

Private Bank

OUTLOOK 2016

# Transforming commerce



While global economic growth has slowed since the financial crisis, technological progress is rapidly changing the way we do business and behave as consumers.

The benefits are widespread, including increased productivity in many businesses and greater choice and convenience for their customers.

Just as this transformation of commerce is creating victors, it is creating victims among

companies whose businesses are being disrupted.

A compelling example is the healthcare industry, where investors may have yet to appreciate fully the implications of innovative treatments and technologies.

17.4

The proportion of US GDP spent on healthcare in 2013.

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5x

Citi Research's forecast growth in the immunotherapy market between 2014 and 2023

Sources: US Bureau of Economic Analysis; Citi Research, as of Feb 2015. All forecasts are expressions of opinion, are not a guarantee of future results and are subject to change without notice.



# Ongoing transformation

Phil Watson, Head of the Global Investment Lab  
Jeffrey Sacks, EMEA Capital Markets Strategist

## Technological progress is rapidly changing business and consumer behavior. We believe this transformation has further to go

Economic growth today isn't what it used to be. Global gross domestic product (GDP) has been expanding at a slower pace ever since the financial crisis of 2007-09. But while the overall picture may be one of sluggishness, rapid change is taking place beneath the surface. Technological development is fundamentally altering the ways we do business and behave as consumers. And although it has already had a major impact, we believe that this transformation of commerce still has further to go.

The benefits of the transformation are widespread. Industries are achieving greater productivity and much-needed cost savings. In *Outlook 2015*, for example, we explored how robotics and machinery are helping mining companies drill faster and transport freshly-mined ores without the need for a human driver. Progress in car technology, which we highlighted in our mid-year edition, is already helping reduce road deaths, vehicle emissions and travel times. Thanks to internet and mobile innovations, we have more choice and convenience than ever before in shopping, entertainment, travel, dating and socializing – to name but a few.

Just as the transformation is creating victors, however, it also has its victims. We previously highlighted the case of retail, where online retailers are commanding an ever-growing share of overall sales. But while they and

the delivery firms who ship their wares to customers are reaping the gains, this comes at the direct expense of many traditional retailers. The problem is especially acute for retailers that have invested heavily in large stores in non-prime locations, where shoppers are increasingly unlikely to visit. Such retailers – as well as their landlords, lenders and shareholders – face an uncertain future.

We see the transformation of healthcare as a particularly compelling case right now, but one that is not fully understood by investors. In our view, the industry is undergoing more change than at any time in its history, with the science innovation cycle having reached an important inflection point. Approvals by the US Food & Drug Administration reached an eighteen-year high in 2014, while the recent decoding of the genome has allowed

the development of 'personalized medicines' for the first time ever. And with the cost per genome falling from \$100m to \$1,000 in only twelve years, the prospects for further new treatments are bright.

The transformation of healthcare is sorely needed. The world's population is aging fast while healthcare costs are already straining budgets everywhere. While the primary victors of more effective – and possibly cheaper – treatments will be patients and taxpayers, innovative healthcare firms and their investors potentially stand to gain too. At the same time, we seek to identify which firms may fall victim to further innovation. Although not a panacea, we believe that carefully chosen and underappreciated healthcare investments within a broader portfolio may offer a partial remedy to the effects of today's lower-growth world.



# Healthcare's transformation

Phil Watson, Head of the Global Investment Lab  
Jeffrey Sacks, EMEA Capital Markets Strategist

## Innovative treatments and technology could benefit patients and investors alike

The cost of medication can sometimes be enough to make you feel unwell. While many of today's cutting-edge drugs have the potential to extend patients' lives and ease suffering as never before, the expense of obtaining them can be exorbitant. In the US, some leading treatments can easily run to hundreds of thousands of dollars a year. So, while medical science continues to make life-saving innovations, there is a risk that the benefits will be felt by ever fewer of those who need them.

Sharply rising treatment costs are already putting a strain on health budgets and patients worldwide. Total national health expenditures in the US reached \$2.9 trillion in 2013, equivalent to 17.4% of the size of the economy, a trend which Citi Research sees as unsustainable - **figure 1**. There have been an excess of bankruptcies among US cancer sufferers, while in the European Union, there has been 50% under-treatment of severe rheumatoid arthritis patients.

Among today's more expensive treatments are some biological products or 'biologics.' Biologics are medications that come from living

organisms including human, animal and bacterial sources, rather than pure chemical substances like conventional drugs. Their uses include treating conditions such as rheumatoid arthritis, anemia, certain cancers and skin disorders like psoriasis. Big branded biologics already swallow up almost one-third of total US drugs spending, a proportion which is growing fast. Worldwide, more than half of the top ten best-selling prescription drugs in 2014 were biologics.

As with conventional chemical drugs, branded biologics initially enjoy patent protection, which expires after a set period. Unlike chemical compounds, however, biological products are impossible for generic drug-makers to copy precisely once their patents expire. But they may be replicable to a high degree of similarity, such that they are as safe and effective as the originals, and therefore could gain regulatory approval. This is creating a new category of lookalike versions known as 'biosimilars.'

A key attraction of biosimilars could be their cost. Citi Research expects their makers to offer aggressive discounts

and rebates in order to gain market share. As a result, Citi Research believes that western healthcare budgets could enjoy savings of around 50% on biologics by 2025. With developed-world governments increasingly focused on achieving better value in their healthcare systems, this would come as important relief, especially as populations continue to age rapidly around the world. According to the United Nations, the number of people over 60 globally will more than double between 2015 and 2050, creating even greater demand for healthcare.

To fulfil their potential, biosimilars will need to win the approval of drug regulators, fend off legal and intellectual-property challenges, and commercialize themselves by gaining physicians' and insurers' acceptance. Citi Research believes that this will happen and estimates the companies that created the original products could lose more than \$360 billion in revenues over the next ten years, with about \$110 billion of that captured by biosimilar makers - **figure 2**.

Figure 1. US healthcare spend appears unsustainable given macro-economic pressures



Source: Citi Research, as of Feb 2015. PPP = purchasing power parity.

### Immunotherapy

Almost two decades into the twenty-first century, cancer remains one of the worst blights on human existence. Currently, half of us develop the illness at some point in our lives and perhaps more than one-quarter of us die from it. Aside from suffering and bereavement, its economic impacts are enormous. In 2008, Citi Research highlights that cancer is estimated to have cost \$200bn in the US alone. But cancer's days as a killer on this scale may be numbered, with our own bodies leading the fight-back.

Immunotherapy is a treatment that harnesses the body's own defenses to fight cancer. The human body develops cancer cells all the time, but healthy people's immune systems are able to detect and destroy them before they

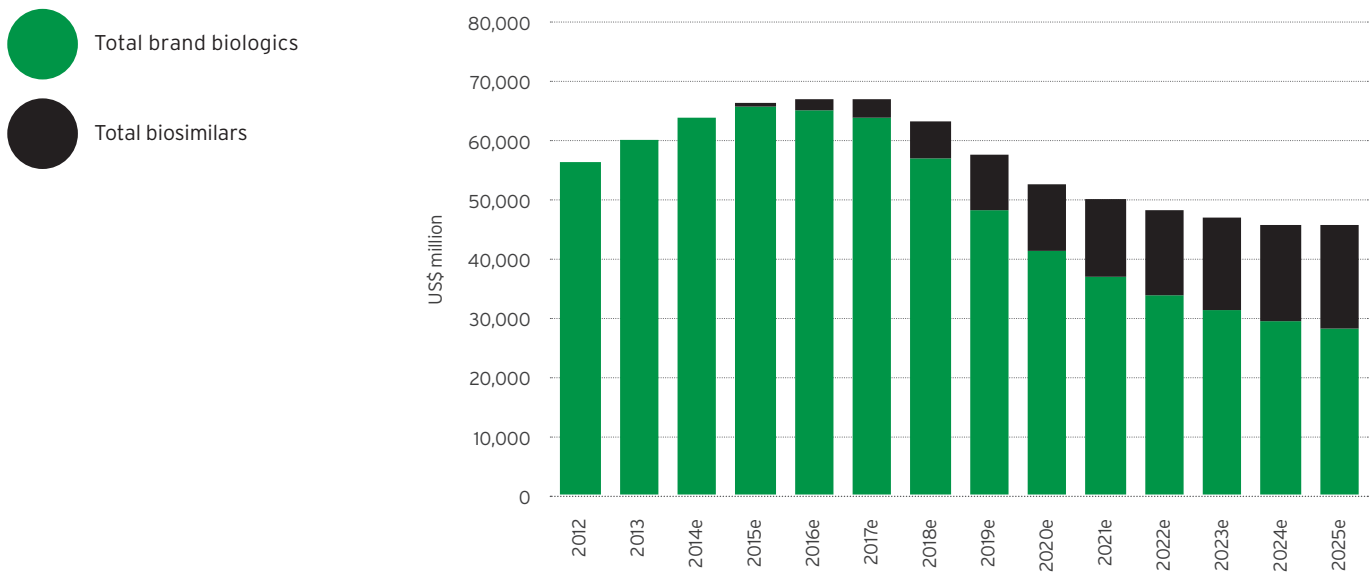
turn malignant. With cancer patients, however, the immune system has become compromised such that it cannot perform this vital function. Immunotherapy drugs restore the body's ability to fight back naturally against cancer, just as it does with healthy people.

While immunotherapy is still at an embryonic stage, it is already achieving tangible results, particularly in skin cancer. Existing chemotherapy and also some newer drugs tend to shrink tumors powerfully at first, but without enduring effect, such that tumors can regrow and spread. With immunotherapy, however, the durability of responses can last a decade or more, as the body stores a memory of how to deal with the cancer cells.

The best-known applications of immunotherapy today are for skin, renal and non-small cell lung cancers. However, it may be that tumors that have not traditionally been considered immunotherapy-addressable can become so if administered alongside existing cancer therapies including chemotherapy and radiotherapy. Citi Research believes that whereas only around 3% of cancers are currently immunotherapy-addressable, this could reach at least 60% across the developed world by 2023.

Aside from the fundamental benefit of saving and extending lives, the economic benefits to society could be substantial. Many cancers could effectively be transformed from terminal illnesses into chronic but manageable ones, rather like HIV

Figure 2. The opportunity for biosimilars



Source: Citi Research, as of Feb 2015. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.

when fully treated. Younger patients in particular might therefore be able to remain economically active. In the US alone, this could potentially reduce the \$120bn annual costs of cancer outside of healthcare expenses. As to the commercial benefits, Citi Research estimates that the immunotherapy market could grow from around \$7bn a year as of 2014 to around \$35bn by 2023.\*

### Beyond drugs

With healthcare budgets under pressure and ever more interactions between patients and providers, cheaper drugs are only part of the solution. The healthcare industry needs to boost its productivity and make cost-savings elsewhere. While today's hospitals often use cutting-edge medical treatments and procedures, the same is not always true when it comes to their

administration and communications. Better use of technology could lead to a more efficient and cost-effective service, benefiting both patients and the system.

Improved interaction between healthcare providers and users is one example. In health systems across the world, time and money could be saved by carrying out appointment-making, initial medical consultations and prescription issuance over the internet. Likewise, managing physicians' workload and patient notes is much more effectively done electronically than via traditional paperwork. Making payments tends to be very time-consuming for patients, providers and insurers alike, typified by repeated, long phone calls and time spent on hold. Once again, digitization could offer a way forward.

While it is still early days, technology companies around the world are rising to these challenges. In China, for example, Citi Research believes that internet and mobile technology could be game-changers in altering the way that patients, physicians and hospitals interact. If further deregulation occurs, existing online pharmacies hope to capture a significant share of sales of prescription drugs, while platforms have already been built that could allow patients to transmit key data about their health from wearable devices, allowing monitoring of their wellbeing.

### Portfolio prescriptions

We do not believe that investors have fully appreciated the magnitude of healthcare's transformation. This creates potential investment opportunities particularly within biosimilars, immunotherapy and

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healthcare. The companies at the forefront of this progress could enjoy significant growth. But some of the advances made - especially in biosimilars - will come at the expense of other companies, whose investors will be negatively impacted. Just as important as seeking out opportunities, therefore, is reviewing portfolios regularly for exposure to potential victims of healthcare's transformation.

Traditionally, much of the healthcare sector has been considered a more defensive sector that can help diversify an equity portfolio, especially more economically-sensitive holdings. This could be particularly valuable in today's more uncertain environment. Of course, the sector is made up of more than 1,000 companies globally, and wide divergences in the performances of single stocks are to be expected.

For longer-term diversified exposure, an actively-managed fund or account could offer a logical way to access our favored areas. The most relevant candidates among long-only managers would obviously be those that focus specifically upon the healthcare sector and have similar views to ours on the industry's transformation. As well as expertise in both clinical and valuation matters, we would look for a deep due diligence process and a robust track record of creating positive relative returns. Hedge-fund managers specializing in the sector, meanwhile, may also offer potential diversification opportunities, which could be of particular value for those preparing their portfolios for life beyond the present investment cycle - see *Enduring through cycles*.

For shorter-term and even more focused exposure, capital-markets strategies offer a broad range of possibilities. Baskets of securities with exposure to high-conviction securities within biosimilars, immunotherapy, and healthcare IT can be constructed, based on an investor's risk and return objectives. These might include seeking enhanced yield or greater participation in price-movements, and some element of capital preservation.

Lastly, there are more opportunistic investments - from specific placements in the primary markets to longer-term illiquid investments - set to benefit from the trends above.

*Duygu Baydur also contributed to this article*

Just as important as seeking out opportunities, is reviewing portfolios regularly for exposure to potential victims of healthcare's transformation

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#### **Asset class definitions**

Global Developed Market Equity is composed of MSCI indices capturing large-, mid- and small-cap representation across 23 individual developed-market countries, as weighted by the market capitalization of these countries. The composite covers approximately 95% of the free float-adjusted market capitalization in each country.

Global Emerging Market Equity is composed of MSCI indices capturing large and mid-cap representation across 20 individual emerging-market countries. The composite covers approximately 85% of the free float-adjusted market capitalization in each country. For the purposes of supplemental long-term historical data, local-market country indices are used, wherever applicable.

Global Developed Investment Grade Fixed Income is composed of Barclays indices capturing investment-grade debt from twenty different local currency markets. The composite includes fixed-rate treasury, government-related, and investment grade rated corporate and securitized bonds from the developed-market issuers. Local market indices for US, UK and Japan are used for supplemental historical data.

Global High Yield Fixed Income is composed of Barclays indices measuring the non-investment grade, fixed-rate corporate bonds denominated in US dollars, British pounds and Euros. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt. Ibbotson High Yield Index, a broad high yield index including bonds across the maturity spectrum, within the BB-B rated credit quality spectrum, included in the below-investment-grade universe, is used for supplemental historical data.

Global Emerging Fixed Income is composed of Barclays indices measuring performance of fixed-rate local currency emerging markets government debt for 19 different markets across Latin America, EMEA and Asia regions. iBoxx ABF China Govt. Bond, the Markit iBoxx ABF Index comprising local currency debt from China, is used for supplemental historical data.

Cash is represented by US 3-month Government Bond TR, measuring the US dollar-denominated active 3-Month, fixed-rate, nominal debt issues by the US Treasury.

Hedge Funds is composed of investment managers employing different investment styles as characterized by different sub categories - HFRI Equity Long/Short: Positions both long and short in primarily equity and equity derivative securities; HFRI Credit: Positions in corporate fixed income securities; HFRI Event Driven: Positions in companies currently or prospectively involved in wide variety of corporate transactions; HFRI Relative Value: Positions based on a valuation discrepancy between multiple securities; HFRI Multi Strategy: Positions based on realization of a spread between related yield instruments; HFRI Macro: Positions based on movements in underlying economic variables and their impact on different markets; Barclays Trader CTA Index: The composite performance of established programs (Commodity Trading Advisors) with more than four years of performance history.

Private Equity characteristics are driven by those for Developed Market Small Cap Equities, adjusted for illiquidity, sector concentration, and greater leverage.

Real Estate contains all Equity REITs (US REITs and publicly-traded real estate companies) not designated as Timber REITs or Infrastructure REITs: NAREIT US REIT Index, NAREIT Canada REIT Index, NAREIT UK REIT Index, NAREIT Switzerland REIT Index, NAREIT Euro-zone REIT Index

Commodities contains the index composites - GSCI Precious Metals Index, GSCI Energy Index, GSCI Industrial Metals Index, and GSCI Agricultural Index - measuring investment performance in different markets, namely precious metals (e.g. gold, silver), energy commodity (e.g. oil, coal), industrial metals (e.g. copper, iron ore), and agricultural commodity (i.e. soy, coffee) respectively. Reuters/Jeffries CRB Spot Price Index, the TR/CC CRB Excess Return Index, an arithmetic average of commodity futures prices with monthly rebalancing, is used for supplemental historical data.

#### **Index definitions**

The Bloomberg-JPMorgan Asia Currency Index (ADX) is a US dollar tradable index of emerging Asian currencies, which serves as a benchmark for monitoring Asia's currency markets on an aggregate basis. It is a spot index of emerging Asia's most actively traded currency pairs valued against the US dollar.

The CBOE Crude Oil ETF Volatility Index ("Oil VIX", Ticker - OVX) measures the market's expectation of 30-day volatility of crude oil prices by applying the VIX® methodology to United States Oil Fund, LP (Ticker - USO) options spanning a wide range of strike prices.

Commodity Index is the S&P Gold Sachs Commodity Index (S&P GSCI), a composite index of commodity sector returns representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities.

The CBOE Volatility Index (VIX) is a measure of expectations of near-term volatility based on S&P 500 stock index option prices.

The CSI 300 is a capitalization-weighted index compiled by the China Securities Index Company Ltd and tracks 300 stocks traded on the Shanghai and Shenzhen stock exchanges.

The Currency Volatility Index (CVIX) seeks to provide a benchmark for currency market participants, representing investors' expectation of future volatility, and is calculated as the arithmetic average of the 3-month level of implied volatility for all the major currency pairs.

The DAX 30 is an index of the 30 most actively traded German blue chip stocks on the Frankfurt Stock Exchange. The value of the index is based on a free-float weighted system and average daily volume.



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The Deutsche Bank Currency Volatility index (CVIX) is a measure of investors' expectations of future volatility, and is calculated as the arithmetic average of the 3-month level of implied volatility for all the major currency pairs.

The Dow Jones Industrial Average - commonly known as the Dow - is a price-weighted stock market index that tracks the performance of 30 large US companies chosen by a committee.

The Euro Stoxx 600 is an index representing the performance of 600 large-, mid-, and -small capitalization companies across 18 countries across Europe.

The FTSE 100 is a capitalization-weighted equity index representing the performance of 100 large-capitalization companies listed on the London Stock Exchange.

Gold is represented by the commodity futures price for gold.

The Hang Seng index is a free-float adjusted market capitalization stock market index in Hong Kong, which aims to represent the leading companies in that country.

The MOVE (Merrill Lynch Option Volatility Estimate) Index measures the implied volatility of US Treasury markets based on options pricing.

The MSCI All Country World Index represents 48 developed and emerging equity markets. Index components are weighted by market capitalization.

The MSCI Asia ex-Japan index has large and mid-cap representation across 2 of 3 Developed Markets countries and 8 Emerging Markets countries in Asia. It captures approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI China index has large- and mid- cap representation across China H shares, B shares, Red chips and P chips. With 139 constituents, it covers about 85% of this China equity universe.

The MSCI Emerging Markets Index represents the performance of large- and mid-equities from 23 emerging countries, covering approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI KLD 400 Social Index is a capitalization-weighted index of 400 US securities that provides exposure to companies with outstanding Environmental, Social and Governance (ESG) ratings and excludes companies whose products have negative social or environmental impacts. The parent index is MSCI USA IMI,

The MSCI USA Investable Market Index (IMI) measures the performance of the large, mid and small cap segments of the US market. With 2,469 constituents, the index covers approximately 99% of the free float-adjusted market capitalization in the US.

The MSCI World Index represents the performance of more than 1,600 large- and mid-cap stocks across 23 developed markets countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

The MSCI World ex-USA Index represents the performance of large- and mid-cap representation across 22 of 23 developed markets countries excluding the United States. With 1,005 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The Nikkei 225 tracks the performance of 225 leading stocks on the Tokyo Stock Exchange (TSE). The components of this index are reviewed yearly. Since it is a price-weighted index, the movement of the stocks is weighted without regard to their market capitalization.

Oil is represented by the West Texas Intermediate Crude Oil price.

The Standard & Poor's 500 Index is a capitalization-weighted index that includes a representative sample of 500 leading companies in leading industries of the US economy. Although the S&P 500 focuses on the large cap segment of the market, with over 80% coverage of US equities, it is also an ideal proxy for the total market.

USD vs developed currencies is a broad weighted average index of the foreign exchange values of the US dollar against the currencies of a large group of major U.S. trading partners.

USD vs emerging markets = The OITP (other important trading partners) index is a weighted average of the foreign exchange values of the US dollar against a subset of currencies in the broad index that do not circulate widely outside the country of issue.

#### **Citi Private Bank Hedge Fund categorizations**

Diversifier, Return Enhancer and Volatility Dampener are internal descriptors based on a fund's strategy and objective that HFRM has developed and uses to categorize hedge funds. Such descriptors have not been approved by the relevant portfolio managers. The internal classification noted above is subject to change without notice to investors. Many portfolio managers offer multiple products that could have a different objective or classification from that of the fund identified herein. Diversification does not ensure against loss of principal invested.

Volatility Dampeners are hedge funds that typically are expected by HFRM to have low to moderate correlation and/or beta to traditional markets and seek low volatility and relatively consistent returns. The portfolio managers of such funds often attempt to eliminate a substantial portion of market risk via hedges and trade construction. This classification is based on the analysis and subjective views of HFRM. The internal classification is subject to change without notice to investors and there is no guarantee that the funds will perform as described above. It is important to note that the market strategy described above may not completely eliminate market risk. There is no guarantee that hedge funds classified as "Volatility Dampeners" will perform as described above. Hedge funds should not be invested in based on their classification as "Volatility Dampeners" and other assets in a client's overall portfolio should be taken into consideration before an investment is made.

Diversifiers are hedge funds that typically are expected by HFRM to display low or negative correlation and/or beta to traditional asset classes though they may display significant degrees of market correlation at certain points of the investment cycle. The portfolio managers of such funds are often long volatility and generally may provide attractive diversification benefits to a client's portfolio though returns are often "unpredictable" and can be volatile. This internal classification is based on the analysis and subjective views of HFRM. The internal classification is subject to change without notice to investors and there is no guarantee that the funds will perform as described above. It is important to note that the market strategy described above may not completely eliminate market risk. There is no guarantee that hedge funds classified as "Diversifiers" will perform as described above. Hedge funds should not be invested in based on their classification as "Diversifiers" and other assets in a client's overall portfolio should be taken into consideration before an investment is made.

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## Other terminology

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Adaptive Valuations Strategies is Citi Private Bank's own strategic asset allocation methodology. It determines the suitable long-term mix of assets for each client's investment portfolio.

Alpha is a measure of absolute positive or negative performance, adjusted for risk. It is commonly seen as a way of capturing an investor's skill in generating returns

Beta is a measure of the relationship between one asset class and another. It compares the average change in the return of one asset class relative to the average historical change in another. The beta of High Yield would be 0.5x to Equities if, on average, High Yield rises by 5% whenever Equities rise by 10%.

Correlation is a statistical measure of how two assets or asset classes move in relation to one another. Correlation is measured on a scale of 1 to -1. A correlation of 1 implies perfect positive correlation, meaning that two assets or asset classes move in the same direction all of the time. A correlation of -1 implies perfect negative correlation, such that two assets or asset classes move in the opposite direction to each other all the time. A correlation of 0 implies zero correlation, such that there is no relationship between the movements in the two over time.

Extreme Downside Risk (EDR) is a measure used to estimate the risk of an asset allocation. EDR seeks to estimate the typical type of loss, over a 12-month time horizon, that an asset allocation may experience in a period of extreme market stress. It is calculated using a proprietary methodology and database. For a given asset allocation, this approach estimates the loss, over a 12-month time horizon, that the asset allocation may have experienced during historical periods of extreme market stress. EDR is calculated by taking the average loss in the worst 5% of this historical periods of extreme market stress. EDR does not estimate the maximum possible loss. Potential losses for a given asset allocation may exceed the value of the EDR.

Strategic Return Estimates are Citi Private Bank's forecast of returns for specific asset classes over a 10-year time horizon. The forecast for each specific asset class is made using a proprietary methodology that is appropriate for that asset class. Equity asset classes are forecast using a proprietary methodology based on the calculation of valuation levels with the assumption these valuation levels revert to their long-term trends over time. Fixed Income asset classes are forecast using a proprietary methodology based on current yield levels. Other asset classes have other specific forecasting methodologies. Please note that hedge funds, private equity, real estate, structured products and managed futures are generally illiquid investments and are subject to restrictions on transferability and resale. Each SRE is gross of actual client fees and expenses. Components of the methodology used to create the SREs include the rate of return for various asset classes based on indices. Termination and replacement of investments may subject investors to new or different charges. Past performance is not indicative of future results. Future rates of return cannot be predicted with certainty. Investments that pay higher rates of return are often subject to higher risk and greater potential loss in an extreme scenario. The actual rate of return on investments can vary widely over time, especially for long-term investments. This includes the potential loss of principal on your investment. It is not possible to invest directly in an index.

Tactical asset allocation looks to adjust the strategic asset allocation of a client's investment portfolio to incorporate shorter-term market insights.

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Bonds are affected by a number of risks, including fluctuations in interest rates, credit risk and prepayment risk. In general, as prevailing interest rates rise, fixed income securities prices will fall. Bonds face credit risk if a decline in an issuer's credit rating, or creditworthiness, causes a bond's price to decline. High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. Finally, bonds can be subject to prepayment risk. When interest rates fall, an issuer may choose to borrow money at a lower interest rate, while paying off its previously issued bonds. As a consequence, underlying bonds will lose the interest payments from the investment and will be forced to reinvest in a market where prevailing interest rates are lower than when the initial investment was made.

Alternative investments referenced in this report are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in the fund, potential lack of diversification, absence of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and advisor risk. Asset allocation does not assure a profit or protect against a loss in declining financial markets.

## REITS

REITs are subject to special risk considerations similar to those associated with the direct ownership of real estate. Real estate valuations may be subject to factors such as changing general and local economic, financial, competitive, and environmental conditions. REITs may not be suitable for every investor. Dividend income from REITs will generally not be treated as qualified dividend income and therefore will not be eligible for reduced rates of taxation. There may be additional risk associated with international investing, including foreign, economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes, and differences in financial and accounting standards.

## Master Limited Partnership

- Energy Related MLPs May Exhibit High Volatility. While not historically very volatile, in certain market environments Energy Related MLPs may exhibit high volatility.
- Changes in Regulatory or Tax Treatment of Energy Related MLPs. If the IRS changes the current tax treatment of the master limited partnerships included in the Basket of Energy Related MLPs thereby subjecting them to higher rates of taxation, or if other regulatory authorities enact regulations which negatively affect the ability of the master limited partnerships to generate income or distribute dividends to holders of common units, the return on the Notes, if any, could be dramatically reduced.
- Concentration Risk. Investment in a basket of Energy Related MLPs may expose the investor to concentration risk due to industry, geographical, political, and regulatory concentration.
- The price and dividends paid by Energy Related MLPs may be affected by a number of factors, including:
  - Worldwide and domestic supplies of, and demand for, crude oil, natural gas, natural gas liquids, hydrocarbon products and refined products;
  - Changes in tax or other laws affecting MLPs generally;
  - Regulatory changes affecting pipeline fees and other regulatory fees in the energy sector;
  - The effects of political events and government regulation;
  - The impact of direct government intervention, such as embargos;
  - Changes in fiscal, monetary and exchange control programs;
  - Changes in the relative prices of competing energy products;
  - Changes in the output and trade of oil and other energy producers;
  - Changes in environmental and weather conditions;
  - The impact of environment laws and regulations and technological changes affecting the cost of producing and processing, and the demand for, energy products;
  - Decreased supply of hydrocarbon products available to be processed due to fewer discoveries of new hydrocarbon reserves, short- or long-term supply distributions or otherwise;
  - Risks of regulatory actions and/or litigation, including as a result of leaks, explosions or other accidents relating to energy products;
  - Uncertainty or instability resulting from an escalation or additional outbreak of armed hostilities or further acts of terrorism in the United States or elsewhere;
  - General economic and geopolitical conditions in the United States and worldwide.

Mortgage-backed securities ("MBS"), which include collateralized mortgage obligations ("CMOs"), also referred to as real estate mortgage investment conduits ("REMICs"), may not be suitable for all investors. There is the possibility of early return of principal due to mortgage prepayments, which can reduce expected yield and result in reinvestment risk. Conversely, return of principal may be slower than initial prepayment speed assumptions, extending the average life of the security up to its listed maturity date (also referred to as extension risk).

Additionally, the underlying collateral supporting non-Agency MBS may default on principal and interest payments. In certain cases, this could cause the income stream of the security to decline and result in loss of principal. Further, an insufficient level of credit support may result in a downgrade of a mortgage bond's credit rating and lead to a higher probability of principal loss and increased price volatility. Investments in subordinated MBS involve greater credit risk of default than the senior classes of the same issue. Default risk may be pronounced in cases where the MBS security is secured by, or evidencing an interest in, a relatively small or less diverse pool of underlying mortgage loans.

MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements. Price volatility may also occur from other factors including, but not limited to, prepayments, future prepayment expectations, credit concerns, underlying collateral performance and technical changes in the market.

Please read offering documents and/or prospectus information carefully for the risks associated with the particular MBS security you are purchasing.

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