management of a public facility. Private-sector partners are responsible for activities normally undertaken by the government and bear a financial risk if the project fails to provide a minimally acceptable standard of service. Conversely, if the facility is built and managed efficiently, the private-sector party is typically permitted to seek a reasonable return on its invested capital. P3s have been used sparingly in the US, but are more common in other developed countries, because US tax-exempt municipal bonds provide a competitive form of financing.

Implications for
US equities

Equity market implications of a USD 300-600bn ten-year infrastructure investment program (USD 30-60bn per year) are likely to be fairly modest. Annually, this is a drop in the bucket compared to S&P 500 revenues of nearly USD 11tr in 2016. Even for the industrials sector, which we believe would be the biggest beneficiary of an expanded infrastructure spending program, the increase is small relative to annual revenues of USD 1.2tr.

Still, there are clear economy-wide benefits from prudent infrastructure investment programs.

Still, there are clear economy-wide benefits from prudent infrastructure investment programs. The potential spending should be seen as a means to help maintain, or even slightly accelerate, US economic growth over the longer term. Faster growth has positive implications for US equities, but these benefits will likely be modest and only accrue over a longer period of time. As a result, infrastructure spending is not a significant driver of our constructive shorter-term tactical view.

While we would expect the market-wide benefits to be quite diffuse, individual companies could be substantial winners from an infrastructure spending push. Engineering and construction, construction materials, steel, and construction machinery companies should be the biggest winners. Not surprisingly, investors aggressively bid up shares in these companies in the weeks after the election.

Our 23 November 2016 report *Equity markets: US infrastructure: More bark than bite?* concluded that stocks leveraged to US infrastructure spending had become unappealing after strong performance in the two weeks after the election. That thesis has largely played out, as infrastructure stocks have underperformed the broader market since late November. Market expectations are now a bit more reasonable as a result. However, given that there is still a fair amount of uncertainty about the timing and scope of any infrastructure push, we continue to refrain from recommending a basket of companies that are associated with infrastructure spending at this time.

Recommendations

- We retain our overweight view on US equities in our globally diversified portfolios based on accelerating earnings growth, benign inflation, and durable economic growth. The prospect of higher infrastructure spending is not a significant driver of our overweight position.
- After underperforming since November, select companies that have high exposure to infrastructure spending are looking more appealing. But it appears premature to invest in these companies given uncertainties about the timing and scope of any legislation.

Implications for
US fixed income

New government spending initiatives should, all else being equal, be negative for fixed income. First, cash-strapped state and local governments will likely finance new spending through increased borrowing, adding to already high fixed costs. Bond prices could fall, even marginally, due to higher credit risk. Second, new spending should stimulate economic growth, leading to higher inflation and interest rates. That dynamic occurred immediately after the election, as the yield on the 10-year Treasury bond rose 60 basis points (bps) in five weeks.

Instead, the fixed-income implications from infrastructure spending apply foremost to municipal bonds.

However, interest rate risks stemming from new spending initiatives in 2017 and 2018 look to be fairly low. That's because the size and timing of any new spending is likely to be modest and not occur before late 2018. Consequently, the impact on growth and inflation should be minimal.

Instead, the fixed-income implications from infrastructure spending apply foremost to municipal bonds. Because the Trump administration places high importance on infrastructure investment, the risk that tax reform legislation will eliminate the municipal tax exemption is low. We believe that's a consequence of public interest groups forcefully advocating the value of municipal bonds for infrastructure investment for the past five years.

In terms of specific infrastructure programs, political dysfunction in Washington has occasionally delayed the reauthorization of federal transportation aid programs, thereby threatening the payment of debt service on municipal bonds that are secured by such assistance. Grant anticipation revenue vehicles (GARVEEs) and other types of municipal bonds reliant on federal aid should perform marginally better as Congress focuses on improvements to the surface transportation system.

A focus on public-private partnerships may loosen the rules governing long-term concessions of public infrastructure to the private sector. To the extent that more lenient regulations still require the early redemption of outstanding tax-exempt debt, municipal bondholders stand to benefit from the payment of premiums upon the execution of concession contracts.

Recommendations

- We retain an underweight on US government bonds vs. risk assets (US and global equities and US high-yield corporate bonds), and expect the 10-year Treasury yield to trade in a range of 2.2-2.7% for much of this year, gradually trending higher.
- We recommend municipal bonds with 12- to 17-year maturities. We are not inclined to extend duration beyond 17 years because tax reform, while unlikely to eliminate the municipal tax-exemption, may include a reduction in the rate of taxation on corporate bonds. This would make corporate bonds more attractive to institutional investors and crossover buyers, thereby reducing the taxable-equivalent yield on munis. Intermediate maturities are in a safer position in the near term as Congress debates the details of legislation.

Priorities and impact

	Tax reform	Regulatory relief	Spending initiatives	Global engagement
Overview	**Expect a reduction in the 35% corporate tax rate**. Proposals are for 15% (per Trump) and 20% (the Ryan-Brady plan), but 25% is more likely. The size will depend on the inclusion of a border adjustment tax (BAT) - a tax on imports and subsidy for exports. A BAT is unlikely but would enable a larger cut. Other possible reforms include accelerated depreciation of capital expenses and reduced deductibility of interest expense. A **tax break on the repatriation of foreign earnings is very likely** as this has broad support and generates revenue. Legislation might not pass until late 2017, or possibly 2018, due to complex negotiations and the return of healthcare reform as a priority. **Lowering and simplifying personal income tax rates is a goal**, but may not be part of the legislation.	The failure of House Republicans to vote on the American Health Care Act (AHCA) **makes healthcare reform unlikely in 2017**, though Trump recently stated that he wants to prioritize it again. Other **relief has already occurred through executive orders and new appointments** in the cabinet and agencies, with further changes likely to come in the form of new legislation. The focus has been on energy and environmental-related regulations and an overhaul of Dodd-Frank. Significant changes to the latter will require new legislation. **Congress can overturn recently issued regulations** under the Congressional Review Act. Over a dozen such resolutions have been signed by the president.	Trump has proposed a USD 1tr infrastructure spending package over ten years, and is seeking a USD 54bn increase in defense spending in the FY 2018 budget. **Actual infrastructure spending is likely to be more modest, around USD 300-600bn** over ten years. The administration is focused on tax credits and public-private partnerships to induce private capital to participate, though these are policy ideas rather than concrete plans at this time. A new infrastructure program could be dealt with through tax reform legislation as part of the 2018 budget reconciliation process, but it's more likely to be addressed through separate legislation in 2018.	**The "Trump Doctrine,"** guided by the principle "America First," which initially rejected multilateralism, **is evolving**. The administration has subsequently been more conciliatory toward allies and has asserted US global leadership. Improving the trade balance remains a top goal and **all relationships will be evaluated by the economic bottom line**. The administration is likely to bring more trade enforcement actions to the WTO and renegotiate trade agreements, beginning with NAFTA. The administration may consider using tariffs, but **will try to avoid crossing the line that triggers trade wars**. It is also likely to continue to aggressively enforce immigration laws and actively seek the deportation of illegal immigrants.
Prioritization	High	High	Low / medium	High
Expected timing	Late 2017 – 2018	Immediate and ongoing	Late 2017 – 2018	Immediate and ongoing
Probability	Medium / high	Medium / high	Low / medium	High
Economic implications	**Modest boost to GDP growth** from corporate tax reform [<0.5 percentage points (ppt) and not until 2018]. Small but positive impact on inflation. Fed stays on pace for two more rate hikes in 2017. A BAT is unlikely, but could be inflationary and cause USD appreciation.	Specific areas of the economy may get a significant boost, but the **aggregate impact on growth is likely to be modest in the near term**. Over the longer term, reforms could lead to faster productivity growth, which can be disinflationary and positive for growth.	Positive for growth, but **the GDP impact should only be 0.2–0.3ppt** if annual investment is USD 40bn. This reinforces the rising inflation trend, with a faster-than-expected pace if spending is closer to USD 100bn annually.	**US growth could suffer** due to the negative impact from new trade barriers, tighter immigration, and an uneven foreign policy. The effects are likely to vary across countries and sectors. **They should also be inflationary**.
Investment implications	Positive for US equities. **Foreign earnings repatriation could boost S&P 500 EPS by 3-4%**. Reduction of corporate rate to 25% could boost profits by another 6%. Domestically focused companies would benefit the most.	**Benefits are likely to be concentrated in specific sectors**, with energy, healthcare, and financial services most directly impacted.	Benefits of additional spending are likely to be concentrated in certain companies. US infrastructure-related stocks **no longer appear to be pricing in USD 300–400bn of spending** over ten years. A slow pace of spending supports our expectation for gradually rising rates.	**Most markets aren't pricing in global engagement risks**. Trade barriers would be negative for risk assets, especially globally focused companies. They should also lead to USD appreciation in the short term, but the Trump Doctrine risks weakening the USD over the long term.

The first 100 days:
A lot left to do

The Trump presidency began with high investor expectations for its pro-growth policy agenda of tax reform, regulatory relief, and infrastructure spending, and not much worry about its "America First" approach to global engagement. Investors remain optimistic as the 100-day mark of the administration nears, as evidenced in our just-released survey of UBS clients, Investor Watch: *On your mark...*

The administration has made some progress on implementing its agenda, including a series of executive orders, legislation, and foreign policy shifts that have effectively reversed many Obama-era regulations and trade deals. However, there is still much to be done if they want to reach their goals – specifically on tax reform,

We view more progress as likely, but are cautious not to expect too much.

Obamacare, and infrastructure. Granted, it was never realistic to expect the administration to make significant headway on all these complex policies in such a short time period. Yet the failure of the House to even vote on healthcare reform does raise legitimate concern about how much of the agenda the administration can accomplish.

Current pricing would suggest that markets at least are skeptical of what progress can be made. The markets responded very favorably to the agenda immediately after the election, pricing in the expected economic benefits across equities, interest rates, and the US dollar. But since inauguration day, the markets have largely undone the initial pricing of these benefits. While it's easy to view that pessimistically, it also means that continued progress on the agenda should be positive for market performance.

We view more progress as likely, but are cautious not to expect too much. For instance, we expect tax changes by early 2018, but it's likely to be just a corporate tax cut, not broad tax reform. Continued progress on regulatory relief also looks very likely. Still, there are many unanswered questions, ranging from what policy proposals will look like to how effectively Trump and his administration can learn from early mistakes. We will be closely monitoring developments to answer these questions and evaluate their investment implications.

Publication details

Publisher
UBS Financial Services Inc.
Wealth Management Research
1285 Avenue of the Americas, 20th Floor
New York, NY 10019

This report was published on 26 April 2017.

Editors in chief
Jason Draho
Mike Ryan

Editors
Kate Hazelwood
Kristin Stephens

Contributors
(in alphabetical order)
Jason Draho
David Lefkowitz
Tom McLoughlin
Mike Ryan
Justin Waring

Project management
John Collura
Paul Leeming
Matt Siegel

Report design
George Stilabower

Desktop publishing
Cognizant Group – Basavaraj Gudihal, Srinivas Addugula, Pavan Mekala and Virender Negi

Photos
iStock, Getty Images

Mike Ryan

Jason Draho

Leading the POTUS 45 team this year are Mike Ryan, Chief Investment Officer Americas, UBS Wealth Management, and Jason Draho, Head of Tactical Asset Allocation Americas, UBS Wealth Management Chief Investment Office.

Endnotes

[1] American Society of Civil Engineers (ASCE), *Report Card for America's Infrastructure*, 2017, http://www.infrastructurereportcard.org/.

[2] Statista, World seaborne trade–carried by containers 1980-2015, https://www.statista.com/statistics/253987/international-seaborne-trade-carried-by-containers/, accessed 9 April 2017.

[3] US Department of Transportation Bureau of Transportation Statistics, *Transportation Statistics Annual Report*, 2016, https://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/transportation_statistics_annual_report/index.html, accessed 9 April 2017.

[4] Texas A&M Transportation Institute, *2015 Urban Mobility Scorecard*, August 2015, tti.tamu.edu/documents/mobility-scorecard-2015.pdf.

[5] Department of Energy, *The Smart Grid: An Introduction*, accessed 30 March 2017, https://energy.gov/oe/downloads/smart-grid-introduction-0.

[6] Federal Communications Commission (FCC), *2016 Broadband Progress Report*, 28 January 2016.

[7] American Society of Civil Engineers (ASCE), *Report Card for America's Infrastructure*, 2017, http://www.infrastructurereportcard.org/.

[8] Congressional Budget Office (CBO), *Public Spending on Transportation and Water Infrastructure*, 1956 to 2014, March 2015, http://www.cbo.gov/publication/49910.

[9] Cerulli Associates, *Cerulli Lodestar*, December 2015, https://www.cerulli.com/products-services/cerulli-lodestar/.

Disclaimer

Chief Investment Office (CIO) Wealth Management (WM) Research is published by UBS Wealth Management and UBS Wealth Management Americas, Business Divisions of UBS AG (UBS) or an affiliate thereof. CIO WM Research reports published outside the US are branded as Chief Investment Office WM. In certain countries UBS AG is referred to as UBS SA. This publication is for your information only and is not intended as an offer, or a solicitation of an offer, to buy or sell any investment or other specific product. The analysis contained herein does not constitute a personal recommendation or take into account the particular investment objectives, investment strategies, financial situation and needs of any specific recipient. It is based on numerous assumptions. Different assumptions could result in materially different results. We recommend that you obtain financial and/or tax advice as to the implications (including tax) of investing in the manner described or in any of the products mentioned herein. Certain services and products are subject to legal restrictions and cannot be offered worldwide on an unrestricted basis and/or may not be eligible for sale to all investors. All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness (other than disclosures relating to UBS and its affiliates). All information and opinions as well as any prices indicated are current only as of the date of this report, and are subject to change without notice. Opinions expressed herein may differ or be contrary to those expressed by other business areas or divisions of UBS as a result of using different assumptions and/or criteria. At any time, investment decisions (including whether to buy, sell or hold securities) made by UBS AG, its affiliates, subsidiaries and employees may differ from or be contrary to the opinions expressed in UBS research publications. Some investments may not be readily realizable since the market in the securities is illiquid and therefore valuing the investment and identifying the risk to which you are exposed may be difficult to quantify. UBS relies on information barriers to control the flow of information contained in one or more areas within UBS, into other areas, units, divisions or affiliates of UBS. Futures and options trading is considered risky. Past performance of an investment is no guarantee for its future performance. Some investments may be subject to sudden and large falls in value and on realization you may receive back less than you invested or may be required to pay more. Changes in FX rates may have an adverse effect on the price, value or income of an investment. This report is for distribution only under such circumstances as may be permitted by applicable law.

Distributed to US persons by UBS Financial Services Inc. or UBS Securities LLC, subsidiaries of UBS AG. UBS Switzerland AG, UBS Deutschland AG, UBS Bank, S.A., UBS Brasil Administradora de Valores Mobiliarios Ltda, UBS Asesores Mexico, S.A. de C.V., UBS Securities Japan Co., Ltd, UBS Wealth Management Israel Ltd and UBS Menkul Degerler AS are affiliates of UBS AG. UBS Financial Services Incorporated of PuertoRico is a subsidiary of UBS Financial Services Inc. UBS Financial Services Inc. accepts responsibility for the content of a report prepared by a non-US affiliate when it distributes reports to US persons. All transactions by a US person in the securities mentioned in this report should be effected through a US-registered broker dealer affiliated with UBS, and not through a non-US affiliate. The contents of this report have not been and will not be approved by any securities or investment authority in the United States or elsewhere. UBS Financial Services Inc. is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

UBS specifically prohibits the redistribution or reproduction of this material in whole or in part without the prior written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect.

Version as per September 2015.

© UBS 2017. The key symbol and UBS are among the registered and unregistered trademarks of UBS. All rights reserved.