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Before the Senate Budget Committee

"The 2014 Outlook: Moving From Constant Crises to Broad-Based Growth"

February 4, 2014

The U.S. economy is set to experience stronger and broader growth as the middle of the decade approaches. Underpinning this optimism are the private economy's muchimproved fundamentals: Businesses are highly profitable and very competitive, households have reduced debt burdens and are saving more, and the banking system is well-capitalized and liquid.

Housing, which had been at the center of the economy's problems, is expected to add significantly to growth. As has been the case since the housing crash, homes are being built too slowly to meet the demand generated by demographic trends. More and more housing markets across the country are going from overbuilt to undersupplied.

Also supporting stronger growth is the fading of fiscal austerity. Government spending cuts and tax increases have been a powerful headwind to the economy in recent years. Not since the defense drawdown after the Korean War has the economy been affected on this scale by federal action, but this headwind will diminish quickly as fiscal policy stabilizes.

The key missing ingredient for stronger growth has been confidence. Businesses have been reluctant to take the leaps of faith that historically have been common by this point in past recoveries to expand operations. Hiring and investment have been lackluster. This is changing, however, as businesses appear to be finally getting back on track. Various surveys of large and small firms show sentiment meaningfully improved since lawmakers reopened the federal government last fall and reached a budget deal that eased political tensions in Washington.

Real GDP is expected to accelerate from the disappointing 2% growth pace that has prevailed throughout the recovery to 3% this year. Growth in 2015 is expected to accelerate further to a robust rate approaching 4%. At this pace, the economy is on track to reach full employment by late 2016.

A number of threats could change this upbeat outlook, however. Political brinkmanship over the Treasury debt limit, which must be increased in the next few weeks, and the winding down of the Fed's bond-buying program are immediate worries. Global threats, from turmoil in emerging markets to a renewed euro zone crisis, are serious. Political pressures put the Middle East and Asia in constant danger of boiling over.

The economy also faces daunting long-term challenges. The federal government's near-term fiscal outlook is stable, but the nation's debt load is uncomfortably high, and unless policymakers come to terms on entitlement and tax reform soon, deficits and debt will balloon early in the next decade.

The American Dream could fade unless the increasingly skewed distribution of income and wealth is addressed. Forces driving inequality, including technological change and globalization, are firmly in place. Near term, policies such as extending emergency unemployment insurance, expanding the Earned Income Tax Credit, and raising the minimum wage would help. Longer term, policy should focus on raising educational attainment, increasing worker training, reforming immigration laws, developing infrastructure, and lowering political and social barriers to income mobility.

But while the path will not be straight up and significant hurdles remain, the U.S. economy's prospects are brighter than they have been in years.

Flush businesses

A necessary condition for sustainably strong economic expansion is a solid private sector balance sheet. The economic wrongs that precipitated the Great Recession have been largely righted. Leverage is low and the economy is bubble-free. Businesses and households have significantly reduced their debt loads and the financial system is well-capitalized. And while stock and house prices have risen strongly over the past two years, they appear to be still in line with corporate profits, household incomes and rents.

The financial health of nonfinancial businesses has arguably never been better. Corporate profit margins are almost double their long-term average, as businesses have significantly reduced cost structures.ⁱⁱ Unit labor costs—compensation measured in relation to productivity—have barely budged since the recession. In manufacturing, labor costs are about where they were a quarter century ago.

Manufacturers are also receiving a lift from the surge in oil and natural gas production and the resulting lower prices. U.S. natural gas prices are likely to remain well below global levels for the foreseeable future, as exporting natural gas will be difficult and there are limited uses for it in the transportation system. Since natural gas is an

increasingly important energy source for utilities, electricity prices will also remain low compared with those of the rest of the world (see Chart 1).

300 Industrial electricity Italy prices, \$ Mwh 250 200 Japan Germany 150 • U.K. China • ____ India France 100 U.S. 50 Korea Natural gas price, \$ mmBTUs 0 10 20

Chart 1: U.S.'s Energy Advantage

Sources: Country sources, Moody's Analytics

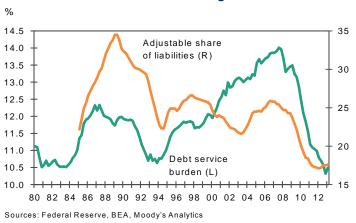
Businesses have also done a good job shoring up their balance sheets, as debt service is low and they are awash in cash. The quick ratio—comparing cash and other short-term assets to short-term liabilities— for nonfinancial companies has never been as high. Businesses' large cash hoard is a barometer of their skittishness about taking risks and expanding their operations, but it also signals they have the financial resources necessary to do so whenever they feel sufficiently comfortable.

Firms have locked in record low interest rates. Corporate bond issuance has soared since the recession as corporate bond rates have plunged. The rate on Baa corporate bonds (the lowest investment grade) has hovered near 5% for the past two years, marking the lowest borrowing costs since the 1940s. Rates on below-investment grade corporate bonds have never been as low. iv

Working down debt

Households have significantly reduced their debt burdens. The share of after-tax income needed to remain current on their payments is as low as it has been since at least 1980 (see Chart 2). This is due to both rock-bottom borrowing costs and more than a 10% reduction in the amount of debt owed. That reduction was driven by a rise in mortgage defaults, which, while not an ideal way to resolve a financial imbalance, was therapeutic. Originations of mortgages and credit cards have also been weak.

Chart 2: Households Deleverage and Lock In



Lighter debt burdens combined with lower unemployment are causing a rapid improvement in credit quality. According to Equifax, the dollar delinquency rate on all household liabilities is approaching 4%, down from a peak of 8%, and not far from the 3% rate that prevails in the best of times. Credit card, auto, and consumer finance loan delinquencies are already as low as they have ever been.

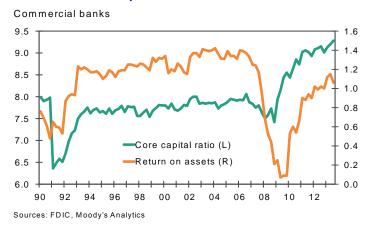
The household deleveraging process, which place significant constraints on consumer spending and growth, is over. Originations are picking up and household credit growth has turned positive. Like businesses, households are well-positioned for any increase in interest rates, since a refinancing boom in recent years has allowed them to lock in low rates. Only a fifth of household liabilities are now tied to rates that adjust from year to year. Vii

Some problems remain. More than 2 million first-mortgage loans are in or near foreclosure, and a rising number of home equity loans are approaching payment resets. But rising house prices make these problems manageable. Rapidly rising student loan debt is also a worry, but not on a scale that will threaten the broader recovery.

Capital-rich banks

The banking system is well-capitalized and highly liquid. Banks are holding high-quality Tier-1 capital equal to more than 9% of their assets. This compares with an average capital-to-asset ratio just over 7% since the FDIC was established in the 1930s (see Chart 3). With credit losses continuing to decline and net interest margins widening as the yield curve steepens, banks' profitability and capital levels should continue to improve.

Chart 3: Well-Capitalized and Profitable Banks



To make absolutely sure that the banking system has sufficient capital, the nation's largest banks are required to stress-test their balance sheets and income statements every year, showing they can withstand the darkest of economic scenarios. The current round of stress tests envisages an economic downturn at least as severe as the Great Recession. The tests also require banks to prepare for a rapidly rising interest rate environment, just in case the Federal Reserve is unable to gracefully unwind its bond-buying and zero interest rate policies.

With sturdy balance sheets, banks now look to make more loans. They have eased underwriting standards for commercial and industrial, real estate and consumer loans. ix Standards for residential mortgage loans are still tight, but this should change in coming months given improving credit quality, the end of the refinancing boom, and increased clarity about various regulatory and legal issues that have bedeviled lenders. Net loans and leases at commercial banks are expanding at a solid mid-single digit pace.

Bubble free

Stock and house prices have been on a tear. Despite the recent correction, stock indexes are near record highs, up an astounding 30% last year and almost 50% over the past two years. House prices, as measured by Case-Shiller indexes, are up almost 15% over the past year and 20% over the past two. Surging asset prices have lifted household wealth and supported consumer and business confidence, providing a vital tailwind to the recovery.

Despite these gains, however, stocks and housing appear appropriately valued. There is no indication that speculation and leverage have produced bubbles in either stocks or housing. Equity prices are being supported by record corporate earnings, putting price-

earnings ratios for the major indexes not far from their long-run averages. House prices still appear low by historical standards relative to household incomes and only slightly high compared with effective rents (see Chart 4).^x

2013Q3 Undervalued Correctly valued Overvalued Significantly overvalued Sources: CoreLogic, BEA, PPR, Moody's Analytics

Chart 4: Most Housing Is Appropriately Valued

To be sure, stock and house prices have been pumped up by the Federal Reserve's bond-buying program. xi Corporate bond yields, which are important to stock valuation, and fixed mortgage rates are an estimated 100 to 150 basis points lower than they would have been if the Fed had not engaged in quantitative easing. The lower interest rates have in turn increased stock prices 10% to 15% and house prices as much as 5%.

As the Fed normalizes monetary policy, this will put downward pressure on asset valuations and prices. The Fed has said this process will occur over several years, however, suggesting that the impact on stock and bond prices will be drawn out and not acute.

Housing recovery

The recovery in the housing market augurs well for the broader economy. While housing has come a long way since hitting bottom two years ago, home sales and construction remain low given demographic needs.

This is clearest with regard to homebuilding. Builders are constructing new singleand multifamily homes and manufactured housing at a pace of just over 1 million units per year. Across the business cycle, demand for new housing units is estimated at 1.7 million units. This trend demand is composed of 1.15 million new household formations, 375,000 replacement structures and 175,000 second and vacation homes. xii

Recent demand for new homes has run well below that trend, but homebuilding has been even weaker. The number of vacant homes is thus falling rapidly, and what was a significantly overbuilt housing market just a few years ago will soon be undersupplied (see Chart 5).

Vacant homes for sale, for rent, and held off market, ths 11,500 **Current Housing Supply** 1.050.000 Single-family 650,000 10,500 Multifamily
Manufactured Housing 350.000 50.000 9,500 Trend Housing Demand 1,700,000 Obsolescence 375,000 8.500 7,500 Vacancy 6,500 5.500 94 96 98 00 02 04 06 80 10 12 Sources: Census Bureau, Moody's Analytics

Chart 5: Housing Will Soon Be Undersupplied...

Homebuilding is thus set to ramp up significantly over the next several years. Activity may even be supercharged for a time given prospects for a period of very strong household formation. Many twentysomethings have been unable to find jobs in recent years and continue to live with their parents. The number of U.S. households with adult children at home is up by more than 1.5 million since the Great Recession. Once the job market picks up, many of these young people will strike out on their own, fueling demand for new homes. This has already begun as demand for multifamily rental units that cater to younger people is robust.

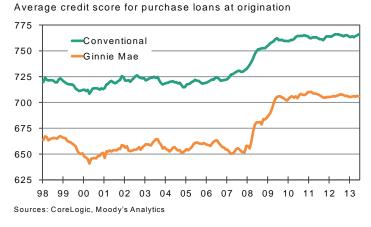
The housing recovery is vital to the job market. Every newly built single-family home supports nearly four new jobs over one year in construction, manufacturing, transportation, retailing and financial services. Every new multifamily unit supports closer to two new jobs over a year. If homebuilding simply increases from the current pace of 1 million units to its trend rate of 1.7 million, at least two million new jobs will be created (700,000 additional housing units multiplied by an average three jobs per unit). This by itself will reduce the unemployment rate by 1.25 percentage points.

While housing's demographic underpinnings are strong, the pace of recovery faces some threats. Investor demand for homes has weakened over the past year. Investors had been buying up distressed properties, attracted by low prices and strong rental demand coming out of the housing bust. But with fewer remaining distressed properties, higher house prices and easing rental demand, single-family housing is no longer such a compelling investment.

For the housing recovery to continue, first-time and trade-up homebuyers must fill the void left by investors. Last summer's surge in interest rates complicated this transition. Fixed-rate mortgages jumped from a nearly record low below 3.5% in the spring to more than 4.5% by the fall. While these rates are still low by historical standards, the rise, combined with double-digit price gains in many markets made single-family housing much less affordable. Potential homebuyers suffered sticker shock.

Potential first-time homebuyers also face exceedingly tight mortgage credit. All but those with the strongest balance sheets find it difficult to obtain loans. The average credit score among those receiving home purchase loans this year exceeds 750, some 50 points higher than the average score for all households and 50 points higher than the average among those receiving home purchase loans a decade ago, before the bubble (see Chart 6).

Chart 6... Mortgage Underwriting Is Tight



A number of mutually reinforcing factors are making credit tight. Lenders have reassessed how much risk they are willing to take on, both in reaction to losses suffered in the collapse and because they now recognize costs associated with riskier lending that were not fully appreciated before. These include the cost of servicing distressed borrowers and the reputational and legal risks associated with servicing significant numbers of delinquent or defaulting loans.

Lenders also worry that Fannie Mae, Freddie Mac, or the Federal Housing Administration will force them to take back loans sold to these agencies because of mistakes in underwriting. All three agencies grew more aggressive about putting defaulting loans back to lenders in the wake of the housing collapse. Along with uncertainty about the rules they must follow to avoid such "put-backs," this leaves lenders willing to make only very high-quality loans with little prospect of default.

Despite the threats, housing is expected to get back on track by spring. Fixed mortgage rates have recently fallen toward 4.25%, and mortgage standards appear to be slowly easing as lenders become more confident in the recovery and work through their issues with Fannie Mae, Freddie Mac and the FHA. Assuming the Federal Reserve is able to manage future interest-rate increases so they are consistent with an improving job market, housing will be an important contributor to the economy's growth. Housing activity will not be dented by higher mortgage rates if there are plenty of jobs lifting homebuyers' purchasing power and confidence.

Fading fiscal austerity

Economic growth will also be significantly boosted as fiscal austerity fades. The hit to real GDP growth last year due to federal government spending cuts and tax increases is estimated at 1.5 percentage points. In other words, if federal fiscal policy had been simply neutral with respect to the economy, neither adding to nor subtracting from growth, the economy would have grown 3.4% in 2013. Since state and local government policy was neutral with respect to the economy, this was the growth rate in the private sector.

If policymakers make no further changes to spending and tax policy, the economic drag from fiscal policy will fade to no more than 0.4 percentage point this year, and the drag in 2015 and 2016 will be minimal (see Chart 7). The budget deal signed into law at the end of 2013 appears to rule out further significant changes to fiscal policy for the foreseeable future. The accord, which did away with the across-the-board sequester cuts, set federal government spending levels for two years.

Federal discretionary fiscal policy contrib. to real GDP growth, % Stimulus Sequester Obamacare 3 Bush taxes over \$400k Payroll tax & UI 2 Recovery Act Other spending Cash for clunkers Tax rebate checks Total fiscal policy 0 Austerity -2 08 09 10 11 12 13 14 Source: Moody's Analytics

Chart 7: Fiscal Austerity Peaks

The fiscal drag this year would be even less if lawmakers would extend the emergency unemployment insurance program. It would be unprecedented not to extend the program given the still very high unemployment rate. The 6.7% rate recorded for December is near the average peak in recessions since World War II, to which emergency UI has typically been part of the policy response (see Chart 8). An extension of the program would reduce the fiscal drag on real GDP growth in 2014 by an amount between 0.15 and 0.25 percentage point.

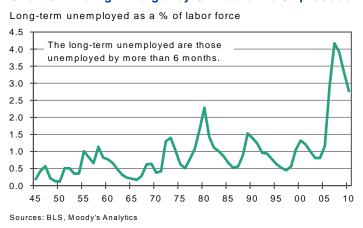


Chart 8: Ending Emergency UI Would Be Unprecedented

One side effect of not extending the emergency UI program would be a drop in the unemployment rate by an estimated 0.25 percentage point in the next few months. But this would result from increased retirements by older unemployed workers, who will leave the workforce once they stop receiving UI benefits, exacerbating the recent decline in labor force participation.

In the groove

The main missing ingredient for stronger growth has been confidence. The nightmare of the Great Recession has weighed heavily on the collective psyche, and confidence has been rocked throughout the recovery by a string of debilitating shocks that were all but impossible to handicap. Most notable among these are the on-again, off-again European debt crisis and Washington's incessant political brinkmanship.

The uncertainty created by budget battles in Congress has been a serious constraint on growth through the economic recovery. A statistical analysis shows that increased political uncertainty from 2008 through 2013 (and thus including the government shutdown at the end of last year) lowered real GDP by \$170 billion, reduced employment by 1.2 million jobs, and raised the unemployment rate by 0.75 percentage point.^{xv}

The budget deal achieved at the end of 2013 was thus very encouraging. It appears to have effectively ended the bitter bipartisan warfare over spending and taxes that twice brought the nation to the brink of debt default. Political tension and uncertainty have eased, and sentiment has improved.

The growing optimism has been clearest in financial markets, with stock prices near record highs and corporate credit spreads tightening as bond investors demand a smaller risk premium to buy businesses' debt. The price of gold, the ultimate safe-haven investment, fell sharply last year. xvi

Consumers are not as cheerful, particularly those in lower-income households that do not benefit from rising stock and house prices. Yet even here optimism is increasing. Consumer sentiment falls each time federal lawmakers become embroiled in another budget battle. Encouragingly, however, confidence has rebounded quickly since the latest standoff and is now as high as it has been since before the recession.

Perhaps most importantly, businesses are much more upbeat. At the start of 2014, sentiment is as strong as it has been in the 11-year history of the Moody's Analytics weekly survey (see Chart 9). More than half the responses to the nine questions posed in the survey are positive, compared with the average of closer to one-third since the survey began. Only 10% of responses are negative.

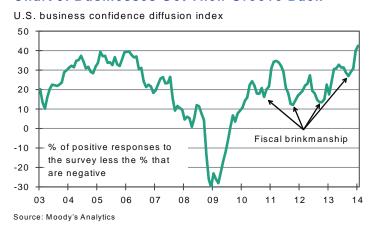


Chart 9: Businesses Get Their Groove Back

Expectations regarding the economy's outlook through the first half of 2014 are notably cheery. Close to three-fourths of respondents say conditions will improve further during the first half of this year. Expectations are stronger than assessments of current economic conditions, generally a positive leading indicator for growth and consistent with the view that the economy will accelerate.

Secular stagnation?

The tough economy has engendered fears that something fundamental is amiss—that since the late 1980s periods of strong growth and full employment have occurred only when powered by speculation and asset bubbles. Of course the bubbles eventually burst, pushing the economy into increasingly severe downturns and high unemployment. Under this view the economy's longer-term path is characterized by secular stagnation. xvii

In this perspective, the economy achieved full employment in the late 1980s only because of a bubble in commercial real estate, powered by an out-of-control savings and loan industry. Full employment in the late 1990s grew out of the stock market's technology bubble, and the housing bubble was necessary to achieve full employment in the mid-2000s.

Such pessimism is misplaced. Yes, growth in the current recovery has been disappointing, but mostly because of fiscal austerity. The private economy has posted very respectable gains, expanding at a 3.3% annualized pace. In 2013, private sector growth was robust at almost 4% (see Chart 10). And this happened while businesses and households were shrinking debt and asset markets have remained bubble-free. With fiscal austerity fading, a stronger private economy will become evident.

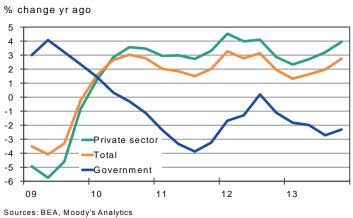


Chart 10: Private Sector Posts Respectable Gains

Bubbles and financial crises have been a fixture of the U.S. economy since its inception. The near collapse of the financial system in 2008-2009 produced the most severe downturn since the 1930s. However, the Great Recession was due not to inherent weakness in the economy, but rather to policy missteps and to idiosyncratic problems that have more or less been addressed.^{xx} This is not to say there will not be financial crises in

future, when the financial system is overflowing with euphoria and most investors feel nothing can go wrong. Mistakes will surely be made.

The secular-stagnation hypothesis will soon be tested. If businesses remain cautious and fail to increase hiring and investment, it would lend support to that gloomy perspective. But if businesses' animal spirits are unleashed by the end of Washington's budget wars and greater clarity around reforms of the financial and healthcare systems, stagnation will seem to be only a passing cloud.

Economic growth will be slower in coming decades than in past decades, but because of well-anticipated demographic changes that will slow growth in the labor force. Babyboom retirements are accelerating, and foreign immigration has slowed, reflecting better economic conditions in the emerging world and lower fertility rates. xxi

Policy missteps

The principal threat to stronger U.S. economic growth this year is a policy mistake. Most immediately, Congress must raise the Treasury debt limit again. The Treasury's borrowing authority runs out in the next few days, and while it will use various extraordinary measures to continue paying its bills, it will run out of options by early March given that cash needs grow to pay tax refunds.

Given the political fallout from last fall's budget battle, chances are lawmakers will come to terms before they do significant damage to confidence and the economy. But given Congress' past behavior, more political brinkmanship and even a breach of the debt limit cannot be completely ruled out.

The Federal Reserve must also gracefully manage interest rates higher consistent with an improving job market. XXIII This will require winding down its bond-buying program and normalizing short-term interest rates as unemployment declines and the economy reaches full employment. Getting this right will be tricky: An undesirable surge in long-term rates last summer was triggered when Fed officials merely began to talk about slowing the pace of asset purchases. Investors seemed to assume that tapering meant the Fed would begin raising short-term rates soon after quantitative easing ended.

The Fed does appear to have convinced bond investors, at least for now, that it has no plans to raise short-term rates soon. Long-term rates are starting the year roughly where policymakers want them. If rates again start to rise too quickly for comfort, policymakers can respond using a range of tools. Nonetheless, the Fed faces a difficult task, and mistakes are possible.

Emerging-market threat

Other meaningful threats to stronger U.S. economic growth come from overseas. Financial turmoil, weak growth and simmering political unrest in the emerging world are most worrisome. Emerging-market economies have powered global growth for more than a decade and account for more than one-half of global GDP. But while growth continues in the emerging world, it is falling well short of expectations, fomenting tensions that boiled over this past year in Brazil, Egypt, Thailand and Turkey. Argentina, China, India and Russia have also experienced greater strife.

Part of the problem is that the outsize growth of emerging markets has been fueled by excess credit growth and speculation. Quantitative easing by central banks in the developed world has exacerbated this, as liquidity-flush global investors have piled into emerging-market investments. The other part of the problem is that policymakers in developing economies have not been especially adept at addressing these excesses. China's on-again, off-again efforts to rein in rapid credit growth, and Brazil's botched attempts at managing hot-money flows into its financial markets are testimonial to this.

These stumbles come at a time when an expanding middle class in the developing world desperately wants more economic and political freedom. A taste of both has left people increasingly frustrated at their political elites' inability to deliver more. Endemic corruption is making matters worse. Some demonstrations have turned violent, causing global investors to grow skittish—yields on emerging-market debt have widened considerably relative to Treasuries—weighing further on growth (see Chart 11).

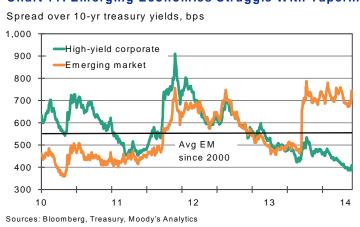


Chart 11: Emerging Economies Struggle With Tapering

So far, there has not been much fallout from this on the U.S. economy. Oil and other commodity prices are stable and U.S. export growth is slow but firm. However, a more serious faltering among emerging markets, especially in China, would be difficult for the global economy to absorb.

Tensions in the Middle East also threaten to be an economic drain. The wars in Iraq and Afghanistan have been extraordinarily costly, and the Syrian civil war and the military coup in Egypt are the latest worries. Mounting acrimony between Shia and Sunni Muslims more broadly, fueled in part by funding from Shia Iran and Sunni Saudi Arabia, could cause unrest to escalate. If oil production in the region is disrupted, it would quickly become a serious global economic problem.

The U.S. is less sensitive than it once was to swings in energy prices, thanks to the growth in domestic shale oil and natural gas production. But it would still hurt a lot if global energy prices spike.

The euro zone's travails

The euro zone crisis was dormant last year as the European Central Bank's aggressive actions convinced investors the currency union would remain intact. Most important was the announcement of the ECB's Outright Monetary Transactions program at the end of 2012, which permits it to purchase the debt of troubled sovereigns. The ECB has not been forced to use the OMT, but the mere fact that it can has settled bond yields. Italian and Spanish 10-year bonds, for example, carry very manageable yields below 4% (see Chart 12).

Spanish 10-yr sovereign yields ECB extraordinary actions: ОТМ SMP=Securities market program 7.0 LTRO LTRO=Long-term refi operation 6.0 5.0 10 11 12 14 0.8 0.9 13 Sources: Bloomberg, Moody's Analytics

Chart 12: Euro Zone Hangs Together

With the odds of a euro zone crackup fading, financial markets have rallied, confidence has improved, and the region's recession has ended. Germany's economy is enjoying solid growth, and even those of countries on the euro zone periphery are more stable. France and Italy are the most disappointing, as those countries have been slow to adopt structural reforms, and thus their economies are increasingly uncompetitive.

The euro zone is expected to grow enough this year to stem the rise in unemployment. This is critical, since political fissures evident across the single-currency region could easily widen with unemployment above 12%, and the jobless rate among younger workers approximately doubles that. Politics appears especially dysfunctional and fragile in Italy, France, Greece, Portugal and Spain.

A key test of whether the zone's recovery is sustainable will be this year's European bank stress tests. These are part of the zone's efforts to better integrate its banking system and revive the flow of credit. Bank lending to households and businesses is declining, particularly on the periphery where lending rates are much higher, because of uncertainty about banks' financial stability. This is not consistent with continued growth. By engaging in truly stressful stress tests that require undercapitalized banks to raise sufficient equity, the hope is lending rates will decline and credit will flow more normally.

For the stress tests to succeed, however, it is necessary that European policymakers define a clear resolution mechanism for banks that are unable to raise capital, and to have a sufficiently large bailout fund backed by the zone's sovereigns to help too-big-to-fail institutions if they need capital and are unable to raise it from private investors. There has been progress, but it is unclear whether it is enough for the testing to work. If the process fails, the euro zone's recovery could be stillborn.

Another developing concern for the euro zone is disinflation. A regional core inflation rates below 1% means that some countries are suffering outright deflation. Falling prices crimp demand as consumers put off purchases, waiting for prices to drop further, and increase pressure on debtors suffering weaker wages and profits. Sovereign debt loads also continue to rise despite significant fiscal austerity as nominal GDP declines.

Pressure on the ECB to respond to mounting deflation is growing. Compared with the Fed, the Bank of England and Bank of Japan, the ECB has been much slower to reduce interest rates and expand its balance sheet. This is one reason why the euro's dollar exchange rate is above \$1.35, well above its long-run equilibrium nearer \$1.20. The high currency value has been manageable for the very competitive German economy, but painful for the rest of Europe.

Until the ECB adopts a more aggressive monetary stance, the euro zone will struggle with uncomfortably low inflation, an overvalued euro, and weak or nonexistent growth. There is a risk that the euro zone growth will falter in 2014, precipitating another round of financial turmoil. While this likely would not be enough to upend the U.S. recovery, it could be enough to short-circuit stronger growth once again.

Forecasting with a ruler

Economists have a tendency to forecast with a ruler, assuming the economy's recent performance will continue into the future. Many such forecasts were issued in the last decade, assuming the "great moderation" meant the good times would never end.

Similarly, straight-edge adherents now conclude that the difficult times that have occurred since the recession are here to stay. This view holds that it will take years to return to full employment and that growth will be much slower than we want for the foreseeable future—that secular stagnation is the new normal.

Forecasting with a ruler is inevitably wrong, however, and this will become evident again in 2014. While the coming year could see another false start, the greater likelihood is that the U.S. recovery will finally evolve into a full-blown, self-sustaining expansion. The fundamentals are as good as they have been for decades, and it is increasingly difficult to envisage shocks that could undermine them. Worries exist, including economic and political stumbles in the emerging world, Europe's travails, and the possibility of botched fiscal and monetary policy in Washington. But these threats do not feel as existential as those the economy has been grappling with since the recession.

The U.S. economy should have a breakout year in 2014.

ⁱ Full employment is defined as a 5.7% unemployment rate and a nearly 64% labor force participation rate. As of December 2013, unemployment is 6.7% and labor force participation is 62.8%.

ⁱⁱ The after-tax corporate profit margin rose to 19.6% in the third quarter of 2013 according to the BEA. The average since World War II is 11.1%.

ⁱⁱⁱ The quick ratio is currently 50%, according to the Federal Reserve's financial accounts (formerly known as the Flow of Funds). The average quick ratio since World War II is 35%.

^{iv} The yield on corporate junk bonds is currently near 7%, 400 basis points over 10-year Treasury yields. The average spread since the 1980s is closer to 500 basis points. Covenants on junk bonds have also eased significantly, further lowering the cost to corporate borrowers.

^v According to Equifax credit file data, total household liabilities have fallen from a peak of \$12.4 trillion in August 2008 to \$11.1 trillion in December 2013.

vi Bankcard originations during the first three quarters of 2013 totaled almost \$150 billion, according to Equifax. This is substantially higher than the \$90 billion originated during the first three quarters of 2010 at the low, but is well below the \$225 billion originated in 2007 before the recession.

vii At the peak in the mid-1980s, 35 percent of household liabilities had an interest rate that adjusted within one year of a change in market interest rates.

viii The Federal Reserve's stress-testing process is also known as the <u>Comprehensive Capital Analysis and</u> Review or CCAR.

ix This is based on the Federal Reserve's quarterly Senior Loan Officer Survey.

x The map shows valuation of metropolitan area housing markets based on house price-to-income and house price-to-rent ratios compared with their pre-bubble long-run averages.

xi The economic impact of Quantitative Easing is estimated in "The Federal Reserve's Quantitative Easing: Weighing the Cost-Benefit Trade-Off," Chris Lafakis and Ryan Sweet, Regional Financial Review (May 2013).

xii Each new household must by definition live somewhere and is thus a source of demand for a new home. The estimate that trend household formation is 1.15 million per year is based on projections of population and household size by age group and ethnicity.

xiii This is based on simulations of the Moody's Analytics structural model of the U.S. economy.

xiv The Bipartisan Budget Act of 2013 was signed into law on December 26, 2013.

xv The methods used to measure political uncertainty and quantify its impact on economic growth are described in "A Budget Battle Postmortem," Mark Zandi, Moody's Analytics special study (October 2013). xvi Gold prices are currently near \$1,200 per Troy ounce, down from a peak of almost \$1,800 per Troy ounce, and back to where they were in mid-2010.

xvii This perspective was expressed well by former Treasury Secretary Lawrence Summers in a recent IMF speech and seconded by Paul Krugman in a New York Times op-ed.

xviii This is the growth in real GDP excluding government spending between the second quarter of 2009 and

fourth quarter of 2013. It understates the underlying strength of the private sector as tax increases and the multiplier impacts of reduced government spending also significantly reduce growth in the private sector. xix On a fourth-quarter to fourth-quarter basis.

xx A detailed accounting of the causes of the 2008-09 financial crisis and Great Recession is provided in

Financial Shock, Mark Zandi (FT Press, 2008). xxi The Census Bureau released an update to its <u>long-term population projections</u> in May 2013. While it has long factored in the retiring baby-boom generation into its projections, it meaningfully lowered its projections for foreign immigration in its current forecast.

xxii At equilibrium—that is, with full employment, growth at potential rates, and inflation at the Fed's target—the federal funds rate should be approximately 4% and the 10-year Treasury yield closer to 5%. The equilibrium 10-year Treasury yield equals the sum of forward short-term real interest rates of 2.5%, inflation expectations of 2% (equal to the Federal Reserve's target), and a 0.5% term premium.

xxiii One option would be to adopt a lower threshold for core consumer expenditure inflation, pledging not to raise short-term rates unless inflation is greater than, say, 1.5%. Core inflation has recently slowed to near 1%. An even more aggressive step would be to reduce the current 6.5% unemployment threshold for raising short-term rates.