ECONOMIC RESEARCH & CORPORATE DEVELOPMENT

Working Paper 134

February 9, 2010

MACROECONOMICS | FINANCIAL MARKETS | ECONOMIC POLICY | SECTORS

Dr. Michael Heise, Thomas Hofmann, Dr. Arne Holzhausen, Gabriele Steck

The US consumer: Towards a more saving-oriented lifestyle – Implications for the savings industry

Allianz

AUTHORS:

DR. MICHAEL HEISE
Tel.: +49.89.3800-16143
michael.heise@allianz.com

THOMAS HOFMANN
Tel.: +49.69.263-19912
t.hofmann@allianz.com

DR. ARNE HOLZHAUSEN
Tel.: +49.89.3800-17947
arne.holzhausen@allianz.com

GABRIELE STECK
Tel.: +49.89.3800-15578
gabriele.steck@allianz.com

Executive summary

- The sharp decline in US households' net worth will trigger a lasting increase in the saving rate to 6%; by itself, this would expand the market for saving products massively.
- However, the deleveraging process acts as a countervailing force: US households have to bring their debt-to-income ratio down to a more sustainable level; this effectively caps the increase in liabilities and reduces their financial room for maneuver.
- As a consequence, US households will use less of their disposable income for the acquisition of financial assets but, on average, still some USD 700bn per year will hit the US savings market in the next ten years.
- Saving patterns will change, too. Our survey of households in the US, Germany, France and Italy shows that US consumers are reacting most profoundly to the crisis. Almost half of them responded that they have to revise their living standards, i.e. reduce their spending and save money in a low-risk way.
- This increased cautiousness is reflected in the still relatively high share of cash-holdings. US households are returning only reluctantly to risky assets. However, someday this wall of cash has to find a new home, given the lasting environment of low interest rates.
- In our view, the market for life insurance and retirement assets (including IRAs) should emerge as the winner. Many households lost a significant portion of their retirement assets during the financial crisis; they have to replenish their nest-egg. But they will manage their money more carefully. The growing awareness of risks stemming from high health costs, longevity, inflation and volatility of equity markets is set to boost the demand for products with guarantees.
- Furthermore, the retirement of the baby boom generation will result in significant assets transferring out of 401(k) plans and into IRA accounts. Increasingly, the management of "retirement assets" goes beyond accumulation. With the baby boomers starting to retire, risk management during the retirement payout phase requires much more attention. Products for preservation and / or annuitization of assets will grow in importance.
- Insurers – given their by and large stable performance during the crisis – are well positioned to respond to these twin challenges of protection and guaranteed returns.

US HOUSEHOLDS' RESPONSE TO THE FINANCIAL CRISIS

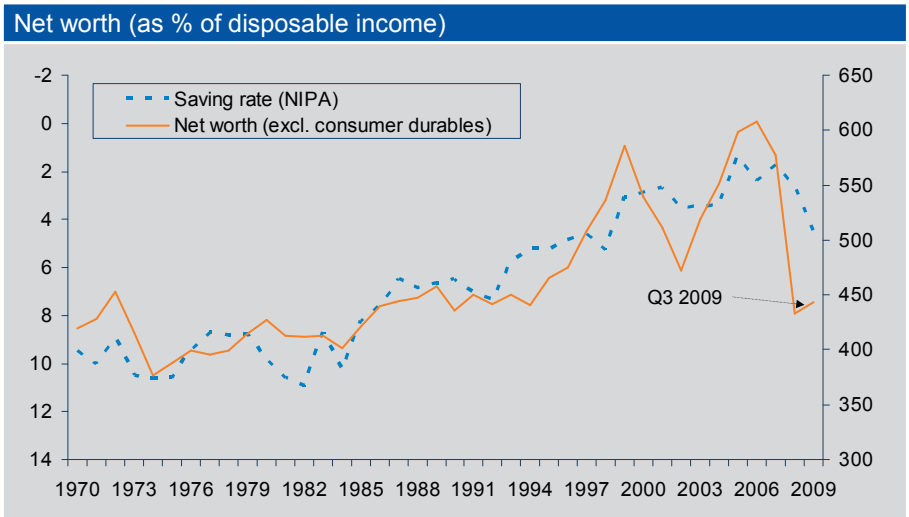
Wealth destruction

US households have experienced an unprecedented decline in net wealth from mid-2007 to early 2009. At its worst in the first quarter of 2009 the fall in share prices and collapse in home values had destroyed some USD 17.5 trillion of household wealth, according to the Fed's flow of funds accounts. With the stock market rally that began in March and the stabilization of house prices, some of these losses have been recovered by year-end 2009. Nevertheless, estimated losses still amount to USD 11-12 trillion and the ratio of wealth to income has fallen back to mid-1990s levels.

The wealth effect

The question whether and how much changes in wealth cause changes in consumption and saving, respectively, has a long history in economics. While a large body of empirical research - based on the permanent income/life-cycle hypothesis - has established a link between consumption and wealth, estimates of the marginal propensity to consume out of wealth differ widely. Generally, we believe a range between 3 cents to 6 cents for every $1 change in net wealth is plausible.

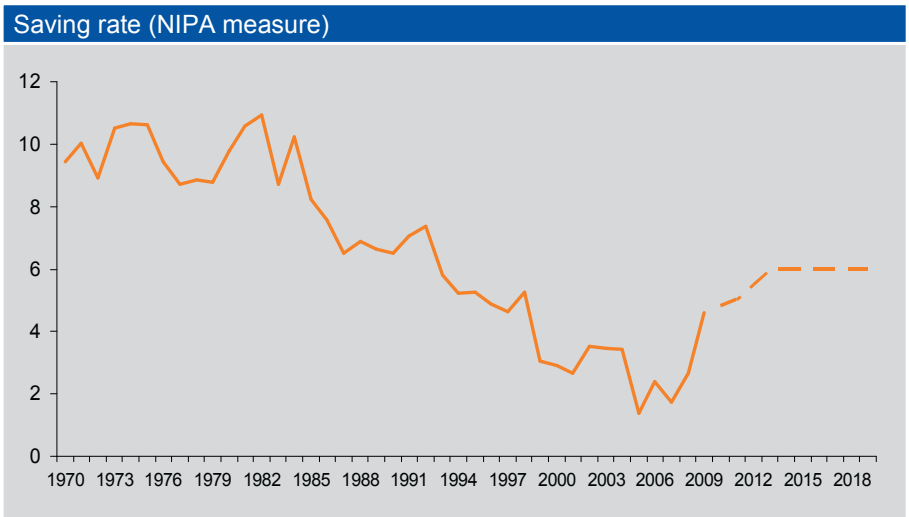
The wealth effect: Household saving changes in response to changes in net wealth



Source: Board of Governors of the Federal Reserve System; Bureau of Economic Analysis.

Based on the mid-point value of this wealth effect, the level of spending should be reduced by a good USD 500bn annually. With disposable income currently equal to roughly USD 11 trillion, this is equivalent to a rise of around 4.7 percentage points in the personal saving rate. Given its level of around 1½% in mid-2007, the saving rate should eventually amount to 6% - 6.5%. The severe decline in household wealth has already been an important motivation for the surge in the saving rate since early 2008. The personal saving rate amounted to 4.6% on average in 2009. Thus, adjustment so far is only partial.

Adjustment of the saving rate under way and set to continue



Source: Bureau of Economic Analysis.

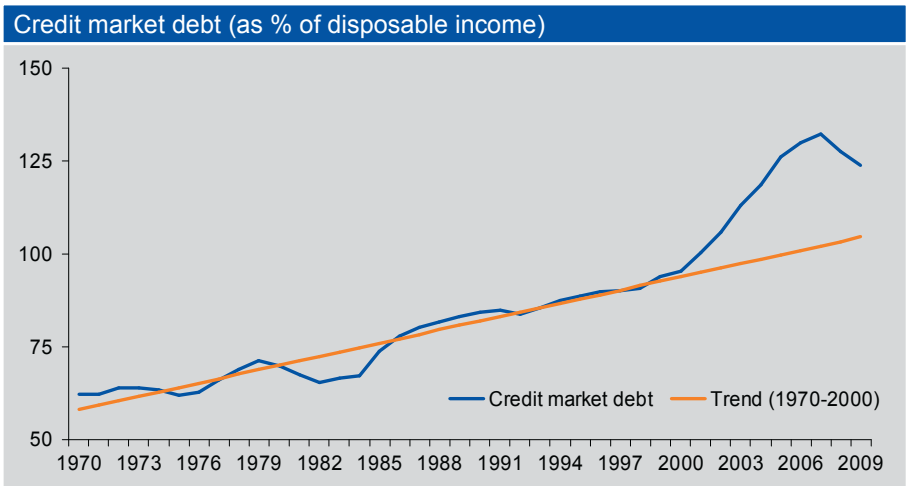
How will higher savings be used?

In principle, households can use savings in several ways. They can accumulate more financial assets, buy more tangible assets, or trim net liabilities.

There are indeed good reasons to believe that a reduction of leverage (measured by debt as a proportion of disposable income) will likely be an important part of the adjustment process. From 2000 to 2006 the pace of US households' debt accumulation accelerated dramatically. By 2007, the household debt-to-income ratio was nearly 30 percentage points above its long-term trend. Two important aspects substantiate the assumption of downward pressure on debt:

- Tighter lending standards and new financial regulation will require more income, collateral, and documentation for any given loan.

With potentially limited price-induced growth in household assets, deleveraging becomes compelling to improve balance sheet situation



Source: Board of Governors of the Federal Reserve System; own calculations.

- To bring the debt-service-ratio down to more manageable and sustainable levels even in an environment of higher interest rates, the debt-to-income ratio must come down closer to 100%. This means at least that debt accumulation will have to grow by less than disposable income. Whether that means a reduction in the absolute amount of debt depends on the extent of disposable income growth.

Implications for the net acquisition of financial assets

We have derived the implications of a higher saving rate of US households for the net acquisition of financial assets over the next ten years using the following assumptions:

- The saving rate gradually increases to 6% in the next few years and stabilizes at this level from 2013. This reflects our view that baby boomers – given the high uncertainty they face (longevity "risk", medical costs) – are highly unlikely to draw down assets rapidly after they retire; after the losses of the financial crisis, some might even decide to defer retirement. A dissaving process will start only well after the baby boom generation has retired, if at all.

- Annual average growth of disposable income from 2010 to 2019 amounts to 4.3%.

- Net capital expenditures, i.e. the sum of residential investment spending of households and nonresidential investment expenditure of nonprofit organizations, as % of disposable income return gradually to their long-term average.

- The debt-to-income ratio declines to around 105% by 2019. Writedowns on households' debt by banks and other creditors are not included in our model. According to the IMF's estimates, crisis-related writedowns on housholds' debt could amount to more than USD 1000bn whereof the bulk would occur in 2009 and following years. Therefore, with the "help" of banks and other creditors the debt-to-income ratio could even fall below the 100% mark.

With estimates of savings, the change in household debt as well as the projected path for capital expenditures, an estimate of the sector's net acquisition of financial assets can be obtained residually. In addition to this baseline, two further scenarios have been explored, where we look at the consequences of a variation in the saving rate and at the implications of differing intensities of deleveraging.

Two different ways to calculate the saving rate

With this approach, we essentially try to extrapolate the key components of Table F.100 of the Federal Reserve Board's flow of funds accounts (FFAs). Generally, the FFAs are the most relevant data source for analyzing the financial position of the household sector. The flow of funds data are produced independently by the Federal Reserve and provide an alternative measure of the personal saving rate: Here, personal saving is defined as the net acquisition of assets (excluding consumer durables) less the net increase in liabilities whereas personal saving normally is defined as the difference between disposable income and personal outlays (National Income and Product Accounts). In theory, the two measures are identical. In practice,

they are not because of differences in source data and timing of recorded flows. One important source of the discrepancies are debt writedowns, which represent a rearrangement of debtor/creditor relationships in the economy. Unfortunately, they cannot be extracted from the financial flow data: It is impossible to say whether a reduction in liabilities results from debt repayment (=saving) or writedowns (=creditor losses). Unsurprisingly, the differences between the two data sets have reached unprecedented levels during the crisis.

Results

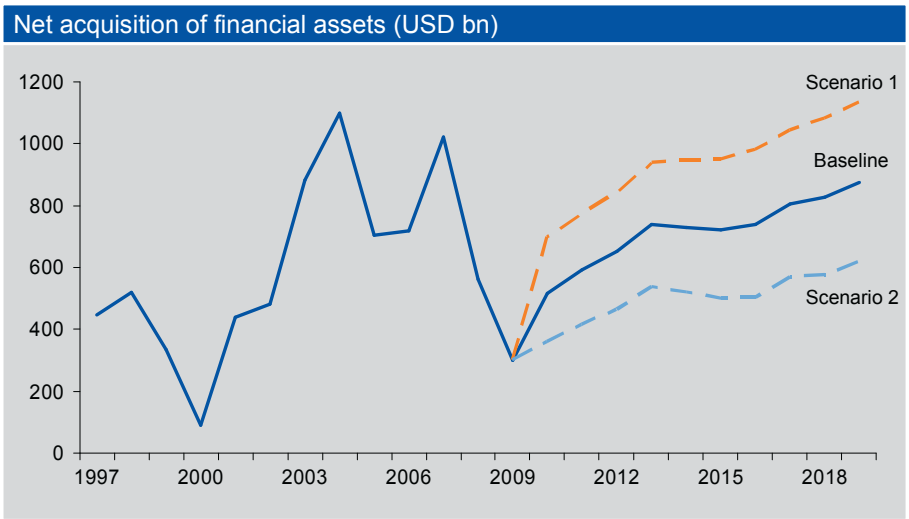
Under the assumptions outlined above, perspectives for the net acquisition of financial assets are muted.

In our baseline, after a relatively lean year 2009, US households' annual acquisition of financial assets would then increase again towards a range of USD 700 - 800bn. This is a large number although it is less than the average of almost USD 900bn in the five boom years 2003 to 2007. This latter magnitude will only be approached again at the end of the projection period. Overall, accumulation of financial assets as a ratio of disposable income is – on average – 2 percentage points lower than in the period 1997-2008.

Scenario 1 assumes that the saving rate is 1 percentage point higher every year compared to the baseline. At the same time we relax the assumption on the intensity of deleveraging: the debt-to-income ratio just declines to 110% by 2019.

In combination, this yields an annual financial asset accumulation which is some 30 % higher than in the baseline. Nevertheless, the restrictions on debt accumulation and at the same time higher absorption of savings via the assumed gradual normalization of housing investment are strong enough, so that even in this case asset accumulation in relation to disposable income remains somewhat below the 1997-2008 average.

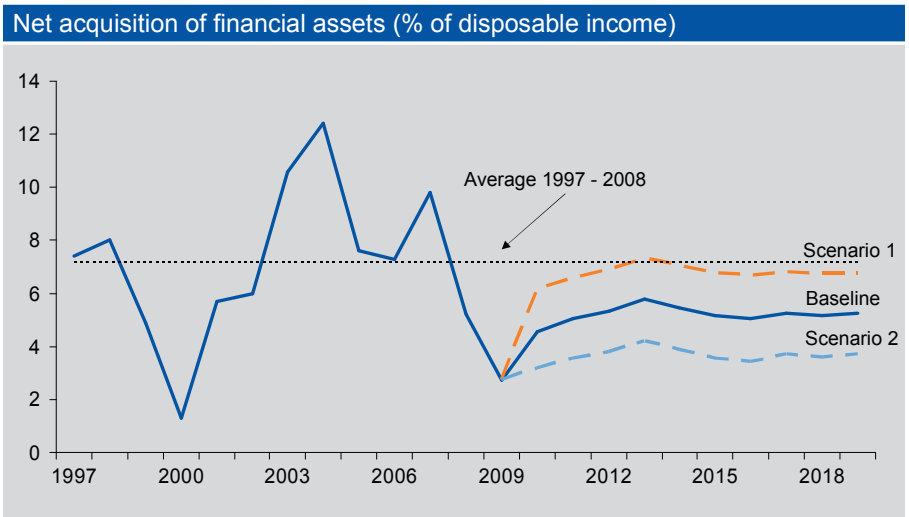
Alternative scenarios for the net acquisition of financial assets: the critical role of saving rates and deleveraging



Source: Board of Governors of the Federal Reserve System; own simulations.

Scenario 2 is the opposite of Scenario 1: the saving rate is 1 percentage point lower compared to the baseline and the debt-to-income ratio has to decline to 100% by 2019. Prospects for financial asset accumulation in this case are quite restrained throughout. Financial asset accumulation in relation to disposable income remains 3.5 percentage points below the aforementioned historical ratio.

Alternative scenarios for the net acquisition of financial assets: the critical role of saving rates and deleveraging



Source: Board of Governors of the Federal Reserve System; own simulations.

STRUCTURE OF FINANCIAL ASSETS OF PRIVATE HOUSEHOLDS

US households will not only spend less of their disposable income for the acquisition of financial assets but also in a different way. The composition of assets will change quite significantly over the next years.

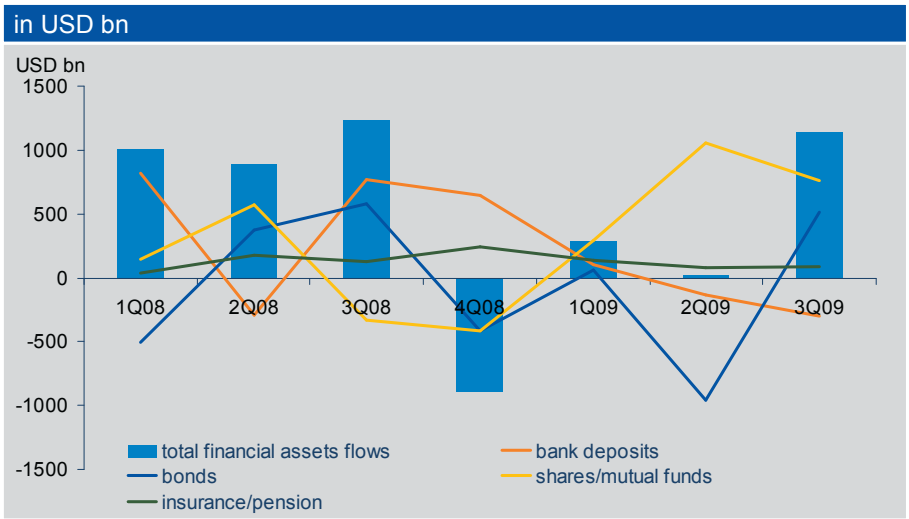
In 2008 financial assets of private households declined by 17.8% over the previous year reflecting mainly the fall in equity markets. Besides the devaluation of existing assets, flows of most segments suffered strongly as a result of the weak economy suppressing the acquisition of financial assets. At the same time, the rush into cash-like instruments which characterized the market panic after the collapse of Lehman Brothers has started to reverse. In 2008, banks could not attract more deposits, although the US government is now insuring up to USD 250,000 per depositor per bank. In fact, flows into bank deposits declined by 22% over 2007. However, with USD 467bn they still reported the highest inflow compared to other financial assets. At least, the expanded state deposit insurance averted a huge stampede out of bank deposits that would otherwise have occurred after the collapse of Lehman Brothers.

Demand for bonds was almost negligible due to record low yields. Demand for equity assets was also very low, but at least positive after many years in which households took advantage of the stock market rally by selling their equity assets. Inflows into life insurance reserves assets almost doubled, but on the other hand demand for pension funds dropped sharply. The latter reflects the poor situation of 401(k) flows. The weak economy and higher unemployment led to employee deferrals and resulted also in higher outflows as laid-off employees transferred their assets out of the plan. Furthermore, employer matching contributions were lower.

In 2009 these trends intensified. Demand for bank deposits dropped further as more and more households moved out of cash and started buying assets with higher returns. The beneficiaries are mutual funds and equities which reported strong inflows, especially for corporate bond funds and emerging market equity. And with less volatile equity markets, demand for pension funds also revived slowly. On the securities market, households seemed to swap US government agency securities for Treasury securities. But as the reported household assets in the flow of funds statistics are calculated as a residual of all other sectors, the strong decline of government agency securities assets of households could also reflect the increased demand of the Federal Reserve for these assets.

However, cash holdings by US households are still high compared to pre-crisis levels. Checkable deposits stood at USD 332bn at the end of the third quarter 2009 compared to only 104bn at the first quarter of 2008. So lots of US cash is still looking for a new "home".

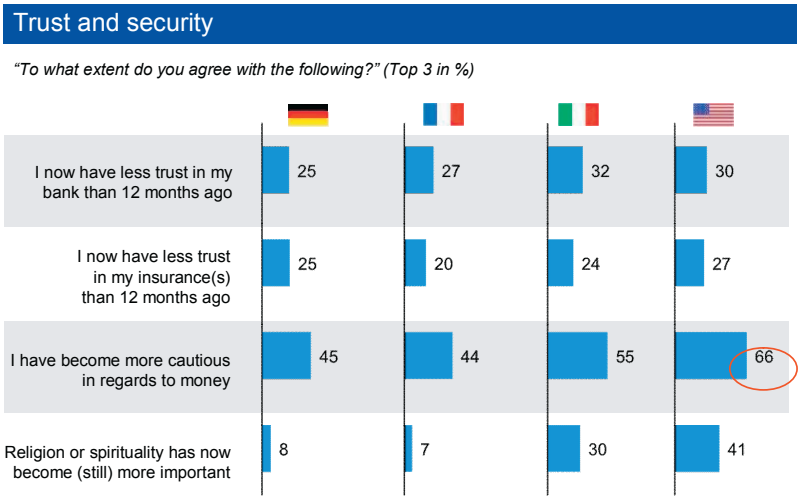
Household financial assets flows



Source: Federal Reserve.

This "wait and see" strategy reflects the new cautiousness of US consumers in financial matters. The days of free spending are gone for good. Our own quantitative survey in four countries (USA, Germany, France and Italy) has confirmed this new pattern. Contrary to the image of former times, US consumers turned out to be the most thrifty and cautious.

US consumers lost most trust and are most cautious in regards to money

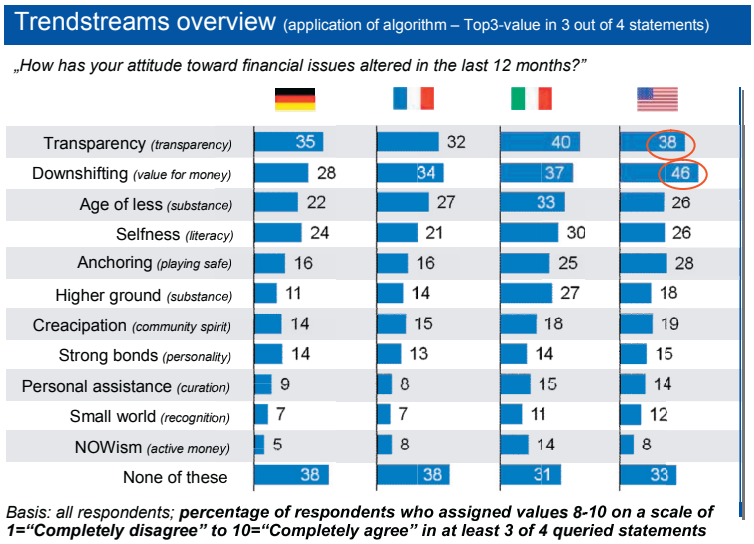


Basis: all respondents; percentage; ***top 3 boxes****: respondents who assigned values 8-10 on a scale of 1="Completely disagree" to 10="Completely agree"*

Source: Allianz SE.

Our survey confirms also that transparency and downshifting are the most relevant trends emerging from the crisis. And again, it is the US consumer who leads the pack in terms of price sensitivity. This changed behavior explains a good way the reluctance of Americans to return to risky and more pricey assets.

US consumers are most demanding



Basis: all respondents; ***percentage of respondents who assigned values 8-10 on a scale of 1="Completely disagree" to 10="Completely agree" in at least 3 of 4 queried statements***

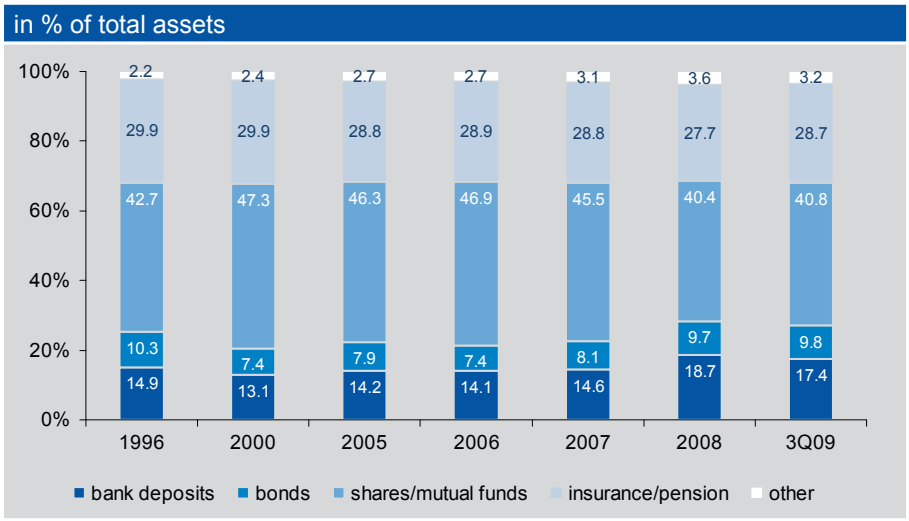
Source: Allianz SE.

These shifts of investment flows and behaviour as well as the loss in value of equities changed the structure of financial assets. Bank deposits could increase their market share by a whopping 4pp in 2008 but this shift in market share is not sustainable: It was driven more by other asset classes' losses than the popularity of bank deposits. So it is no surprise that, with the recovery under way, the picture has already started to change again. Until the end of October 2009, bank deposits had to give ground while especially mutual funds increased strongly. The asset group of life and

pensions lost over 1pp market share in 2008, but managed to regain almost all of the lost ground in 2009.

In our view, these trends will continue well beyond 2009. The driver is the ever increasing need for private retirement provision: Over time, the US savings market will morph into a market for retirement assets. This becomes even more apparent if we look at the huge *Individual Retirement Accounts* (IRA) that account for 8.6% of total assets. IRAs are tax-deferred retirement accounts that are above all used as a rollover tool for depositing lump-sum payments (out of 401(k) plans). However, IRAs are not included in pension fund reserves but allocated within the different assets classes they consist of, e.g. mutual funds (36.6% of IRAs). If we regroup the IRAs into the insurance and pension assets this new asset class – which could be named "life insurance & retirement assets" – already makes up more than one third of total assets today. We believe that this share is set to increase to nearly 45% in 2020. In order to understand the future dynamics of the US savings market it is therefore necessary to analyze this huge market segment and its development in more detail.

Structure of financial wealth
private household financial assets



Source: Federal Reserve.

THE US MARKET FOR RETIREMENT ASSETS

The individual insurance and retirement market can roughly be divided into three segments: life insurance, annuities and retirement plans.

Life insurance

It comes as no surprise that the financial crisis had a big impact on the US life market. Life premium growth tumbled by 7% last year and the first half of 2009 was the worst since 1942 with individual life sales plummeting by 23%. First results for the 3rd quarter suggest that sales finally at least started to stabilize. But in the first half of the year all products with varying premium payments and especially those that are in addition unit-linked like variable universal life crashed as people reduced their premium payments during the crisis and are very reluctant to buy unit-linked

products due to the uncertain equity markets. Traditional term and whole life products do not allow premium payment adjustment over time and provide fixed returns. They are relatively simple to understand and especially term life products are quite affordable. Consequently, premiums declined by *only* 3% and 4% year-to-date respectively and could therefore both increase their market share by 6pp to 28%. However, as life insurances are *sold* rather than *bought* the performance was also affected by the pull-back from the market by some insurers due to the need of insurance companies to conserve capital. Higher prices – especially for term insurance products with high required reserves – and the ongoing weak economic environment will depress growth of life insurance products particularly for the traditional term and whole life products in the medium term.

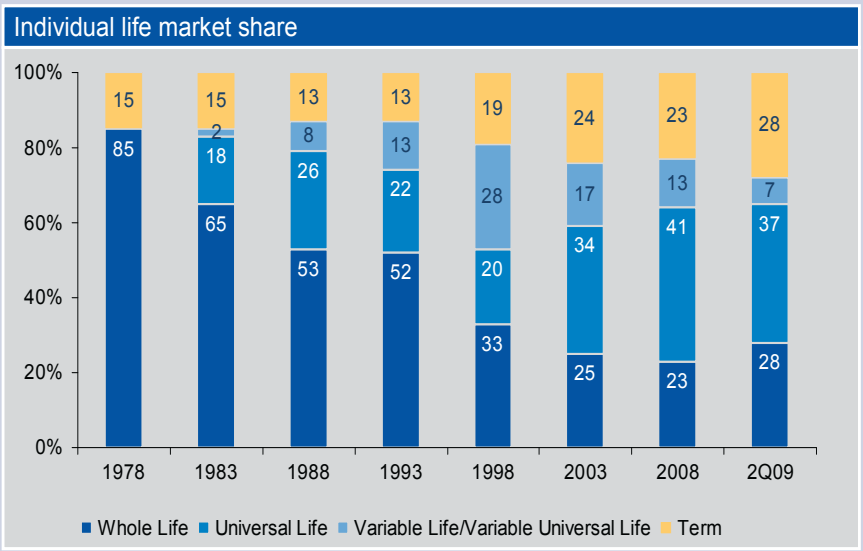
Despite the cutback, universal life products will continue to be the most popular individual life product as they are relatively easy to understand and provide fixed-returns with death benefit protection. The equity market recovery will play into the hands of variable life products, but it will be some time before they reach the market share of 16% from 2007 again (2Q09: 7%).

Structure of the life insurance market

There are three types of life insurance policies: *Individual life insurance*, underwritten separately for each individual, *group insurance* like for all employees of a company, and *credit insurance* that jumps in to pay back debt if the insured person dies.

Individual life is the most used form of life insurance protection, representing 52% of policies in force. The majority of US Americans (78%) own some type of life insurance product as a risk protection to shield their affiliated from financial hardship when the policyholder dies. Or they use life insurance products to accumulate savings for financial hard times. There are pure risk insurance products like *term insurance* that only provide protection for a specified period. But the most commonly used products are *individual permanent insurance* policies providing protection for the lifetime of the insurance holder. Permanent insurance products like *whole life, universal life, variable life,* and *universal variable life* also include a savings component. Until 1980 traditional *whole life* products with constant annual premiums were the only option customers had. However, as customers became more and more reluctant to commit themselves for a long period, new insurance products started to emerge in the 1980s like *universal life (UL)* that allow varying premium payment amounts over time subject to a certain minimum and maximum. *Variable-universal life* products combine death benefits, flexible premium payment and higher investment opportunities as cash value is subject to the performance of a portfolio of investments chosen by the policyholder.

Structure of life insurance products

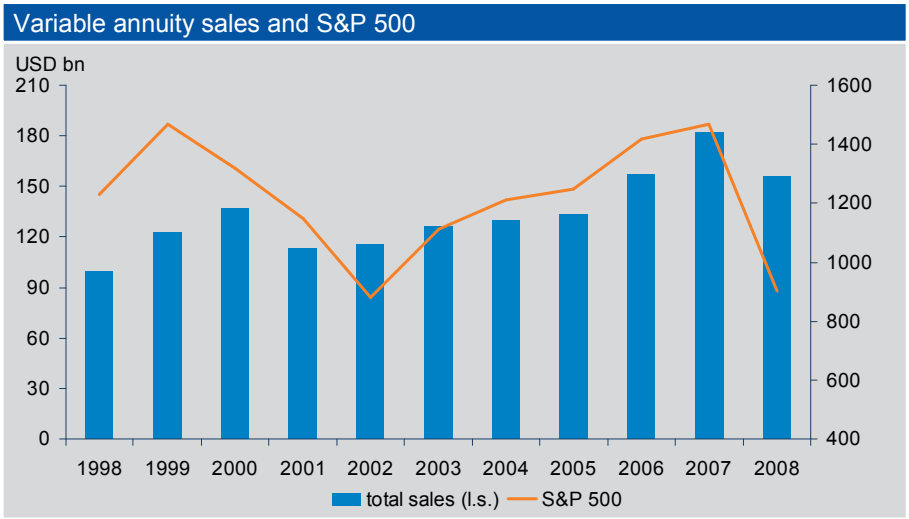


Source: Morgan Stanley.

Annuities

The shock of dwindling returns after years of high earnings annihilated demand for unit-linked products. In addition, insurers had to adjust to higher hedging costs due to the increased equity market volatility by withdrawing some products from the market or increasing costs for guarantees. So after the variable annuities market recorded an average annual growth of 5% for the last 7 years, sales contracted in 2008 by 15% and until September 2009 by 23%. However, as sales of variable annuities are strongly linked to the development of the stock market, it is no surprise that with the recovery of the equity markets, the VA market also started to stabilize in the third quarter.

Variable annuities running with the stock exchange



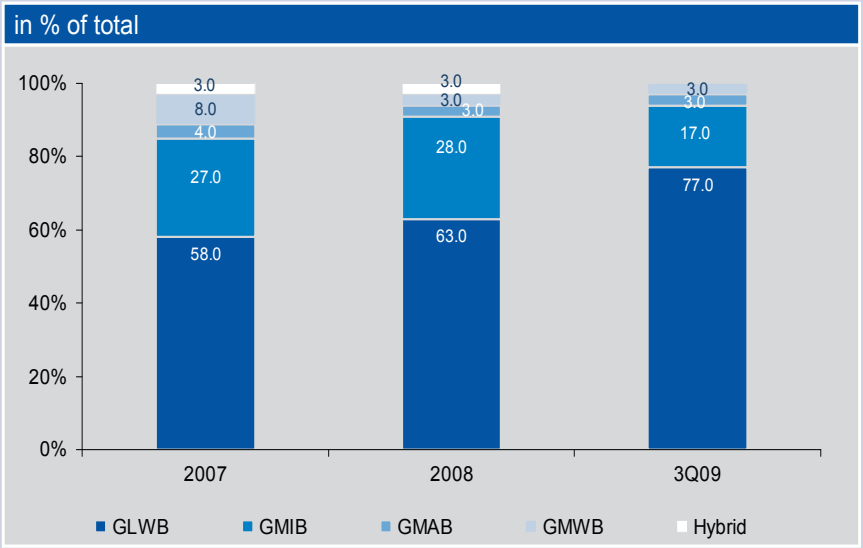
In the short run, the slow economic recovery and low confidence in the VA guarantees will dampen demand. But not only customers will be cautious to approach the VA market and ask for more and better guarantees. Insurers are also concerned over hedging program costs, company financial strength, and capital needs. Therefore it will take some time to find the right balance between guarantees and fees. For customers especially GMWBs and GLWBs continue to be very popular as they provide a floor of protection for the contract owner, guaranteed income payments for a certain time or even lifetime, flexibility as partial withdrawals and varying premium payments are permitted, and there is also a cash surrender value if needed. But insurers are moving in the opposite direction, raising prices and making guarantee features less generous: They offer lower withdrawal rates, reduce opportunities to "step up" the guaranteed value or earn enhancement credits, and place more restrictions on investment. New product launchings like consumer price indexed guarantees are also on hold until the market has calmed down a bit.

But VAs will be back on track in the medium term when the performance of the equity market improves over a longer period. And the demographic trends play into the hands of VAs: With the baby boomers approaching retirement, demand for safe old-age provision increases. Therefore the focus of customers and insurance providers will continue to be the guaranteed living benefits.

Structure of the annuities market

Twenty years ago traditional life insurance accounted for 72% of premium income and annuity insurance was still a small market of USD 29bn; today annuities account for half the market and premiums of USD 265bn. The fundamental attraction of annuities is the protection against outliving one's own financial assets. Basically, the consumer can choose between a fixed annuity (FA), which provides stable returns, and a variable annuity (VA) that is unit-linked. Obviously, VAs are the more risky product; their popularity stems from the many different guarantees for the annuity holder or beneficiary which make the risk-return highly attractive. The first guarantees for VAs were introduced in 1980 – the minimum death benefits (GMDB). But soon demand for principal protection rose and insurers started to offer living benefit features such as minimum income, minimum withdrawal or minimum accumulation benefits (*for an overview see glossary*). The most popular guarantee is the Guaranteed Lifetime Withdrawal Benefit (GLWB). Especially since the crisis started, its market share rose from 52% in 2007 to 77% in the third quarter 2009. It guarantees that a certain percentage (typically 2-8%, often based on age) of the amount invested can be withdrawn each year for as long as the contract holder lives.

Structure of Guaranteed Living benefits



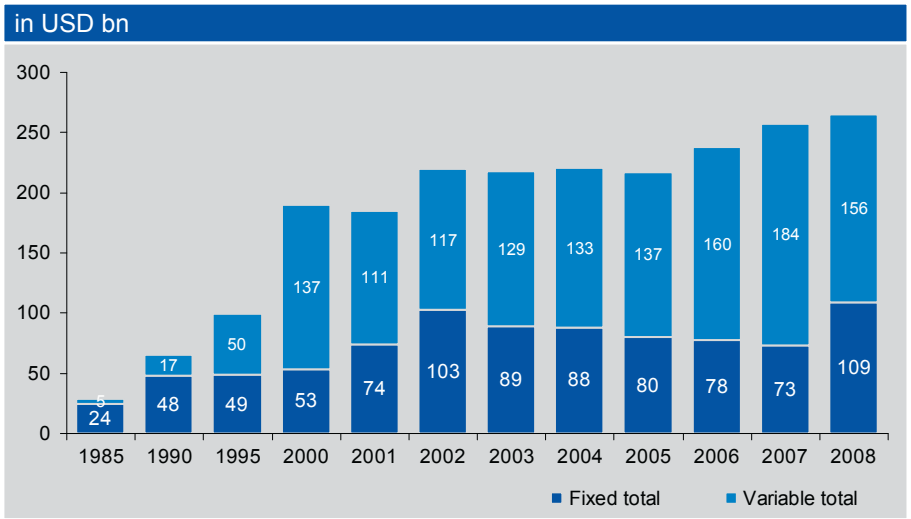
Source: Limra.

Fixed annuity revival

While variable annuities crashed in the crisis, fixed annuities saw a revival. Since after the dotcom crisis in 2002, demand for fixed annuities shrank annually by 5.6% as variable products promised higher returns. However, the crisis changed that picture. Furthermore, the steep yield curve which results in increased spreads between fixed annuity rates and Certificates of Deposit (CD) rates makes FAs quite attractive. Demand for fixed annuities increased by 50% last year as well as 39% in the first half of 2009. While still high relative to historical levels, the run to fixed annuities started to fade away in the 3rd quarter because equity markets started to recover and the credit spread over CD rates declined.

However, the popularity of fixed annuities will persist for some time. The yield curve will be steep until the end of 2010, therefore fixed annuities continue to be superior to competing products like CDs. And with the baby boomers reaching an age when most people purchase fixed annuities – because they care more about protecting principal and earning a fixed return – the number of relevant customers for fixed annuities increases. A new growth opportunity for fixed annuities is the combination with long-term-care products, that is now possible due to the Pension Protection Act of 2006 (starting in 2010; for details see glossary). The huge potential of such new products is underlined by the fact that – according to surveys (LIMRA) – consumers' highest concern is not longevity, but health care expenses. A favorable tax treatment also makes the product very attractive.

Annuity sales



The retirement plan market

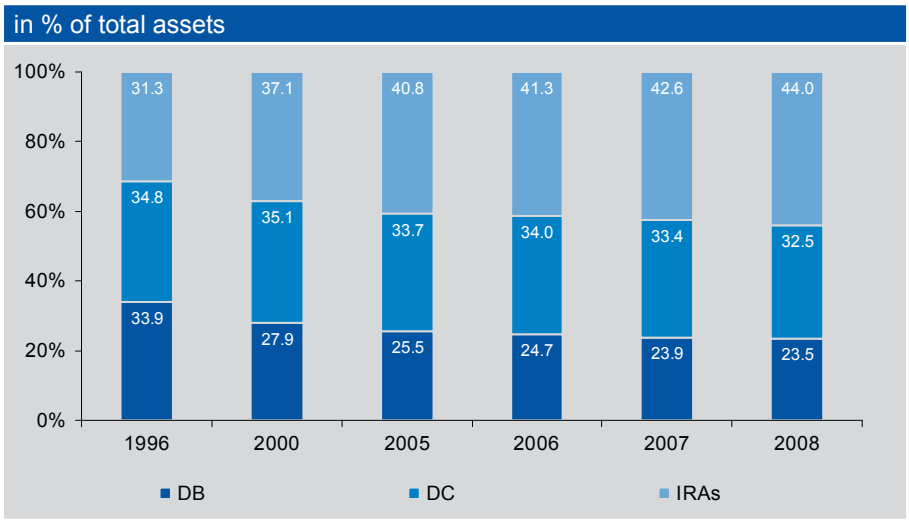
Until 2020 the number of new retirees per year will steadily increase from 3.5 million today to 4.5 million and will stay at that level even after the last baby boomer has retired. Retirees are important customers for insurance companies. Empirical research shows that retirees try to spend down their assets rather slowly keeping a buffer for high health care costs or longevity. A visible dissaving process will therefore only start in 2020, even though baby boomers are already starting to retire now. To prepare for health care and longevity risks, consultancy is an important issue, especially as according to a LIMRA consumer survey (LIMRA 2009a), 36% of retirees do not have a roadmap for retirement and could be caught off guard. Taking into consideration that the baby boomer generation holds – according to the 2007 US Survey of Consumer Finances – more than 50 percent of the value of all outstanding financial assets, this generation cannot be ignored by financial service providers. More retirees will also have to continue working to compensate for the losses of the financial crisis and more affluent retirees carry on accumulating wealth during their first years of retirement.

Already in 1999 assets of Individual Retirement Accounts (IRA) surpassed the Defined Contribution Plans (DC) and since then they are the most important retirement plan (25.4% of retirement wealth). The rise of IRAs is closely connected to their role as rollover tool for DC contributions when a job is changed or upon retirement. Inflows into IRAs peaked in 2007 at USD 358bn and crashed last year to less than 92bn due to the financial crisis. However, the retirement of baby boomers will again increase the flows of assets into IRAs significantly in the near future as they start to move their DC assets into IRA accounts.

Longer life expectancy and high administration costs triggered the shift from the defined benefit to the defined contribution system. Under the current DC system, annuitization is not mandatory and in fact most of the retirees choose a lump sum payment despite a tax benefit for the annuitization option. The reluctance to hold retirement assets as a lifetime annuity has many reasons: People may simply not be aware of the annuitization option, annuity premiums may be seen as unfair, most people wish to pass savings on to their heirs, or the uncertainty about their

remaining life span and medical expenditures make them fear the loss of control of assets in conjunction with fear of inflation. However, as retirees become more aware of the risk from high health costs, longevity, inflation and volatility of equity markets, demand for innovative products such as tiered annuities (paying more in case of disability) or phased withdrawal plans with inflation protection is set to increase.

Structure of the retirement plan market



Source: Federal Reserve.

Conclusion

Before the crisis, US households relied heavily on an ever increasing flow of credit secured against rising asset prices. The resulting sharp increase in liabilities not only fuelled consumption but also propelled the acquisition of financial assets to record levels. Often overlooked, but the US households' role as the consumer of last resort of the world economy was mirrored by its role as important source of revenue for the financial industry: At the height of the boom, US households spent a fifth of their disposable income on interest payments and financial fees.

This development was not sustainable, the crisis brought credit flows to an abrupt halt. Today, US households have to rein in their debt and the financial industry faces leaner times ahead. As households' financial room for maneuver is sharply reduced they can no longer afford to use up to 10% of their disposable income for the acquisition of financial assets. At the same time, the need to build a retirement nest-egg is growing substantially. This is reflected in a higher saving rate for many years to come, accompanied by a shift into "retirement assets". But the management of "retirement assets" goes beyond accumulation. With the baby boomers starting to retire the risk management during the retirement payout phase requires much more attention. Products for preservation and / or annuitization of assets will grow in importance as retirees face the twin challenge of transforming their assets into reliable income streams while managing risks stemming from longevity and health care costs. The key to benefiting from the changing savings landscape is to offer products that combine access to capital markets and guarantees in a credible, transparent and fair way.

GLOSSARY

Annuities: basic guarantee features

- Guaranteed minimum death benefit (GMDB):
  Policyholder's beneficiary receive guaranteed amount upon the death of the policyholder. Risk for insurer: probability of death while guaranteed benefits exceed the current account value.
- Guaranteed minimum income benefit (GMIB):
  Policyholder receives a guaranteed income stream for life after a predetermined accumulation period. Insurer guarantees a minimum interest rate during accumulation period. Risk for insurer: longevity
- Guaranteed minimum withdrawal benefit (GMWB):
  Policyholder receives a guaranteed minimum stream of withdrawals for either a set period or for lifetime. Withdrawals can start upon purchase of the VA or later. Risk for insurer: account value is exhausted before all guaranteed benefits are paid (longevity)
- Guaranteed minimum accumulation benefit (GMAB):
  Policyholder receives the greater of current account value or guaranteed amount at the end of the accumulation period. Typically based on a step-up rate or maximum account value. Risk for insurer: guaranteed benefits exceed current account at the end of the accumulation period.

Defined benefit plans provide a specified monthly benefit during retirement. The benefit amount is usually based on an employee's salary and length of service. The employer funds such plans and bears the entire investment risk.

Defined contribution plans: contributions from the employer are fixed (fixed amount or percentage from salary). Employee bears the investment risk. Annuitization is not mandatory, lump sums have been the most popular distribution method.

Life Insurance Market

- Term insurance policies (23% market share of annualized premiums) provide life insurance coverage for a specified period, usually greater than one year. Term policies provide no further benefits when the term expires, and no build-up of cash value occurs. If this insurance is not renewed at the end of its term, coverage lapses and no payment would be made to the beneficiary in the event of death.
- Permanent insurance (77% market share), permanent life policies also have a savings component
- Traditional whole life: constant annual premiums over time: 1976: 88% market share; 2008: 24% market share
- Universal life (UL): allows varying premium payment amounts subject to a certain minimum and maximum. 2008: 41% market share (annualized premiums)
- Variable life (VL): death benefit and cash value vary subject to the performance of a portfolio of investments chosen by the policyholder (market share < 0.5%)
- Variable-universal life (VUL): combines the flexible premium payment options of UL with the varied investment options of VL; 2008: 12% market share.

Pension Protection Act of 2006 (starting in 2010)

- Qualified long-term care riders can be added to any non-qualified annuity contract issued after December 31, 1996.
- Charges to the cash value of an annuity or life insurance policy to pay for the qualified long-term care rider will reduce the investment in the contract and will

not be included in gross income. Furthermore, long-term care expenses paid pursuant to the annuity/LTC benefit are tax-free.

- Section 1035 of the Internal Revenue Code (IRC) will allow for exchanges with long-term care combination products. An existing annuity can be exchanged for qualified stand-alone long-term care insurance (LTCI) or a combination product with a qualified LTCI rider.

Literature

ACLI (2008), American Council of Life Insurers Fact Book 2008.

AGI (2009), Retirement at Risk II – Challenges for U.S. Baby Boomers Approaching Retirement, International Pension Paper.

Bond, Charlotte A., Teran Martin, Susan H. McIntosh, and Charles I. Mead (2007), Integrated Macroeconomic Accounts for the United States, Paper, U.S. Bureau of Economic Analysis.

Congressional Budget Office (2009), Will the Demand for Assets Fall when Baby Boomers Retire?, Background Paper.

Insured Retirement Institute (2009), Annuity Fact Book 2009.

Investment Company Institute (2009), The Evolving Role of IRAs in U.S. Retirement Planning.

LIMRA (2008), The 2008 Individual Annuity Market.

LIMRA (2009a), The retirement income reference book 2009.

LIMRA (2009b), Variable Annuity Guaranteed Living Benefits Election Tracking Survey.

Mishkin, Frederic S. (2007), Housing and the Monetary Transmission Mechanism, Finance and Economics Discussion Series No. 2007-40, Federal Reserve Board.

JP Morgan (2009), Market Share Bible, Vol. XLI.

Wharton (2007), You’ve worked hard, saved and just retired: How do you manage your finances now?, Knowledge@Wharton.

These assessments are, as always, subject to the disclaimer provided below

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain of the statements contained herein may be statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. In addition to statements which are forward-looking by reason of context, the words 'may, will, should, expects, plans, intends, anticipates, believes, estimates, predicts, potential, or continue' and similar expressions identify forward-looking statements. Actual results, performance or events may differ materially from those in such statements due to, without limitation, (i) general economic conditions, including in particular economic conditions in the Allianz Group's core business and core markets, (ii) performance of financial markets, including emerging markets, (iii) the frequency and severity of insured loss events, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) the extent of credit defaults (vii) interest rate levels, (viii) currency exchange rates including the Euro-U.S. dollar exchange rate, (ix) changing levels of competition, (x) changes in laws and regulations, including monetary convergence and the European Monetary Union, (xi) changes in the policies of central banks and/or foreign governments, (xii) the impact of acquisitions, including related integration issues, (xiii) reorganization measures and (xiv) general competitive factors, in each case on a local, regional, national and/or global basis. Many of these factors may be more likely to occur, or more pronounced, as a result of terrorist activities and their consequences. The matters discussed herein may also involve risks and uncertainties described from time to time in Allianz SE's filings with the U.S. Securities and Exchange Commission. The company assumes no obligation to update any forward-looking statement.

NO DUTY TO UPDATE

The company assumes no obligation to update any information contained herein.