Themes for 2015 and Beyond
Welcome

With winter upon us, it’s natural to look forward to what might unfold in the year ahead. That impulse is especially strong coming off a 2014 in which many areas of the U.S. markets registered strong gains, although with periodic volatility.

Yet as important as it is to consider 2015 and your near-term financial strategy, your financial life extends far beyond the coming year’s investment returns; it’s more about the long-term goals you hope to reach. That’s why in this issue of CIO Outlook we’re also using a longer lens to examine how markets, policy and the wider world are likely to continue transforming over the next several years and even in the decades to come. You’ll find insights from the members of our CIO team as well as guest contributors from BofA Merrill Lynch (BofAML) Global Research and U.S. Trust. Together we cover the impact of a stronger U.S. dollar, disruptive technologies, aligning personal values with portfolio choices and more.

In addition, to help you put all of this information to work for you, we describe how our Wealth Allocation Framework can put your goals and aspirations at the center of decisions about allocating your resources. You may want to discuss these topics with your financial advisor as you consider their impact on your own life—in 2015 and in the years and decades to come.

Ashvin B. Chhabra
Chief Investment Officer, Merrill Lynch Wealth Management

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Redefining Wealth Management

What do you want your money to do for you?
The Wealth Allocation Framework can help you find the answers.

In the past 60 years, Modern Portfolio Theory has become an established cornerstone of prudent investment strategy through its emphasis on portfolio diversification. However, the theory as implemented today places the market at the center of investment strategy, without sufficient accommodation for an individual investor’s needs and goals. The Wealth Allocation Framework represents an important evolution in wealth management philosophy by shifting focus from the market at the center to the investor at the center. It underlies a goals-based wealth management approach by asking the investor: “What do you want your money to do for you?”

A diversified market portfolio is core to most investors’ financial strategies, but alone it is not enough. Markets are unpredictable, and even broadly diversified portfolios can at times experience extreme volatility. Investors have a desire for safety and personal financial obligations they must meet regardless of market conditions. In addition, many investors have aspirations that entail taking risks and pursuing returns beyond those of a well-diversified market portfolio.
Recognizing the shortcomings of the market portfolio, the **Wealth Allocation Framework** addresses three basic types of risks that may prevent investors from achieving their goals:

- **Personal risk** that could jeopardize one’s basic standard of living (such as from loss of income, natural disaster, death or disability)
- **Market risk** that comes from exposure to financial markets (the widely known dimension of risk)
- **Idiosyncratic risk** that is specific to an asset such as a business or another kind of asset that has a risk of substantial loss of capital

To address all three risk dimensions, the Wealth Allocation Framework accounts for an investor’s **total wealth**, recognizing not just market investments but all assets and liabilities, including **tangible capital** such as home, mortgage, insurance, investment real estate and art; **financial capital** such as investments and cash; and **human capital** such as the skills, knowledge and unique capabilities that contribute to an individual’s earning potential.

Investors can use the framework to categorize their resources according to intended purpose and risk-return characteristics—illuminating the potential risks to their total wealth and, more specifically, the risk that they won’t achieve their goals. The result of the process is the household balance sheet, reimagined with the focus on goals. We call this the Risk Allocation Statement. This snapshot allows investors to align goals and resources from a common starting place—and facilitates connecting their assets more directly with their financial strategy.

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**THE WEALTH ALLOCATION FRAMEWORK**

This investor-centered approach organizes an investor’s wealth by intended purpose and risk-return characteristics.

- **Protect basic standard of living**
  - To safeguard essential goals, investors can hold lower-risk assets—but they have to accept lower returns in exchange.

- **Invest to maintain lifestyle**
  - A well-diversified portfolio provides risk and return in line with efficient market performance—very efficient, but also uncertain.

- **Potential for significant wealth mobility**
  - To pursue goals that require higher-than-market returns, investors often need to take higher and concentrated risks.

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1 Modern Portfolio Theory assumes that investors are risk-averse and seek to earn the highest possible return with the least amount of risk through broad diversification across asset classes.
In 2015, we expect better global economic growth, led by the U.S., with interest rates remaining lower for longer. We expect a divergence in central bank monetary policies around the world to be the biggest story for financial markets in 2015. As the Federal Reserve’s (Fed) stimulus is partly replaced by loosening on the part of the European Central Bank (ECB) and the Bank of Japan (BOJ), the shift will bring greater volatility to investment portfolios. Higher valuations should temper investment returns in 2015, and the policy divergence should support the U.S. dollar, especially versus the euro and the yen.

Macro outlook
We expect global economic growth to pick up, with the U.S. economy leading the way. Despite better growth, inflation should remain low due to continued spare capacity. Subdued inflation should keep interest rates lower for longer and central banks more accommodative.

U.S.—fundamentals take hold: U.S. growth has picked up recently and we expect the trend to continue in 2015. BofA Merrill Lynch (BofAML) Global Research Economist Ethan Harris expects the economy to expand by 3.3% next year. Underpinning this uptick is spending by the U.S. consumer, who has reduced debts and faces better job prospects. Harris expects the economy to generate around 240,000 jobs a month, with the unemployment rate dropping steadily throughout the year.

International—it’s all about policy: Our economists expect European growth to remain fragile with downside risks, but they see growth in Japan improving. Europe’s recovery, at least in the near term, will depend on the ECB’s monetary policy. We expect it to implement sovereign quantitative easing early in the year. In Japan, the central bank has stepped up its bond-buying program and we expect it to remain stimulative. Growth should pick up as corporate profitability improves along with capital spending, employment and wages.

We expect growth in emerging markets (EM) to improve slightly in 2015 on the back of stronger U.S. growth and lower oil prices, which should keep inflation contained. Growth should rebound in Brazil and India from historically low levels, but moderate in China, supported by fiscal and monetary stimulus.
Equity outlook
We continue to favor global equities relative to global bonds. With economic activity improving and global monetary policy accommodative, the backdrop for equities is still broadly constructive. However, BofAML Global Research’s return expectations are in the range of 4% to 8% for global equities in 2015, lower than what investors have realized in recent years.

U.S. equities should also benefit from the improvement in corporate earnings. We prefer the technology and industrial sectors, which are beneficiaries of better global growth with overall valuations that are not extended. We also favor higher-quality and large-cap stocks. Pharmaceutical companies, along with other parts of the health care sector, offer attractive income opportunities.

Outside the U.S., we prefer Japanese equities, hedged for currency risk. We think the combination of yen weakness and a less restrictive Japanese fiscal policy than in 2014 should boost profits and keep stocks moving higher. In emerging markets, selectivity will remain important as fundamentals among countries diverge, but we see opportunities in countries such as India as reforms continue to take hold.

Fixed income outlook
We expect inflation to remain low and, as a result, for interest rates to remain lower for longer. We thus see a challenging environment for returns on fixed income, but we believe it remains an important part of a diversified, balanced portfolio. Credit markets generally remain close to fairly valued, requiring investors to be selective. Our bias for 2015 is towards higher-quality offerings in segments with stronger fundamentals.

Treasuries and high-quality municipal bonds should continue to make up the core of a fixed income allocation. Tactically, we see opportunities in emerging market debt and senior loans. For the former, investors should consider dollar-denominated issues, as we see a stronger greenback in 2015. Our BofAML credit strategy team believes that senior loans will be boosted by strong supply-demand dynamics, minimal energy industry exposure and expectations for rate hikes later in the year. Senior loans are lower in quality and should be part of high yield allocations.

Alternative investments
Commodity prices should continue to face headwinds driven by the combination of a stronger U.S. dollar, rising interest rates and sluggish demand growth. Gold will remain challenged in
2015 and the BofAML Global Research commodities team’s outlook for oil calls for greater volatility and wider trading ranges as a result of a mismatch in supply and demand.

As markets move toward a more normal environment, we believe dispersions between the returns of individual securities should rise—historically an indicator of greater potential for hedge fund strategies like Equity Long/Short. In addition, during greater market volatility, which we expect, strategies such as Global Macro and Managed Futures should be favored.

**Risks to our view**

In 2015, uncertainty over global growth will remain. There’s concern over the commitment to policy easing abroad, as strong growth in the U.S. can only carry the rest of the world so far. In Europe, the risks of recession and deflation remain high as the recovery has been fragile. Recent ECB announcements sound accommodative, but we have yet to see sufficient action. If confidence declined and attention refocused on the debt dynamics, it would be problematic for markets.

Our BofAML commodities team sees further oil price declines as likely and this puts energy sector employment and capital expenditures at risk. It can also create deteriorating financial conditions for oil-exporting emerging markets.

Finally, a risk to our modest single-digit return expectation is that stocks get aggressively bid up as investors chase performance. An ensuing scenario could be a harder pull-back bringing losses to portfolios significantly overweighted to equities.

In conclusion, our outlook for 2015 reflects improving global growth, with lower interest rates and muted inflationary pressures. We expect equities to outperform bonds, but acknowledge that returns going forward are likely to be lower. Investors will need to be mindful of a new set of risks, such as greater volatility and the possibility that central banks outside the U.S. are less accommodative than anticipated. Given these risks, investors with large overweight positions should look to rebalance to long-term strategic allocations.
Washington’s Unfinished Business

Changes to fiscal and monetary policies are ahead, but will evolve slowly.

Since the financial crisis six years ago, both fiscal and monetary policies have influenced the ensuing economic recovery. Washington’s budget battles and austerity programs have acted as headwinds to confidence and a drag on growth. Monetary policy, meanwhile, has done much to encourage growth, with the Federal Reserve keeping short-term interest rates near zero since 2008 and pursuing six years of quantitative easing with massive purchases of government securities.

While the federal budget deficit has declined significantly from its highs in 2009, Washington has several pieces of unfinished business on the fiscal and monetary policy fronts. Without action the deficit could rise again, and the Fed must determine how it will ultimately normalize interest rates.

**Fiscal policy—steady, but challenges ahead**

There is no looming crisis that will force significant changes in fiscal policy in 2015, says Michael Hanson, senior U.S. economist for BofA Merrill Lynch (BofAML) Global Research. And although one party will control Congress, a strong public backlash against the government shutdown in 2013 could prevent a repeat in 2015, leading to improved business confidence and investment.

In the longer term, however, we believe that Washington does have a pressing need to reform the U.S. tax code, energy policy and programs such as Medicare to ensure a healthy and growing economy.

**Growing pressure for comprehensive tax reform**

Both parties seem to want to reform the U.S. tax code, and high corporate tax rates, in particular, may add momentum for change. The U.S. has the highest corporate tax rate in
the industrialized world at 35%, putting American companies at a competitive disadvantage against foreign competitors that pay an average of 25%. Yet while there are plans to lower the U.S. corporate rate, for every percentage point it is reduced, Congress must find an offsetting $100 billion in additional tax revenue over the next 10 years, says Daniel Clifton, partner and head of policy research for Strategas Research Partners.

Meanwhile, U.S. companies have pushed ahead with a different solution—corporate inversions, in which they combine with overseas companies and move their tax jurisdiction to where tax rates are lower. Converting to real estate investment trusts or master limited partnerships also brings more favorable tax treatment. While the U.S. Treasury Department has signaled its intent to prevent corporate inversions, U.S. corporations are likely to keep innovating in order to maximize their after-tax profits.

Those and other pressures may prompt attention to tax reform, but this process will likely be complicated by whether to include revisions to individual as well as corporate taxes, and Clifton doesn’t expect major movement before 2017.

Bumps on the road to energy exports

Energy policy could change more quickly as Washington feels increasing pressure to allow U.S. oil exports. The nation is already the largest producer of natural gas, and exports of liquefied natural gas are expected to begin by late 2015. Yet, as one of the largest producers of oil in the world, a 40-year-old ban on exporting crude oil largely remains in effect. Combined with booming production, that could lead to a glut of domestic supply, with prices falling far enough to slow U.S. production—and curtail the broad economic benefits of the energy boom.
Congress is likely to resist repealing the export ban because lower gasoline and energy prices help a broad swath of the American public. Still, President Obama could broaden the export exemption for condensate crude—a light crude oil that isn’t ideal for U.S. refineries—and buy more time to see how world markets digest the increased supply, says Clifton.

**A temporary reprieve on Medicare costs**

With large businesses moving many employees to high-deductible health plans, health care spending has slowed, leading the way for lower Medicare costs as well. In an August update to its April 2014 projection for Medicare spending, the Congressional Budget Office (CBO) reduced its estimate by $49 billion for 2014 through 2024, giving Congress a temporary pass on making reforms. That will remain necessary in the longer term, because of Medicare’s outsized share of federal spending and an aging population projected to lead to ballooning costs. But for now, slowing spending on the huge program is good news for policymakers and the economy.

**Slow changes ahead for monetary policy**

Monetary policy, too, should evolve gradually. The first hike in the Fed’s target rate for short-term loans is expected to come later in 2015. As long as the economy continues to improve, bond yields should also rise incrementally and the stock market can continue to move higher, although with more volatility, according to Hanson.

The Fed will likely delay shrinking its $4.5 trillion balance sheet—up from just $900 billion when the financial crisis began—until the first half of 2016 and allow it to stay elevated through the rest of the decade. The Fed will unwind its asset purchases by letting them passively mature instead of actively selling them, expects Hanson. That plan would change only if inflation increased rapidly, and that’s not likely.

The Fed also wants to be as transparent as possible during these coming changes and to avoid a repeat of the “taper tantrums” that caused market sell-offs when investors reacted prematurely to worries that the Fed would reduce bond purchases. U.S. monetary and fiscal policy will evolve gradually in the months and years ahead. The financial markets will be following any developments along the way closely.
The U.S. Dollar

Buoyed by American growth, we expect the currency to stay strong.

The U.S. dollar has been one of the best-performing major currencies in 2014, with the Dollar Index (DXY) up roughly 10% at the end of November. We see further upside for the greenback going forward, especially against the euro and the yen.

**Growth and monetary policy are drivers**

As discussed previously, there has been a divergence between the monetary policy of the U.S. and those of Europe and Japan. The Fed recently concluded its quantitative easing program, as confidence in the economy led it to embark on the path of normalizing interest rates. This has caused the dollar to strengthen as prospects for growth and inflation are better in the U.S. than in these other developed markets.

This year, as economic indicators have weakened, the European Central Bank (ECB) has cut interest rates and decided to purchase asset backed securities and covered bonds issued by financial institutions. Still, growth remains weak and the euro has fallen by roughly 9% against the dollar from July through November. The dollar’s move relative to the Japanese yen has also been significant, with the yen reaching the lowest level since 2007 amid a backdrop of accommodative monetary policy in Tokyo.

Given the strong performance, bullish views on the dollar are common. Thus, we won’t be surprised if the currency has limited upside in the first few months of 2015. However, BofA Merrill Lynch (BofAML) Global Research does expect the dollar to strengthen to 1.15 against the euro and to 127 against the yen in 2016.

**Rising confidence in the U.S.**

The differences in growth and monetary policy across global economies will continue to provide support for the dollar, as will the improving fiscal health of the U.S. and transformative changes such as the surge in U.S. energy production.

America’s fiscal position has improved quite a bit as the economy has recovered. The Congressional Budget Office (CBO) estimates that the U.S. fiscal deficit will be $483 billion for the 2014 fiscal year, much less than the trillion-dollar levels of 2009–2012. The CBO projects the deficit will fall to 2.6% of gross domestic product (GDP) by 2015, down from 6.8% in 2012.
The U.S. has also made great progress toward energy independence. U.S. energy production rose by roughly 13% from 2009 to 2013, according to the Energy Information Administration. Consequently, net energy imports have fallen. This is a game changer for U.S. economic competitiveness and is bullish for the dollar as the country reduces its reliance on more expensive foreign oil.

Ultimately, a stronger dollar signals growing global confidence in U.S. assets and resulting foreign capital inflows should contribute to further growth. The U.S. has long been regarded as a more productive economy, especially compared with Europe and Japan, which have been slow to implement structural reforms. The prospects for a stronger currency going forward should broaden U.S. appeal for foreign corporations and investors, creating a self-reinforcing cycle.

Depending on your time horizon, currency hedging can be critical for U.S. investors. For roughly the past 15 years, the dollar has trended downward against a basket of other major currencies. That trend has generally provided a boost to returns on U.S.-based investors’ overseas holdings. Now with the trend reversing, U.S. investors should consider a strategy of hedging international bond and equity exposures.
The True Value of Bonds

Bonds still help diversify portfolios and provide income.

When the Fed announced that it was finally ending its six-year bond-buying program known as quantitative easing, we saw many investors shrink away from bonds, worried that without those purchases, prices would fall.

But that didn’t happen, and we believe bonds will continue to be a valuable part of most portfolios regardless of what happens to interest rates. It’s true that over the long term, stocks have outperformed bonds, chalking up a compound annualized return since 1925 of 10.2%, compared with 5.3% and 5.7% for intermediate and long-term Treasury bonds, respectively. However, equities’ higher returns have come with far greater volatility. For their part, Treasuries may provide relative safety and reliable, predictable income to spend or reinvest. In addition, the two assets are negatively correlated, meaning when one declines the other might rise or suffer a smaller loss.

And although bond yields will eventually rise, waiting until then to commit to this asset class means sacrificing income now that could take years to recoup. Rather than relying on yields rising enough in the future to make up for that foregone income, it is probably better to take some of the yield that the market gives you now, according to Martin Mauro, fixed income strategist for BofA Merrill Lynch (BofAML) Global Research. The risk of bond prices declining as interest rates rise could be better managed through portfolio laddering—that is, by combining bonds with different maturities.

Stretching for income amid low inflation

One surprise over the past year has been a decline in inflation and inflation expectations, despite an ongoing improvement in the U.S. economy. That has resulted from several factors, including slowing global economic growth, subdued wage growth and lower energy prices.

Taken together, these factors have brought inflation that is a great deal lower than many investors expected. Bond yields tend to rise and fall with inflation. We have been in the camp of subdued inflation and think that interest rates should remain low compared with previous
recoveries but will rise gradually from current levels. As a result, finding income in bonds will continue to be challenging as yields are stuck at the bottom of their historical ranges.

Two classic ways to meet that challenge and potentially boost income are to buy bonds with longer maturities and to invest in higher-yielding, lower-quality bonds. The risk with the first approach is that it leaves investors vulnerable if interest rates rise. If you want to sell before maturity—say, to reinvest the proceeds in a higher-yielding bond—you’ll likely have to accept a discounted price. The potential problem with the second approach is that lower-quality bonds may be more volatile than other issues and bring a greater risk of default. Thus, such bonds may not be suitable for conservative investors.

Diversifying sources of income
Income-seeking investors can look beyond U.S. government and investment-grade corporate bonds. High yield corporates, dividend-growth stocks and options strategies that capitalize on near-term market volatility are some alternatives. Master limited partnerships (MLPs) can provide comparatively higher yields and some tax advantages. All of the above come with their unique risks which must be balanced with the income need. Also consider government bonds from other nations, particularly those in which opportunities have been created by global volatility. During turbulent times, foreign governments, especially those in emerging markets, may have to offer comparatively high yields to attract investors. We suggest that investors diversify their exposure to emerging markets among different countries in order to better manage the credit risk.

One consideration for investors looking at foreign sovereign bonds is the risk of currency fluctuations that could reduce the value of their holdings. Currency movements could cause swings in the prices of sovereign bonds, exerting more influence on the prices than factors such as changes in credit conditions that normally affect bond values. Investors could consider both sovereign and corporate emerging market debt that is issued and

A MIDDLE GROUND BETWEEN MARKET EXTREMES
Bonds haven’t soared as high as stocks over the very long term but they also haven’t sunk as low.

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*Based on calendar years

SOURCE: Ibbotson Associates; BofAML Global Research. Note: Intermediate Term as defined by the 5-year Treasury bond, Long Term as defined by the 20-year Treasury bond. Stocks as defined by the S&P 500 Index. Data from 1925-2014. U.S. Treasures are guaranteed for the timely payment of principal and interest.
denominated in U.S. dollars. The bottom line is that in a low-inflation, low-yield environment, which may be with us for a while, income-seeking investors may have to consider alternatives that involve more risk than Treasury securities. We think that proper diversification can help to mitigate some of these risks. Even so, we do not believe that investors should completely abandon Treasuries in their search for yield and ought to remain within their risk tolerance. Risk-averse investors with a focus on capital preservation may need to stay with lower-risk and lower-yielding investments such as Treasuries.

**Inflation uncertainty drives portfolio construction**

We advise that investors consider adopting a core-satellite approach to fixed income portfolios. For the core, diversified municipal bonds can be considered within taxable accounts, and a combination of Treasuries and investment-grade corporate bonds for tax-exempt accounts would be appropriate. For the satellite portion, high yield, emerging market bonds and senior loans can be considered. This approach helps investors monitor and limit how much risk is in their fixed income portfolios.

The current economic environment, with its uncertainty about interest rates and inflation, seems to favor intermediate bond maturities. Those bonds provide higher yields than short-term bonds but are less susceptible to interest rate risk than longer-term holdings. However, those who hope to stretch for the additional yield of longer-term bonds while keeping risk in check may want to consider laddering one-, five- and 10- or 15-year maturities, says Mauro. With such a portfolio, investors can benefit from higher yields on extended maturities, but if rates rise, they can redeploy proceeds from maturing bonds into longer-term bonds with higher coupon rates. Meanwhile, for those in the 28% tax bracket or above, 10-year municipal bonds have better tax-adjusted yields than corporate bonds of the same credit rating.\(^6\) In general, Mauro suggests laddering out to 15 years in munis and 10 years in the taxable market.

Looking ahead, the bond market will be driven by continued low inflation, a modestly generous Fed and decent economic growth. Even at their most volatile, bonds still offer more stability than equities. Moreover, bonds’ inverse relationship to equities can give you a crucial counterweight in times of turbulence.\(^7\)

\(^{1}\) Ibbotson Associates.  
\(^{2}\) BofA Merrill Lynch Global Research.
Disruptive Technology
Welcome to the future tech that could change economies and lives.

Technological innovations—in health care, communications, entertainment, transportation, manufacturing, energy production and elsewhere—continue to transform lives, upend businesses and boost the global economy. Now, as we look beyond the silicon-based microprocessor, tomorrow’s disruptive technologies are already in sight, changing the way we live.

**Connectivity and the Internet of Things**
Only about 40% of the world’s 7 plus billion people currently use the Internet, according to the International Telecommunication Union, and billions more, especially in emerging markets, could be connected by 2020. The billions of connected devices that collect, process and transmit information in real time will multiply and become a part of everyday living. Beyond connected computers, smart devices and TVs, look for more connectivity in vehicles for things like GPS, Wi-Fi, radar and vehicle-to-vehicle communication. Expect to see it in wearables such as wristwatches, glasses and smart clothing and in health care devices like monitors for the heart, blood pressure and glucose levels. And throughout homes for thermostats, lighting, smoke detectors, security cameras, refrigerators, coffeemakers and more.

**Robotics**
Programmable machines, widely used in the auto industry, are increasingly employed in aerospace, metal production, medicine and other fields. Robots are becoming capable of working more safely with people and are in wider use in the home, in the form of vacuum cleaners and security systems, for example, and for senior care. The use of drones—essentially flying robots—is on the rise in entertainment and police surveillance, and they could soon be used for package delivery and other services.
Transportation
The automobile industry is undergoing perhaps the most significant shifts since Model Ts first rolled off Henry Ford’s groundbreaking assembly line. Electric car technology has advanced, and consumer acceptance, although limited, is improving. E-cars could eventually dominate the roads in the U.S. and elsewhere. Assisted-driving technology is already standard in many automobiles in the form of rearview cameras, vehicle proximity-detection radar, lane-departure warnings and other capabilities. Driverless car technology is expected to reduce the number and severity of crashes and injuries, thereby lowering insurance and medical costs.

Energy
In the face of grim reports from the United Nations about the potentially catastrophic effects of human-produced atmospheric carbon, the use of alternative energies and technologies that reduce carbon emissions should rise.

Solar panels have become more efficient and less expensive. Faced with opposition from nearby residents, more wind farms are likely to be built off-shore. Tidal turbines are being tested and could become an option as well. Because alternative energy is intermittent, megawatt batteries, currently in early development, should prove essential to the spread of wind and solar.

Carbon-sequestration and storage technologies, which can absorb carbon from coal-fueled power plants and other facilities, are plagued by high costs and carbon storage questions. Yet with government funding or incentives, they could become viable, making it feasible to continue using coal.

Health care
From penicillin to organ transplants, CAT scans and genome decoding, advances in health care have improved or saved countless lives and provided investors with significant opportunities. Obesity, for example, is a global problem. More effective medications to lower cholesterol or prevent heart attacks and strokes are likely. Producers of low-calorie and healthful foods could also benefit. Regenerative medicine leading to replacement of body parts is in its infancy but eventually could help people with diseased organs. High-tech prosthetics are becoming more widely used and may soon be grafted directly onto a recipient’s bone.

Changes caused by technological shifts seem to be accelerating. This can bring challenges such as higher and persistent levels of unemployment. But the economy and society are likely to evolve and adopt technologies that improve productivity.
n energy-secure future will require a balanced energy mix, encompassing cleaner coal, natural gas, nuclear and renewables—as well as energy-efficiency measures. The latter offers the single greatest opportunity among currently available options for cheap, easy energy and reductions in carbon dioxide (CO₂) emissions.

Energy efficiency is the answer

The current energy path is unsustainable. With energy demand set to grow by as much as 40% by 2035, the world needs $48 trillion to $53 trillion in energy investments over that period. Today’s share of fossil fuels in the global energy mix is much the same as it was 25 years ago, leaving large parts of the world dependent on energy imports and associated geopolitical risks. The current energy path is also putting us on a CO₂ emissions trajectory consistent with long-term global temperature increases of 2.0°C to 4.5°C, which would make irreversible climate change a reality.

In a resource-constrained world, energy demand needs to adjust to limited supplies of conventional sources. The rationales include supply-demand balance, energy and infrastructure costs, energy security, environmental sustainability, access to energy and fuel poverty. We believe this process needs to occur through a combination of energy-efficiency improvements and gradual replacement of oil and other fossil fuels.

Investing for the future

Historical energy savings from efficiency measures exceed the output from any single fuel source. Without the savings from improved energy efficiency since 1974—particularly in buildings, industry, power production and transport—global energy consumption would now be at least 65% higher in the 29 member countries of the International Energy Association. Efficiency measures could halve the energy needed to power the world by 2035.

Global investments in energy efficiency have recently ranged from $130 billion to $300 billion per year. By 2035, we anticipate $8 trillion to $14 trillion in investments—or at least $550 billion in annual spending—both to meet growth in energy demand and to make the transition to a lower-carbon economy. There is significant “low-hanging fruit” given that 80% of energy is lost along the
value chain. Every dollar spent means $2 to $4 in lifetime cost savings, and two-thirds of the economic potential to improve energy efficiency remains untapped.\textsuperscript{10}

**Progress, but a long way to go**

The U.S. has started making progress on energy efficiency in recent years with measures like appliance standards, building codes, fuel economy requirements and voluntary government-industry partnerships. However, it has made limited progress compared with China, the European Union and Japan. The U.S.—long considered an innovative and competitive world leader—ranks 13th on the 2014 Scorecard of the American Council for an Energy Efficient Economy, having fallen behind Australia, Canada, India and South Korea since the 2012 assessment.\textsuperscript{11}

**Multiple entry points for investors**

There is a diverse range of entry points for investors in the energy-efficiency theme that includes autos, buildings, industry, the Internet of Things (IoT), information and communications technology (ICT), LEDs and other efficient lighting solutions, smart grids and energy storage and transport.

Turbochargers, to cite one example, allow smaller automobile engines to replace larger ones without compromising power during acceleration, providing fuel savings of 15% to 30% and reductions in CO\textsubscript{2} emissions of up to 20% at a fraction of the cost of a hybrid motor assist.

The Internet of Things, to highlight another, includes incorporation of sensors and smart nodes into various devices to “undumb” the hardware in smart grids, smart homes, city lighting, intelligent street signalling and networks for managing vehicle fleets, industrial production and supply chains. ■
Values and Impact Investing

Opportunities to express personal values through investing have expanded.

The opportunity to consider using values-based strategies in investment portfolios has never been greater. The number of approaches and strategies available to investors has grown in both size and quality over the past several years as better social and environmental data on companies has intersected with an increased demand by individuals. The total assets under management using sustainable, responsible and impact investing (SRI) had grown to $6.57 trillion at the start of 2014. Where investors have interest in expressing their values in portfolios, we see a growing opportunity. The following examples are worth considering.

Supporting cancer research

The most direct way to support the search for a cure for cancer is investing in promising biotechnology companies. Somewhat less direct is screening to remove investments seen as contributing to cancer, such as cigarette makers or those that use high levels of chemical carcinogens. However, these blunt approaches may add additional risks to a portfolio that are not compatible with an investor’s goals.

The spectrum of opportunity to have an impact in this area is larger. For example, an investor may choose to invest in companies that use a portion of revenues to fund research or set up foundations to do so. This approach is exemplified by the founder of American Century Investments, who set up a foundation focusing on cancer research that is funded with a 40% share of American Century’s profits. Going a step further, investors can also choose to invest in companies viewed as helping prevent cancer, such as organic food makers, operators of wellness centers or drugstore chains such as CVS, which recently began pulling cigarettes from its shelves.

Climate change

Another notable area of investor interest is climate change and carbon emissions. This isn’t surprising given extensive coverage of the topic in the media, including the recent discussions of fossil fuel divestment at universities like Stanford and Harvard. A growing number of investment strategies seek to remove exposure to...
fossil fuels or to invest in companies looking to reduce carbon emissions or improve efficiency around the use of natural resources like water or energy. Individuals can also invest with asset managers that support environmental policy-making or research, such as ones that have formed partnerships with the Environmental Defense Fund, or in companies that meet environmental standards such as the Sustainable Forestry Initiative.

**Gender equality: focus on women**

There have been a number of investment strategies launched recently based on the premise that both developed and developing countries and companies benefit from an increase in the number of women in the workforce and in senior management. Here, an approach could be investing in companies led by women, or in companies that have focused on positive portrayals of women in their marketing. There are also investment strategies based on financial inclusion by making loans or the capital markets more widely available to the economically disadvantaged, which tend to create jobs or provide entrepreneurial capital and training for women. Investing in companies that promote equal access to education in the developing world also can contribute to a more educated and productive labor force while expanding opportunities for women and girls.

The growing number of ways for investors to express their personal beliefs through their portfolios suggests the time has come to align their values and investments to create a bigger impact.
The Rise of Nontraditional Mutual Funds

More liquid and more closely regulated than most alternative investments, they still can help manage portfolio risk and increase diversification.

More recently, hedge fund-like strategies and other alternative investments have become much more widely available through mutual funds—so-called nontraditional mutual funds (NTMFs)—and exchange-traded funds (ETFs).

The growth of NTMFs

After the financial crisis, mainstream investors became interested in diversifying their portfolios and reducing their dependence on the markets. Meanwhile, investors in hedge funds stepped up calls for greater transparency, liquidity and uniformity of structure. This convergence of interests led to greater demand for liquid, more highly regulated alternative investments in general and for NTMFs in particular. Assets in mutual funds categorized by Morningstar as alternative grew ninefold between 2005 and 2013. The most recent growth has been concentrated in a few categories. Of the roughly $94 billion that flowed into NTMFs last year, about $54 billion went to...
Comparing NTMFs and hedge funds
NTMFs are a liquid, more regulated way to access strategies most commonly found in hedge funds. NTMFs offer hedge fund strategies in a convenient format, aiming to provide both diversification and risk control. However, there are trade-offs in using NTMFs rather than hedge funds. Regulations for mutual funds limit the use of some key drivers of hedge fund returns, such as illiquid securities, leverage and concentrated holdings. It is fair to assume that NTMFs may behave more like traditional mutual funds, with returns closer to those of the overall markets and perhaps sacrificing some potential outperformance, compared with their hedge fund siblings. These potential sacrifices may be offset by benefits such as daily liquidity, regular transparency, lower investment minimums, less stringent eligibility requirements, generally lower fees and more efficient tax reporting, which make NTMFs more attractive to the average investor. They still offer a broad range of opportunities to influence risk and potential returns as well as the ability to potentially reduce losses in down equity markets. These variables and others must be taken into account when deciding whether to pursue alternative strategies through hedge funds, NTMFs or other products.

Using NTMFs in portfolios
Like hedge funds, NTMFs come in many shapes and styles. Strategies provide different exposures and various risk and return profiles. Additionally, the skill and experience of individual portfolio managers take on greater importance when funds have a more flexible mandate, so manager selection becomes integral to success.

Investors may benefit by combining various strategies into a diversified portfolio. Another approach is to use NTMFs to diversify specific portfolio risks. An investor might, for example, use long/short equity strategies as a portion of a traditional equity allocation to help reduce a portfolio’s volatility. Similarly, an investor could use nontraditional bond strategies to address a portfolio’s sensitivity to interest rates; note, however, that while that risk may be reduced, other types of risks, such as that resulting from increased credit exposure, may rise.

For investors who don’t have access to hedge funds, a portfolio of carefully selected NTMFs can provide exposure to similar strategies in a more liquid, regulated and convenient fashion. In addition, sophisticated investors may find that detailed analysis of funds, strategies and structures leads to the use of NTMFs in conjunction with private-placement hedge funds and other alternative vehicles.

SURGING POPULARITY OF NONTRADITIONAL FUNDS
Since the beginning of 2012, assets in nontraditional mutual funds have more than doubled.

SOURCE: Morningstar Direct; MLWM Investment Management & Guidance.
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Options involve risk and are not suitable for all investors. Before engaging in the purchase or sale of options, investors should understand the nature and extent of their rights and obligations and be aware of the risks involved in investing with options.

Alternative Investments, such as hedge funds and private equity, can result in higher return potential but also higher loss potential. Before you invest in alternative investments, you should consider your overall financial situation, how much money you have to invest, your need for liquidity, and your tolerance for risk. Some or all alternative investment programs may not be suitable for certain investors.

Non-traditional mutual funds (NTMFs) are intended to offer investors exposure to hedge fund strategies, but in a more liquid format with relatively low minimums. Each of the funds is registered under the 1940 Act and is subject to 1940 Act restrictions. While NTMFs can offer diversification within a relatively liquid and accessible structure, it is important to understand that they may be imperfect as a hedge fund substitute.