On the Markets

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Equities Show Resilience, but ...

During the past month, global economic trends have played out as expected, with signs of slowing growth due to US fiscal sequestration, continued European woes and structural headwinds for certain emerging markets. Unsurprisingly, this has led to better performance in fixed income markets even as equity markets appear to be looking beyond this soft patch. While headline equity indexes have been resilient, significant corrections have taken place in cyclical sectors such as materials, energy, technology and industrials. Similarly, emerging market equities and commodities have performed much worse than developed-market equities during this economic slowdown. A key question now is: Can this divergence continue until the soft patch has passed, or will broader equity indexes catch up on the downside first? Our view skews to a broader correction, which is why we remain *tactically* underweight equities even though we prefer equities to bonds over the next 12 months.

Fixed income market performance has been better as bonds tend to be more sensitive to *economic* growth while equities are most sensitive to *earnings* growth. Stocks have responded accordingly, with "stable" earnings providers dramatically outperforming the more economically-sensitive cyclicals. The exception has been Japan, the world's only true reflation story, where earnings expectations are rising significantly. Consequently, Japan has been the strongest equity market globally—and led by cyclical sectors.

This month's *On the Markets* addresses many of these market divergences, highlighting the opportunity to use strength in fixed income to shorten portfolio duration. Conversely, credit spreads have not tightened in this most recent bond rally, leaving opportunity to seek out the value remaining in specific credits. Because we expect rates to rise later this year, bank loans could represent a better way to play credit than high yield.

Across both fixed income and equities, emerging markets are showing significant dispersion across regions. This is a recent development for this relatively new asset category and supportive of our view to seek out alpha rather than beta in all of one's investments. We believe investors should focus on the countries that have stable currencies and where policies and structural reform are supportive of growth, namely Mexico and India. Finally, several commodities markets have underperformed recently. While we think these assets still have a place in one's portfolio, there is growing evidence that the secular bull market is over for commodities. ■

Positioning Portfolios for (Slightly) Higher Rates

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In shortening duration* in our fixed income portfolios, we have continued to emphasize that this was not a call for "Great Rotation" to stocks from bonds. After all, many of the forces that have helped to push long-term interest rates down to record lows—a sluggish economy, low inflation, the Federal Reserve's Quantitative Easing (QE) policy and ongoing Euro Zone woes—remain in place.

Our expected range for the 10-year US Treasury yield is 1.50% to 2.25%, with the yield gravitating toward the lower half of the range in the near term. Our case for higher yields relies primarily on the market perception of reduced "tail risks" and the observation that US Treasury market rallies have become increasingly short and shallow. We believe the lower end of our range for the 10-year allows for crises of the magnitude of the Cyprus bank bailout. Of course, an extraordinary exogenous event could push the yield below the bottom of our range.

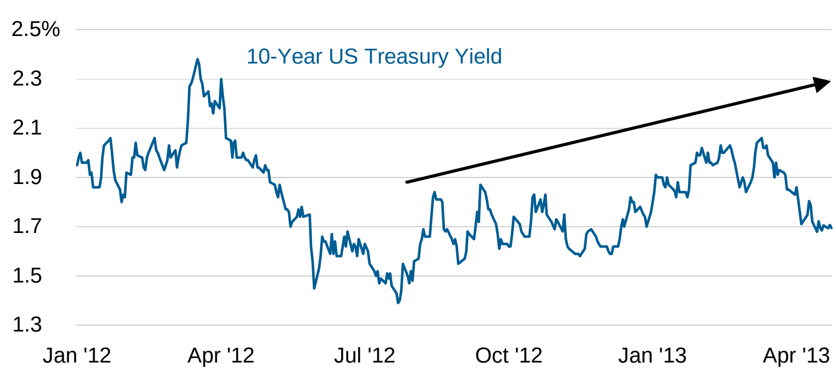
SOFT DATA. Economic data seem to support lower rates. Morgan Stanley & Co. economists have been expecting a soft patch in second-quarter GDP—a slim 1.2% gain—and recent data certainly point in that direction, as the most damaging effects of the federal government's sequester are set to hit during the April-through-June period. However, MS & Co. economists also anticipate growth rebounding to 2.75% in the second half of the year. If this forecast comes to fruition, it would be less friendly for longer-dated bonds.

Up to this point, whenever the 10-year Treasury has moved into the 2.00%-to-2.05% range, buyers have emerged and 2.06% has become an area of support (see chart). We believe this will remain the case in the near term but, eventually, this level will be breached to the upside and the yield will move toward 2.25%. Thus, while the Great Rotation may not yet be upon us, we think the current environment for fixed income is ideal for revisiting portfolios and making necessary adjustments.

RANGE-BOUND CREDIT MARKETS. Both investment grade and high yield spreads have remained range-bound of late, but they are no longer tightening as they were at the beginning of the year. We believe this is partly a result of stretched valuations and also due to a recent patch of softer-than-expected economic data. Still, why haven't spreads widened in response to the weaker macro backdrop? In our view, the markets seem to be taking bad news as good news, in the sense that if economic data disappoints the Federal Reserve is more likely to continue with Quantitative Easing (QE), which tends to lift prices for risk assets. Consider all the easing by the Fed, the Bank of England and the European Central Bank, add to that the Bank of Japan's recently announced asset-purchase program and you have a powerful technical tailwind for risk assets both at home and abroad.

The Fed is likely to be the first major central bank to ease up on easing, possibly in 2014, according to Vincent Reinhart, MS & Co's chief US economist. Although the market is likely to price in this move well before it occurs, we believe that current valuations in credit— especially high yield—do not provide investors with much of a cushion for such

Sawtooth Trading Range for 10-Year Treasuries



Source: Bloomberg as of April 24, 2013

an adjustment. We believe investors should be positioning within credit for this eventual move by using a defensive yet tactical approach that limits the downside but still provides a decent stream of income and return potential.

At the beginning of the year, our 2013 return forecasts were roughly 1% to 2% for investment grade and 3% to 4% for high yield, respectively. Year to date (through April 29), the Citi Broad Investment Grade Corporate Index is up 1.71%, while the Citi High Yield Market Index is up 4.32%. Thus, both asset classes have already generated the bulk of our expected full-year return and in the case of high yield, exceeded our forecast.

HIGH YIELD RISK. High yield bonds appear to have more downside potential, in our view. The market is currently trading at the highest dollar price we have ever seen, 106.50. The risk/reward for high yield has become very asymmetric, and thus we believe investors should either improve the quality of their holdings or reduce exposure to the asset class. Within high yield, we continue to recommend shorter duration BB-rated credits over CCC-rated issues.

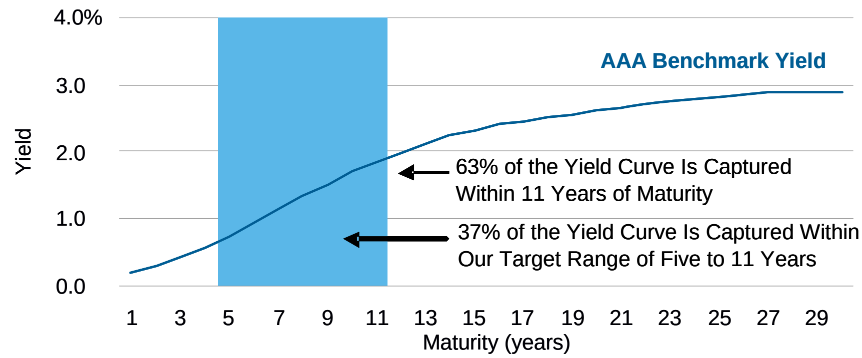
In the coming months, we expect investment grade to outperform high yield and believe positioning within investment grade is critical. We see opportunity in moving down the ratings curve to BBBs, which, in our view, trade cheaply relative to A-rated issues. From a sector perspective, we prefer financials to industrials, in part based on continued credit improvement in the financial sector. Maturity-wise, we see value in the three-to-seven-year range, especially at the longer end.

MUNICIPAL OPPPORTUNITY EXTENDED. We believe that municipal bond investors, like all fixed income investors, will have to deal with a range-bound market for most of this year, albeit one with a modest upward tilt. For now, though, positive and negative forces have driven the market to a standstill. Since the first days of April, interest rates, using the 10-year US Treasury note as a benchmark, have moved within a very tight range of less than 10 basis points, leaving benchmark muni yields at their year-to-date lows. Municipal bond mutual fund flows have been negative for eight consecutive weeks. The new-issue calendar has been robust and municipal relative-value ratios remain rather elevated versus corresponding-maturity US Treasuries. Absolute yields on municipal bonds are more than 20 basis points higher than last November, and credit spreads for A-rated and BBB-rated general-obligation bonds remain wide of long-term averages.

LOWERING DURATION. In our opinion, this climate offers investors an opportunity to temper interest rate risk through repositioning their portfolios in terms of maturity and individual bond structure. Given the downward trajectory of interest rates over many years, bond redemptions via call features have left some investors' portfolios too short, while the reach for yield by other investors has entailed much greater duration risk in their respective portfolios. We believe the ongoing mix of global forces, political uncertainties and muni-specific seasonal factors facilitate an extended opportunity to fine tune portfolios with an eye toward lower duration.

In repositioning, investors should look to our five-to-11-year target maturity range, which captures 37% of the yield available through the curve. Furthermore, 63% of the yield resides in one to 11 years (see chart). In addition, we suggest investors seek above-market coupons, as they are more defensive when rates rise. We also advocate high-quality securities such as general-obligation bonds rated mid-tier A and higher, and essential-service revenue bonds rated mid-level BBB and higher. Prerefunded bonds also look compelling when near or above parity with US Treasuries, and they offer gilt-edged credit quality. ■

Sweetest Spot in the Municipal Bond Market



Source: Thomson Reuters as of April 23, 2013

*Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

Leveraged Loans: As Interest Rates Move Up, So Do Their Yields

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With the likelihood of rising rates over the coming years, many fixed income investors are looking for ways to hedge their interest rate exposure. We believe there are two simple ways investors can do this: shorten the duration of their fixed income portfolios or add floating-rate securities that should rise in value as interest rates move up. Both strategies involve giving up some yield now but should provide both greater stability and, in the case of floating-rate securities, upside potential when rates start to rise.

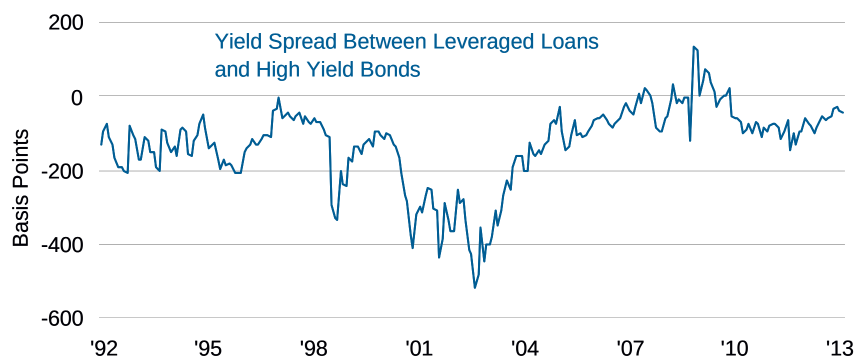
FLOATING RATES. Leveraged loans, also known as bank loans, are largely floating-rate securities. They are bank borrowings that have been taken out by the same companies that issue high yield bonds; but, unlike high yield bonds, leveraged loans are secured by assets and, as such, rank higher in the capital structure of the company than its unsecured debt. The interest rate on such a loan is usually set at a fixed spread over a benchmark variable rate such as LIBOR (London Interbank Offered Rate), and the rate will typically reset, on average, every 30 to 60 days. Thus, if interest rates rise, the yields on these loans will eventually rise, too, albeit with a lag.

The terms of leveraged loans are similar to those of high yield bonds with average maturities in the five-to-10-year range, but leveraged loans generally have much shorter call windows, giving the asset class a shorter duration profile than high yield. The long-term default rate on this asset class is in the 3%-to-4% range, roughly the same as it is for high yield. However, because the loans are backed by assets, the recovery rate is significantly higher for leveraged loans, roughly 70% versus 40% for unsecured debt.

ALTERNATIVE TO HIGH YIELD. The Morgan Stanley Wealth Management Global Investment Committee remains underweight high yield due to stretched valuations. However, for investors looking for additional yield without high yield's downside risk, leveraged loans could be a suitable alternative. Leveraged loans are trading rich relative to their recent history, as is every other fixed income asset class. Still, they appear cheap relative to high yield; only 45 basis points of yield separate the Credit Suisse Leveraged Loan Index and the Credit Suisse High Yield Index (see chart).

Investors in leveraged loans are generally hedge funds, pension funds and insurance companies. Individual investors can access the asset class through mutual funds, closed-end funds and exchange-traded funds. The bank loan funds, also known as "prime rate" funds because the investments they make are usually tied to the prime rate or some other variable interest rate, have been around since the 1980s. ■

Leveraged Loans Appear Attractive Relative to High Yield Bonds



Source: Credit Suisse, Guggenheim Partners as of March 31, 2013

Emerging Market Debt: Higher Yield, But Not High Yield

Many investors and advisors think about emerging market bonds only in comparison with high yield—or riskier—fixed income, says Alex Kozhemiakin, director of emerging market strategies at Standish Mellon Asset Management. Yet this asset class presents an entirely different set of risks and rewards than do high yield bonds. Kozhemiakin, who invests in the entire spectrum of emerging market debt, including dollar-denominated bonds, local-currency-denominated bonds and both sovereign and corporate debt, says the best balance of risk and potential reward is in countries with relatively low geopolitical risk. In a recent conversation with Morgan Stanley Wealth Management's Tara Kalwarski, he discussed some of the most attractive plays in this sector right now. The following is an edited version of their conversation.

TARA KALWARSKI (TK): Can you define the universe of emerging market debt you consider?

ALEX KOZHEMIAKIN (AK): Most of the countries that we call emerging markets have one characteristic in common: They are not yet rich. You define how rich a country is by its gross domestic product, otherwise known as per-capita GDP. As a rule of thumb, if a country's GDP per capita is not in the upper quartile, it is not rich.

Thus, I say that we invest in the fixed income asset classes of nonrich countries. If you phrase it this way, the risks, as well as the return potential, of investing in emerging markets become more apparent. By definition, nonrich countries are starting with a lower base and thus have the potential to grow at higher rates than developed, rich countries do. Mexico's future growth rate is higher than that of the US. Russia has more potential to grow than Germany. Then you consider why these [nonrich] countries aren't rich yet. Defining that aspect helps enumerate the risks of investing in emerging markets—such as the weaknesses of some of their institutions, macroeconomic volatility or dependence on a single commodity.

TK: How do you determine whether or not the potential returns are worth the risks?

AK: We look at the usual fundamental factors, such as the global macroeconomic environment and a specific country's balance sheet and income statement, as well as the political situation. What distinguishes the fundamental research in emerging markets from [research aimed at] US corporates is the importance of country risk. Our real bread and butter is country picking—we have to select our countries correctly.

TK: What countries are you bullish on at the moment?

AK: For the past year we have been bullish on Mexico. We have chosen to express this view with our long position in the Mexican peso against the US dollar. There are a number of reasons for this. One of them is the fundamental valuation of the Mexico peso; it's been a cheap currency, and we still think it's cheap. Second, Mexico's growth rate has remained relatively strong while inflation has been fairly subdued. With the new president, there is an expectation that Mexico could embark on the necessary structural reforms to boost the long-term growth rate of the economy.

So you've got a reasonable growth rate, the potential for structural reforms, an undervalued currency, responsible monetary policy and well behaved inflation, all in an environment where there is no reason to question the public-debt sustainability. All those things, combined with a relatively favorable balance of payments for the Mexican peso, helps explain why we are bullish in Mexico and why we have used the currency to express this view.

We're also overweight in the Chilean peso. Chile is a very well run country. It has a high growth rate, reasonable monetary policy, good creditworthiness and low debt. In addition, we think the Chilean peso is undervalued. That said, there is a risk there; Chile is a major exporter of copper. So we are also keeping an eye on developments in China, particularly in the property sector, for the potential swings in the demand for copper.

In Eastern Europe, we like Russia. We're exposed to that country through its currency as well. While Russia has institutional weaknesses, its sovereign creditworthiness is not in doubt. We can buy Russian local-currency-denominated debt with a shorter duration at the yield approaching 7%, which is quite attractive to us. The Russian ruble is also a bet on oil prices, and currently, oil and gas remain very important for Russia from a fiscal, as well as an export, standpoint.

We do not have any Middle Eastern exposure in our portfolio because of the geopolitical risks related to Iran—but we can actually play these tensions to our advantage, as they are keeping a floor on oil prices. Russia is a country through which we're expressing this view.

TK: In dollar-denominated debt, are you finding better opportunities in sovereign or corporate bonds?

AK: There are still some good opportunities in sovereign debt, but the days of significant spread compression are over. In general, we have shifted more toward quasi-sovereign and corporate debt. We're finding good opportunities in Mexican, Colombian and Peruvian corporates. In Russia, given the concerns about institutional weakness and the protection of private property rights, we prefer to play the story via quasi-sovereigns.

TK: What areas or countries don't look very attractive right now?

AK: We do not believe that political risks are fully priced into the Middle East, so we have no exposure there. We avoid countries with weak institutional frameworks—such as Belarus, Belize, Jamaica and Pakistan. We are also generally cautious on Central Europe, partially as a result of its greater vulnerability to the European debt crisis.

TK: Do you have other strategies to help mitigate overall portfolio risk?

AK: Above all, we consider the global macroeconomic environment. If we get a sense of volatility in a country, we seek to hedge out some of the currency risk in the local currency. In our dollar-denominated debt portfolios, we sell some of the high yield exposure.

We also aim to be humble. If we have a high conviction about a trade, we're going to express it in the portfolio. But we'll still diversify and try to seek returns from a variety of sources rather than betting the farm on one or two or three big trade ideas.

TK: Why do you think it's important to consider exposure to emerging market debt in addition to considering equity?

AK: There are a couple of reasons. One is simple country diversification. When you're investing in emerging market equities, you're not investing in the same countries as when you're investing in emerging market fixed income. For example, India, China, South Korea and Taiwan are not that heavily represented in the emerging market fixed income universe—for regulatory and other reasons. On the other hand, Peru, Colombia, Kazakhstan and Lithuania do not really have liquid equity markets but [do have] fixed income opportunities.

Second, in a lower-growth environment, I think you want to be in fixed income. Look at the relative performance of emerging market fixed income relative to equities over the past couple of years. If you look at longer time periods, emerging market fixed income has provided better risk-adjusted returns—and in some cases, better absolute returns. Clearly there are risks in this asset class, but they're often different types of risk.

TK: A lot of money has flowed into this area in the past couple of years. Has that distorted valuations?

AK: I think the rush into this asset class may be more of a problem five to seven years down the road. In the immediate term, I'm encouraged by the fact that a lot of allocations are coming from investors who have a longer-term time horizon: institutional pension plans, sovereign wealth funds and central banks, some of which are located in emerging market countries themselves.

These investors are looking for a way to diversify away from the US, away from the dollar. Moreover, at least two-thirds of emerging market local-currency bonds are still in the hands of local investors. Foreigners are just discovering this asset class, and I think there is more room to add.

TK: Does this type of exposure add significant risk?

AK: Ultimately, emerging market debt is a risky asset class, in part because there are two types of risk: risk that is inherent to the asset class and the country risk. When US high yield [bonds], the S&P 500 and Germany's DAX are doing poorly, emerging market debt has historically done poorly, too—and countries have risks of their own. You could have something political happen in Russia, for example, or drug violence in Mexico or a collapse of real estate prices in China that would drag Chinese stocks with them.

But the idea here is to diversify. Right now, if you want to diversify your fixed income exposure overseas, current valuations suggest that the opportunities in Japan or Europe are not that great. That's why we look at opportunities in nonrich countries. True, you take on different types of risk, but risk avoidance is also return avoidance. Our strategy offers investment-based diversification, and there is the potential of strong returns on the back of better growth rates. ■

Alex Kozhemiakin is not an employee of Morgan Stanley Wealth Management. Opinions expressed by him are solely his own and may not necessarily reflect those of Morgan Stanley Wealth Management or its affiliates.

Why Is Emerging Market Growth Under Fire?

MANOJ PRADHAN

Global Economics Team
Morgan Stanley & Co.

Emerging markets GDP growth bottomed last year, which in itself was a surprise. Normally, at this early stage of the economic recovery, indicators should be showing above-trend growth, emerging market (EM) risk markets should be surging and outperforming their developed-market (DM) counterparts, commodity markets should be booming and monetary policy should be on cruise control, waiting for signs of inflation before starting to worry again. Instead, the EM markets and growth recoveries have faltered, as have commodity prices. Although Japan's policymakers have spurred another round of EM monetary policy easing, China and Brazil have already begun to tighten. Why?

In our view, these dynamics are out of sync because structural issues have bubbled up just as the impact of cyclical policy tools has declined. The first demonstration of this difficult dynamic came when Brazil's growth continued to tumble last year even as the central bank cut policy rates by a massive 525 basis points. Economic growth finally bottomed in the second quarter of 2012, but the recovery has remained sluggish. The beleaguered manufacturing sector has seen scant improvement. Instead, bank lending and consumption are driving economic growth, worsening the mismatch of weak supply and strong demand. To complete the misery, the central bank has already hiked policy rates to curb the elevated inflation expectations that it raised by easing policy so aggressively.

BETTER NEWS. Cyclically, the weakness in commodity prices and the response from EM central banks should help improve growth later this year. Beyond responding to the effects of Japan's policy actions, soft global growth and the inflation risks pushed further out by lower commodity prices will likely lead to easier EM monetary policy or allow China and Brazil to do less tightening.

STRUCTURAL REFORM. Only Mexico and India have delivered on structural reforms so far. Mexico's proposed labor, energy and telecom reforms and prospective finance reforms have been rightly seen as possibly heralding a new era of growth. Still, there is hope, given notable changes over the last year. MS & Co. economists have previously pointed out the structural roadblocks in the EM world (see *Emerging Issues: The Broken EM Growth Model*, June 27, 2012), and the attention of policymakers in the major EM economies has slowly but surely shifted to structural reforms. The economists believe that this attention has to translate into action.

INDUSTRIAL POLICY. One feature of growth in China, Russia, Brazil and India is that the lagging sector in each economy—consumption in China, investment in India and manufacturing in Russia and Brazil—is the one that needs to drive growth in the future. Standard macro tools cannot address such sectoral imbalances, but modern industrial policy can. It is on this count that India's policy reforms stand out; they have specifically targeted the fast tracking of investment and faster provision of infrastructure and energy to support that investment.

All told, we have to ask: Have EM growth issues been diagnosed and treated correctly? What specifically are the main impediments to growth in the structurally challenged economies of China, Russia and Brazil? Why is India not among the most structurally challenged economies? Why have the usual cyclical tools been ineffective in this cycle in these economies?

MISDIAGNOSIS. Brazil's predicament is an extreme reflection of the difficulties facing EM giants. The primary problem is structural: allocation of capital to a strategy whose time has passed. The redirection of that capital toward more productive uses and the release of productivity through reforms is a structural issue that needs structural tools and changes. However, MS & Co. economists believe that this structural problem has been repeatedly misdiagnosed as a cyclical one. As a result, cyclical tools have been used to treat a structural malaise. In 2009 and 2010, EM economies deployed massive doses of monetary and fiscal easing to protect growth. Yet, we know from the wrenching experience of the crises in the US and Euro Zone that such policies can support growth temporarily but not solve underlying structural problems.

As if the challenge of structural change wasn't enough, the use of monetary and fiscal palliatives reinforced the existing growth strategy, thereby creating a worse starting point for rebalancing. China needed consumption but pursued investment, while India needed investment but pursued consumption, making it harder for both of them to rebalance. Most commodity-producing economies also committed too many resources to the commodities sector, which has made a shift away from commodities and into manufacturing that much harder.

Aggressive use of these tools in the past has created many of the problems that prevent their use in the present. China's past aggressive credit growth has forced policymakers to follow a more moderate path now. Brazil's rate cuts in 2011 have raised inflation expectations, which have already forced a policy rate hike. India's loose fiscal policy has raised inflation, which has forced both monetary and fiscal policymakers to maintain a prudent stance. Using cyclical tools isn't as straightforward as it was in the past.

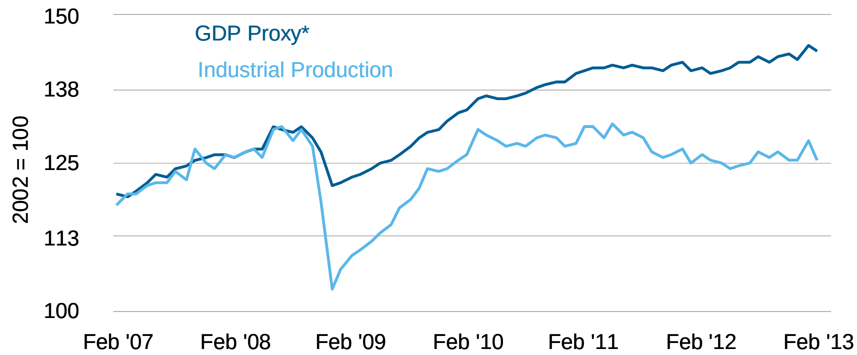
Compared with India, MS & Co's economics team argues that China, Russia and Brazil have the tougher structural challenges:

•**China.** China's transition from an investment-led economy to a consumption-led one requires continued liberalization of its interest rate markets. Faced with a dearth of vehicles to protect their savings, China's households save more than they should.

A liberalized interest rate market should deliver better ways to protect and reward savings, reducing the incentive to over save. The higher real interest rates that such liberalization is already generating should incentivize better-quality investment. China also needs to move faster toward consumption-led growth, but that's a delicate move, too. If households start spending too quickly, it could also crimp funds needed for investment.

The best news to come out of Beijing, in our view, has been the pragmatism of the new administration. The emphasis has

Brazil's Gap Between GDP and Industrial Production



*GDP proxy as reported by IBC Brasil
Source: Banco Central do Brasil, IBGE, Morgan Stanley & Co. Latam Economics as of Feb. 28, 2013

remained on structural reforms, deregulation and the eradication of corruption and wasteful public spending.

•**Brazil and Russia.** China's investment-led growth set off a surge in commodity-oriented investment, exposing both economies to the risk of an overemphasis on commodity-led growth, or what economists call the "Dutch Disease." This refers to the Netherlands' discovery of large gas field in 1959, setting off a trade shock and commodities boom in the domestic economy. The rapidly expanding commodities sector attracted both capital and labor and bid up their prices. As unemployment fell and wages rose, richer households spent freely, which benefitted services but also created inflation.

Dutch Disease hurt the manufacturing sectors in both Brazil and Russia, as they could not compete against the twin forces of exchange rate appreciation and high wages, particularly since the price of manufactured goods is set globally. In Brazil, for example, a wide gap has opened between GDP growth and industrial production (see chart).

We think there is one big benefit to the commodities boom. Debt/GDP levels are now at more benign levels: 58% in Brazil and 46% in Russia.

•**India.** The primary structural problems are archaic labor laws and regulations; energy and agricultural subsidies; and a fragmented political system. After a difficult period marked by corruption scandals and a slowdown in investment, the government has introduced structural reforms on a regular basis. These reforms have been well directed and, in our view, should have a salutary impact on investment and growth. ■

"Third Arrow" Points to Japan's Future

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When Japanese Prime Minister Shinzo Abe took office late last year, he launched an all-out attack on the deflation that had crippled his country for more than two decades, using arrows to describe his strategy. The first "arrow" of "Abenomics" is monetary policy and, on that front, the Bank of Japan now has a governor committed to driving the annual inflation rate to 2%. Japan has also become more aggressive in its fiscal spending, the second arrow. The third arrow, microeconomic reforms, is now the focus of attention. Success of third arrow policies will likely determine the sustainability of stock market gains and the weaker yen, as well as optimism about ending deflation and about fiscal reform.

Third arrow policies, such as better labor-market flexibility and deregulation, allow for a greater supply at a given price level. The same policies also make it more attractive to build new facilities in Japan; they spur domestic private investment, which has the usual Keynesian impact on the economy. Higher incomes spur consumption, and, in turn, spur more investment. Moreover, as productivity rises, employees expect higher lifetime wages, and thus savings rates may fall, spurring demand even more.

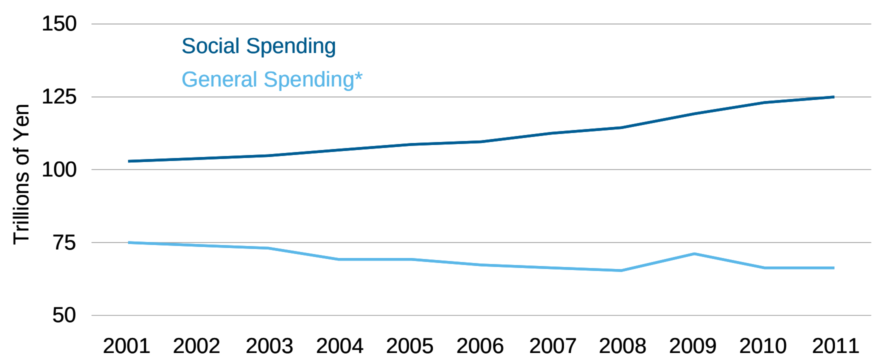
Is there historical precedent? Yes, there is. Indeed, one of the biggest surprises of the 1990s deregulation drive was the extra demand that so-called supply-side policies created. The canonical case was cell phone deregulation. Opening the phone network to private service providers triggered a boom in investments in both hardware and software, along with a boom in innovation that still continues. In light of this history, the key question on the third arrow is not whether it will work. The key question is whether it will indeed be done, properly and thoroughly. What will motivate the authorities, who remain heavily influenced by vested interests, to shoot the third arrow straight?

FISCAL SUSTAINABILITY. A key motivation for aggressive third arrow policies is fiscal sustainability. Consolidated accounts for the entire government—the central government, local governments and the social security fund—show a stark picture. By fiscal year 2011, which ended March 2012, the deficit in the social security account had reached ¥65.3 trillion, or 13.8% of GDP. Total spending on national pensions, the public component of medical care, aid to families and nursing care reached ¥124.5 trillion, or 26.1% of GDP, with revenue covering less than half of that.

This gap cannot be closed by higher tax rates alone, or by further spending cuts outside social security. Already these spending items have been squeezed to make room for social security (see chart). Achieving the required ¥53.5 trillion in savings outside social security would imply an 81% cut—even if such spending cuts had no impact on the economy.

Since no set of plausible spending cuts and tax rate hikes alone can bring fiscal sustainability, these must be aided by a large increase in nominal GDP. This increase could come in the form of hyperinflation, which would wipe out the value of much of the government debt. However, even this solution might not work, because much of the social security system is indexed to inflation. While inflation modestly in excess of social security benefits is likely to be part of the solution, a large share of the needed improvement in nominal GDP will have to come from real growth. In short, fiscal sustainability requires sustained expansion of real GDP, and sustained expansion of real GDP requires sustained third arrow policies.

Japan's Social Spending Crowds Out Other Needs



*Includes spending on all goods and services other than social spending; major components include education, defense, R&D and public capital formation.

Source: Japan Cabinet Office, *National Accounts Yearbook, 2012,* Morgan Stanley MUFG Securities as of January 2013

STRUCTURE OF DECISION. Third arrow policies are harder to identify and implement than first arrow or second arrow policies. This is true because third arrow policies are essentially *micro*economic, and the list of domains is quite broad. The Abe government has set up an apparatus to address many of these problems, but the complexity of the issues, not to mention the complexity of the relations among the stakeholders, makes forecasting outcomes difficult. A group of committees whose members include government officials and representatives of the private sector are charged with developing plans. The prime minister chairs four of the bodies, and he has already used his position as a bully pulpit. Still, the committee structure leaves the third arrow agenda in danger of being hijacked by vested interests in the bureaucracy and private business. Finally, the relationship of decisions at the committees to actual budget formation is not clear.

Despite these problems, an agenda for third arrow policies is emerging. Nine policy areas have emerged from the different councils and even from outside the councils. They all address some specific needs. For example, Japan's agricultural sector has a major global opportunity, but is marked by low productivity and a hamstrung distribution system. Proposed measures include Japanese participation in the Trans Pacific Partnership negotiations, easing agricultural land leasing laws and making it easier for corporations to create farms, thereby increasing efficiency and bringing more investment to the sector. So far, we give this sector a B in the interim report card (see table).

Japan's Interim Report Card

Topic	Grade	Comments
Energy	B+	Good moves to change R&D; budget commitment still too low.
Agriculture	B	Good so far, but important issues are yet unaddressed.
Employment	B-	Bold ideas on hiring and firing, but no action yet taken.
Government Reform	C+	National identification system is an excellent step, but rest of agenda is murky and stalled.
Education	C	Some good ideas, but small relative to needs; budget implications not clarified.
Medical Care	C	Moves so far are obvious; no clear change of medical system or incentives yet.
Electoral System	F	Plans are transparently cosmetic; no impact on underlying problems.
Immigration	Incomplete	Debate has yet to begin in earnest.
Tax System	Incomplete	Debate has yet to begin in earnest.

Source: Morgan Stanley MUFG Securities as of April 4, 2013

ELECTORAL REFORM. Electoral reform, one of the nine, is particularly critical. Under the current system, the weight of votes in older-than-average prefectures is far greater than in younger-than-average districts. Moreover, since voter participation rates for older voters are substantially higher than for younger ones, the impact of the voter disparities is magnified. Hence, the interests of older voters, such as high pensions and greater medical care spending by the government, are also overrepresented, making it difficult to get the nation back on a sustainable fiscal path. In our interim report card, electoral reform is getting an F. In our view, an outright failure might cause support for Prime Minister Abe and Abenomics to plunge, thus endangering the entire third arrow agenda. ■

Our Favored Overseas Plays

HERNANDO CORTINA, CFA

Senior Equity Strategst
Morgan Stanley Wealth Management

So far this year US equities have led global markets—the Dow Jones Industrial Average is up 13%, the S&P 500 Index 12% and the NASDAQ Composite Index 10% (through April 30). Even so, the Morgan Stanley Wealth Management Global Investment Committee (GIC) has recommended a tactical shift from US equities to international markets, including Japan, Europe and the emerging markets (see *Strategic and Tactical Asset Allocation Change: Moving Toward a Barbell Approach*, March 8, 2013). In its report, the GIC notes that while the US has led the recovery from the Great Recession, international markets now offer similar or more upside besides providing portfolio diversification. In addition, earnings growth, or the rate of change of growth, should be more attractive in some of these international markets than in the US.

Within our Strategic Equity Portfolio (STEP) Program, we have established meaningful exposure to non-US markets. Below are four of our favored industries or themes outside the US. They have been incorporated into our STEP portfolios using both US companies with significant overseas exposure and companies domiciled outside the US. These themes are based on our bottom-up views:

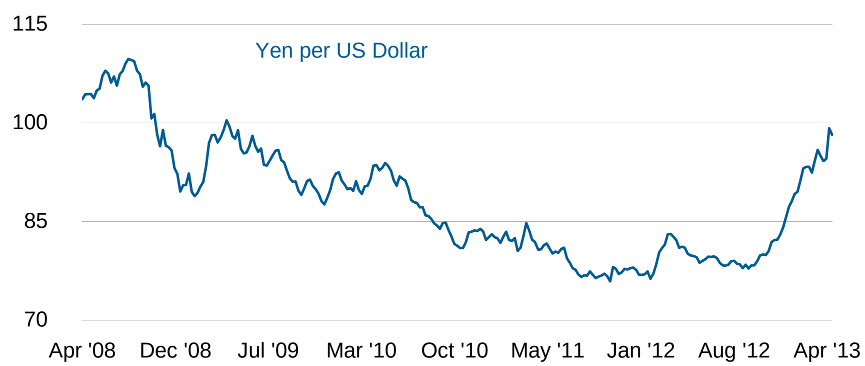
•**Japanese Automakers.** One of the major—and intended—consequences of the aggressive monetary policy implemented by the Bank of Japan has been a significant weakening of the yen versus the US dollar. Since September 2012, the yen has declined 21% versus the dollar (see chart).

We believe that Japan's automakers are among the most direct beneficiaries of the weakening yen, a trend that could have further to run. Approximately 50% of Japan's domestic auto production is exported, and those sales made in dollars or euros translate into more yen. Likewise, amid a gradually improving global auto market, sales of cars manufactured abroad are turned into higher profit when measured in yen. While MS & Co.'s global autos team does not expect a price war to break out, the team anticipates a shift in global market share in favor of the Japanese producers as they are in a position to improve the value proposition of their products. While the fundamental strength of Japan's automakers lies in their quality vehicles, brand loyalty and fuel efficiency, currency weakness provides a competitive boost, which we believe is likely to result in greater market share and profitability.

•**Emerging Market Consumer Companies.** Because of slowing exports, volatile commodity prices and inflationary pressures, the broad emerging market (EM) equity benchmarks have meaningfully lagged the S&P 500 during the past year. This, however, does not imply to us that the fundamental case for emerging markets based on higher economic growth, an expanding middle class and growing consumption of staple and discretionary items has been impaired.

Recently released data from the International Labor Organization (ILO) indicates that the number of middle class consumers in emerging markets more than doubled in the 10 years that ended in 2011 (see chart, page 12). Importantly, the ILO expects that the number of these EM consumers is set

Weaker Yen Should Help Japanese Automakers



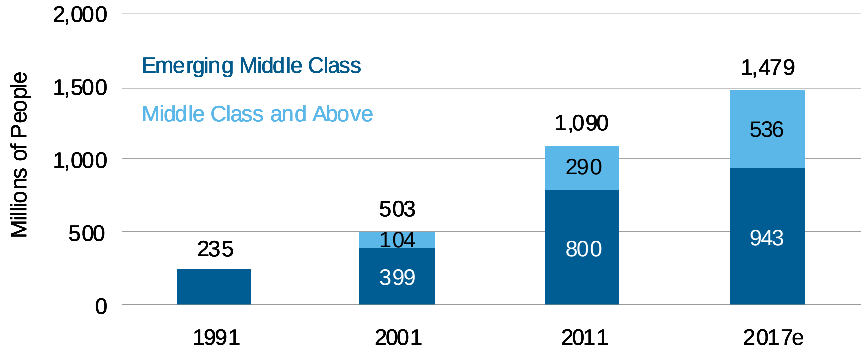
Source: Bloomberg as of April 19, 2013

to grow another 40% or so through 2017. Though growth appears slower than in the past decade, it stands in stark contrast to the stagnant, or even declining, consumption in most developed economies.

In this environment, it is imperative for global consumer companies to be able to access this expanding pool of EM consumers. Our favored industry segments within this broad universe include companies that sell infant formula, snacks, soft drinks, beer and beauty products, as well as fast-food restaurants. Most of these companies are domiciled in developed markets, but a number of EM-based companies are serving these consumers as well.

•**European Industrial Restructurings.** Yes, Europe has been mired in doom and gloom for a few years and the latest economic data still show an economy that's at best stagnant. That said, we see a few opportunities among globally oriented European industrial leaders as they embark on a restructuring wave. We have identified companies that we believe have the strength to navigate through the current cyclical weakness while at the same time taking actions to improve their profitability and position themselves for the next up cycle. In particular, these companies are reducing headcount, shifting production to lower-cost destinations and selling or spinning off non-core businesses. Focus areas include energy infrastructure, industrial automation and healthcare technologies. Key to success, in our view, is identifying those management teams that can make the difficult decisions to sell, spin off or shut down underperforming divisions.

Ascent of the Emerging Markets Consumer



Source: International Labor Organization as of January 2013

Note: Middle class is defined as income of \$4-to-\$13 a day. All dollar figures are calculated at purchasing power parity.

•**Overseas Tech Champions.** While US tech giants are most commonly identified as the leaders in the information technology sector, there are many companies domiciled overseas that stand tall in critical segments of the technology food chain or enterprise software, or are major providers of state-of-the-art consumer devices, in our view. Among those that appear favorable are the Asian semiconductor foundry giants, which dominate production of logic and communications chips. Separately, there are European software companies that are at the forefront of enterprise resource planning, business intelligence and cloud computing that are among the fastest-growing segments in technology globally. Last, while this remains a highly competitive segment, Asian, particularly Korean, companies continue to compete effectively in the consumer electronics and mobility industries. ■

Fundamentals Build Strong Foundation for REITs

VANCE EDELSON

REIT Analyst
Morgan Stanley & Co.

Real estate investment trusts (REITs) have performed in line with the S&P 500 Index during the past year, with the MSCI US REIT Index and the S&P 500 delivering a 14% return (as of April 24). Even so, MS & Co.'s REIT team expects REITs to outperform the broader market because the strong fundamentals that drove their results remain in place:

• Low interest rates spur investor appetites for REITs with strong yields.

• Given modest economic growth, interest rates are likely to remain low.

• REITs can finance external growth with cheap credit.

• Construction is limited, especially in the commercial arena, keeping new supply off the market.

We forecast gradual improvement in global fundamentals, with the US generally outperforming on occupancy and rental rates, with Asia Pacific beginning to rebound and Central and Eastern Europe, Middle East and Africa real estate markets apt to remain challenged. Ultimately, however, REITs are hybrid investment vehicles that trade not only on the fundamentals, but on the spreads relative to fixed income, which brings us to the question: What if interest rates rise?

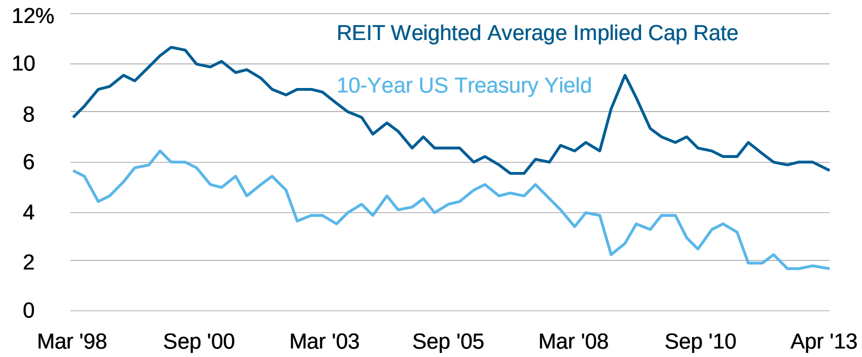
REITS' RISKS. While we do not expect it to happen anytime soon, it is worth assessing what may occur when the rates start to climb. We see several risks for REITs. First, all other things equal, REIT yields become less attractive relative to the rising rates on risk-free Treasuries. Next, if cap rates—net operating income as a percentage of the total value of a REIT's debt and equity—rise one percentage point in a rising-rate environment, net operating income needs to rise 17% as an offset, or investor returns fall. Rising rates can hurt REITs with floating-rate debt, as well as make it more costly for REITs to finance acquisitions through borrowings. Finally, just as low rates brought private equity investors to the REIT sector, higher rates might prompt them to seek returns elsewhere, thus becoming less of a valuation support mechanism.

However, there is no relationship between REIT returns and moves in the 10-year Treasury rate; rate increases have a negative impact but only in isolation. In reality, policy rate increases typically occur during periods of economic expansion, which are generally coincident with improving REIT fundamentals. Thus, REIT spreads over Treasuries diminish but the impact on the stock is generally offset by improved fundamental performance. Because REITs are equities, they respond more positively to improved economic conditions than do corporate bonds.

ECONOMIC CONCERNS. The other big question for REITs is: What happens if the economy falters and/or the market corrects? The economy is largely "housed" by commercial real estate, and the macro environment is instrumental to our REIT view. For the office and industrials REITs, an economic slump would hurt the key drivers, but relatively high dividend yields should help support the stocks, as should the hard assets they represent.

Ultimately, our 11 REIT subsectors have varying degrees of economic sensitivity, and should the economy deteriorate we would likely shift our focus away from industrial and office sectors and toward the more defensive health care REITs and those backed by "triple net leases." In such leases, the tenant pays not only the rent, but also the property's real estate taxes, insurance costs and maintenance. ■

Implied Cap Rate Shows REITs Are Attractive Relative to Treasuries



Source: Thomson Retures, SNL Financial, company data, Morgan Stanley & Co. Research as of April 24, 2013

Global Oil Demand Growth: The End Is Nigh

SETH M. KLEINMAN

Energy Analyst
Citi Research

After decades of robust growth in oil demand, the broad consensus in the oil industry and the analytic community is that oil demand will continue its inexorable rise through to 2030. In turn, this consensus underpins the belief that oil prices will have to stay high versus historical norms to bring forth enough supply to meet this ever-rising demand. The only matters seemingly up for debate are how fast oil demand will grow and how high prices will need to be to sustain supply growth.

TIPPING POINT. Citi's Energy team believes several developments give reason to question the consensus and raise the possibility that the tipping point for oil demand may come much sooner than the markets are expecting. Our research indicates that since 2000, global oil demand growth has averaged approximately 1.3% per year. Given the current high price environment and the observed drop in the oil demand/global GDP ratio we assume that this baseline growth rate drops slightly to 1.2%. This is our "business as usual" (BAU) baseline.

To estimate the impact of the improved fuel efficiency of new cars, we take our automobile equity team's estimate of a 2.5%-per-year improvement in fuel economy for new car and truck purchases and assume a 20-year turnover in the fleet; both of these assumptions are deliberately conservative. Note that we assume that transport fuel demand over the last few decades has been impacted by fuel economy improvements, which we back out to avoid double counting. By 2020, this improvement in the fuel efficiency of the global fleet already reduces projected global oil demand by 3.8 million barrels a day versus the BAU scenario.

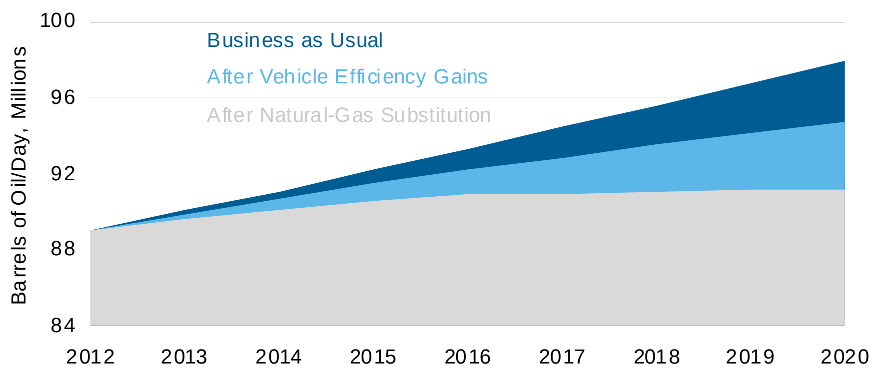
Clearly, we see opportunities to substitute natural gas for oil in shipping, light-duty vehicles, heavy-duty trucks, power generation, petrochemicals and various industrial processes. If we model the progressive substitution using fairly conservative assumptions, the resulting impact on oil demand growth is a formidable 3.5-million barrels a day by 2020 (see chart). Taken together, the improvement in global fleet efficiency and the substitution of natural gas for oil could be enough to create a plateau for global oil demand by the end of this decade. Our forecast for Brent crude prices at that time is $80 to $90 a barrel versus today's $103.

HIGHER PRICES LOWER DEMAND. The 230% rise in oil prices during the past 10 years has already resulted in a lowering of the ratio between global oil demand and GDP growth to 0.3% during the past five years from just below 0.6% between 2000 and 2005 (see chart, page 15). Even given Citi Research's fairly rosy outlook of 3.5% global GDP per year from 2014 onward, this would still only translate into about 1.2% per year growth in global oil demand. This is also only slightly below the observed average over the last 10 years, so we take this as our BAU assumption.

Higher oil prices are having more of an impact on consumers as subsidies have been removed in many key consuming countries, and the fallback for oil bulls, China, has already experienced a reduction in its oil demand growth. In a pattern similar to the abrupt slowdown in demand growth seen in the Asian Tigers in the 1990s, Chinese demand growth has slowed to a more tepid 3%-to-5% rate as compared with the double-digit growth of the early 2000s.

BETTER FUEL ECONOMY. Vehicle fuel efficiency has improved markedly since 2007, when the US enacted legislation aimed at raising fuel economy by 20% over 10 years. Similarly robust mandates

With Vehicle Efficiency Gains and Natural-Gas Substitution, Global Oil Demand Can Ease



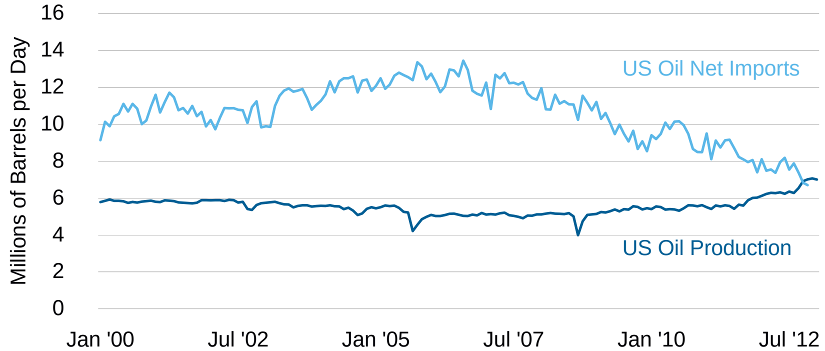
Note: Data for 2013 and beyond are estimates.

Source: Citi Research as of March 26, 2013 have been passed in several other key car markets since then, including the EU, Japan and Canada. Given the increasing focus on fuel economy in some key non-OECD members, including China, and the fact that enacted fuel economy standards around the world mandate annual fuel economy improvements of up to 4.7% for van fleets, we are comfortable with Citi Automobile research team's forecast of annual fuel economy improvements of 3% to 4% for light-duty vehicles. The improvements in US fuel economy are partially indicative of what is happening globally, though the US fleet is getting an added boost to fuel efficiency by the slowdown in SUV sales as a percentage of total sales.

Heavy-duty truck fleets are also seeing ongoing improvements and many key markets will see fuel economy mandates take effect later this decade. The standards in the US, to take effect midyear 2014, will require annual fuel economy improvements of 1.1% to 3.4% depending on the truck class. Chinese standards will take effect in marketing-year 2015 along with Japan's. The auto team assesses fuel economy improvements across the heavy-duty truck fleet for new trucks at 1% to 2% a year.

Given that cars make up about 60% of the total road fleet, we assume global fuel economy improves by 2.5% a year for new purchases. If we reduce this assumption to 1.5% but keep gas-for-oil substitution unchanged, we forecast global oil demand would continue to grow through to the end of the decade, but at a tepid 400,000 thousand barrels a day from 2015 to 2020.

US Oil Imports Fall as Domestic Production Picks Up



Source: US Energy Information Agency, Bloomberg as of April 29, 2013

IMPORTS DECLINE. The surge in US oil production thanks to the shale-oil revolution is now well documented. However, the collapse in US net oil imports is even more pronounced. In December 2012, US oil production climbed 1 million barrels per day year over year, but net oil imports fell 1.5 million barrels (see chart). Despite the raft of positive economic data in 2012 for the US, oil demand fell by 2.1% year over year. The US energy story is now becoming one of a revolution in demand as well as in supply. Distillate demand, which is typically well correlated with economic activity, fell by 3.9% in 2012, while gasoline demand was also down 0.6%. This drop in oil demand is partly the result of natural-gas substitution in a variety of sectors. This development is taking root in the US due to the large gap between natural-gas prices and oil-product prices. However, because in many countries the spread between oil and gas is still substantial, the gas-for-oil substitution should continue. Even in countries where the spread is compressed, such as China, environmental concerns are bolstering the shift from oil to gas. ■

Crumbling Pillars of Gold

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In our view, the dramatic sell-off in gold last month, which drove the price of an ounce of gold to $1,367 from $1,483 in just three days, was the result of a concerted short-sale effort. The shorts found fertile ground for their assault largely because the major pillars supporting a nearly 14-year-old bull market had begun to erode. As such, we have lowered our price targets to $1,487 in 2013 and $1,563 in 2014. Those are markdowns of 16% and 15%, respectively, from our previous forecasts.

Perhaps the most visible pillar is the rise of investment demand through exchange-traded funds (ETF) that hold physical gold, a trend that emerged in 2003. Not only was demand waning, but there was a persistent liquidation from these funds that started in February; our data show aggregate holdings of gold ETFs declined by some 8 million ounces between January and mid April.

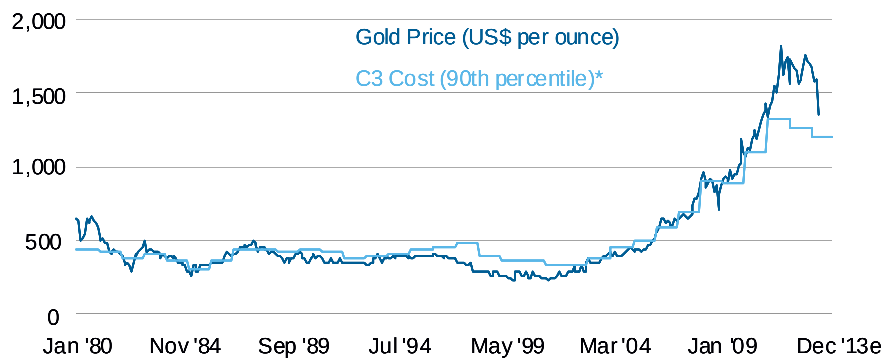
CENTRAL-BANK ACTIVITY. Another important pillar was central-bank activity: controlled selling by those in the developed markets and increased purchases by those in the emerging markets. In recent months, however, concerns have risen that developed-market central-bank selling will accelerate to a point where it neutralizes the buying from emerging market central banks.

Cyprus is not required to sell gold as part of its European Union bank bailout, but any money raised from a sale must go toward covering any losses from loans to its banks. While the size of a potential gold sale from Cyprus is small, of greater concern is the precedent it set. The combined gold of fiscally challenged Portugal, Spain, Italy and Greece is about 3,228 tons, a level surpassed only by Germany and the US. Two other pillars of the long-term bull market—the unwinding of the gold hedges and anemic mine output—have largely played out, and have little influence on prices.

INVESTOR SENTIMENT. Investor sentiment is also a concern. In Morgan Stanley Australia's view, the failure of gold to perform in the face of a new chapter in the long-running Euro Zone sovereign debt and banking crisis and heightened political tensions on the Korean peninsula point to declining investor appetite as a safe-haven asset. Further evidence of this declining demand was in the negative gold-price reaction to speculation that the Federal Reserve might be preparing for an earlier-than-anticipated exit from Quantitative Easing 3 (QE3) or lower bond purchases under the current program. We do not believe that the Fed is likely to materially change its stance on QE3, despite the significant expansion in global liquidity represented by recent changes to Japanese monetary policy. In a market where bearish sentiment is rampant, perceptions to the contrary have a disproportionate impact.

PRICE OUTLOOK. Where does the gold price go from here? The data suggests that, over the medium to long term, spot gold prices tend to trade closely with the marginal C3 mining costs, defined as the combined level of cash mining cost, fully allocated corporate costs and mine asset depreciation (see chart). Until April 2011, gold traded in a tight range around these costs, but the relationship broke down when the price surged, reaching $1,923 in late 2011. Our current cost estimate is $1,200 per ounce, which puts it strikingly close to the current spot price. Consequently, while a sharp move below this level would materially endanger returns to new and some existing mining projects and choke off new supply, after exhausting the current selling pressure, we believe gold will find support reasonably close to this level. ■

Gold Usually Trades Close to the Marginal Cost of Production



*C3 Cost is the combined level of cash mining cost, fully allocated corporate cost and mine asset depreciation. Costs after April, 2013 are forecasts

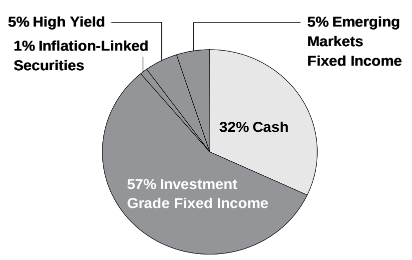
Source: Wood Mackenzie Brook Hunt, Morgan Stanley Research as of April 25, 2013

Global Investment Committee Tactical Asset Allocation

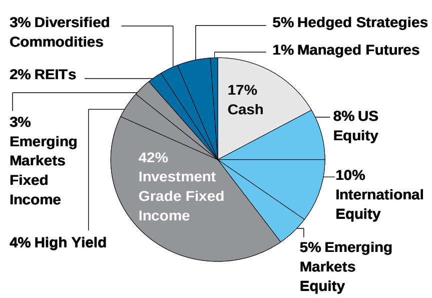
The Global Investment Committee provides guidance on asset allocation decisions through its various model portfolios. The eight models below are recommended for investors with up to $25 million in investable assets. They are based on an increasing scale of risk (expected volatility) and expected return.

CONSERVATIVE ››› MODERATE ›››

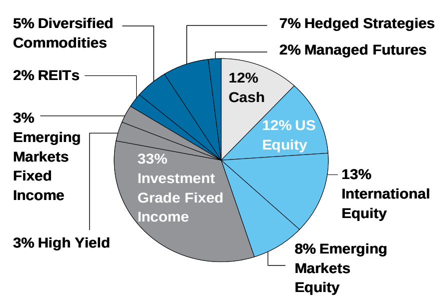
MODEL 1



MODEL 2

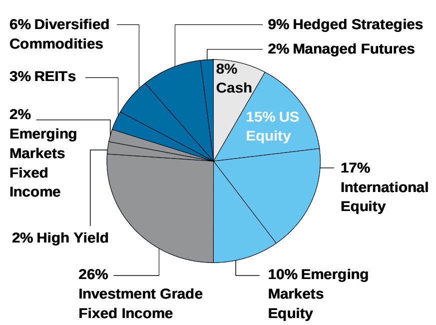


MODEL 3

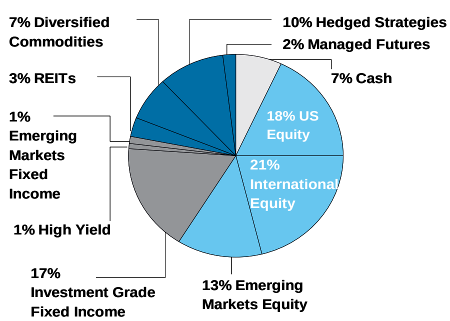


MODERATE ››› ›››

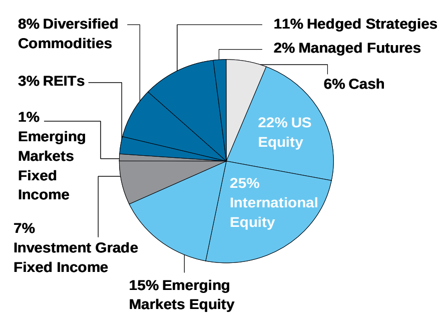
MODEL 4



MODEL 5

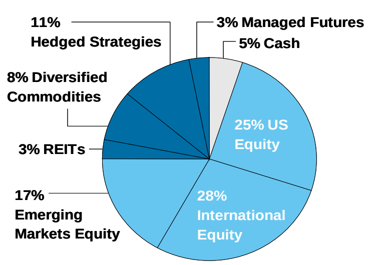


MODEL 6

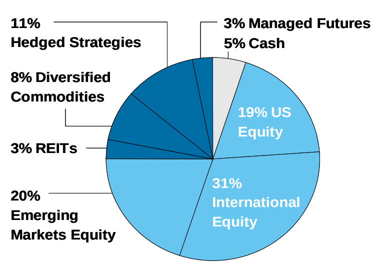


AGGRESSIVE ›››

MODEL 7



MODEL 8



KEY

- CASH
- GLOBAL FIXED INCOME
- GLOBAL EQUITIES
- ALTERNATIVE INVESTMENTS

Note: Hedged strategies consist of hedge funds and managed futures.

Tactical Asset Allocation Reasoning

Global Equities	Relative Weight Within Equities	
US	Underweight	We recently decreased our exposure on a relative basis. The US has led the global recovery from the financial crisis, owing to its more aggressive monetary and fiscal policies. At this stage, relative valuation and the rate of change in policy and growth look more attractive in other regions.
International Equities (Developed Markets)	Equal Weight	We recently increased our exposure to Japan and Europe. In Japan, a meaningful political change has taken place, leading to significant currency depreciation, which is bullish for equity prices. Economic growth and structural issues remain in Europe, but they are well known and priced in, making this an attractive region over our seven-year strategic time horizon.
Emerging Markets	Equal Weight	Policymakers' focus has generally shifted away from containing inflation toward supporting growth, with room for further stimulative measures.

Global Fixed Income	Relative Weight Within Fixed Income	
US Investment Grade	Overweight	We recommend investors hold shorter maturities given potential capital-loss risks associated with the current record-low yields. For example, a 20-basis-point increase in rates can wipe out the entire annual yield on a 10-year bond. Within investment grade, we prefer corporates and securitized debt to Treasuries.
International Investment Grade	Equal Weight	Yields are low globally so not much additional value accrues to owning international bonds beyond some diversification benefit.
Inflation-Linked Securities	Underweight	With significantly negative real rates all along the yield curve, we see little value in these securities at the moment. There are better ways to hedge inflation risk.
High Yield	Underweight	Yields are near record lows while the upside is capped due to call provisions on many of these issues.
Emerging Markets Bonds	Equal Weight	With spreads and yields at record lows, we recently moved to equal weight from overweight.

Alternative Investments	Relative Weight Within Alternative Investments	
REITs	Equal Weight	Further upside appears limited if interest rates begin to rise, but property markets continue to recover in the US, making this an acceptable risk.
Commodities	Equal Weight	Monetary easing is accelerating on a global basis, which historically has been associated with higher commodity prices, especially in the precious-metals sector. China's weak GDP performance has been weighing on industrial commodities, but China's economy is starting to stabilize.
Hedged Strategies (Hedge Funds and Managed Futures)	Equal Weight	We recently decreased our exposure to hedged strategies to further diversify our overall allocation to alternatives. This asset class can provide uncorrelated exposure to equity and other risk-asset markets and tends to work well in periods of difficult financial market conditions.

Index Definitions

CITI BROAD INVESTMENT GRADE INDEX This index tracks the performance of US-dollar-denominated bonds issued in the US investment grade bond market. It includes institutionally traded US Treasury, government-sponsored, mortgage, asset-backed and investment grade securities.

CITI US HIGH YIELD MARKET INDEX The index includes publicly issued US-dollar-denominated non-investment grade, fixed-rate, taxable corporate bonds that have a remaining maturity of at least one year, are rated high yield using the middle rating of Moody's, S&P and Fitch, respectively, and have $600 million or more of outstanding face value.

CREDIT SUISSE LEVERAGED LOAN INDEX This index is designed to mirror the investable universe of the US-dollar-denominated leveraged loan market. The index frequency is monthly.

CREDIT SUISSE HIGH YIELD INDEX This index is designed to mirror the US-dollar-denominated high yield debt market. The index frequency is weekly and monthly. Issues must be rated no higher than Baa1/Ba1 by Moody's or BB+ or BBB+ by S&P.

DOW JONES INDUSTRIAL AVERAGE A widely followed indicator of the stock market, the Dow is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industries.

S&P 500 INDEX Regarded as the best single gauge of the US equities market, this capitalization-weighted index includes a representative sample of 500 leading companies in leading industries of the US economy.

NASDAQ COMPOSITE INDEX The index is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market. The index was developed with a base level of 100 as of Feb. 5, 1971.

MSCI US REIT INDEX This index broadly and fairly represents the equity real estate investment trust opportunity set with proper investability screens to ensure that the index is investable and replicable. The index represents approximately 85% of the US REIT universe.

Disclosures

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International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Alternative investments which may be referenced in this report, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, 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 a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor.

Managed futures investments are speculative, involve a high degree of risk, use significant leverage, have limited liquidity and/or may be generally illiquid, may incur substantial charges, may subject investors to conflicts of interest, and are usually suitable only for the risk capital portion of an investor's portfolio. Before investing in any partnership and in order to make an informed decision, investors should read the applicable prospectus and/or offering documents carefully for additional information, including charges, expenses, and risks. Managed futures investments are not intended to replace equities or fixed income securities but rather may act as a complement to these asset categories in a diversified portfolio.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

A taxable equivalent yield is only one of many factors that should be considered when making an investment decision. Morgan Stanley Smith Barney LLC and its Financial Advisors do not offer tax advice; investors should consult their tax advisors before making any tax-related investment decisions.

Value investing does not guarantee a profit or eliminate risk. Not all companies whose stocks are considered to be value stocks are able to turn their business around or successfully employ corrective strategies which would result in stock prices that do not rise as initially expected.

Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

Rebalancing does not protect against a loss in declining financial markets. There may be a potential tax implication with a rebalancing strategy. Investors should consult with their tax advisor before implementing such a strategy.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional U.S. Treasuries in times of low inflation.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Interest income from taxable zero coupon bonds is subject to annual taxation as ordinary income even though no interest payments will be received by the investor if held in a taxable account. Zero coupon bonds may also experience greater price volatility than interest bearing fixed income securities because of their comparatively longer duration.

Investing in foreign emerging markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks.

Investing in foreign markets entails greater risks than those normally associated with domestic markets, such as political, currency, economic and market risks. Investing in currency involves additional special risks such as credit, interest rate fluctuations, derivative investment risk, and domestic and foreign inflation rates, which can be volatile and may be less liquid than other securities and more sensitive to the effect of varied economic conditions. In addition, international investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

The indices selected by Morgan Stanley Wealth Management to measure performance are representative of broad asset classes. Morgan Stanley Wealth Management retains the right to change representative indices at any time.

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