

# The insurers' moment: Credit lending after the crisis

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## IN BRIEF

Insurers face a vastly changed investing environment as we emerge from the post-crisis era. On the one hand, we anticipate that slow economic growth and the burdens of an aging world population will constrain sovereign and investment grade yields for the foreseeable future. On the other, a more stringent regulatory environment, for banks and insurers alike, could present sizable opportunities in private credit:

- The contraction of the shadow banking system has created a funding void that insurers, with relatively predictable liabilities, are well positioned to fill.
- As banks, in Europe particularly, seek to shore up their capital ratios through deleveraging, a large supply of private loans should become available, creating in effect a buyers' market.
- Capital adequacy rules, based on Europe's Solvency II regime, should enhance the value to insurers of thoroughly researched and carefully structured private loan portfolios.

In sum, the private lending market offers insurers a means to diversify away from sovereign and investment grade debt and reap the liquidity premium potential of their liabilities.

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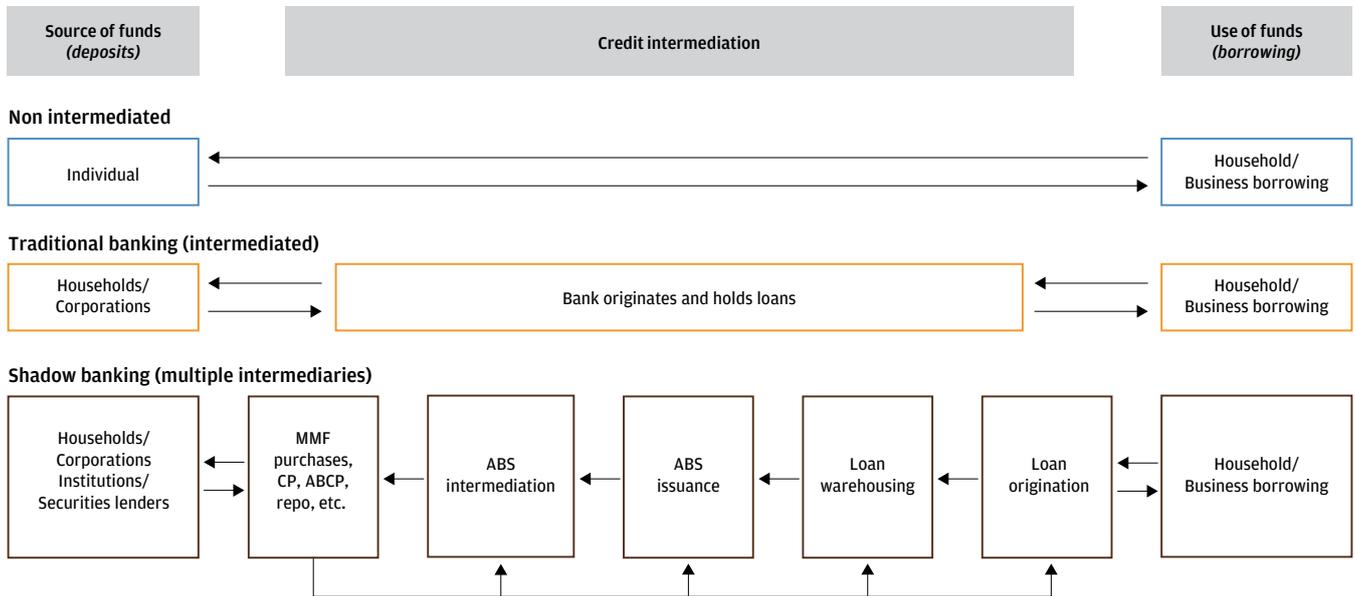
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The recent financial crisis underscored three features of the global system of credit creation: the ultimate resiliency of traditional regulated bank lending, the inherent riskiness of lightly regulated shadow banking and a chronic shortfall between the funding needs of long-term business borrowers and traditional bank funding sources. Shadow banking, as we define it, originated in a series of financial innovations in the mid-1970s. The term fit the practice for two reasons. First, the innovations essentially duplicated the traditional banking functions of maturity, liquidity and credit transformation. Traditional banking built its business on highly liquid deposit liabilities made relatively stable and secure from bank runs in the U.S. with the advent of FDIC insurance during the Great Depression. Shadow banking, by contrast, funded its activities by issuing commercial paper, repurchase agreements (repo) and other structured instruments and selling them to money market funds, fixed income mutual funds and similar large-scale "wholesale" investors (**Exhibit 1**, next page).

Second, traditional banks sponsored many of the shadow banks, moving assets off their corporate balance sheets to special purpose vehicles (SPVs). Relatively unencumbered by regulatory constraint (but also, fatefully, unsupported by the regulatory backstops of deposit insurance and access to the Federal Reserve's discount window), the SPVs could employ greater leverage. While the traditional banking system could thus share in shadow banking's greater profit potential through the SPVs, it also shared the SPVs' vulnerability to bank runs.

Pieces of the action: Lightly regulated shadow banking engaged “wholesale” investors in the process of credit transformation

EXHIBIT 1: LENDING—TRADITIONAL BANKING AND SHADOW BANKING COMPARED



Source: The Federal Reserve Bank of Dallas (November 2012).

Key: MMF—money market funds; CP—commercial paper; ABCP—asset-backed CP; repo—repurchase agreements; ABS—asset-backed securities. Charts and graphs shown above and throughout this Investment Insight are for illustrative purposes only.

The repercussions of shadow banking’s collapse are still reverberating. Wholesale flows, the source of shadow banking funding, have yet to return to pre-crisis levels (Exhibit 2). Banks have to adapt to a new, more stringent regulatory environment, and consequently corporate and real estate borrowers are facing stiffer credit requirements. This has simultaneously put a brake on economic recovery and created opportunities for new sources of credit exposure for the insurance industry.

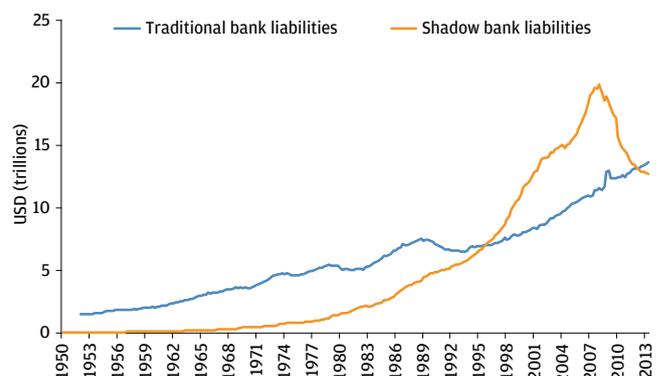
Private lending into the breach

The gap left by shadow banking’s sharp contraction offers an attractive opportunity to insurers working through professional asset managers. Asset managers, acting as advisors to institutional lender-investors, originate loans just as traditional banks would. In addition to overseeing credit research and selection, they arrange the necessary documentation and maintain the loan administration and analytics systems. Not only does the individual insurer benefit from the asset manager’s operational economies of scale, it can capture the “new issue premium” directly—rather than ceding it to the larger retail funds, as ample evidence suggests is often the case now.

Not least among the asset manager model’s advantages is its contrast to shadow banking. Unlike shadow banking’s “regulation lite” approach, lending in the asset manager model takes place in the context of the highly regulated insurance industry. And whereas shadow banking leveraged short-term funds to make long-term loans, incurring sizable liquidity risks in the process, the asset manager model looks to match long-term loans with the long-term, but largely predictable, liability profile of insurance lenders. The European Commission

The shadow vanishes: Shadow bank assets have lagged since the financial crisis as a result of heightened regulation

EXHIBIT 2: RESULT OF THE FINANCIAL CRISIS: A SHIFT IN OVERSIGHT AND REGULATION OF CREDIT MARKETS



Source: Federal Reserve; data as of 1Q2013.

acknowledged the prudence of this approach in a recently published green paper, which states, “The diminished role of banks in long-term lending opens up new needs and opportunities for other financial institutions and market-based intermediation to channel financing to long-term investments. Given the longer time horizons of their business models, institutional investors—such as (life) insurance companies, pension funds, mutual funds and endowments—represent suitable providers of long-term financing.”<sup>1</sup>

## A new regulatory environment

As arguably one of the most important consequences of the global financial crisis, the world’s governments and their regulators have undertaken a far-reaching and ongoing series of banking reforms. In 2010, the U.S. Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act to reinforce direct regulatory supervision of the financial sector. At the same time, the Basel Committee on Banking Supervision ratified revised voluntary regulatory standards, known collectively as Basel III.<sup>2</sup> Basel III, which builds upon previous Basel accords, governs bank capital adequacy, stress testing to gauge banks’ ability to function in unanticipated and extremely adverse circumstances, and market liquidity risk. The reforms seek to address the regulatory shortcomings that enabled shadow banking to proliferate and contributed to the crisis. Basel III’s provisions to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage should have profound impacts on global lending practices.

Basel III’s implementation will take place in stages between 2013 and 2019, as it introduces two new liquidity requirements: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). The LCR is a stress test of an institution’s ability to withstand a severe liquidity freeze that lasts 30 days. Beginning in 2015, the LCR will mandate the minimum ratio of total assets to total cash outflows under stress scenario assumptions, after liquidity haircuts (the loss that would be incurred if these assets were to be liquidated in the middle of a severe financial crisis). The results will likely require many banks to hold more and higher-quality capital than called for under Basel II.

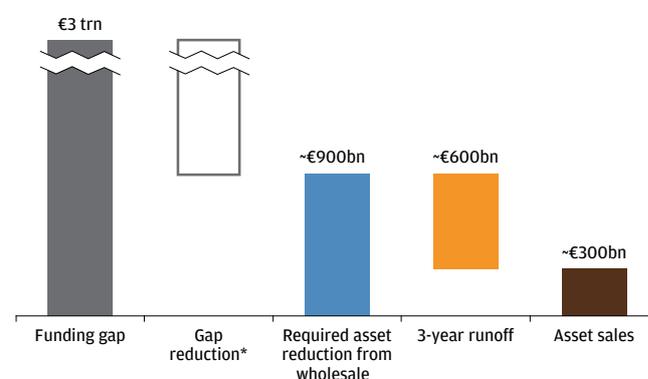
The NSFR is intended to cover risks that stem from excessive maturity mismatches. It essentially requires banks to match assets (that is, their loans) with liabilities (such as deposits) of comparable duration. In other words, it forces banks to raise long-term obligations to match long-term assets like senior loans and project finance. Any reduced availability of long-term liabilities would mean reduced term lending by banks. Maturity transformation would become more expensive in any case, because Basel III levels a substantially greater capital charge against longer duration loans.

## Deleveraging impacts

The changed regulatory environment is likely to force banks to deleverage, just as shadow banking funding from hedge funds, middle market collateralized loan obligations (CLOs) and bank proprietary trading desks is drying up. This broad pullback opens a wide gap between loan demand and credit supply—a gap we expect to persist. According to an analysis by the Oliver Wyman consultancy, the potential eurozone funding shortfall amounts to €3 trillion (\$4.05 trillion, £2.49 trillion) (Exhibit 3).<sup>3</sup> Central bank support and retiring debt reduces this gap considerably, to €900 billion. The gap narrows by a further two-thirds after factoring in loans scheduled to mature within the next three years. That still leaves a hefty sum—€300 billion—in loans that banks have to sell in the coming years.

### Loans for sale: European banks will need to dispose of some €300 billion in loans to meet stringent new capital requirements

EXHIBIT 3: EUROPEAN BANK PROJECTED DELEVERAGING



Source: Oliver Wyman; data as of 2012.

\* Gap to be reduced by sustained central bank support, retail asset/trading asset reduction, etc.

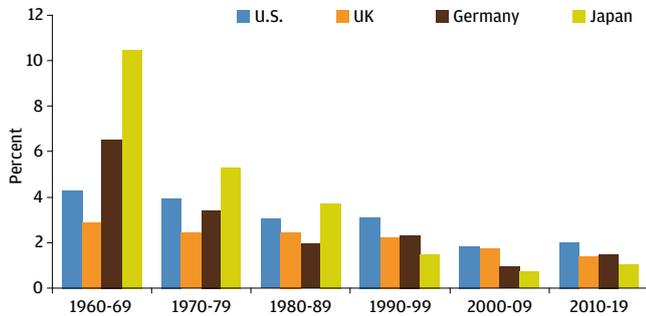
<sup>3</sup> John Whitworth and Emma Byron, *The €200 billion opportunity: Why Insurers Should Lend More*, Oliver Wyman (2012)5.

<sup>1</sup> “Long-term financing of the European economy,” European Commission Green Paper (March 2013)9.

<sup>2</sup> While each country has initiated important regulatory reforms with significant implications for banks, for the purposes of our paper we will focus our discussions on Basel III, because it sets global regulatory standards.

**Arrested developments? Declining developed market growth since the 1960s has been matched by declining interest rates since the 1990s**

**EXHIBIT 4A: ANNUAL GDP GROWTH RATES**



Source: J.P. Morgan, Bloomberg; data as of June 30, 2013.

The structural changes in the lending markets are coming together to create an opportunity for insurers to pick up compelling yields across a range of private credit asset classes, each with varying levels of risk-based capital intensity. To be sure, insurance companies will not completely replace traditional bank lenders, but they are hardly new to the game.

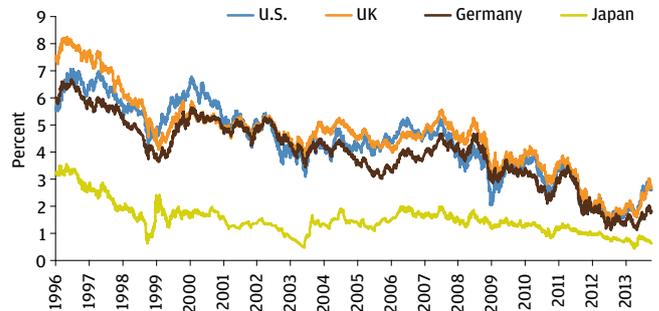
Their role as providers of long-term corporate capital extends across decades. In fact, the increased role of insurers in corporate, real estate and infrastructure markets is already influencing lending terms, making credit both easier to come by and cheaper.<sup>4</sup>

## Low for longer

The measures developed market central banks have taken since the crisis to hold policy rates near zero as a means of revitalizing their economies were exceptional, but they should not obscure the long-term fundamentals. The global financial crisis culminated a long, steady decline in interest rates worldwide. Economic growth rates in developed markets have been declining for decades, a trend that consensus estimates suggest will persist and foster chronically low rates (Exhibits 4A-B).

Although central bank efforts to promote growth by suppressing rates have made headlines, aging demographics may well have a more lasting structural effect. The percentage of those over age 65 in the developed markets

**EXHIBIT 4B: YIELD TO MATURITY ON 10-YEAR GOVERNMENT BONDS**

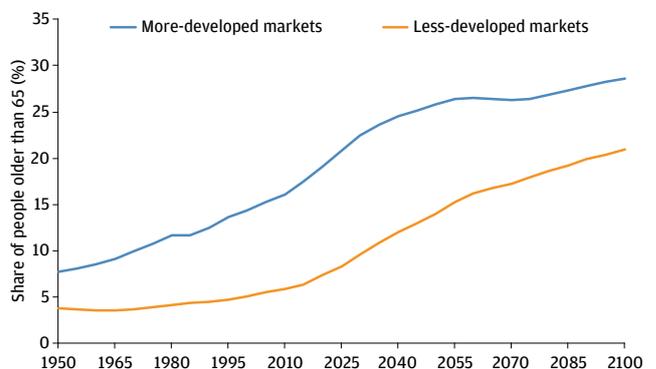


Source: J.P. Morgan, Bloomberg, International Monetary Fund; data as of March 31, 2013.

has risen from 10% in 1970 to more than 12.5% in 1990 and 15% in 2010, and it is expected to reach 25% around 2040<sup>5</sup>, according to United Nations' statistics, which also forecast that emerging markets demographics will follow a similar trajectory (Exhibit 5). As populations in the industrialized nations have aged, a steadily larger share of government revenues has gone toward funding state-run pension and entitlement programs. This has limited capital expenditures in areas that promote economic expansion—education, infrastructure and basic research—reducing future growth prospects and compounding downward pressures on interest rates.

**Global graying: Life expectancy has increased in emerging as well as developed markets since the 1990s**

**EXHIBIT 5: POPULATION DEMOGRAPHIC TRAJECTORY**



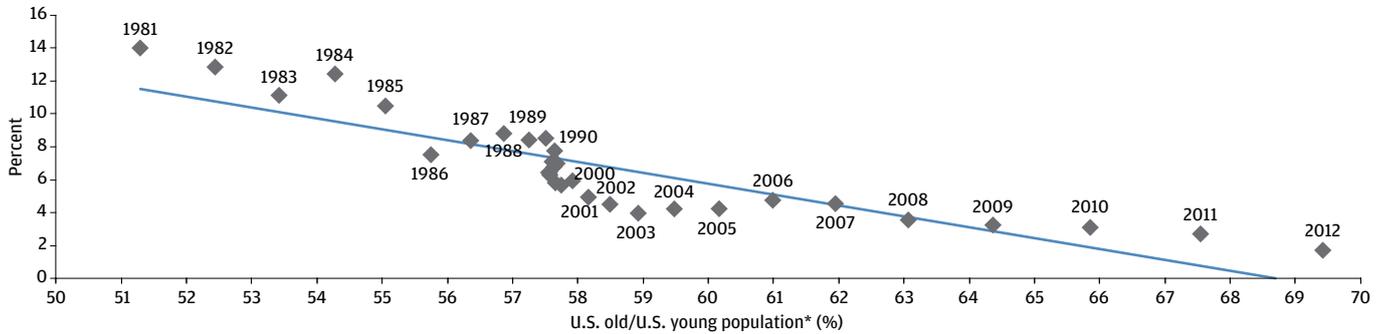
Source: J.P. Morgan, United Nations; data as of June 13, 2013.

<sup>4</sup> Anita Likus, "Insurers step up role in real-estate lending," *Wall Street Journal* (December 7, 2011).

<sup>5</sup> *World Population Prospects: The 2012 Revision*. United Nations (2013).

**Sliding scales: U.S. population has steadily aged over the last generation, and interest rates have steadily declined**

**EXHIBIT 6: AVERAGE YIELD ON 10-YEAR U.S. TREASURIES**



Source: Bloomberg, United Nations; data as of June 13, 2013.

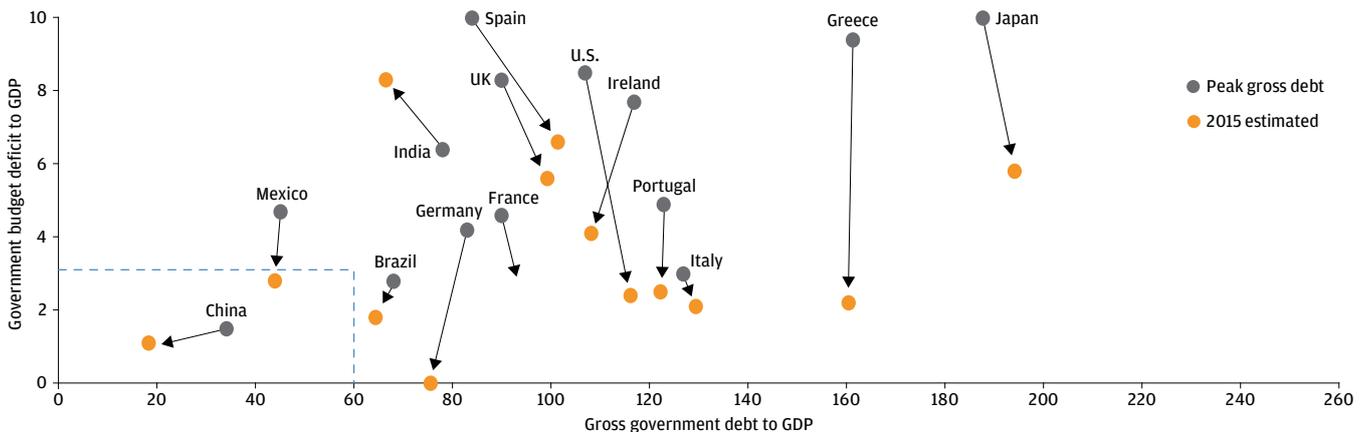
\*U.S. old/U.S. young population is the ratio of American population 65 years old and older to the population 15 years old and younger.

The aging demographic, which has already exerted an influence on macroeconomic fundamentals, should have a parallel and increasing impact on fixed income technicals. Older investors tend to shift allocations away from volatile assets, such as equities, and rebalance their portfolios in favor of stable investments, such as government and corporate bonds. If recent U.S. experience is any guide, rising demand for fixed income assets will weigh on the yields of both government bonds and investment grade credit (Exhibit 6).

“Low for longer” has a third aspect that augments the fundamental and technical: a policy dimension. We anticipate that policy efforts to bolster government finances and stabilize sovereign debt-to-GDP ratios, including off-loading retirement burdens on the private sector, may well act as a further brake on sovereign issuance and, as important, suppress growth (Exhibit 7). This perfect storm of factors—fundamental, technical and policy—makes the challenge of securing a high and stable income extraordinarily difficult for insurance investors.

**Austerity bites: Nations throughout the world intend to reduce debt-to-GDP ratios sharply in the coming years**

**EXHIBIT 7: GOVERNMENT DEBT/DEFICIT AS % OF GDP, PEAK YEAR\* VS. 2015 TARGET**



Source: J.P. Morgan; data as of September 30, 2013.

\*Peak year is the year between 2006 and 2012 with the highest gross debt-to-GDP ratio. The corresponding deficit-to-GDP ratio is taken for the same year. The peak year for each country is: France, Ireland, Italy, Portugal, Spain, UK, U.S., Japan and Brazil—2012; Greece—2011; Germany and China—2010; Mexico—2009; India—2006.

Dotted line indicates minimally acceptable debt ratios specified in the 1992 Treaty of the European Union (60% debt/GDP and 3% deficit to GDP).

### Safe isn't what it used to be

**Exhibit 8A** shows the rolling average yield of 10-year U.S. Treasuries, which can serve as a proxy for the book yield of a long-term U.S. investor. Similarly, **Exhibit 8B** uses the rolling average yield of the 10-year German Bund as a proxy for the book yield for a long-term eurozone investor. Although past investments currently produce an adequate book income in the U.S. and the eurozone alike—the rolling 10-year yield as of September 30, 2013 stood at 3.5% in the U.S. and 3.2% for the Bund—we project a decline under the impact of reinvestment at lower rates. Assuming constant Treasury and Bund yields of 2.8% and 1.9% (respectively the 10-year yields as of August 31, 2013), the book yield would fall to 2.6% by 2020. Portfolios invested in British Gilts and German Bunds face a similar fate. Bund income could fall even further—by 125 basis points.

So in this post-crisis environment, safe assets come to seem less than safe over the long run. Although the efficacy of sovereign bonds against short-term tail risk remains robust almost by definition, the bonds themselves pose a growing threat to long-term portfolio values as well as portfolio income. The prolonged yield drought that we foresee does not imply a corresponding period of rate stability. As last summer's taper rumors amply demonstrated, interest rates can still spike higher—and markets can correct—with breathtaking speed. Indeed, with the Fed merely postponing its taper and Europe showing increasing signs of shaking off its recession, we can reasonably expect rates to rise in the near term, even if that doesn't imply that they will return to historical norms any time soon. Increasingly, then, insurance investors will have to vary the risk budgets and the degrees of risk-based capital intensities of their allocations. They will have

to look beyond sovereign bonds to strategies that can generate additional portfolio income by taking advantage of higher credit spreads and capturing liquidity premia.

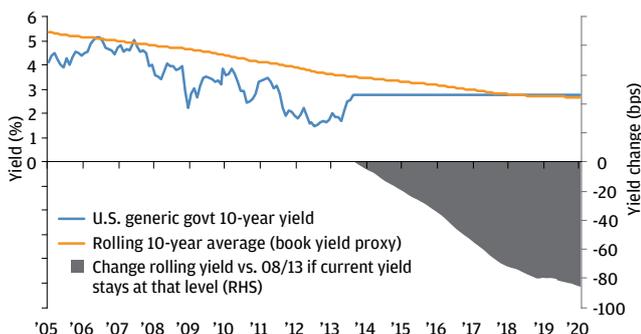
### Implications of Solvency II for private credit portfolios

Crucial to formulating the insurance industry's long-term yield enhancement strategies, of course, is its own regulatory environment. In common with most post-crisis financial regulatory regimes, that environment is in flux. The catalyst of insurance industry change is the prospective adoption of Europe's Solvency II Directive governing capital adequacy. When final, Solvency II will replace the 40-year-old Solvency I Directive with a set of rules intended to stake out a level playing field for a unified European insurance market. Rather than relying on Solvency I's obsolete undifferentiated ratios, Solvency II calculates required capital based on granular stress tests across the spectrum of quantifiable risks an insurance company faces.

Though much delayed in implementation, Solvency II has influenced insurance rule making in developed and emerging markets alike. The UK, through its Individual Capital Adequacy Standards, and Switzerland, with the Swiss Solvency Test, have taken the lead in adopting so-called economic models of capital adequacy, and their efforts have resonated globally. Regulators in Australia, South Africa, Japan and China are all working toward new capital evaluation standards.

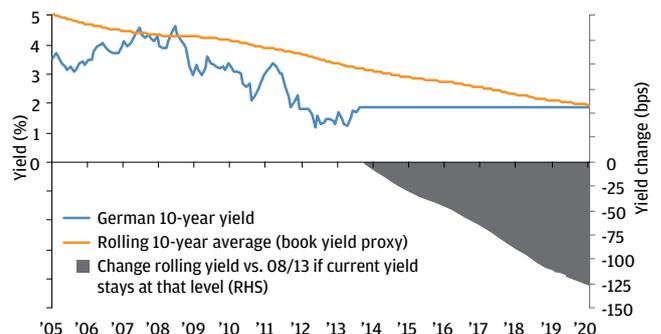
#### Slippery slopes, steep shortfalls: Persistent low government yields could greatly reduce bond income in the years ahead

EXHIBIT 8A: U.S.



Source: J.P. Morgan, Bloomberg; data as of September 30, 2013.

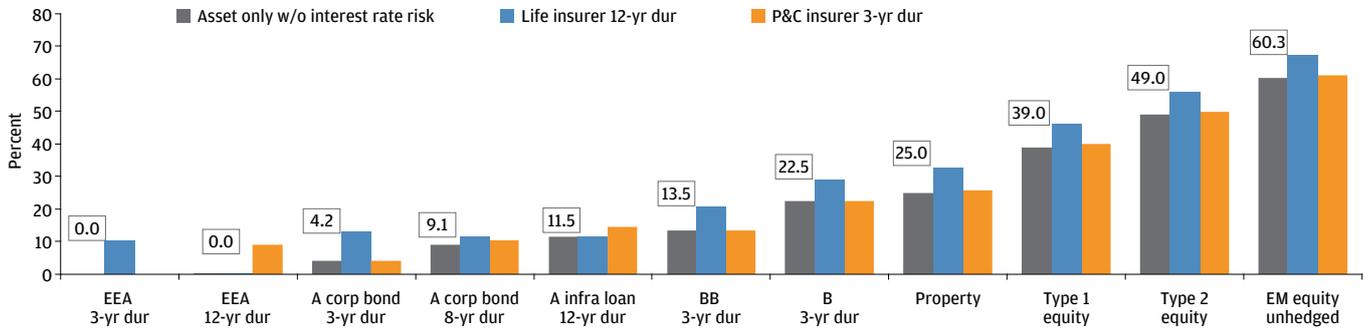
EXHIBIT 8B: EUROPE/GERMANY



Source: J.P. Morgan, Bloomberg; data as of September 30, 2013.

**Harsh regime: Solvency II capital requirement could level a heavy charge on insurance company growth**

**EXHIBIT 9: CAPITAL TREATMENT UNDER SOLVENCY II**



Source: J.P. Morgan; data as of December 31, 2012.

Solvency capital requirement is based on best estimates and represents J.P. Morgan’s interpretation of revised technical specifications for the Solvency II valuation; published December 21, 2012.

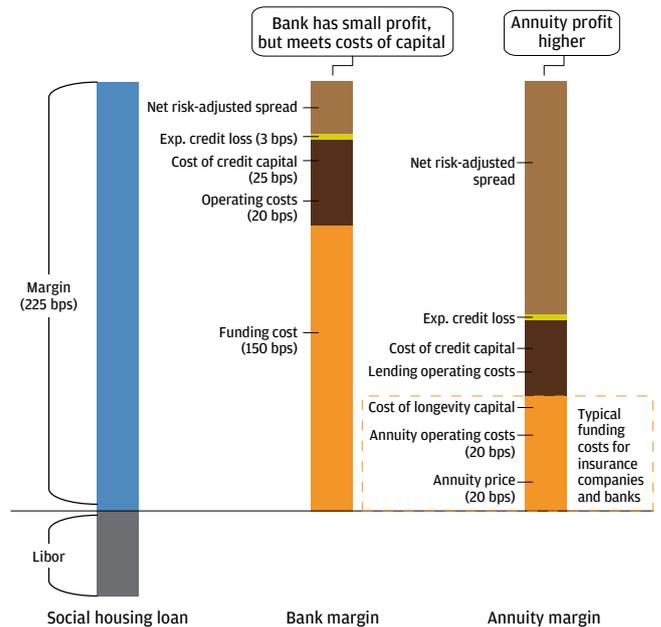
New capital charges will place a greater burden on the alternative asset classes of hedge funds, real estate and private equity (Exhibit 9). Within fixed income, the burdens, while heavier than under current calculations, are relatively less onerous.

Solvency II treats private loans as fixed income securities, with several noteworthy differences. First, the new standards take loan-to-value ratios into account. Well-secured loans from AA credits can, for instance, receive the same treatment as AAA credits. Second, Solvency II mitigates the impact of illiquid loan assets that correspond to illiquid liabilities of comparable duration. Although the new rules would normally weigh a variety of risk factors, if the duration of a loan asset matches a long-term liability, the only factor that would enter into the capital calculation would be default risk. Others, such as spread risk and interest rate risk, would not and would mitigate capital charges.

The calculation recognizes the inherent advantage insurers have over banks in the lending market. Banks must bear the costs and risks of maturity transformation, underwriting long-term loans with demand deposits and short-term funding. Insurers, in contrast, are simply matching the loans against liabilities of comparable maturity or duration. Regulatory benefits aside, an insurer matching liabilities can improve on bank margins by some 100 basis points, according to one estimate (Exhibit 10).

**Margin of difference: Without banks’ funding burdens, insurers making loans to match funded liabilities could earn superior profits**

**EXHIBIT 10: EXAMPLE OF SPREAD BREAKDOWN BETWEEN BANK FUNDING OF A LOW INCOME HOUSING LOAN AND UK ANNUITY FUNDING**



Source: John Whitworth and Emma Byron, *The €200 Billion Opportunity: Why Insurers Should Lend More*, Oliver Wyman. 2012.

## Private market premia, public market problems

In a low yield and rigorous regulatory environment, private loans offer insurers an intriguing new source of investment return. They diversify insurance portfolios away from sovereign and investment grade bonds at precisely the time when prospects for those assets have become questionable. Indeed, the private loan asset class itself comprises a wide variety of assets: senior loans, liquid loans, corporate and real estate mezzanine debt, commercial mortgages and infrastructure project finance loans. All of them may improve yields in portfolios overly exposed to sovereign and investment grade rate and credit risks. Above and beyond the yield pickup implicit in their credit quality, private loans offer premia to compensate investors for the loans' relative lack of liquidity and the management of documentation at issuance and credit through time compared with more "actively traded" fixed income sectors. Solvency II recognizes the loans' advantage as assets to match the liabilities on insurers' books. This enables insurers to make more efficient use of the premium than banks.

Despite such advantages, global loan portfolios have developed unevenly. U.S. banks have deleveraged and restructured their loan portfolios much faster than their European counterparts. Their decisive actions have given insurers interested in dollar-based credit exposure a broad, smoothly functioning market to invest in. Europe has a longer way to go, but with the eurozone's incipient recovery and the looming prospect of Basel III, its market may prove the most interesting through time.

European insurers have the largest exposure to Europe's troubled sovereign issuers and under capitalized financials. Reducing the exposure by, say, moving into more-extended sectors of the bond market would run up against formidable barriers. Allocating just 5% of European insurance assets to the European high yield market would exceed that market's total issuance: €270 billion against €266 billion.

## Conclusion: Boost yields, buffer duration

The pace may be uneven, but the supply of investable loan assets for the insurance industry is growing around the world, in contrast to the constraints we anticipate in the sovereign arena. The enhanced supply should allow insurers to be selective in augmenting their portfolios. Selectivity, in fact, is essential. We see sizable benefits in a thoroughly researched private credit strategy that employs more-exacting standards than the typical ratings agency approach. We believe that, chosen with care, the loans' yield per unit of credit risk can measure up well against publicly traded investment grade and high yield securities.

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