

Economic Research & Corporate Development

# Allianz Global Wealth Report 2010





# Allianz Global Wealth Report 2010

Gabriele Steck

Dr. Michaela Grimm

Dr. Michael Heise

Dr. Arne Holzhausen

Dr. Nicolas Sauter

### **Foreword**

Banking crisis, economic crisis, debt crisis – we are in the midst of challenging times that mean tough decisions and the need for new strategic approaches for all of us, not least for savers and investors. With demographic change in full swing and government budgets looking increasingly strained at the seams, the need for individuals to make their own provisions for retirement has barely been quite as pressing as it is today. At the same time, the environment on the capital markets is marred by considerable uncertainty. It is in this ambivalent environment that savers have to make their decisions – decisions that will have a far from insignificant impact on their future prosperity.

In the "Allianz Global Wealth Report", we will therefore take a look at how changes in savings behavior and developments on the financial market have affected private household wealth across the globe. Which countries have been hit particularly hard by the financial crisis and how have savers reacted?

Issues like these have to be looked at globally, which is why we have used the "Allianz Global Wealth Report" as a means of compiling an international data pool. For a change, this report is not going to be focusing on the rich and the super-rich. Our main point of interest is the "saver next door", the members of the middle class in the wealth stakes — a group that is growing across the globe. Certainly one of the most encouraging conclusions drawn by this study is the fact that the middle class is not only alive and kicking; it is growing, most notably so in the emerging markets of Asia and South America. In these regions the financial crisis wreaked less damage than in the highly developed industrial countries.

But it is not only in its analysis of wealth distribution that the "Allianz Global Wealth Report" provides new insights. The report also explores other issues, such as the link between levels of wealth and wealth structure or the impact of demographic change on savings behavior. With its trove of new information and analyses, the study will prove useful reading for anyone interested in savings habits across the globe. It aims to make an important contribution to fostering a greater understanding of developments on the capital markets both today and in the future. I am sure that the "Allianz Global Wealth Report" will receive broad recognition.

Michael Diekmann

Chairman of the Board of Management of Allianz SE

The arm



### **Table of Contents**

- 5 Foreword
- 8 Summary
- 13 Development of global financial assets: Financial crisis, convergence and demographic change
- 29 How global financial assets are distributed: How big is the world's wealth middle class?
- 35 Regional differences: Financial assets in individual regions
- 77 Literature
- 78 Appendix A: Methodological comments
- 81 Appendix B: Financial assets by country

7

Summary

### The consequences of the financial crisis are still lingering

Although the situation on the financial markets calmed down last year, the wealth losses as a consequence of the crisis have not yet been overcome. Despite a marked increase to the tune of 7.5%, global financial assets in the 50 countries under review at the end of 2009 (EUR 82,230 billion) were still lower than the level of EUR 85,590 billion reached before the crisis. Global financial assets have been growing by an average of just under 4% a year since 2001 – slower than nominal economic output. Per capita growth at a mere 2.8% was below average global inflation of 3.4%.

In order to paint a more sophisticated picture of global wealth distribution by country, the Allianz Global Wealth Report has split the countries evaluated into three wealth classes, similar to the income classes used by the World Bank: high wealth countries (HWC) with average per capita wealth of more than EUR 31,600; middle wealth countries (MWC), with average per capita wealth of between EUR 5,300 and EUR 31,600; and low wealth countries (LWC), with average per capita wealth of less than EUR 5,300.

#### Huge global prosperity gap ...

Wealth is distributed very unevenly throughout the world. Even today, almost 90% of global financial assets are still in the hands of private households in HWCs. The global prosperity gap is immense from a per capita perspective, too: global per capita financial assets averaged EUR 17,530 at the end of 2009. At EUR 79,640, the figure for the HWCs was many times greater than for the LWCs, where per capita financial assets averaged only EUR 1,800. People in MWCs had average financial assets worth EUR 14.280.

### ... but the poor are catching up

Despite the vast differences, the last ten years have not been a lost decade for the world's poorer populations. Per capita wealth in the LWCs has been growing by just shy of 16% a year since 2001, almost seven times faster

than in the HWCs. At the beginning of the decade financial assets in the HWCs were 135 times higher than in the LWCs, this factor has now fallen to 45. The MWCs are also still showing extremely high growth, with an yearly increase of 8%. The HWCs' share of the global wealth cake has therefore shrunk by six percentage points since 2000 – the poorer countries have gained ground. The financial crisis dealt a particularly savage blow to the financial assets of highly-developed industrial countries.

### Latin America with highest per capita wealth in the emerging markets

A regional analysis returns the expected result: on the one hand, North America, western Europe and Australia, with average per capita wealth of EUR 60,000 to EUR 100,000, and on the other, the poorer regions of Asia, Latin America and eastern Europe, where the corresponding figure comes in at only somewhere between EUR 3,000 and EUR 6,000. Among the emerging markets, the big economies in Latin America (Argentina, Brazil, Chile, Colombia and Mexico) led the way with average per capita wealth of EUR 3,900. Surprisingly, in per capita terms, eastern Europe was still trailing the field with average wealth of EUR 3,150, although it is important to remember that there are more countries to eastern Europe than just the up-and-coming new EU members. However, without the three Asian HWCs (Japan, Taiwan and Singapore), Asia's per capita financial assets would have been even lower at EUR 1,970.

### Eastern European wealth is growing fastest

Nevertheless, eastern European households have witnessed the strongest growth in per capita wealth over the past decade, with an average annual growth rate of almost 17%. Eastern Europe also fared well in the face of the financial crisis on average.

# Financial crisis has accelerated the convergence process

Because the financial crisis has hit wealth

in rich countries the hardest, it has, in this respect, "helped" to even out global wealth imbalances, accelerating the "catch up" process for poorer countries. This is particularly evident if we compare performance in the HWCs directly with performance in the LWCs over the past two years. In 2009, per capita financial assets in the HWCs were still down by 7.4% on the pre-crisis level. Private households in the LWCs, by contrast, escaped the financial crisis unscathed: their per capita financial assets continued to grow in 2008 and at the end of 2009 were almost 25% higher than they were before the crisis hit.

#### Conservative wealth structure in poor countries

One of the reasons behind these marked differences lies in wealth structure. In the HWCs, financial assets are distributed more or less evenly among the three major asset classes: bank deposits, insurance policies and securities, although the latter dominate with a share of more than 35%. In the LWCs, by far the majority of assets (68%) are held in bank deposits; and in MWCs, too, bank deposits still account for almost half of all financial assets.

#### Running up debt in rich countries

The differences in borrowing behavior are similarly pronounced. Global private household debt comes in at 68% of economic output. But while this figure stands at 87% on average for the HWCs, it is only 16% for the LWCs. This means that private debt is primarily a problem affecting households in rich countries, and nowhere are private debt levels higher than in Australia and New Zealand, where private debt equates to 112% of GDP.

#### Debt reduction is an absolute must...

However, much of the private household debt in the world's rich regions consists of (collateralized) property loans - more than 70% in North America and western Europe, and almost 90% in Australia and New Zealand. Accordingly, in most countries the share of property assets in overall private household assets is high. In Australia it stands at over 60% and brushes almost 75% in New Zealand. In the European Union private household assets comprise on average more than half property assets and over 40% financial assets. In the USA this ratio is the reverse: in 2005 property assets accounted for just under 36% of the total assets of an average US household. In the wake of the financial crisis this figure tumbled to just under 29% last year. In view of the relatively high level of debt and falling property prices, many private households now need to consolidate. This can be seen not least in a sharp decline in new borrowing: in a two-year comparison (average for 2008/09 compared with 2006/07), it fell by 60% in western Europe and by more than 100% in the US – in other words: Americans have started to pay back their debt.

### ...but the impact on capital formation will be negative

This deleveraging process, however, will have a detrimental impact on capital formation. This is because the drop in borrowing triggered a drop in the inflow of funds into financial assets, namely by almost two-thirds in North America and by nonetheless a third in western Europe (two-year comparison). This also explains why financial assets in rich countries were hit so hard by the financial crisis: without sufficient supply of "fresh" incoming funds, households were unable to compensate for the value losses affecting equities, in particular. Savings drives are focused, out of necessity, on the liabilities side of household balance sheets: namely on making them less reliant on a constant chain of new loans.

### Risk-aversion wins over focus

### on long-term returns

Private household wealth plays an important role in cushioning the conceivable impact of demographic change. However, financial security in old-age seems not to be one of the main motivations behind capital formation across the globe. Rather, the five percentage

point increase in bank deposits as a proportion of total global financial assets over the past decade suggests that risk aversion is winning in the race against a focus on long-term returns. It is crucial that, as the global financial architecture is revamped, the basis for a return of investor confidence in long-term investments is laid.

### 565 million people fall into the wealth middle class

The analysis of wealth distribution by country neglects to take account of differences within individual countries. Consequently, the Allianz Global Wealth Report has also calculated the average per capita wealth per population decile within the countries analyzed. According to this calculation, 565 million people worldwide belong to the middle class of wealth owners (per capita financial assets of between EUR 5,300 and EUR 31,600); this number has almost doubled since 2000. Equally striking: more than half of them are not from HWCs. 493 million people in the world can be deemed to belong to the wealth upper class. While the vast majority of this upper class lives in the HWCs, there are no less than 35 million people with considerable wealth living in poorer countries. Not least against this backdrop, it is revealing to assess and analyze country-specific factors in a regional context. The second part of the Allianz Global Wealth Report is therefore devoted to presenting the development of financial assets in the individual regions.



Development of global financial assets:

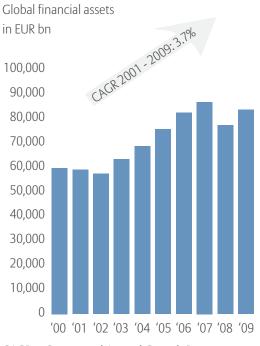
Financial crisis, convergence and demographic change

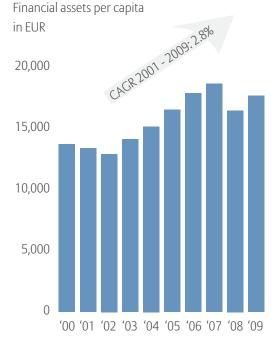
The turbulent first decade of the new century gave rise to stern challenges for savers across the globe: the dot-com bubble, the property price boom, the financial crisis and, last but not least, the most drastic economic slump since the Great Depression of the 1930s were the hallmarks of what was a rollercoaster ride on the markets. In this environment, it was not always easy for individuals to make the right decisions to protect and enhance their assets.

### The consequences of the financial crisis are still lingering

This can also be seen in the performance witnessed over the past ten years: since 2000, global financial assets have been growing by an average of 3.7% a year and thus somewhat slower than the growth in global economic output, which has increased by around 5.1% a year in nominal terms over the same period. This highlights the sustained impact on capital formation of the two steep stock market slides seen at the beginning and end of the decade. The after-effects of the Lehman shock of 2008, in particular, are still being felt. Although the global financial assets of private households made a marked recovery again in 2009, climbing by 7.5% to total EUR 82,230 billion, this was still not enough to make up for the losses incurred as a result of the financial crisis and is still down by 4% on the high of EUR 85,590 billion reached at the end of 2007.

### Aftermath of the financial crisis





CAGR = Compound Annual Growth Rate

This subdued development is all the more evident if we look at private financial assets in per capita terms. In 2009, around EUR 17,530 could be attributed to each individual in the world, a figure that was up by 6.6% on 2008 but is still down by around 5.5% on the high of EUR 18,550 per capita reported in 2007. All in all, per capita financial assets have been increasing by only 2.8% since the start of the new millennium, and thus by less than average global inflation of 3.4%. This moderate growth rate reflects not only the slump triggered by the crisis but also the unrelenting growth of the global population.

In order to paint a more sophisticated picture of global wealth distribution by country, the Allianz Global Wealth Report has split the countries evaluated into three wealth classes, similar to the income classes used by the World Bank: high wealth countries (HWC) with average per capital wealth of more than EUR 31,600; middle wealth countries (MWC), per capital wealth of between EUR 5,300 and EUR 31,600; and low wealth countries (LWC),

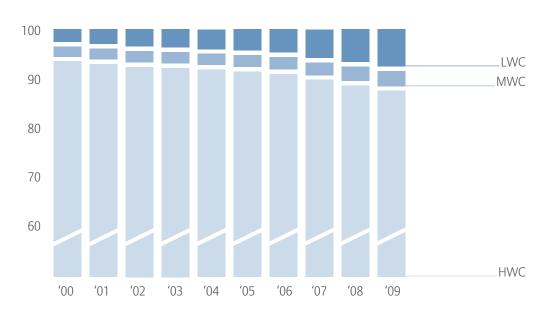
per capital wealth of less than EUR 5,300. (Please refer to the following section for information on how the individual wealth classes are defined.)

### Huge global prosperity gap

The result is anything but surprising. Wealth is distributed very unevenly throughout the world. It is still the case that almost 90% of global financial assets are in the hands of private households in the HWCs – although these countries only account for 20% of the total population and just under 70% of global economic output. But at least the trend is moving in the "right" direction: the HWCs' share of the global wealth cake has shrunk by six percentage points since 2000, meaning that poorer countries are gaining ground.

### Power shift

Share of total global financial assets, by country groups in %



The global prosperity gap is huge from a per capita perspective, too. At EUR 79,640 at the end of 2009, per capita wealth in the HWCs was many times greater than in the LWCs, where it averaged only EUR 1,800. People in MWCs have average financial assets worth EUR 14,280.

### Poorer countries are catching up

Despite these vast differences, however, the last ten years have not been a lost decade for the world's poorer countries. Per capita wealth in the LWCs has been growing by just shy of 16% a year since 2001, almost seven times faster than in the HWCs. The MWCs are also still showing extremely high growth, with an increase of 8%. This means that the "inequality factor" between the HWCs and LWCs, which was still hovering at 135 in 2000, has now been pushed down to 45, a development that is, without a doubt, impressive. If the differences in economic momentum were to continue unchanged over the next ten years, the gap between rich and poor would be narrowed to a factor of 12. Taking somewhat more realistic economic assumptions as a basis, this level of (un)equal distribution is likely to have been reached in 20 years' time. Nonetheless: convergence is certainly making headway as far as financial assets are concerned.

# Financial crisis has accelerated the convergence process

The sizeable differences in growth seen over the past ten years are closely linked to the varying impact of the two stock market crashes. The assets of poorer countries managed to escape these crashes virtually unscathed. The most recent financial crisis, in particular, helped to start ironing out global wealth imbalances, accelerating the "catch up" process for poorer countries. This is particularly evident if we compare performance in the HWCs directly with performance in the LWCs over the past two years. In 2009, per capita financial assets in the HWCs were still down by 7.4% on the pre-crisis level. Per capital financial assets in the LWCs, on the other hand, continued to grow in 2008 and are now almost 25% higher than they were before the crisis hit.

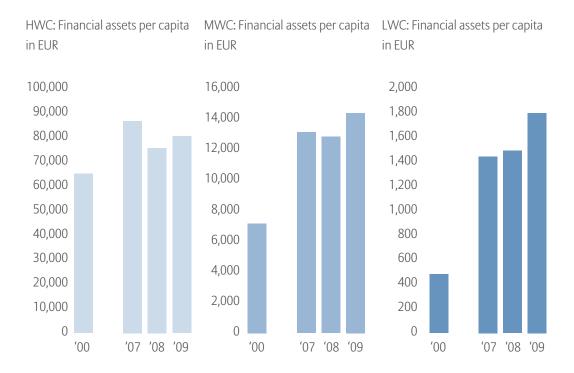
### Latin America "primus inter pauperes"

Most HWCs are located in North America and western Europe. As far as the other regions of the world are concerned, only Australia, Japan, Singapore and Taiwan qualify for the club of rich countries. Consequently, the global wealth map paints a predictable picture; on the one hand, we have the rich countries of North America, western Europe and Australia, with average per capita wealth of EUR 60,000 to EUR 100,000, and on the other, there are the poorer regions of Asia, Latin America and eastern Europe, where the same figure comes in at only between EUR 3,000 and EUR 6,000. Without the three Asian HWCs (Japan, Taiwan and Singapore), however, Asia's per capita wealth would stand at only EUR 1,970.

One fact that is likely to come as something of a surprise is the relatively low level of per capita wealth in eastern Europe (EUR 3,150), although it is important to remember that there are more countries to eastern Europe than just the up-and-coming new EU members, which have already achieved per capita financial assets of EUR 7,040. Other populous countries in the region, for example Ukraine, Russia or even Turkey, come in well below this level. Contrary to public perception, which is often still shaped by the idea of Asian or eastern European "tiger states", the bigger economies in Latin America are the strongest of the poorer, with average per capita wealth of EUR 3,900.

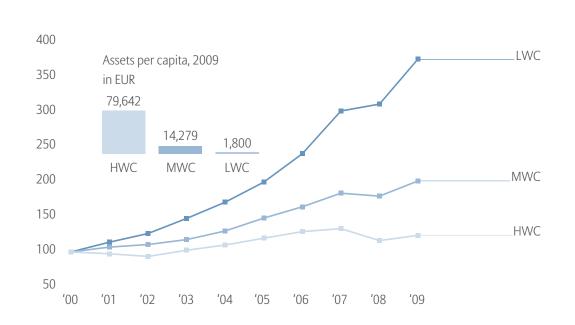
### 17

### Big prosperity gap



### Convergence of financial assets per capita

Index



18

### Eastern European wealth is growing fastest

Nevertheless, eastern European households have witnessed the strongest growth in per capita wealth over the past decade, with an average annual growth rate of almost 17%. Eastern Europe also fared well in the face of the financial crisis on average and, at the end of 2009, per capita wealth had already returned to a level 20% higher than before the crisis.

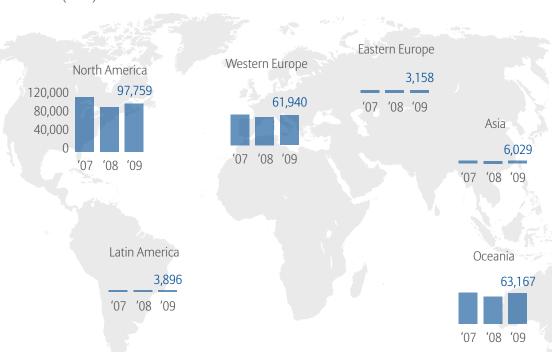
Only the Asian emerging markets have performed better over the past two years, with per capita wealth up by 23%. The low value for Asia as a whole is solely attributable to the standstill in Japan, the richest country in the region by far, where per capita wealth has been growing by only 0.4% on average since 2000.

All in all, the regional analysis also shows that it is precisely the poorer countries that have been witnessing a dramatic increase in wealth over the past decade. This also applies to Latin America, which is on a par with other high-growth emerging markets in Asia and eastern Europe in terms of growth. This is further testimony to the fact that many South American countries have finally managed to unleash their potential over the past ten years.

The situation in the rich regions tells the very opposite story. Not only has the growth in per capita financial assets been far slower over the past decade, particularly in North America and western Europe, with

#### Global imbalances

Financial assets per capita in EUR (2009)



growth below the 3%-mark in each case, the setback inflicted by the financial crisis has not yet been overcome by a long chalk: in all three rich regions, financial assets were still down on their 2007 level. Incidentally, the same also applies to the two rich Asian countries of Japan and Taiwan; Singapore is the only country that has already made up for the impact of the financial crisis in full.

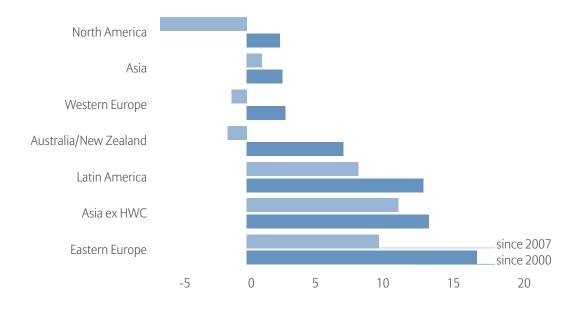
### Financial crisis has hit the rich countries particularly hard

Given these considerable differences in wealth development, particularly over the past two years, it comes as little surprise to learn that the list of the biggest losers of the financial crisis is headed by the world's industrialized nations. Only one eastern European emerging market, Latvia, is among the top 10.

Any attempt to pinpoint the reasons behind this development leads us back to the very nature of the crisis itself: the 2008 financial crisis was a crisis that hit developed markets. Unlike many crises in the past, the focus was not on the emerging markets. Rather, the epicenter was right under Wall Street, at the heart of the global financial markets. As a result, this time the world's developed, rich countries were hit far harder by the crisis than the rest of the world. This was aggravated by huge differences in debt and asset structures. Let's look at asset structures first:

#### Comparison of growth: Eastern Europe tops the table

Financial assets per capita, average annual growth in %



### Conservative wealth structure in poorer countries

It is relatively easy to see how important asset structures are. The higher the proportion of volatile capital market instruments in a portfolio, the greater the negative impact of losses in the value of these securities on overall performance. This is why private households in the US and Greece, for example, were hit so hard. Before the crisis (late 2007), securities accounted for more than 50% and more than 40% of financial assets in these two countries respectively.

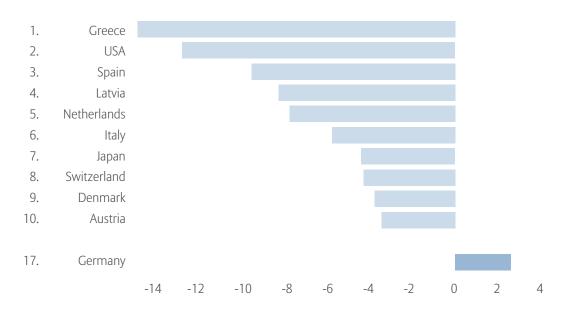
All in all, there are significant differences between the various country groups as far as asset structures are concerned. In the HWCs, financial assets are distributed more or less evenly among the three major asset classes: bank deposits, insurance policies and securities, although the latter dominate with

a share of 36%. In the LWCs, by far the majority of assets (68%) are held in bank deposits – as was the case before the financial crisis erupted – , and in MWCs, too, bank deposits still account for almost half of all financial assets. There is no doubt that this extremely risk-averse asset structure has helped the world's poorer countries - even though this was not, of course, always a conscious investment decision or immediate reaction to the financial crisis, but rather a result of the prevailing circumstances, i.e. the maturity of the individual financial systems, in the majority of cases.

Nevertheless, it is worth asking whether the financial crisis will not nourish a general trend towards keeping more assets in the form of "safe" liquidity again. After all, even a fleeting glance at developments in recent years shows that securities did not gain the significance they were expected to. The assumption that investors with increasing wealth would start turning more to investments offering higher returns — as house-

#### Biggest losers of the financial crisis

Change of financial assets since 2007 in %



holds in the US have done in the past – has failed to match reality, at least as far as the last ten years are concerned.

### Risk-aversion wins over focus on long-term returns

On the contrary: securities have become much less popular among investors, while investments in insurance policies have managed to defend their share of the market. Consequently, the clear winners of the past decade have been bank deposits, whose share of global financial assets has expanded by 5 percentage points. While this may be attributable, to some (lesser) degree, to the growing importance of the MWCs and LWCs, it primarily reflects increasing risk aversion among investors across the globe. A closer analysis of this behavior suggests that this trend could well intensify in the years to come. (See the

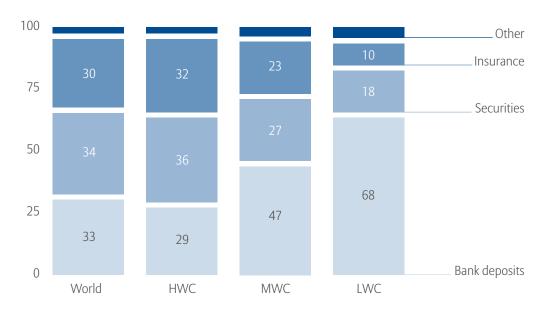
following box entitled "Empirical estimate of the medium-term impact of the financial crisis on household asset structures")

However, against the backdrop of demographic change, this development would be worrying: the rise in life expectancy coupled with falling birth rates renders private provisioning to maintain living standards in old age an absolute must. The financial crisis and the resulting surge in government debt will crimp public-sector budgets for a long time to come, with welfare cuts likely to prove inevitable. It would appear that most of the individuals affected are aware of their predicament.

It remains doubtful, however, whetherindividuals are gearing their savings efforts accordingly. Even if the underlying savings objective is not always entirely apparent from an investor's choice of asset class, it is safe to assume that assets invested in insurance policies and pension agreements are aimed

#### Conservative asset structure in poorer countries

Asset classes as % of total financial assets, 2009



primarily at providing a source of financial security in old age. Retirement savings tend to be concentrated in this asset class. So it is all the more disillusioning to see that there would appear to be no correlation between a society's ageing process (measured in terms of future age coefficients) and the proportion of wealth held in insurance policies/pension agreements.

This compels the conclusion that many private households have not yet risen to the challenge facing them, as individuals, as a result of demographic change - irrespective of their financial situation. If no further changes are made to the overall (tax) environment, there is a real danger that many private households will fail to accumulate the level of savings that they need for the future.

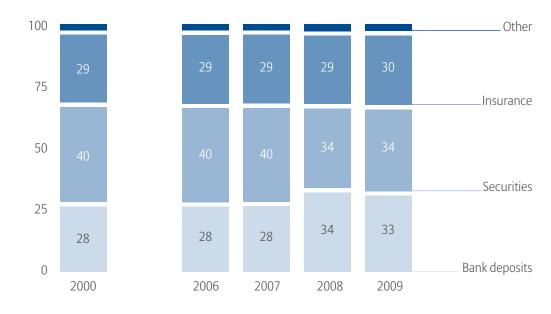
The financial crisis has made it all the more imperative for savers to take action. The mood of risk aversion among investors has already become apparent, which is understandable given the uncertainty that is plaguing the markets. But as far as the need

for long-term wealth accumulation is concerned, the tendency to "flee" to low-risk investments is counterproductive. The fact that savers are shying away from investments that offer the sort of returns they need means that they have to save even harder. A responsible approach to provision involves a certain degree of risk-taking.

It is clear that, with regard to the current drives to make the financial market more stable, there is more at stake than making banks bear their share of the crisis costs or curbing speculation. The bigger, more important task on the to-do list is restoring confidence in the financial markets and in long-term investment among private households so that they can surmount the challenge posed by demographic change.

#### Increasing risk aversion

Asset classes as % of total global financial assets



### Running up debt in rich countries

The differences in borrowing behavior are similarly pronounced to those affecting asset structures. Global private household debt stood at 68% of economic output at the end of 2009. But while this figure stood at 87% for the HWCs, it was only 16% for the LWCs. Private debt is thus primarily a rich country phenomenon - although higher incomes mean more capital formation, they also entail higher debt levels. Nowhere were the debt levels of private households higher than in Australia and New Zealand, where this sort of debt corresponded to 112% of GDP.

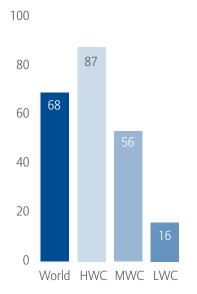
Much of the private household debt in the world's rich regions consists of (collateralized) property loans – more than 70% in North America and western Europe, and almost 90% in Australia and New Zealand. These loans have been rising rapidly in recent years, particularly in Australia/New Zealand, where the boom is continuing unabated. Stripping out mortgage loans, private households in these countries still had a comfortable level of net wealth on the whole: in Australia and New Zealand and western Europe, net wealth stood at just under 200% of GDP, while it came in at almost 300% of GDP in North America.

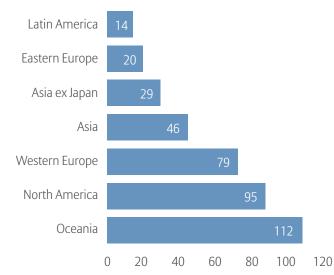
#### Debt reduction is an absolute must...

In most countries the share of property assets in overall private household assets is high. In Australia it stands at over 60% and brushes almost 75% in New Zealand. In the European Union private household assets comprise on average nearly two-thirds property assets and one-third financial assets. In the USA

### Private debt – a problem of the HWC

Private household debt as % of GDP, 2009





this ratio is exactly the reverse: in 2005 property assets accounted for just under 36% of the total assets of an average US household. In the wake of the financial crisis this figure tumbled to just under 29% last year. In view of the relatively high level of debt and falling property prices, many private households now need to consolidate. This can be seen not least in a sharp decline in new borrowing: in a two-year comparison (average for 2008/09 compared with 2006/07), it fell by 60% in western Europe and by more than 100% in the US – in other words: Americans have started to pay back their debt.

### ...but the impact on capital formation will be negative

This deleveraging process, however, had a detrimental impact on capital formation. This is because the drop in borrowing stifled the inflow of funds into financial assets, namely by two-thirds in North America and by no less than a third in western Europe (also two-year comparison).

This also explains why financial assets in rich countries were hit particularly hard by the financial crisis: private households in these countries had no choice but to use any spare funds to repay debts rather than to boost their reserves, especially given the clamp-down on new lending. This put something of a damper on wealth accumulation on the whole. Without a sufficient supply of "fresh" incoming funds, however, households have been unable to fully compensate for the value losses that hit their equities, in particular. In the future, too, savings drives will be focused, out of necessity, on the liabilities side of household balance sheets, i.e. reducing reliance on loans.

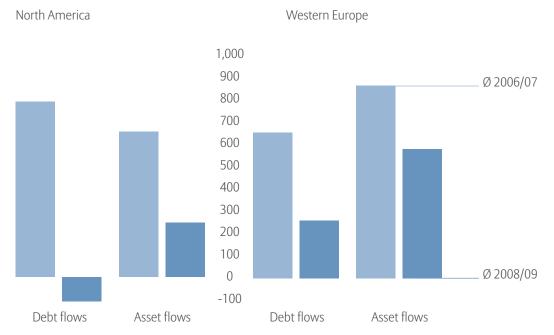
### The dark side of the real estate boom

Development of mortgage loans, in EUR Oceania North America Western Europe 8,000 CACR 2003 - 2009; 8.1% 900 CACR 2003 - 2009: 12:59 7,000 CACR 2003-2009: 8.7% 1.000 7,000 800 6,000 6,000 700 5,000 5,000 600 4,000 4,000 500 3,000 3,000 400 2,000 2,000 300 1,000 1,000 200 0 '02 '07 '08 '09 '02 '07 '08 '09 '02 '07 '08 '09

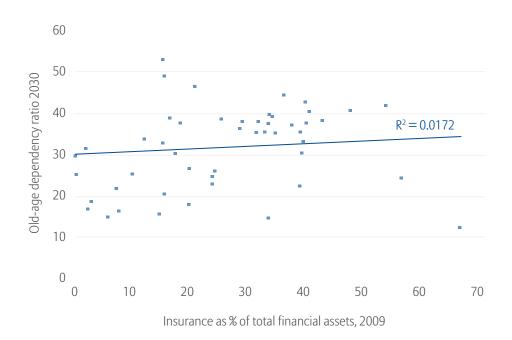
CAGR = Compound Annual Growth Rate

### Deleveraging weighing on asset growth

Development of debt and asset flows in EUR bn



### Retirement provisions not the predominant savings motive?



# Empirical estimate of the medium-term impact of the financial crisis on household asset structures

The dramatic losses in value and net sales of equities and investment funds during the financial crisis have pushed the proportion of high-risk investments held in household assets down across the globe. This box tries to perform an empirical estimate of whether or not, and to what extent, the financial crisis will impact the structure of household assets in the years to come.

For a medium-term estimate, we compared the reactions to the stock market slump in 29 selected countries between 2000 and 2002. In the half of the countries that suffered the heftiest share prices losses between 2000 and 2002 following the bursting of the dot-com bubble, the recovery in net securities purchases by households was extremely tepid after the crisis. At the same time, the proportion of securities held in financial assets was slow in increasing again. By comparison, in the other half of the countries, which were not hit quite as hard by the crisis, the proportion of high-risk investments held in portfolios rose and securities purchases also increased considerably from 2002 onwards.

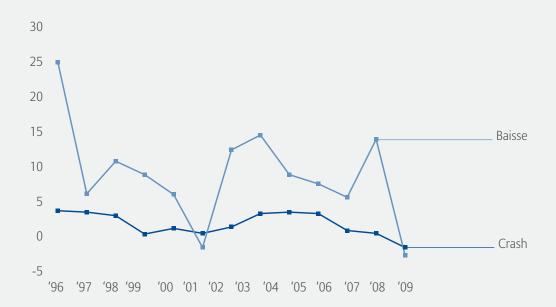
The empirical modeling is based on a panel data model that estimates the average impact of the crisis on (i) securities transactions and (ii) securities as a proportion of total financial assets. In order to ensure the comparability of the data for various countries, securities transactions are not assessed in terms of absolute volumes, but as a percentage year-on-year change in volume. The main focus is on the impact of the stock market crash on household asset structures. For each year from 2002 onwards, the average impact of the percentage slump on the stock markets between 2000 and 2002 is estimated for the individual countries. This allows annual trends in investment behavior caused by the share price slump that hit at the beginning of the decade to be identified. (You can find further information on the estimate method in Appendix A.)

The results of the estimate show that following a stock market slump, there was a temporary phase in which net securities purchases were far lower. Nevertheless, this effect appears to be limited to a period of two to three years. It is a different story as far as the estimated long-term effect on asset structures is concerned. There is a negative correlation between high-risk investments as a proportion of total financial assets and the extent of the crash. This effect accumulates over a period of several years and results, all in all, in a medium-term decline in the proportion of securities held in household assets to the tune of 5 percentage points on average.

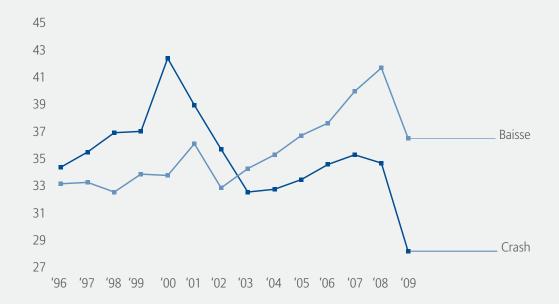
The most recent crisis is expected to have a similar impact on household investment behavior. While the current decline in securities transactions is likely to be only a temporary one, the proportion of high-risk investments held in household financial assets will slide in the medium term in the countries affected. The estimates show that the proportion of securities held in financial assets could be around 5% lower. Based on the figures for 2009, this equates to a loss of potential demand for equities and other securities corresponding to more than EUR 4,000 billion over the next five to ten years.

### Different reactions to the dot-com crisis





# Securities in % of total financial assets



Explanation: In the country group "Crash" are 50% of those countries with the strongest stock market crash between 2000 and 2002; the country group "Baisse" consists of the other half. Source: Datastream, own calculations.



How global financial assets are distributed:

How big is the world's wealth middle class?

Social classes are normally identified in terms of income, meaning that the middle class is defined by how much it earns. By contrast, there is no system that divides society into "wealth classes".

But there is certainly a link between disposable income and wealth. Households have to exceed a certain income level before accumulating wealth is even an option.

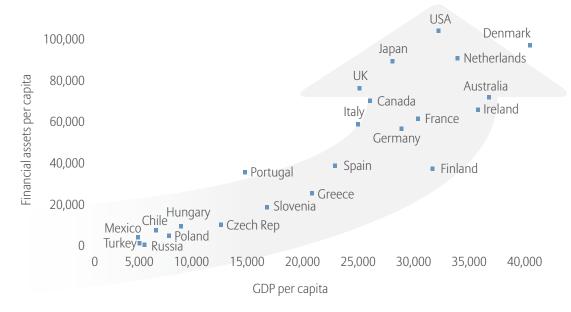
As a general rule, people in lower income groups and some of the (income) middle class have either no, or only very few

assets. This means that the terms "income middle class" and "wealth middle class" do not refer to the same group of people; rather, the distribution of income and wealth vary considerably: while around one third of the population earns half of the population owns half of its assets on average.

Consequently, our definition of the global wealth middle class is based not on the standard income classes, but on global average per capita wealth, which stood at EUR 17,530 at the end of 2009. We have defined the middle wealth countries (MWCs) as those countries that own between 30% and 180% of average global per capita wealth. In 2009, this corresponded to average per capita wealth of between EUR 5,300 and EUR 31,600. (Please refer to Appendix A to see how the wealth thresholds were defined)

#### Strong correlation between income and wealth

Financial assets of households and GDP per capita in EUR (2009)



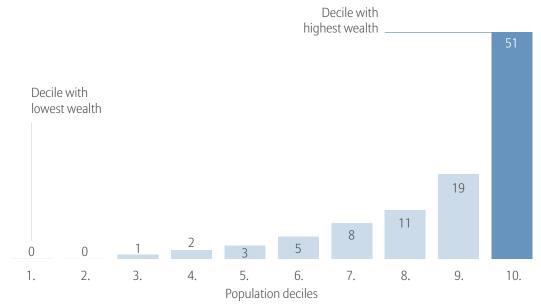
### The group of middle wealth countries is expanding

Based on the above, 13 of the countries we have analyzed can be classified as middle wealth countries (MWCs) in 2009: Chile in Latin America, Malaysia and South Korea in Asia, the Czech Republic, Hungary, Estonia, Lithuania, Poland, Slovakia, Slovenia and Croatia in eastern Europe, along with New Zealand; Greece is the only country in the EU-15 to be assigned to the MWC group. A total of 180 million people lived in the MWCs. 920 million live in the high wealth countries (HWC, average per capita wealth of more than EUR 31,600), while just short of 3.6 billion people live in the world's low wealth countries (LWC, per capita wealth of less than EUR 5,300) which include China and India.

Membership of the MWC club has changed drastically in recent years. Only ten years ago, the only MWCs in eastern Europe were the Czech Republic, Slovenia and Croatia. On the other hand, it is surprising that Mexico and Brazil, which have long been classified as falling into the upper middle income bracket based on the World Bank's definition, are still not members of the MWC group. With financial assets of EUR 5,120 per capita at the moment, however, Mexico was very close to the MWC threshold.

### Uneven distribution

Share of global (50 countries, 4.6bn people) financial assets, by population deciles in %



In addition to the world's established industrialized nations, Singapore and Taiwan rank among the HWCs. At the end of 2009 these countries had average per capita wealth of EUR 79,640 in a group that ranges from Portugal, where average wealth stood at EUR 36,430, to Switzerland, with EUR 163,700.

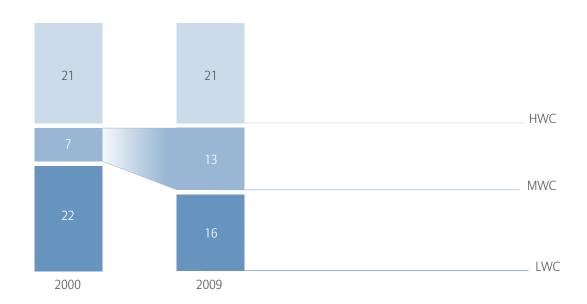
Although the simple analysis of average per capita weath and the resulting division into countries with low, average and high assets enable a rough categorization of the world, this only provides limited information on how many people across the globe fall into the middle wealth bracket. We have performed a country-specific analysis to ensure that we also take account of individuals in the middle wealth class who are living in poorer countries.

### 565 million people fall into the wealth middle class

In order to do so, we have to make assumptions as to how wealth is distributed within a country. In their studies, Davies et al. (2009) showed that, despite the differences, there is generally a relatively stable link between income and wealth distribution. We have used this link to draw conclusions as to wealth distribution in the countries we have analyzed based on income distribution levels in the countries in question. This involved "converting" income deciles into wealth deciles to calculate the average wealth per population decile.

#### A wealth middle class is developing

Number of countries in wealth classes

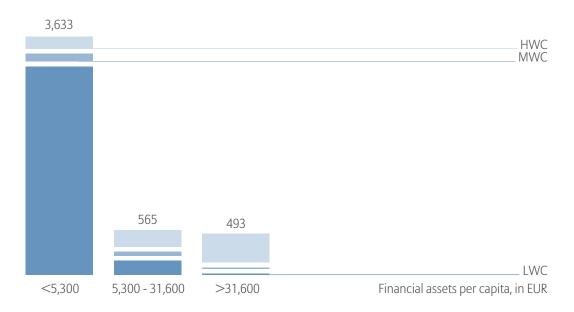


By doing so, we can identify the proportion of the population in the middle or high wealth bracket in poorer countries, provided that, on average, at least one tenth of the population surpasses the threshold value. Brazil and Mexico, for example, are home to more than 60 million people with financial assets averaging more than EUR 5,300 per capita.

Using this calculation, a total of 565 million people around the globe belonged to the wealth middle class at the end of 2009 – compared with less than 300 million people in 2000. Of these, 230 million people lived in LWCs and 65 million people in MWCs. So while more than half of the 565 million members of the global wealth middle class are not resident in rich countries (HWCs), the global "upper wealth class" is concentrated in the HWCs; of the total 493 million people with high wealth, only 35 million lived in the world's poorer countries at the end of 2009.

### Over 1bn people around the globe own more than EUR 5,300

Population (50 countries analyzed) in m

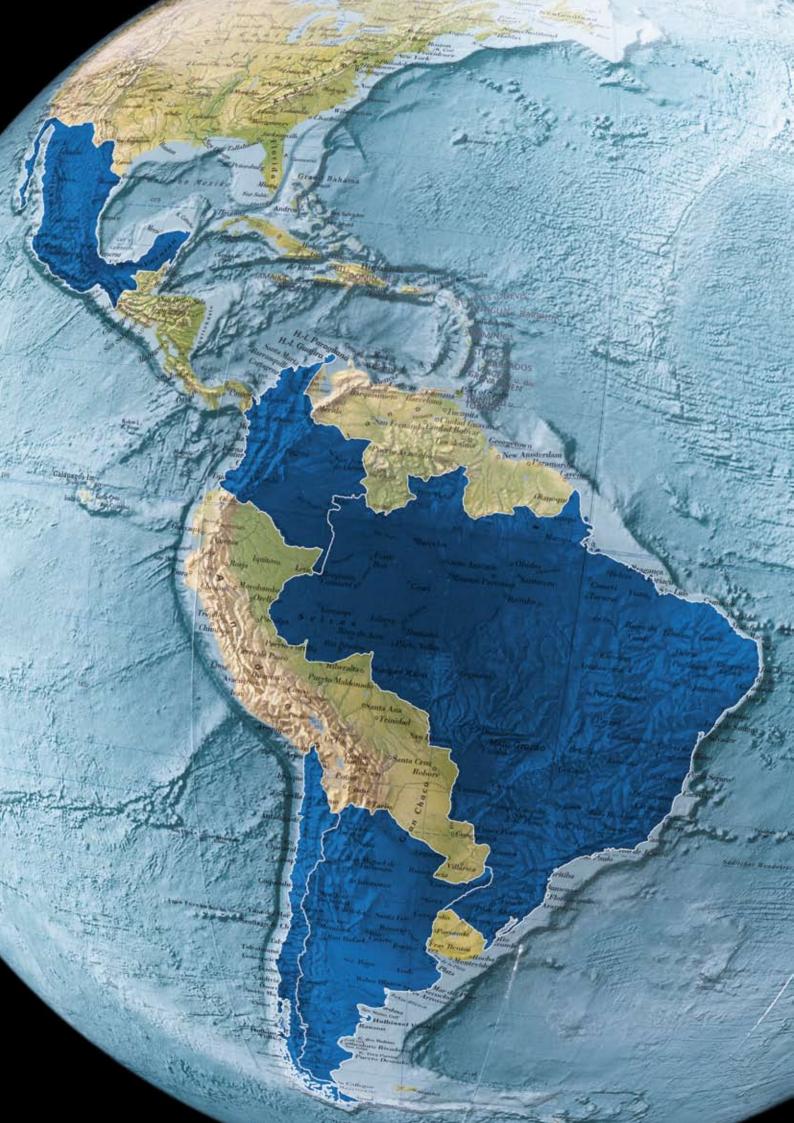




### Regional differences:

# Financial assets in the individual regions

- 36 Latin America
- 42 USA and Canada
- 48 Western Europe
- 54 Eastern Europe
- 62 Asia
- 72 Australia and New Zealand



## Latin America

Population	
Total · · · · · · · · · · 406 mill	ion
Proportion of the region as a whole····································	
Proportion of the global population · · · · · · · · · · · · · · · · · · ·	.9%
GDP	
Total · · · · · · · EUR 2,640 bill	ion
Proportion of the region as a whole $\cdots$	80%
Proportion of global GDP · · · · · · · · · · · · · · · · · · ·	.4%
Financial assets of private households	
Total·····EUR 1,580 bill	ion
Average·····EUR 3,895 per cap	oita
Proportion of global financial assets··································	.9%
Debt (as % of GDP)·····	14%

#### Latin America is catching up

All in all, only just under 2% (EUR 1,580bn) of the financial assets held by private households across the globe were located in the five Latin American countries covered in our analysis. Ten years ago, however, this figure had still languished below the 1% mark. Thanks to a decade of strong growth in financial assets, Latin America has caught up. The region already has one MWC, Chile, with Mexico expected to join the ranks shortly.

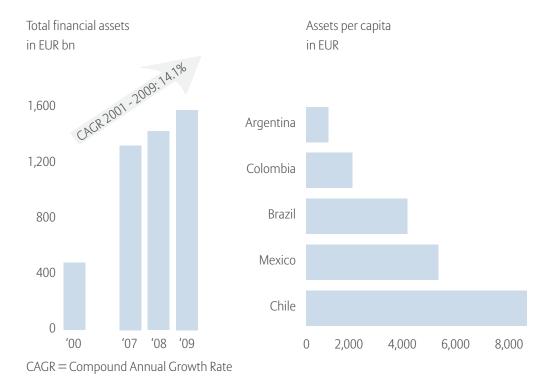
The progress made is evident if we look at wealth distribution within the individual countries: in 2009, no fewer than 58 million Latin Americans were already classed as belonging to the middle wealth group (per capita wealth of between EUR 5,300 and EUR 31,600) and almost 13 million have wealth that even exceeds EUR 31,600. At the same time, the percentage of the population living in poverty has fallen from 48% to

33% in the period from 1990 to 2008. Brazil, in particular, has made significant progress as far as fighting poverty has concerned, and has reduced the proportion of people living in poverty from 37.5% (2002) to 26% (2008).

## Poorly developed financial sector

In general, however, the Latin American financial sector is still relatively poorly developed. In the countries we have analyzed, both the average insurance penetration rate – the premium volume of life and P/C insurance corresponded to only 2.5% of GDP – and average lending to the private sector – just under 37% of GDP – are underperformed only by Africa in an international comparison.

## Growth story in Latin America



The low lending levels tend to push down the savings rate of private households, especially at times of crisis, because households are unable to resort to short-term loans to maintain their consumption habits. Instead, they raid their savings. The same trend was observed after Mexico's tequila crisis, for example, when the household savings rate fell from 14.1% in 1994 to 9.5% only two years later. The savings rate did, however, bounce back swiftly and, at 12.4% in 2007, was far higher than in other major Latin American countries, where savings rates fluctuate between 7% and 9%.

The flip side of the restricted access to loans is the very low debt ratio in a global comparison. On average, private households across the globe had debt corresponding to 68% of GDP in 2009. In Latin America the figure was a mere 14% as a whole, with Chile reporting the highest debt ratio, at 27%.

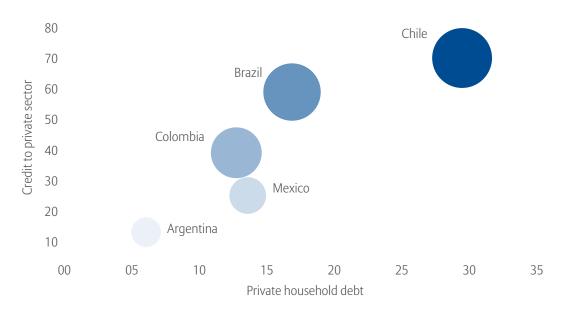
## Latin America escaped the financial crisis largely unscathed

The financial crisis had only a limited impact on most Latin American countries; with a fall in GDP of 2.1%, the region fared relatively well by international standards last year. Mexico was dealt the harshest blow due to its dependency on the US and on the oil price.

As a result, at -4.5% (2008) Mexican households were also hit by the most drastic decline in wealth triggered by the financial crisis. This was also attributable to the structure of Mexican financial assets, because it is not only in terms of economic dependency that the country is closer to its northern neighbor than its Latin American relatives. There are many parallels between Mexico and the US in terms of investments, too. Even back in 1995, these two countries were the only OECD states where more than 50% of private households' financial assets were in securities. Before the crisis. Mexicans had more than 82% of their financial assets invested in securities. So when the stock market crashed

## Low private household debt

Credit to private sector and household debt as % of GDP



by almost 25% (2008), households suffered hefty asset losses, prompting them to turn their backs on both the equity and the bond markets. However, at the end of 2009 the figure was back at 80%, with the Mexican stock exchange recovering in the course of the year and recording new highs.

Mexican household financial assets had climbed to EUR 560bn by the close of 2009, more than compensating for the asset losses of 2008, and at EUR 5,120, per capita wealth remains the second-highest in Latin America after Chile (EUR 8,500).

A comparison with the eastern European EU states, however, shows just how much influence the overall economic conditions and the maturity of the financial system have on the financial assets of private households. 10 years ago, Mexico had per capita financial assets of EUR 2,050, putting

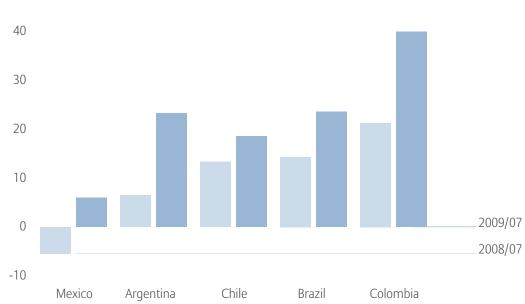
it more or less on a par with the eastern European EU states (EUR 2,200). When the eastern European candidate countries joined the EU, however, they experienced a real spurt in development, with the result that, by 2009, average per capita financial assets in these countries were EUR 1,900 (or 40%) higher than in Mexico.

## The varying success of pension system reforms

There is another aspect that sets Mexico apart from its Latin American neighbors. The proportion of assets invested in life insurance or pensions is very low in both an OECD and a regional comparison, at just over 4%. Despite numerous pension reforms, the transition from the old state-financed pension system to a privately financed one is still an ongoing process. Although pension levels (pension remuneration as a % of earnings before retirement) have fallen from 72.5% in 1997 to 35.8% in 2006, the demand for private pensions has been lame to date. The government recently hoped to boost the private pensions

## Crisis, what crisis?

Change of financial assets per capita since 2007 in %



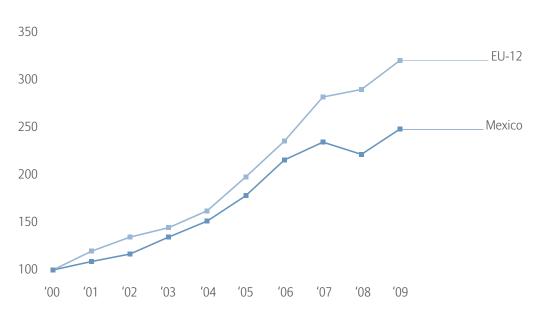
system by limiting the costs and commission that private providers can charge and allowing pension funds to offer more flexible and higher-risk products that are better suited to savers' investment preferences and life circumstances.

Countries like Chile and Colombia have made far more headway as far as pension reforms are concerned, explaining why at 37% and 39% of financial assets respectively, insurance policies are the second most popular form of investment after bank deposits. In Chile, the introduction of an independent, fully funded private pension system thirty years ago gave rise to a high private savings volume. In Colombia, on the other hand, the pension system was not fully privatized. Instead, the state system, which is financed by contributions, has been competing with a private pension system since 1993. Nevertheless, sections of the population like

women, single parents and people working in the informal sector, in particular – groups that account for no less than almost 60% of all Colombians – as well as seasonal workers still fall through the net, meaning that only 25% of Colombians are covered by the pensions system at all. Brazil seems to have found the solution to this problem: in order to offer the large number of workers in the informal sector access to pensions and to promote the private pensions industry, Brazil has been achieving remarkable success with its VGBL (Vida Gerador Beneficio Livre) products of late. These combine a life insurance product with a long-term savings product, offering considerable security and with the advantage of deferred taxation.

## Eastern European EU-members leave Mexico behind

Average assets per capita Index 2000 = 100





# North America

Population  Total······  Proportion of the global population ······	
GDP Fotal······EUR	11,500 billion
Proportion of global GDP ·······	
Fotal······ EUR Average···· EUR 97,7	
Proportion of global financial assets······  Debt (as % of GDP)·······	41%

At EUR 34,040bn at the end of 2009, 41% of the financial assets held by the world's private households was concentrated on the US and Canada, with the lion's share (EUR 32,020bn) attributable to the US. In a global comparison of individuals in the middle or high wealth bracket, North America once again - not surprisingly - led the field. 171 million people, or 35% of those with assets of more than EUR 31,600, live in North America, followed by 208 million people in the middle wealth bracket.

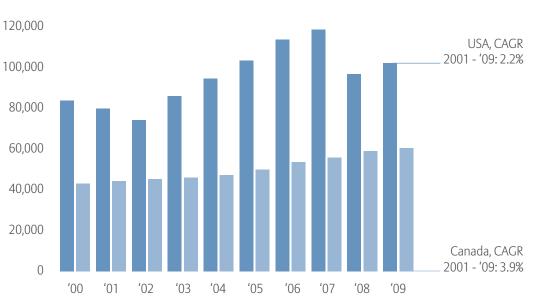
#### In the eye of the financial crisis storm

US households really felt the brunt of the financial crisis. In 2008, the value of financial investments slid by 17.8% in a year-

on-year comparison, mainly due to the nosedive taken by the stock market. Furthermore, most segments recorded far lower cash inflows than in the past due to the weak economic environment. Whereas households in most countries managed to compensate for their 2008 losses in 2009, the United States was an exception to this rule. Even at the end of 2009, per capita household financial assets were still only slightly higher than the value reported at the end of 2005, and were still down almost 14% on 2007, at EUR 101,760. In a global comparison, however, US households still come second only to Switzerland in terms of wealth. While per capita household financial assets in Canada are only EUR 60,240, they did not decline in the financial crisis.

## Stock market crashes take their toll

Financial assets per capita in EUR



CAGR = Compound Annual Growth Rate

As far as the structure of financial assets is concerned, US and Canadian households differ considerably from households in other regions. Most assets are invested not at banks, but in securities, insurance policies and pension funds. This structure has paid off in Canada, where total financial assets have been growing at an annual rate of 4.9% for the past ten years. This is due, among other things, to the development of the stock market, which has gained 3.4% a year in the same period.

## Shunning shares

In the US, on the other hand, the high proportion of securities held in financial assets proved less advantageous for households due to the sluggish development on the stock market. In the same period, total financial assets grew by only 3.2% a year. Within the securities asset class, around one third of investments was attributable to equities (direct investment) – and at the end of 2009 the S&P 500 was still 354 points down on its 1999 level. A look at the flow patterns shows that US households exploited intermittent price gains to sell their shares, meaning that the assets held by private households in equities has fallen by EUR 1,860bn over the past ten years after reaching an all-time high in 1999. Other securities, like bonds and investment funds, however, more than compensated for

Other

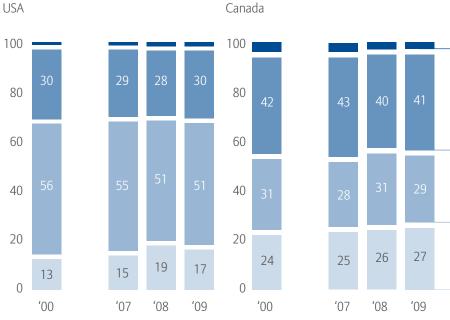
Insurance

Securities

Bank deposits

## High share of securities

Asset classes as % of total financial assets



the poor performance of equity investments, pushing the total volume of investments held in securities up from EUR 14,600bn to EUR 16,400bn over the past ten years. Consequently, the increasing risk aversion among investors witnessed across the globe did not prompt US investors to eschew securities in general, but rather to adjust the way in which their investments are distributed within this asset class.

US banks did not manage to attract more savings deposits in 2009 either. They lacked appeal from an investor point of view, despite the fact that the US government increased the level of deposit protection to USD 250,000 per customer. In actual fact, at EUR 37bn, the inflow of funds into bank deposits last year corresponded to only one eighth

of the amount saved at banks every year between 2004 and 2007. The government's decision to boost the level of deposit protection did at least serve to avert panic-driven withdrawals following the crash of Lehman Brothers. But the ongoinmg nervousness among investors is illustrated by the fact that EUR 189bn was still "parked" in sight deposits at the end of 2009, compared with only just under EUR 6bn in the first quarter of 2008.

The demand for pension funds had already been sliced in half in 2008 and remained mired at a low level last year, a trend that is also reflected in the weak inflows into 401(k) pension plans. The weak economy, coupled with higher unemployment, meant lower employee deferrals and higher cash outflows, because employees who lost their jobs took the assets they had accumulated in their pension plans along with them. This development was accompanied by a drop in employer matching contributions as well.

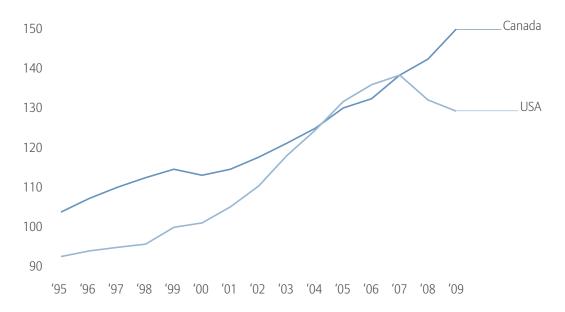
## The end of the debt supercycle

Influenced by the trying economic climate, rising unemployment and uncertainty about the future, US households upped their savings rate sharply to 5,9% last year, a trend that reflects considerable consolidation pressure. Private household debt had equated to more than 130% of disposable income since 2005 a level that is virtually impossible to sustain in the long term. To keep debt servicing at a manageable level, even in an environment characterized by rising interest rates, the debt ratio should be closer to the 100% mark. Among other things, the more stringent lending terms imposed during the crisis meant that household liabilities were reduced on balance for the first time.

Canadian households are also deeply in debt. Ever since the late-1990s, liabilities have exceeded 100% of disposable income. Unlike in the US, not even the financial crisis – which proved relatively mild in Canada – prompted a rethink: the figure rose further to 142% last year. This is cause for concern because, according to a household study performed by the Canadian Association of Certified General Accountants (CGA-Canada, 2008), most loans are required for consumer goods and living costs. 32% of those surveyed said that they did not set aside any money for savings, or for private pensions either. To date, rising house prices, low interest rates and the rapid recovery made by financial assets in the wake of the crisis have helped to ensure that the high debt levels can still be financed. But the financial situation of Canadian private households is far from sustainable.

## Parting of ways in debt development

Household debt as % of disposable income





# Western Europe

<sup>2</sup> Opulation
Total······405 millior
Proportion of the global population · · · · · · · 5.9%
GDP
Fotal····· EUR 11,890 billior
Proportion of global GDP · · · · · · 29%
Financial assets of private households
Total····· EUR 25,100 billior
Average·····EUR 61,940 per capita
Proportion of global financial assets······319
Debt (as % of GDP) · · · · · · · 80%

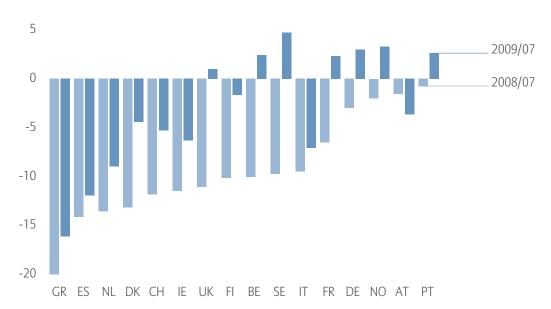
At EUR 61,940, the average per capita financial assets of households in Europe's industrialized countries was the third-highest in the world at the end of 2009 in a regional comparison. However, the actual per capita figures spanned a fairly wide range, from EUR 25,760 in Greece to EUR 163,730 in Switzerland. All in all, 127 million Europeans fall into the middle wealth bracket (EUR 5,300 to EUR 31,600) and 176 million are classed as belonging to the high wealth group, with the latter accounting for just under 36% of the global upper wealth class.

## Varied pace of recovery after the crisis

Although financial assets in the region climbed by EUR 1,640bn in 2009, this was not enough to make up for the losses incurred as a result of the financial crisis. After all, 2008 shaved 7.6% or EUR 1,920bn off household assets in Europe. In absolute figures, households in the UK were hardest hit with a blow of EUR 433bn. The greatest impact in relative terms was felt by Greece, where financial assets plummeted by 17.9% in 2008 and were still down by 14.2% on the pre-crisis level at the end of 2009. By contrast, Belgium, France, Germany, Norway, Sweden, the UK and, by the skin of its teeth, Portugal managed to make up for the losses incurred in the 2008 crisis year.

## Financial crisis left its mark

Change of financial assets per capita since 2007 in %



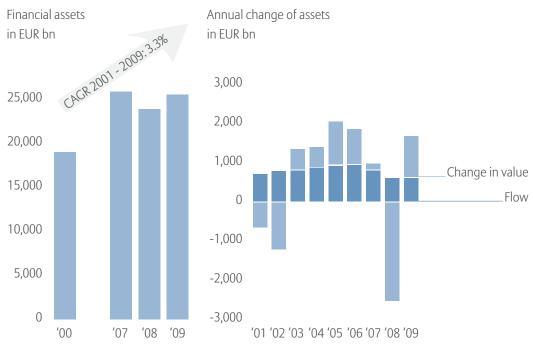
This was owed primarily to gains on the stock markets, which bounced back strongly in 2009. By contrast, overall inflows into financial assets in 2009 were once again well below levels seen during the crisis. Bank deposits, in particular, following the flight to safety, recorded minimal inflows last year due to the decline in interest rates. It was a different story for securities. The outflow of funds was reversed in 2009: on balance, the volume of securities purchased rivaled a level last seen in 2001.

#### Insurance policies dominate

The structure of western European financial assets is distributed almost equally among bank deposits, securities and insurance policies. Whereas securities were still the dominant asset class ten years ago, they were overtaken by insurance policies in 2004 and, in the course of the financial crisis in the face of tumbling stock markets and the flight to safety, they were also overtaken by bank deposits.

Within the region, however, the situation varies considerably, especially as far as the popularity of bank deposits is concerned. Greek citizens, for example, had 72% of their financial assets invested at banks in 2009, compared with only just under 20% in Sweden. The British had the smallest proportion of assets invested in securities at 13.8%, while the Italians had the highest share of security investments at just short of 49%. As far as insurance policies are concerned, the Greeks once again trailed the field with only 4%. The British were at the other end of the scale, with more than 53% of their financial assets tied up in insurance policies.

## Asset flows down, but stock markets rebound



CAGR = Compound Annual Growth Rate

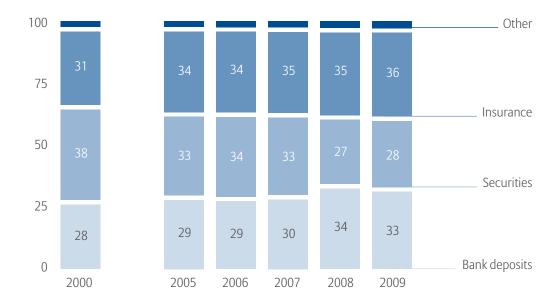
The stable economic backdrop prior to the crisis had prompted many households to ramp up their liabilities by 6.7% a year from 2001 onwards. More restrictions on lending and the uncertain future, however, have put the brakes on the soaring liabilities trend ever since the crisis broke out, bringing the rate of increase down to only 1.8% last year.

Nevertheless, household debt as a proportion of GDP has risen substantially over the last ten years, from 60% to just under 80% of late, as a result. The steepest rise was seen in Ireland where household debt doubled to 127% of GDP within an eight-year period. The only EU country in which private household debt (as a % of GDP) has fallen since the start of the new millennium is Germany, with a drop of over 10 percentage points.

Households have stepped up their efforts to save as a result of the crisis. Whereas the gross savings rate still averaged 11.3% at the end of 2007, it had already climbed to 13.9% by the final quarter of 2009. The increase in the savings rate is not only explained by the fact that the rise in disposable income has been less pronounced than in the past. Rather, the main reason lies in efforts by households to curb their consumption. The increase in consumer spending has been slower than income growth since mid-2007, and fell in absolute terms in the last two quarters of 2009.

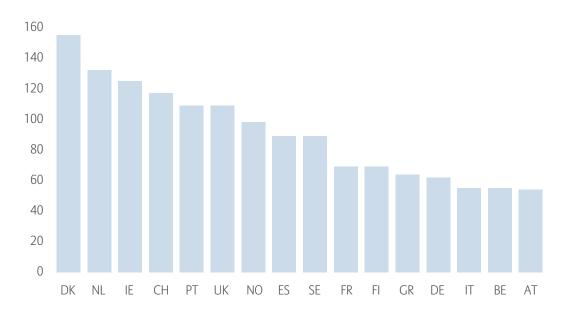
## Insurance dominates

Asset classes as % of total financial assets



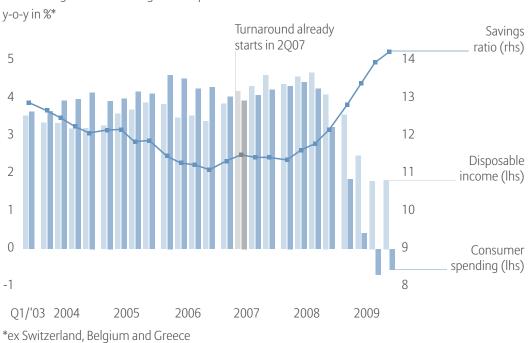
## Debt levels sustainable?

Private household debt as % of GDP, 2009



## Households cut back on consumption

Gross savings ratio and change of components





# Eastern Europe

opulation otal·······383 milli roportion of the global population ······5.	
DP otal ·····EUR 2,620 billi	on
roportion of global GDP ·······4. nancial assets of private households	
otal ······EUR 1,210 billi verage····EUR 3,160 per cap	ita
roportion of global financial assets······1. bebt (as % of GDP)······2	

## Eastern European EU members Surge in growth

In no other region has there been such a pronounced improvement in per capita financial assets over the last ten years than in the ten eastern European EU member states. In Romania, wealth has increased more than tenfold since the end of the last century – albeit starting at a very low level (EUR 240 in 1999). The region as a whole has been reporting average annual growth rates of 12.6%. At 0.9%, however, eastern Europe still accounts for a very small share of total global financial assets – even if this share has more than doubled over the past decade.

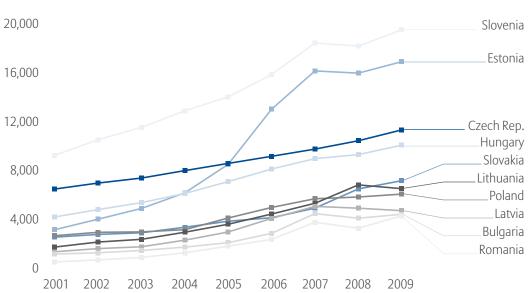
On average, eastern European households had per capita financial assets of EUR 7,040 at the end of 2009, with Slovenia the long-standing leader with EUR 19,700 and Romania bringing up the rear with EUR 4,270. What is more, seven countries in the region now rank among the MWCs. Around 26 million people have average per capita wealth in excess of EUR 5,300. 7.3 million are now members of the upper wealth class. Nevertheless, with a share of only 1.5%, the ten countries in this group are still grossly underrepresented.

#### Financial crisis weathered

Last year, all of the countries in this region, with the exception of Latvia and Bulgaria (two countries whose economies were hit exceptionally hard), managed to make up for the asset losses triggered by the financial crisis. Total financial assets in these ten countries came in at EUR 715bn at the end of 2009, a good 12% higher than before the crisis.

## Rapid development

Financial assets per capita in EUR



The eastern European countries' entry to the EU has also given the financial sector a real boost in terms of development. Austrian and Scandinavian banks, in particular, expanded strongly in the region, propelling lending to the private sector up to 45% of GDP within a short space of time. Annual growth rates in excess of 30% were nothing unusual, and some countries, such as Bulgaria and Romania, even witnessed annual lending growth that surpassed the 60% mark.

## Lending crisis successfully obviated

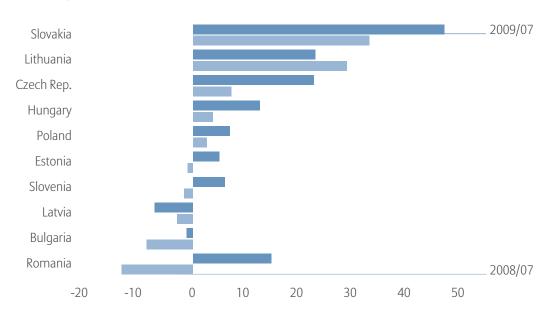
This obviously reflected the significant need for this region to catch up, and fueled an economic boom. But these loans were not only used to purchase capital goods. Many households took the loans as an opportunity to finance consumer spending and, first and foremost, construction activity, taking out loans in euros or Swiss francs due to the considerable interest rate differential. This remained unproblematic as long as the respective local currencies remained on a stable upward

trend. Household debt trebled, increasing from 13% of GDP (2001) to 35% (2009), as a result. This is more or less on a par with the level seen in Asia, but is still far lower than in the world's established industrialized nations (87%).

The financial crisis slammed the brakes on lending in the entire region: household liabilities increased by only EUR 7bn in 2009 – only a fifth of the figure seen the year before. Nevertheless, the region managed to avert the prophecy of a total collapse because exchange rates stabilized again fairly quickly meaning that – also thanks to low interest rates in the euro area and in Switzerland – the feared wave of household bankruptcies and insolvencies at small companies with no

## Financial crisis losses broadly offset

Change of financial assets per capita since 2007, in %



income in foreign currencies failed to materialize. The financial crisis was interpreted as a warning in much of eastern Europe, exposing the weaknesses inherent in the financial sector. In particular in Hungary, the country with the highest proportion of foreign currency loans along with the Baltic states, more loans are being granted in Hungarian forints again.

#### More conservative asset structure

On the whole, it would appear that after a prolonged period in which for most of eastern Europe it was all upswing and a feeling of being on the move, households are now becoming more cautious again, in line with the increasing risk aversion across the globe: in almost all of the countries in this region, bank deposits rose considerably as a proportion of total financial assets, mainly to the detriment of securities investments. This reflects not only the slide in shares, but also a change in savings habits: the bulk of asset inflows were directed at banks, with the exception of the Baltic states, where financial assets barely grew at all due to the severity of the financial crisis. Securities, on the other hand, were hit by substantial outflows in some cases.

Insurance policies were able to further expand their share of household portfolios after the crisis as well, although the shift in portfolio distribution is largely due to poor securities performance. The insurance market in these countries is still a fairly young and underdeveloped market, meaning that confidence in the sector has not yet been established either. At only 2.3% of GDP at the end of 2009, the penetration rate in the

eastern European EU states was still lower than in the emerging markets, which had a penetration rate of 2.7%. The life insurance segment is particularly underdeveloped. The average penetration rate for this type of insurance comes in at only 1.1% of GDP in these countries, and does not even reach the 0.5% mark in Bulgaria, Romania, Estonia, Latvia and Lithuania. Only Poland is on a par with the average rate for the emerging markets.

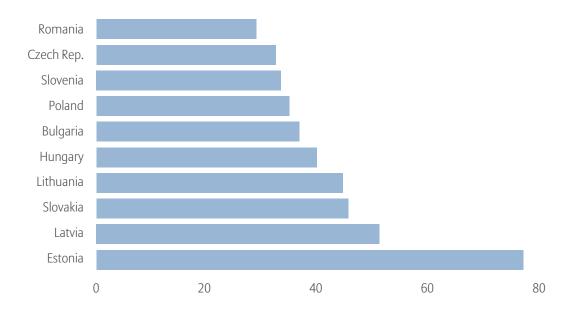
## EU candidate countries: Croatia and Turkey

Croatia looks set to become the 28th member state of the EU over the next few years. At EUR 10,900, average per capita household financial assets have already outstripped the average for the eastern European member states, propelling the country into the MWC group. The structure of financial assets in Croatia is also similar to the structure seen in the EU member states. At just under 50%, bank deposits account for the lion's share of financial assets, with securities coming in second at 35%. With a penetration rate of 0.9% of GDP, the life insurance sector is still not particu-

## 59

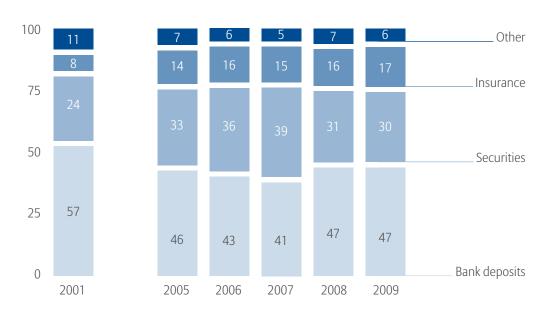
## Private household debt

as % of GDP



## Bank deposits as safe haven in the financial crisis

Asset classes in % of total financial assets



Turkey still has a serious game of catch-up ahead of it in terms of financial assets. At EUR 2,630, per capita wealth is even lower than in Romania, where households already had per capita wealth of EUR 3,730 when the country joined the EU in 2007. However, the Turkish population has been af-

flicted by numerous severe economic crises and hyperinflation in the past. So it comes as no surprise that rebuilding confidence in the Turkish economy and the country's own currency has been a long, hard struggle. Consequently, the financial assets of EUR 197bn tend to be invested very conservatively: at the end of 2009 80% were held in bank deposits, with more than 30% of these deposits still denominated in foreign currencies.

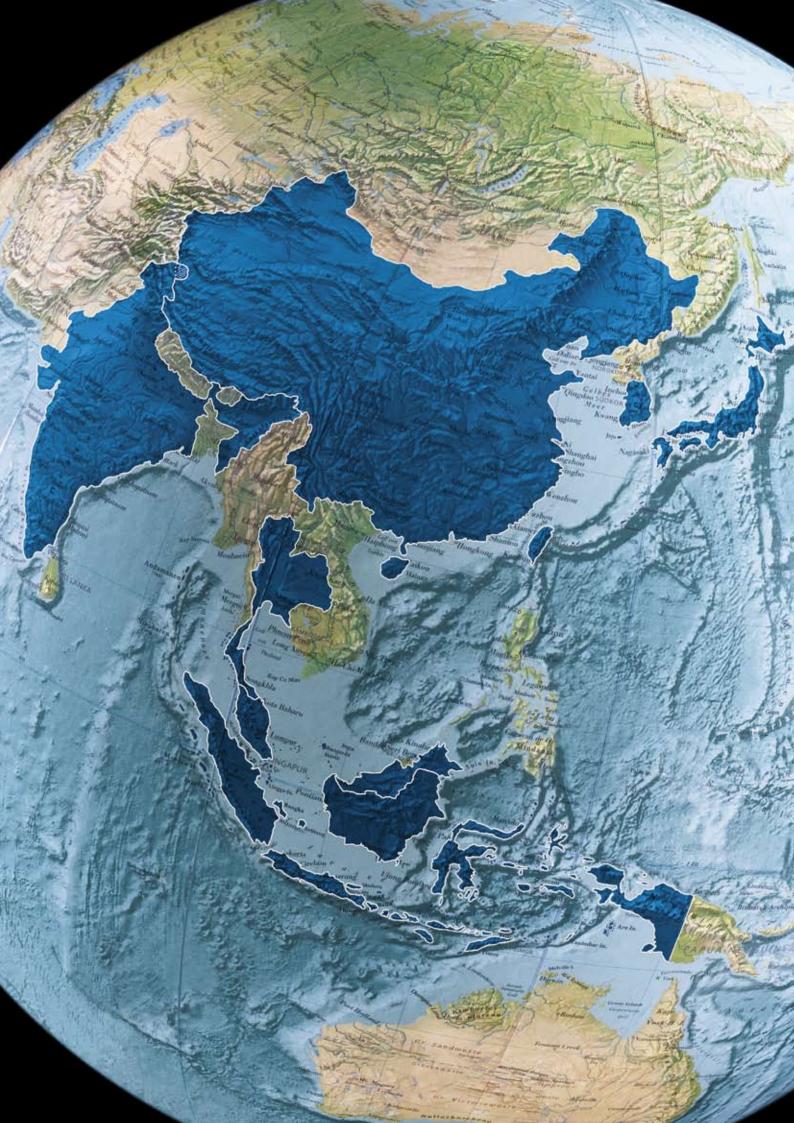
## Russia, Kazakhstan, Ukraine

Further east, the disparity between the local economies and the EU are even greater. Whereas the total financial assets of Russian households at the end of 2009 were almost on a par with those of Turkish households, the per capita wealth figure was only half as high at EUR 1,460. Although the advent of the market economy gave Russian households access to consumer goods, they have also had to cope with a number of shocks, such as high unemployment, hyperinflation and the depreciation of the ruble, over the past twenty years: all in all, not the warmest welcome to the market economy. In addition, households

have had to bid farewell to the secure, predictable incomes and pensions they enjoyed under socialism and start making their own provisions for the future. On the other hand, the oil boom has gifted the country real economic growth averaging 7% from 2004 onwards, allowing an ever-growing middle income class to emerge. Whereas only just under 24% of the population were members of the middle class in 2004, this figure had risen to as much as 51% by 2008.

Kazakhstan and Ukraine have also had to find their footing in a market economy environment. Confidence in the banking sector among the population at large is still subdued and many households prefer to keep their assets in safe foreign currencies, not even necessarily at banks, but even "stuffed under the mattress" or abroad, as the large exodus of capital from these countries shows.

Per capita financial assets are predictably low as a result: EUR 880 in Kazakhstan and EUR 640 in Ukraine. Private pension provision in the form of insurance products also remains virtually non-existent. On average, per capita life insurance premiums in these countries come in at EUR 2.40. Even in Turkey, the corresponding figure has already reached EUR 11, and in Croatia just under EUR 80.



Asia

opulation
otal····· 3,072 million
roportion of the region as a whole······82%
roportion of the global population · · · · · · · 45%
GDP
otal····· EUR 10,540 billion
roportion of the region as a whole······94%
roportion of global GDP · · · · · · 23%
inancial assets of private households
otal····· EUR 18,520 billion
verage·····EUR 6,030 per capita
roportion of global financial assets······25%
Debt (as % of GDP) · · · · · · 46%

The financial assets of private households in Asia have been growing by 3.6% a year on average since 2000. In 2009, this figure corresponded to EUR 18,520bn in the nine Asian countries included in our analysis, with average per capita assets totaling EUR 6,030. Without the three Asian HWCs (Japan, Singapore and Taiwan), however, this figure would fall to EUR 1,970, putting Asia at the bottom of the league in our regional comparison. Asian growth rates, on the other hand, are far more dynamic if we leave the HWCs out

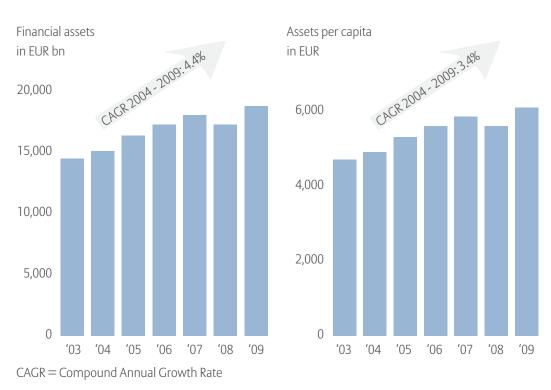
of the equation: the average growth rate for per capita financial assets jumps from 2.6% to more than 13% a year in an analysis that excludes the 3 HWCs.

This region is home to around 210 million members of the global middle wealth class (per capita financial assets of between EUR 5,300 and EUR 31,600) - meaning that 38% of these households are located in Asia. Similarly, 23% (110 million) of the global upper wealth class live in Asia, 79% of these in Japan, however.

#### Bank deposits benefit from the financial crisis

The financial crisis left its mark on Asia, too: in 2008, the financial assets of private households contracted by more than 4% or around EUR 800 million. This was due primarily to plummeting prices on stock markets in the region, where, for example, China's Shanghai A Share Price Index lost 65% in the course of a year and Japan's Nikkei plunged by 42%. This means that financial assets held by households in securities lost 36% of their value.

## Rich countries drag growth down



Banks benfited the most from this trend: in the year of the crisis, bank deposits gained 7%, compared with average growth of only 3% a year in the period from 2003 until the onset of the crisis.

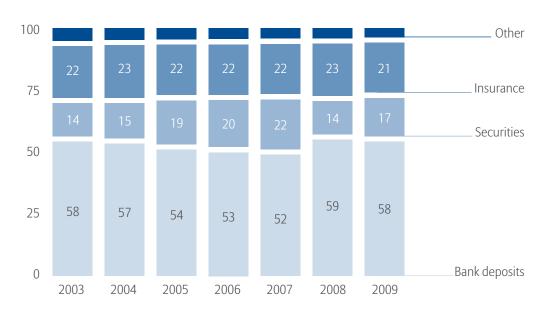
2009 brought above-average growth in bank deposits, too. Not least because the stock markets did not start to bounce back until the second half of the year. At the end of 2009 leading share indices in the countries included in our report were still trailing the all-time highs reported in 2007. This means that, despite growth of 25%, financial assets held in securities were also unable to match the pre-crisis level. All in all, however, the losses incurred in the crisis year have been more than offset: at the close of 2009, the financial assets of private households were a good 4% higher than in 2007.

This means that the new investment landscape brought about by the stock market slump looks set to stay put for the time being, breaking with the trend towards more diversified investments evident since 2003 - a trend that benefited securities, in particular. In the years prior to the crisis, the proportion of the financial assets of private households held in securities climbed from 14% to just shy of 22%, while the share of bank deposits dwindled from 57% to 52%. When the stock market slump hit, the proportion of securities fell back to the 2003 level. The proportion of bank deposits, on the other hand, swelled to 59% in 2008, and was still above the 2003 level in 2009 at around 58%.

The shift towards bank deposits was evident in all countries. Nonetheless, the structure of financial assets still varies widely from country to country: in 2009 private households in Malaysia, for example, had more than a third of their financial assets locked up in life insurance policies and pensions and 30% invested in securities, whereas

## Bank deposits – winner of the crisis

Asset classes as % of total financial assets



Investment diversification reflects, among other things, the maturity of a financial system. The more financing chan-

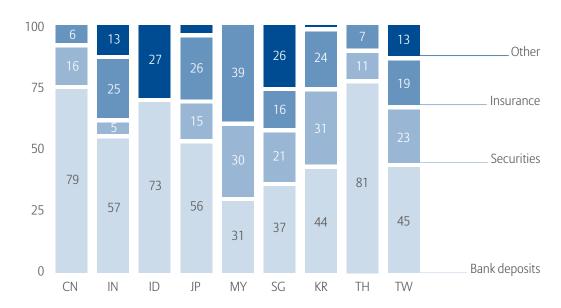
nels open to the corporate sector and, vice versa, the more investment forms available to private households, the more efficient a financial system tends to be. Reforms of the financial system in India, for example, have prompted private households to shift their financial assets from low-yield government bonds to the comparatively more attractive bank deposits, life insurance policies and pension funds over the past few years. For this reason the proportion of India's financial assets held in bank deposits had risen even before the financial crisis struck, unlike the trend seen in other Asian countries.

## Japan is stagnating while China is catching up

The structure of financial assets proved decisive in determining how hard the financial crisis hit private households in the individual countries. Whereas per capita financial as-

## Huge differences in asset structure

Asset classes as % of total financial assets, 2009



sets took a real tumble in the crisis year of 2008 in Singapore, Japan, Malaysia, South Korea and Taiwan, they remained more or less constant in China. In those countries where securities have been a less popular investment instrument to date, per capita financial assets actually increased considerably: in Thailand, they gained a good 8% thanks to the favorable development of bank deposits. India and Indonesia even managed to clock up growth running into the double digits, with 10% and 16% respectively.

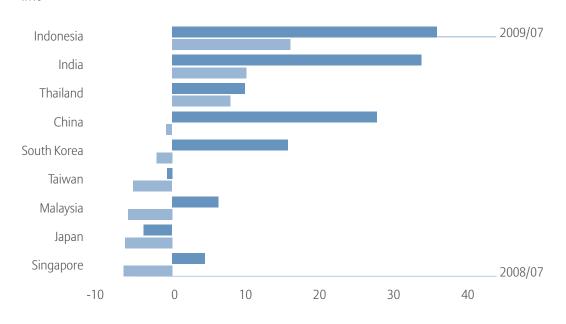
Developments in 2009 were similarly varied, with all countries – with the exception of Japan – able to notch up gains again, in some cases substantial. In China, India and Indonesia average per capita financial

assets were up by as much as a third on their end-2007 level. In Japan, by contrast, they were still down by almost 4% on the pre-crisis level.

This varied performance during the crisis is symptomatic for the overall development of financial assets in Asia. While financial assets in China, India, Indonesia and Malaysia more than doubled in the period from 2003 to 2009, Japan was locked in

## Only Japan and Taiwan still in the red

Change of assets per capita since 2007 in %



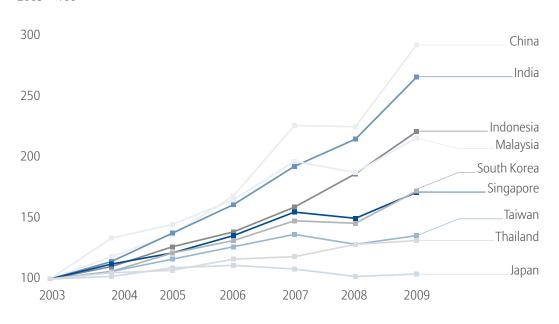
virtual stagnation, with an average growth rate of 0.7% a year. This can be blamed not only on what was below-average stock market performance compared with the rest of Asia, but also on a sustained environment of low interest rates. At the same time, the savings rate of Japanese private households has slid by more than 7 percentage points over the past ten years, from 10% in 1999 to 2.8% last year. In light of the demographic trends, any sustained upward trend in savings is unlikely in the long term, because savings rates tend to be lower in old age than among younger age groups.

This development has shifted the weightings of the countries under review in terms of their respective shares of the total financial assets of Asia's private households. The share of Chinese and Indian households, for example, more than doubled between 2003 and 2009, albeit from different levels: during this period, China's share grew from 8% to 18%, while India's increased from just under 2% to around the 4% mark. Japanese households, on the other hand, who still held three quarters of Asia's total financial assets at the end of 2003, "only" had a share of around 61% of the region's financial assets by the end of 2009.

Japanese households are still, however, far wealthier than households in other countries in the region. At the end of 2009, per capita financial assets in Japan totaled EUR 88,660. In Singapore and Taiwan, the region's other two HWCs, per capita financial assets came in at EUR 66,830 and EUR 51,330 respectively.

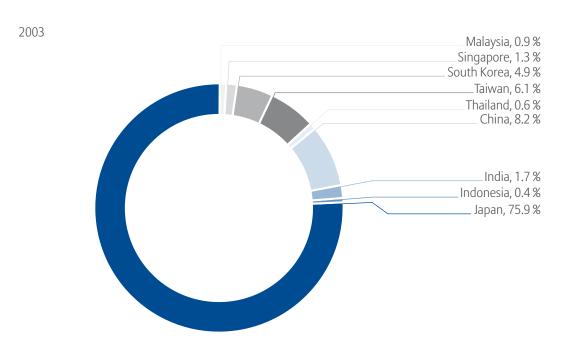
## China races ahead, Japan stagnates

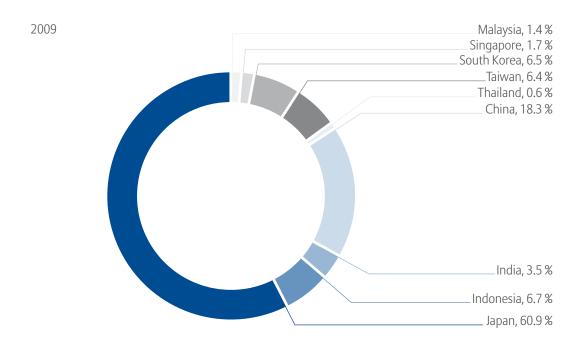
Development of financial assets 2003 = 100



## Power shift – in favor of China

Share of regional financial assets in  $\ensuremath{\%}$ 





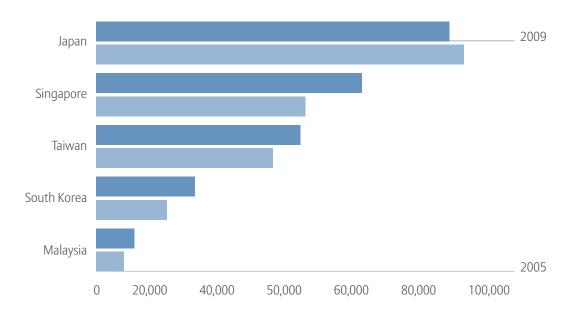
## Asian prosperity disparity is still huge

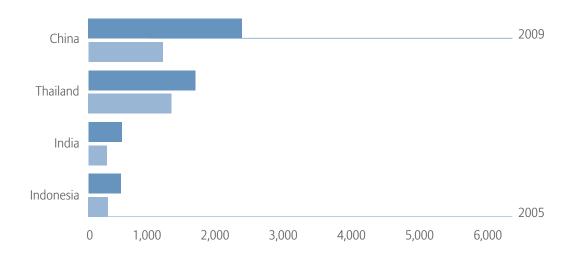
Despite the high growth rates, financial assets in China and India, on the other hand, are still modest in terms of the population figures: the per capita figure at the end of 2009 came in at only EUR 2,520 in China and EUR 545 in India. However, the overall picture is distorted by the huge income and wealth differences between the urban and coun-

try populations: both in China and in India, a large proportion of the population lives in rural areas. Official statistics put the proportion of the population living in the country at 55% in China and around 70% in India at the end of 2008. The financial assets of China's urban population, however, are likely to be around five times higher on average, and India's as much as eleven times higher than the respective rural populations.

## Still large disparities within Asia

Financial assets per capita in EUR







# Australia and New Zealand

C '11'
6 million
1.5%
55 billion
1.9%
10 billion
er capita
2.0%
····112%

### Large wealth disparity

In New Zealand, the increase in the value of total assets was mainly concentrated on properties, meaning that per capita financial assets have barely grown in recent years and amounted to "only" EUR 20,890 at the end of 2009. In terms of financial assets, this means that the country was in the MWC club. There are marked differences between New Zealanders and their neighboring Australians when it comes to investment structures as well. In New Zealand, people saveed 48% of their financial assets in bank deposits last year and only 15% in insurance policies and pension products. In Australia, by contrast, the majority of financial assets (59%) were held in insurance policies, particularly in the popular superannuations, a combination of state and private, voluntary and tax-incentivized pension provision. In New Zealand, private pension plans invest more in investment funds, which fall under the "securities" category. The voluntary private contributions to superannuations are also less attractive than in Australia.

### Unequal neighbors: Australia and New Zealand

# Financial assets per capita in EUR 80,000 70,000 60,000 40,000 20,000 10,000 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

# Savings rate "down under"

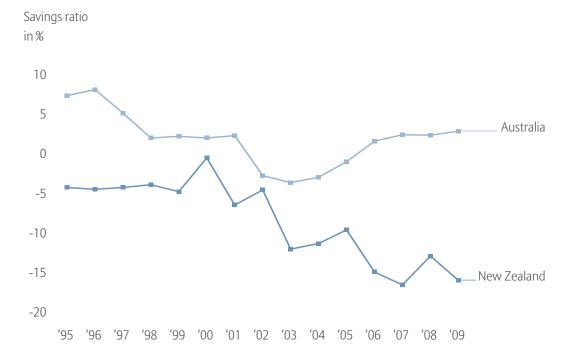
New Zealand has by far the lowest savings rate among the world's industrialized nations and savings rates in Australia have been on a clear downward trend for some time now. In New Zealand, the negative savings trend already emerged in the early 1990s, while in Australia the savings rate slipped into negative territory in 2003.

One explanation for the sustained decline in savings rates lies in the low interest rate level, which prompted a construction and house price boom. Since the wealth gains generated on the back of rising house prices are taxed, they reduce disposable income and, as a result, the savings rate.

In Australia, the commodity price boom ended the downward spiral in the savings rate. As incomes rose in the midst of the boom, households opted, by and large, not to up their consumer spending, but rather to start to save more again, with many convinced that the commodity boom would be a temporary feature.

Nonetheless, as the flip side of the low savings rate trend and the property boom, household debt has risen sharply in both countries: to 97% of GDP in New Zealand and to no less than 114% of GDP in Australia (figures for 2009 in each case).

# Savings ratio "down under"





# Literature

Aron, Janine; Muellbauer, John; Prinsloo, Johan: "Estimating the Balance Sheet of the Personal Sector in an Emerging Market Country. South Africa 1975 – 2003", United Nations University, UN-Wider, Research Paper No. 2006/99, 2006.

Attanasio, Orazio and Székely, Miguel: "Household Saving in Developing Countries – Inequality, Demographics and All That: How Different are Latin America and South East Asia?", Inter-American Development Bank, Working Paper No. 427, 2000.

Davies, James B.; Sandstrom, Susanna; Shorrocks, Anthony; Wolff, Edward N.: "The Level and Distribution of Global Household Wealth", November 2009.

Jalava, Jukka and Kavonius, Ilja Kristian: "Durable Goods and their Effect on Household Saving Ratios in the Euro Area", European Central Bank, Working Paper Series, No 755, May 2007.

Reinhart, Carmen and Plies, William: "Saving in Latin America and Lessons from Europe: An Overview". Published in: Carmen M. Reinhart, ed., Accounting for Saving: Financial Liberalization, Capital Flows, and Growth in Latin America and Europe (Washington DC: John Hopkins University Press for the Inter-American Development Bank, 1999): pp. 3-47.

Schmitt-Hebbel, Klaus; Webb, Steven B. and Corsetti, Giancarlo: "Household Saving in Developing Countries: First Class-Cross Country Evidence", The World Bank Economic Review, Vol. 6, No. 3, 1992.

Thorne, Susie and Cropp, Jill: "Household Saving in Australia", Australian Treasury, Domestic Economy Division, 2008.

Thorp, Clive and Ung, Bun: "Recent Trends in Household Financial Assets and Liabilities", Reseve Bank of New Zealand: Bulletin Vol. 64 No. 2, 2000.

Tiongson, Erwin R.; Sugawara, Naotaka; Sulla, Victor; Taylor, Ashley; Gueorguieva, Anna I.; Levin, Victoria; Subbarao, Kalanidhi: "The Crisis hits Home: Stress-Testing Households in Europe and Central Asia", The International Bank for Reconstruction and Development / The World Bank, 2010.

Torche, Florencia and Spilerman, Seymour: "Household Wealth in Latin America", United Nations University, UN-Wider, Research Paper No. 2006/114, October 2006.

United Nations, ECLAC: "Social Panorama of Latin America 2009 • Briefing Paper" Wieland, Dr. Carsten: "Kolumbien auf dem Weg zur Sozialen Marktwirtschaft?", Konrad Adenauer Stiftung, April 2008.

# Appendix A: Methodological comments

# General assumptions

The Allianz Global Wealth Report is based on data from 50 countries. This group of countries covers 87% of global GDP and 68% of the global population. In 34 countries, we had access to statistics from national wealth balance sheets. In the other countries, we were able to estimate the volume of total financial assets based on information from household surveys, bank statistics, statistics on assets held in equities and bonds, and technical reserves.

In many countries, it is still extremely difficult to find data on the financial assets of private households. Let's take the Latin American countries as an example. For many countries, the only information that can be found relates to the entire private sector or the economy as a whole, which is often of only limited use as far as the situation of private households is concerned. In addition to Mexico, the only other countries with fairly good data that can be used to analyze the financial structure of private household assets are Chile and Colombia. In Argentina and Brazil, we were able to estimate financial assets with the help of data on bank deposits and insurance reserves.

In order to rule out exchange rate distortions over time, the financial assets were converted into the national currency based on the fixed exchange rate at the end of 2009.

**HWC** 

Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Ireland
Italy
Japan
Netherlands
Norway
Portugal
Singapore

Spain

Sweden Switzerland Taiwan UK USA **MWC** 

Chile
Malaysia
South Korea
Czech Rep.
Estonia
Hungary
Lithuania
Poland
Slovakia
Slovenia
Croatia
New Zealand
Greece

**LWC** 

Argentina Brazil Colombia Mexico China India Indonesia Thailand Bulgaria Latvia Romania Kazakhstan Russia Turkey Ukraine South Africa

78

# Determination of wealth bands for middle wealth countries (MWC)

Lower wealth threshold: there is a link between financial assets and the incomes of private households. According to Davies et al., private individuals with below-average income tend to have no assets at all, or only very few. It is only when individuals move into middle and higher income groups that they start to accumulate any assets to speak of.

We have applied this link to our country analysis. Countries in the upper-middle income bracket (based on the World Bank's country classification system) therefore form the group in which the average assets of private households have reached a relevant volume for the first time. This value marks the lower threshold for middle wealth countries. How high should this value be?

In terms of income, households with incomes that correspond to between 75% and 150% of average net income are generally considered to constitute the middle class. According to Davies et al., households with income corresponding to 75% of the average income have assets that correspond to 30% of the average assets. As far as the upper threshold is concerned, 150% of average income corresponds to 180% of average assets. Consequently, we have set the threshold values for the wealth middle class at 30% and 180% of average per capital assets. As far as 2009 is concerned, this corresponds to the wealth band from EUR 5,300 to EUR 31,600. Countries with higher per capita financial assets are then classed as HWCs: high wealth countries. Countries with lower per capita financial assets are the LWCs: low wealth countries.

# Technical appendix on the box entitled

"Empirical estimate of the medium-term impact on the financial crisis on household asset structures" Empirical model:

The estimate is based on the following empirical model for country i in year t:

$$y_{it} = \beta_0 + \beta_1 \text{grgdp}_{it} + \beta_2 \text{inflation}_{it} + \beta_3 \text{log(rbgdp}_{it)} + \beta_4 \frac{\text{flows}_{it}}{\text{assets}_{i,t-1}} + \sum_{t=2002}^{2008} y_t \text{crash}_i d_t + d_i + d_t + \epsilon_{it},$$

whereby, depending on the model specification, the dependent variable yit is either (i) the rate of change, expressed as a percentage, in all securities transactions in a year-on-year comparison or (ii) the proportion of total financial assets held in securities, expressed as a percentage. The model controls for country-specific fixed effects (di) and for year-specific fixed effects (dt). The model estimates the average effect of the stock market slump between 2000 and 2002 on the (respective) dependent variable for each year after the beginning of the market crash as the parameter ŷt.

The model also contains other control variables, namely IMF data on the annual growth rate in real GDP ( $grgdp_{it}$ ), on the annual information rate (inflation<sub>it</sub>), on the logarithm of real GDP and the rate of change for all household financial transactions on a year-on-year basis. Countries in the sample:

"Crash" group: Belgium, Finland, France, Germany, Greece, Japan, the Netherlands, Portugal, South Korea, Sweden, Switzerland, the UK, the US.

"Baisse" group: Austria, Bulgaria, Canada, Colombia, Czech Republic, Denmark, Estonia, Hungary, Ireland, Mexico, Poland, Romania, the Slovak Republic, Slovenia and Spain.

80

# Regressions:

regressions.		
	Securities flows <sub>t</sub> / Securities assets <sub>t-1</sub>	Securities assets / Assets
Real GDP growth	0.152	-0.083
Inflation	0.235	-0.068
log of real GDP	-2.108	-8.135
Flows / Assets <sub>t-1</sub>	1.597***	0.068
%crash * d2002	0.281	0.091
%crash * d2003	0.385	0.117
%crash * d2004	0.171	0.167
%crash * d2005	0.068	0.173
%crash * d2006	0.014	0.211
%crash * d2007	0.248	0.327
%crash * d2008	0.038	0.329
Fixed country effects	Yes	Yes
Fixed annual effects	Yes	Yes
Observations	334	335
Countries	29	29
Adjusted R2	0.23	0.31
Probability of joint significance of all %crash * d200x	0.00***	0.00***

Explanation: The parameters %crash \* d200x estimate the annual effect of the stock market crash 2000-2002 on (i) the growth rate of securities flows relative to previous year's assets in securities and (ii) the proportion of securities in total financial assets. The estimate is based on a panel data model for 29 OECD countries and emerging markets with fixed country and annual effects. \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1. Robust standard errors not reported.

Appendix B: Financial assets by country	Financial assets Global share in %	Financial assets in EUR bn	Financial assets 2009, y-oy in %	Financial assets EUR per capita	GDP EUR per capita
USA	38.94	32,020	6.8	101,762	33,539
Japan	13.71	11,273	2.3	88,659	28,449
Germany	5.68	4,672	5.4	56,856	30,287
UK	5.68	4,669	12.6	75,842	26,337
France	4.66	3,830	9.0	61,437	31,570
Italy	4.28	3,523	2.9	58,845	26,038
China	4.13	3,393	29.3	2,521	2,902
Canada	2.46	2,022	3.4	60,236	28,180
Spain	2.13	1,753	3.2	39,037	23,760
Australia	1.85	1,525	14.0	71,636	37,005
Netherlands 	1.85	1,523	5.2	91,798	35,590
Switzerland	1.51	1,239	7.0	163,732	48,669
South Korea	1.46	1,200	18.4	24,821	15,355
Taiwan 	1.44	1,183	5.1	51,332	12,513
Belgium 	1.09	900	13.1	84,529	32,629
Brazil	0.92	760	9.0	3,925	7,213
India	0.79	651	23.0	544	904
Sweden	0.68	562	14.9	61,048	34,309
Mexico	0.68	561	13.2	5,119	6,277
Denmark	0.64	526	9.2	96,242	42,533
Austria	0.49	440	-2.1	52,599	34,399
Portugal	0.47	390	3.3	36,407	16,023
Singapore	0.38	317	14.6	66,831	27,157
Ireland	0.37	307	7.1	68,060	35,182
Norway	0.37	302	5.9	62,716	62,841
Greece	0.35	287	4.5	25,757	21,279
Malaysia	0.32	265	14.7	9,631	5,513
Poland	0.28	231	4.1	6,074	8,589
Finland	0.24	202	1.3	37,842	32,101
Russia	0.24	198	26.6	1,405	6,376
Turkey	0.24	197	15.2	2,634	5,929
South Africa	0.19	154	2.6	3,081	4,577
Chile	0.18	145	5.6	8,549	7,416
Czech Republic	0.15	124	14.8	12,002	13,248
Indonesia	0.15	122	22.3	532	1,745
Thailand	0.14	119	2.3	1,754	2,696
Hungary	0.12	101	8.2	10,134	9,663
Romania	0.11	91	31.5	4,276	5,454
New Zealand	0.11	89	8.7	20,893	18,286
Colombia	0.10	82	17.0	1,795	3,719
Croatia	0.06	48	8.4	10,900	10,337
Slovenia	0.05	40	8.0	19,711	17,274
Slovak Republic	0.05	39	10.6	7,187	11,715
Argentina	0.04	34	25	856	5,215
Bulgaria 	0.04	33	7.4	4,401	4,418
Ukraine	0.04	29	-8.0	641	1,741
Estonia	0.03	23	5.9	17,060	10,246
Lithuania 	0.03	21	-5.6	6,522	8,107
Kazachstan	0.02	14	13.5	882	4,845
Latvia	0.01	11	-4.7	4,698	8,303
World		82,243		17,539	



# **Imprint**

Publisher Allianz SE Economic Research & Corporate Development Königinstraße 28 80802 Munich www.allianz.com

Chief Economist Dr. Michael Heise

Authors Gabriele Steck Dr. Michaela Grimm Dr. Michael Heise Dr. Arne Holzhausen Dr. Nicolas Sauter

Editors Alexander John Maisner OBE Dr. Lorenz Weimann

Photos Helge Mundt

Design Schmitt. Kommunikation, Hamburg

Closing date 20. August 2010

# Legal disclaimer

The information contained in this publication has been carefully researched and checked by Allianz SE or reliable third parties. However, Allianz Group and any third party do not assume liability for the accuracy, completeness and up-to-dateness of the contents. The authors' opinions are not necessarily those of Allianz SE. Statements do not constitute any offer or recommendation of certain investments, even if individual issuers and securities are mentioned. Information given in this issue is no substitute for specific investment advice based on the situation of the individual investor. For personalized investment advice please contact Allianz SE.

