

ALLIANZ GLOBAL WEALTH REPORT 2018

ECONOMIC RESEARCH

Allianz 

Kathrin Brandmeir
Dr. Michaela Grimm
Dr. Michael Heise
Dr. Arne Holzhausen

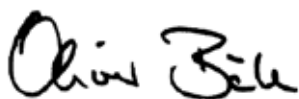
PREFACE

600 million people have moved up to join the ranks of the global wealth middle class in the last two decades. 2.5 billion people own financial assets of at least EUR 3,000 after deduction of debts, i.e. more than ten times more than at the turn of the millennium. Never before in history has the economic well-being of so many people improved so radically in such a short time. Never before have so many people had the chance to determine their own lives, opportunities for education and self-reliance and the hope of a long and healthy life. The „Allianz Global Wealth Report“, a comprehensive analysis of the global asset situation of private households, confirms this in impressive fashion.

The key to this massive increase in wealth lies in open markets and free trade. The integration of China and the former Eastern bloc countries into the international division of labor around 30 years ago provided the initial spark for this process. This development can be summed up in one word: globalization. Without globalization, the world would be much poorer today. The last few decades have been characterized by worldwide prosperity and participation. Despite this, „globalization“ has come to be a bad word in recent times. It is regarded as the cause of many evils and of one thing in particular: growing inequality. The gap between rich and poor has actually widened in many industrialized countries, not least the US. Our report also testifies to this. Two other P's are now being assumed to provide a solution: populism and protectionism.

But can wealth be distributed more fairly when its sources are running dry? Each society is itself responsible for the distribution of assets, income and opportunities. But we are all jointly responsible for ensuring we have the necessary frameworks to create assets, income and opportunities in the first place. We must stand together against the destruction of the foundations of our wealth. This applies as much to our natural environment as to the liberal economic order we have created. Intelligent globalization opens up opportunities for many, while protectionism secures privileges for few and populism only creates scapegoats but certainly no sustainable solutions.

The ninth edition of our „Allianz Global Wealth Report“ is published at a time when the foundations of this wealth are threatened more than ever. Allianz is one of the leading global financial service providers. We are aware of our responsibility to ensure an open and sustainable economy. Our actions are geared towards maintaining the conditions for prosperity and participation worldwide. We owe it to our customers, employees and shareholders.



Oliver Bäte

Chairman of the Board of Management of Allianz SE



CONTENT



08	Summary
15	Development in global financial assets: An exceptional year
32	Box: The return of inflation
37	Development in global liabilities: The “debt screw” is loosened further
50	Box: Is household debt sustainable?
55	Wealth distribution: a new indicator
70	Box: Calculation of the Allianz Wealth Equity Indicator (AWEI)
74	Box: The impact of monetary policy on distribution
78	Regional differences: Financial assets in individual regions
154	Literature
156	Appendix

SUMMARY



An exceptional year

Despite growing political tensions, 2017 was an almost perfect year for investors. The economic recovery following the financial crisis culminated in a synchronous upturn around the globe and financial markets performed strongly, particularly equity markets. Financial assets of households rose significantly as a result. Growth came to 7.7%, another half of a percentage point above the previous year's already very good figure. Global gross financial assets therefore increased to EUR 168.3 trillion.

Investment in securities makes a comeback

There was a noticeable shift in investment behavior in 2017. For the first time since the financial crisis, there were significant inflows of fresh funds into shares and investment funds. In the context of booming stock markets, this meant that securities enjoyed by far the strongest growth of all asset classes in 2017, increasing by 12.2% in total and representing over 42% of all savings at the end of 2017. Securities are therefore not only by far the most popular asset class, but have also surpassed their pre-crisis levels again for the first time. This is followed in second place by receivables from insurance companies and pensions, which account for 29% of the asset portfolio and grew by 5.2% last year.

The end of a preference for liquidity?

While investors rediscovered the capital markets, bank deposits fell out of favor with households around the globe. Only 42% of new investments went into banks, compared with 63% the year before. In absolute figures, this meant a drop of over EUR 390 billion; growth declined by two percentage points to 4.3%. This movement away from bank deposits in „old“ industrialized countries in particular was associated with the return of inflation. The inflation rate tripled in this group of countries in 2017, although it remained at a low level. Losses suffered by private investors as a result of inflation if they parked their savings in bank accounts that did not pay any interest therefore also shot up to an estimated EUR 400 billion in 2017 alone.

Industrialized nations catch up

The years following the crisis were mainly characterized by weak asset growth in industrialized countries. This also changed in 2017. The acceleration in growth was due solely to development in industrialized nations: while growth in these countries increased by more than one percentage point to 6.5%, in emerging countries it slackened by three percentage points to 12.9%. The growth differential between these two groups of countries was thus at its lowest level since 2005, at 6.5 percentage points. The average figure for the past decade was twice as high, at 13 percentage points.

The US overtakes China – but Asia remains at the top in terms of growth

This contrasting development when it comes to growth in financial assets was largely due to the respective heavyweights in North America and Asia, the US (where growth accelerated from 5.8% to 8.5%) and China (where growth slowed from 18.3% to 14%). The US has thus overtaken China again in terms of absolute growth. In 2017, the US accounted for around 44% of global growth in gross financial assets of households, while China accounted for only about 25%. This ratio has averaged 26% vs. 35% over the last three years – but with China coming out on top. The whole region of Asia (excluding Japan) nevertheless remained the leader in terms of growth in 2017. The astonishing catch-up process in Asia becomes particularly clear in a long-term comparison, even if we take into account population growth and inflation. Real asset growth per capita was 10.5% in Asia (excluding Japan) in the last decade, twice as high as in Latin America (5.3%) and almost three times as high as in Eastern Europe (3.8%). Industrialized countries are falling far behind in this analysis, with 2% growth since 2007 in the US, 1.3% in Western Europe and 1.1% in Japan.

Debt growth accelerates further

Worldwide household liabilities rose by 6% in 2017. The growth rate was thus slightly above the previous year's level of 5.5% and well above the long-term annual average of 3.9%. Thanks to strong economic growth, however, the global debt ratio (liabilities as a percentage of GDP) increased only minimally to 64.3%. These global averages naturally mask huge differences. In some countries, such as Norway and Australia among industrialized nations or Thailand and China among emerging markets, debt levels and dynamics have reached critical figures in the last few years. However, a comparison with developments in the US shortly before the outbreak of the subprime crisis shows that these countries are still (just) outside the „death zone“.

Eastern Europe comes last

If we subtract debt from gross financial assets, we are left with net financial assets, which reached a new global record high of EUR 128.5 trillion at the close of 2017. This represents an increase of 8.3% compared with the previous year. Despite the catch-up process, discrepancies between household assets in richer regions and those in the world's poorer regions remain huge. North America is still the richest region on earth, with average per capita assets of EUR 160,400 after deduction of debt at the end of 2017. This figure was EUR 61,060 in Western Europe and only EUR 4,500 in Eastern Europe, the poorest region.

More participation thanks to globalization

The last two decades of rapid globalization have given rise to a new global wealth middle class, which included almost 1.1 billion people at the end of 2017. Fewer than half a billion people belonged to this group at the turn of the millennium, with just under half of them coming from Western Europe, North America or Japan. Today, these countries account for only a quarter of the global wealth middle class. In contrast, China's share has soared from just under 30% to over 50% in this period. The figures accompanying this success story are impressive: around 500 million Chinese people have moved up to join the ranks of the global wealth middle class since 2000, and over 100 million more can now even consider themselves part of the global wealth upper class.

Extreme global concentration of wealth – but this is decreasing

The global concentration of wealth (share of the richest decile of the population in total net financial assets) came to just under 79% in 2017. This is extremely high, although this figure was over 90% in 2000. Apart from the richest and the poorest decile, where debt continued to rise, all other population deciles increased their share of the global wealth pie during this period. The shares of the sixth, seventh and eighth deciles – the upper middle class – grew particularly strongly, with the figures more than tripling. Development is at least moving in the right

direction; this is also true for global median net per capita financial assets, which reached EUR 2,810 at the end of 2017, compared with just EUR 340 in 2000. Median assets have thus grown at an average of 13.3% per year since then, considerably faster than average assets (+5.1%).

More inequality in industrialized countries

A comparison of the development of median and average net financial assets in a national context shows a very heterogeneous picture. Wealth distribution has improved in many countries since the turn of the millennium, but in many others it has deteriorated. The latter group includes a large number of industrialized countries, from the US to the euro crisis countries and even Germany and Japan. The perception that the „old“ industrialized nations in particular have been suffering in recent decades from a growing gulf between rich and poor therefore seems to match the reality in many cases. However, in some of these countries – such as Germany and Italy – the trend has reversed again since the financial crisis.

A new indicator for the national distribution of wealth

To obtain a nuanced picture of national distribution in an international context, we have introduced a new indicator in this report, the Allianz Wealth Equity Indicator (AWEI). Some of the results are surprising. Along with the „usual suspects“ of the US, South Africa, Indonesia and the UK, countries where the distribution of wealth is relatively strongly distorted also include Denmark, Sweden and Germany. In Scandinavia this may be primarily due to high debt levels among large parts of the population; in Germany, the country's delayed reunification and the general shortage of capital-funded pension schemes play a crucial part. On the other hand, those countries where wealth distribution is relatively balanced include many eastern and western European countries, some of which are euro crisis countries such as Italy, Spain and Greece. Even if the last few years of crisis and austerity may have led to greater inequality in the last two countries in particular, they still have a relatively solid base to fall back on, as assets have traditionally been very widely distributed – not least when it comes to real estate assets. We should therefore be wary of drawing hasty or generalized conclusions about wealth distribution. Apart from the US, barely any country conforms to the cliché of a wealth distribution that is already extremely distorted but is still getting worse.





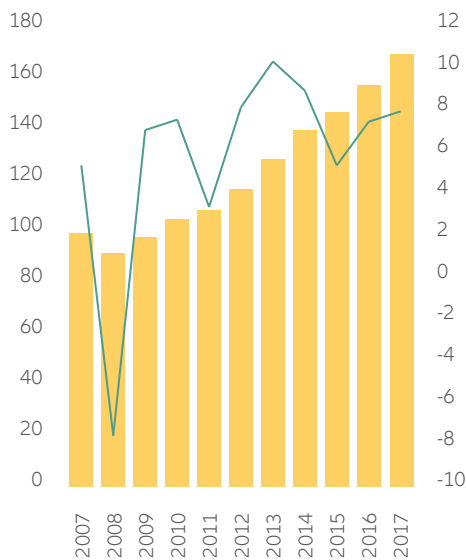
DEVELOPMENT IN GLOBAL FINANCIAL ASSETS: AN EXCEPTIONAL YEAR

2017 was an almost perfect year for investors. The economic recovery following the financial crisis culminated in a synchronous upturn around the globe and financial markets performed strongly, particularly equity markets, which gained 20% worldwide. Furthermore, this boom was associated with low volatility and was underpinned by strong corporate profits.

This development was particularly unusual against the backdrop of growing political tensions. In the US, President Trump left no doubts about his intention to turn the free, rules-based trading system upside down and roll back globalization. Europe remained in a state of political paralysis, faced with the UK's forthcoming departure from the EU, the unresolved refugee crisis and diverging ideas on reform in the eurozone. Geopolitical tensions continued to mount worldwide, particularly in the Middle East and around North Korea, but also between China and its neighbors. However, the global economic upturn – and

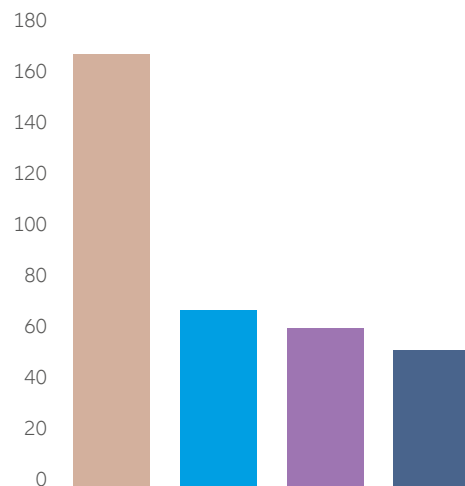
Asset Growth (still) on the upswing

Development of global gross financial assets



- Gross financial asset, in EUR tn (lhs)
- Change rate, y/y in % (rhs)
- Global gross financial assets
- Global market capitalization
- Global nominal economic output
- Global sovereign debt

Household savings by comparison 2017, in EUR tn



Sources: IMF, National Central Banks and Statistical Offices, Thomson Reuters Eikon, World Federation of Exchanges, Allianz SE.

investor confidence – was strong enough for the moment to push these concerns into the background. We don't need the gift of prophecy to foresee that this will not happen again to the same extent in 2018. 2017 may have been the last year of the post-crisis/pre-populism era. We are standing at the beginning of a new (dis)order, which is expected to involve a longer and turbulent transition phase.

Yet there was no sign of this in 2017. Private financial assets grew strongly by 7.7%, another half of a percentage point above the previous year's already very good figure. Gross financial assets in the 53 countries we analyzed thus increased to EUR 168.3 trillion, corresponding to 272% of global economic output and 245% of global market capitalization. In theory, households could use their savings to settle the aggregate sovereign debt of all the countries we analyzed three times over.

Global financial assets of households have grown at an annual rate of 5.4% over the last ten years (2007-2017), about half a percentage point faster than global nominal economic output (+4.8% in the last decade). In per capita terms, however, long-term growth rates for each fell by almost one percentage point as a result of population growth, to 4.6% and 3.9% respectively. After taking into account the inflation rate (global average of 2.4%), average annual per capita asset growth was 2.2% in real terms. Average gross financial assets per capita came to EUR 33,160 at global level at the end of 2017.

The US tops the rankings

This higher growth compared with the previous year was due solely to development in industrialized countries. While emerging markets were unable to maintain the previous year's growth rate (+12.9% in 2017, following +15.7% in the previous year), growth in advanced economies accelerated from 5.3% to 6.5%. The growth differential between these two groups of countries was thus at its lowest level since 2005, at 6.5 percentage points. The average figure for the past decade (2007-2017) was twice as high, at 13 percentage points. The recovery of industrialized countries is therefore also being reflected in the development of financial assets. The post-crisis era, in which the „old“ industrialized nations in particular battled for a long time with the after-effects of the financial crisis, is drawing to a close. As a result, however, the global process of convergence, the closure of the gap between richer and poorer regions, stalled for the first time.

This contrasting development was largely due to the respective heavyweights in the two groups of countries (the US for advanced economies and China for emerging markets). Financial assets of US households grew by 8.5% in 2017, following growth of 5.8% in the previous year. The main driver of this strong growth was the positive performance of the capital markets. In China, on the other hand, growth slowed from 18.3% (2016) to 14% last year; although this was still respectable, it was China's lowest growth since the financial crisis. The government's efforts to curb unregulated (credit) growth in the shadow banking sector are leaving their mark on Chinese investors.

That means that the weightings between the US and China have also shifted again. Total private financial assets in the US are naturally still significantly higher than in China – almost three times as high. In the last few years, however, China had overtaken the US in terms of absolute growth: between 2014 and 2016, China on average accounted for around 35% of global growth in gross financial assets, while the US accounted for only about 26%. In 2017, the ratio then became 25% vs. 44%. The recovery of the „old“ industrialized countries is rounded off by developments in Japan, where growth last year came to 4%, well above the average for the last decade (1.3%).

Investment in securities makes a comeback

Along with regional growth drivers, it is also worthwhile examining „functional“ growth drivers in more detail, i.e. looking at the question of whether asset growth is coming primarily from new savings/inflows of funds or from changes in the value of existing portfolios.¹

There was a noticeable change in 2017. While inflows of funds since the financial crisis had risen more or less in line with general economic development by about 4% per year up to and including 2017, with some fluctuations, only 42% of new investments were put into bank deposits in 2017. Until then, bank deposits on average accounted for more than 50% of fresh savings. In 2016, their share even came to 63%. This represented an absolute year-on-year decline of over EUR 390 billion, with bank deposits becoming less attractive around the globe (with the exception of Japan). North American households actually invested less than half the amount in banks in 2017 than they had invested in 2016. Banks nevertheless remained the first choice of savers when it came to investment of fresh savings in 2017, with a share of 42%. This was closely followed by insurance policies and pensions (39%), which also experienced a decline last year, albeit a relatively moderate one of around EUR 50 billion. This

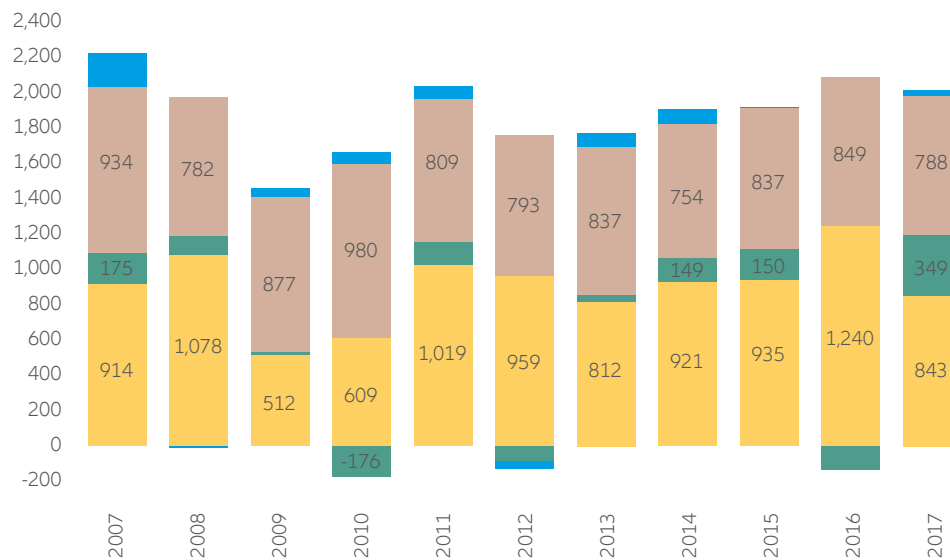
¹ As detailed data on inflows of funds is not available for all countries, the following analysis is essentially limited to industrialized countries (excluding Switzerland)

shift away from bank deposits is not unexpected, particularly in the „old“ industrialized countries. The inflation rate tripled there in 2017, although it was still at a low level. Losses suffered by private investors as a result of inflation if they parked their savings in bank accounts that did not pay any interest also shot up as a result. While they were estimated to be around EUR 100 billion in this group of countries in 2016, they are expected to have risen to almost EUR 400 billion last year.

The big winner last year was securities, i.e. investments in shares, bonds or investment funds. After savers had largely ignored this asset class in the post-crisis years since 2010 – with inflows and outflows alternating at a low level – its share last year reached 17%, considerably more than even in the years preceding the crisis, when its share was just under 10%. As with bank deposits, this is a global trend; in all of the regions examined here (with the exception of Australia and EU countries in Eastern Europe) there was a reversal in investment decisions, albeit to varying degrees. Over EUR 300 billion was invested in securities in North America, compared with net sales of just un-

Net purchases of securities well above pre-crisis level

Acquisition of financial assets* by asset classes, in EUR bn



- Bank deposits
- Securities
- Insurance and pensions
- Other

*Australia, EU Eastern Europe, Japan, North America, Western Europe ex Switzerland.
Sources: National Central Banks and Statistical Offices, Allianz SE.

der EUR 40 billion in the previous year. 2016 was a „one-off“, however; between 2012 and 2017, North American households' cumulative new investments in securities amounted to almost EUR 760 billion. In Western Europe these investments totaled only a modest sum of EUR 15 billion, following net sales of over EUR 80 billion in 2016 alone and around EUR 240 billion in the years since 2012. Even Japanese households bought shares and investment funds again in 2017 (+EUR 7.4 billion), following seven years in which they disposed of these investments year after year.

Is the zero interest rate policy – the aim of which is to drive investors into higher-risk investments such as shares – finally starting to bear fruit? It is more likely that this change in investment behavior mainly reflects the return of inflation and the positive performance of the stock market. There is no question that investment in securities will pay off in the longer term. Although a high proportion of shares and investment funds in a portfolio will lead to greater fluctuations in the short term, in the long term it generally correlates with a higher share of value changes in financial asset growth – and thus with higher growth in financial assets overall. In North America, securities

have on average accounted for about 50% of financial assets in recent years (since 2007), and on average more than 60% of total asset growth is attributable to changes in the value of portfolios. At the same time, financial assets have grown by an average of 4.6% per year in this period, with relatively low original savings but substantial fluctuations (growth rates between -12.1% and +12.8%). In Western Europe, on the other hand, investors held only about 30% of their portfolios in securities, resulting in a correspondingly low share of changes in value, at just under 40%. Growth in financial assets came to 3.2% per year, with similarly low savings as in North America but much lower volatility (growth of between -4.6% and +6.4%). The ratios in Germany are even less favorable, with 24% securities and only 5% value gains. This results in annual growth of 3.4%, whereby almost twice as much is being put into savings as in North America and Western Europe and volatility has been reduced further (growth of between -4.5% and +5.4%).

These connections can be described as the „saver's trilemma“: a high level of security (only slight fluctuations in the portfolio), high growth and low requirements in terms of own savings efforts cannot be achieved simultaneously. Households that set great store by security can achieve satisfactory growth in their financial assets only by putting large amounts into their savings at the same time (the German version); households that want to use a smaller portion of their income for savings must dispense with security (the American version).

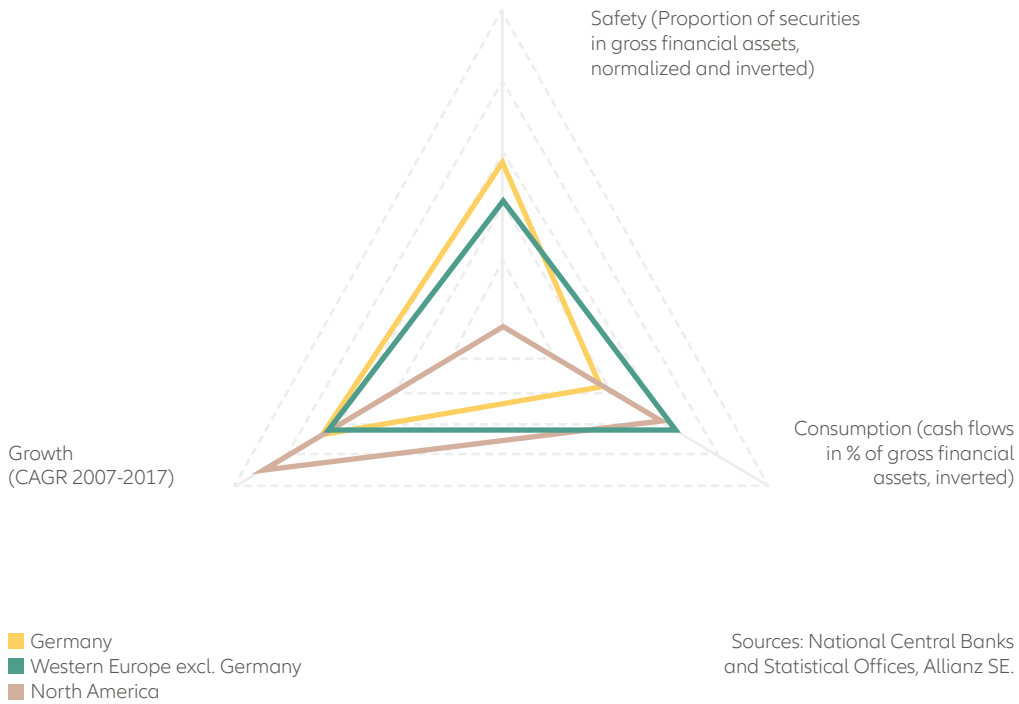
Securities: investors are trusting the capital markets again

Inflows have returned to decent levels and stock markets around the world are booming. It's no wonder that securities (shares, bonds and investment funds) recorded by far the strongest growth of all asset classes in 2017, increasing by 12.2% worldwide. Only

in the years prior to the crisis and in 2013 was growth even stronger than this. There are striking differences in dynamics in industrialized and emerging countries: while growth almost doubled in the former to 10.4%, in the latter it declined to just under 19%, the lowest figure since the financial crisis. One cause of this lies in developments in China, where „wealth management“ products, which for a long time were extremely popular, have become less attractive owing to more stringent regulation.

The “Savers Trilemma”

Analysis of the household wealth portfolio according to the components safety, growth and consumption (0 = low, 5 = high), Average of 2007 to 2017, in %



Securities holdings of private households around the globe totaled EUR 70.8 trillion at the end of 2017 and have thus more than doubled since the low reached in 2008 due to the crisis. This asset class therefore accounts for over 42% of total savings and is not only by far the most popular asset class, but has also surpassed its pre-crisis level again for the first time. Only in Europe – both west and east – it is still significantly below this, with shares of less than 30% in the asset portfolio.

Insurance policies and pensions: investors remain loyal

Private household receivables from insurance companies and pension institutions are the second most popular asset class worldwide, with a share of 28.9%. These receivables came to EUR 48.7 trillion in total.

In 2017 they once again achieved solid growth of 5.2%, although this was almost one percentage point lower than the previous year's growth. There are two trends in particular that are responsible for this: a slowdown in China and a sharp decline in Western Europe, where growth slumped from 8.2% to 2.3%. However, this is certainly not because savers have suddenly turned against insurance policies and pensions. On the contrary, this asset class is actually the most popular in the region, representing 39.1% of the overall portfolio, and inflows also remained largely stable in 2017.

The explanation lies in the sharp fluctuations in changes in value, which are triggered in particular by interest rate movements. While falling interest rates drove up the value of portfolios in 2016 – growth in the large insurance markets of the Netherlands, the UK and France was between 9% and 12.3% – the interest rate reversal had the opposite effect the following year, as expected. As a result, France and the UK recorded growth of only 1.4%, while the Dutch market actually contracted by the same amount.

Bank deposits: investors are less keen on liquidity

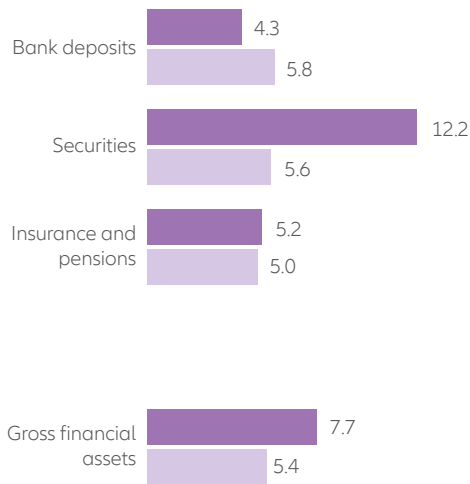
The popularity of bank deposits as a „safe haven“ and a source of guaranteed liquidity received a significant blow in 2017. Inflows fell by more than 30% worldwide, leading to a drop in growth from 6.3% to 4.3%, the lowest level since the financial crisis. However, banks around the world still hold EUR 44.7 trillion. Their share in the asset portfolio amounted to 26.5%, which roughly corresponds to the figures before the crisis. Ten years after the outbreak of the financial crisis, savers' relationship with bank deposits therefore seems to have „normalized“ again.

This „withdrawal of affection“ for bank deposits was most pronounced in North America, where inflows fell by around EUR 310 billion or 53%. Bank deposits thus dropped down to last place in the competition for fresh savings in 2017, having been in first place without interruption for three years. Growth slowed to 2.5%, weaker even than at the height of the crisis in 2009 (+2.6%). There was a less marked rejection of bank deposits in Western Europe, where households reduced new investments by almost EUR 100 billion or 24%. Bank deposits thus remained the most popular asset class for new investments with inflows of around EUR 310 billion, slightly ahead of insur-

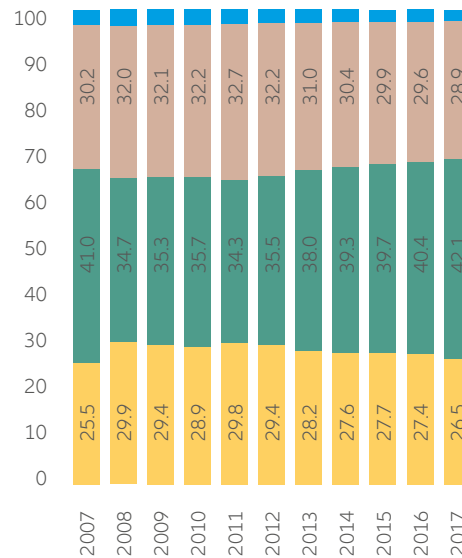
ance policies and pensions (+EUR 290 billion). Growth in bank deposits came to 3.2% in 2017. Although this was considerably lower than in the previous year (+4.5%), it was at roughly the same level as in the years following the crisis. Growth in bank deposits also slowed in all other regions (with the exception of Latin America).

Securities recording the strongest growth

Growth by asset classes, in %



Asset classes as % of gross financial assets



- Bank deposits
- Securities
- Insurance and pensions
- Other

- 2017
- CAGR* 2007-2017

*CAGR = Compound Annual Growth Rate.
Sources: National Central Banks and Statistical Offices, Allianz SE.

Asset growth in Asia continues unabated

Asian households had total savings of around EUR 48.8 trillion at the end of 2017. Private financial assets in the region have more than doubled since 2007, with average annual growth of 8.5%. Asia overtook Western Europe, which was previously the world's second-richest region, in 2013. If we exclude financial assets of Japanese households, which grew by an average of only 1.3% per year in the same period and represent almost 30% of all savings in Asia, then average annual growth nearly doubles to just under 15%. Asset growth in this group of countries slowed slightly year-on-year during 2017, from 14.7% to 12.2%. Nevertheless, financial assets grew faster in Asia (excluding Japan) than in any other region, both last year and in a long-term comparison.

The main driving force behind this is the increasing importance of China, where household financial assets have risen at an average rate of about 20% per year over the last decade. The share of the world's second-biggest economy in financial assets in Asia (excluding Japan) climbed by almost 28 percentage points in this period to around 70%. In terms of absolute financial assets, China overtook

Japan in 2014. At the beginning of the decade, total savings of Chinese households came to just over one-third of private financial assets in Japan. At the end of last year, however, they were almost 70% higher. The share of the entire region of Asia (excluding Japan) in global assets more than doubled in this period to just under 21%.

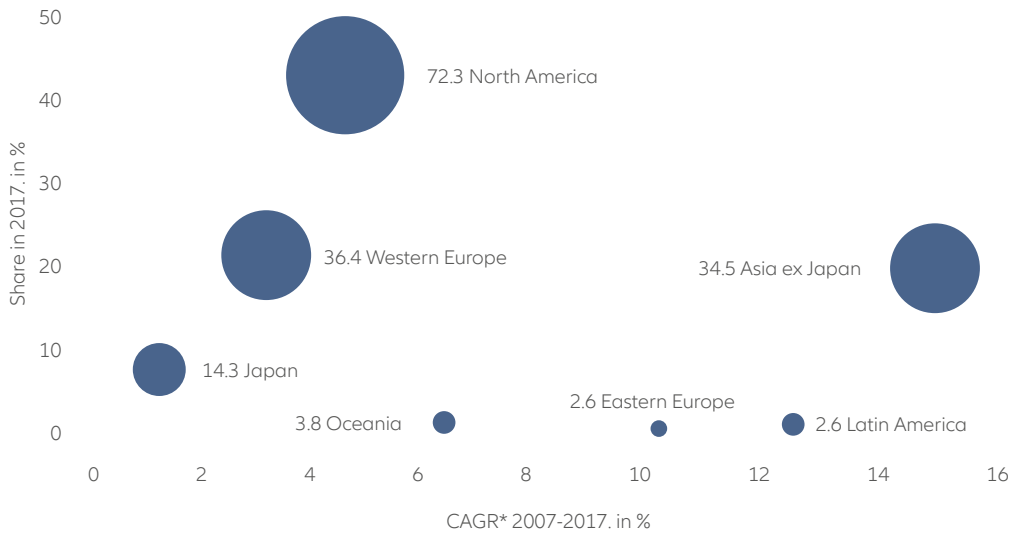
China's economic rise and its insatiable appetite for raw materials also contributed indirectly to the upturn in Latin America. High world market prices for crude oil, copper and other raw materials led to rising export revenue and capital inflows in the region, which is rich in natural resources. The subcontinent's economic output almost trebled during the 2000s, Latin America's „golden decade“. Along with rising incomes, generous social welfare programs allowed many households to build up a financial buffer. Private financial assets in the region grew at an average annual rate of over 12% between 2007 and 2017, although growth has slackened somewhat since 2013. A slowdown in growth in China and falling prices on the commodities markets have plunged the region into a crisis that has also had an impact on private asset accumulation. While growth in household savings averaged around 13% per year in the first half of the last decade, this dropped to 11.5% in the second half. Moreover, a large proportion of this is being eaten up by inflation, although inflation is now at least declining. Financial assets in the region grew by 12% last year, but households lost more than half of this growth due to average inflation of just under 7%.

Despite a slight slowdown in the last few years, household assets in Latin America have almost quadrupled since 2007 and totaled around EUR 3.7 trillion at the end of 2017. The region's share of global gross financial assets doubled to 2.2% during this period.

Private households in Eastern Europe held a total of almost EUR 2.6 trillion, or 1.5%, of global financial assets at the end of 2017. At an average growth rate of 10.0% per year, savings in the region have almost tripled since 2007. Although average annual growth remained constant at this level in the second half of the decade, asset growth slackened from around 11% and 12% in 2013 and 2014 respectively to 7.5% in 2017. This is not surprising given that the Russia-Ukraine conflict is still smoldering and that the Russian economy depends heavily on the oil price.

Assets and growth by region

Share of global gross financial assets in 2017 and average annual growth since 2007, in %



● Bubble size: Absolute amount of gross financial assets (in EUR tn)

*CAGR = Compound Annual Growth Rate.
Sources: National Central Banks and Statistical Offices, Allianz SE.

In the wealthier parts of the world, where households already have substantial assets, private savings naturally grew more slowly than in emerging regions. A classic example of this is Japan, which was in 11th place on the list of the world's richest countries at the end of 2017 in per capita terms, with gross financial assets of EUR 112,470. However, private assets have grown at an average rate of just 1.3% per year since 2007, much more slowly even than in Western Europe or North America (+3.2% and +4.6% respectively in the same period). This meager growth is principally a result of very conservative, liquidity-oriented investment behavior. The Japanese have traditionally held more than half of their financial assets in the form of bank deposits, which are generating barely any income for savers owing to decades of low interest rates. For many years, it was also virtually impossible to achieve any value gains on the domestic stock market. At some points during the 2000s, the Nikkei fell back to the same levels it was at in the early 1980s. The situation did not start to change until 2013, with the beginning of „Abenomics“. While Japan's leading index was still down by almost one-third on its 2007 level at the end of 2012, it had exceeded this level by more than 24% three years later. Private household assets held in the form of equities and fixed-income securities shot up by almost 40% to around EUR 2.4 trillion in this period alone. However, as the share of this asset class in the portfolio was around 18%, the overall effect remained modest.

Having more or less stagnated in 2016 (+0.4%), the Nikkei soared by 19.1% last year, causing securities holdings of Japanese households to gain 13.1%. Almost 98% of this growth was due to value gains. The Japanese bought more shares, investment funds and other ownership interests than they sold for the first time in eight years, although the figures came to only EUR 7.4 billion in total or just under EUR 60 per capita. In the period from 2010 to 2016, households sold securities worth almost EUR 149 billion in total or EUR 1,170 per capita in net terms. Total assets grew by 4.0% in 2017. The share of securities holdings in the portfolio grew by 1.6 percentage points to 19.6% last year alone, owing to the above-average performance of these investments. Japanese savings totaled around EUR 14.3 trillion at the end of 2017. The country's share of global financial assets has fallen from 12.2% to 8.6% in the course of the last decade.

Financial assets of households in Western Europe grew almost in step with Japan last year, with the growth rate decreasing by 1.3 percentage points year-on-year to 3.9%. Growth was nevertheless still slightly faster than the long-term average (+3.2% a year). Although there was an increase across all asset classes, growth was once again driven by securities holdings, which were up 6.6% year-on-year. As

in Japan, growth was almost entirely attributable to value gains (97%). Western European households also invested fresh savings in securities again for the first time last year, having sold securities worth around EUR 250 billion in total or an average of EUR 630 per capita in net terms between 2012 and 2016. However, last year's purchases came to only EUR 40 per capita on average or EUR 15 billion in total.²

The preference for investments that can be liquidated quickly is less obvious in Western Europe than in Japan. However, more savings were held in savings accounts (29.5% of the portfolio) at the end of 2017 than the average for industrialized countries (23.6%). Riskier investments such as equities and other securities made up 28.7% of the portfolio. Insurance policies and pensions remained the most popular savings products, accounting for 39.1% of the portfolio in total. Inflows of funds declined very slightly year-on-year in 2017 (-0.9%) in favor of securities holdings, but remained high at EUR 290 billion or an average of EUR 710 per capita. The long-term average is EUR 292 billion. Total savings of western European households amounted to approximately EUR 36.4 trillion or just under 22% of global assets.

Households in North America have more of a risk appetite in their investment strategy. Securities accounted for more than half (53.0%) of the asset portfolio there at the end of last year – the highest level since 2007. By contrast, bank deposits, which are very popular in Japan and Western Europe, made up only 13.4%. North American households saved almost 31% of their financial assets in the form of insurance policies and pensions, although these are often linked to the performance of the capital markets, particularly in the US. In a long-term analysis, this savings behavior has paid off. Average annual growth since 2007 has been 4.6% in North America, above both the western European average (+3.2%) and the Japanese average (+1.3%). Asset growth last year was actually well above average owing to the strong performance of the stock markets. Securities holdings gained 11.5%, while the entire asset portfolio grew by 8.3% to around EUR 72.3 trillion. Value gains on securities holdings alone totaled around EUR 3.6 trillion, which represented 92% of total growth for this asset class, even though inflows of funds reached the record level of 2008 (EUR 313 billion) at EUR 314 billion in total or an average of EUR 870. With a share of around 43% in global financial assets, North America is the richest region on the planet.

Private financial assets grew even more dynamically than in North America in Oceania, where household savings have doubled since 2007 at an average annual growth rate of

² All information on flows of funds relates to Western Europe excluding Switzerland.

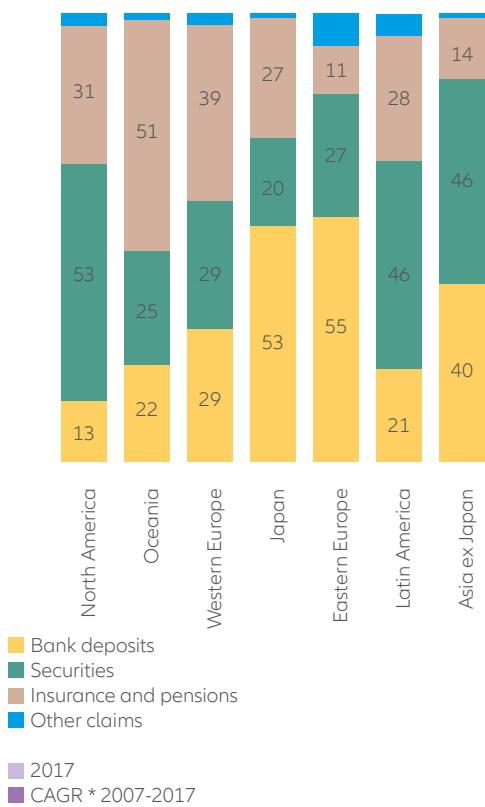
6.3%. However, the percentage increase last year of 6.1% was slightly below the long-term average and was noticeably lower than the previous year's figure of 8.7%. Assets held in the form of insurance policies and pensions, which account for about half of the portfolio, recorded the strongest growth of all asset classes at 7.1%. All in all, financial assets of private households in the region came to EUR 3.8 trillion, which corresponds to 2.3% of global savings.

Poorer regions are catching up

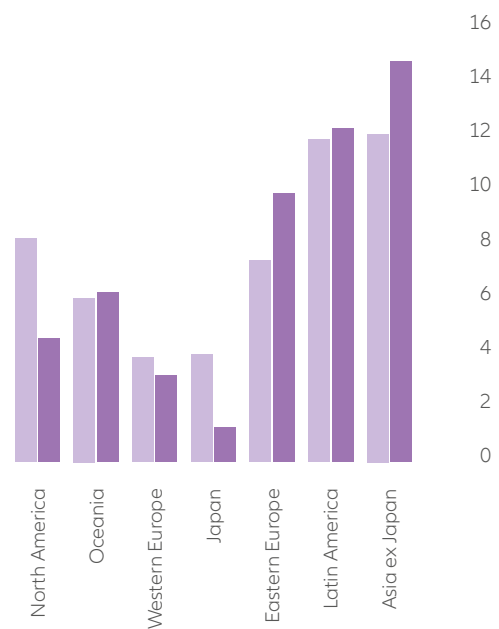
Although asset growth in emerging markets has been more than four times as high on average as in industrialized countries over the last decade, the weightings on the world wealth map are shifting only slowly. The share of North America and Western Europe in global gross financial assets has declined by

Asset structure and growth by region

Asset classes as % of gross financial assets, 2017



Growth of gross financial assets, in %



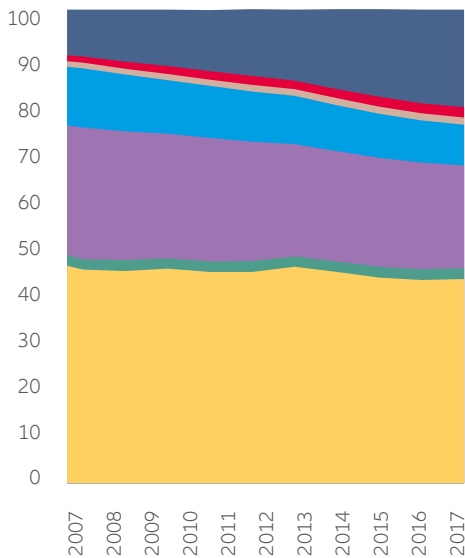
*CAGR = Compound annual growth rate.
 Sources: National Central Banks and Statistical Offices, Allianz SE.

about 9 percentage points since the end of 2007. However, the two regions together still held almost two-thirds of the world’s assets at the end of last year. With a „global share“ of around 43%, North America was the richest region on the planet. In Asia-Pacific, Japan accounted for a further 8.6% of assets and Australia and New Zealand for 2.3%. That means that about three-quarters of global financial assets were still in the hands of private households in the world’s richer areas, even though these households make up less than one-fifth (just under 19%) of the earth’s population.

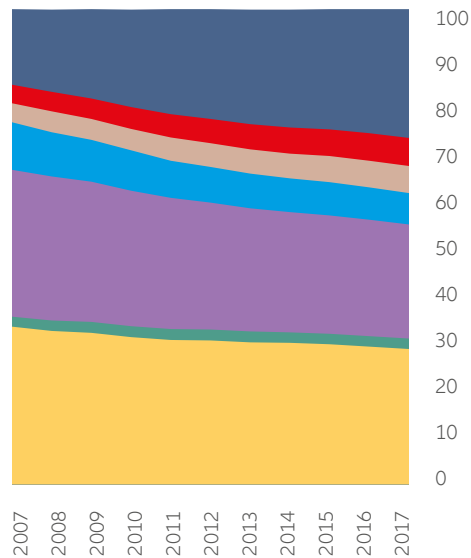
The remainder of the world’s financial assets (around 24%) are distributed among Latin America (2.2%), Eastern Europe (1.5%) and other Asian countries (20.6%), i.e. among a total of just under 4.1 billion people. Their share of global financial assets rose by almost one percentage point last year alone and has more than doubled over the last decade.

Slow catch-up process in wealth

Regional shares of global financial assets, in %



Regional shares of global GDP, in %



- Asia ex Japan
- Latin America
- Eastern Europe
- Japan
- Western Europe
- Oceania
- North America

Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

Nevertheless, this power shift is taking place in slow motion compared with development of economic output. In terms of gross domestic product, the weightings have already shifted away from richer regions and much further towards the world's poorer regions. The two heavyweights of North America and Western Europe not only had a much smaller share in global gross domestic product (just under 53% at the end of 2017) than in global assets, but have also experienced a decline of nearly 12 percentage points in their share of global GDP since the end of 2007, much sharper than the drop in their share of global assets. Conversely, the world's poorer regions have upped their share of global economic activity by 15 percentage points, to almost 39%, during the same period.

In 2017, Asia (excluding Japan), Latin America and Eastern Europe accounted for about 60% of worldwide economic growth, while their share of growth in financial assets was only 36%.

In both cases, most of this was due to a rapid catch-up process in Asia, and more specifically in China. The Middle Kingdom accounted for 31% of worldwide economic growth and 25% of global asset growth in 2017 alone.

Inflation gnaws at assets

The significantly higher rates of asset growth in emerging countries are put into perspective if we include two factors in the analysis: development of consumer prices and population growth. The latter plays only a minor role; total population growth in emerging markets reduces long-term average growth in gross financial assets by 1 percentage point in per capita terms, while this demographic effect comes to half a percentage point in advanced economies. There is therefore little change with regard to the major differences.

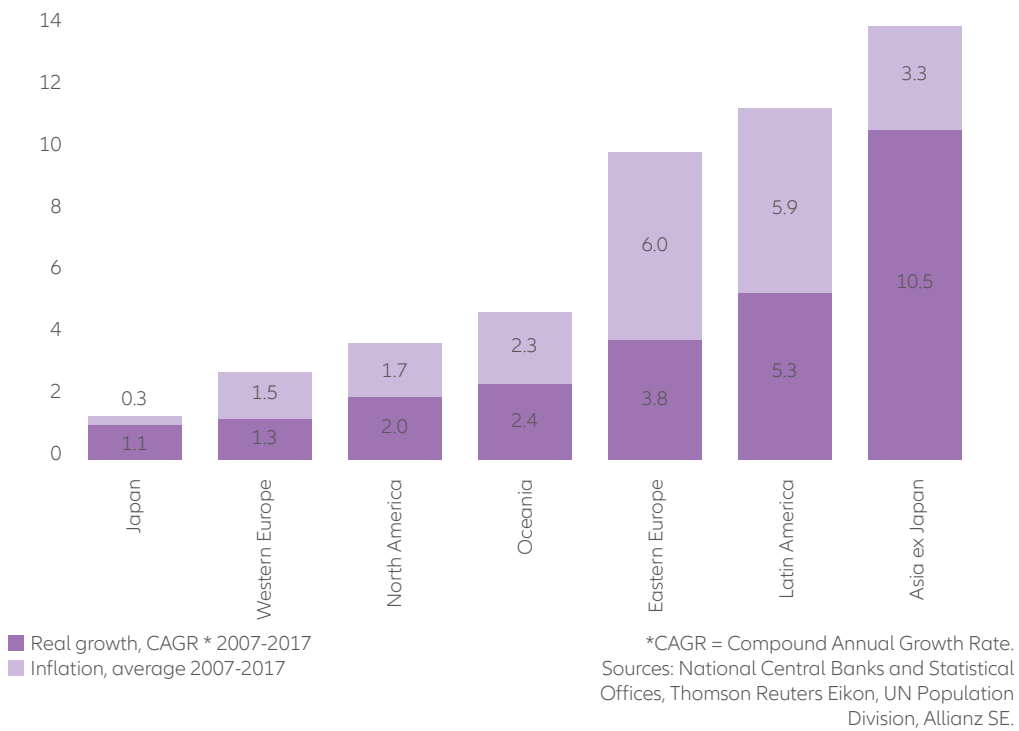
With regard to asset growth in real terms, however, i.e. minus the general rate of inflation, the effects are much more pronounced. Per capita asset growth is significantly reduced in all regions, but inflation has the biggest impact on private assets in Eastern Europe and Latin America, where average annual growth falls to 3.8% (instead of 9.8%) and 5.3% (instead of 11.1%) respectively. Asia (excluding Japan) remains the clear leader in a long-term comparison even after deduction of inflation, with growth of 10.5% p.a. since 2007.

In real terms, growth differentials compared with advanced economies, particularly North America and Western Europe, thus no longer appear quite so pronounced, even if inflation is naturally also curbing asset accumulation in

these regions. North America is now clocking up growth of 2.0% a year (real gross per capita financial assets since 2007), compared with only 1.3% in Western Europe, which is thus just ahead of Japan (1.1%) after adjustments for inflation.

Inflation hurts savers particularly in eastern Europe and Latin America

Inflation rate and real growth of gross financial assets per capita, in %



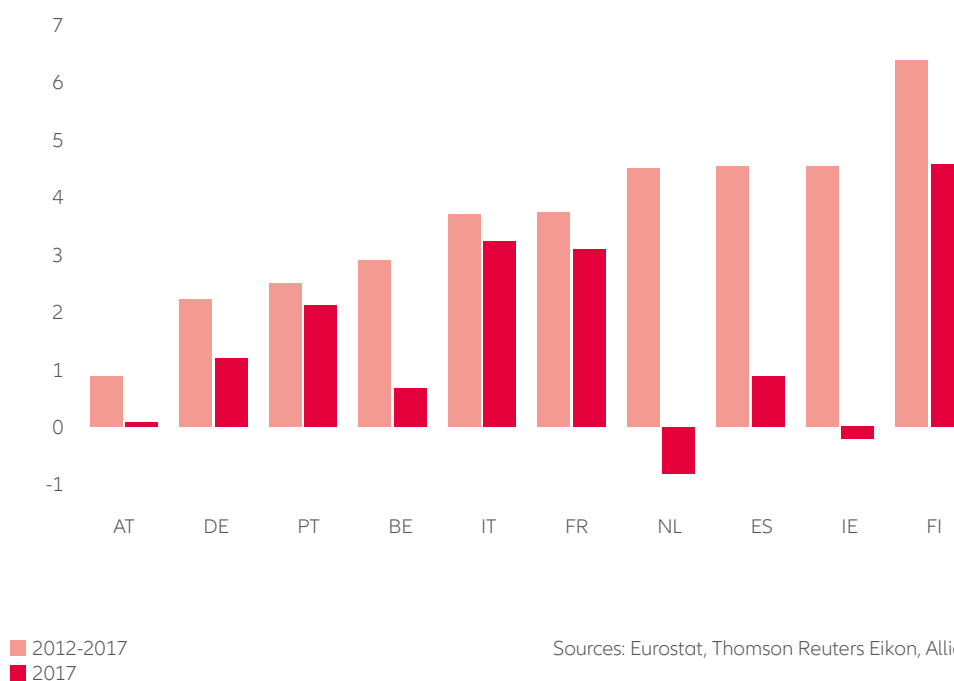
The return of inflation

The ECB's ongoing zero interest rate policy is toxic to savers. However, (implicit) returns on financial assets in the eurozone have actually given little cause for complaint in recent years, with a few exceptions. This did not change until last year, with the return of inflation.

The „implicit return on financial assets“ refers to the total sum of gains in value and investment income in relation to portfolios. We have focused on the six-year period from 2012 to 2017 inclusive, which covers the phase of the ECB's extreme monetary policy – from „whatever it takes“ to negative interest rates and securities purchases. We have looked at both the average return over the entire period, which tends to reflect the structural aspects of savings habits, and that of the last year, which maps shorter-term trends (see chart).

About savers and investors

Real returns on financial assets, average of 2012 to 2017 and 2017, in %



Average return on financial assets in selected eurozone countries

Let's consider long-term development first. In the (unweighted) average for all the countries analyzed, the return on financial assets after deduction of inflation is 3.5% – that's a very tidy sum.³ However, the differences between the individual eurozone countries are striking, with average returns ranging from less than 1% in Austria to over 6% in Finland. These differences can be directly attributed to the portfolio structure. Finland, for example, has the highest proportion of securities of all the countries analyzed. At the other end of the scale are the countries where bank deposits have the biggest share in financial assets: Austria, Germany and Portugal.

However, there is one thing that all countries have in common. Last year returns everywhere dropped below the long-term average, and in some countries such as the Netherlands and Ireland they even fell below zero. We don't need to speculate much about the cause. The return of inflation has hit savers hard, and although the stock market still performed reasonably well in 2017, it was not enough to offset this fully in all countries.

In particular, savers with a strong preference for bank deposits are feeling the (damaging) effects of inflation, and are now receiving negative returns on their bank deposits. The loss of purchasing power ranges from EUR 670 per capita in Belgium and EUR 540 in Austria to around EUR 50 and EUR 30 per capita in Ireland and France. For Austria, this means that all savings from earned income (just under EUR 500) are consumed by losses on bank deposits. German savers are losing almost 30% of their savings in this way. In other words, every third euro of earned income that is added to financial assets serves merely to compensate for the loss of purchasing power of funds in savings and current accounts. For countries like Austria and Germany – as well as Belgium and Finland – this is not a new experience. In almost all years since 2012, the real return on bank deposits has been below zero, with cumulative losses becoming correspondingly high (see chart). It's no coincidence that households in „northern countries“ in particular are having to pay this „inflation duty“. Bank interest rates were even lower here than on average for the eurozone, and inflation was simultaneously a notch higher.

Average loss of purchasing power on bank deposits in selected eurozone countries

The return of inflation is also worrying in another respect. It is likely to further intensify the existing inequality with regard to assets, which the zero interest rate policy has already exacerbated.

³ By way of comparison, studies by economic historians show that the real return on „safe“ investments (mainly government bonds) over about the last 150 years has averaged 1% to 3% p.a., while higher-risk investments (shares) generated an average return of around 7% p.a. Jordà et al. (2018).

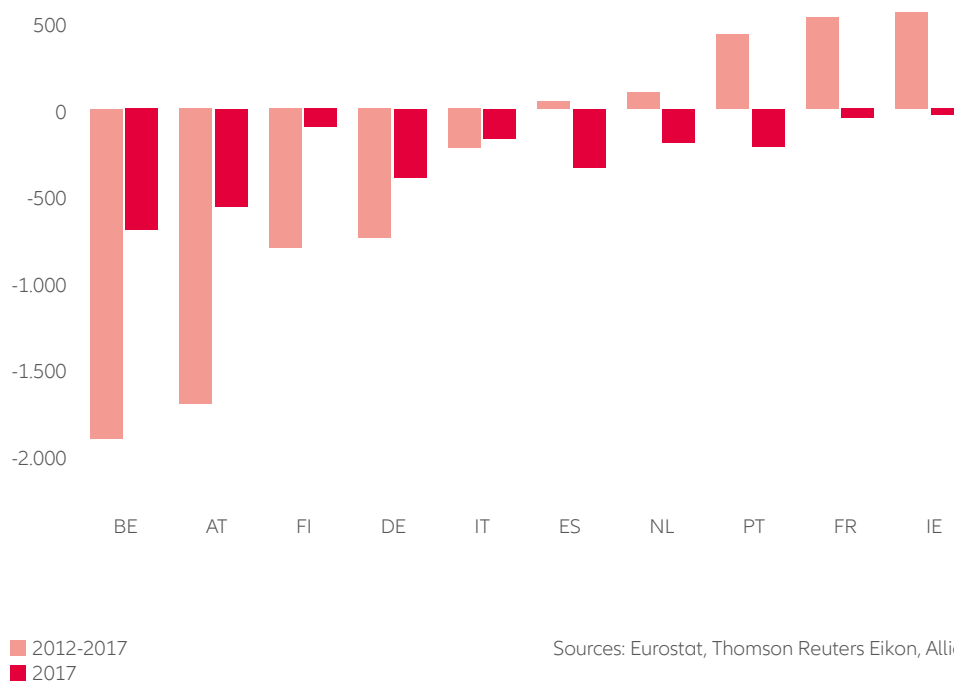
Richer households generally achieve higher returns with their financial assets, as their portfolios include more high-risk and high-yield investments than those of poorer households. That means they also have a larger buffer against a rising inflation rate. With a few exceptions, the difference in returns between the households with the highest incomes and those with the lowest incomes in eurozone countries is well over 1% (see chart).

Differences in returns between income brackets in selected eurozone countries

The two extremes in this analysis are worth a closer look. On one hand there is Finland. Nowhere else are the differences in investment behavior between income brackets as pronounced as in northern Europe: top earners allocate over 40% of their financial assets to shares, roughly five times as much as low-income households. This also sheds a light on the high average return

The inflation's toll

Losses in purchasing power per capita on bank deposits, 2017 and 2012 – 2017 cumulated, in EUR

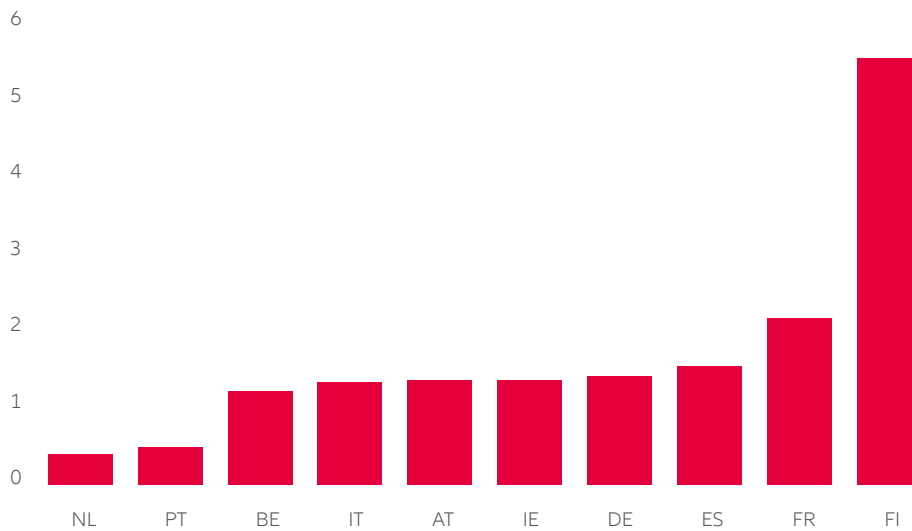


that Finnish savers achieve on their financial assets. It is essentially generated only by a very small group of households. At the other end of the spectrum is the Netherlands, where the small differences in returns are a result of mandatory – and therefore widespread – company pension schemes. The relative share of pensions and insurance policies in financial assets is actually higher in lower income brackets than in higher income brackets; there are no differences with regard to preference for bank deposits, as the obligation to have a capital-funded pension plan has led to the „democratization“ of yield-oriented saving. However, the highest income bracket has a stronger affinity for shares and investment funds.

Although all savers in the eurozone are faced with an identical framework in terms of monetary policy, there are significant differences in investment preferences and performance. The return of inflation could widen the gaps between income brackets in particular.

He who has, to him will be given

Difference in real returns of financial assets between the highest and lowest income group, average of the years 2012 to 2017, in %



Sources: ECB, Eurostat, Thomson Reuters Eikon, Allianz SE.



An aerial photograph of a mountainous landscape. A winding road, possibly a race track, is visible on a steep, rocky slope. The road is light-colored and curves through the terrain. In the background, there are more mountains and a cloudy sky. A large, semi-transparent purple rectangle is overlaid on the right side of the image, containing white text.

**DEVELOPMENT
IN GLOBAL
LIABILITIES:
THE “DEBT
SCREW” IS
LOOSENING
FURTHER**

Worldwide private household liabilities reached a historic high of EUR 39.8 trillion in 2017. At 6.0%, the growth rate was not only slightly above the previous year's level of 5.5%, but also well above the long-term average annual growth rate of 3.9%. Debt growth has accelerated noticeably since 2013 and is gradually returning to familiar levels. Low interest rates make borrowing more attractive while loan volumes have probably increased, particularly in the case of mortgages, in line with developments in house prices over the last few years. According to the Organization for Economic Cooperation and Development (OECD), the nominal house price index for OECD countries has on average risen by 21 percentage points in the last four years alone and is still increasing.

In most parts of the world, debts grew faster in 2017 than in the previous year. The rate of growth increased over the course of the year from 3.3% to 3.8% in North America, from 5.9% to 6.2% in Oceania, from 2.6% to 3.0% in Western Europe, from 4.8% to 7.4% in Eastern Europe and from 6.7% to 8.4% in Latin America. In contrast, borrowing slowed slightly in Japan, where the growth rate declined from 2.4% to 1.8%. Although debt growth remained high in the rest of Asia at 15.8%, the percentage increase was down compared with the previous year's figure of +16.5%.

Emerging regions increase in importance

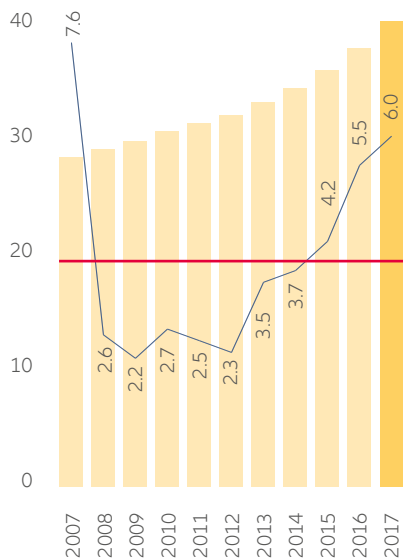
The geographical distribution of liabilities is similar to that of assets. The richer parts of the world accounted for a total of three-quarters of global debt at the end of 2017 (North America 36.4%, Western Europe 27.6%, Oceania 4.2% and Japan 6.6%). However, their total share came to around 90% at the beginning of the last decade, which means that the emerging regions of Latin America, Eastern Europe and Asia (excluding Japan) have increased significantly in importance. Private liabilities in these three regions more than quadrupled to around EUR 10 trillion in total in the period from 2007 to 2017, with average annual growth rates of 11.5% in Eastern Europe, 12.6% in Latin America and as much as 14.8% in Asia (excluding Japan). Latin American and Eastern European households have been considerably more cautious when it comes to borrowing in the past five years than in the first half of the last decade. While private debts rose on average by around 15% (Latin America) and just under 16% (Eastern Europe) between 2007 and 2012, average growth rates have since dropped to 9.5% and 6.7% per year. This re-

flects the after-effects of the global financial crisis and the debt crisis in the eurozone, as well as the decline in the price of oil and other commodities, which has made things difficult for export economies that are strongly weighted towards commodities, such as Russia and Brazil. The associated negative economic consequences have forced households and consumers to cut down on consumption and therefore to curb borrowing as well.

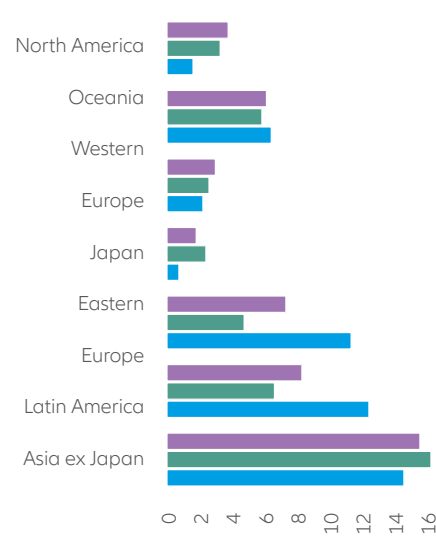
In Asia (excluding Japan), on the other hand, credit growth remained more or less constant in both periods. Private debt has risen by an average of 14.5% per year since 2013, while between 2007 and 2012 the growth rate was only half a percentage point higher. Liabilities in the region increased almost five-fold over the decade as a whole and totaled EUR 8.2 trillion at the end of 2017, 63% of which related to China alone. China's share had been only about half of this figure ten years ago.

Highest debt growth since the crisis

Development of global debt burden



Increase of debt by region, in %



- Liabilities worldwide, in EUR tn (lhs)
- Change rate y/y, in % (rhs)
- CAGR* 2007-2017, in % (rhs)
- 2017
- 2016
- CAGR* 2007-2017

*CAGR = Compound Annual Growth Rate.
Sources: National Central Banks and Statistical Offices, Allianz SE.

A long-term review shows that in North America, Western Europe and Japan, where debt levels are of course much higher than in emerging regions of the world, average growth in liabilities has been a low single-digit percentage. Japan is at the bottom of the list with average growth of just 0.7% per year in the period from 2007 to 2017, after North America (+1.6%) and Western Europe (+2.2%). Japanese households had actually reduced their liabilities in the years prior to the crisis, which in many places were characterized by excessive debts. Private debt declined further by an average of 0.4% per year between 2007 and 2012. Demand for credit has since increased again, causing liabilities in Japan to grow by an average of 2.2% per year and bringing them to a total of around EUR 2.6 trillion at the end of 2017. A huge increase in the Japanese central bank's already extremely expansive monetary policy appears to be bearing fruit by boosting private household borrowing. Furthermore, property market trends have reversed in the last few years, with house prices rising again for the first time since the early 1990s. According to the OECD, the nominal house price index climbed by almost 11 percentage points between 2013 and 2017, having previously slumped by more than 80%.

The global financial crisis forced households in North America, particularly the US, which was at the epicenter of the crisis, to restructure their asset balance sheets. After the debt burden of US citizens rose rapidly in the years leading up to the crisis, sometimes reaching double-digit growth rates, liabilities fell by an average of 0.8% per year from 2008 to 2012 in the wake of the subprime crisis, partly owing to payment defaults. The trend has since changed again and average annual growth has risen to 2.2% (North America as a whole: +2.5%). This was primarily due to student and car loans, which have grown at an average rate of 7.2% and 6.5% per year respectively in the last five years, reaching a total of EUR 2.6 trillion, or just under 17% of the total volume of loans, at the end of 2017. Before the property bubble burst, their share of the total was just under 10%. On one hand, low interest rates are stimulating demand for credit; on the other, lending conditions – particularly for car loans – have been relaxed again, meaning that loans have increasingly been granted to lower-income households. If interest rates were to rise again, financially weak households in particular could find it difficult to repay their debts. Total private debt in the US reached a new record level of around EUR 12.9 trillion (North America as a whole: EUR 14.4 trillion).

The financial crisis also heralded the start of a phase of restraint in borrowing in Western Europe. Households in the euro crisis countries in particular have since made significant progress in reducing their debts. After private liabilities grew at double-digit rates in the years preceding the crisis, households in Greece, Ireland, Portugal and Spain were forced to curtail their demand for credit. Debts in these four countries have contracted by a total of EUR 287 billion, or an average rate of 2.4% per year, since the end of 2008. In other western European countries, however, debts rose by an average of 2.2% per year in the same period.

In the region as a whole, the trend towards debt growth has picked up again slightly in the last few years. After borrowing stagnated in 2012 and 2013, annual growth accelerated continuously and reached 3.0% last year, the highest growth rate since 2008. Total debt in the region thus came to around EUR 10.9 trillion.

Private liabilities in Oceania grew much faster than in Western Europe and North America, with annual growth averaging 6.5% over the last decade. Average growth has nevertheless dropped to less than half the levels reached in the years prior to the crisis. However, last year the growth rate „down under“ was still around twice as high as in Western Europe, at 6.2%, while private debt totaled around EUR 1.6 trillion. Rising house prices in particular have driven up credit growth. According to the OECD, nominal prices have risen rapidly since the early 2000s with only brief interruptions, climbing almost 44% in Australia and nearly 60% in New Zealand in the last five years alone.

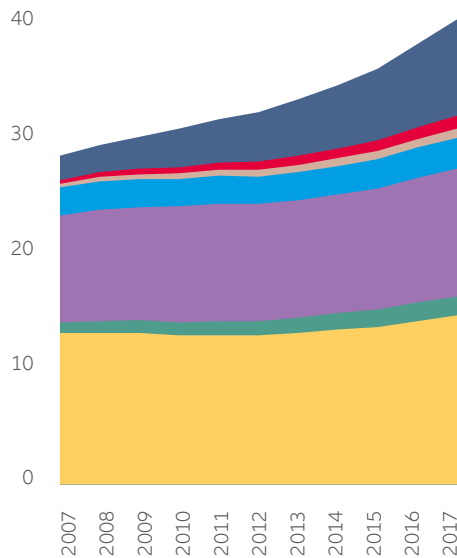
Significant differences in the debt ratio

Unsurprisingly, households in Oceania have by far the highest per capita debt in a regional comparison. At an average of EUR 56,530 at the end of 2017, they were more than twice the average for Western Europe (EUR 26,180) and

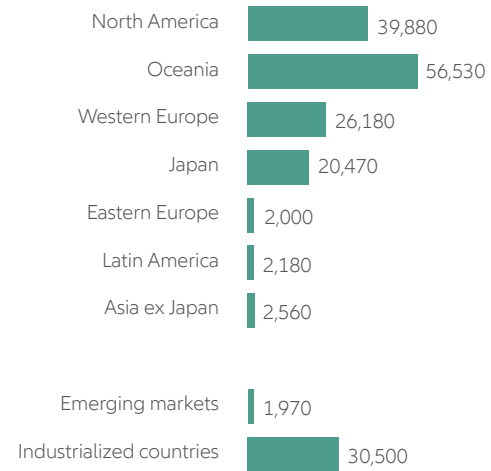
Japan (EUR 20,470). Even the North Americans had almost 30% less debt in per capita terms than households in Oceania, at EUR 39,880. The gap between these two regions has widened massively owing to diverging trends in debt. While average per capita debt in the two regions was almost equal as recently as 2008, at EUR 38,420 in North America and EUR 38,720 in Oceania, the difference had increased to nearly EUR 17,000 per capita by the end of last year.

Weight of emerging regions growing – but per capita debt still low

Development of global debt, in EUR tn



Debt per capita 2017, in EUR



- Asia ex Japan
- Latin America
- Eastern Europe
- Japan
- Western Europe
- Oceania
- North America

Sources: National Central Banks and Statistical Offices, UN Population Division, Allianz SE.

Per capita debt in emerging regions was much lower. Eastern Europe (EUR 2,000), Latin America (EUR 2,180) and Asia (excluding Japan) (EUR 2,560) were at a similar level. If we look at Asia (excluding Japan) without including the industrialized countries in the region, Israel (EUR 18,440), Singapore (EUR 35,310), South Korea (EUR 25,750) and Taiwan (EUR 18,550), the average drops to EUR 1,960.

Just as in per capita terms, there are also significant differences between the world's wealthier regions and emerging regions when it comes to the debt ratio, i.e. liabilities measured as a percentage of nominal economic output. Once again, Oceania is well ahead of all other regions: the ratio here has risen by just under one percentage point to 124.3% over the last year, while the increase since the end of 2007 comes to around 15 percentage points. That means that Oceania is drifting further and further from the global average. While the gap between it and the global average was just under 38 percentage points in 2007, it came to 60 percentage points at the end of 2017. However, this development is not only due to a comparatively high level of debt

growth; it is also the result of more sluggish economic growth in the region.

This is the reverse of the trend in North America, where the ratio of debt to economic output has contracted by almost 17 percentage points compared with 2007 to 82.0%. The region was thus still slightly above the average figure for industrialized countries of 78.7%. In Western Europe the ratio came to just under 75% in 2007, and two years later climbed to its highest level to date of 79.6%. It has since declined by 5.6 percentage points to 74.0%, putting the region below the average for industrialized countries at the end of 2017. The debt ratio of Japanese households was much lower still. Although it increased by almost four percentage points compared with 2007, largely as a result of weak economic growth, it still stood at only 64.8% at the end of 2017.

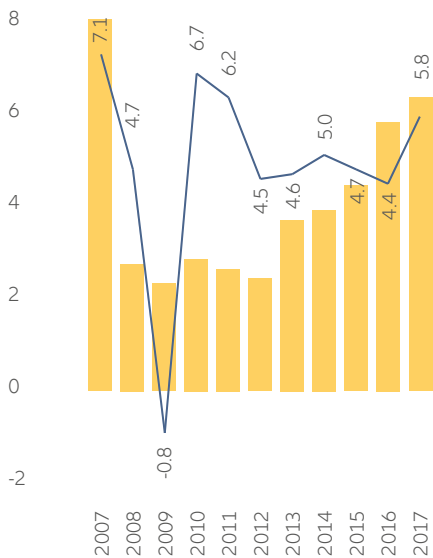
Among emerging regions, the ratio of private liabilities to gross domestic product was lowest in Eastern Europe. After debt growth slowed considerably in the last three years, falling well below the pace of economic growth, the ratio dropped from its historic high of 25.0% in 2014 to 22.7% at the end of 2017. The ratio in the region's EU member states, which was around 32% on average, was unsurprisingly much higher than in the rest of the region (about 17%), although all countries were still below the 50% mark.

The ratio in Latin America was approximately 6 percentage points higher than in Eastern Europe at just under 29%, with liabilities growing at a noticeably faster rate (almost 13% a year on average) than economic output (around 9% a year on average) in the period from 2007 to 2017. No country in the region has surpassed the 50% mark to date, although Chile, which had the highest debt ratio in the region at the end of 2017 at 48%, could pass the threshold this year.

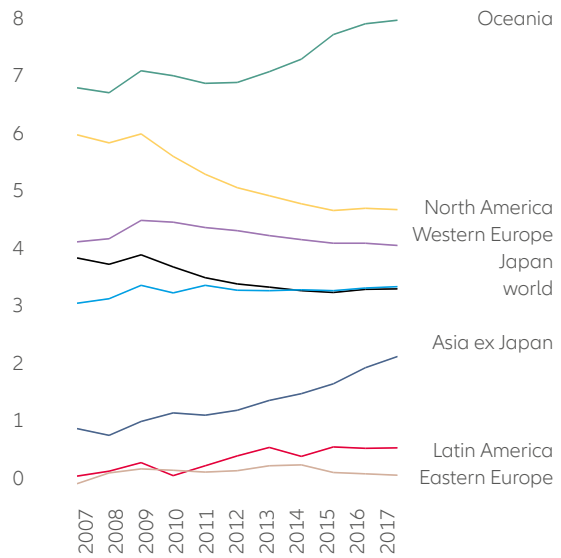
Asia (excluding Japan) is giving greater cause for concern. The debt ratio there was more than twice as high as in Eastern Europe, at around 49%. Even if we exclude industrialized countries in the region, the ratio at the end of 2017 came to just under 43%, around 14 percentage points above the level in Latin America. The ratio of debt to economic output

Global economy and debt growing in sync in 2017

Economic growth vs. debt growth, y/y in %



Liabilities as % of nominal GDP



■ Global liabilities (rhs)
 ■ Global nominal GDP (lhs)

Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

is already alarmingly high in some emerging countries in the region. Two of them, Malaysia (84.4%) and Thailand (79.1%), have already significantly exceeded the 50% mark; this could be followed by a third country, China (49.1%), this year. The figures for both countries were also more than twice as high as the average for emerging markets as a whole (37.2%). They are thus gradually coming closer to the debt ratio that households in Spain (86.6%), the US (100.3%) and Ireland (100.7%) had reached at the end of 2007 – shortly before the credit bubble burst.

At global level, the ratio of private liabilities to economic output remained more or less stable in 2017 at 64.3%, compared with the previous year's level of 64.2%. Thanks to a broad-based recovery in the global economy last year, global gross domestic product (+5.8%) kept pace with a further rise in debt growth (+6.0%). This ratio has fallen by nearly 8 percentage points since reaching a historic high in 2009 (71.9%). Economic growth and growth in debt have increasingly converged, until finally in 2016 liabilities grew faster than worldwide GDP, bringing the deleveraging process that began with the global financial crisis to an end.

A large wealth gap between the regions

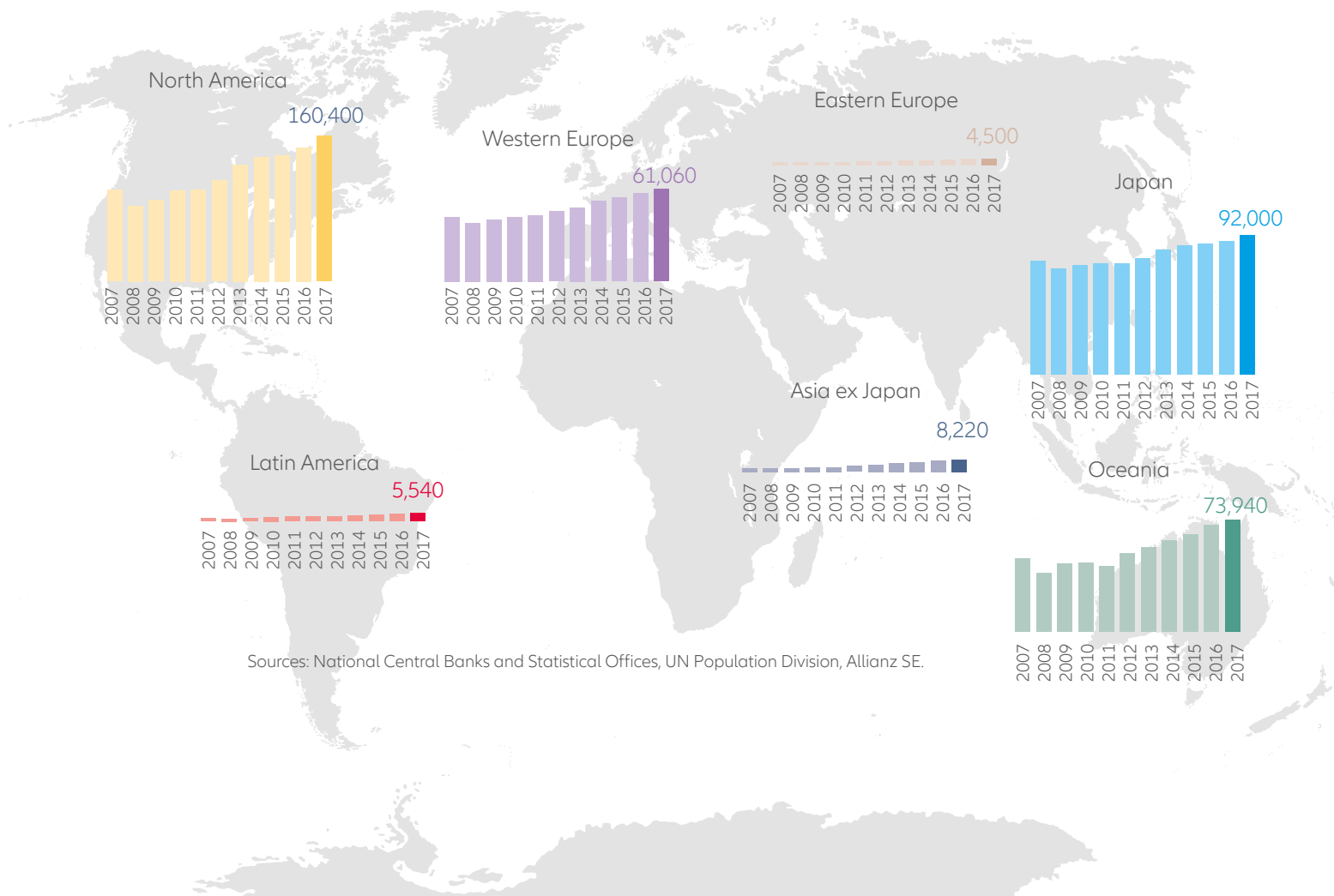
If we subtract debt from gross financial assets, we are left with net financial assets, which reached a new global record high of EUR 128.5 trillion at the close of 2017. Since growth in total savings was 7.7% last year, 1.7 percentage points above the rate of debt growth, the growth rate in net terms was 8.3% – slightly below average compared with the last five years (average of 8.8% per year). A look at the world wealth map tells a predictable story. Discrepancies between household assets in the world's richer regions and those in poorer regions remain huge. The wealth gap becomes particularly clear if we compare North America and Eastern Europe. North America remains the richest region in the world, with average per capita assets of EUR 160,400 last year after deduction of liabilities. By contrast, Eastern Europe was the region with the lowest net financial assets. At the end of 2017, households there had an average of EUR 4,500 per capita. This means that North Americans had 36 times the assets of eastern Europeans. Nevertheless, this factor was as high as 53 back in 2007.

On the other side of the globe, in Asia-Pacific, Japanese households remained at the top of the rankings with average per capita assets of EUR 92,000. However, they have only a very narrow lead over Singapore (EUR 90,650) and Taiwan (EUR 90,260). At the beginning of the decade, net per capita financial assets in Japan were still about 39% higher than in Singapore and 42% higher than in Taiwan. In Asia (excluding Japan) as a whole, per capita finan-

cial assets averaged EUR 8,220 – largely due to the fact that assets in India and Indonesia are still very low. The level of assets in Oceania was significantly lower than in Japan. Due to high debt levels, average net financial assets of households in Australia and New Zealand came to EUR 73,940 per capita, well below the average for Japan. Leaving liabilities out of the equation, households in Oceania had average gross financial assets of EUR 130,470 per capita, putting them ahead of their Japanese counterparts (EUR 112,470).

Global wealth map at a glance

Net financial assets per capita in EUR, 2017



Net per capita financial assets in Western Europe were even lower than in Oceania at the end of 2017, coming in at EUR 61,060. Although the gap between Western and Eastern Europe has narrowed perceptibly over the last decade, it is still significant. Average per capita assets in Western Europe in 2007 were 23 times higher than in the east of the continent; this factor had fallen to 14 by the end of last year. The transatlantic wealth gap, on the other hand, is moving in the opposite direction and is widening continuously. At the beginning of the decade, net per capita financial assets in Western Europe came to around 42% of per capita assets in North America. By the end of 2017, this figure had dropped to 38%.

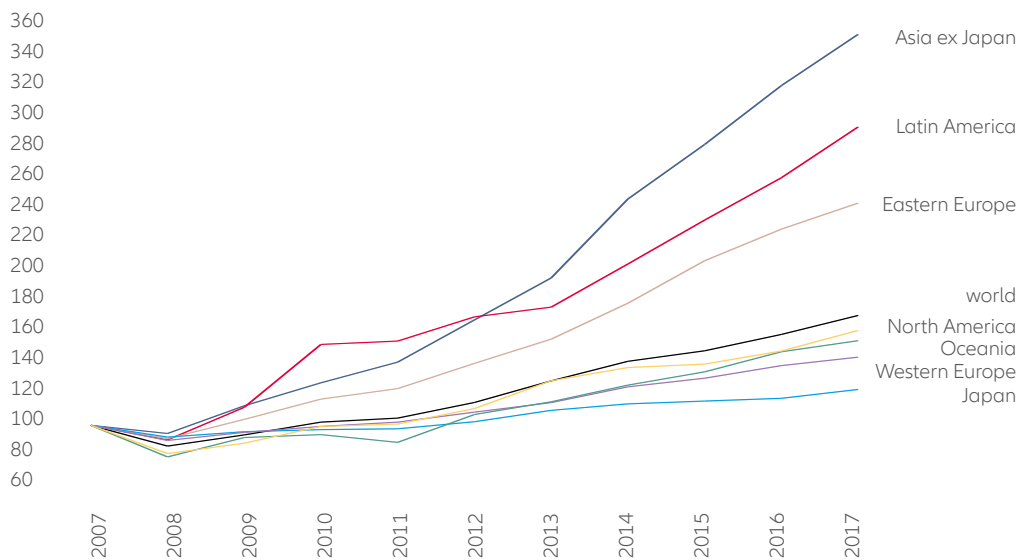
Asia (excluding Japan) leaving all other regions far behind

Private savings in Asia (excluding Japan) have grown the most dynamically over the last decade, even after deduction of liabilities. Net per capita financial assets in this region have grown at an average of 13.8% per year since 2007, with the growth rate actually accelerating noticeably in the second half of the decade (from 12.3% to 15.7%). In Eastern Europe, per capita assets have risen at an average annual rate of around 9% in net terms since 2007, owing to a decline in debt growth. However, there was no acceleration in growth on the assets side of the wealth balance sheet as in Asia (excluding Japan), which meant that on balance Eastern Europe was unable to keep pace with this region. The latter also applies to Latin America, where savings grew slightly more slowly in the last five years (at an average rate of +10.4% per year) than in the first half of the decade (average growth of +11.8% per year). In net terms, the average annual growth rate for Latin American households since 2007 is 11%.

Oceania and North America are neck and neck with average long-term growth of 4.6% in both regions, well ahead of Western Europe (average growth of +3.3% per year). Japan comes bottom of the league, with average growth of 1.5% a year. That means that the gap separating Japan from Western Europe is no longer very large. If we take inflation into account, Western Europe's lead shrinks even further; average growth for Western Europe comes to just +1.7% per year in real terms, compared with +1.2% in Japan.

Asia beats all

Development of net financial assets per capita by region, index (2007 = 100)



Sources: National Central Banks and Statistical Offices, UN Population Division, Allianz SE.

Is household debt sustainable?

The global debt burden is continuing to grow, and many are eyeing it with increasing concern. According to calculations by the Institute of International Finance (IIF), liabilities of states, (non-) financial companies and private households reached a new record total of USD 247.2 trillion or 318% of worldwide economic output in the first quarter of this year. In many (predominantly advanced) economies, the household sector in particular restructured its asset balance sheet immediately after the global economic and financial crisis. However, these efforts have subsided in recent years and demand for credit has risen again, causing private debt ratios (household liabilities as a percentage of GDP) in some economies to reach new records ten years after the collapse of the financial markets.

How sustainable is the debt ratio in the household sector? In this analysis, we have used the situation in the US shortly before the property bubble burst as a benchmark. In 2007, the ratio of private household debt to GDP was around 100% and had increased by 20 percentage points over the previous five years. We have compared these data with the current situation in industrialized countries. Where has the debt ratio risen similarly dramatically in the last five years and in which economies is it currently above 100% (see chart)?

The debt situation of private households in industrialized countries

It becomes clear that most developed economies are outside the „danger zone“, i.e. the debt ratio is currently still less than 100% and the increase compared with 2012 is well below 20 percentage points. The ratio of debts to GDP has even declined in 14 countries over the last five years. These include those countries that were hit hardest by the (debt) crisis (the US, Spain, Portugal and Greece), which also rank among the economies that have made the most progress in reducing their debts. However, Denmark and the Netherlands, whose ratios are currently still 132% and 113% respectively, have also had some success in bringing their debt ratios back down towards the 100% mark.

There are five countries in particular where the debt dynamic in recent years appears problematic, as high debt ratios of around the 100% threshold and above are combined with a sharp

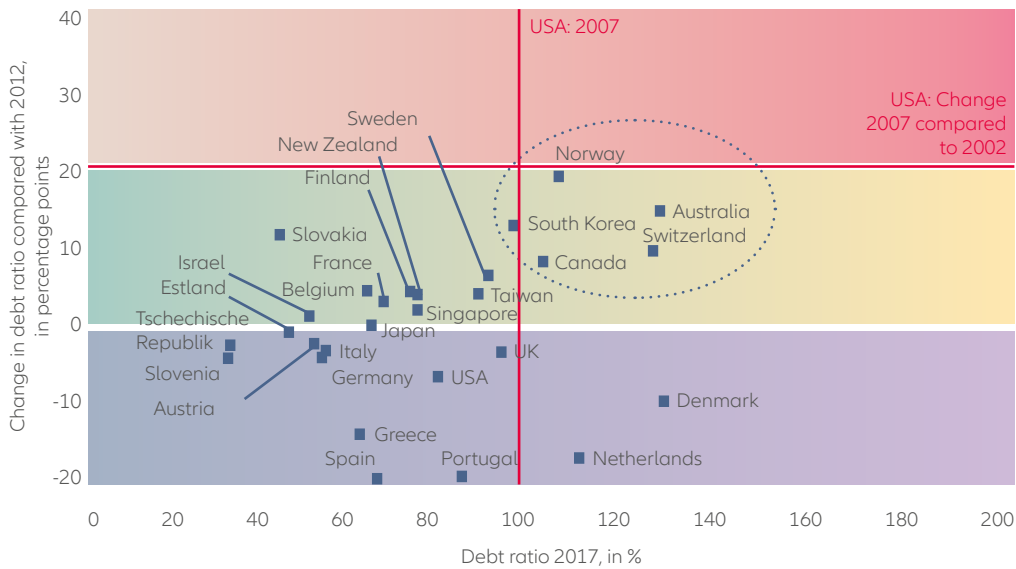
increase. These are South Korea (97.5%, +13.7 percentage points), Canada (104.3%, +9.0 percentage points), Switzerland (129.6%, +10.4 percentage points), Australia (131.2%, +15.6 percentage points) and Norway (107.9%, +20.1 percentage points). Of all industrialized countries, however, only Norway matches the US benchmark from the subprime crisis.

The debt situation of private households in emerging countries

We conducted a similar analysis of the private debt situation in emerging countries, although we adjusted the benchmark to the situation there, i.e. the „critical“ thresholds are 50% for the debt ratio and 10 percentage points for the increase in the debt ratio (see chart).

Five countries need watching

Debt ratios 2017 and their change compared with 2012



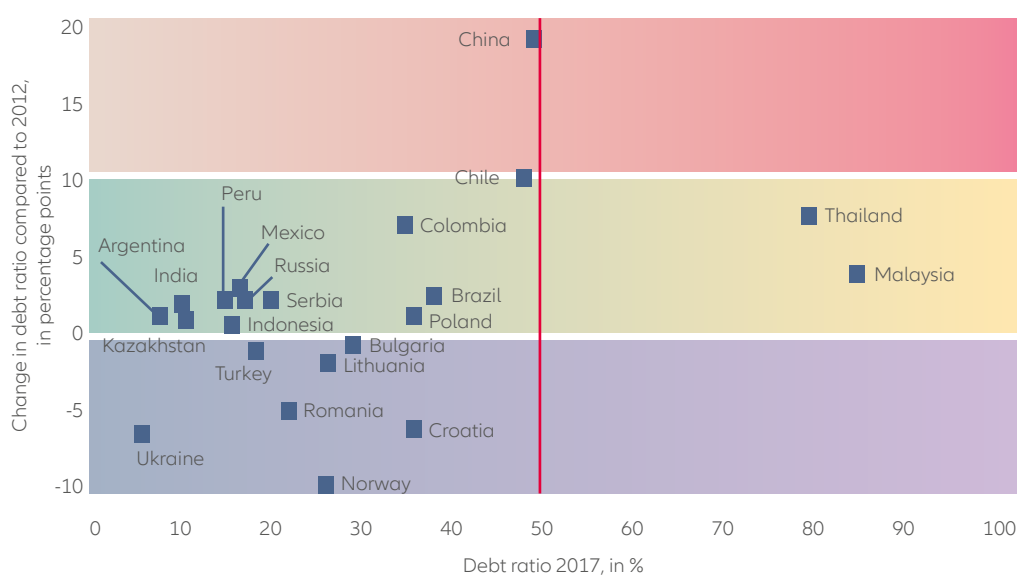
Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

Unlike in industrialized countries, a very clear regional pattern is apparent among emerging economies. Here, it is only households in eastern European countries that not only have a debt ratio of less than 50% but have also reduced the ratio of liabilities to GDP compared with 2012. The exceptions are Poland, Serbia and Kazakhstan, where the debt ratio has risen slightly since then by 1.2 percentage points, 2.2 percentage points and 0.9 percentage points respectively. A debt ratio of less than 50% combined with a moderate increase in the ratio over the last five years prevails in parts of Asia (India and Indonesia) and in Latin America. Yet once again, one exception proves the rule here: Chile. Following a large increase of 10.2 percentage points in the ratio of liabilities to GDP, the debt ratio is now 48% and is thus approaching the 50% mark.

Other than Chile, there are three Asian countries in particular where development of private debt appears critical. These include Thailand and Malaysia on one hand, where debt ratios are already coming close to the 100% threshold of industrialized countries at 79.1% and 84.4% respectively; the increase over the last five years has at least been less than 10 percentage points.

China, Thailand and Malaysia stand out

Debt ratios 2017 and their change compared with 2012



Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

The other country is China, where the ratio is 49.1%. Although this still falls very slightly short of the 50% mark, it has risen by 19.2 percentage points in the last five years. This may be partly linked to the fact that China needed to catch up to some extent, as Chinese private households only obtained access to bank loans in 2003.

In conclusion, private household debt is in our view still at a moderate level in most countries; debt reduction and restraint in lending in recent years has had an impact. Along with the US, this applies above all to Eastern Europe and the crisis-hit southern European countries. However, in some economies – including both industrialized and emerging countries – developments seem very worrying and close monitoring is required. This is likely to focus on Thailand and Norway in particular, where debt ratios are well above the regional benchmark and have also risen significantly in the last five years.



An aerial photograph of a winding asphalt road through a lush green valley. The road curves through the landscape, bordered by a wooden fence. The background shows rolling hills and a small village in the distance. A large blue semi-transparent rectangle is overlaid on the right side of the image, containing the title text in white.

WEALTH DISTRIBUTION: A NEW INDICATOR

In the last few years, public attention has focused less on growth in assets and debts than on the distribution of wealth. In this perceived increase in inequality, an important key has been seen that can be used to explain the unsettling triumph of populists around the world. A growing number of malcontents are turning their backs on open markets and liberal societies, disappointed that it is always „other people“ who benefit from globalization. That is why we too have for years dedicated a separate section to wealth distribution, with the aim of providing a nuanced picture of different developments. This year we have also developed a new indicator, which, based on various parameters, is intended to provide a more reliable picture of wealth distribution in a country. Because we at least need to ask some questions about the popular narrative of ever-widening inequality.

When assessing inequality, it is vital to ask whether it is the relationships between countries that are being examined, or the situation within a country. As in previous years' reports, we look at wealth distribution from both perspectives and have therefore divided our analysis into two parts. Firstly, we will look at the situation in a global context, and then we will examine national wealth distribution.

Globalization has a positive impact!

In order to analyze how wealth is distributed at global level, we have divided all households/individuals into global wealth classes. This classification is based on worldwide average net financial assets per capita, which stood at EUR 25,320 in 2017, more than twice as high as in 2000. The global wealth middle class („middle wealth“, MW) includes all individuals with assets of between 30% and 180% of the global average. This means that for 2017, asset thresholds for the global wealth middle class are EUR 7,600 and EUR 45,600. The „low wealth“ (LW) category, on the other hand, includes those individuals with net financial assets that are below a EUR 7,600 threshold, while the term „high wealth“ (HW) applies to those with net financial assets of more than EUR 45,600 (for details on how the asset thresholds are set, see Appendix A).

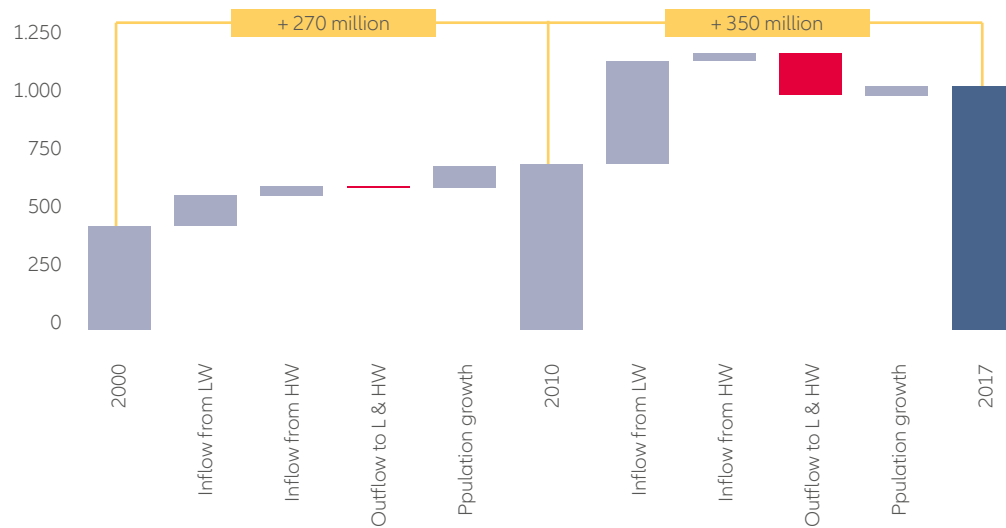
The last two decades of rapid globalization have given rise to a new global wealth middle class, which includes almost 1.1 billion people in the countries we have analyzed. Fewer than half a billion people belonged to this group at the turn of the millennium, with just under half of them coming from Western Europe,

North America or Japan. Today, these countries account for only a quarter of the global wealth middle class. In contrast, China's share has soared from just under 30% to over 50% in this period. There is therefore little doubt about what the driving force behind the new global middle class is: its emergence primarily reflects the rise of China.

The figures accompanying this success story are impressive. Around 500 million Chinese people have moved up to join the ranks of the global wealth middle class since 2000, and over 100 million more can now even consider themselves part of the global wealth upper class. That means that China accounts for about 80% of movements between wealth classes since the turn of the millennium. China's rise gained further momentum after 2010, in the post-financial crisis era, which was due not least to the fact that asset growth elsewhere was somewhat weak during this period. This ultimately caused the wealth middle class in the „old“ industrialized countries to

More dynamic after the financial crisis

Change in global wealth middle class, in million



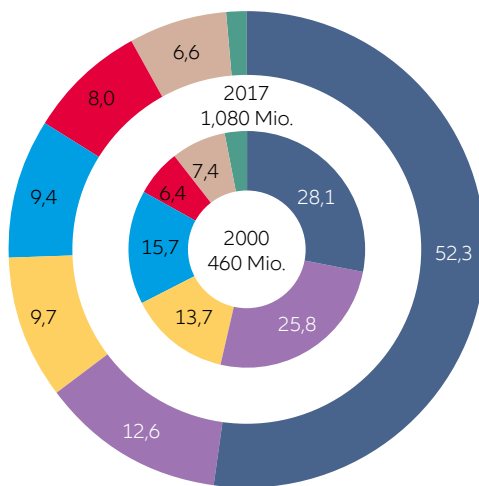
Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

grow as well, although here the trend was the other way around: about 60 million people joining the middle class have moved down the scale, i.e. as households that have been „relegated“ from the high wealth class. This affects primarily the US and Japan, but also European countries such as Italy, France and Greece.

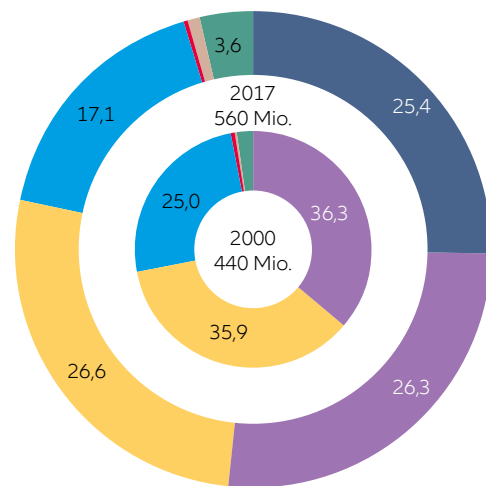
Compared with the rapid growth in the wealth middle class, changes in the other two wealth classes appear fairly modest. The wealth upper class grew by almost 30% to around 560 million people, mainly owing to the „revitalization“ of China, which more than offset the „bloodletting“ in the old industrialized countries. This also means that the upper class overall is much more heterogeneous than previously, when it was made up almost exclusively of western Europeans, Americans and Japanese. This group accounted for well over 90% of the wealth upper class at the beginning of the millennium, compared with only two-thirds today.

More Chinese

Wealth middle class by region, in %



Wealth upper class by region, in %



- China
- Western Europe
- North America
- Rest of Asia
- Latin America
- Eastern Europe
- All others

Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

The global wealth lower class, on the other hand, has actually contracted from 3.5 billion people in 2000 to 3.44 billion at the end of 2017. This figure does not appear particularly impressive at first glance. Without movements between classes, however, the wealth lower class would include an extra 510 million people compared with 2000, owing to population growth alone. That means that nearly 600 million people have actually moved up from the wealth lower class. This also becomes clear if we look at the number of people belonging to the wealth lower class in relation to the population as a whole: their share has dropped from 80% (2000) to 68% (2017).

Development of global wealth distribution therefore underlines the positive effects of globalization once again. This mass advancement up to the global wealth middle class is a success story. By global standards, more and more people are able to share in worldwide prosperity.

Yet this development is by no means complete, firstly because it is mainly only a handful of Asian countries, and above all China, that have benefited from it to date. If other heavily populated countries such as Brazil, Russia, Indonesia and in particular India were to exploit their potential in a similar way over the coming decades, the global wealth middle class could easily double again by 2030. Secondly, the emergence of a new global wealth

middle class cannot disguise the fact that the concentration of wealth is still extremely high from a global perspective. This becomes clear if we break down the overall population of the countries we have analyzed into population deciles based on net financial assets.

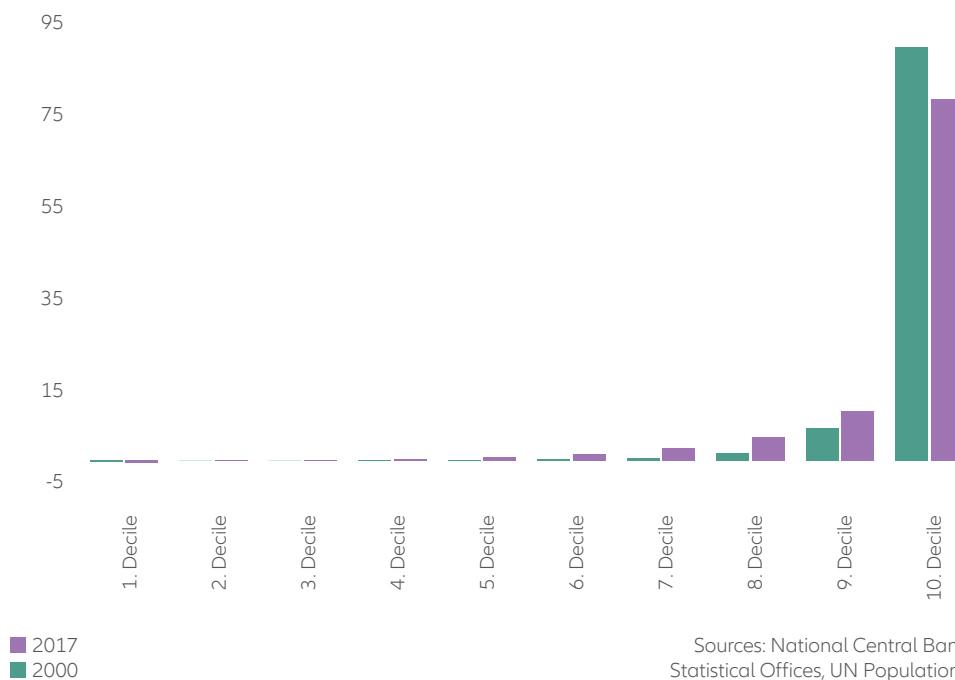
This shows that the richest 10% worldwide together own 78.9% of total net financial assets, while less than 1% is left for the lower half of the population, about 2.5 billion people. The latter figure must be interpreted with caution, however, as those with the fewest assets also include many people from the richest countries who are in debt; the „poorest“ global population decile actually has negative net financial assets, but high levels of debt cannot necessarily be equated with poverty. The Scandinavian countries are a good example of this. Households in Denmark and Sweden are among the most highly indebted worldwide, with up to 30% of the population there having higher liabilities than financial assets. However, these high debts are generally likely to be offset by tangible assets, particularly property. A happy home owner in Denmark should not be confused with a penniless day laborer in India.

The trend is also moving in the right direction with regard to the strong global concentration of wealth. In 2000, the concentration of wealth (the share of the richest decile of the population in total assets) was 90.3%. Moreover, apart from the richest and the poorest decile, where debt continued to rise, all other population deciles increased their share of the global wealth pie. The shares of the sixth, seventh and eighth deciles – the upper middle class – grew particularly strongly, with the fig-

ures more than tripling. From this perspective, it therefore also appears that the world as a whole is in the process of becoming a better world where distribution is fairer – even if there is still undoubtedly a very long way to go.

More equity in distribution

Share of wealth deciles in total net financial assets, in %



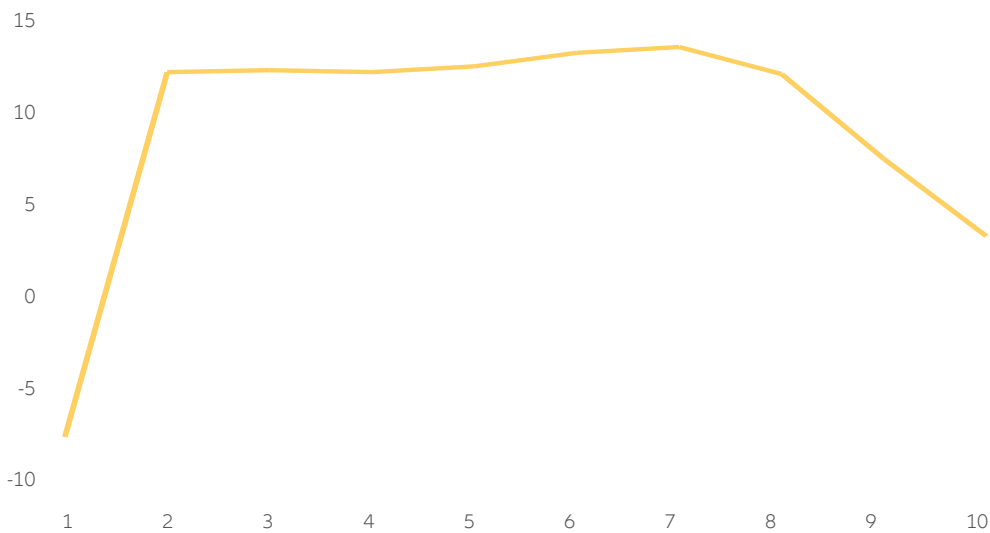
Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

The calculation of global wealth deciles also enables us to recreate the infamous „elephant chart“ showing the global development of incomes for financial assets. The original „elephant chart“ maps income growth for each global population percentile between 1988 and 2008. In line with the data available to us, we limited ourselves to the period between 2000 and 2017 when showing asset growth for each decile.

There are clear similarities to the original. As with incomes, there was no improvement in the situation of the lowest wealth decile during these years. Even worse, net financial assets here actually declined, with debts rising faster than assets. The other wealth deciles, on the other hand, all had positive growth rates, with the highest growth in the sixth and seventh deciles. As with incomes, it is therefore households in the upper middle part of the global wealth distribution in particular – those joining the middle class in emerging countries – that have benefited the most from asset growth in recent years.

More growth in the middle

CAGR* of net financial assets per capita between 2000 and 2017, by wealth deciles



* Durchschnittliche jährliche Wachstumsrate.

Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

Yet the most striking difference compared to the income situation can be seen at the top end of the distribution pyramid. Growth slows not only in the eighth and principally in the ninth decile (as with incomes), but also in the tenth, the decile with the highest net per capita financial assets. Asset growth is actually by far the weakest in this group, with the exception of over-indebted households at the other end of the distribution spectrum. The elephant has no trunk. One factor that is certain to play a part in this is that most of those in the richest decile of the population – over 500 million people – live in the „old“ industrialized countries, where asset growth has generally been lower in the last few years.

Another parameter that can be used to measure the distribution of wealth is the median figure and/or a comparison between the median and the average. The further away the latter is from the median, the greater the inequality in distribution. Once again, a look at the global figures is sobering. Median net per capita financial assets of EUR 2,810 stand in contrast to an average figure of EUR 25,320. As with the concentration of wealth, however, what is crucial when it comes to median assets is their

development – and that is unequivocally positive. As recently as 2000, the median figure for net financial assets was EUR 340. Median assets have grown at an average rate of 13.3% per year since then, considerably faster than average assets (+5.1%).

In conclusion, the distribution of financial assets remains extremely unequal at global level. However, the situation is changing for the better. The middle is becoming broader and richer, which means that globalization is having a positive impact.

Is globalization having a negative impact?

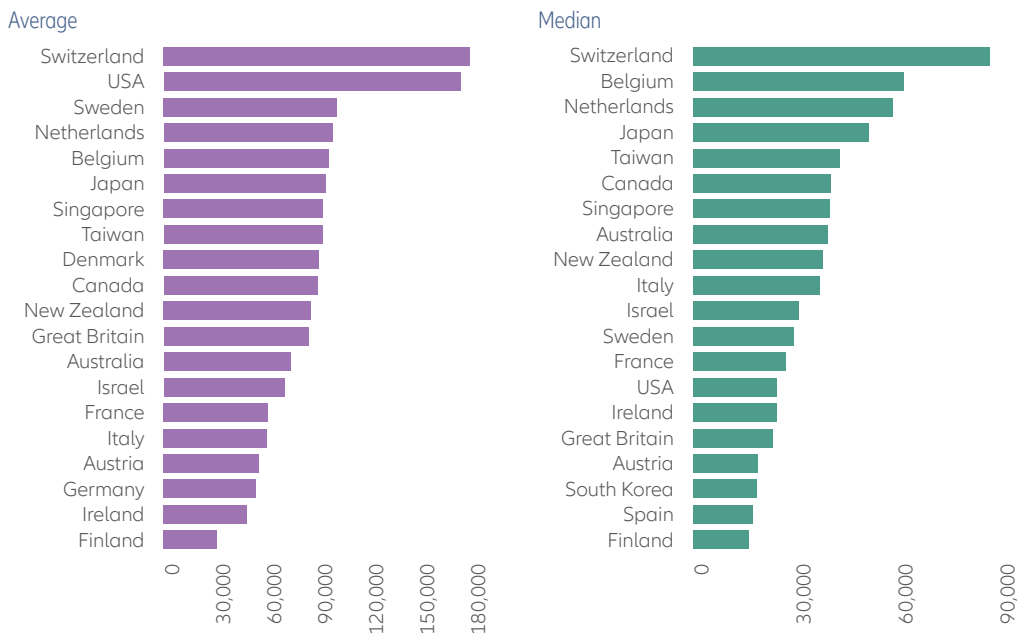
Although this division into global wealth classes is very useful when it comes to analyzing how global weightings are shifting, it is likely to remain rather abstract for most of the people concerned. This is because the benchmark for most households is not the global average, but rather their national average – people are interested first and foremost in how much their neighbor has.

However, the relationship between median and average assets is also a good measure of the distribution of wealth in a national context. Even a direct comparison between median and average net per capita financial assets is very revealing. If we drew up our rankings of the world’s richest countries based on median values, they would look different. Three countries would drop out of the Top 10 completely: the US (from second to 14th place), Sweden (from third to 12th place) and Denmark (from ninth to 23rd place). Other countries that would slide down the rankings are Chile and

South Africa (each -7 places), Latvia and the UK (each -4 places) and Malaysia and Germany (each -3 places) – the latter would thus also drop out of the Top 20. Median assets are significantly lower than average assets in all of these countries in an international comparison, an indication of relatively unequal distribution of wealth. At the same time, however, there would be many countries that would move up the rankings, particularly Italy and Slovakia (each +6 places), Australia (+5 places) and Canada, Ireland and Romania (each +4 places). The difference between the two measurements of assets is fairly small in these

The alternative ranking

Median and average net financial assets per capita 2017, in EUR



Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

countries, showing that wealth distribution is more equal. However, this list of the countries that would move up or down the scale also makes it clear that it is difficult or even impossible to recognize a pattern in wealth distribution, either geographically or in terms of level of development.

The alternative rankings naturally only provide a snapshot of the current situation. The long-term development of wealth distribution is certainly more interesting. To work this out, we have compared annual growth rates (2000-2017) in median and average net financial assets. Where have median assets grown faster, indicating an increase in prosperity, particularly in the middle of society? And where have average assets risen faster, a sign that the richest members of society are moving further and further away from the middle? Just as in the comparison of current figures, long-term development also shows a very heterogeneous picture.

What is immediately striking is that of the countries we analyzed, there are more countries (30 in total) in which distribution, based on development of median assets, has improved since the turn of the millennium. It is also clear that the top places are dominated by Latin American countries. Although assets are still very unequally distributed in many of

these countries, improvements in the last two decades have been striking. Many eastern European and Asian countries also have a positive growth differential between median and average assets. In contrast, few western European countries appear here; Denmark, Belgium and Sweden are the only places where wealth distribution seems to have become more balanced since the turn of the millennium.

At the other end of the spectrum are the „usual suspects“, particularly the US. Nowhere else has development of median and average assets diverged more sharply, and nowhere else is the absolute gap between these two figures wider. While the average net financial assets of a US citizen total EUR 168,640, the median figure is only EUR 24,690. Once again, these figures confirm the reputation of the US as one of the world's „most unequal“ countries.

Indonesia and South Africa, another two countries with a reputation for distorted wealth distribution, also have a very high negative growth differential. Furthermore, a comparison of growth shows that wealth distribution has tended to worsen in many European countries over the last few decades, albeit to a lesser extent than in the US. These include the euro crisis countries (Portugal, Greece, Ireland, Italy and Spain), but also Switzerland, France and Germany. The list is rounded off by countries such as Australia and Japan. The perception that the „old“ industrialized nations in particular have been suffering in recent decades from a growing gulf between rich and

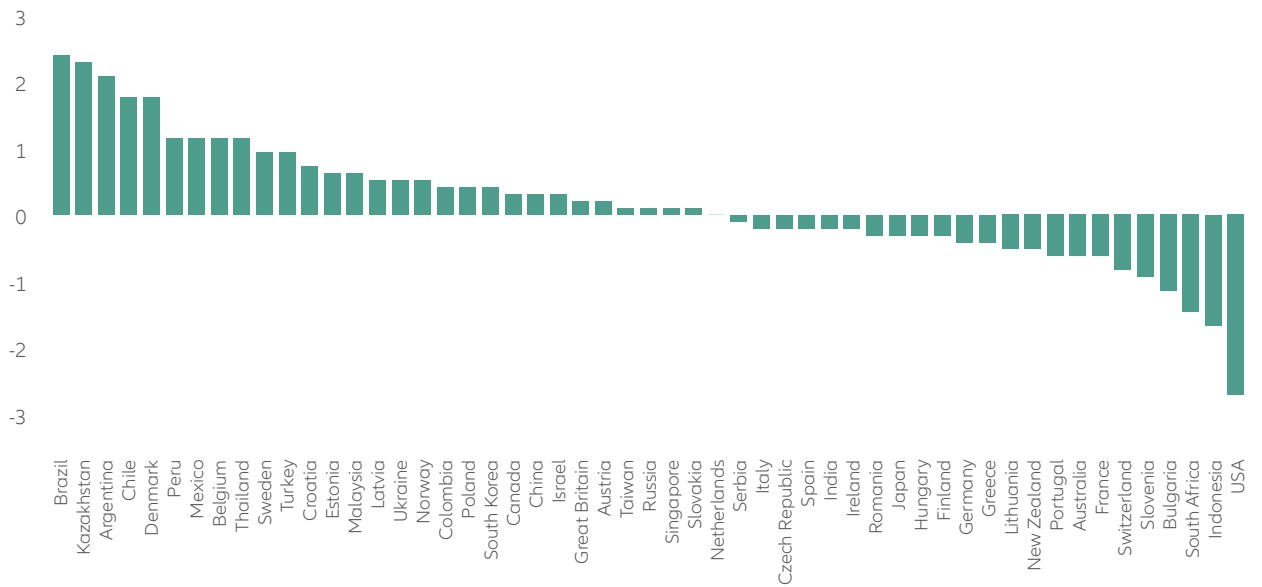
poor therefore corresponds to reality in many cases. It's therefore not surprising that globalization is viewed much more critically in these countries than in emerging economies, which have benefited on the whole from the increasing international division of labor, including with regard to the distribution of wealth within countries.

is then likely to have been outweighed by other effects in the later post-crisis phase, particularly ultra-loose monetary policy, which has accelerated the rise in asset prices. Once again, we have compared growth in median and average assets to provide an initial response to these questions. We have also contrasted long-term development (since 2000) with development since 2010.

What influence has the financial crisis had on this development? It is theoretically conceivable that the loss of assets in the first phase of the crisis made things more equal, with the crisis acting as a kind of leveler. However, this

In different directions

Growth difference between average and median net financial assets, in percentage points, CAGR* 2000 to 2017



*Compound Annual Growth Rate.

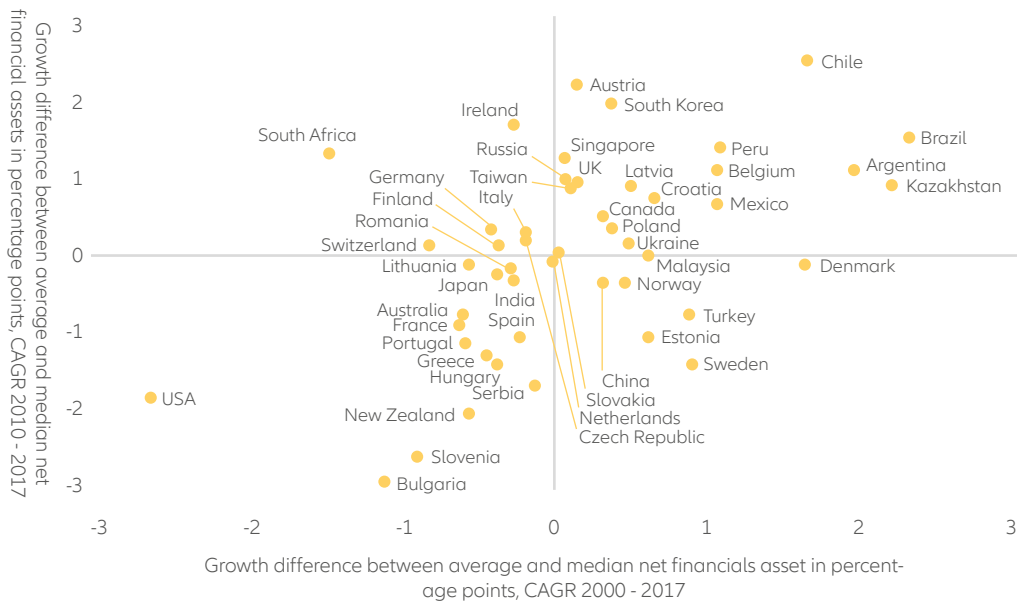
Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

The financial crisis has obviously not had any uniform effect. In most countries it has had barely any influence on the direction of development, although it has probably affected the speed of change. This includes the US, for example, where the shift towards greater inequality has probably slowed somewhat since the financial crisis, but also Greece and Spain, where the opposite is true.

There are also some countries in which the direction of development has changed since 2010, such as Switzerland, Italy, Germany and in particular Ireland, where median assets have since grown (slightly) faster than average assets again. With the exception of Italy, this is likely to be due above all to positive economic development, such as Germany's „jobs miracle“. In Italy, on the other hand, the halving of the large bond portfolio of households has played a major role; this is a direct consequence of the zero interest rate policy, which is likely to have impacted richer households first and foremost.

Different effects of the financial crisis

Growth difference between average and median net financial assets in percentage points



Sources: National Central Banks and Statistical Offices, UN Population Division, UNU WIDER, World Bank, Allianz SE.

Finally, there are also countries where wealth distribution has deteriorated (slightly) only since the financial crisis. These are predominantly the Scandinavian countries (where household debts are high), although they also include China and Turkey. In the last two countries this may also be linked to a shift in the drivers of asset growth. While the first few years were dominated by asset accumulation through savings, gains in value have also played a bigger role more recently, i.e. access to higher-yield investments – which is generally likely to be easier for households that are already wealthier.

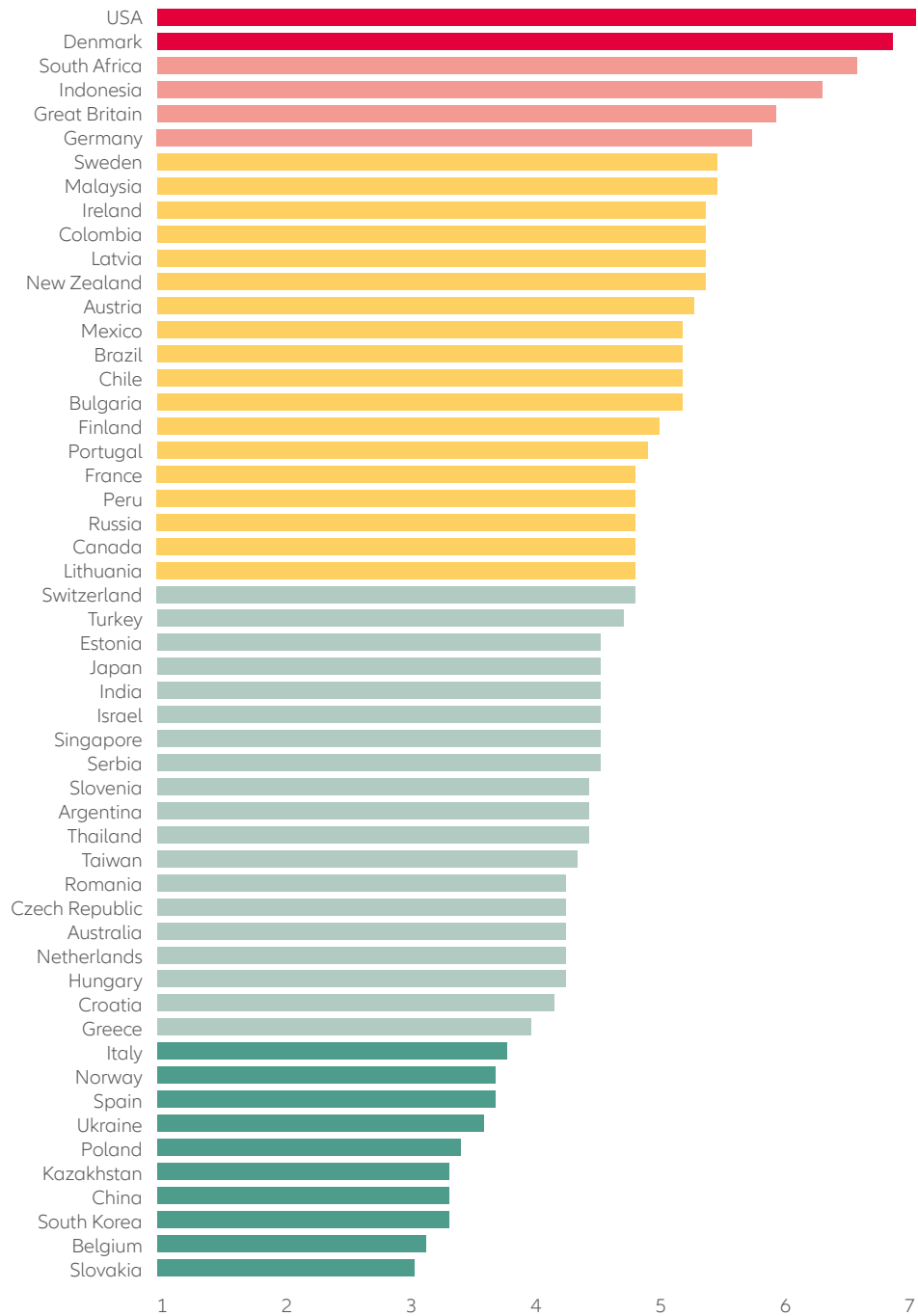
An analysis of development since the financial crisis shows that there is by no means a monocausal connection. Even in countries with such similar overall conditions as the eurozone countries, the impact varies widely, as there are different overlapping effects. It would therefore be inadequate to regard the financial crisis in particular as a cause of growing wealth inequality in the „old“ industrialized countries. Long-term factors are likely to play a larger part.

A new indicator

As well as analyzing median and average assets, there are naturally many other indicators that can be used to measure the extent of equality or inequality in wealth distribution. These include the Gini coefficient, for example, which serves as a comprehensive indicator. However, as the Gini coefficient is an overall indicator that measures changes in all wealth deciles simultaneously, the shifts from one year to the next are only slight.⁴ We therefore decided to introduce a new indicator, the Allianz Wealth Equity Indicator (AWEI), which takes into account various other parameters relating to wealth distribution and its development over time. See the box below for information on how the AWEI is calculated.

⁴ The latest Gini coefficient for all countries can be found in the appendix.

Allianz Wealth Equity Index: Broad Spectrum



Sources: Allianz SE.

Calculation of the Allianz Wealth Equity Indicator (AWEI)

The AWEI is based on five different parameters for wealth distribution:

- The share of the national wealth middle class in total net financial assets – a measure of the middle’s participation in national prosperity; weighting: 20%
- The share of the richest decile of the population in total net financial assets and the change since 2000 – a measure of the concentration of wealth at the top; weighting: 15% (share) and 5% (change)
- The share of the lower half of the population in total net financial assets and the change since 2000 – a measure of the so-called „trickle-down“ effect; weighting: 15% (share) and 5% (change)
- Median net financial assets as a percentage of average assets and the change since 2000 – a measure of the degree of distortion in wealth distribution; weighting: 20% (share) and 10% (change)
- Growth in net per capita financial assets since 2000 – a measure of the general increase in prosperity; weighting: 10%

The AWEI thus takes into account both structural features of wealth distribution and changes in these, with a lower weighting being given to the latter. The primary aim of the new indicator is to obtain as comprehensive a picture as possible of the current situation. However, changes play a part insofar as they influence perceptions: for example, wealth concentration of 60% will be interpreted differently depending on whether the figure was previously 70% or 50%.

The original values for the parameters are transferred to a scale of 1 to 7, in which 1 represents the best figure. The distribution of individual figures is based on a normal distribution, i.e. the parameter values are assessed not on the basis of normative guidelines – e.g. a wealth concentration of only 40% is very good – but instead based on the relative distribution of parameters' values. In view of the difficulties involved in drawing up standardized normative criteria for such culturally different societies as those that we are dealing with in this analysis, the adoption of such a relative perspective seems to make sense. However, that also means that the country with the best indicator value may not necessarily be a country in which wealth is perfectly distributed. It is simply the country in which distribution is least distorted among the countries analyzed here – no more and no less. The overall indicator AWEI is the weighted sum of the individual parameter values, and can range from 1 (very good) to 7 (very poor).

The AWEI underlines the findings of previous analyses. The US has a significant distribution problem; the same can be said for South Africa, Indonesia and the UK. If we include Ireland as well, we get the picture we would expect: it is English-speaking societies in particular, with their strong emphasis on the market mechanism as opposed to corrective intervention by the government, where wealth distribution is highly concentrated by international standards. Many South American countries also belong to this group, as they have a legacy of plutocratic structures that have been in place for hundreds of years, which are continuing to have an effect despite positive development in recent decades.

Somewhat surprisingly, however, Denmark, Sweden and Germany also rank among the countries where wealth distribution is strongly distorted, although development here has been moving in the „right“ direction, at least in the last few years. Moreover, these three countries are relatively „egalitarian“ societies in terms of the income situation, where the state strives to ensure a better balance through extensive redistribution. While this may work reasonably well with incomes, it is not the case with assets. In Sweden and Denmark, this is primarily due to high debt levels among large parts of the population. In Germany, relatively high levels of inequality in wealth distribution are likely to be a result in particular of the country's delayed reunification and the general shortage of capital-funded pension schemes.

Along with some eastern European countries, those countries where wealth distribution is relatively balanced include many western European countries, particularly euro crisis countries such as Spain, Italy and Greece. As regards the eastern European countries, their late start to building up private assets is likely to have played a crucial role in their good performance. The case of the three euro crisis countries is certainly more interesting. Wealth distribution here has tended to worsen over the last two decades and has deteriorated

very significantly in Spain and above all in Greece since the financial crisis. However, these countries still have a solid base to fall back on. Often this is not mentioned in discussions: even if the last few years of crisis and austerity may have led to greater inequality, the situation in these countries with regard to asset distribution is nowhere near as bad as in northern Europe, for example, not to mention the US. The traditionally very wide distribution of assets in these countries – not least when it comes to real estate assets – has not changed dramatically to date.

A little surprisingly, it is Belgium – and not the Netherlands, which has strong capital-funded pension provisions across the board – that is the country with the most balanced wealth distribution in Western Europe. An indicator cannot lie in this regard: Belgium achieves good to very good scores in all areas. We can only speculate here about the reasons for this, although the fact that Brussels is the capital of Europe – and thus a magnet for well-paid jobs – is certain to have had an influence.

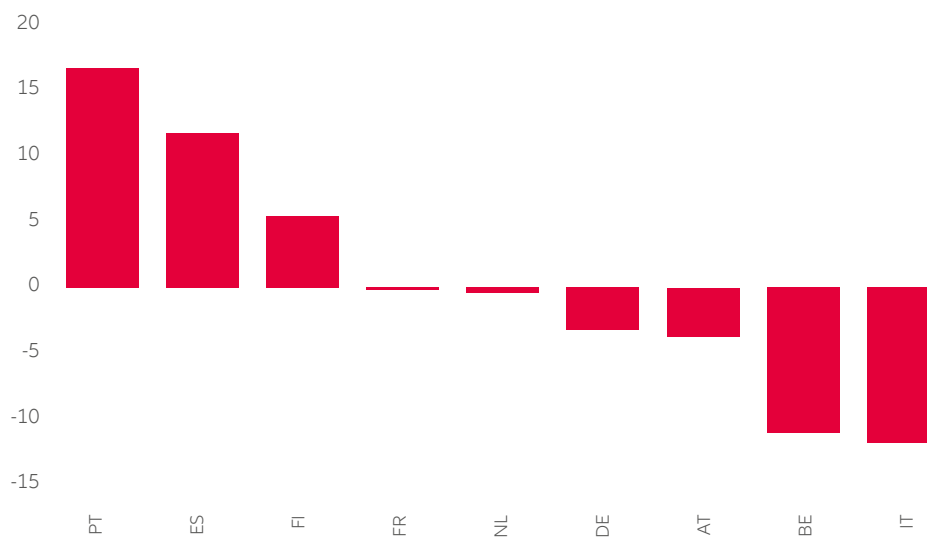
In conclusion, the new indicator AWEI will help to provide a nuanced picture of distribution. It will not make analysis much easier, however, particularly if we also take into account deeper causes and political consequences. With the exception of the US, the usual explanatory models – globalization is leading to increased inequality in individual countries, and the rise of populist parties is the inevitable consequence – are proving inadequate. Actual development is far more complex.

The impact of monetary policy on distribution

Monetary policy has an impact on distribution. Extreme monetary policy has an extreme impact on distribution. That's the lesson of the last nine years in the eurozone, in which the ECB has continually loosened monetary policy, to the point of introducing negative interest rates and bond purchase programs running into trillions of euros. Changes in net interest income in individual economic sectors in various eurozone countries clearly highlight this.

Winners and losers

Cumulative changes in net interest income of private households between 2008 and 2017 as % of GDP*



*Interest payment before FISIM.
Sources: Eurostat, Allianz SE.

5 Financial Intermediation Services, Indirectly Measured; for details of the methodology – as well as the definition of interest used – and a comparison with other calculations (e.g. by the ECB), see Brandmeir and Holzhausen (2018).

Net interest income is the difference between interest income (e.g. on bank deposits) and interest expenses (e.g. for loans). In our analysis we use interest payments before FISIM⁵ and take into account changes in both interest rates and volumes, as the sometimes large changes in volumes – e.g. due to the sale of bonds or additions to bank deposits – should be regarded as a conscious reaction to low interest rates. We have also dispensed with calculating opportunity costs or gains by comparing actual development with a hypothetical „normal“ trend (counterfactual perspective). Instead, our analysis concentrates on the actual development of net interest income over the last few years.

The changes in households’ net interest income are in some cases dramatic. This is particularly evident if we look at the cumulative annual changes compared with the base year of 2008, when the easing of monetary policy began (see chart). The differences range from +17% to -12% of the respective gross domestic product.

Not just the usual suspects

Cumulative changes in net interest income between 2008 and 2017 as % of GDP*



The major losers include households in Italy, Belgium, Austria and Germany. It might come as a surprise that Italy features on this list. This is due not least to a drastic reduction in the bond portfolio from around EUR 800 billion (end of 2008) to EUR 290 billion (end of 2017), which led to a dramatic decline in interest income. Austrian and German households also particularly suffered as a result of a slump in interest income, which fell by about four-fifths in both countries during the period under review – even though the associated assets grew by around one quarter. Finally, in the case of Belgium it was primarily a (slight) rise in interest expenses on debts that was responsible for the decline in net interest income. This development against the trend is attributable to rising debt and a very slow reduction in interest rates on loans.

The main interest rate winners, on the other hand, include households in Portugal, Spain and Finland. In the two „southern countries“, changes in volumes have boosted interest rate movements. A sharp rise in deposits has curbed the decline in interest income, while a reduction in borrowing has accelerated the fall in interest expenses. In Portugal, this combination of rising assets and falling liabilities actually caused negative net interest income to become positive. Meanwhile, Finland benefited in particular from a sharp drop in loan interest, with debts at a high level and increasing further.

However, interest rate gains and losses of households do not tell the full story of low interest rates. Net interest income of other sectors – companies, financial service providers and states – has also changed significantly in recent years (see chart).


Some common features are apparent here. (Non-financial) companies, to varying degrees, generally belong to the interest rate winners. That's not very surprising, as interest income does not play a major role in their balance sheets, while interest expenses do, and the latter have been substantially reduced in recent years thanks to falling interest on debt (and restraint in borrowing). Financial companies, especially banks, rank among the interest rate losers, with a few exceptions. In particular, they have been negatively affected by a decline in interest margins.

No coherent pattern can be identified for the „state“ sector. Net interest income has deteriorated in the „southern countries“ (and in Finland), as rapidly rising debt has more than offset the decline in interest rates. The reverse is true in the „northern countries“ (and in Italy): falling interest rates have led to a reduction in interest expenses, as debts have increased only moderately on the whole.

All of this provides a differentiated picture of the overall economy. The main countries that have benefited from low interest rates include Spain and Portugal, for example, where a deterioration in net interest income of the state and banks was substantially overcompensated by improvements at companies and households. However, the overall balance was also positive in the Netherlands (thanks to strong banks), Italy (savings at companies in particular) and Germany. In Germany, the state has gained a lot from low interest rates, as have companies. On the other hand, the French and Finnish economies have experienced negative development. In both cases, drops in the net interest income of banks in particular influenced the overall result.

In conclusion, ongoing low interest rates and the changes in behavior they have triggered have a serious impact on income in almost all sectors and eurozone countries. After nine years of „one-way monetary policy“, the effects on distribution policy can no longer be argued away.

REGIONAL DIFFERENCES: FINANCIAL ASSETS IN INDIVIDUAL REGIONS



81	Latin America
91	North America
103	Western Europe
125	Eastern Europe
127	Asia
147	Australia and New Zealand



LATIN AMERICA

Population

In the analyzed countries	475 m
Analyzed countries' share of the region as a whole	76.6%
Analyzed countries' share of the global population	6.4%

GDP

In the analyzed countries	EUR 3,658bn
Analyzed countries' share of the region as a whole	84.5%
Analyzed countries' share of global GDP	5.8%

Gross financial assets of private households

Total	EUR 3,722bn
Average	EUR 7,720 per capita
Share of global financial assets	2.2%

Debt of private households

Total	EUR 1,052bn
Average	EUR 2,180 per capita
As % of GDP	28.8%



A gold-rush mood prevailed on the Latin American subcontinent, which is rich in natural resources, during the first decade of the new millennium. High world market prices for crude oil, copper and other raw materials led to rising export revenue and capital inflows in the region. China's increasing importance and its rapidly growing demand for raw materials pushed up prices, indirectly fueling the boom in Latin America. Increasing economic output and generous social welfare programs also led to growth in disposable incomes, giving households more scope for saving. Private financial assets almost quadrupled during this period, with an average growth rate of around 14% per year, and the region's share in global assets climbed from 0.7% to 1.7%.

However, with the great financial crisis, the picture changed considerably: Slackening growth momentum in China and falling prices on the commodities markets have plunged the region into a deep crisis. More recently, the US central bank's decision to begin phasing out its unconventional monetary policy resulted in substantial corrections on the capital markets and caused currencies to depreciate in emerging countries. Within a short space of time, the former growth star mutated into the region with the weakest economic growth. Total economic growth in the countries we analyzed (Argentina, Brazil, Chile, Colombia, Mexico and Peru) has declined from just un-

der 7% in 2010 to -0.7% in 2016. Consumers have tightened their belts, causing the annual growth rate in consumer spending to contract from 5.6% to 1% in the same period. At the same time, growth in private financial assets has slowed to an average of about 11% per year. In the context of rising inflation, average asset growth fell in real terms from 8.6% (from 2001 to 2010) to 4.8% (from 2011 to 2016).

Latin America recovered again slightly in economic terms last year. The region's gross domestic product grew by 1.6%, not least thanks to the stabilization of commodities prices. Private consumption also picked up noticeably over the course of the year, growing by 2.3% following a meager rise of 1.0% in 2016. Growth in private savings also accelerated slightly from just under 11% (2016) to 12% in the last year. Total assets of Latin American households increased to around EUR 3.7 trillion as a result. Securities holdings recorded the most dynamic growth, rising by an estimated 13.6% to over EUR 1.7 trillion. The region's stock markets have been rising again for the last two years. The MSCI Emerging Markets Latin America gained a further 20.8% in 2017, having climbed almost 28% in the previous year.

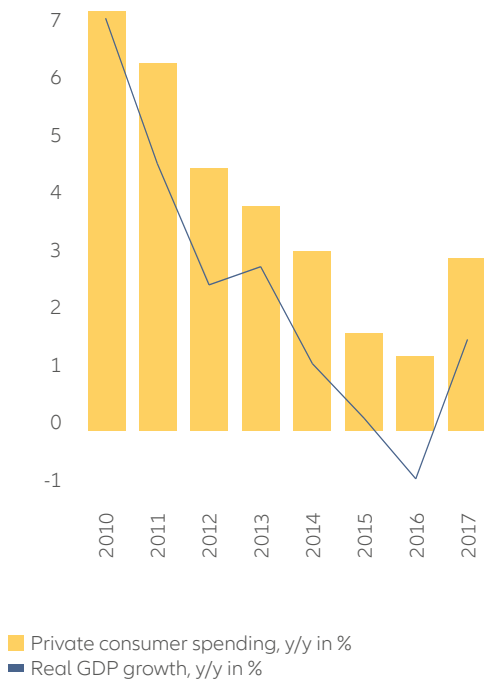
With the exception of Mexico (+8.1%), the benchmark indices in all of the countries we analyzed achieved double-digit growth rates. The biggest gains were recorded in Argentina (+77.7%) and Chile (+34.0%). At the end of last year, the stock exchange barometers in Brazil (+10.2%) and Chile (+12.9%) each surpassed their respective record levels from 2010. In contrast, the leading indices in Colombia (-25.9%) and Peru (-4.0%) were still down.

Different asset structures in individual countries

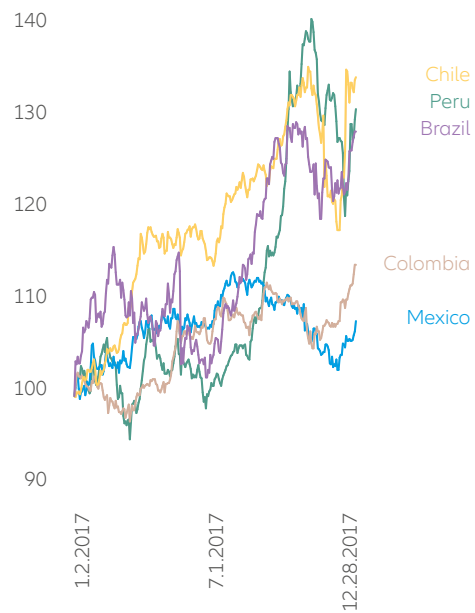
Brazil is slowly battling its way out of its deepest recession for 100 years. Having contracted by 3.6% in 2015 and a further 3.5% in 2016, gross domestic product grew by 1% last year. With its commodities-heavy export economy, Brazil was hit particularly hard by plummeting prices for iron, crude oil and other raw materials. The unemployment rate, which was still 6.5% in the last quarter of 2014, peaked

Things are looking up again

Development of private consumption and GDP in Latin America



Development of the national benchmark indices (Index: 02.01.17 = 100)



Sources: Thomson Reuters Eikon, World Bank, Allianz SE.

at 13.7% in the first quarter of 2017. Households were forced to tighten their belts in this context, causing consumer spending to fall by 3.2% in 2015 and 4.3% in 2016. The weak economy at least led to a reduction in the inflation rate, which in December 2015 stood at 11.3%, its highest level since 2003; the annual average came to 9.4% for 2016 and dropped to just 3.0% last year. There was a slight revival on the labor market, which resulted in a drop of almost two percentage points in the unemployment rate by the end of 2017. Private consumption also grew again for the first time in two years, rising by 1% over the course of the year. Brazil's leading index gained almost 27% and in September last year surpassed the record set in May 2008 for the first time. Private households, which hold around half their assets in the form of shares, funds and other equity interests, have also benefited from strong growth on the stock markets. Securities holdings grew strongly by an estimated 19%, while receivables from insurance companies and pension funds also enjoyed double-digit growth in the stock markets' wake. Even bank deposits were up by 7.5%, following paltry growth of 2.1% in the previous year. Brazilians' total savings rose by about 13% to over EUR 1.9 trillion, representing about half of all assets in the region.

However, the recovery is a delicate plant that is already at risk of dying. Following a sharp rise in diesel prices, truck drivers went on strike in May this year, bringing the country to a standstill for almost two weeks. Leading indicators, such as the Business Confidence Index, have deteriorated noticeably since the beginning of the year. In addition, structural reforms that are urgently needed – one of which is the pension reform that has been delayed again – are unlikely to be implemented before the presidential elections in October. In any case, the political system has been shaken up by countless corruption scandals and is more preoccupied with itself than with putting forward concrete proposals for solutions to the country's problems.

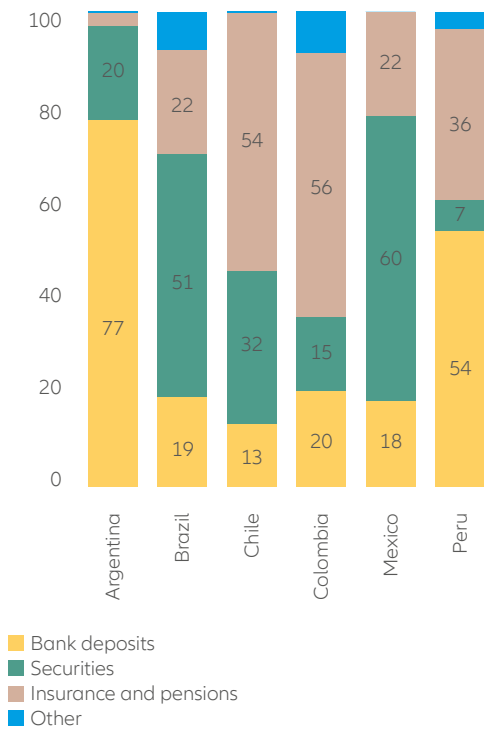
Mexico, the second-largest economy in the region, accounted for just under a quarter of private financial assets in Latin America at the end of 2017. Mexican households are actually investing 60% of their savings in securities and other equity, holdings of which are estimated to have grown by 6.7% last year. However, there has been a shift in the portfolio towards secure investments such as bank deposits and insurance policies and pensions in the last few years. Before the outbreak of the global financial crisis, securities accounted for about 73% of the portfolio. Insurance policies and pensions achieved the strongest growth among the various asset classes in 2017, increasing by almost 13%. Bank deposits also proved popular, with growth of around 11%. Total assets of Mexican households rose by almost 9% year-on-year.

Households in Argentina, Chile, Colombia and Peru shared the remaining quarter of the region’s financial assets and accounted for just under 30% of the population of the countries we analyzed. Asset growth in these countries in 2017 ranged from 7.3% in Chile to about 40% in Argentina. The re-election of Mauricio Macri as the Argentinian president last October confirmed that he is pursuing the right course. Economic reforms, which had proved painful for a large part of the population, began to have noticeably positive effects from mid-

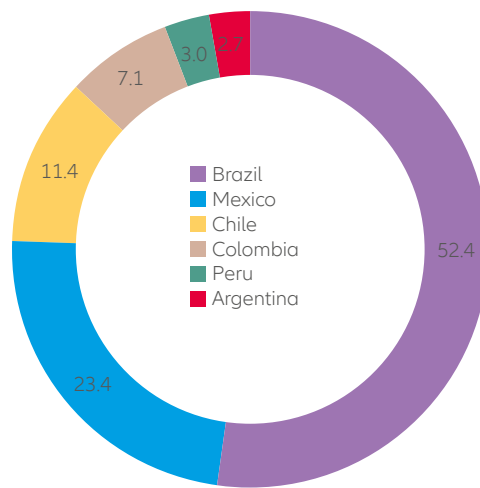
2017. Real GDP grew by 2.9%, following a drop of 1.8% in the previous year. Private consumer spending also rose again significantly by 3.6%, having declined by 1% in 2016. The economic upturn was reflected not least in the country’s stock market, with the Argentinian leading index gaining almost 78% over the year. However, a major problem is that inflation remains high. Macri hopes to reduce it to 10% in 2019, an ambitious target given that the average inflation rate last year was around 25%. Inflation is eroding incomes and private savings. Many households are seeking refuge in safe foreign

Asset structure by countries

Asset classes in % of gross financial assets, 2017



Share of regional financial assets by country, 2017 in %



Sources: National Central Banks and Statistical Offices, Allianz SE.

currencies in a bid to preserve the value of their assets. Bank deposits and cash are estimated to represent four-fifths of the portfolio. In contrast, private retirement provisions in the form of life insurance policies or pension funds barely exist any more, after private pension funds were nationalized in 2008. The share of this asset class in private financial assets has since declined from around 11% to an estimated level of just under 3%.

In contrast, insurance policies and pensions predominate in Chile and Colombia, representing 54% and 56% respectively of household asset portfolios. The Chilean pension insurance system, which was changed from a contribution-based system to a private, capital-funded system in 1980 under the Pinochet regime, has served as a template for many countries worldwide. Receivables of households from insurance companies and pension funds rose by almost 11% in Chile and around 18% in Colombia last year.

Debts are highest in Chile

However, the „golden decade“ did not just lead to a rise in private household assets, but also in debts, which grew at the same pace as savings during this period, on average at about 14% per year. While asset growth began to slow noticeably from 2011 onwards, however, debt growth accelerated again, reaching an average of around 19% from 2011 to 2013. It was not until 2014 that credit growth suddenly slackened to 1.9%, mainly owing to developments in Brazil, where borrowing actually fell by 2.4%. The regional debt burden has since risen faster again, at an average rate of just under 10% per year. Last year's growth came to over 8%. Overall, household debts in Latin America are estimated to have totaled EUR 1.1 trillion at the end of 2017. The region's share of the global debt burden has increased from 1.2% to 2.6% over the last decade.

As its liabilities grew faster during this period than its nominal economic output (average growth of +9.3% per year), the debt ratio, i.e. the ratio of debts to GDP, increased from 22.5% in 2007 to 28.8% last year. On the whole, however, the region is still at an uncritical level for emerging markets; the average ratio of debts to economic output in emerging countries was

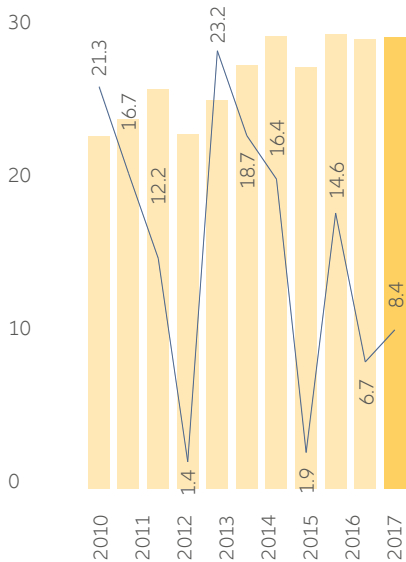
around 37% at the end of 2017. Nevertheless, the differences between individual countries are considerable. While the ratio in Argentina was only around 8%, Chile led the field with a ratio of 48%, well ahead of Brazil (about 38%). Chilean households also topped the regional rankings in per capita terms, with average debt of EUR 6,250. The lowest per capita debt was in Argentina, at an estimated EUR 840. The regional average was EUR 2,180 per capita, putting Latin America slightly above average for emerging markets (EUR 1,970).

A growing wealth middle class – but inequality remains a problem

Net per capita financial assets, i.e. all savings minus debt, came to a regional average of EUR 5,540 last year. Chile is the only country in Latin America in which average per capita household assets surpassed the middle wealth country (MWC) threshold of EUR 7,600. With average assets of EUR 17,200 per capita,

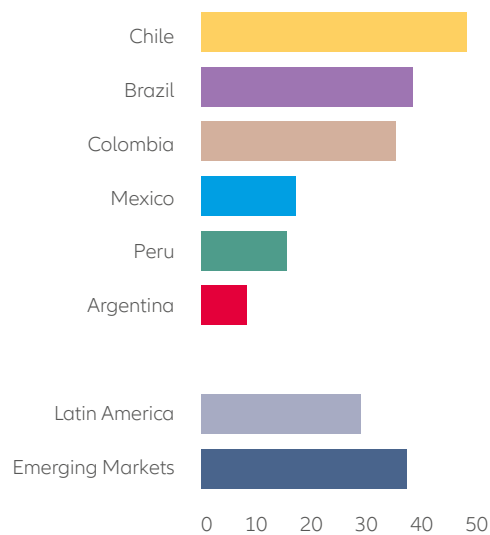
Chile with the highest debt ratio

Debt development since 2007



■ Debt ratio, in % (lhs)
 ■ Debt growth, y/y in %

Debt ratio by country 2017, in %



Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

Chilean households were only one place behind Portugal and 25th in the global rankings. For Brazilian households, which had average per capita assets of EUR 6,290 at the end of 2017, the transition to the ranks of the MWCs is within reach. If net per capita financial assets continue to increase on average at the annual growth rate for the last decade (about 15%), Brazil will exceed the current threshold by the end of next year. In view of the country's current economic weakness, however, this is a very optimistic assumption. Based on the same assumptions, Mexico would not be likely to become an MWC until 2023. However, the threshold will have risen further by then, in line with global asset development. These two countries came 39th and 41st in an international comparison and, together with the rest of the countries in Latin America, they were in the bottom quarter of the country rankings.

The proportion of the region's population that belongs to the „middle wealth category“ in a global comparison (net per capita financial assets of between EUR 7,600 and EUR 45,600) was just under 18% at the end of 2017. That means that almost 86 million Latin Americans belong to the global wealth middle class, compared with an estimated total of about 29 million at the start of the millennium. Just under 2 million people had high net financial assets (more than EUR 45,600 per capita) by

global standards, although these individuals accounted for only a fraction of the overall population (0.4%) in 2017. Nearly 82% of the population, and thus the majority, still belongs to the lower wealth class. This means that almost 395 million Latin Americans had average assets of less than EUR 7,600. It is also important to remember, however, that currency losses make it more difficult for these countries to exceed the threshold values, which are calculated in euros.

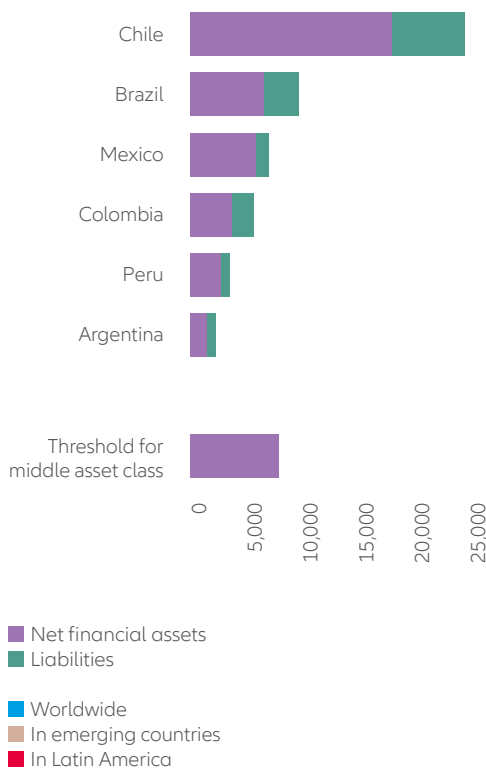
One of the biggest challenges facing Latin America remains the quest to achieve a better distribution of income and wealth within societies. Both in a global comparison and measured against emerging economies as a whole, incomes and wealth in Latin America are much more highly concentrated. The richest 20% in the region receive around 52% of total income on average and hold almost 77% of total assets. This is compared with ratios of approximately 46% and around 72% respectively in emerging markets as a whole and average figures of about 42% and 70% respectively in a global comparison.

Despite persistent inequality in incomes and assets, significant progress has been made in the fight against poverty since the early years of the new millennium. The proportion of the population living below the national poverty line has fallen to less than half of its previous

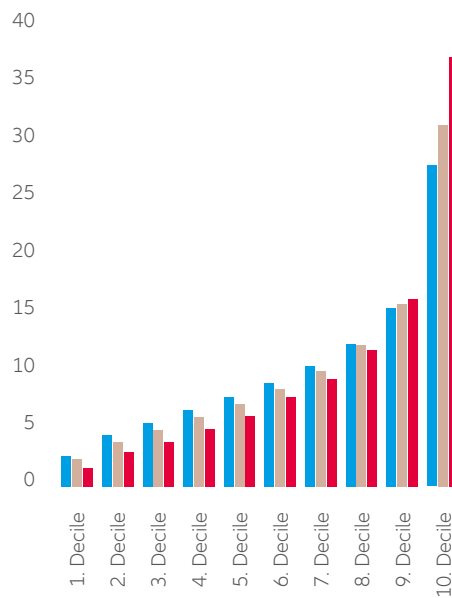
levels in Brazil and Peru, for example, dropping to 8.7% (2015) and 20.7% (2016) respectively. In Colombia, too, the proportion of the population living in poverty has been slashed from almost 50% to 28% in 2016. As economic growth has cooled, however, many people have been at increased risk of falling back into poverty. This has been the case in Brazil and Argentina in particular, where gross domestic product has actually fallen. According to a study by the United Nations Development Programme (UNDP) from 2017⁶, these are the only countries in the region of Latin America and the Caribbean where the poverty rate increased again between 2013 and 2015.

Enormous gap between rich and poor

Net financial assets and liabilities per capita 2017, in EUR



Average income distribution by comparison, in %



Sources: National Central Banks and Statistical Offices, UN Population Division, World Bank, Allianz SE.

⁶ United Nations Development Programme (2017): Applying PovRisk tool to 15 countries in Latin America. Regional Human Development Report for Latin America and the Caribbean: Update policy note.



NORTH AMERICA

Population

Total	363 m
Share of the global population	4.9%

GDP

Total	EUR 17,553bn
Share of global GDP	26.3%

Gross financial assets of private households

Total	EUR 72,319bn
Average	EUR 200,280 per capita
Share of global financial assets	43.0%

Debt of private households

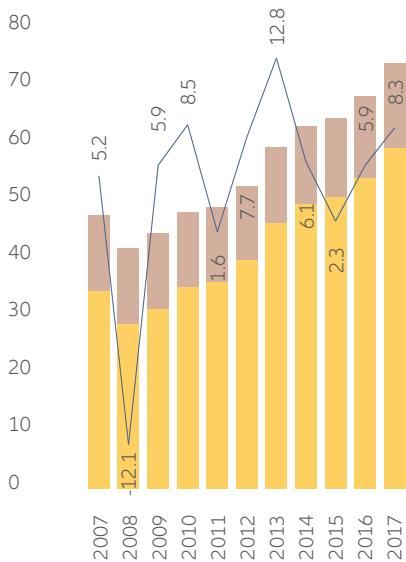
Total	EUR 14,401bn
Average	EUR 39,880 per capita
As % of GDP	82.0%

Private households in North America held a total of EUR 72.3 trillion, or 43%, of global financial assets at the end of 2017. Following robust growth of nearly 6% in 2016, asset growth accelerated further last year to 8.3%. Asset growth in the US (+8.5%) was thus not only higher than in Canada (+6.5%), but also well above the average for the industrialized countries as a whole (+6.5%). In absolute terms, savings were up by about EUR 5.3 trillion in to-

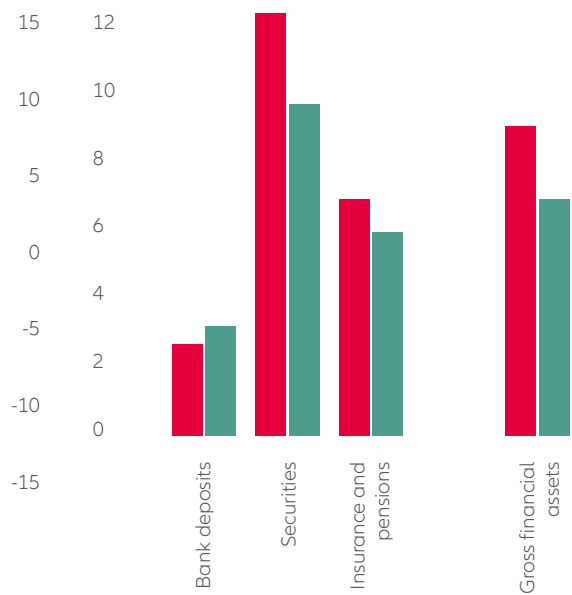
tal or an average of just under EUR 16,300 per capita in the US, while in Canada they grew by EUR 285 billion or nearly EUR 7,800 per capita. Only about 17% (US) and 8% (Canada) of this growth came from fresh funds; the bulk of growth was due to changes in the value of the portfolio, whose share in growth has thus risen noticeably compared with the average for the last decade (60% in the US and 85% in Canada). All three of the major asset classes made a positive contribution to growth, with securities holdings – as in the previous year – achieving the most dynamic growth (+11.6% in the US and +9.1% in Canada).

Growth of financial assets increased again

Development of financial assets and liabilities in North America



Growth by asset classes, 2017/2016 in %



■ Net financial assets, in EUR tn (lhs)
■ Liabilities, in EUR tn (lhs)
■ Gross financial assets, y/y in % (rhs)
■ USA
■ Canada

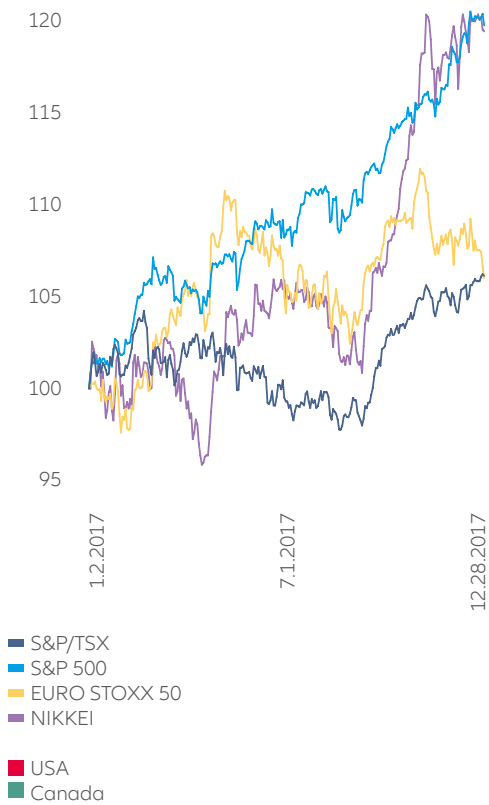
Sources: Board of Governors of the Federal Reserve System, Statistics Canada, Allianz SE.

The unexpectedly strong and broad upturn in the global economy led to new highs on many stock markets during the course of the year. US indices reached new all-time highs right at the start of the year, with the Dow Jones surpassing the 20,000-points mark for the first time in January and gaining 4.6% in the first quarter, while the broader-based S&P 500 was up 5.5% by the end of March. US households benefited from value gains of around EUR 960 billion or an average of EUR 2,960 per capita during this short period. Stock markets continued this dynamic performance throughout the rest of the year, with the result that by the end of December the S&P 500 was up 19.4% and the

Dow Jones was up 25.1% year on year. Securities holdings of US citizens recorded steady and robust growth over the course of the year, climbing by a total of 11.6% to almost EUR 36.5 billion, the biggest increase since 2013 (+19.6%). Canada’s benchmark index stood at around 16,200 points at the end of the year, up 6% compared with 2016. As in the US, securities holdings there achieved positive growth rates across all quarters. Overall, there was an increase of 9.1% to just under EUR 1.9 trillion.

Happy times for investors

Important stock indices, indexed (02.01.2017 = 100)



Increase of securities, q/q in %



Sources: Board of Governors of the Federal Reserve System, Statistics Canada, Thomson Reuters Eikon, Allianz SE.

US: A reversal in investment?

US households have traditionally had a much larger risk appetite than their neighbors in Canada, with almost 54% of their asset portfolios invested in securities. „Only“ about 40% of financial assets in Canada were held in the form of shares, investment funds or other equity interests at the end of 2017. However, Canadian households were at least on a par with the industrialized countries' average. In net terms, Canadians have disposed of securities every year since 1999 (around EUR 450 billion in total). In 2017, the net value of securities sold came to almost EUR 17 billion or EUR 460 per capita. The portfolio nevertheless grew from EUR 589 billion to almost EUR 1.9 trillion in this period, thanks to strong value gains totaling around EUR 1.7 trillion. In contrast, US citizens purchased large volumes last year, with the bulk of savings flowing into this asset class. At EUR 331 billion, households there invested roughly as much as in 2008 (EUR 355 billion). In addition, there were ample value gains of almost EUR 3.5 trillion or EUR 10,700 per capita, more than three times the average for the last decade of EUR 1.1 trillion. Despite a further significant increase in inflows of funds, around 90% of growth in this asset class last year thus came from gains in value.

US households seem to be gradually moving away from their „wait-and-see attitude“ of the last few years and investing their assets for the long term again, rather than parking them in the short term. Inflows of funds into bank deposits fell from an average of about EUR 446 billion in the period from 2011 to 2016 to EUR 242 billion in 2017; their share in total inflows of funds therefore slipped from an average of 44% to 26%. Likewise, growth in the portfolio slowed from 6.4% in 2016 to 2.5% in 2017. Bank deposits play only a very minor role in the US with regard to the portfolio structure, accounting for 12.9% of the total portfolio.

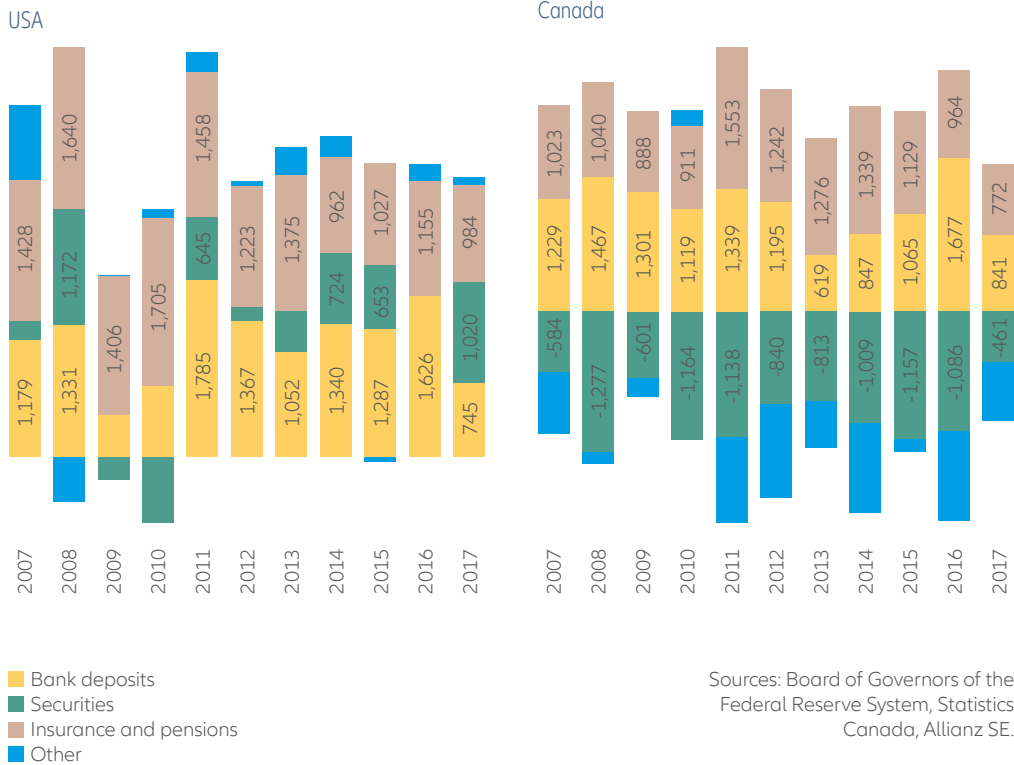
In Canada, however, bank deposits still play an important part in savings, partly because households there continue to turn their backs on the stock markets. More than half of fresh savings are going into bank deposits, a share that has barely changed in the last decade. The share of bank deposits in total financial assets is nevertheless still relatively low in Canada, at 20.3%.

The second most popular type of investment in North America, insurance policies and pensions, recorded robust growth of 6.4%. However, inflows of funds have tended to decline in recent years. In 2017, they fell by 15% to a total of EUR 347 billion or EUR 960 per capita, having been about 60% higher in the record year of 2010. This no doubt also reflects demographic shifts, with more and more baby boomers leaving the labor market. Savers nevertheless benefited from indirect participation in the capital market, particularly with

regard to their pension entitlements. Value gains per capita came to an average of EUR 1,710 in Canada and EUR 2,880 in the US in 2017, i.e. around three-quarters (US) and two-thirds (Canada) of growth in this asset class was due to changes in the value of the portfolio. Despite a year-on-year decline in inflows of funds, growth in both countries has therefore accelerated, rising from 2.7% to 5.6% in Canada and from 4.3% to 6.5% in the US. Insurance and pension assets are a key component of household savings in both countries, accounting for around 30% of the total asset portfolio in the US at the end of 2017 and almost 37% of the Canadian portfolio.

USA: Change in savings behavior?

Net acquisitions of financial assets by asset classes, per capita in EUR



Sources: Board of Governors of the Federal Reserve System, Statistics Canada, Allianz SE.

Americans correct the debt excesses of the past...

The years before the crisis erupted were characterized by what was, at times, double-digit growth in the US personal debt burden, pushing the ratio of liabilities to disposable incomes up from nearly 100% in 2000 to a historic high of 138% seven years later. In 2008, households started to borrow less in an attempt to tidy up their asset balance sheets. In the period leading up to 2011 they reduced their liabilities, shaving about 21 percentage points off the debt ratio in the space of these four years alone, which was whittled down to 117.1% of disposable income. Although debt growth has moved back into positive territory since 2012, until 2015 it remained below the level of growth in disposable incomes (+3.8% per year on average) at an average of 1.1% per year, thanks to the improved situation on the labor market. This means that the ratio of liabilities to disposable incomes has fallen by a further 12 percentage points to 105.4%. Over the past two years, however, debt growth has picked up again, so the debt ratio has remained roughly stable. Debt growth in 2017 ultimately came to 3.7%, the highest rate since the outbreak of the crisis.

Growth was recorded across all categories of credit, including home and car loans as well as student loans and credit card debt. Home loans, which accounted for the largest share of about two-thirds of private debt, grew by EUR 116 billion in the last quarter of 2017, the biggest increase for nine quarters. Despite this, mortgage debt at the end of 2017 was still 4.4% below its record level to date, while total outstanding debt across all categories had by 2016 already exceeded the historic high reached in the third quarter of 2008. Student loans grew at the highest rates, with the average volume of outstanding credit increasing by almost 9% per year to EUR 1.1 trillion. Their share in total debt more than doubled over this period to 10.5%.

In per capita terms, liabilities increased last year to an average of EUR 39,860, putting them at about the same level as in 2008. A combination of historically low interest rates and a moderate increase in both employment and incomes has so far made it easier for many households to pay back their debt. The debt service ratio, i.e. the ratio of capital and interest repayments to disposable income, has fallen to a historic low in recent years and in 2017 remained stable at the previous year's level of 10.3%; the all-time high over the past 30 years (13.2%) was reached at the end of 2007. The delinquency rate is also on the way down and fell to 4.7% in the last quarter of 2017, less than half the peak of 11.9% that it reached at the end of 2009. That means that it is once again

well below its pre-crisis level of 6.7%, reached at the end of 2007. The ratio for student loans also fell slightly last year, although it was still relatively high (11.0% in the final quarter). All in all, however, the household sector has corrected the excessive debt behavior it displayed in the boom years and pushed its liabilities back down to the historical average.

... while debts in Canada are reaching dangerous levels

The debt situation in Canada is much more precarious than in the US. In relation to disposable incomes, the debt ratio has been constantly on the rise, climbing from 107.4% in 2000 to 172.2% last year – putting it about 67 percentage points ahead of the US level. Per capita debt is climbing to new record highs year in, year out, and came to an average of EUR 40,070 at the end of 2017. The outbreak of the financial crisis at least caused a slow-

down in the rate of growth: while the average annual growth rate in the years preceding the crisis was over 9%, it has since dropped to just under 6% on average. The era of cheap money is also drawing to a close in Canada. Against the backdrop of an interest rate rise in July 2017 – the first for almost seven years – and another rise in September of a total of 50 basis points to 1%, debt growth slowed again slightly from +5.3% in the previous year to +4.8%. Liabilities nevertheless still grew faster than in the US (+3.7%) and compared with the average for all industrialized countries (+3.7%). The rapidly growing debt mountain was driven by ongoing house price rises, particularly in the Greater Vancouver and Toronto areas. According to the OECD, the nationwide nominal house price index climbed around 36 points to 157.4% between the end of 2014 and the end of 2017, compared with an average rise of „only“ 18 points to 127.1% for all OECD countries. Mortgage loan growth rose in tandem with house prices, increasing the proportion of highly-indebted households. In addition, more and more investors from emerging countries, especially China, discovered this market in their search for safe investment opportunities for their savings. The city of Vancouver responded to this in August 2016 by introducing a tax of 15% on the price of houses purchased by foreign investors. Although the property market in Vancouver has cooled down slightly, demand has shifted to other cities such as Victoria and Toronto.

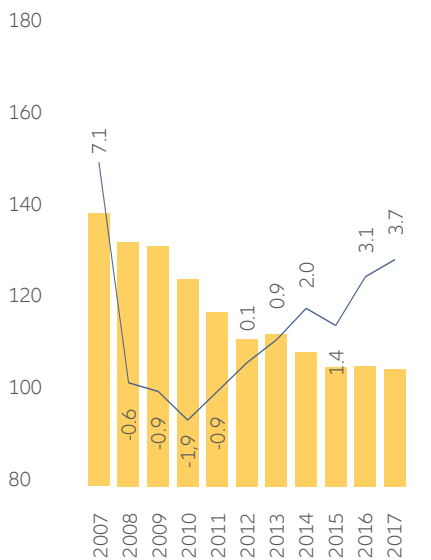
The Canadian central bank has for a long time been observing the growing debt burden of the household sector with great concern, and has described it as one of the biggest risks to the financial system. The regulator has therefore been attempting for some time to counteract this with macroprudential measures. In February 2016, the financial supervisory authority set out more stringent capital requirements for loans backed by a residential

property, the aim being to restrict lending to households with high credit ratings. Furthermore, the federal government introduced new regulations in fall 2016 on financing for housing construction, as part of which the ratio of debt service payments to income will be limited to a maximum permissible level when loans are granted. Strong growth in incomes, a slowdown in credit growth and improvements in credit quality have helped to make the financial system less vulnerable. Nevertheless, Canada urgently needs to find its way back to a solid and sustainable asset situation.

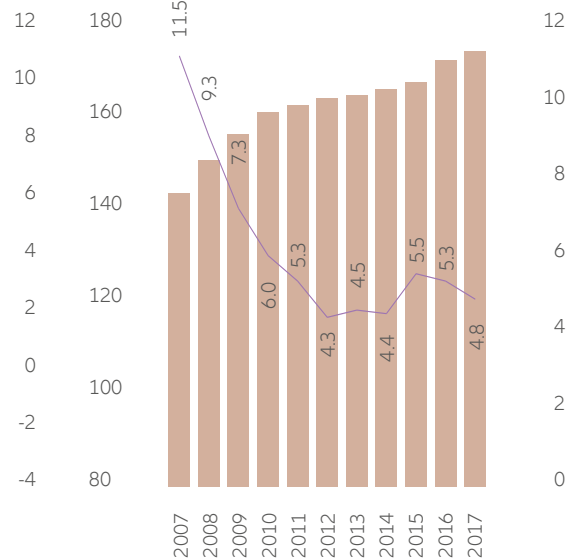
Debt burden in Canada dangerously high

Debt ratio and growth in liabilities

USA



Canada



- Debt as % of disposable income (lhs)
- Debt growth, y/y in % (rhs)
- Debt growth as % of disposable income (lhs)
- Debt growth, y/y in % (rhs)

Sources: Board of Governors of the Federal Reserve System, Statistics Canada, Allianz SE.

The US is back in second place among the richest households worldwide

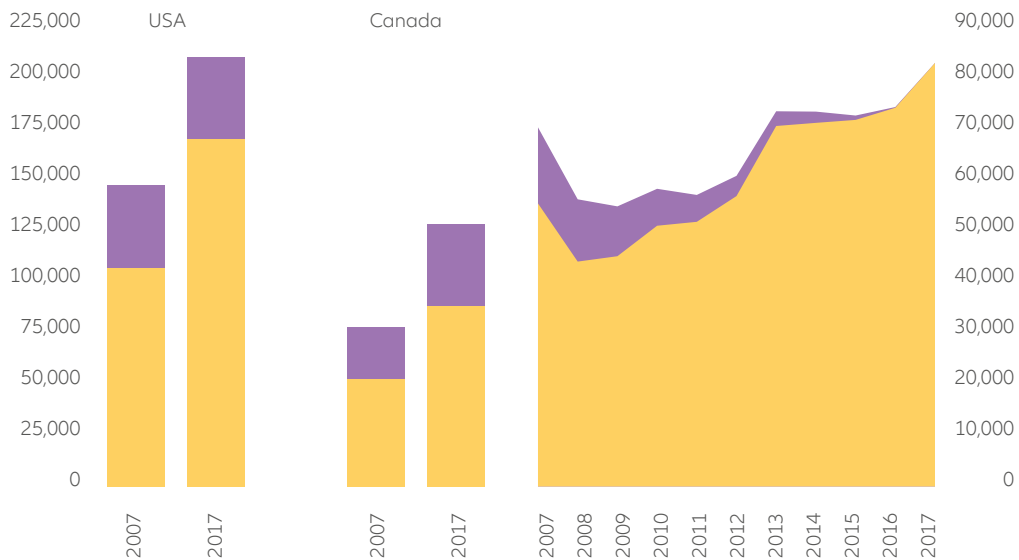
North America is not only the region with the highest proportion of the world’s financial assets, it is also the region with the highest per capita wealth. After subtracting liabilities, the average North American had assets worth EUR 160,400 at the end of last year; by way of comparison, average per capita assets in Western Europe came to „only“ EUR 61,060.

Even if assets are distributed very unequally at national level, particularly in the US, a great many North Americans are very well off by international standards: 41% of the North American population has assets averaging more than EUR 45,600 per capita to fall back on, making them members of the wealth upper class in a global comparison. In global terms, 27% of people classed as high wealth individuals live in North America.

The US-Canada asset gap is rising, the debt gap is shrinking

Net financial assets and liabilities per capita, in EUR

Difference between USA and Canada, in EUR



■ Net financial assets
■ Liabilities

Sources: Board of Governors of the Federal Reserve System, Statistics Canada, UN Population Division, Allianz SE.

If we look at the national distribution of wealth, the situation in the US has actually become exacerbated even further. According to a survey of households published by the Federal Reserve System⁷ last fall, which is carried out every three years, the richest 10% of US households held 77.1% of private assets. In the survey published three years previously, this figure was 75%. The US thus ranks among the countries with the greatest inequality worldwide and has the highest Gini coefficient for wealth distribution of all the countries we have analyzed. In Canada, almost 48% of assets were held by the richest decile of the population, putting the country slightly below the average for industrialized nations, which is estimated at almost 51%.

If we compare the two neighboring countries in terms of average per capita assets, private households in the US have average net assets of EUR 168,640 per capita, making them considerably more wealthy than Canadian households (EUR 87,390 per capita in net terms). The gap between the two countries has actually widened noticeably over the last decade. While US citizens had around EUR 54,000 more in net financial assets than Canadians in 2007, the difference in wealth had grown to more than EUR 81,000 by the end of last year. The situation is reversed when it comes to liabilities. At the end of 2007, per capita debt was still EUR 14,600 higher than in Canada, and by the end of 2017 even more than EUR 200 lower. This reflects the different paths taken by the two countries since the crisis.

US households were once again overtaken by the Swiss in the global rankings and pushed back down to second place. The Canadians moved down one place and came in tenth in the rankings, behind Denmark and ahead of New Zealand.

⁷ Board of Governors of the Federal Reserve System (2017): „Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances“.



WESTERN EUROPE

Population

Total	419 m
Share of the global population	5.7%

GDP

Total	EUR 14,768bn
Share of global GDP	21.1%

Gross financial assets of private households

Total	EUR 36,413bn
Average	EUR 87,240 per capita
Share of global financial assets	21.6%

Debt of private households

Total	EUR 10,927bn
Average	EUR 26,180 per capita
As % of GDP	74.0%



Savings of private households in Western Europe rose by nearly EUR 1.4 trillion to a record figure of EUR 36.4 trillion in 2017. However, the rate of growth slowed noticeably to 3.9%, compared with 5.1% in 2016. Private financial assets in Western Europe therefore grew not only more slowly than in North America (+8.3%), but also more slowly than in industrialized countries overall (+6.5%). About 52% of this growth came from fresh funds, while 48% was due to changes in the value of the portfolio, whose share in growth has thus increased appreciably compared with the average for the last decade (38%).

Securities holdings made the biggest contribution to growth, increasing by 6.6%, which exceeded growth in both bank deposits (+3.2%) and insurance and pension assets (+2.3%). The economic environment was favorable to equity markets last year. The eurozone in particular provided surprisingly positive economic data, with the result that growth forecasts were raised almost continuously. Positive election results in the Netherlands and France boosted markets in the first half of the year, after fears of a victory for populist parties were allayed. In the second half of the year the focus shifted more to company figures, although the corporate sector in Europe was unable to keep pace with US technology giants. The euro has appreciated again since Macron's election victory, which has made the export sector less competitive and led to drops in share prices. Catalonia's quest for in-

dependence has also made investors uneasy. The European benchmark index Euro Stoxx closed the year with solid growth of 6.5%, but remained well behind the US stock exchange barometer: the S&P 500 gained 19.4% over the course of the year, climbing to a record high of over 2,640 points. That means it has risen by around 82% in total since 2007, while the Euro Stoxx is still down by about 20%. The leading indices in half of the 16 western European countries were below pre-crisis levels at the end of last year. Unsurprisingly, the biggest losses were recorded in the southern European countries of Greece (-92%), Portugal (-59%) and Spain (-34%).

Compared with North America, where households invest over half of their financial assets in securities, this asset class tends to be under-represented in Western Europe, where it accounts for just under 29% of the portfolio. However, the first signs of a reversal in this trend seem to be appearing. After households had disposed of securities in net terms from 2012 to 2016, selling securities worth a total of about EUR 250 billion⁸ or EUR 620 per capita, there was a net inflow of funds in 2017, albeit at a very low level. On balance, households purchased shares and investment fund units worth an average of EUR 40 per capita, or just under EUR 15 billion in total. In contrast, US citizens have invested around EUR 950 billion or an average of EUR 2,970 per capita in this asset class since 2012.

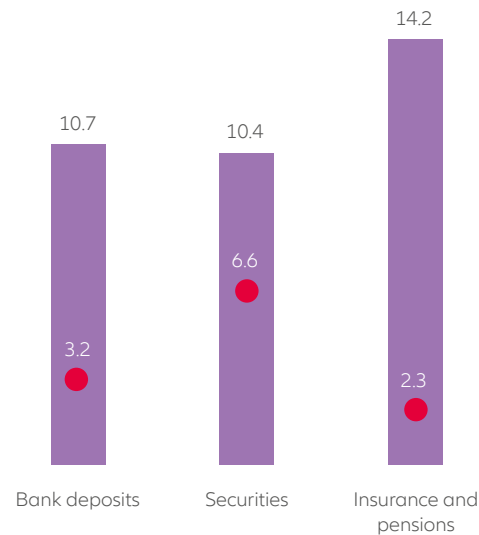
⁸ Not including Swiss households.

The dominant pillar in the western European asset portfolio remains insurance and pensions. Receivables from insurance companies and pension institutions rose by EUR 300 billion to EUR 14.2 trillion during the year, an increase of 2.3% compared with 2016. Since the outbreak of the financial crisis, on average households have plowed more than half of their „fresh“ savings into this asset class, pushing its share of total financial assets up by around five percentage points to about 39% by the end of 2017. This development is likely due first to growing awareness of the need

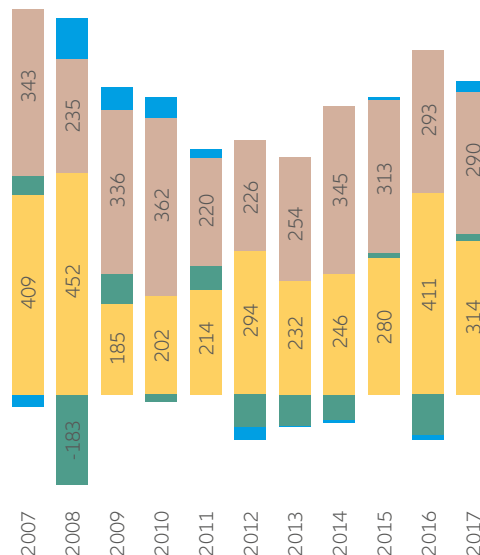
to make more independent provisions for old age. The significance of state pensions, which have made up the lion's share of income in old age in most of these countries to date, is on the wane due to tight budgets and pension reforms that are intended to cushion the effects of demographic change. Second, a shift in the overall asset structure had already started to emerge back at the turn of the millennium. In the aftermath of the bursting of the dotcom bubble and the outbreak of the financial crisis, many investors seem to have lost faith in shares and now prefer secure investments. Securities still accounted for almost 39% of the asset portfolio in 2000.

For the first time since 2011 net purchases of securities

Volume and growth of financial assets by asset classes, 2017



Net acquisitions of financial assets by asset classes*, in EUR bn



- Volume, in EUR tn
- Growth rate, y/y in %
- Bank deposits
- Securities
- Insurance and pensions
- Other

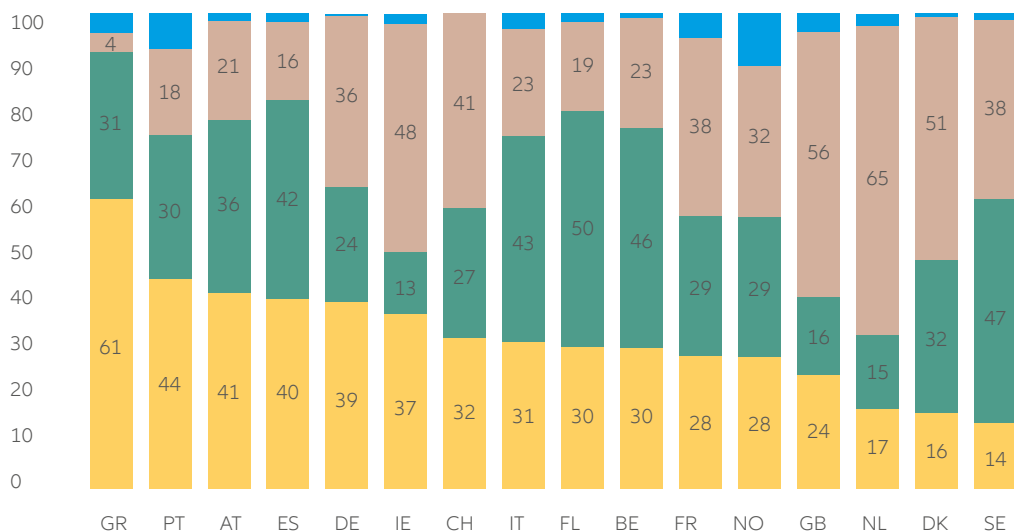
*Excluding Switzerland.
Sources: National Central Banks and Statistical Offices, Allianz SE.

Bank deposits also benefited from these concerns about security. Despite the current zero interest rate policy, households still hold almost 30% of their savings in the form of cash and demand, term and savings deposits. The increase of 3.2% in the portfolio compared with 2016 to EUR 10.7 trillion was primarily due to substantial inflows of funds, as in previous years. A further EUR 314 billion was added to this asset class in 2017, almost half the total volume of savings. Only in Greece has the volume of bank deposits declined since the crisis, owing to the severity of the crisis and capital controls.

If we compare the individual countries, no uniform pattern emerges as far as the asset structure is concerned. The proportion of securities assets in the overall asset portfolio ranges from 12.9% in Ireland to 49.5% in Finland. Bank deposits dominate the asset portfolios of Greek (61.0%) and Portuguese (44.2%) households; their share has actually risen significantly since the crisis, by nine (Greece) and six (Portugal) percentage points respectively. However, this is unlikely to be due to a conscious investment decision. Instead, this shift in the asset structure reflects losses in securities holdings.

Differing preferences

Asset classes as % of gross financial assets, 2018



■ Bank deposits
■ Securities
■ Insurance and pensions
■ Other

Sources: National Central Banks and Statistical Offices, Allianz SE.

Growth across the board

A comparison of countries shows that assets grew across the board in 2017. The only exception was the Netherlands, where private savings declined slightly (-0.2%) owing to falls in the value of insurance and pension assets. Unlike in previous years, however, there was no clear divide between northern and southern Europe in terms of growth. Savings of households in Greece and Italy, for example, recorded above-average growth of 5.8% and 4.1% respectively, while Portugal and Spain were below the western European average (+3.9%) at 3.3% and 2.4% respectively. Italian households, which hold above-average investments in securities compared with other western European countries, benefited particularly strongly from the positive performance of the stock market last year. Italy's leading index gained almost 14% over the course of the year and household securities holdings grew by 4.5%, despite net outflows of funds. This reflected value gains of EUR 107 billion or an average of EUR 1,800 per capita. In the previous year, these had come to only about EUR 4 billion or approximately EUR 70 per capita.

Norwegian and Swedish households topped the league table for growth last year, with an increase of 6.1% each in their financial assets. They were closely followed by the Swiss, who enjoyed growth of 5.9%. Developments varied in the other German-speaking countries. While Germany beat the regional average with growth of 5.1%, Austria lagged significantly behind (+3.3%). As in previous years, Germany's strong growth was down to the substantial savings efforts of German households. If we look at inflows of funds in relation to gross financial assets, German households are the unbeaten „European savings champions“ with a ratio of 3.7%. As they still have a marked preference for liquidity, bank deposits grew more strongly in Germany than anywhere else in Europe.

However, most western European countries have one thing in common: in 13 of the 16 countries we analyzed, securities holdings made the biggest contribution to growth last year. On average in Western Europe, they accounted for 1.8 percentage points of total growth of 3.9%. This effect was most pronounced in Greece, where the leading index closed the year up almost 20% and securities holdings rose by nearly 31%. As Greeks sold securities in net terms (EUR -0.8 billion), this growth came solely from value gains of EUR 20 billion or just under EUR 1,800 per capita. The strong growth in securities holdings more

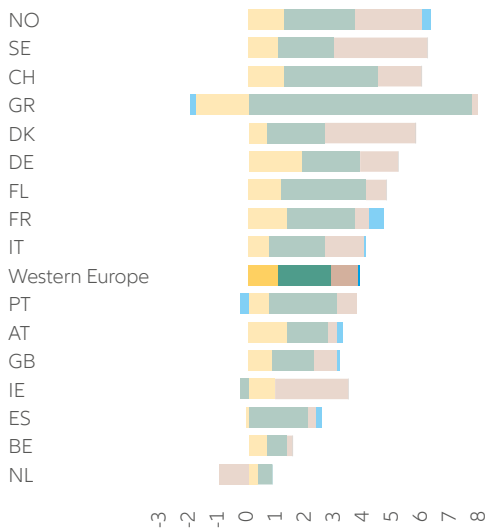
than offset declines in bank deposits (-2.7%). According to official statistics, however, total Greek financial assets at the end of 2017 were still down by 22% compared with the pre-crisis high. In all other western European countries, households were better placed than they were back in 2007. The top of the rankings is home to Sweden with growth of 95.2%, followed by Norway (+79.9%) and the Netherlands (+69.8%).

Credit growth increases again slightly

As at global level, the outbreak of the financial crisis also marked a reversal of the trend in debt dynamics in Western Europe. Annual rates of credit growth declined sharply from a peak of +8.8% in 2006 to -0.1% six years later. Growth has increased again slightly since then, although it has remained at a lower level. The rate of growth in liabilities rose from

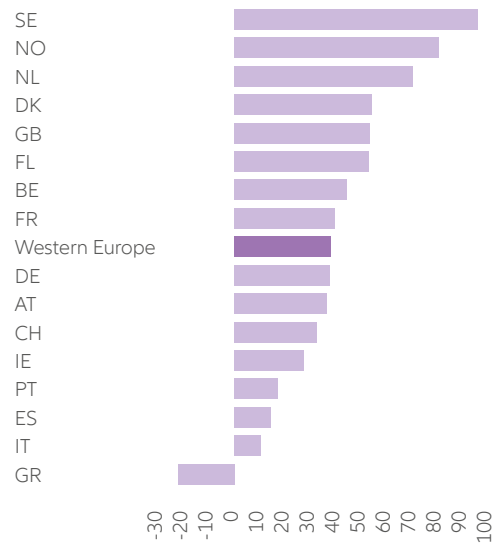
Growth of financial assets on a broad level

Growth contribution by asset classes, 2017/2016, in percentage points



- Bank deposits
- Securities
- Insurance and pensions
- Other

Change in gross financial assets since 2007, in %



Sources: National Central Banks and Statistical Offices, Allianz SE.

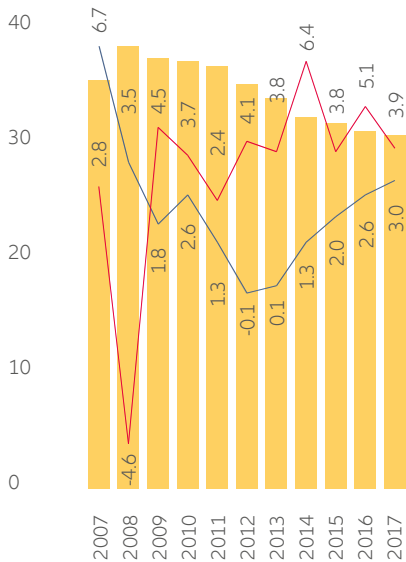
2.0% in 2015 to 2.6% in 2016 and 3.0% in 2017. The ECB’s plan to stimulate private demand for credit with its unconventional monetary policy thus seems to be having a (slight) impact. Despite this slight acceleration, however, debts have still risen noticeably more slowly than assets over the last five years. While liabilities have increased by an average of 1.8% per year, savings have achieved average annual growth rates of 4.6%, although the gap between asset and debt growth has most recently narrowed to just 0.8 percentage points. The ratio of household debts to financial assets has fallen continuously from a record high of 37.5% in 2008 to 30.0%. All in all, outstand-

ing loans of western European households came to EUR 10.9 trillion at the end of 2017, which corresponds to 27.5% of the global debt burden. Private household debt in Europe thus poses no risk to financial market stability on the whole, although this does not necessarily apply to each individual country (see below).

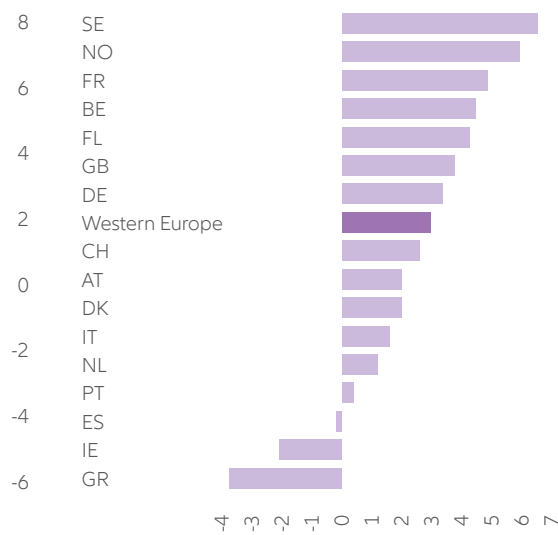
There was a clear split between the north and south of Europe in terms of debt growth last year. The biggest increase was seen among Swedish households, whose liabilities rose by

Debt growth almost at the same level as asset growth

Growth in financial assets and in liabilities in Western Europe



Debt growth by country, 2017/2016 in %



■ Debt as % of gross financial assets (lhs)
 ■ Liabilities, y/y in % (rhs)
 ■ Gross financial assets, y/y in % (rhs)

Sources: National Central Banks and Statistical Offices, Allianz SE.

6.6%. Four other countries from the northern part of the region also recorded above-average growth in debts: these were Norway (+6.0%), Belgium (+4.5%), Finland (+4.3%) and the UK (+3.8%). Further south, the volume of outstanding credit was up by 2.6% in Switzerland and 2.0% in Austria. Liabilities also rose more slowly than the western European average in Italy (+1.6%) and Portugal (+0.4%). While debts in Spain more or less stagnated (-0.2%), the central bank of Greece actually reported a further drop of 3.8% in debt, for the seventh consecutive year. Irish households also continued with their consolidation strategy last year, reducing their liabilities by 2.1%. Since reaching a record high in 2008, private debt in Ireland has fallen year after year, declining by almost 29% in total.

Swiss households in first place not only with regard to debt...

A look at debt levels shows significant differences between individual countries. Per capita debt, for example, ranges from an average of EUR 10,010 in Greece to EUR 87,110 in Switzerland. The gap between these two countries has widened from around EUR 59,000 to about EUR 77,000 since the outbreak of the

crisis. While Greek households have corrected their „excessive debts“ from the years prior to the crisis and reduced their liabilities by an average of 1.0% per year, the outstanding debt volume of Swiss households has continued to grow by an average of 3.4% per year. However, debt reduction in Greece is not due solely to a drop in demand and more stringent lending guidelines. Some households were simply no longer able to repay their loans, and creditors have been forced to write off their receivables. Apart from Switzerland, the three countries with the highest private per capita debt levels included the two Scandinavian countries Norway (EUR 67,640) and Denmark (EUR 66,300); all three had significantly higher debt levels than the US (EUR 39,860 per capita). The two heavyweights, Germany and France, in which around 30% of the region's debt burden was concentrated at the end of 2017, came in at the lower end of the middle of the range, with average private per capita debts of EUR 21,240 and EUR 23,830 respectively. Together with Greece, households in the other southern European countries of Spain (EUR 16,710), Portugal (EUR 15,960) and Italy (EUR 15,630) brought up the rear.

However, it's not just the absolute debt figures, but also an analysis of relative levels of debt that reveals significant differences between individual countries. If we look at private debt in relation to nominal economic output, the Danes topped the rankings in 2017 with a ratio of 132.1%, well ahead of Switzerland (129.6%), although the Danish debt ratio has fallen by almost 18 percentage points since the record high in 2009. The ratio in the Netherlands

(112.6%) and Norway (107.9%) was also well above the 100% mark. If we also include the UK (94.7%) and Sweden (91.7%), it becomes clear that private debt is reaching dangerous levels in the rich „northern countries“ in particular. However, not all „rich“ countries have high levels of debt. Austria has for years had the lowest ratio, which in 2017 came to 51.6%, closely followed by Germany (53.4%), where the ratio has fallen continuously in recent years. Germany's debt ratio was still over 70% at the turn of the millennium – higher than in the UK, Sweden or Norway, for example.

The ratio of liabilities to gross financial assets varies less widely, with just under 54 percentage points between Belgium, which had the lowest ratio of 20.7% at the end of 2017, and Norway, which was in first place with a ratio of 74.3%. It is noticeable here that, with the exception of Italy (21.1%), all the euro crisis countries of Greece (41.7%), Portugal (41.5%), Ireland (40.1%) and Spain (36.0%) exceeded the regional average of 30.0%, in some cases significantly. This shows once again that debts remain in crisis periods, while assets may suffer losses.

... but also in terms of net assets

Swiss households have the highest net per capita financial assets in Western Europe with an average of EUR 173,990, well ahead of Sweden in second place (EUR 98,380). After ceding their traditional first place in the global rankings to the US in 2016, the Swiss reclaimed the title of „richest households worldwide“ last year, pushing the US back down to second place (EUR 168,640). Along with Switzerland and Sweden, only three other western European countries ranked among the top 10 places for the richest households worldwide: the Netherlands (EUR 95,880), Belgium (EUR 93,580) and Denmark (EUR 88,270). Out of a total of 16 countries in the region, five ranked among the MWCs.⁹ Also falling into this category, in addition to the crisis-ridden southern European countries of Greece, Portugal and Spain, were Finland and Norway.

As far as their net financial assets are concerned, western Europeans are spread relatively evenly across all three asset classes. Around 35%, or 146 million out of the 417 million people who live in this region, had average financial assets, after deductions for any liabilities, of at least EUR 45,600 at the end of last year, putting them in the wealth upper

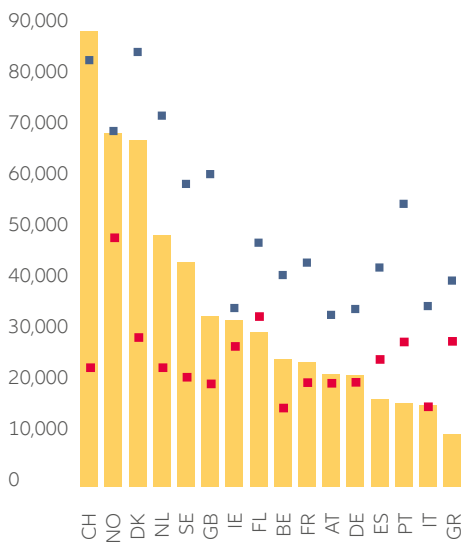
⁹ Middle Wealth Countries. Average net per capita financial assets in these countries ranged from EUR 7,600 to EUR 45,600 in 2017.

class in a global context. Three-quarters of these people live in the five largest economies in the region: Germany, France, the UK, Italy and Spain. Last year, the lowest wealth class included 135 million western Europeans (32%) whose total savings came in at less than EUR 7,600 per capita on average. This meant that roughly one-third of the population formed part of the wealth middle class last year.

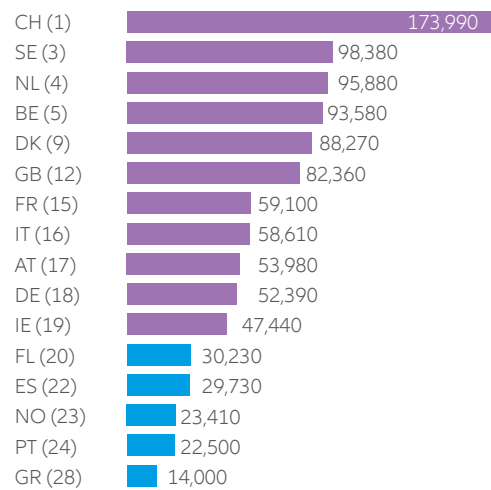
With regard to wealth distribution within countries, the richest decile of the population in Western Europe on average owns about 52% of national net financial assets in each case. Their average share has risen by only about one percentage point since 2000, although in some countries such as Switzerland and France there has been a much more significant increase. This is likely to be a side effect of expansionary monetary policy, as more affluent households generally invest a larger portion of their savings in securities and have therefore particularly benefited from rising asset prices in recent years.

Liabilities and financial assets the highest in Switzerland

Debt ratio and debt per capita, 2017



Ranking by net financial assets per capita in 2017, in EUR



■ Debt per capita, in EUR (lhs)
 ■ Debt as % of GDP (rhs)
 ■ Debt as % of gross financial assets (rhs)

■ HWC
 ■ MWC
 In brackets: Global ranking

Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, UN Population Division, Allianz SE.



EASTERN EUROPE

Population

In the analyzed countries	395 m
Analyzed countries' share of the region as a whole	83.7%
Analyzed countries' share of the global population	5.4%

GDP

In the analyzed countries	EUR 3,511bn
Analyzed countries' share of the region as a whole	95.0%
Analyzed countries' share of global GDP	5.2%

Gross financial assets of private households

Total	EUR 2,592bn
Average	EUR 6,490 per capita
Share of global financial assets	1.5%

Debt of private households

Total	EUR 798bn
Average	EUR 2,000 per capita
As % of GDP	22.7%



Eastern European EU members

Private financial assets grew by 6.0% in eastern European EU member states in 2017, below the previous year's growth of +7.8%. Growth rates were nevertheless positive in each of these 11 countries¹⁰. In total, household savings were up by almost EUR 80 billion at the end of last year, at over EUR 1.3 trillion. 42% of this increase was attributable to value gains; however, the better part was driven by "fresh savings", i.e. the acquisition of new financial assets. Despite this robust development, the outbreak of the economic and financial crisis certainly took considerable wind out of the sails of asset growth. While double-digit growth rates had been the norm in the years preceding the crisis, average growth has since fallen to around 7%.

Private households still held the biggest chunk of their financial assets (around 44%) in bank deposits. Even though the world's major central banks have effectively abolished interest rates with their expansionary monetary policy, about two-thirds of annual savings have gone into this asset class in the last four years, at an average of EUR 36 billion. Households put around EUR 32 billion, or about EUR 300

per capita, into the bank last year in net terms. Total deposits thus rose by 5.1% – 3.8 percentage points less than in the previous year – and came to EUR 592 billion at the end of 2017.

Growth in securities holdings in the region also slowed year-on-year from 7.8% to 6.5%. However, developments varied widely between individual countries. While double-digit growth rates were achieved in Hungary (+10.1%), Lithuania (+11.9%), Estonia (+12.3%) and Slovakia (+14.0%), households in Croatia actually suffered a loss of 2.1%. Inflows of funds into this asset class totaled EUR 2.1 billion or around EUR 10 per capita in 2017, just a tenth of the previous year's figure and only 6% of the record figure of EUR 19.5 billion achieved in 2012. Of the total increase of around EUR 25 billion in securities holdings to EUR 430 billion, 96% therefore came from value gains. However, this is not unusual for the region: the average figure for the whole of the last decade was almost 97%.

The respective leading index in almost all eastern European EU member states recorded double-digit growth over the course of the year. The exceptions were Romania (+9.4%), Slovakia (+2.2%) and Croatia, where the benchmark index in fact fell by 7.6% year-on-year. If we compare the figures at the end of last year with their pre-crisis levels, however, the leading indices in the majority of these countries were still down. Estonia, Latvia, Lithuania, Poland and Hungary were the only countries where the stock markets rose compared with 2007. All in all, the proportion of

¹⁰ Bulgaria, Estonia, Croatia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, the Czech Republic and Hungary.

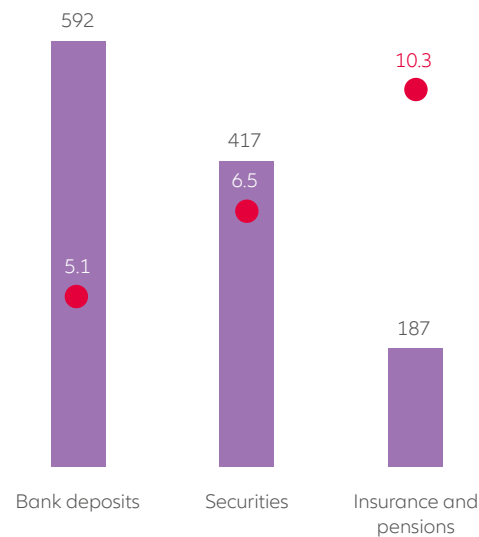
gross financial assets held in securities came in at almost 32%, a fall of nearly 7 percentage points from this asset class’s peak in 2007.

Household receivables from insurance companies and pension funds grew by 10.3% last year, the highest level of growth among the three major asset classes. Romania achieved the strongest growth of 24.9%, although this was from a very low initial level. Assets of EUR 580 per capita were invested there in insurance policies and pensions, against a regional average of EUR 1,810. The ratio of this asset class to gross financial assets varies from

country to country. In Romania, for example, it accounted for only 8.9% of gross financial assets, compared with 25.7% and 20.8% respectively in Croatia and Slovakia. The average ratio for the eastern European EU countries rose from 6.3% at the beginning of the millennium to 14.0% last year as private retirement provisions grew.

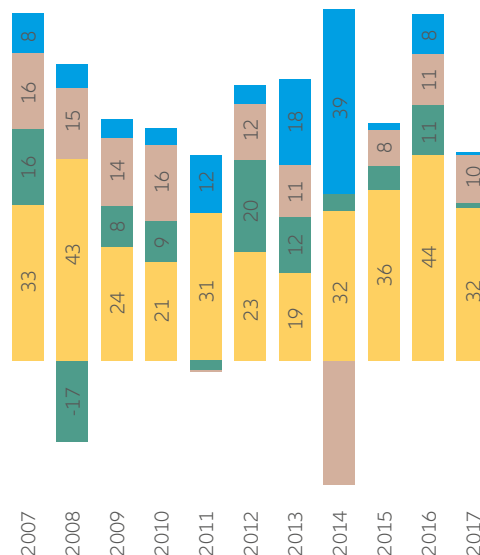
Bank deposits dominate asset portfolio

Volume and growth of financial assets by asset class, 2017



- Volume, in EUR bn
- Growth rate, in %
- Bank deposits
- Securities
- Insurance and pensions
- Other

Net acquisitions of financial assets by asset class, in EUR bn



Sources: National Central Banks and Statistical Offices, Allianz SE.

In the meantime, however, the asset class insurance and pensions reached a high of as much as 18.0% in household asset portfolios in 2010. The decline in importance thereafter is due to government interventions in Hungary and Poland. The Hungarian parliament under prime minister Viktor Orbán decided at the end of 2010 to nationalize the private, capital-funded pillar of retirement provision. The funds were used to reduce the deficit in state pension schemes and pay back sovereign debt. Citizens had paid in the equivalent of around EUR 9.7 billion since 1998, which is now missing from household balance sheets. Consequently, the share of insurance policies and pensions in overall assets has since been halved, and stood at around 8% at the end of 2017.

In 2014, Poland became the second eastern European EU member state to nationalize some of the retirement funds managed by private pension funds, transferring about half of these savings to the state pension system. According to statistics of the Polish central bank, the „confiscated“ savings were no longer registered in household asset balance sheets as receivables from insurance companies and pension/retirement funds, but instead as other receivables. Ultimately, households appear no worse off than they were in the past, at least on paper. It remains to be seen whether they will be able to rely on these funds in the future. There has certainly been a loss of confidence in how secure private retirement provision is; households have reduced inflows of funds into this asset class to an average of EUR 3 billion in the last three years – less than half the lev-

els reached in the years before the reform. The share of this asset class in the asset portfolio has fallen by more than 11 percentage points to just under 16%.

Debts are rising faster – but are still at a low level

The eastern European countries' entry to the EU gave the financial sector a real boost in terms of development. Austrian and Scandinavian banks in particular have been on a major expansion course in the region, propelling lending to the private sector as a whole from just under 32% of nominal economic output in 2000 to around 56% eight years later. Among private households alone, annual debt growth rates in excess of 30% were not uncommon prior to the outbreak of the financial crisis. By the end of 2008, the household debt level had more than trebled from 9.7% of gross domestic product to 32.4%.

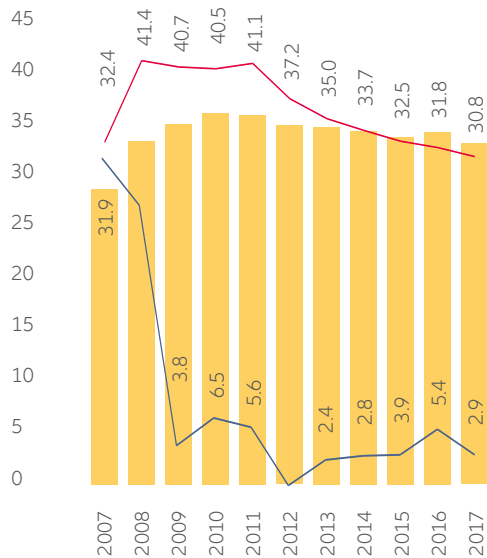
The tremendous boom came to an abrupt end in 2009, when the financial crisis forced banks to restrict lending in, and to, Eastern Europe. The annual growth rate fell to an average of 4.0% in the following three years. Borrowing stagnated in 2012, after which growth in debt gradually began to pick up again. In line with global development, credit growth also accelerated continuously in eastern European EU countries, reaching 5.4% in 2016. The rate of growth slowed last year to 2.9%. Households in Slovakia and Estonia came out on top, with growth of 10.3% and 7.0% respectively. In contrast, Lithuania and the Czech Republic

reported a net drop of 1.2% and 0.3% respectively in liabilities last year.

Although the debt growth rate has increased again noticeably in a regional context since 2012, the average rate of growth in liabilities of 2.7% per year is still considerably slower than growth in assets, which have risen by an average of 7.7% per year. Relative household debt, measured as a percentage of gross financial assets, has thus declined by around 10 percentage points to 30.8%. The ratio of debts to assets has fallen in all countries since the end of 2008, with the exception of Slovakia.

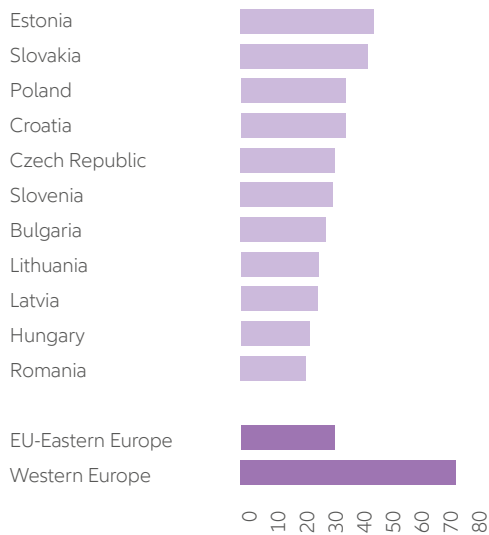
Household debt levels are falling

Growth in liabilities since 2007



■ Liabilities as % of GDP
— Debt growth, y/y in %
— Liabilities as % of gross financial assets

Debt as % of GDP, 2017 by country



Sources: National Central Banks and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

However, private debt has grown not only more slowly than assets, but also more slowly than nominal economic output in the same period: the debt ratio, i.e. the ratio of liabilities to GDP, has dropped from 34.9% at the end of 2011 to 32.2%. Within Eastern Europe, the ratio varies considerably from country to country, ranging from 22.4% in Romania to 45.8% in Estonia. Although the Estonians have the highest debt ratio in this group of countries, they are still a long way off the western European average of 74.0%.

Wealth gap between the east and the west

After deductions for liabilities, households in the eastern European EU member states had average per capita assets of EUR 8,970 at the end of 2017. Last year, the Czech Republic overtook Slovenia (EUR 14,260) with average assets of EUR 15,290 per capita. In gross terms, however, Estonia's households are in the lead. In a comparison with Western Europe, Czech and Slovenian households are actually ahead of their counterparts in Greece, where average net per capita assets have dwindled from EUR 19,320 to EUR 14,000 since the end of 2007. Romania comes bottom of the regional league with average per capita assets of EUR 4,520 and is still ranked as an LWC (low wealth country). Other than Romania, only Slovakia falls into this group of countries in net terms.

Debts there are above average in relation to gross financial assets; in 2017, the ratio of liabilities to assets was around 52%, well above the regional average of 30.8%.

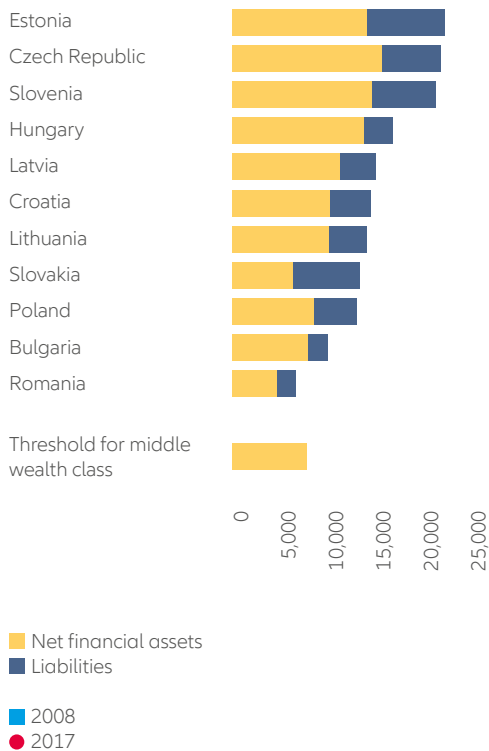
To date, not a single eastern European EU member has managed to propel itself into the ranks of the HWCs (high wealth countries), which would require average net per capita financial assets to surpass a threshold of EUR 45,600 in 2017. Although average per capita assets have more than quadrupled in the region since the end of 2000, around 63% of the population still has less than EUR 7,600 per capita and thus belongs to the global low wealth class. Admittedly, however, this proportion has fallen by 18 percentage points during this period. On the other hand, the number of people who belong to the global middle wealth class has almost doubled to 35 million (about one-third of the overall population), and around three million eastern Europeans are now in the global high wealth class (net financial assets per capita above EUR 45,600).

With regard to wealth distribution within countries, the richest decile of the population in eastern European EU countries on average owns almost 50% of national net financial assets in each case. So, in international comparison, this country group still ranks among the more equal societies; in the US, for example, the share of the top 10 is way above 70%. Their average share has risen by about one percentage point since 2000, although in some countries such as Bulgaria and Slovenia there has been a much more marked increase.

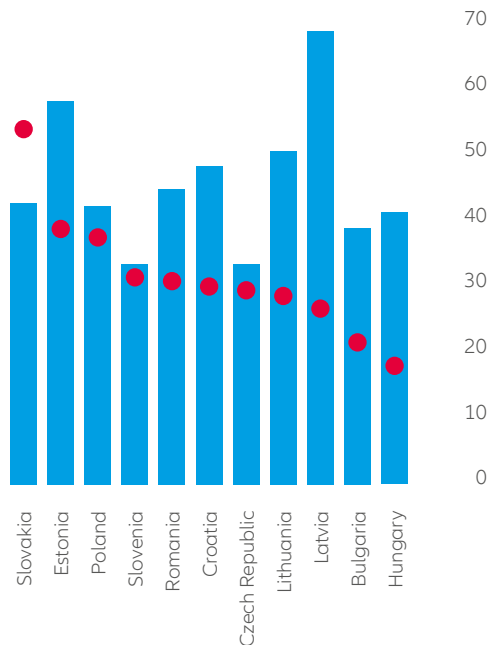
There is still a huge gap separating eastern and western EU member states. Whereas eastern European households, which represent 2.0% of the population of the 53 countries included in our analysis in 2017, accounted for only 0.7% of global net financial assets, Western Europe’s EU citizens, which represent 8.2% of the population, accounted for almost 20% of global assets. At EUR 61,060, average per capita assets in the EU countries in Western Europe were almost seven times as high as in the eastern European member states.

Estonia leader of the pack

Net financial assets and debt per capita 2017, in EUR



Debt as % of gross financial assets by country



Sources: National Central Banks and Statistical Offices, UN Population Division, Allianz SE.

Eastern European countries outside of the EU

Growth rates for household savings in Kazakhstan, Russia, Serbia, Turkey and Ukraine have been consistently impressive, averaging about 14% a year over the past decade. Despite this dynamic development, only 0.7% of global assets, or almost EUR 1.3 trillion, were attributable to this group of countries at the end of 2017 – although these countries are home to no less than 5.8% of the total population of the countries included in our analysis. Assets are correspondingly low in per capita terms, too: people living in these countries had average gross financial assets of EUR 4,240, while savings in the EU member states were around three times this amount. Last year, asset growth in these five countries came to about 9% in total, considerably lower than the historical average (around 14% per year since 2007).

However, based on the long-term average, liabilities have been growing at an even faster rate than savings. In the period between 2007 and 2017, the liabilities side of the asset balance sheet was growing at an average rate of 18% a year. Nevertheless, debt measured as a percentage of economic output was still at a relatively low level. The debt ratio of 17.3% at the end of 2017 was still much lower than in Latin America (just under 29%) or Asia (52%). Average per capita debt of EUR 1,300 was

also lower in this group of countries than the average for all emerging markets (EUR 1,970). The pace of debt growth has slowed significantly in recent years from almost 28% in 2011 to only 1.5% in 2015. Since then it has accelerated again to 4.2% in 2016 and just under 13% last year. Households had net average assets of EUR 2,940 per capita. The lion's share of total net financial assets was owned by Russian (76%) and Turkish (19%) households, two countries that are home to more than three-quarters of the population of this group of countries.

As a net commodities exporter, Russia had been hit particularly hard by the slump in oil prices, but is slowly emerging from recession. After two years of negative growth (-2.5% in 2015 and -0.2% in 2016), gross domestic product grew by 1.5% in real terms in 2017. The central bank also succeeded in pushing inflation, which had soared to almost 16% in 2015 after the country's currency nosedived, below 4% again. That meant that savers were left with some financial asset growth in real terms. Savings of Russian households grew at an estimated rate of about 8% last year and came to approximately EUR 890 billion in total. In per capita terms, that equates to gross financial assets of EUR 6,200, by far the highest figure among the five countries. Growth in liabilities, which had contracted by an average of 0.4% in the two preceding years, picked up again significantly in 2017, with an increase of 12%.

After deduction of liabilities, which came to around EUR 230 billion in total or an average of EUR 1,610 per capita at the end of last year, Russian households had total financial assets of about EUR 660 billion or EUR 4,590 per capita.

Asset growth in Turkey remained at a high level of 13.9% in 2017. The country's economic development since the financial crisis of 2001 has been impressive. Turkish GDP has grown by an average of 5.8% per year in real terms and nominal economic output per capita has increased almost ten-fold during this period, to an average of EUR 8,350. Even the global economic and financial crisis curbed development only briefly, as the country had set about implementing important reforms, such as the stabilization of the banking sector, after the 2001 crisis. The country's economic upturn also allowed the population to achieve a certain level of prosperity, and private household savings have increased almost five-fold over the last decade. A growing middle class has emerged, with eight million of the country's over 80 million inhabitants joining the ranks of the global wealth middle class. Private savings, which totaled EUR 292 billion at the end of 2017 (+13.9% against the previous year), are still invested very conservatively, with around three-quarters of financial assets held in the form of bank deposits, well above the average for emerging countries (38%). More than one-third of this sum was denominated in foreign currencies, reflecting a lack of trust in the domestic currency. The weak lira, which lost almost 23% against the euro last year alone, is making imports more expensive and driv-

ing up inflation. The inflation rate peaked at 13.0% in November last year, its highest level for almost 14 years and a long way off the target of 5%. After deduction of liabilities, which came to an average of EUR 1,570 per capita at the end of last year (+12.1%), Turkish households were left with average net financial assets of EUR 2,040 per capita.

However, Turkey still has a long way to go before catching up with eastern European EU member states. If average net per capita financial assets continued to rise in line with the average annual growth rate over the past decade of just under 11%, Turkey would not reach the level that eastern European EU countries are currently at until 2032. In the context of the current developments in domestic and foreign policy, however, there is a large question mark over this assumption. The repressive policy adopted by Erdogan's government, particularly since the foiled coup attempt in July 2016, could jeopardize past achievements. For the Turkish economy in particular, which is heavily dependent on inflows of foreign capital, it is vital to have the trust of international investors in a functioning constitutional state with independent institutions.

In Ukraine, asset development recovered to some extent last year. Gross financial assets grew again slightly by an estimated 1.4% following three years of losses. After deduction of inflation of 14.5%, however, households suffered a loss of assets last year in real terms.

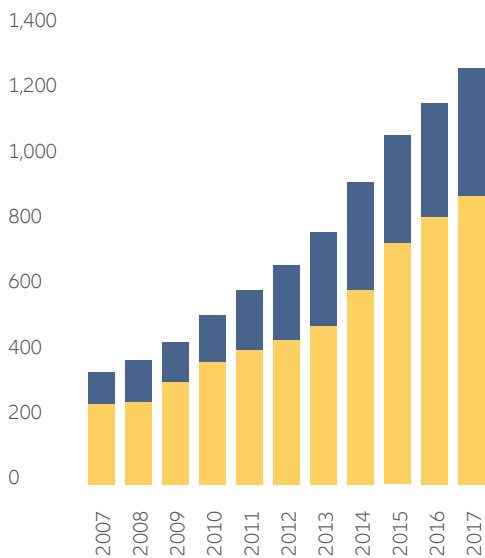
Average net financial assets per capita came to just EUR 530 at the end of 2017, the lowest figure among the countries analyzed.

Kazakhstan's and Serbia's households lag far behind with average assets of only about EUR 730 and EUR 800 per capita respectively. As in Turkey, bank deposits account for the lion's share of financial assets in these countries, with households there also favoring safe foreign currencies. About half of bank deposits in Kazakhstan were denominated in foreign currencies. Households in Serbia held around 84% of their savings deposits in foreign currencies,

primarily in euros. This extremely high level not only reflects a lack of trust in the country's own currency, but is also likely to be an indicator of high levels of (illegal) monetary circulation in foreign currencies in the economy as a whole, creating a breeding ground for the black market. In circumstances like these, getting to the bottom of the actual asset situation is obviously very difficult – something that doubtlessly applies to countries other than Serbia, too.

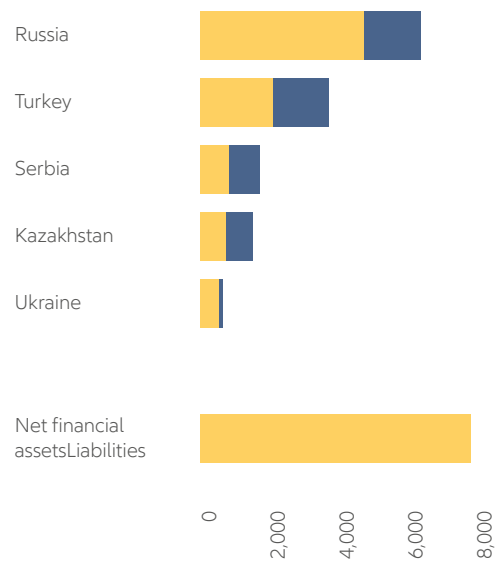
Per-Capita financial assets still at low level ...

Net financial assets and liabilities, in EUR bn



Net financial assets
Liabilities

Net financial assets and liabilities per capita 2017, in EUR



Sources: National Central Banks and Statistical Offices, UN Population Division, Allianz SE.

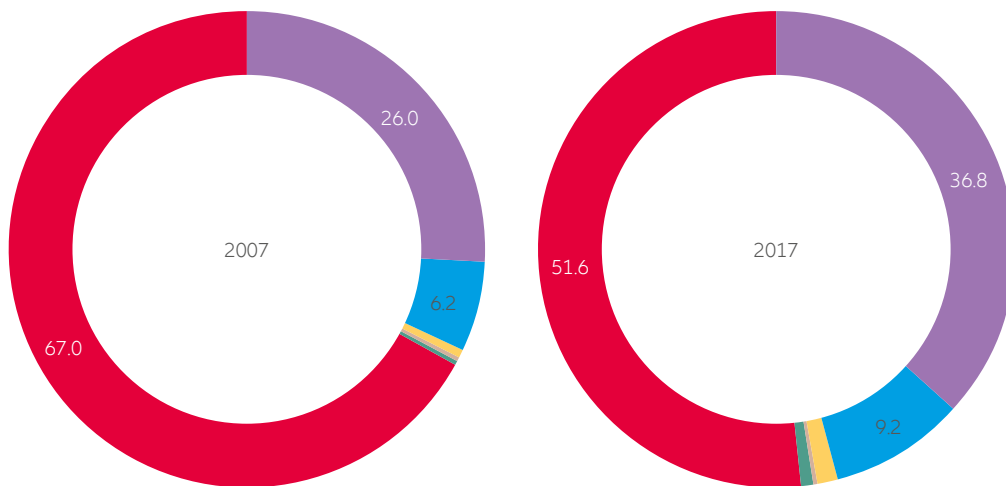
All five countries are LWCs and have some way to go before they can expect to make the leap into the MWC group. Even Russia only has 60% of the assets needed as a minimum to earn the title of an MWC. At the end of 2017, almost 88% of the population, or 259 million people, belonged to the lower wealth class in a global comparison (net financial assets per capita below EUR 7,600), with only 37 million people making it into the middle wealth class. On average, even the richest 10% of the population could not consider themselves part of the high wealth class (net financial assets per capita above EUR 45,600). This can be seen as a sign that high wealth in Russia is concentrat-

ed on very few shoulders. Moreover, the sometimes hefty currency losses in these countries make it all the more difficult to exceed the threshold values, which are calculated in euros.

However, households in Kazakhstan, Russia, Serbia, Turkey and Ukraine gained ground compared with eastern European EU member states: their share in net financial assets for the whole region of Eastern Europe has risen by about 15 percentage points since the end of 2007 to around 48%.

... but catching up

Share of non-EU countries in net financial assets of whole region Eastern Europe 2007 and 2017, in %



- Russia
- Turkey
- Ukraine
- Serbia
- Kazakhstan
- Rest of Eastern Europe

Sources: National Central Banks and Statistical Offices, Allianz SE.



ASIA

Population

In the analyzed countries	3,286 m
Analyzed countries' share of the region as a whole	86.5%
Analyzed countries' share of the global population	44.6%

GDP

In the analyzed countries	EUR 20,699bn
Analyzed countries' share of the region as a whole	94.4%
Analyzed countries' share of global GDP	30.1%

Gross financial assets of private households

Total	EUR 48,848bn
Average	EUR 14,670 per capita
Share of global financial assets	29.0%

Debt of private households

Total	EUR 10,809bn
Average	EUR 3,250 per capita
As % of GDP	52.2%



Asia – a success story with downsides

Gross financial assets of private households in Asia grew by 9.7% in 2017 to the equivalent of EUR 48.8 trillion. This was exceeded only by North America, where private households' gross financial assets amounted to EUR 72.3 trillion. That means that the 3.3 billion people living in the ten Asian countries¹¹ included in our analysis held almost one-third of global financial assets. However, loans to private households grew by 12.1% in the same period and thus much more strongly than their gross financial assets, causing liabilities to reach a new high of EUR 10.8 trillion at the end of 2017.

Gross financial assets of private households in Asia grew more strongly than global financial assets

As in previous years, gross financial assets of private households in Asia grew more strongly than global financial assets. In the region they increased by 9.7%, while worldwide gross financial assets grew by 7.7%. If we excluded Asia, the global growth rate would be „only“ 7.0%.

However, there were significant differences in terms of the growth dynamic in individual countries, which can roughly be divided into three groups. The first group includes the three most populous countries in Asia, China¹², India and Indonesia. Growth rates here came to 14.0% in China, 11.5% in India and 10.9% in Indonesia; these were not only above the global average, but also well above the regional average. The second group of countries consists of Singapore, Malaysia and South Korea, where gross financial assets of private households grew by 8.9%, 8.6% and 8.2% respectively and thus slower than in the region as a whole, but still stronger than on the global scale. Development in the third group of countries was below average in both respects. Growth came

¹¹ The analysis included financial assets of private households and not-for-profit organizations in China, India, Indonesia, Israel, Japan, Malaysia, Singapore, South Korea, Taiwan and Thailand. The term „financial assets of private households“ will be used from now on, however, for the sake of simplicity. Calculations of financial assets did not take into account valuables such as jewelry, precious metals, precious stones or paintings.

¹² The information for China is based on our own projections. Up-to-date data were still not available from the Chinese central bank at the time of going to press.

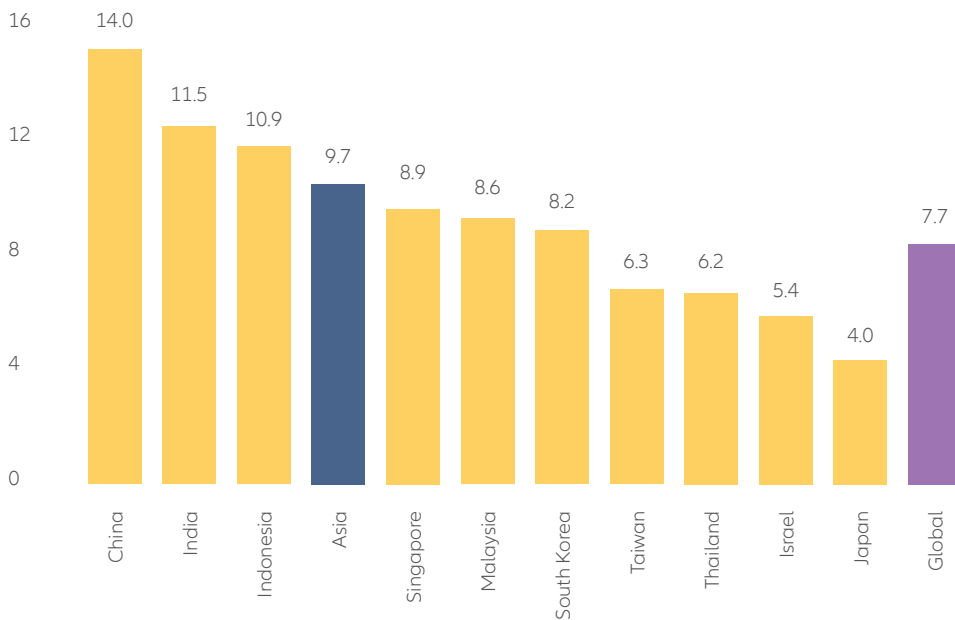
to around 6.0% in Taiwan and Thailand and 5.4% in Israel, while Japanese households – as so often in previous years – came last with growth of „only“ 4.0%. This was nevertheless the second-highest growth rate recorded by Japan since the financial crisis. 2013 was the only year in which gross financial assets of private households grew more strongly, at 5.8%.

80% of gross financial assets are concentrated in China and Japan

Financial assets are still unequally distributed in the region, with 80% of gross financial assets concentrated in two of the ten countries we analyzed: China and Japan. At the end of 2017, Chinese households held around half of all gross financial assets in Asia, while Japanese households accounted for just under

Financial assets of Asian households grew faster than global financial assets

Growth in gross financial assets 2017, in %



Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

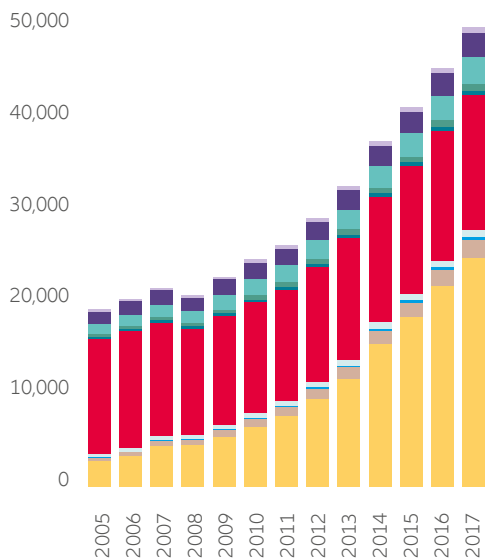
one-third, at EUR 14.3 trillion. The two countries' roles were the reverse of this ten years ago, when around 60% of total gross financial assets were held in Japan, while Chinese households owned only 20%.

Private households in India, the planet's second most populous country after China with 1.3 billion inhabitants, owned a much smaller share. Although their financial assets almost quadrupled between 2007 and 2017, they represented just 4.0% of total gross financial assets in the region last year, totaling the equivalent of EUR 1.9 trillion. India, South Ko-

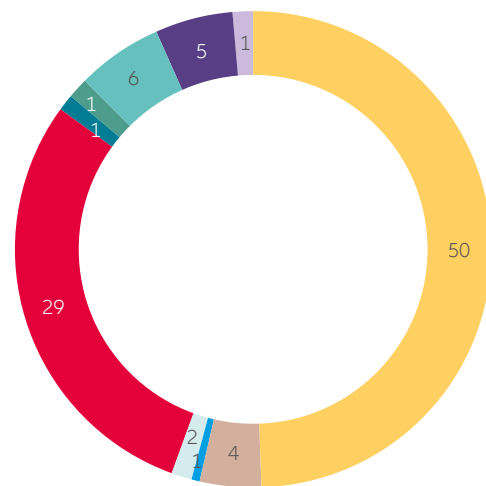
rea and Taiwan thus constituted the mid-table countries. Financial assets of private households totaled EUR 2.9 trillion in South Korea and EUR 2.6 trillion in Taiwan, corresponding to regional shares of 5.8% and 5.3%. In the other five countries, gross financial assets of private households were still well below the EUR 1 trillion mark. At the end of 2017 they came to the equivalent of EUR 725 billion in Israel, EUR 719 billion in the city state of Singapore, EUR

80% of the gross financial assets of Asian households come from China and Japan

Gross financial assets, in EUR bn



Gross financial assets 2017 by country, in %



- China
- India
- Indonesia
- Israel
- Japan
- Malaysia
- Singapore
- South Korea
- Taiwan
- Thailand

Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

607 billion in Thailand, EUR 499 billion in Malaysia and EUR 306 billion in Indonesia. These five countries' shares in total financial assets in Asia thus ranged between 1.5% and 0.6% and came to 5.9% in total.

Differences in gross financial assets per capita in Asia are greater than in any other region

In view of the sometimes considerable differences between the countries with regard to their level of economic development and the size of the population, however, the comparison of absolute gross financial assets of their private households is of only limited use. If we look at private households' financial assets in Asia and the individual countries in relation to the respective population, for example, using gross financial assets per capita as the basis for comparison, we get a different picture in both an international and an intra-regional comparison.

Asia comes only mid-table here by international standards: each of the region's 3.3 billion inhabitants theoretically had average gross financial assets of EUR 14,670 at the end of 2017. Although this figure was well above the average for Latin America (EUR 7,720) and Eastern Europe (EUR 6,490), it was much lower than the average figure for North America (EUR 200,280), Oceania (EUR 130,470) and Western Europe (EUR 87,240) and not least the global average of EUR 33,160.

A decisive factor in this below-average figure by international standards is gross financial assets per capita in the two most populous countries in Asia and worldwide, China and India, which have 1.4 billion and 1.3 billion inhabitants respectively. Gross financial assets per capita came to the equivalent of EUR 17,220 in China at the end of 2017. Although this was only about half the global average, it was above the regional average of EUR 14,670. In India, on the other hand, gross financial assets per capita totaled EUR 1,460, just one-tenth of this regional average. The only place where they were lower was Indonesia, the third-biggest country in Asia in terms of population and the fourth-largest worldwide behind the US, with 246 million inhabitants. Gross financial assets per capita here came to just EUR 1,160. They were also well below the international average in Malaysia, where gross financial assets per capita amounted to the equivalent of EUR 15,770 (as in China, this was above the regional average) and in Thailand, where each citizen arithmetically held EUR 8,790.

¹⁴ Vgl. UN Population Division, World Population Prospects, The 2017 Revision.

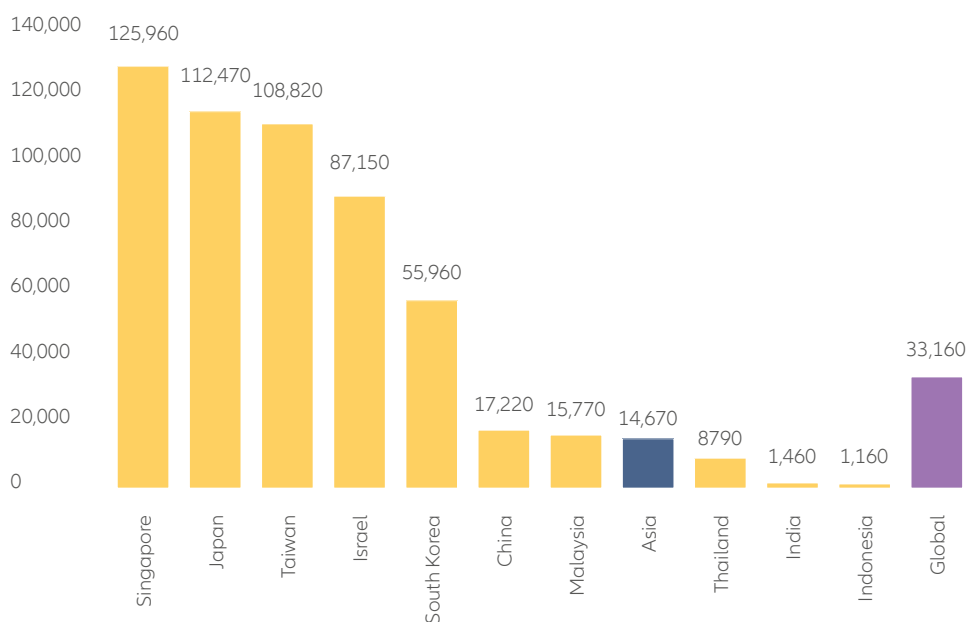
Not only were gross financial assets per capita in the other five countries above the regional and global average, but the countries also occupied the top spots in an international comparison. In Singapore, gross financial assets per capita were 108 times as high as in neighboring Indonesia: each of the city state's 5.7 million inhabitants theoretically held assets worth EUR 125,960. Singapore was thus not only the wealthiest country in Asia in terms of its inhabitants' gross financial assets per capita, but also ranked among the ten richest countries worldwide. In contrast, Indonesia and India were among the three poorest countries. The gap between the richest and

the poorest country was wider in Asia than in any other region of the world.

Gross financial assets were also above the EUR 100,000 mark in Japan and Taiwan, at the equivalent of EUR 112,470 and EUR 108,820 respectively; this put these two countries among the 20 richest countries worldwide, along with Israel, where citizens held average assets of EUR 87,150. South Korea, where the average figure was EUR 55,960, less than half as high as in Singapore, completed the top half of the rankings and came in 22nd place in an international comparison.

Asia's gross financial assets per capita below global average - Singapore in the top ten

Gross financial assets per capita 2017, in EUR



Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, UN Population Division, Thomson Reuters Eikon, Allianz SE.

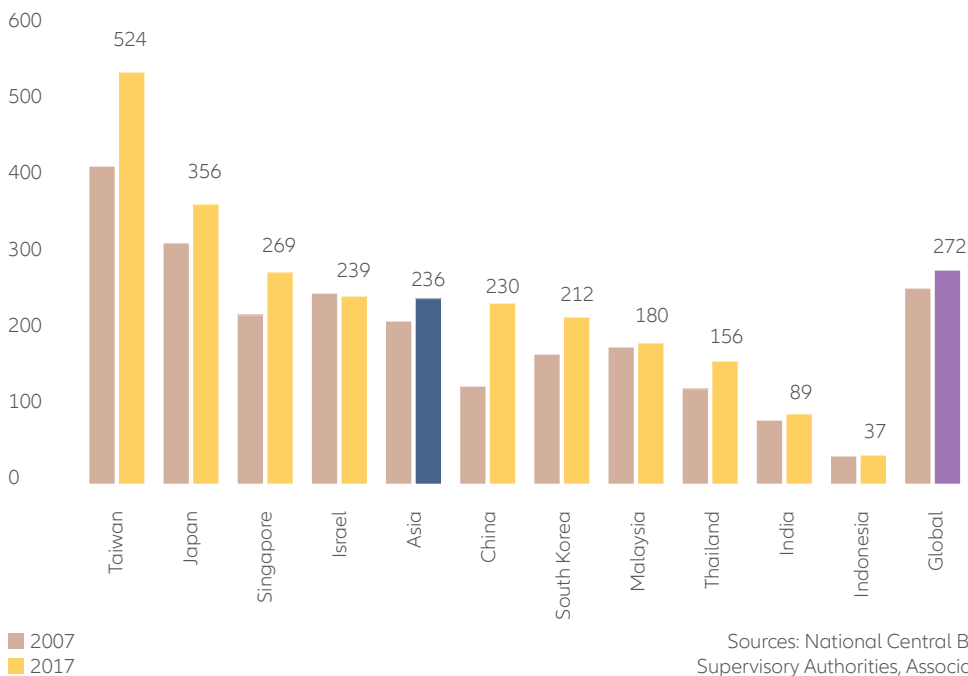
Gross financial assets per capita reflect the level of economic development – asset ratio below the global average

Gross financial assets per capita reflect the level of economic development and access to financial services among large parts of the population. The higher GDP is per capita, the higher financial assets per capita generally

are as well. If we therefore use asset ratios, i.e. the ratio of gross financial assets to respective GDP, as the basis for comparison, two things become apparent. Firstly, financial assets of private households in all countries in Asia – with the exception of Israel – have grown faster than GDP since 2007, despite the financial crisis. Secondly, the countries’ asset ratios are closer together than gross financial assets per capita: the asset ratio of the country that is in first place is „only“ 37 times, not 108 times, as high as that of the country that is bottom of the league.

Since 2007, gross financial assets have grown faster than GDP in (almost) all countries

Gross financial assets as % of GDP 2007 and 2017



Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

By international standards, however, the region as a whole continues to lag behind here. Gross financial assets at the end of 2017 came to 236% of GDP generated by the ten countries, and were thus below the global average of 272%. Only in Taiwan and Japan were asset ratios significantly higher than this, at 524% and 356% respectively. Although Singapore has substantially narrowed the gap separating it from the global average in the last ten years – in 2007, it was still as high as 33 percentage points – its asset ratio remained below the average figure, albeit only very slightly, at 269%, despite high per capita assets. The city state therefore ranked top of the mid-table countries, which also include Israel, China and South Korea. The asset ratios in Israel and China were close to the regional average, at 239% and 230%; in South Korea, where the Asia crisis in the late 1990s has left its mark on financial assets of private households, the ratio was 212%.

In the other countries, the asset ratio was in some cases still well below the 200% mark. In Malaysia, where the asset ratio was much higher than in South Korea and China ten years ago, gross financial assets of private households came to 180% of GDP. In Thailand, they came to 156%. This was followed, after a significant gap, by India and Indonesia, which still had to make up ground in terms of access to financial services and opportunities to build up financial assets for large parts of the

population. While the asset ratio in India has risen from 81% to 89% in the last ten years, it remained below 40% in Indonesia at the end of 2017.

Build-up and diversification of financial assets depends on access to financial services

One explanation for the low asset ratio in Indonesia could be that, according to the World Bank,¹⁴ only 49.5% of the Indonesian population aged 25 and over had a bank account, and therefore access to formal financial services, at the end of 2017. Nevertheless, this reflects the success of the government's information campaign to improve general financial education among the public;¹⁵ in 2011 the rate was only 21.3%.

The Indian government has also been successful with its Jan Dhan Yojana program, launched in 2014. The aim is for every Indian household to have a bank account in the long term. To create additional incentives for people to open a bank account, the program offers special conditions when an account is opened, such as term life insurance and accident insurance, interest on credit, waiver of minimum credit, direct payment of social se-

14 Cf. Demirgüç-Kunt, Asli et al. (2018): The Global Findex Database 2017.

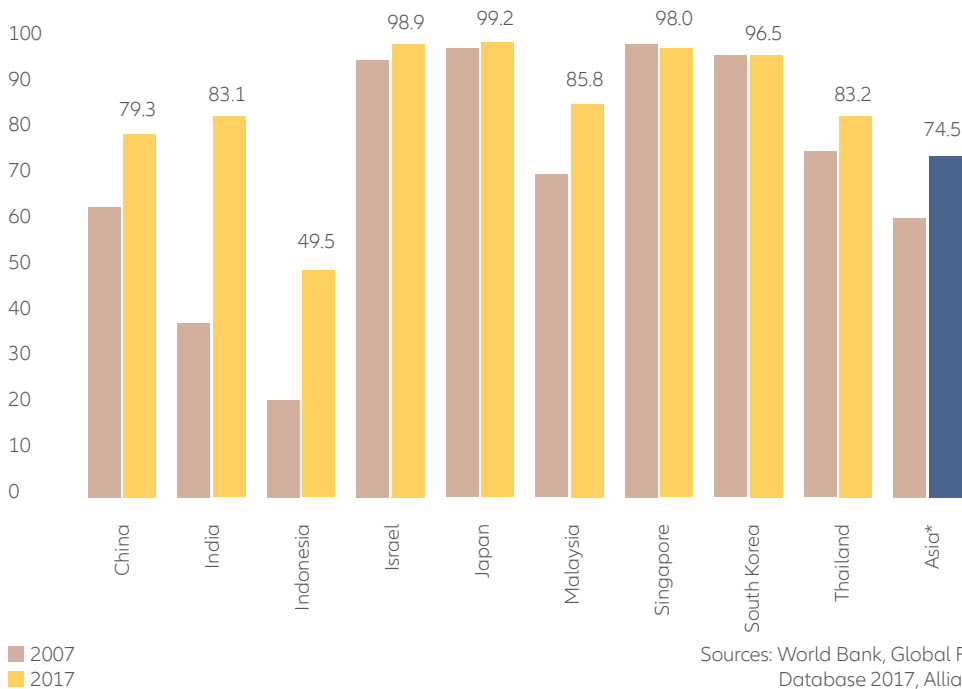
15 Cf. OJK (2017): National Strategy on Indonesian Financial Literacy.

curity and welfare benefits into the account as well as the arrangement of an overdraft facility after six months – preferably for the female head of the household.¹⁶ The program has been further boosted by the introduction of new national identification numbers since 2016. As a result, 83.1% of the Indian population had a bank account in 2017, compared with just 38.0% in 2011.

The rate in Thailand is just as high as in India; 83.2% of the Thai population had a bank account in 2017¹⁷. China is lagging slightly behind in this respect, with „only“ 79.3% of those surveyed reporting that they had a bank account. However, this still represents substantial progress:¹⁸ only 63.3% could make this claim in 2011. In Malaysia, the ratio rose from 70.5% to 85.8%. It also increased further in almost all other countries, reaching nearly 100% by the end of 2017. The only exception was Singapore, where the data showed that „only“ 98% of the population had a bank account, and not 99% as in 2011.

Access to financial services

Percentage of population aged 25 and over with a bank account, in %



16 Cf. www.pmjdy.gov.in/scheme. Pradhan Mantri Jan Dhan Yojana (PMJDY).

17 The proportion of the population that actually has access to financial services may nevertheless differ from this. According to a survey by the Bank of Thailand in 2016, for example, 97.3% of households in Thailand said that they had access to financial services, with 86.3% using this service while 11.0% deliberately chose not to use the service. Commercial banks and Specialized Financial Institutions (SFIs) were the most important financial service providers and, along with ATMs, were also used the most, although non-banks and electronic payment system providers are growing in popularity. In contrast, the market share of service providers from the informal sector has fallen further, as wished. 94.2% of households said that they had bank and/or savings deposits. Those that did not have any savings deposits with banks generally cited a drop in disposable income as the reason for this. Cf. Bank of Thailand (2017): Financial Access Survey of Thai Households 2016.

18 Cf. World Bank Group and The People’s Bank of China (2018): Toward Universal Financial Inclusion in China. Models, Challenges, and Global Lessons

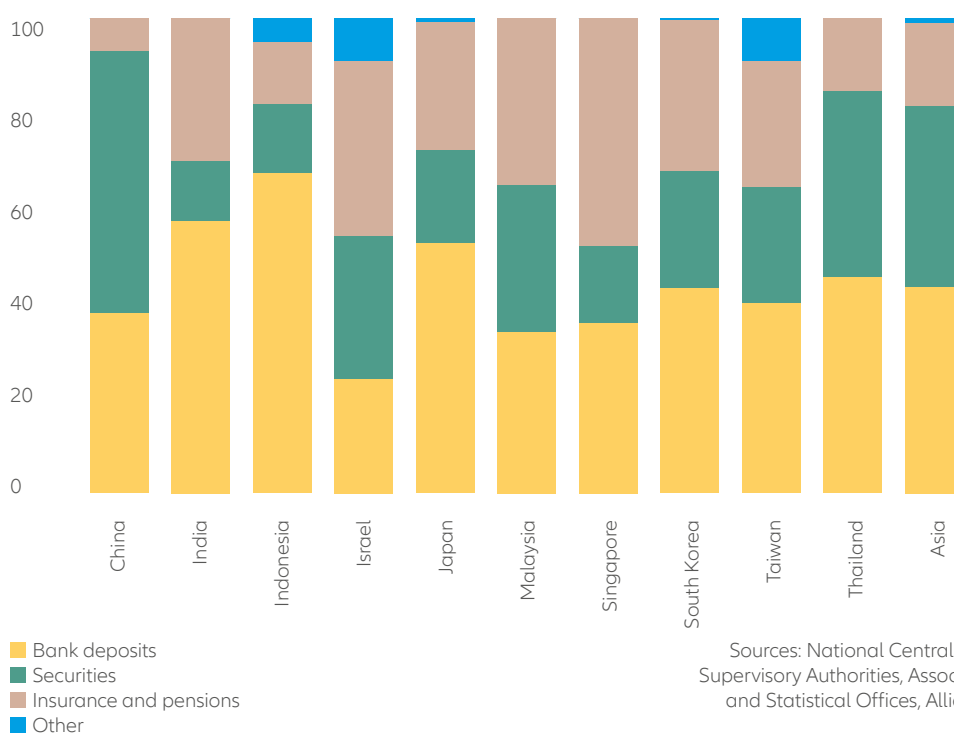
Bank deposits remain the most popular asset class

Bank deposits were once again the most popular type of investment in Asia in 2017. At the end of 2017, private households held a total of 43% of their financial assets, which thus still represented the bulk of their financial assets, in the form of bank balances. This was followed in second place by securities at 38% and in third place by receivables from in-

surance companies and pension funds, which accounted for around 17% of financial assets. Access to financial services and the level of development of the financial system are crucial to the diversification of financial assets of private households. Other factors are the age distribution of the population and the structure of the pension system: the higher the old-age dependency ratio and the lower the benefit level under the state pension system, the higher the demand for capital-funded company and private pension schemes.

Diversification of financial assets reflects the development of the financial system

Gross financial assets by asset class 2017, in %



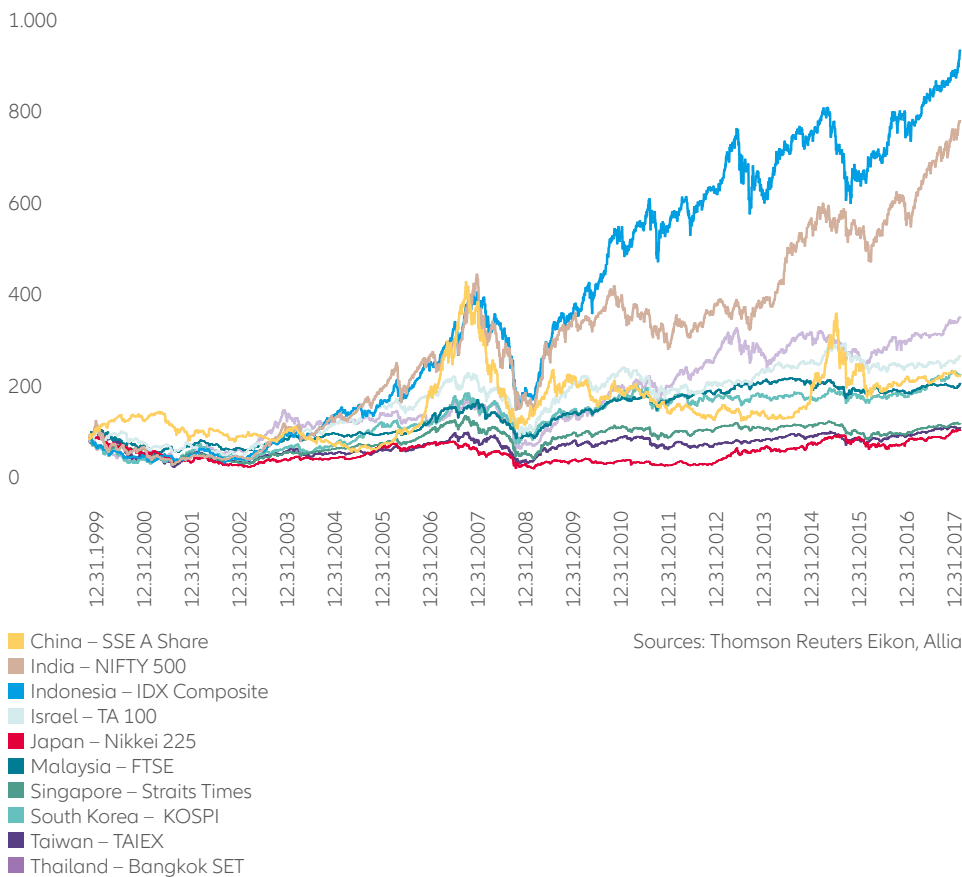
¹⁹ Vgl. World Bank Group und The People's Bank of China (2018): Toward Universal Financial Inclusion in China. Models, Challenges, and Global Lessons.

The share of bank deposits in total financial assets was highest in Indonesia, which was due to the fact that a large proportion of the population still had no or only limited access to financial services. In India too, where over 83% of the population now has a bank account and banks have significantly improved their product range and accessibility in recent years, the share of bank deposits in the overall portfolio remained well above 50%. This was followed by receivables from life insurance policies and – to a lesser extent – pension funds, which accounted for about one-third of financial assets. Japan, where the proportion of bank deposits has traditionally also been

high at over 50%, albeit with a slight downward trend, does not fit into this explanatory model. The positive development of the Nikkei in the last few years has made investment in securities more attractive again. As a result, Japanese households had invested around 20% of their financial assets in shares as at the end of 2017, for the first time since 2006. Although the share of bank deposits was below 50% in Thailand (45.4%), South Korea (43.1%) and Taiwan (39.9%), bank deposits were also the most popular asset class among private households here.

Investors benefit from rising stock markets

Benchmark indices (31.12.1999 = 100)



Sources: Thomson Reuters Eikon, Allianz SE.

Private households in China had the highest proportion of securities in their portfolios, as in recent years they have increasingly shifted their bank deposits in particular into higher-yield securities-based products, which are frequently also offered by banks. Securities were least popular among private households in India and Indonesia. In India, private households held only 12.6% of their financial assets (directly) in the form of securities, while in Indonesia the share was around 15%. That means that private households in these two countries benefited to only a limited extent from the dynamic performance of the countries' stock markets. The benchmark index for the Indonesian stock exchange has climbed more than 800% since the turn of the millennium, while India's leading index has gained over 600%. Growth was somewhat more muted in the other countries: in Thailand, the leading index rose more than 250% in the same period, while in China, Malaysia and South Korea growth came to slightly over 100%. Growth rates were much lower in Japan (20%), Taiwan (26%) and Singapore (34%), which explains the restraint shown by private households in these countries with regard to this asset class.

Pension schemes becoming more important

Private households in Singapore had the largest share of receivables from life insurance policies and pension funds in their portfolios. This asset class accounted for 48.0% of their total financial assets at the end of 2017. The driving force behind this is the rapid demographic change that the city state is set to experience in the coming decades. Along with South Korea and Taiwan, Singapore is one of the most rapidly aging countries in Asia. In all three countries, the old-age dependency ratio – i.e. the ratio of people of retirement age to the working-age population – will rise from its current level of about 20% to over 60% by the middle of the century.

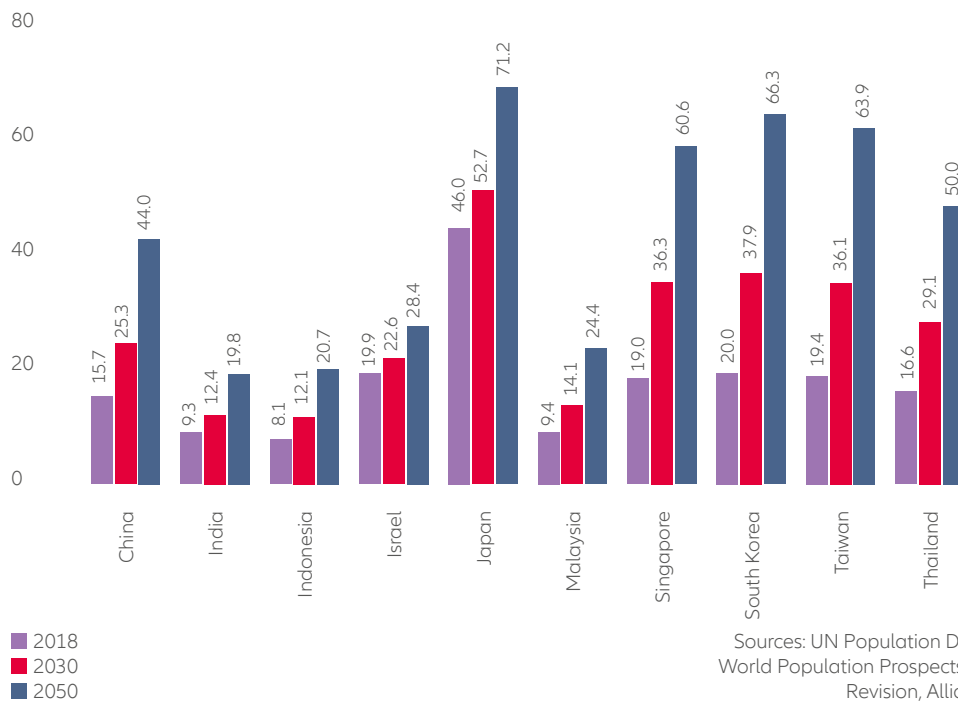
The old-age dependency ratio is also expected to almost triple in the other countries over the same period, although starting from a lower level. In Thailand, there are expected to be two people of working age for every pensioner in 2050, compared with the current old-age dependency ratio of 16.6%. One cause for concern in this regard is that, according to a recent survey by the Bank of Thailand, the proportion of households planning to save for their retirement or already doing this fell from 59% in 2013 to 44% in 2016. In China, the

UN anticipates a rise in the old-age dependency ratio from 15.7% to 44.0% in its current forecast. It remains to be seen to what extent the incentives introduced by the Chinese government to encourage people to have more children will have an impact and thus rising birthrates will curb the future aging of the population.

Malaysia (9.4%), India (9.3%) and Indonesia (8.1%) are currently still classed as young societies, owing to their low old-age dependency ratios. However, declining birth rates and increasing life expectancy in Malaysia mean that by the middle of the century, there are likely to be around 24 people aged 65 and over for every 100 people aged between 15 and 64. This explains why the Malaysian government is attaching a lot of importance to strengthening capital-funded pension schemes. Receivables from insurance companies and pension funds currently account for 35.3% of the portfolios of private households in Malaysia, which means that they also have

Accelerating ageing of population requires greater savings efforts

Old age dependency ratio, in %

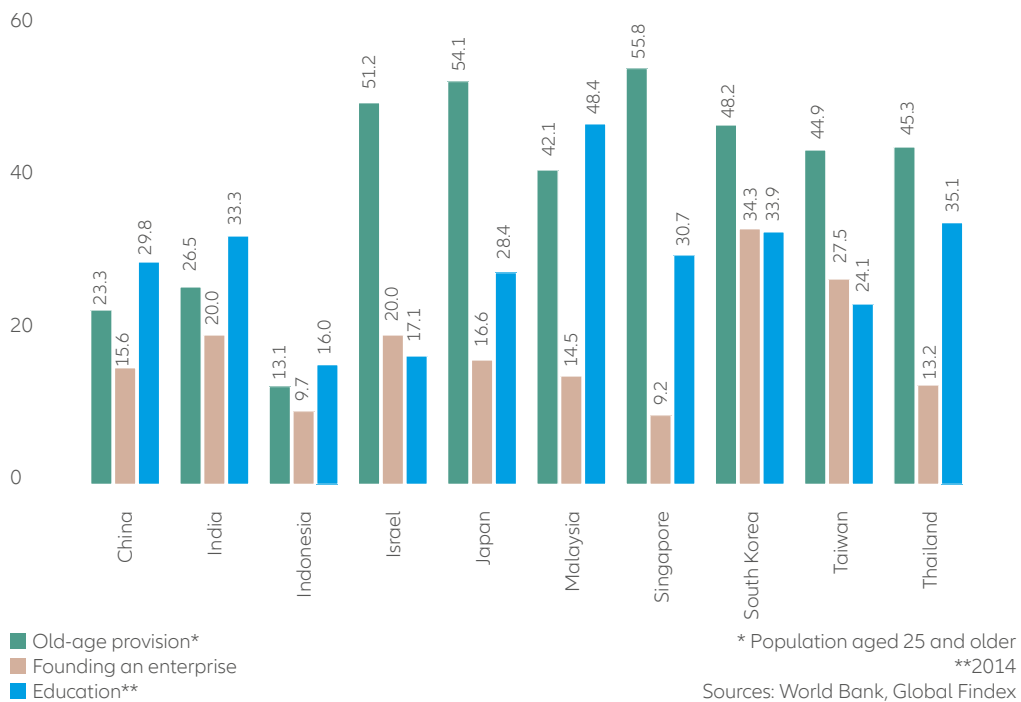


the most balanced investment structure in the region. They have invested their financial assets in almost equal proportions in banks (33.9%), life insurance policies and pension funds (35.3%) and securities (30.8%). The old-age dependency ratio is expected to reach 19% in India and 21% in Indonesia in 2050. However, this applies only provided that the retirement age in all countries will be at 65 in the long term.

There is expected to be a smaller increase in Israel and Japan. In view of immigration and a birth rate that currently stands at 2.9 children per woman and that the UN expects to fall to 2.5 children by 2050, the old-age dependency ratio in Israel is set to rise only moderately by international standards from 19.9% to 28.4%. In Japan, on the other hand, where there are already 46 people of retirement age for every 100 people of working age, the old-age dependency ratio is expected to be 71.2% in 2050.

Old-age provision in most countries the most important reason for savings

Reason for savings, named by x% of the population



In view of anticipated demographic developments, it is hardly surprising that the majority of savers in the countries with the highest expected old-age dependency ratios, Japan, Singapore, South Korea, Taiwan and Thailand, were most likely to cite provision for their retirement when asked about their reasons for saving. In China, Indonesia, India and Malaysia, on the other hand, the reason most frequently stated by savers was their children's education.

Liabilities have grown more strongly than gross financial assets

With societies increasingly aging, the question arises of whether households will be able to make adequate provisions to at least maintain their accustomed standard of living in retirement. In this context, it is worrying that total debts of Asian households have risen by an average of 9.0% per year in the last ten years, while their financial assets have grown by only 8.5%. There are nevertheless significant differences between individual countries. The rapid growth in liabilities is due not least to a need to catch up in emerging countries in the region and to the fact that many households in these countries did not have access to formal bank

loans for a long time. Liabilities grew much more strongly than gross financial assets in some cases in China, India, Indonesia, Malaysia and Thailand, while the trend was the reverse of this in Japan, Singapore, South Korea and Taiwan, where assets grew more strongly than liabilities.

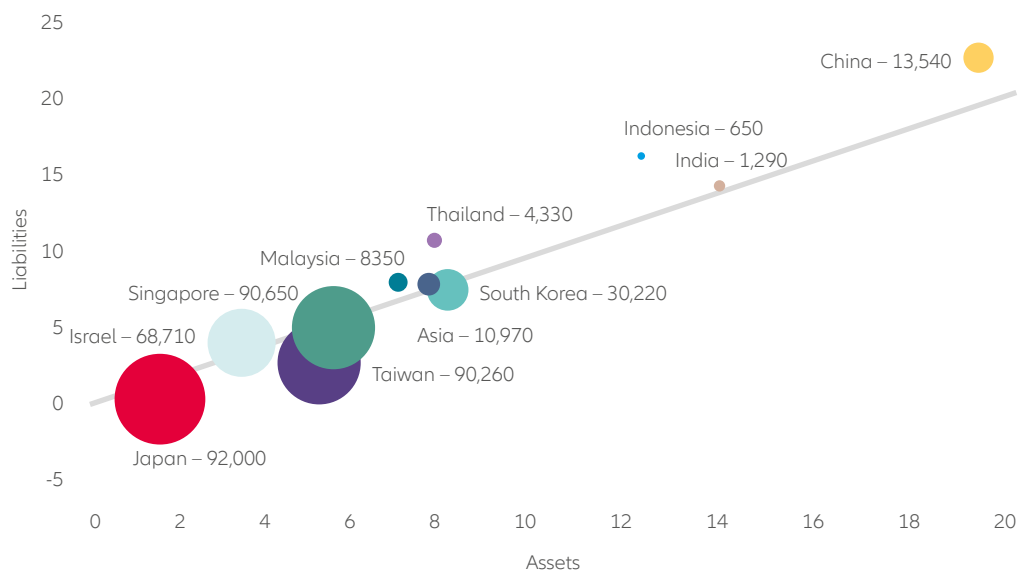
Growth was most dynamic in China. While gross financial assets per capita have increased by an average of about 20% per year since 2007, liabilities have risen by 23%. This is followed by India and Indonesia, where growth rates also reached double-digit figures. Growth rates in the other countries were well below 10%. At the lower end of the scale is Japan, where gross financial assets per capita have grown by an average of 1.4% and liabilities per capita by just 0.8% per year.

That means Japan once again topped the rankings of the richest countries in Asia in 2017 with net financial assets per capita of EUR 92,000. In international terms it was in sixth place, ahead of Singapore (EUR 90,650) and Taiwan (EUR 90,260). Israel and South Korea were also in the top half of the rankings, albeit with a substantial gap: average net financial assets per capita came to the equivalent of EUR 68,710 in Israel and EUR 30,220 in South Korea at the end of 2017. China was in first place in the bottom half, with average net financial assets of EUR 13,540 per capita. The

figures for the other countries were well below the regional average of EUR 10,970, at EUR 8,350 in Malaysia, just EUR 4,330 in Thailand and EUR 1,290 in India. Indonesia came last with net financial assets of only EUR 650 per capita.

Since 2007, liabilities of private households have grown slightly faster than assets

Average annual growth in gross financial assets and liabilities per capita* 2007-2017, in %



* The size of the bubbles corresponds to the respective net financial assets per capita in EUR in 2017
Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, UN Population Division, Thomson Reuters Eikon, Allianz SE.

Households in China and Japan accounted for three-quarters of liabilities

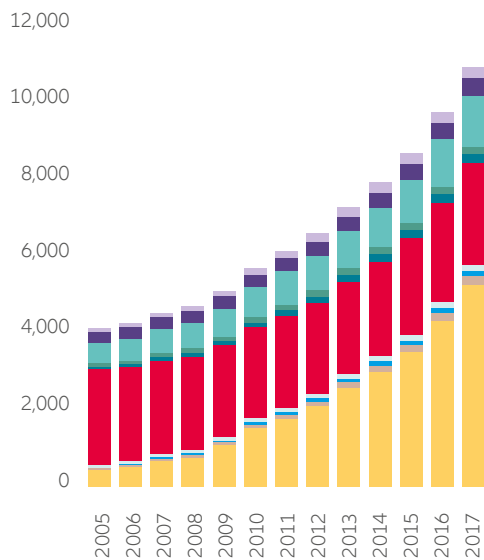
The concentration of liabilities was almost identical to the regional distribution of gross financial assets, with China and Japan once again playing a dominant role. Chinese households held 48% of the total volume of outstanding credit of EUR 10.8 trillion at the

end of 2017, while Japanese households held 24% and South Korean households 12%. Taiwan had a share of 4% and the other countries each had a share of about 2%, with the exception of Indonesia, whose share was only around 1%.

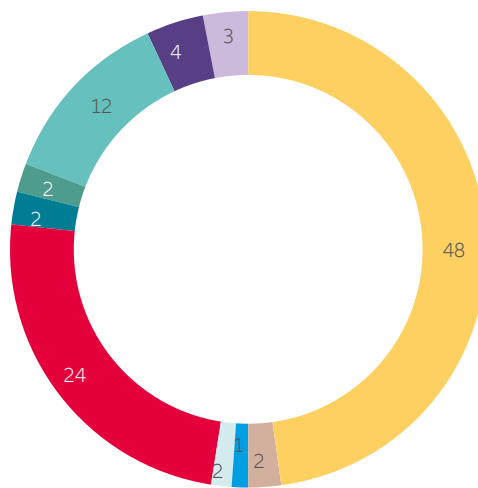
What is problematic, however, is not the individual countries' shares in the region's total debt, but the debt ratio of private households. Liabilities of private households continued to grow more strongly than GDP last year in all countries apart from Malaysia and Thailand. Households in South Korea once again

China and Japan account for 75% of Asian households' liabilities

Liabilities, in EUR bn



Liabilities 2017 by countries, in %



- China
- India
- Indonesia
- Israel
- Japan
- Malaysia
- Singapore
- South Korea
- Taiwan
- Thailand

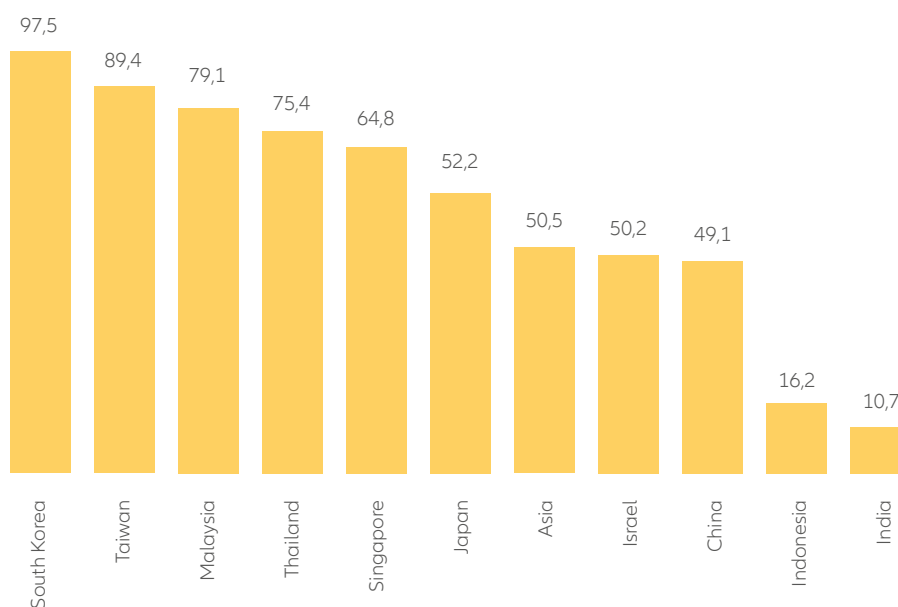
Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

had the highest debt ratio of 97.5%, followed by Taiwan at 89.4%, Malaysia at 84.4% and Thailand at 79.1%. However, while assets of private households in Taiwan are nearly six times as high as their liabilities, in the other three countries they are only twice as high. Given that assets and income are generally unequally distributed, private households in middle and lower income brackets in particular are likely to have difficulties reducing their debts. A potential interest rate reversal could

further exacerbate their financial situation. China, India and Indonesia were at the lower end of the scale. In China, the debt ratio now stands at 49.1%, almost 20 percentage points higher than five years ago. In India and Indonesia, on the other hand, liabilities have grown only marginally faster than GDP in the last few years. The debt ratio was 10.7% in India and 16.2% in Indonesia at the end of 2017.

Debt ratios continued to rise in most countries

Debt in % of GDP, 2017



Sources: National Central Banks, Supervisory Authorities, Associations and Statistical Offices, Thomson Reuters Eikon, Allianz SE.

Debt growth mars performance record

High levels of debt growth have tarnished the performance record for the last few years. Although the number of people belonging to the wealth middle class with net financial assets of between EUR 7,600 and EUR 45,600 increased to almost 700 million last year, their share in the total population stagnated at 20%. The proportion of people who belonged to the wealth upper class – around 240 million people in total – even fell slightly to 7.1%. The majority of the population (2.4 billion people or 73% of the total population of the Asian countries) still owned less than EUR 7,600 and therefore belonged to the wealth lower class in global terms. With society aging increasingly, further efforts are therefore needed to accelerate wealth-building across all income brackets.



AUSTRALIA AND NEW ZEALAND

Population

Total	29.6 m
Share of the global population	0.4%

GDP

Total	EUR 1,326bn
Share of global GDP	2.0%

Gross financial assets of private households

Total	EUR 3,804bn
Average	EUR 130,470 per capita
Share of global financial assets	2.3%

Debt of private households

Total	EUR 1,648bn
Average	EUR 56,530 per capita
As % of GDP	124.3%

Financial assets of Australian households grew by 6.5% or EUR 200 billion last year. Growth in private savings thus slowed noticeably year on year (2016: +9.3%), but was still well above that in New Zealand (+3.8%) and even slightly above the average for all industrialized countries (+6.5%). Australian private financial assets came to almost EUR 3.3 trillion in total at the end of 2017.

This asset growth was based on all three major asset classes: holdings of cash, demand and savings deposits were up 4.8% or EUR 33 billion, while receivables from insurance companies and pension funds rose by 7.0% or EUR 124 billion. The latter represent the dominant pillar in Australia's asset portfolio, with a share of just under 58%. Households invested around EUR 102 billion in this asset class last year, the bulk of their total volume of savings (EUR 141 billion). This was the highest figure since 2007. However, in the context of a further increase in bond yields, value gains declined from almost EUR 102 billion in 2016 to roughly EUR 22 billion, which meant that overall growth in this asset class slowed by 4.3 percentage points. In contrast, Australians are somewhat hesitant to invest in securities, which has caused their share in total financial assets to decline by more than 10 percentage points to just under 19% since the record high reached in 2005. In net terms, households disposed of shares or investment fund units worth a total of almost EUR 103 billion or around EUR 4,600 per capita in the period from 2007 to 2012. The net

figure has become positive again since then, but came to only EUR 2.2 billion or EUR 90 per capita last year. Private investors nevertheless benefited from a positive performance on the capital market. After moving sideways in the first nine months of the year, Australia's leading index finally began to make up for lost ground in the last quarter and was up 7.0% by the end of the year. Households achieved value gains of around EUR 36 billion or almost EUR 1,500 per capita, well above the average for the last decade (around EUR 21 billion annually in total). Overall, i.e. including inflows of funds, securities holdings grew by 6.6% last year. Of the total increase of EUR 200 billion in financial assets, EUR 141 billion (70%) thus related to households' own savings efforts (inflows of funds) and EUR 59 billion (30%) to changes in the value of the portfolio.

In contrast, households in neighboring New Zealand were much more willing to take risks when it came to investment. Securities accounted for the lion's share of almost 69% of private financial assets at the end of 2017, of which more than half comprised direct holdings of equities. However, the majority of these consisted of non-listed shares and other ownership interests. Households therefore barely benefited from strong growth of around 17% on the New Zealand stock exchange. Growth in this asset class slowed further in 2017, from +4.0% in the previous year to +1.6% or almost EUR 6 billion. Another reason for this relatively sluggish development could be that investors realized gains and sold securities; however, no official statistics are available for flows of funds.

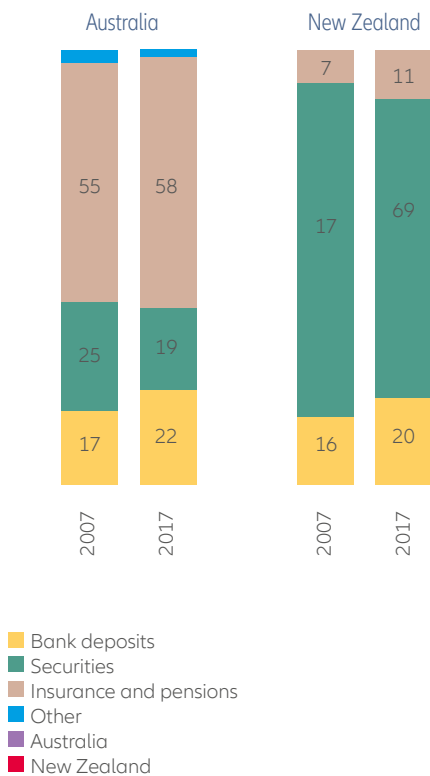
New Zealand citizens held one-fifth of their savings in the form of cash, demand and savings deposits, holdings of which grew by 7.1% or just under EUR 7 billion last year. Receivables of households from insurance companies and pension funds, which accounted for about 11% of financial assets, recorded the strongest growth among the three major asset classes of 11.8% or around EUR 6 billion. In total, savings in New Zealand rose by nearly EUR 19 billion to EUR 516 billion over the course of the year, representing growth of 3.8% compared with 2016.

Private debt is alarmingly high

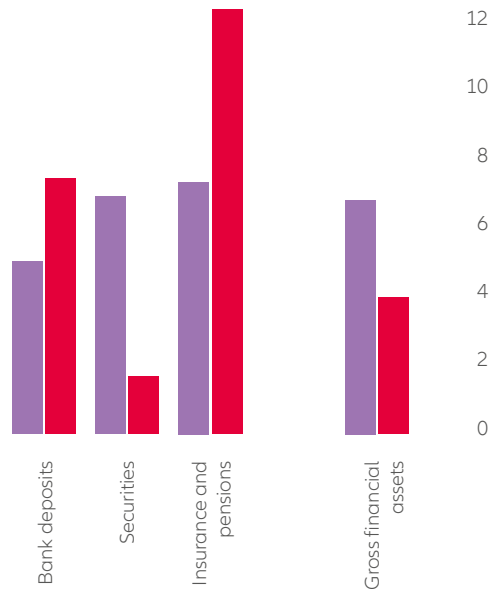
The outbreak of the financial crisis initially halted rapid growth in Australia’s private debt, which until then had rocketed at a double-digit rate on the back of stable economic development, rising incomes and easier access to credit. At the same time, the average savings rate shot up from just 0.7% in 2007 to 7.4% in

Unequal neighbors

Asset classes as % of gross financial assets



Growth in financial assets by asset class, 2017/2016 in %



Sources: Australian Bureau of Statistics, Reserve Bank of New Zealand, Allianz SE.

2009. The rate hovered at around the 7% mark until 2014 but since then has tended to decline again, most recently dropping to 2.9%. After growth in liabilities also dropped to a historically low level of 3.4% in 2012, debts have since begun to rise faster again, with liabilities increasing by an average of 6.1% per year or around EUR 390 billion in total. In 2017 there was a rise of 6.1%, while disposable incomes grew by only 1.9%. Relative debts of Australian households, measured as a percentage of disposable income, have increased again significantly in the last three years in particular – primarily owing to a rise in mortgage debt, although modest growth in incomes has also played a part. In 2017 alone, the ratio of debts to incomes climbed from 180.7% to 188.6%. Average liabilities per capita came to EUR 62,380 in Australia, twice the average for industrialized countries; worldwide, only Switzerland, Denmark and Norway exceed this figure.

The credit boom was fueled in particular by rapid growth in house prices. According to the OECD, the nominal house price index in Australia has climbed almost 27 points to 142.5 (2010 = 100) in the last three years alone, compared with an average rise of „only“ 18 points to 127.1 for all OECD countries. Low interest rates continue to help households to offset rising costs for ever larger loans. The ratio of interest payments to disposable income remained relatively stable in the final quarter at 8.9%, in line with the comparatively low level of the previous three years (average of 8.7%). The highest level to date was 13.2%, which was recorded in the third quarter of 2008. Regu-

latory measures introduced by the Australian supervisory authority and steps to tighten lending standards helped to curb a further deterioration in the resilience of household balance sheets. Although the proportion of non-performing household loans has recently risen slightly, it has remained at a relatively low level (NPL ratio below 1%). This suggests that the overall quality of outstanding loans is high. Nevertheless, the household sector has become more vulnerable, given that debts have risen again while growth in incomes has been only very moderate. Potential reductions in income, higher interest rates and an end to the house price boom could become a risk, particularly for households with high levels of debt. At least in Sydney, where there had been a positive explosion in prices, the housing market already seems to be cooling, with house prices there falling slightly in the second half of 2017.

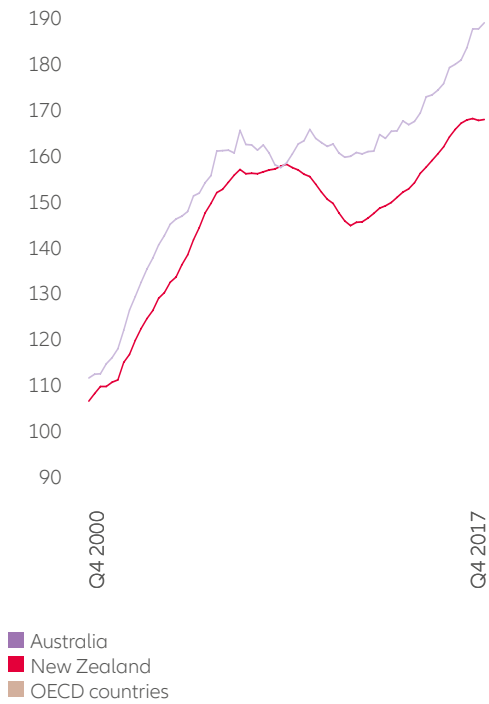
Developments in New Zealand tell a very similar „debt story“. Households there were also forced to massively reduce their borrowing as a result of the financial crisis. The ratio of debts to incomes, which had peaked at 158.6% in mid-2009, noticeably declined in subsequent years. Only in 2012, when credit growth accelerated significantly, did the ratio begin to rise again, climbing from 145.6% to 168.1% at the end of 2017. Debts grew by 6.5% or almost EUR 8 billion over the course of last year. Despite this, New Zealand still had a much lower debt ratio than Australia. Liabilities per capita came to an average of EUR 26,130, less than half the figure for Australia.

A property boom has also occurred in some regions of New Zealand over the last few years. In particular, growth in net immigration has fueled demand for home ownership, pushing up house prices. If the market were to become overheated, this could harbor the risk of a sharp price correction, which could threaten financial stability. This is because properties and mortgages are the dominant assets on the balance sheets of households and banks. New Zealand’s central bank has already taken various measures in recent years with the aim of cushioning the impact of a price correction on the property market. In particular, the limit on loan-to-value ratios

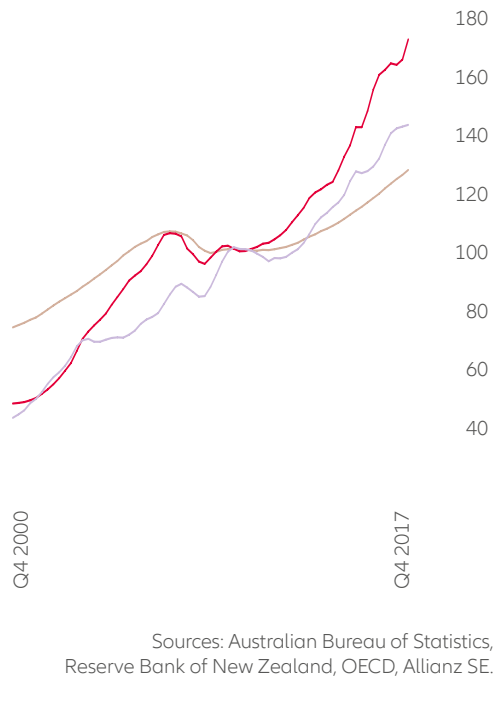
that has been in force since October 2016 appears to be having an effect. Nominal growth in house prices slowed to an average of 10.1% in 2017, compared with 18.0% in the previous year. This lower house price inflation contributed to a slight slowdown in credit growth from 8.2% in 2016 to 6.6%. However, debts in the household sector remain the biggest single risk to the financial system, as New Zealand’s central bank emphasizes once again in its latest report on financial stability.

Rising house prices drive debt growth

Debt as % of disposable income



Nominal house price index, 2010 = 100



Sources: Australian Bureau of Statistics, Reserve Bank of New Zealand, OECD, Allianz SE.

Differences in the ratio of assets to liabilities

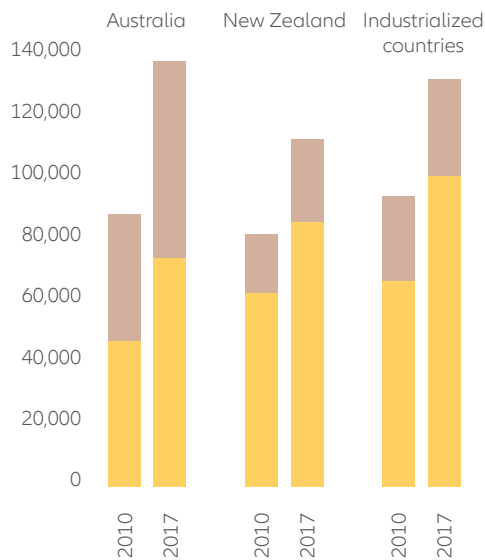
Looking at the region as a whole, half of the population had high net financial assets in a global comparison, i.e. an average of more than EUR 45,600 per capita, at the end of 2017. In North America this proportion came in at 41%, whereas „only“ around 35% of the population of western Europe falls into this category. In terms of the national distribution of wealth, the richest 10% of Australian house-

holds own around 45% of total private assets, while the proportion in New Zealand comes to almost 50%. The average for industrialized countries is estimated at 51%.

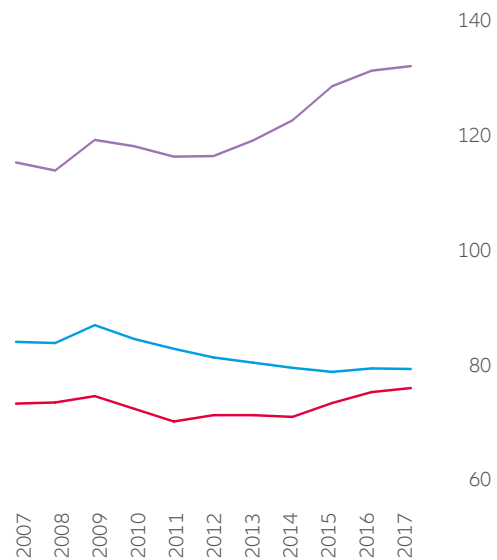
If we only look at the assets side of the wealth balance sheet, then at the end of last year, Australians had average per capita financial assets of EUR 134,460, putting them 23% ahead of their neighbors in New Zealand (EUR 109,700 per capita). Following deductions for liabilities, however, the latter are in

Australian debt well above industrial country average

Net financial assets and debt per capita, in EUR



Liabilities as % of GDP



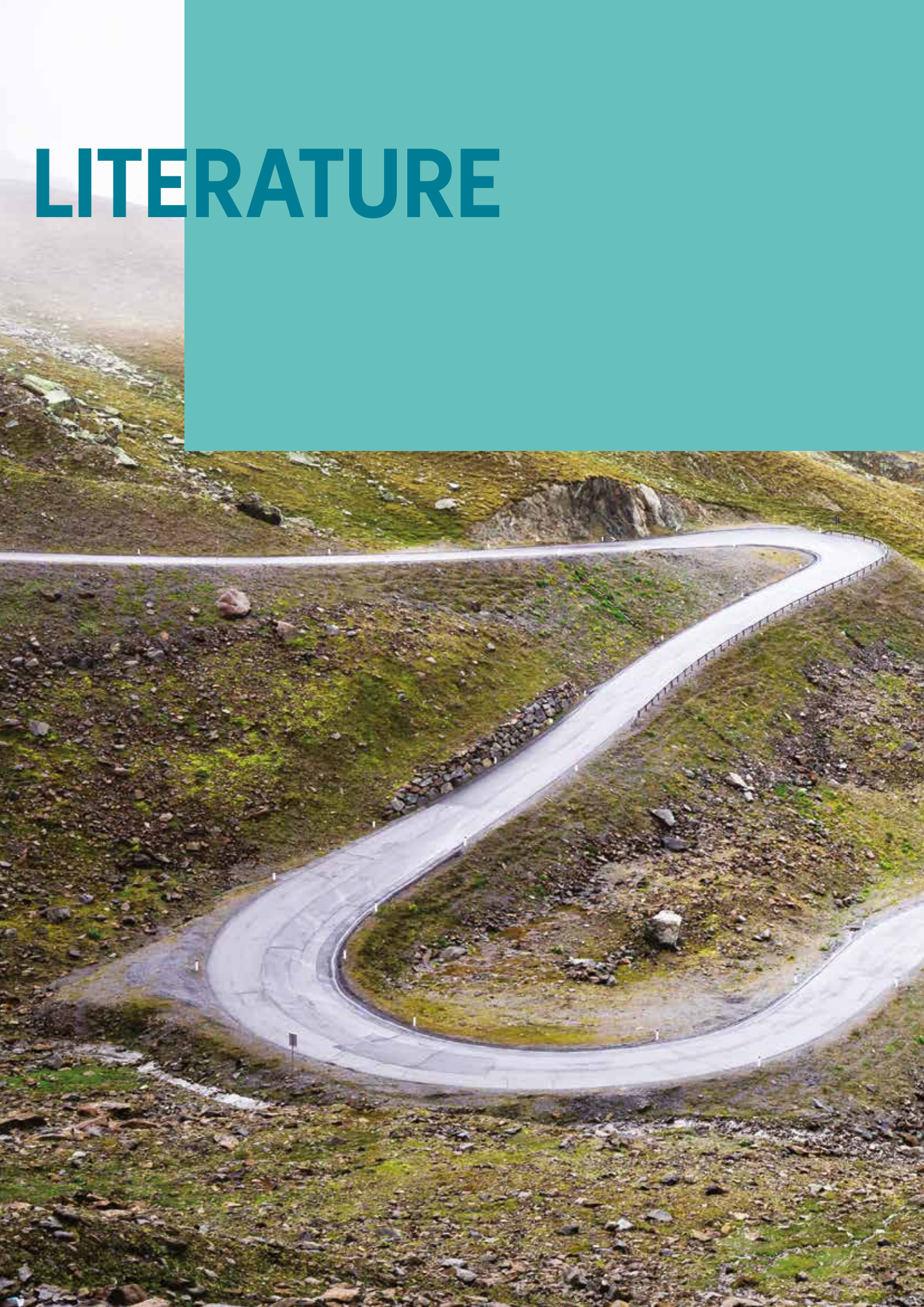
- Australia
- New Zealand
- Industrialized countries
- Net financial assets
- Liabilities

Sources: Australian Bureau of Statistics, Reserve Bank of New Zealand, Thomson Reuters Eikon, UN Population Division, Allianz SE.

a much better position: due to the relatively high debt burden, Australian financial assets fell to only EUR 72,080 per capita in net terms, whereas in New Zealand, average per capita assets came in at EUR 83,570 in net terms. This means that Australian households are more indebted than their counterparts in New Zealand in both absolute and relative terms. For each euro borrowed in Australia, there were assets worth EUR 2.20, while households in New Zealand had EUR 4.20 in assets for each liability of one euro. This is also reflected in the ratio of debt to GDP. At the end of 2017, the ratio of private debt to nominal economic output in Australia was the second-highest worldwide at 131.2%, after Denmark at 132.1%, and was around 52 percentage points above the average for industrialized countries (78.7%). In New Zealand, on the other hand, the ratio is only beginning to come close to this level, at 75.4%.

In the global league of the highest net per capita financial assets, New Zealand is in eleventh place, after Canada, and two places ahead of Australia. Compared with 2000, however, the country has fallen two places, whereas Australia has climbed from 18th to 13th place. This reflects the fact that not only debts, but also assets have risen significantly in Australia, growing by an average of 8.4% per year since the end of 2000, compared with an average of 6.2% in New Zealand.

LITERATURE



Ampudia, Miguel et al.: "Monetary Policy and Household Inequality", ECB Working Paper Series, Discussion Papers, No. 2170, July 2018.

Ariyapruchaya, Kiatipong: "Thailand's Household Sector Balance Sheet Dynamics: Evidence from Microeconomic and Macroeconomic Data", IFC Bulletin, No. 25, S. 91-100, 2007.

Bank of Thailand (2018): Financial Stability Report 2017, Bangkok 2018.

Bank of Thailand (2017): Financial Access Survey of Thai Households 2016, Bangkok 2017.

Board of Governors of the Federal Reserve System: "Changes in U.S. Family Finances from 2013 to 2016: „Evidence from the Survey of Consumer Finances“, September 2017.

Bonnet, Odran et al.: "Does Housing Capital Contribute to Inequality? A Comment on Thomas Piketty's Capital in the 21st Century", Sciences Po Economics Discussion Papers, Discussion paper 2014-07, 2014.

Brandmeir, Kathrin and Holzhausen, Arne: "Das Nettozinseinkommen der privaten Haushalte", Working Paper No. 212, Allianz Research, February 2018.

Davies, James B. et al.: "The Level and Distribution of Global Household Wealth", November 2009.

Demirgüç-Kunt, Asli et al. (2018): The Global Findex Database 2017. Measuring Financial Inclusion and the Fintech Revolution, ed.: World Bank Group, Washington, D.C. 2018.

Demirguc-Kunt, Asli et al.: "The Global Findex Database 2014: Measuring Financial Inclusion around the World", Policy Research Working Paper 7255, World Bank, Washington, D.C., 2015.

European Central Bank: "Annual Report 2017", 2018.

European Central Bank: "Eurosystem Household Finance and Consumption Survey", 2014.

European Central Bank: "Eurosystem Household Finance and Consumption Survey", 2016.

IMF (2017): Financial Access Survey 2017, Washington, D.C. 02/10/2017.

Jordà, Òscar et al.: "The Rate of Return on Everything, 1870-2015", cesifo Working Paper No. 6899, February 2018.

Ortiz-Juárez, Eduardo: "Applying PovRisk Tool to 15 Countries in Latin America. Regional Human Development Report for Latin America and the Caribbean: Update policy note", United Nations Development Programme, 2017.

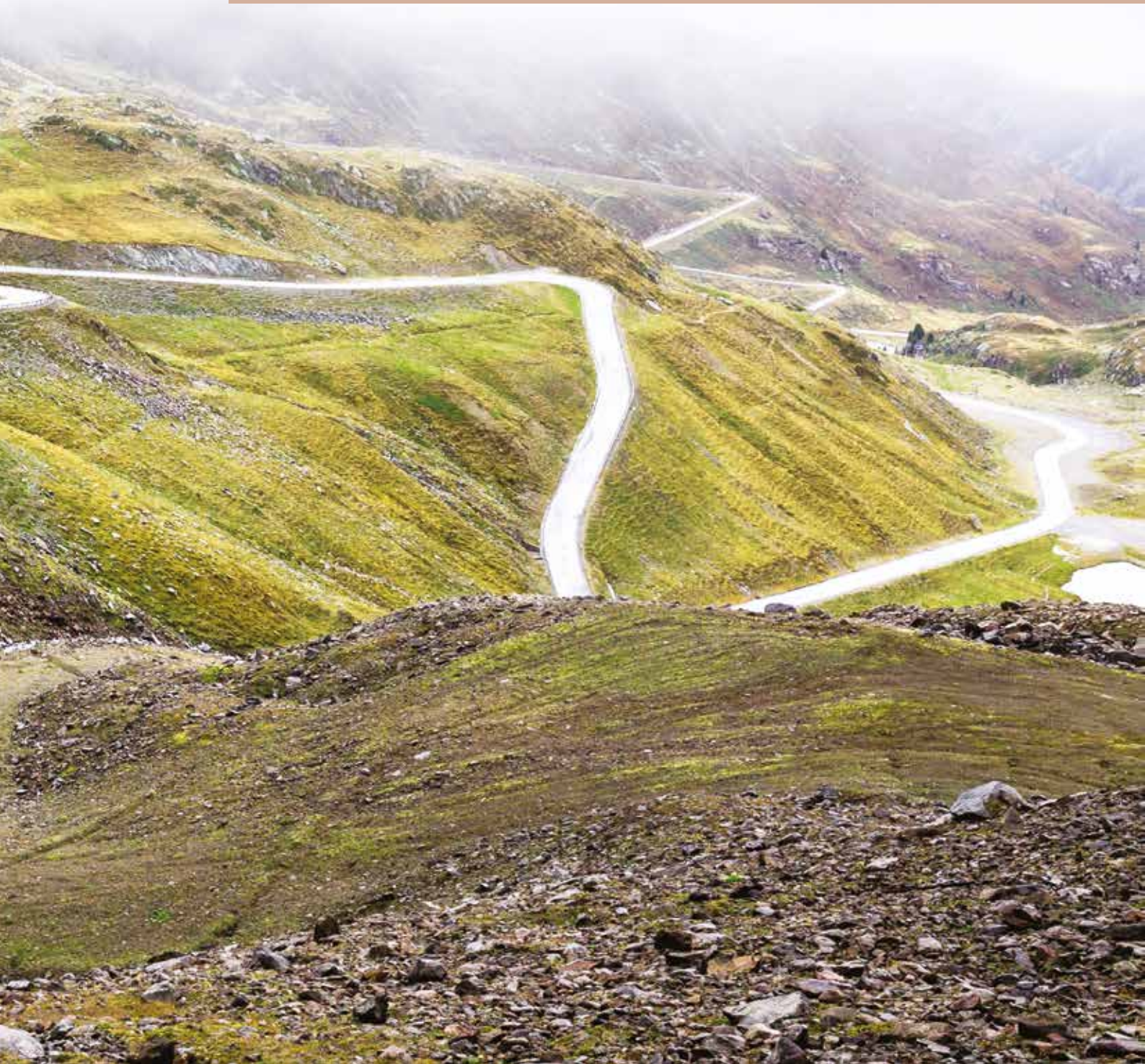
Piketty, Thomas: "Capital in the Twenty-First Century", Harvard University Press, 2014.

Tiongson, Erwin R. et al.: "The Crisis hits Home: Stress-Testing Households in Europe and Central Asia", The International Bank for Reconstruction and Development / The World Bank, 2010.

World Bank Group (2018): The Global Findex Database.

World Bank Group and The People's Bank of China (2018): Toward Universal Financial Inclusion in China. Models, Challenges, and Global Lessons, Washington, D.C. 2018

APPENDIX



Appendix A: Methodological comments

General assumptions

The Allianz Global Wealth Report is based on data from 53 countries. This group of countries covers 91% of global GDP and 68% of the global population. In 43 countries, we had access to statistics from the macroeconomic financial accounts. 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 some 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 Chile, Columbia has fairly good data that can be used to analyze the financial structure of private household assets. In Argentina, for example, 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 2017.

Statistical distinctions

The process associated with the introduction of the European System of Accounts 2010 (ESA 2010) in September 2014 involved updating and harmonizing the guidelines governing the preparation of many macroeconomic statistics. The new requirements also apply to the macroeconomic financial accounts. One change relates to private households: under the ESVG 2010 regulations, the two sectors „Private households“ and „Private organizations without pecuniary reward“ are no longer grouped, but are now reported separately. This also has implications for the Allianz Global Wealth Report, which takes data from the macroeconomic financial accounts as a basis where available. For many countries, however - particularly those outside of the European Union - there is no separate data available for these sectors in general, or at least not at present. So in order to ensure global comparability, this publication analyzes both sectors together under the heading „private households“.

Determination of wealth bands for global wealth classes

Lower wealth threshold: there is a close link between financial assets and the incomes of private households. According to Davies et al. (2009), 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 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 has reached a relevant volume for the first time. This value marks the lower threshold for the global wealth middle class. 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 middle wealth class at 30% and 180% of average per capita assets. If we use net financial assets to calculate the two thresholds, we arrive at an asset range of between EUR 7,600 and EUR 45,600 for the global middle wealth class in 2017. The gross thresholds lie at EUR 9,900 and EUR 59,700.

Individuals with higher per capita financial assets then belong to the global high wealth class, whereas those with lower per capita financial assets belong to the „low wealth“ class.

These asset bands can, of course, also be used for the purposes of country classification. Countries in which the average net per capita financial assets are less than EUR 7,600 can be referred to as „low wealth countries“ (LWCs). „Middle wealth countries“ (MWCs) are all countries with average net per capita financial assets of between EUR 7,600 and EUR 45,600; finally, all countries with even higher average net per capita financial assets are described as „high wealth countries“ (HWCs).

Country classification based on net per capita financial assets:

HWC

Australia*
Austria*
Belgium*
Canada*
Denmark*
France*
Germany*
Ireland*
Israel**
Italy*
Japan*
Netherlands*
New Zealand*
Singapore*
Sweden*
Switzerland**
Taiwan**
United Kingdom*
USA*

MWC

Bulgaria*
Chile*
China***
Croatia*
Czech Republic*
Estonia*
Finland*
Greece*
Hungary*
Latvia*
Lithuania*
Malaysia**
Norway*
Poland*
Portugal*
Slovenia*
South Africa*
South Korea*
Spain*

LWC

Argentina***
Brazil***
Colombia**
India*
Indonesia***
Kazakhstan **
Mexico***
Peru***
Romania*
Russia**
Serbia***
Slovakia*
Thailand***
Turkey*
Ukraine***

*2017 asset balance sheet

**Extrapolation based on 2016 asset balance sheet

***Approximated based on other statistics

Appendix B : Financial assets by country	Gross financial assets			Net financial assets	Gini coefficient of wealth distribution	GDP
	in EUR bn	2017, yoy in %	EUR per capita	EUR per capita	in %	EUR per capita
Argentina	99	39.8	2,240	1,400	0.69	10,130
Australia	3,288	6.5	134,460	72,080	0.59	47,550
Austria	659	3.3	75,460	53,980	0.70	41,670
Belgium	1,348	1.6	117,940	93,580	0.57	38,180
Brazil	1,950	13.4	9,320	6,290	0.74	7,920
Bulgaria	69	4.6	9,760	7,680	0.68	7,060
Canada	4,668	6.5	127,470	87,390	0.65	38,420
Chile	423	7.3	23,450	17,200	0.73	13,020
China	24,273	14.0	17,220	13,540	0.53	7,490
Colombia	266	13.0	5,420	3,570	0.73	5,280
Croatia	59	2.6	14,080	9,980	0.62	11,410
Czech Republic	226	4.4	21,280	15,290	0.62	18,540
Denmark	886	5.8	154,560	88,270		50,200
Estonia	28	11.4	21,660	13,740	0.67	17,270
Finland	331	4.8	59,850	30,230	0.65	40,190
France	5,389	4.6	82,930	59,100	0.66	35,230
Germany	6,046	5.1	73,630	52,390	0.73	39,770
Greece	268	5.8	24,010	14,000	0.58	16,120
Hungary	159	7.5	16,310	13,400	0.62	12,340
India	1,957	11.5	1,460	1,290	0.66	1,640
Indonesia	306	10.9	1,160	650	0.76	3,160
Ireland	377	3.0	79,250	47,440	0.70	59,180
Israel	725	5.4	87,150	68,710	0.65	36,520
Italy	4,407	4.1	74,240	58,610	0.58	28,790
Japan	14,338	4.0	112,470	92,000	0.55	31,610
Kazakhstan	27	4.2	1,460	730	0.63	6,580
Latvia	29	6.3	14,650	11,010	0.74	13,800
Lithuania	40	11.9	13,700	9,850	0.66	14,370
Malaysia	499	8.6	15,770	8,350	0.71	8,790
Mexico	873	8.8	6,760	5,590	0.72	6,810
Netherlands	2,452	-0.2	143,950	95,880	0.64	42,690
New Zealand	516	3.8	109,700	83,570	0.65	34,670
Norway	483	6.1	91,050	23,410	0.58	62,690
Peru	111	11.6	3,440	2,590	0.70	5,560
Poland	486	6.1	12,730	8,270	0.58	12,400
Portugal	397	3.3	38,470	22,500	0.66	18,640
Romania	129	7.0	6,530	4,520	0.64	8,970
Russia	892	8.2	6,200	4,590	0.68	9,140
Serbia	15	2.9	1,670	800	0.65	4,260
Singapore	719	8.9	125,960	90,650	0.65	46,810
Slovakia	71	5.5	12,980	6,190	0.48	15,560
Slovenia	43	4.3	20,720	14,260	0.60	20,340
South Africa	577	12.3	10,180	7,770	0.78	5,400
South Korea	2,853	8.2	55,960	30,220	0.56	26,400
Spain	2,153	2.4	46,450	29,730	0.58	25,270
Sweden	1,400	6.1	141,280	98,380	0.79	46,790
Switzerland	2,213	5.9	261,100	173,990	0.64	67,240
Taiwan	2,571	6.3	108,820	90,260	0.65	20,760
Thailand	607	6.2	8,790	4,330	0.68	5,640
Turkey	292	13.9	3,620	2,040	0.69	8,350
Ukraine	28	1.4	640	530	0.62	1,830
United Kingdom	7,604	3.0	114,890	82,360	0.74	34,370
USA	67,650	8.5	208,500	168,640	0.81	49,760
World	168,275	7.7	33,160	25,320	12.180	12,180

Appendix C: Global ranking					
... by net financial assets per capita (in EUR)			... by gross financial assets per capita (in EUR)		
1	Switzerland	173,990	1	Switzerland	261,100
2	USA	168,640	2	USA	208,500
3	Sweden	98,380	3	Denmark	154,560
4	Netherlands	95,880	4	Netherlands	143,950
5	Belgium	93,580	5	Sweden	141,280
6	Japan	92,000	6	Australia	134,460
7	Singapore	90,650	7	Canada	127,470
8	Taiwan	90,260	8	Singapore	125,960
9	Denmark	88,270	9	Belgium	117,940
10	Canada	87,390	10	UK	114,890
11	New Zealand	83,570	11	Japan	112,470
12	UK	82,360	12	New Zealand	109,700
13	Australia	72,080	13	Taiwan	108,820
14	Israel	68,710	14	Norway	91,050
15	France	59,100	15	Israel	87,150
16	Italy	58,610	16	France	82,930
17	Austria	53,980	17	Ireland	79,250
18	Germany	52,390	18	Austria	75,460
19	Ireland	47,440	19	Italy	74,240
20	Finland	30,230	20	Germany	73,630
21	South Korea	30,220	21	Finland	59,850
22	Spain	29,730	22	South Korea	55,960
23	Norway	23,410	23	Spain	46,450
24	Portugal	22,500	24	Portugal	38,470
25	Chile	17,200	25	Greece	24,010
26	Czech Rep,	15,290	26	Chile	23,450
27	Slovenia	14,260	27	Estonia	21,660
28	Greece	14,000	28	Czech Rep,	21,280
29	Estonia	13,740	29	Slovenia	20,720
30	China	13,540	30	China	17,220
31	Hungary	13,400	31	Hungary	16,310
32	Latvia	11,010	32	Malaysia	15,770
33	Croatia	9,980	33	Latvia	14,650
34	Lithuania	9,850	34	Croatia	14,080
35	Malaysia	8,350	35	Lithuania	13,700
36	Poland	8,270	36	Slovakia	12,980
37	South Africa	7,770	37	Poland	12,730
38	Bulgaria	7,680	38	South Africa	10,180
39	Brazil	6,290	39	Bulgaria	9,760
40	Slovakia	6,190	40	Brazil	9,320
41	Mexico	5,590	41	Thailand	8,790
42	Russia	4,590	42	Mexico	6,760
43	Romania	4,520	43	Romania	6,530
44	Thailand	4,330	44	Russia	6,200
45	Colombia	3,570	45	Colombia	5,420
46	Peru	2,590	46	Turkey	3,620
47	Turkey	2,040	47	Peru	3,440
48	Argentina	1,400	48	Argentina	2,240
49	India	1,290	49	Serbia	1,670
50	Serbia	800	50	Kazakhstan	1,460
51	Kazakhstan	730	51	India	1,460
52	Indonesia	650	52	Indonesia	1,160
53	Ukraine	530	53	Ukraine	640
	Welt	23,330		Welt	31,068

Imprint

Publisher
Allianz SE
Economic Research
Königinstraße 28
80802 München
www.allianz.com

Chief Economist
Dr. Michael Heise

Authors

Kathrin Brandmeir
Dr. Michaela Grimm
Dr. Arne Holzhausen

Editors

Heike Bähr
Dr. Lorenz Weimann

Photos

Getty Images

Design

Schmitt. GmbH, Hamburg

Closing date

01. August 2018

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.

