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Introduction

The eighth edition of the Credit Suisse Research Institute's Global Wealth Report not only provides a comprehensive annual update of global household wealth development by segment and region, it also takes a close look at the evolution and prospects of the highly appraised Millennial generation, whose members came of age after the turn of the 20th century.

In general terms, throughout the twelve months to mid-2017, we observed a significant increase in wealth across the globe, driven not only by equity markets, but also by significant increases in nonfinancial wealth. In total, global wealth has grown by USD 16.7 trillion to USD 280 trillion, which corresponds to a rise of 6.4%. We further saw an increase of 2.3 million US-dollar-millionaires, almost half of whom reside in the United States. Partially due to a 3% rise in the value of euro against the US dollar, we also note 620,000 new dollar-millionaires in the main Eurozone countries Germany, France, Italy and Spain. Another 200,000 joined in Australia and about the same number appeared in China and India together. We have seen a decline in millionaire numbers in very few countries, mostly associated with depreciating currencies: the United Kingdom lost 34,000 and Japan lost over 300,000.

Our home market Switzerland has seen wealth per adult increase by 130% to USD 537,600 since the turn of the century and continues to lead the global rankings. Again, we note that a large part of the rise is associated with the appreciation of the Swiss franc against the US dollar between 2001 and 2013. Nonetheless, measured in Swiss francs, domestic household wealth rose by 35% since 2000, which corresponds to an average annual rate of 1.8%. Switzerland today accounts for 1.7% of the top 1% of global wealth holders and over two-thirds of Swiss adults have assets above USD 100,000. 8.8% of Swiss are US-dollar millionaires and an estimated 2,780 individuals are in the ultra-high net worth bracket, with wealth over USD 50 million. Financial assets continue to make up 54% of gross wealth in Switzerland, which is less than in Japan or the United States and debts average USD 140,500 per adult, which is one of the highest absolute levels in the world, although we continue to believe that the debt ratio reflects the country's high level of financial development, rather than excessive borrowing. On the worrying end, among the ten countries for which long series of wealth distribution are available, Switzerland is alone in having seen no significant reduction in wealth inequality over the past century.

Looking at the bottom of the wealth distribution, 3.5 billion people - corresponding to 70% of all adults in the world - own less than USD 10,000. Those with low wealth tend to be disproportionately found among the younger age groups, who have had little chance to accumulate assets, but we find that Millennials face particularly challenging circumstances compared to other generations. Although relatively less severe in some emerging markets, capital losses during 2008-2009, high unemployment, tighter mortgage rules, growing house prices, increased income inequality, less access to pensions and lower income mobility have dealt serious blows to young workers and savers and hold back wealth accumulation by the Millennials in many countries. With the baby boomers occupying most of the top jobs and much of the housing, Millennials are doing less well than their parents at the same age, especially in relation to income, home ownership and other dimensions of wellbeing assessed in this report. While Millennials are more educated than preceding generations (we see an increase of more than 20% in tertiary education across OECD countries), we expect only a minority of high achievers and those in highdemand sectors such as technology or finance to effectively overcome the "millennial disadvantage." We also note that entrepreneurship, as measured by the fraction of self-employed workers, has been declining across OECD countries since the turn of the century, including Millennials who are generally touted as a generation of entrepreneurs.

Given some of this year's intriguing findings, we hope you find the 2017 edition of the Global Wealth Report a valuable source of insight and wish you interesting reading.

Urs Rohner Chairman of the Board of Directors Credit Suisse Group AG









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Global wealth 2017: The year in review

Now in its eighth edition, the Credit Suisse Research Institute's Global Wealth Report is the most comprehensive and up-to-date source of information on global household wealth. This year's edition finds that throughout 2017, wealth grew at a faster pace than in recent years, reflecting widespread gains in equity markets matched by similar rises in non-financial asset prices. The United States continued its unbroken spell of wealth gains since the financial crisis, adding almost USD 8.5 trillion to the stock of global wealth. China, India and the Eurozone also made major contributions to the new record level of global wealth, equivalent to USD 56,540 per adult.

Reversal of fortunes

The early years of this century were probably the most broad-based spell of wealth creation in recent history. The development was notable for the breadth of its geographic coverage, with emerging market economies - most notably China and India - not just sharing in the growth, but leading much of the action. It was also broad in its coverage of assets, with both financial assets and non-financial assets showing strong real growth rates. Even more importantly, this development was broad in its social impact, with all levels of society benefiting from the economic rewards. While global mean wealth per adult grew at 7% per year between 2000 and 2007, the bottom half of wealth holders did even better, so that median wealth per adult grew almost twice as fast, at 12% per year.

Figure 1



Annual percentage change in total global wealth, 2000-2017

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

The global financial crisis put an end to this remarkable period. Wealth growth resumed soon afterwards, but at a lower and more fragile pace. This was partly due to widespread appreciation of the US dollar: measured in local currencies, wealth growth after 2008 has not been too far below the earlier rate. But what is notably different is the quality of the wealth creation. In the post-crisis period, the source of wealth growth tilted heavily towards the United States, opening a wide gap with Japan and all of Africa, for example. Furthermore, financial assets grew faster than non-financial assets, and much of the rise in financial wealth was due to asset price inflation. Accordingly, the top wealth holders benefited in particular, and, across all regions, wealth inequality rose from 2007 to 2016. In every region of the world except for China, median wealth declined.

Are we turning the corner?

This portrait of wealth creation in recent years was certainly accurate one year ago. But there are now hints that we could be reverting to the earlier pattern. In the twelve months to mid-2017, significant rises in wealth were evident throughout the world, driven not only by robust equity markets, but also by substantial increases in nonfinancial wealth. Overall, aggregate global wealth rose by USD 16.7 trillion to USD 280 trillion, up 6.4%. This compares favorably with the average rate since 2008 (see Figure 1). Wealth growth also outpaced population growth, so that global wealth per adult grew by 4.9%, raising global mean wealth to USD 56,540 per adult, a new record high. But inequality has continued to edge upwards, so that despite higher mean wealth per adult, median wealth fell again this year in Africa, Asia-Pacific and Latin America. Our projections for 2022 suggest more pessimistic scenarios for the immediate years ahead.

Change in household wealth 2016–2017, by region

	Total wealth	Change in total wealth		Wealth per adult	Change in wealth per adult	Change in financial assets		Change in non-financial assets		Change in debts	
	2017	2016-17	2016-17	2017	2016-17	2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
	USD bn	USD bn	%	USD	%	USD bn	%	USD bn	%	USD bn	%
Africa	2,499	22	0.9	4,166	-1.9	51	4.1	-10	-0.7	18	7.0
Asia-Pacific	55,052	396	0.7	47,479	-1.0	201	0.6	497	1.6	302	3.5
China	29,000	1,718	6.3	26,872	5.6	302	2.2	1,601	10.2	186	7.8
Europe	79,639	4,757	6.4	135,163	6.3	2,621	6.6	2,797	5.8	662	5.3
India	4,987	451	9.9	5,976	7.9	64	9.1	470	11.0	83	19.5
Latin America	8,107	302	3.9	19,049	2.1	124	4.5	271	4.3	94	7.4
North America	101,005	9,097	9.9	374,869	8.8	6,313	8.4	3,441	10.7	657	4.3
World	280,289	16,744	6.4	56,541	4.9	9,676	5.8	9,068	6.5	2,002	4.9

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

The United States continued its remarkable unbroken spell of gains after the financial crisis, adding USD 8.5 trillion to its stock of household wealth – a 10.1% increase. India achieved a similar percentage rise, although its addition to total global wealth was limited to USD 451 billion (see Table 1). Europe and China recorded the second- and thirdhighest absolute increases among regions (USD 4.8 trillion and USD 1.7 trillion respectively) and both recorded growth rates that closely matched the global figure of 6.4%. Latin America managed a growth rate of 3.9%, which is a good performance compared to recent years, but below par by this year's standards.

The regional laggards this year – as in many recent years – were Asia-Pacific (excluding China and India) and Africa, where total wealth grew by less than 1% and wealth per adult fell by 1% or more. However, this outcome is due to adverse currency movements. Holding exchange rates constant, wealth rose by 4.7% in the Asia-Pacific

region and by 6.1% in Africa. Elsewhere, exchange rate effects are broadly neutral: Europe and India gained a little; China and Latin America lost a little (see Figure 2). Overall, with fixed exchange rates, global wealth grew by 6.9% rather than 6.4%.

Financial assets suffered most during the financial crisis, and recovered best in the early postcrisis years. Financial assets continue to make a substantial contribution to growth of household wealth, accounting for half of the increase in gross wealth worldwide, and nearly two-thirds of the increase in North America. However, non-financial assets have grown at a similar pace over the past few years. Indeed, non-financial assets are now the main driver of wealth growth in most regions. Last year, they accounted for more than 80% of the rise in both China and India (see Table 1). India is also notable for the rise in household debt, which we estimate to be close to 20% in terms of US dollars, although somewhat less when measured in rupees. Overall, our figures suggest that global household debt rose by 4.9%, in line with wealth per adult.

Figure 2



Change in total wealth (USD bn) by region, 2016-2017: Current vs. constant exchange rates

Regional distribution of wealth

Figure 3 highlights the geographical imbalance in global household wealth, by comparing the share of net worth of each region with its proportion of the adult population. North America and Europe together account for 64% of total household wealth, but contain only 17% of the adult population. In the past, total global wealth in the two regions has often been similar, with Europe's greater population compensating for higher average wealth in North America. However, North America pulled ahead after 2013, and now accounts for 36% of global wealth compared to 28% for Europe.







Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 4







Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

In the other regions, the share of wealth fails to match the population share. The discrepancy is modest in the Asia-Pacific region (excluding China and India), where 23% of global adults own 20% of global wealth. Elsewhere, the disparity between population and wealth is quite striking. Despite enormous gains this century, China accounts for 22% of the adult population of the world, yet only 10% of global wealth. The ratio is not much higher for Latin America at 9% to 3%. But the population share exceeds the wealth share in India by a factor of almost ten, and the disparity is even greater in Africa.

Asset prices and exchange rates

Fluctuations in asset prices and exchange rates account for much of the change in household wealth across regions and countries in the short run. Most of these influences have been positive during the past twelve months, particularly equity prices, which have risen substantially almost everywhere, setting new highs in many parts of the world. Among the countries listed in Figure 4 (the G8 countries plus China and India), market capitalization grew by 10% in Russia and the United Kingdom, and around 15% in Canada, China, Japan and the United States. However, these lagged well behind France, Germany, India and Italy, where market capitalization rose by 30% on average (Figure 4).

Elsewhere in the world, market capitalization growth of at least 10% was the norm, and increases above 20% were commonplace. Rises in excess of 35% were recorded in Hungary and Poland, and in excess of 45% in Argentina and Greece. But Austria and Vietnam topped the list with rises of 51% and 61%, respectively. Very few countries experienced a change in the opposite direction, but market capitalization fell by 10% in Qatar, and by about 25% in Egypt and Ukraine.

House price movements are a rough proxy for the non-financial component of household assets, and here again most countries experienced a rise in values last year, although Japan (-1%) and Russia (-5%) were among the exceptions (see Figure 4). The most notable gains were in China and India, where house prices rose by 10% on average. Turkey (12%), Hong Kong (22%) and Argentina (24%) recorded the greatest increases.

Exchange rate movements were restrained once again in the year to end-June, with deviations typically within the [-5%,+5%] range versus the US dollar. The currencies of both South Africa and Israel appreciated by more than 10%, closely followed by Russia with a gain of 7.8%. Continuing the annual cycle of fluctuations, the Japanese yen depreciated by 8.7%. Turkey (-18%) and Egypt (-51%) recorded the greatest losses against the dollar.

Winners and losers among countries

Comparing wealth gains across countries, the United States was restored to its usual first place with an increase of USD 8.5 trillion, which is five times the rise recorded by China (USD 1.7 trillion) in second place (Figure 5). Four Eurozone countries (Germany, France, Italy, Spain) also appear in the top ten. Together they accounted for USD 3.1 trillion, or almost 20% of the total gain worldwide. Very few countries experienced a decline in total wealth, and only two lost more than USD 100 billion: Egypt (USD 172 bn) and Japan (USD 1.6 trillion).

Converted into percentage terms, most countries achieved increases in a fairly narrow band from 5%–10%. Poland (18%) tops the list mainly because of equity price rises, while Israel (16%) and South Africa (15%) follow close behind due to exchange-rate appreciation (Figure 6). Exchange rate movements also account for the largest percentage losses suffered by countries: Japan (–6%) and Egypt (–49%).

Wealth per adult across countries

The global figure of USD 56,540 for wealth per adult masks considerable variation across countries and regions, as is evident in Figure 7. The nations with wealth per adult above USD 100,000, are located in North America, Western Europe, and among the rich Asia-Pacific and Middle Eastern countries. The list of countries in this category, as well as those in each of the other groups mentioned below, tends to be stable over time. However, more substantial changes can occasionally arise, sometimes prompted by revisions to the official statistics that underlie our estimates.

This year, we have absorbed new population estimates by the United Nations that are sometimes very different from previous figures (e.g. the UAE, where the 2016 population given a year ago, 5,240,000, is now stated as 9,335,000). For the world as a whole, the revisions raise population by 2.1% and the number of adults by 2.4%. These revisions have an immediate and obvious impact on our estimates of wealth per adult, which we use to compare and rank countries and regions. This has been compounded by new data on the level of nonfinancial assets in China, India and Russia, which has led us to revise wealth per adult upwards in each of these countries.

Change in total wealth, 2016-2017 (USD bn): Biggest gains and losses



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 6

Figure 5

Percentage change in household wealth 2016–2017: Biggest gains and losses



Figure 7 World wealth levels 2017



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Switzerland (USD 537,600), Australia (USD 402,600) and the United States (USD 388,600) continue to occupy the first three positions in the ranking of wealth per adult. According to our estimates, New Zealand (USD 337,400, up USD 34,500) has swapped places with Norway (USD 320,500, down USD 15,000), with Denmark (USD 281,500, up USD 21,500) moving up three places to sixth, and Belgium (USD 278,100, up USD 17,200) moving up to seventh. The United Kingdom (USD 278,000) and Singapore (USD 268,800) both move two places in the opposite direction, while France (USD 263,400) stays in tenth place.

The ranking by median wealth per adult favors countries with lower levels of wealth inequality and produces a somewhat different ranking. Based on available data, we believe that median wealth in first place Switzerland (USD 229,000) exceeds that of Australia (USD 195,400), but the difference is narrow compared to mean wealth per adult. Most of the top ten countries in the mean wealth table also appear in the median wealth list, and in similar positions: Belgium (USD 161,000), New Zealand (USD 147,600), Norway (USD 130,500), France (USD 119,700), Singapore (USD 108,900) and the United Kingdom (USD 102,600). Lowerthan-average inequality promotes Italy (124,600)

and Japan (USD 123,700) to sixth and seventh place, respectively. In contrast, high wealth inequality pushes Denmark (USD 87,200) out of the top ten list, while median wealth of USD 55,900 relegates the United States to 21st place, alongside Austria and Greece.

Intermediate wealth

The "intermediate wealth" group portrayed in Figure 7 encompasses countries with mean wealth in the USD 25,000-100,000 range. Three European Union (EU) countries (Czech Republic, Portugal and Slovenia) are situated towards the top of the band, while six more recent EU members (Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia) are found lower down. The intermediate wealth group also includes several Middle Eastern nations (Bahrain, Oman, Saudi Arabia, and United Arab Emirates), and important emerging markets in Latin America (Chile, Costa Rica, Peru and Uruguay). The widespread rise in wealth this year resulted in Cyprus passing the USD 100,000 threshold and moving into the rich country group, while Latvia, Lithuania and Poland joined the intermediate group from below. The most notable change in membership, however, has been prompted by improved and revised wealth estimates for China which have moved it above the threshold for the intermediate wealth group.

Frontier wealth

The "frontier wealth" range from USD 5,000 to 25,000 per adult covers the largest area of the world and most of the heavily populated countries including India, Russia, Brazil, Indonesia, the Philippines, and Turkey. The band also contains most of Latin America (Argentina, Bolivia, Columbia, Ecuador, El Salvador, Mexico, Panama and Paraguay), many countries bordering the Mediterranean (Algeria, Jordan, Lebanon, Morocco and Tunisia), and many transition nations outside the EU (Albania, Armenia, Azerbaijan, Bosnia, Georgia, Macedonia, Mongolia, and Serbia). South Africa was once briefly a member of the intermediate wealth group, but now resides in this category alongside other leading sub-Saharan nations Angola, Botswana, Equatorial Guinea, and Namibia. Malaysia, Pakistan, Thailand and Vietnam are promising Asian members of the group. As already noted, Latvia, Lithuania and Poland moved up to the intermediate wealth group this year, while Egypt dropped into the group below. The most notable change, however, is the revised estimates for wealth per adult in India, which have pushed India above the USD 5,000 threshold and into the frontier wealth group.

The final group of countries with wealth below USD 5,000 is heavily concentrated in central Africa and south Asia. This group encompasses all of central Africa apart from Angola, Equatorial Guinea, and Gabon, while the Asian contingent includes Bangladesh, Cambodia, Nepal, and Sri Lanka. Also languishing in the middle of this wealth range are three countries bordering the EU: Belarus, Moldova, and Ukraine.

Distribution of wealth across individuals and wealth inequality

To determine how global wealth is distributed across individuals, rather than regions or countries, we combine our estimates of the level of household wealth across countries with information on the pattern of wealth distribution within countries. Once debts have been subtracted, a person needed only USD 3,582 to be among the wealthiest half of world citizens in mid-2017. However, USD 76,754 is required to be a member of the top 10% of global wealth holders, and USD 770,368 to belong to the top 1%. While the bottom half of adults collectively own less than 1% of total wealth, the richest decile (top 10% of adults) owns 88% of global assets, and the top percentile alone accounts for half of total household wealth.

The shares of the top 1% and top 10% in world wealth fell between 2000 and 2008: for instance, the share of the top percentile declined from 46% to 43%. However, the trend reversed after the financial crisis. This has had little impact on the share of the top 10%. But from 2013 onwards, the share of the top 5% has been above the level observed at the start of the century, and the share of the top 1% is now significantly above the level we estimate for 2000. The trend in the share of the top 1% partly reflects the trend in the share of financial assets in the household portfolio, which fell during 2000-2008 and then began to rise after 2008, raising the wealth of many of the richest countries, and of many of the richest people. This suggests that the rise in the share of the top 1% may tail off in future as the share of financial wealth levels off. However, while global wealth inequality has certainly been high and rising in the post-crisis period, it is difficult to predict the future trajectory with any degree of confidence.



Figure 8

Regional composition of global wealth distribution 2017



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Wealth distribution across regions

Assigning individuals to their corresponding global wealth decile enables the regional pattern of wealth to be portrayed, as in Figure 8. The most prominent feature is the contrast between China and India. Most Chinese adults are found in the upper middle section of global wealth distribution, where they account for a third of worldwide membership of deciles 7-9. China's record of strong growth this century, combined with rising asset values and currency appreciation, has shifted its median position in Figure 8 towards the right. China now accounts for 9% of the top decile of global wealth holders, less than the number of residents in the United States and Japan, but well above the number in France, Germany, Italy, and the United Kingdom, which it overtook some years ago. In contrast, residents of India remain heavily concentrated in the bottom half of the distribution, accounting for more than a quarter of the members. However, the country's high wealth inequality and immense population mean that India also has a significant number of members in the top wealth echelons.

Residents of Latin America are fairly evenly spread across the global wealth spectrum in Figure 8. The Asia-Pacific region (excluding China and India) mimics the global pattern even more closely, but its apparent uniformity masks substantial polarization within the region. Residents of high-income Asian countries, such as Hong Kong, Japan, and Singapore, are heavily concentrated at the top end: half of all adults in highincome Asian countries are in the top global wealth decile. In contrast, citizens of lower-income countries in Asia, such as Bangladesh, Indonesia, Pakistan, and Vietnam, tend to be found farther down the wealth distribution. In fact, when high-income countries are excluded from the Asia-Pacific group, the wealth pattern within the remaining countries resembles that of India, with both regional groupings contributing around one-quarter of the members of the bottom half of the wealth pyramid.

Africa is even more concentrated at the bottom end of the wealth spectrum: more than 40% of African adults belong to the lowest two global wealth deciles. At the same time, wealth inequality is so high in Africa that some individuals are found among the top global wealth decile, and even among the top percentile. Interestingly, North America and Europe also contribute many members to the bottom wealth decile, which is a reflection of the greater ease with which individuals - especially younger ones - acquire debt in advanced economies. Overall, however, North America and Europe are heavily skewed toward the top tail, accounting together for 60% of adults in the top 10%, and an even higher percentage in the top percentile. Europe alone accounts for 36% of members of the top wealth decile, and the proportion this century has been as high as 42% when the EUR/USD exchange rate was more favorable.

Monitoring world wealth

Wealth is a key component of the economic system, valued as a source of finance for future consumption, particularly in retirement, and for reducing vulnerability to shocks such as unemployment, ill health, or natural disasters. Wealth also enhances opportunities for informal sector and entrepreneurial activities, when used either directly or as collateral for loans. These functions are less important in countries that have generous state pensions, adequate social safety nets, good public healthcare, high-quality public education, and well-developed business finance. Conversely, the need to acquire personal assets is particularly compelling and urgent in countries that have rudimentary social insurance schemes and reduced options for business finance, as is the case in much of the developing world.

The Credit Suisse Research Institute Global Wealth Report offers a comprehensive portrait of world wealth, covering all regions and countries, and all parts of the wealth spectrum from rich to poor. Valued at current exchange rates, total global wealth increased by USD 16.7 trillion, or 6.4%, in the year to mid-2017. Controlling for exchange rate movements, the rise was a little larger, at USD 18.9 trillion. The United States again led the way with a gain of USD 8.5 trillion, most arising from financial assets. Elsewhere, however, the gains derived primarily from non-financial assets.

The top ten countries in the wealth-per-adult league include many smaller, dynamic economies – Belgium, Denmark, New Zealand, Norway, Singapore, and Switzerland – as well as Australia, France, the United Kingdom, and the United States. Notable cases of emerging wealth are found in Chile, the Czech Republic, Lebanon, Slovenia, and Uruguay, while "frontier" wealth is evident in Ecuador, Indonesia, Malaysia, Thailand, and Tunisia.

Wealth varies greatly across individuals in every part of the world. Our estimates suggest that the lower half of global adults collectively owns less than 1% of global wealth, while the richest 10% of adults own 88% of all wealth and the top 1% account for half of all global assets. In recent years, wealth inequality has trended upwards, propelled in part by the rising share of financial assets, and a strengthening US dollar. These underlying factors may be waning, but the impact on wealth inequality is unclear at present.

The next two chapters consider longer-term trends in wealth holdings, and examine in detail the pattern of holdings across individuals. This year, a separate chapter is devoted to the millennial generation, examining in particular the assets and debts of this cohort and how they compare with earlier generations. Those interested in the methodology which underpins our estimates are referred to the Credit Suisse Research Institute Global Wealth Databook 2017, which contains more detailed information and much additional data.

Notes on concepts and methods

Net worth, or **"wealth"**, is defined as the value of financial assets plus real assets (principally housing) owned by households, minus their debts. This corresponds to the balance sheet that a household might draw up, listing the items which are owned, and their net value if sold. Private pension fund assets are included, but not entitlements to state pensions. Human capital is excluded altogether, along with assets and debts owned by the state (which cannot easily be assigned to individuals).

For convenience, we disregard the relatively small amount of wealth owned by children on their own account, and frame our results in terms of the global **adult population**, which totaled 5.0 billion in 2017.

The "Asia-Pacific" region excludes **China** and **India**, which are treated separately due to the size of their populations.

Data for 2016 and 2017 refer to **mid-year** (end-June) estimates; the figures for earlier years indicate **year-end** values unless indicated otherwise.





Global trends in household wealth

This chapter reviews trends in global household wealth since 2000. Measured in local currencies, global wealth per adult has grown every year since 2012 in all regions of the world. In terms of current US dollars, however, recent growth has been subdued and median wealth has plateaued. Wealth inequality continues to rise among the top groups, but the share of the top decile is almost unchanged since 2000.

Trends in global wealth

The prospect of sustained high growth of wealth during the early years of the century came to an abrupt halt with the global financial crisis in 2007– 2008. Some economies have recovered well – most notably the United States. But confidence in the future has been eroded, and there is a growing sense that the economic recovery is shallow, and has not reached all layers of society. Evidence from our global wealth database supports this view. Using current US dollar exchange rates, wealth per adult has grown at a slower pace during the last nine years, while median wealth has not risen at all in many parts of the world, reinforcing concerns that we will not return soon to the robust and inclusive growth experienced at the start of the century. Figures 1 and 2 show the regional make-up of household wealth since 2000. Wealth in current US dollars has increased at an average annual rate of 5.0%; measured in local currency, it has risen by 5.1%. The increase amounts to USD 163 trillion in absolute terms, equivalent to roughly two years of global GDP. Much of this increase took place in the early years of the century: global wealth increased by USD 104 trillion between 2000 and 2007, only to fall by USD 28 trillion the following year. Since then, it has managed to recoup the lost ground and much more; but the pace of growth has been disappointing, averaging 4.5% per year, less than half the pre-crisis rate of 9.5%.

Figure 1



Total global wealth 2000-2017, current exchange rates

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 2

Total global wealth 2000–2017, constant exchange rates



Figure 3



Share of wealth in 2000 and share of wealth growth 2000–2017, selected regional groupings

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 4

Annual average wealth growth (%) by region, 2000–2017, current exchange rates



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Using constant exchange rates (effectively measuring growth in domestic currencies), growth is more flattering for the post-crisis years, amounting to 5.9% annually, against 6.7% in the pre-crisis period. Which is more relevant? The answer is not clear. Few people who are not US dollar earners are likely to measure their net worth in that currency. However, if their local currency purchasing power is eroded due to imported inflation (via rising food prices, for example), then exchange-rate movements become very relevant, especially for those lower down the wealth pyramid.

The regions containing high-income economies -North America, Europe, and Asia-Pacific (excluding China and India) - continue to account for the bulk of global wealth, at around 84% in mid-2017. However, a major rebalancing has taken place since the start of the century. China, which accounted for 4% of world wealth in 2000, has been responsible for 15% of global wealth growth since then. Together, lowerincome (emerging) economies accounted for 11% of wealth in 2000, but contributed 25% of global growth. In local currency terms, the contribution of lower-income economies to global wealth growth has been even greater, amounting to nearly 29%, which is more than the contribution of high-income European nations (27%) and double that of highincome Asian economies (13%).

Looking at the regional breakdown in more detail, total household wealth this century has risen by a factor of two or more in every region. The outstanding performance of China since 2000 is evident from Figure 4, with wealth growing at annual rate of 12.5%, equivalent to a six-fold rise over the 17-year period. India has almost matched this record, growing faster than average even when allowance is made for population growth. These growth performances outstrip those of Europe and Latin America, which are similar to the global average. Africa and North America lag slightly behind the world as a whole, but it is the Asia-Pacific region (excluding China and India) that achieved the slowest wealth growth.

Performance in various sub-periods shows further contrasts. Wealth growth in Europe, India and Africa was not far behind China early in the century, but China pulled away from Europe and Africa during 2005–2010, surprisingly perhaps, as China suffered heavily during the global financial crisis. However, it bounced back quickly, and has continued gaining ground year-on-year. Equally important, China's exchange rate policy has ensured that its performance has not been unduly affected by currency movements. This contrasts with Africa and Latin America, where depreciating currencies have offset underlying wealth growth since 2010, halting the progress in wealth seen earlier. The breakdown into sub-periods in Figure 4 also highlights the slower growth rates since 2010 for the world as a whole, and for each region apart from North America, which, alongside China, has been the engine of global wealth growth in recent years, growing by about twice the world average since 2010. Interestingly, the appreciating US dollar is only part of the story, as the region has outpaced the world even when constant exchange rates are used.

Results obtained using constant exchange rates show that growth has decelerated in most regions since 2010. However, wealth still grew in every region during each of the sub-periods indicated (Figure 5). This reinforces the view that exchangerate movements mask a broadly positive wealth picture in most of the world. Figure 5 also highlights the contrast between modest wealth growth in the "old world" and much faster growth in emerging economies. In part, this difference reflects higher consumer price inflation in the developing world, especially now that inflation has become very low in advanced economies. A year ago it appeared that wealth growth was on a downward path; the evidence now points to a modest decline in growth in the developing world offset by large sustained gains in the United States. Overall, growth in constant dollars has risen since 2010 compared to the previous five years.

Trends in wealth components

The three components of wealth - financial assets, non-financial assets and debts - have moved in tandem for much of this century. Figure 6 displays each of these components, converted into average values per adult to control for changes in adult numbers over time. Net worth per adult in US dollars rose by 80% during 2000-2017, but almost all of this gain (66%) occurred before the global financial crisis. It took until 2013 to restore the crisis losses, and global wealth per adult has risen very little since then in US dollar terms. Using constant exchange rates, however, yields a smoother graph with continuous growth since 2008, and new peak levels recorded every year from 2012 onwards. Thus, short-term currency movements against the US dollar can sometimes obscure the true trend over time, which is one of solid wealth growth, with just a single setback in 2007-2008.

Figure 5





Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 6

Global trends in assets and debts per adult, 2000–2017



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017





Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Among the wealth components, only financial assets are noticeably up since 2007; non-financial assets moved above the 2007 level for the first time this year and are now 2% higher. At the turn of the century, financial assets accounted for 56% of gross wealth. Non-financial assets grew at a faster pace early on, causing the share of financial assets to decline to 50% by 2008. But the trend reversed after the financial crisis, with financial assets rising to 55% of gross wealth in 2014-2015 before falling back slightly to 54%. In terms of absolute gains, gross wealth per adult has increased by USD 28,900 since 2000, of which a little over half (USD 15,000) is due to gains in financial wealth. Figure 7 provides more details, by plotting the yearon-year change in wealth per adult, and identifying the contributions of each component of wealth. The graph illustrates well the slowdown in growth after the financial crisis, and the dominant contribution of financial assets to the modest growth achieved between 2008 and 2016.

The time series for debt has moved broadly in line with non-financial assets, as might be expected given the correlation between mortgage debt and house prices. This century, debt grew at a fast pace (9%) until the financial crisis, but has been flat since then, never regaining the peak value achieved in 2007. Debt per adult is currently 3% below the level in 2007; expressed as a fraction of net wealth, it is 10% lower. While debt has a direct negative impact on net worth, its overall contribution can be regarded as ambiguous, given that rising debt fuels demand for assets and supports asset price inflation. In that respect, its rapid growth prior to 2007 and its subsequent decline may help explain the time path of changes in other components of wealth. Expressed as a share of net worth, debt peaked at 19% in 2008 (the year of falling asset prices), and has since declined to 15%. It should be noted that debt levels and trends differ widely across countries. This century, household debt has grown particularly rapidly in transition countries, and more recently in other emerging market economies such as India.

Trends in wealth inequality

Figure 8 displays the time series for global wealth inequality during 2000–2017, as captured by the wealth shares of the top groups. Our calculations show that the top 1% of global wealth holders started the millennium with 45.5% of all household wealth. This share was about the same until 2006, then fell to 42.5% two years later. The downward trend reversed after 2008 and the share of the top 1% has been on an upward path ever since, passing the 2000 level in 2013 and achieving new peaks every year thereafter. According to our latest estimates, the top 1% own 50.1% of all household wealth in the world.

The shares of the top 5% and top 10% wealth holders exhibit a similar pattern, but show less year-on-year variation. From 2000 onwards, they decline at a mild rate until 2007–2008, then the trend reverses and inequality edges upwards. The share of the top 5% overtook its 2000 level in 2013 and now stands at 76.4%. The share of the top decile is also achieving record highs each year, but the current level of 87.8% is only fractionally above the millennium start.

Changes in wealth inequality happen slowly, so it is difficult to identify the drivers of these trends. However, the value of financial assets especially company securities - is likely to be an important factor, because wealthier individuals hold a disproportionate share of their assets in financial form. The graph of the share of financial assets in Figure 8 resembles the graph for the share of the top 1%, with the trend declining during 2000-2008 and then reversing in the post-crisis period. However, the share of financial assets peaked in 2014, while the share of the top percentile has continued to grow. So other factors may be at work, or perhaps the link between the share of the top 1% and the share of financial assets is more nuanced, depending more on equities, for example, which have shown strong growth recently relative to broader categories of financial assets. Either way, if equity price rises are curtailed in the years ahead, we expect to see wealth inequality levelling off and perhaps falling.

Trends in median wealth

Median wealth values capture the circumstances of the average adult, so trends in median wealth within countries or regions are a good reflection of how the average person has fared over time. Although the countries with the highest median wealth are located in Europe and the Asia-Pacific region, North America leads the regional ranking by a huge margin. Median wealth in North America is currently four times the level in Europe, nine times the level in China, almost 50 times the level in India, and more than 100 times the level in Africa.

Global median wealth per adult (in current US dollars) rose continuously during the early years of the century, more than doubling in value, from USD 1,867 in 2000 to USD 4,220 in 2007 (Figure 9). It then stabilized at around USD 3,700, never regaining the level of 2007. The current value of USD 3,582 represents a doubling this century.

The regional trends were remarkably similar before the financial crisis. Median wealth rose by 98% or more in every region except North America. Then the pattern suddenly reversed. The decline in median wealth has been less pronounced than the upswing, but equally pervasive: in all regions except China, median wealth per adult is below the level recorded in 2007. For Africa, we estimate that median wealth is now just USD 438, less than half the value in 2007 (USD 1024) and – alone among regions – even below the level in 2000.

Figure 8

Share of top wealthholders in global wealth and share of financial assets, 2000–2017



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017



Median wealth per adult 2000-2017, selected regions



Figure 10

Cumulative change in the number of millionaires since 2000, by regional/income groups

Millions



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 11

Cumulative change in the number of UHNWIs since 2000, by regional/income groups



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Trends in the number of millionaires

No other part of the wealth pyramid has been transformed as much since 2000 as the millionaire and ultra-high net worth individual (UHNWI) segments. The number of millionaires has increased by 170%, while the number of UHNWIs (individuals with net worth of USD 50 million or more) has risen five-fold, making them by far the fastest-growing group of wealth holders. For the most part, this is due to the fact that the millionaire and UHNWI group bounds are static and absolute, while the whole distribution of wealth is shifting as the world becomes a wealthier place, progressively lowering the bar for membership over time. Increasing inequality can also boost the speed at which new millionaires are created.

The regional origins of new millionaires and UHNWIs

The most interesting aspect of the growth in millionaire numbers is the country of origin of the "new millionaires" - i.e. those added to the worldwide stock. Our database confirms that the composition of the millionaire segment is changing fast. The 13.2 million millionaires in the world in 2000 were heavily concentrated (97%) in high income economies. Since then, 22.9 million "new millionaires" have been added to the total, of whom 2.7 million - 12% of the total additions - have originated from emerging economies (Figure 10).

The transformation is even more remarkable in the UHWNI segment. Emerging economies accounted for 6% of the segment in 2000, but have seen 22% of the growth in UHNWIs (24,500 adults) since then. China alone added an estimated 17,700 adults - 15% of the new UHWNIs in the world. As a result, emerging nations are now home to 22% of the world's UHNWI population. Among richer economies, North America has added twice as many UHNWIs as Europe, which is not surprising given that in 2000, North America was home to 58% of all UHNWIs, versus 22% for Europe.

Summary

After the turn of the century, there was at first a rapid rise in global wealth, with the fastest growth in China, India, and other emerging economies, which accounted for 25% of the rise in wealth, although they owned only 11% of world wealth in the year 2000. Global wealth declined in 2008, but has trended upwards since then at a significantly lower rate than before the financial crisis. In fact, in US dollar terms, wealth in Europe and Africa remains below the 2007 level, before making any allowance for rising population numbers.

The muted trends in recent years are due in part to US dollar appreciation – in local currency terms,

wealth per adult has risen every year since 2012 in every region. But the level of growth has been insufficient to prevent median wealth from declining almost everywhere in the world. Financial wealth trended downward as a fraction of global wealth until 2008, then moved in the opposite direction until 2014, when the share flattened out. The share of the top 1% of wealth holders followed a similar pattern, declining from 46% in 2000 to 43% in 2008, then rising back to 50% in mid-2017. The close correspondence likely reflects the importance of financial assets in the portfolios of the wealthy. The number of millionaires, which fell in 2008, recovered fast after the financial crisis, and is now nearly three times the 2000 figure.





The global wealth pyramid

This chapter examines the entire wealth pyramid, from the less affluent groups at the bottom up to the wealthiest individuals at the top. The 3.5 billion adults with wealth below USD 10,000 account for 2.7% of global wealth. In contrast, the 36 million millionaires comprise less than 1% of the adult population, but own 46% of household wealth. Last year saw a large increase in the number of high net worth individuals, led yet again by gains in the United States.

Wealth differences within and between countries

Wealth differences between individuals occur for many reasons. Variation in average wealth across countries accounts for much of the observed inequality in global wealth, but there is also considerable disparity within countries. Those with low wealth are disproportionately found among the younger age groups who have had little chance to accumulate assets. Others may have suffered business losses or personal misfortune, or live in regions where prospects for wealth creation are more limited. Opportunities are also sometimes constrained for women or minorities. At the other end of the spectrum there are many individuals with large fortunes, acquired through a combination of talent, hard work and good luck.

The wealth pyramid in Figure 1 captures these differences. The large base of low wealth holders supports higher tiers occupied by progressively fewer adults. We estimate that 3.5 billion individuals – 70% of all adults in the world – have wealth below USD 10,000 in 2017. A further 1.1 billion adults (21%

Figure 1



of the global total) fall in the USD 10,000–100,000 range. While average wealth is modest in the base and middle tiers of the pyramid, the total wealth of these segments amounts to USD 40 trillion, underlining the economic importance of this often overlooked group.

The base of the pyramid

The layers of the wealth pyramid are quite distinctive. The base tier has the most even distribution across regions and countries (Figure 2), but also the widest spread of personal circumstances. In developed

Figure 2



Regional membership of global wealth strata

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 3



Number of dollar millionaires (% of world total) by country, 2017

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

countries, about 30% of adults fall within this category, and for the majority of these individuals, membership is either transient – due to business losses or unemployment, for example – or a lifecycle phase associated with youth or old age. In contrast, more than 90% of the adult population in India and Africa falls within this range. In some low-income countries in Africa, the percentage of the population in this wealth group is close to 100%. For many residents of low-income countries, life membership of the base tier is the norm rather than the exception.

Mid-range wealth

In terms of global wealth, USD 10,000–100,000 is the mid-range band, covering 1.1 billion adults and encompassing a high proportion of the middle class in many countries. The average wealth of this group is quite similar to global mean wealth, and its combined net worth of USD 33 trillion provides it with considerable economic clout. India and Africa are under-represented in this segment, whereas China's share is disproportionately high, having risen rapidly from 12.6% in 2000 to 35% in 2015, where it remains. This contrasts with India, which accounted for just 2.7% of the group in 2000, and only 5.7% now, less than half the share of China at the turn of the century before the rapid rise in its membership.

The high wealth bands

The top tiers of the wealth pyramid – covering individuals with net worth above USD 100,000 – comprised 6.1% of all adults in the year 2000. The proportion rose to 9.1% by the time of the financial crisis, before dropping back to the current level of 8.6%. Regional composition differs markedly from the strata below. Europe, North America and the Asia-Pacific region (omitting China and India) together account for 89% of the group, with Europe alone supplying 155 million members (36% of the total). This compares with just seven million members (1.7% of the global total) in India and Africa combined.

The pattern of membership changes once again for the US dollar millionaires at the top of the pyramid. The number of millionaires in any given country is determined by three factors: the size of the adult population, average wealth, and wealth inequality. The United States scores high on all three criteria, and has by far the greatest number of millionaires: 15.4 million, or 43% of the world total (Figure 3). For many years, Japan held second place in the millionaire rankings by a comfortable margin - with 13% of the global total in 2011, for example, twice as many as the third placed country. However, the number of Japanese millionaires has fallen, alongside a rise in other countries. As a consequence, Japan's share of global millionaires dropped to 10% in 2012, and has settled around 7%. This has been linked to a 16% decrease in its average wealth since 2011.

Table 1

Change in the number of millionaires by country, 2016-2017

Main gains		ousand) with we ove USD 1 m	alth	Main losses	Adults (thousand) with wealth above USD 1 m			
Country	2016	2017	Change	Country	2016	2017	Change	
United States	14,256	15,356	1,100	Japan	3,031	2,693	-338	
Germany	1,722	1,959	237	United Kingdom	2,223	2,189	-34	
Australia	958	1,160	202					
France	1,757	1,949	192					
China	1,790	1,953	163					
Italy	1,150	1,288	138					
Canada	968	1,078	110					
Spain	370	428	58					
Taiwan	323	381	58					
Sweden	280	335	55					
World	33,707	36,050	2,343	World	33,707	36,050	2,343	

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

The United Kingdom retains third place with 6% of millionaires worldwide. Germany, China and France each account for 5% of the global total, followed by Italy with 4%, and Canada and Australia at 3%. Korea, Switzerland, Spain, and Taiwan are the remaining four countries hosting more than 360,000 millionaires, the minimum requirement for a one percent share of the global total.

Changing membership of the millionaire group

Year-on-year variations in the number of millionaires can often be traced to real wealth growth or exchange-rate movements. This year, widespread rises in wealth per adult have led to an additional 2.3 million dollar millionaires, almost half of whom (1.1 million) reside in the United States. Another 620,000 new millionaires are located in the main Eurozone countries (Germany, France, Italy and Spain) partly due to a 3% rise in the euro against the US dollar. Australia added 200,000 new members and about the same number appeared in China and India taken together. Millionaire numbers fell in very few countries, the main exceptions – all associated with depreciating currencies – being the United Kingdom, which lost 34,000, and Japan, which shed over 300,000.



High net worth individuals

The primary sources of information on wealth distribution – official household surveys – tend to become less reliable at higher wealth levels. To estimate the pattern of wealth holdings above USD 1 million, we therefore supplement the survey data with information gleaned from the Forbes annual tally of global billionaires. These data are pooled for all years since 2000, and well-known statistical regularities are then used to estimate

Figure 4 The top of the pyramid

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 5

Ultra-high net worth individuals 2017: Top 20 countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

the intermediate numbers in the top tail. This produces plausible values for the global pattern of asset holdings in the high net worth (HNW) category from USD 1 million to USD 50 million, and in the ultra-high net worth (UHNW) range from USD 50 million upwards.

While the base of the wealth pyramid is characterized by a wide variety of people from all countries and all stages of the lifecycle, HNW and UHNW individuals are heavily concentrated in particular regions and countries, and tend to share similar lifestyles, for instance participating in the same global markets for luxury goods, even when they reside in different continents. The wealth portfolios of these individuals are also likely to be more similar, with a focus on financial assets and, in particular, equities, bonds and other securities traded in international markets.

For mid-2017, we estimate that there are 35.9 million HNW adults with wealth between USD 1 million and USD 50 million, of whom the vast majority (31.4 million) fall in the USD 1-5 million range (Figure 4). There are 3.0 million adults worth between USD 5 million and USD 10 million, and another 1.6 million have assets in the USD 10-50 million range. Europe and North America had similar numbers of HNW individuals from 2007 to 2009, but North America then opened up a gap that has widened significantly since 2013. North America now accounts for 16.4 million members (46% of the total), compared to 10.8 million (30%) in Europe. Asia-Pacific countries, excluding China and India, have 6.1 million members (17%), and a further 2.0 million are found in China (5% of the global total). The remaining 1.2 million HNW individuals (2% of the total) reside in India, Africa or Latin America.

Ultra-high net worth individuals

Our calculations suggest that 148,200 adults worldwide can be classed as UHNW individuals, with net worth above USD 50 million. Of these, 54,800 are worth at least USD 100 million, and 5,700 have assets above USD 500 million. The total number of UHNW adults has risen by 13% (19,600 adults) during the past year, as a result of the widespread gains in average wealth. All regions shared in this rise in the number of UHNW individuals.

North America dominates the regional rankings, with 75,000 UHNW residents (51%), while Europe has 31,900 (22%), and 17,500 (12%) live in Asia-Pacific countries, excluding China and India. Among individual countries, the United States leads by a huge margin with 72,000 UHNW adults, equivalent to 49% of the group total (Figure 5), a rise of 9,900 compared to mid-2016. China occupies second place with 18,100 UHNW individuals (up 3,000 on the year), followed by Germany (7,200, up 500). The United Kingdom (4,700, up 400) made up for some of the losses suffered a year ago after the Brexit vote and retained fourth place ahead of France, Australia and Canada (all 3,000). The remaining places in the top ten list of countries are occupied by Switzerland (2,800, up 400), Italy (2,600, up 100) and Korea (2,300, up 300).

The wealth spectrum

The wealth pyramid captures the contrasting circumstances between those with net wealth of a million US dollars or more in the top echelon, and those lower down the wealth hierarchy. Discussions of wealth holdings often focus exclusively on the top tail. We provide a more complete and balanced picture, believing that the middle and base sections are interesting in their own right. One reason is the sheer size of numbers and their political power. However, their combined wealth of USD 40 trillion also yields considerable economic opportunities, which are often overlooked. Addressing the needs of these asset owners can drive new trends in both the consumer and financial industries. China, Korea and Singapore are examples of countries where individuals have risen rapidly through this part of the wealth pyramid. India has shown less progress to date, but has the potential to grow rapidly in the future from its low starting point.

While the middle and lower levels of the pyramid are important, the top segment will likely continue to be the main driver of private asset flows and investment trends. Our figures for mid-2017 indicate that there are now nearly 36 million HNW individuals, including 2.0 million in China, and 6.3 million more in India and other Asia-Pacific countries. At the apex of the pyramid, 148,200 UHNW adults are each worth more than USD 50 million. This includes 18,100 UHNW individuals in China (12% of the global total), nearly 40 times the number at the turn of the century. A further 6,400 UNHW adults (4% of the total) can be found in Taiwan, India, Hong Kong and Singapore.





The unlucky Millennials

The Millennials have had an unlucky start to adult life, hit early on by the repercussions of the global financial crisis, alongside mounting student debt, tighter credit and rising income inequality. This chapter assesses the impact of these factors on the Millennials' wealth position, and compares their experience with that of previous cohorts.

The "Millennials" - people who came of age after the turn of the century - have had a run of bad luck, most clearly in developed markets. Capital losses in the global financial crisis of 2008-2009 and high subsequent unemployment have dealt serious blows to young workers and savers. Add rising student debt in several developed countries, tighter mortgage rules after 2008, higher house prices, increased income inequality, less access to pensions and lower income mobility and you have a "perfect storm" holding back wealth accumulation by the Millennials in many countries. In emerging markets, it appears that trends have been somewhat more positive (see the Credit Suisse Emerging Market Survey 2017) and the Millennials have everywhere met both their challenges and opportunities

energetically – for example by pursuing a more active, healthy lifestyle and participating in the sharing economy. Nevertheless, on the whole, they are not what one would call a lucky generation.

The Millennials' challenges seem to have been most evident in North America, but the ripples have extended to Europe and elsewhere. They contrast with the good fortune experienced by the baby boomers, born in large numbers between 1945 and 1964, whose wealth was boosted by a range of factors including large windfalls due to property and share price increases. The millennial cohort is smaller as a percentage of the total adult population than the baby boomers were at the same age. Normally it is good to belong to a smaller cohort: there is less congestion in school and less

Figure 1



Percentage of adult population aged 20-29 by region, 1980-2017

competition with peers for jobs and homes. So why aren't they a lucky cohort? Did the financial crisis and its fallout just swamp the advantage of being in a small cohort? Or is there more to it?

Some commentators have mentioned the shadow cast by the baby boomers in developed countries. The boomers are now aged about 50 to 70 – their peak wealth years. They occupy many of the top jobs and much of the housing, especially at the higher end. Some Millennials feel that their own progress is being held up as they wait for the boomers to vacate. Cohort analysis seems to have been turned on its head: the big cohort is now the lucky one.

The comparison between Millennials and boomers is not entirely fair. All cohorts tend to have relatively high wealth when aged 50-70, and young people always struggle to settle in the labor market, establish families and buy homes. The boomers also experienced setbacks: the stagnation of the 1970s, high mortgage rates in the 1980s, and high inflation for a couple of decades. However, the Millennials are doing less well than their parents at the same age, with respect to incomes, home ownership and other dimensions of well-being. In this chapter we compare various aspects of wealth holding by Millennials with their counterparts in previous generations. There is more emphasis here on developed countries than on emerging markets, an imbalance that we hope to correct in future Global Wealth reports.

Demographics

Part of the explanation for the challenges of the Millennials in many countries may be that the cohort is small, but not that small after all. The Millennials are the children of the boomers. There were many baby boomers and altogether they had many children – sometimes referred to as the "echo generation."

Figure 1 displays the fraction of the population between ages 20 and 29 in different regions from 1980 onwards. For the world as a whole, the trend is downwards, but the decline slowed after the year 2000, with the Millennials coming of age. Furthermore, the trend was not uniformly downward. Between 2000 and 2010, the fraction aged 20 to 29 rose in Africa and India, and was roughly constant in North America. Among G7 countries and the BRICS, it rose in Germany, Russia, South Africa and the United Kingdom. So, in some key countries and regions, young people born in the 1980s formed a mini population wave, likely exacerbating their labor market and other problems as they came of age. However, the opposite happened in the Asia-Pacific region, China and Latin America. Also, the percentage aged 20-29 did not rise between 2010 and 2017 in any region or major country, so the second wave of Millennials was smaller than the first. On the basis of demographics alone, therefore, the younger Millennials may expect an easier time than their slightly older contemporaries.



Table 1

Wealth characteristics per adult by age, selected OECD countries, USD

Age group	Mean income	Mean net worth	Financial assets/ gross assets	Debts/ gross assets	Debts/ income	Percent of homeowners
	USD	USD	%	%	%	%
France 2010						
20-29	24,414	81,537	17.4	18.3	74.6	33.7
30-39	34,127	124,395	13.5	26.2	129.7	53.1
40-49	35,837	201,867	14.3	13.7	89.8	63.6
50-59	33,850	249,343	17.2	7.0	55.4	71.1
60-69	32,734	299,221	22.4	2.8	26.7	73.9
70+	30,314	272,903	28.4	0.5	4.9	65.6
Germany 2010						
20-29	26,786	68,694	20.9	16.9	52.1	29.5
30-39	40,666	81,258	25.5	28.7	80.3	35.5
40-49	46,983	190,261	19.2	15.4	73.7	54.1
50-59	45,500	250,531	18.8	11.6	72.5	59.5
60-69	36,731	214,635	22.9	8.6	55.1	62.8
70+	29,221	191,757	23.6	2.7	18.5	56.0
Italy 2010						
20-29	20,412	137,324	8.5	4.5	31.7	68.0
30-39	25,885	135,922	7.4	11.3	67.2	57.6
40-49	28,782	193,621	9.8	6.6	47.5	65.6
50-59	26,592	211,479	11.1	3.4	28.3	75.2
60-69	25,308	271,010	10.6	1.5	16.3	82.0
70+	20,191	223,169	10.9	0.3	3.8	78.3
Spain 2008						
20-29	20,745	147,107	8.3	13.7	112.8	77.7
30-39	25,542	156,532	8.6	21.9	171.7	76.8
40-49	26,823	208,358	10.8	13.7	123.4	82.9
50-59	26,345	267,518	12.5	5.7	61.5	88.3
60-69	22,081	309,903	11.3	2.8	41.0	90.3
70+	16,201	258,305	9.9	1.7	28.1	89.8
United Kingdom 2014						
20-29	19,564	115,030	52.3	19.9	131.3	54.0
30-39	26,572	89,491	43.6	41.7	229.0	64.8
40-49	26,485	212,498	50.1	20.9	202.8	70.6
50-59	24,999	406,097	61.0	7.3	121.6	76.0
60-69	21,600	537,415	60.3	2.4	57.4	80.8
70+	19,646	403,698	47.1	0.9	19.3	75.2
United Chates 2010						
United States 2013			04.0	04.0	110 5	
20-29	27,174	97,544	34.0	24.9	118.7	41.1
30-39	45,914	124,544	27.7	33.4	135.8	53.5
40-49	59,819	259,734	32.3	21.7	120.6	65.5
50-59	60,987	385,283	41.0	13.5	98.7	68.6
60-69	60,127	564,927	48.2	8.4	86.3	75.6
70+	40,077	481,332	48.2	4.4	55.6	71.8

Source: Calculated from microdata for (1) the 2013 Survey of Consumer Finances in the United States and (2) the 2010 Household Finance and Consumption Survey in Europe.



Assets and debts of the Millennials

Table 1 provides a breakdown by age for various wealth characteristics in the developed markets of France, Germany, Italy, the United Kingdom and the United States. Families have been split into their adult members, and each adult assigned an equal share of the family's wealth. Thus, the numbers refer to the wealth of the family in which the adult lives, rather than the amount that legally belongs to the individual, which is not given in the source data. This distinction should be borne in mind when interpreting our results, especially for the youngest group, many of whom still live with their parents.

The table reminds us that income and wealth both generally increase with age – certainly for the average individual, but also usually in cross-section data (there are exceptions – see Credit Suisse Emerging Consumer Survey 2016). The share of financial assets also rises once young millennial adults have left the parental nest. Non-financial assets – of which owner-occupied homes are the most important – decline in importance with age. For many people, the first priority is to buy a house, with financial assets being built up later. This pattern helps to explain why the high and rising house prices seen in many countries since the year 2000 have been a special problem for the Millennials. Financial assets are especially important in the United Kingdom, peaking at 61% of total assets in the 50–59 age group. This reflects the fact that the UK data include the value of all non-state pensions. The US data include only defined contribution pension plans – hence the lower figure of 41% for the same group. Data for the other countries does not include employer-based pensions of any kind, although, in all the countries shown, individuals' private retirement savings are counted.

According to the IMF, state pensions in advanced economies are expected to replace just 20% of per capita income by 2060, compared with 35% today. Also, fewer workers are now covered by employerbased pensions than in the past, and defined benefit pensions are declining fast. For example, only 10% of UK workers in the private sector born in the 1980s have a defined benefit pension plan, compared to 40% of those born in the 1960s at the same age. So it is increasingly important for people to save for retirement on their own account. The share of financial assets in total assets will need to rise in most countries in the future compared to what is seen in Table 1. This is especially true for the Millennials, who will likely face the added challenge of higher contributions and taxes required to fund state pensions and other benefits for the baby boom cohort in their retirement.

As a fraction of both total assets and income, debt rises from age 20 onwards, and then falls steadily with age in all the countries shown in Table 1. Acquiring mortgage debt and then paying it off explains much of this pattern. Apart from the United Kingdom, where debt exceeds two years' income for those aged 30– 40, the ratios of average debt to assets or income do not appear alarming. However, the averages conceal the fact that there is a minority for whom debt loads are a problem. That minority is largest in the most indebted age groups, which means those in the 30–39 year age group in each country.

Student loans have been an increasingly important component of debt in a number of countries. The trend is particularly striking in the United States and is also evident in Germany (see Figures 2a and 2b, which use the same data sources and age groups as Table 1). In the United States, 37% of those aged 20–29 in 2013 had some student debt, which accounted for 18% of the total debt of that age group. In Germany, 12% of those in the same age group had student debt and it accounted for about 6% of total debt.

The rise in student debt is partly due to higher fees. But it also reflects the fact that the Millennials are more educated than preceding cohorts. For instance, the percentage of 25-34 year olds with tertiary education in OECD (Organisation for Economic Cooperation and Development) countries rose from about 15% in 1970 to 26% in 2000 and 43% in 2016. This greater educational attainment may help to ease the Millennials' labor market difficulties. However, although average rates of return to college and university have held up fairly well, this is largely because lower wages for less-educated workers have reduced the opportunity cost of tertiary education. Acquiring more education in order to overcome the "millennial disadvantage" is a strategy that will reap rewards for a minority of high achievers and those specializing in areas in high demand like high tech and finance. But for most university-educated Millennials the outcome may be job opportunities and wages no better than those of their parents, achieved by a dint of more costly education.

Incidence of student debt by age, United States and Germany



Percentage of adults with student debt

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 2b

Figure 2a

Student debt as % of total debt by age, United States and Germany



Student debt/total debt (%)

Figure 3a



Incidence of inheritance by age, selected OECD countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 3b

Inherited wealth as % of total assets by age, selected OECD countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Some Millennials have received financial help from their family to pay for higher education and for house purchases. Others may have inherited wealth or stand to do so in the future. Of those aged 20–39, only about 10%–15% of adults have inherited in the United States, France and Germany (see Figure 3, which again uses the same data source as Table 1). Many more will inherit later – by age 70 about 30%– 40% of adults have inherited in these countries, and in the United Kingdom the number is close to 50%. The amounts involved are sizeable. In the countries shown in Figures 3a and 3b, of individuals aged 30–39 who had already inherited, reported inheritances averaged 40% of their current total assets.

Some respondents forget about small transfers that they have received, and some may be unaware of likely future bequests. Even taking that into account, the surveys suggest it is unlikely that more than 50% of a typical cohort stand to inherit at any point in their lives. But those who do inherit will receive substantial amounts, on average. With the Millennials' parents' wealth having been boosted by high house prices and the booming stock market of recent years, the expectation that half of the Millennials will not inherit while the other half receive relatively large amounts is a source of higher inequality for that generation compared with earlier cohorts.

Entrepreneurship

It is sometimes claimed that Millennials are starting more businesses than earlier generations, and doing it at younger ages. But the official statistics suggest otherwise: only 2% of Millennials in the United States are self-employed, versus 8% of Generation Xers (those born between 1965 and 1980) and baby boomers. And entrepreneurship, as measured by the fraction of self-employed workers, has been declining in most OECD countries since the turn of the century. The OECD self-employment rate fell from 17.6% in 2001 to 15.8% in 2011; in the United States it dropped from 7.4% in 2001 to 6.5% in 2015.

There are also big declines in some emerging market countries – a fall from 52.8% in 2001 to 33.0% between 2001 and 2015 in Turkey, for example, and a drop from 36.4% to 32.1% in Mexico. Almost the only OECD country showing an increase is the United Kingdom, where the rate rose steadily from 12.2% in 2001 to 14.9% in 2015. Sagging entrepreneurship in most countries is consistent with relatively few Millennials starting a business in this period.

The apparent decline in entrepreneurship among Millennials relative to their predecessors seen in the official statistics may reflect the fact that the cohorts being compared are observed at the same point in time, not at the same age. More Millennials will start businesses as they age. Another explanation is that those Millennials who have become entrepreneurs have each created more businesses than their counterparts in earlier cohorts. This may reflect their "tech savvy" and the greater ease of starting multiple businesses these days with the help of the internet. A third factor is that although many Millennials would like to start a business, for a time they were restrained by tough economic conditions. This suggests a surge in millennial entrepreneurship may occur soon or may already be taking place, as has been seen in some emerging markets, such as China and India.

Comparing cohorts

Figure 4 shows wealth components for US adults aged 20–29 and 30–39 in 1992, 1998, 2007 and 2013. Total assets increased markedly for the 20–29 year-old group between 1998 and 2007, due mostly to an increase in real assets caused by rising house prices. Real assets for 30–39 year olds also increased rapidly at that time, but mean financial assets fell in this age range, perhaps reflecting re-allocation of portfolios in response to the changing returns from real and financial assets. Things went into reverse between 2007 and 2013:

real assets declined substantially for both groups and financial assets increased a little. Debt rose strongly for both groups between 1998 and 2007, but has since returned to its 1992 level.

These comparisons tell us about the experience of Generation X and the Millennials in their early adulthood. Generation X was still in its late 20s and 30s when house prices rocketed in the United States prior to the global financial crisis, and during the crisis itself. So it, as well as the first wave of Millennials, had a wild roller coaster ride. They experienced not only the effects of the general rise and fall of economic activity, but also the impacts of wild swings in asset prices. Both aspects are reflected in the wealth changes seen in Figure 4.



Wealth components of US adults





Tracking cohorts

Several countries have time series of household wealth surveys that can be used to trace the fortunes of different cohorts over time. The United States Survey of Consumer Finance (SCF), for example, has been conducted every three years since 1992. This allows us to track the wealth of a given cohort from survey to survey. Figure 5 displays the mean wealth of cohorts of adults grouped according to age in 2017. Overall, wealth rises with age and declines in retirement, but the damage caused by the financial crisis is evident.

Figure 5

Wealth per adult by age, for US cohorts defined by age in 2017



Red dot indicates the year 2007

Most of the (connected) age-wealth profiles not only dip after 2007, but drop below the profile of the next age group. Instead of having higher wealth at a given age than their predecessors – as has invariably been the case during the past half century or more – each of the cohorts aged from 35 to 79 had less wealth after 2007 than its immediate predecessor at the same age.

The decline in wealth of most cohorts after 2007 is a "year effect," unrelated to age or cohort. The years after 2007 were bad, and they were bad for everyone. Similar evidence has been found for the United Kingdom: every cohort born after 1955 had less wealth in 2013 than their predecessors had just five years earlier. It is quite likely that a cohort that experiences bad times early in its life cycle is at a lasting disadvantage. If so, we would expect to see in the future that the Millennials do worse than their predecessors at the same age even when good times – or at least better times – appear. Unfortunately, the current economic recovery has not lasted long enough for that comparison to be made at present.

Figure 6 displays US age-debt ratio profiles in a similar fashion. For each cohort aged 40 or more in 2017, the debt to income ratio was higher than that of previous cohorts at all ages. The "crossing over" observed for wealth in Figure 5 is not seen, reflecting the fact that debts do not fall in value when houses and shares crash, as they did during the financial crisis. But, perhaps most interestingly, the pattern is interrupted for the Millennials. The debt to income ratio started out higher than earlier cohorts for those aged 35-39 in 2017, and also rose (briefly, in 2010) above earlier cohorts for those aged 30-34 in 2017. But then there was a crossing-over in 2013 for both of these cohorts, with their debt to income ratios declining below previous cohorts. This hints that the Millennials became more cautious about debt than their predecessors due to the shock of the housing bust in the United States and the global crisis.

Figure 6









Student debt per adult by age, for US cohorts defined by age in 2017 (USD)

Red dot indicates the year 2007

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Student debt has leapt up for the most recent cohorts in the United States (Figure 7). The biggest increase came for the cohort aged 35-39 in 2017 - i.e. the "leading edge" of the Millennials - but those aged 30-34 in 2017 saw a further increase. As noted earlier, as a consequence, student debt now forms a substantial portion of total debt for young people in the United States.

The percentage of adults living in owner-occupied housing shows much more stability over cohorts (Figure 8). The oldest cohorts follow almost exactly the same path, but for those aged 40-49 or 35-39 in 2017, there was a higher initial fraction of home owners in successive cohorts. The financial crisis resulted in crossing-over once again, and by 2013 these cohorts slipped below previous cohorts with regard to the fraction of homeowners. The record of those aged 30-34 in 2017 is less clear cut due to an upward "blip" in home ownership recorded in the 2010 survey, which could be a statistical artifact.

Figure 8



Percentage of adults living in owner-occupied housing, for US cohorts defined by age in 2017




Expected inheritance per adult by age, for US cohorts defined by age in 2017 (USD)

Red dot indicates the year 2007

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

However, their home ownership rate in 2007 and 2013 was below previous cohorts, again suggesting a more cautious approach to home ownership prompted by the housing bust and the financial crisis. Survey evidence also suggests that US Millennials are more pessimistic about future inheritances than previous cohorts (Figure 9). They expect to inherit less than their immediate predecessors at the same age, perhaps because they know that their parents suffered a substantial reduction in wealth during and following the financial crisis.

Inequality and mobility

Millennials have been affected by the general rise in income inequality in advanced economies over recent decades. In a world with constant mean income, constant inequality and no mobility, parents and children would be equally well off. If – more likely – mean income is rising, and there is some mobility, but inequality is constant, then most children will be better off than their parents. But income inequality has been

rising in the United States since the mid-1970s, and while mean income has also risen considerably, median income has not increased much.

Mobility has also gone down. Similar trends have been seen in other "anglo" countries (with some notable differences, of course). The net result is that past expectations no longer apply. For example, 90% of children in the United States born in 1940 had earnings greater than their parents', but this ratio had fallen to 50% for children born in the 1980s. About 70% of this decline was due to the rise in inequality.

Billionaire Millennials

Some Millennials have become very prominent billionaires, for example the principals in Google, Facebook, Twitter, and some other internet or high tech enterprises. This raises the question of whether some Millennials, at least, have been unusually successful entrepreneurs. There are few young billionaires on the Forbes list, but an interesting trend has emerged. In 2003 and 2005, only one person under 30 appeared on the list. This jumped to five by 2010 and to nine by 2017. The number aged 30–39 has also risen over time, but up to 2010 it did so more slowly than the total number of billionaires, so the percentage of billionaires aged below 40 fell from 5.8% in 2003 to 2.9% in 2010 (Table 2). However, this fraction stabilized after 2010 and was 2.8% in 2017.

Table 2

Percentage of Forbes Global Billionaires by age group

Age group	2003	2005	2010	2015	2017
20-29	0.3	0.2	0.5	0.2	0.5
30-39	5.5	4.2	2.4	2.4	2.3
40-49	9.4	11.5	15.3	12.8	11.0
50-59	23.2	19.9	25.1	25.0	24.5
60-69	26.9	29.0	25.1	26.6	28.1
70+	34.7	35.3	31.6	33.1	33.6
ALL	100	100	100	100	100

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

In absolute terms, the number of young billionaires has risen sharply in the last several years. There were 21 billionaires aged less than 40 in 2003, and just 24 in 2010. But by 2017 the number had risen to 46. Furthermore, their mean wealth rose substantially – from USD 3.2 billion in 2010 to USD 4.1 billion in 2017 (Figure 10). This increase in wealth was especially marked in the last two years.

The geographic and demographic profile of Forbes billionaires yields interesting insights, especially with regard to the comparison between emerging markets and advanced countries since 2000. The age distribution and fraction of self-made billionaires has changed little in advanced countries. But in emerging markets the fraction of self-made billionaires rose from 56% in 2001 to 79% in 2014. Meanwhile, the billionaires are younger in the emerging market countries: billionaires under the age of 50 outnumbered those over 70 in 2014. In highincome countries, on the other hand, one-third of billionaires in 2014 were over 70 and only 12% were aged less than 50. The upsurge of young, self-made billionaires in emerging markets has been seen as a sign of healthy growth and economic dynamism.





Rates of return and interest rates

The financial prospects of a cohort are affected by the rates of return they receive on investments and by the interest rates they face. Throughout the world, equity returns were high in both nominal and real terms during the 1980s and 1990s, providing favorable investment opportunities to baby boomers in the first half of their working lives, and also to young members of Generation X (see the numbers from the Credit Suisse Global Investment Returns Yearbook 2017 shown in Table 3). In the first decade of the new century, however, both real and nominal returns collapsed, creating quite a different investment environment for the Millennials. After 2010, returns rebounded, but not to the level seen in the 1980s and 1990s.

The interest rate story is similar to that for equity returns, but the decline in real rates began earlier, in the 1990s. Although they rebounded slightly in Europe after 2000, the decline was steady in the United States. This is significant because workers trying to acquire assets increasingly have to switch to riskier investments to get a reasonable rate of return. Real lending rates, which are also important for young people, via mortgages for example, have declined over time as well, but more slowly than deposit rates. In the United States, lending rates reached quite a low level after 2010, but in Europe they remained at 3.8%, far above the real deposit rate of 0.4%. Hence safe saving opportunities have deteriorated for young people, while borrowing has not become correspondingly cheaper.

Conclusion

The Millennials have not been a lucky cohort so far. They faced the rigors of the financial crisis and the high unemployment that followed in many countries, and have also been widely hammered by high and rising house prices, rising student debt and increasing inequality. Their pension outlook is also worse than that of preceding cohorts. Some of the Millennials have prospered in spite of these difficulties, as reflected in the more positive picture we see in China and a range of other emerging markets, and the recent upsurge in the number of Forbes billionaires below the age of 40. Some have had substantial family help in paying for education and buying homes, and some stand to inherit from wealthy boomer parents in the future. But there are many Millennials who have not been so fortunate. As a result, the Millennials are not only likely to experience greater challenges in building their wealth over time, but also greater wealth inequality than previous generations.

Table 3

	A	verage annu	al rate of retur	n or interest	rate (%)		
	Equity		Deposit R	ates	Lending Ra	ates	Bat
Period	Nominal	Real	Nominal	Real	Nominal	Real	
United States							
1970-1979	6.1	-1.2					
1980-1989	16.3	10.7	8.2	4.6	9.9	6.3	
1990-1999	17.5	14.2	5.3	2.3	8.0	5.0	
2000-2009	0.2	-2.3	3.2	0.6	6.0	3.4	
2010-2016	12.0	10.2	0.3	-2.0	3.3	1.6	
Europe							
1970-1979	9.4	1.9					
1980-1989	18.2	12.8	3.8	2.5	8.8	7.5	
1990-1999	13.7	10.2	3.5	0.3	9.2	5.9	
2000-2009	3.1	0.6	2.9	0.8	7.1	5.0	
2010-2016	4.2	2.5	1.9	0.4	5.4	3.8	
World							
1970-1979	7.7	0.3					
1980-1989	19.4	13.6					
1990-1999	10.9	7.8					
2000-2009	1.2	-1.3					
2010-2016	8.3	6.6					

Average annual returns and interest rates by cohort, USA, Europe and World

Age range at mid-decade			
Baby boomers Generation X Millennials			
Baby Boomers			
10-29			
20-39			
30-49	15-29		
40-59	25-39	5-24	
50-69	35-49	15-34	
10-29			
20-39			
30-49	15-29		
40-59	25-39	5-24	
50-69	35-49	15-34	
10-29			
20-39			
30-49	15-29		
40-59	25-39	5-24	
50-69	35-49	15-34	

Note: Cohort definitions: Baby Boomers were born 1945-64; Generation X 1965-79; Millennials 1980-1999 Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017



Wealth outlook

Over the last few years, wealth growth has undershot relative to its earlier trend. We expect a similar pace of increase in the next five years and estimate that it will reach USD 341 trillion by 2022. At the same time, we expect debt to grow more quickly after a period of relative stability between 2007 and 2010. The number of millionaires will grow to a new all-time high of 44 million, while the number of UHNWIs is projected to reach 193,000.

Global picture

Figure 1

Despite the recent financial crisis and the lackluster performance of the world economy since then, global household wealth has increased by USD 163 trillion between 2000 and 2017. Emerging markets have been raising their share in world wealth and have increased their contribution to wealth growth since the beginning of this century. But what is likely to happen in the near future? We draw a picture of future global household wealth by presenting estimates of total wealth and its distribution across regions by the year 2022. We expect that emerging economies will continue to catch up with developed economies, albeit at a slower pace than previously estimated.

Since the year 2000, global wealth in US dollars has increased at an annual rate of approximately 5.0%, but with two distinct periods. Prior to the global financial crisis, global wealth grew at an annual pace of 9.5%. It then recorded a very sharp decline of -12.6% in 2008. Since then, the increase in wealth has moderated to an annual rate of just 3.8%. We believe that the pace of increase will continue to be lackluster and average 3.9% per annum over the next five years. This amounts to USD 60 trillion, or an additional 6.4 thousand dollars per adult by 2022. This is well below our previous estimate of 5.4%, but more consistent with the trend recorded in recent years. The slower pace of wealth growth is mostly explained by relatively lower growth in financial assets than



previously projected. The modest rise in risk-free rates over a five-year horizon leads us to expect earnings multiple compression. This is likely to be accompanied by lower annualized equity returns and consequently lower market cap growth forecasts for most of the major equity market indices, impacting growth in financial assets.

Figure 2





Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

It is worth mentioning the case of the United Kingdom. Owing to the impact of the Brexit in the financial markets together with the expected depreciation of the British pound, the United Kingdom is projected to reduce its stock of wealth by 0.9% in the next five years, when expressed in US dollars. This is mostly explained by a projected depreciation in the pound of 4% by 2022.

Based on our projections for the next five years, Millennials are not expected to benefit from the high rate of returns that the baby boomers did in the 1980s and 1990s. Based on the experience of past cohorts in normal times, we expect nominal wealth of the younger Millennials to grow at three times the overall growth rate of the economy. In this scenario, with an annual growth rate for global wealth of 3.9%, we should expect younger Millennials to have lower wealth in five years than their older counterparts today.

Emerging economies to keep increasing their share of global wealth, but at a slower pace

Between 2000 and 2017, emerging markets have nearly doubled their share of global wealth from 11% to 19%. We expect that the pace of wealth generation in emerging economies will continue to be greater than that of developed markets, although this differential will be less striking in the next five years. The share of wealth of emerging markets will likely reach 22% by 2022, increasing their share by 0.4 percentage points on average each year. The annual rate of increase is projected to be 6.5% for emerging markets versus 3.3% for developed markets (Figure 1).



Figure 3



Total wealth in the USA and relative position of selected economies (in USD trn, constant prices)

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Among emerging economies, those in the middle income segment that currently account for 15% of global wealth are expected to contribute about a guarter of wealth growth in the next five years and reach 17% of global wealth (Figure 2). China, a member of the middle income segment, is projected to add a total of USD 10 trillion to the stock of global wealth in the next five years, which is an increase of 33%. China accounts for 10% of global wealth, and this should rise to just above 11% by 2022. Brazil is also expected to recover from the recent economic slowdown and contribute USD 1.6 trillion to world wealth. Among the low or low middle income countries, India is also expected to grow its wealth very rapidly and add USD 2.1 trillion, which is an increase of 42% in just five years.

Leapfrogging

Despite the slower growth that we project relative to previous years, we expect to see a big improvement in the position of emerging economies over the next five years. For instance, in Figure 3, we compare the total wealth of some of the largest economies today and five years from now with the wealth of the United States during the course of the 20th century, adjusting for inflation. The chart shows the position of the Eurozone, Japan, Brazil, China and India relative to the United States from a historical perspective. The Eurozone's total wealth of USD 53 trillion in 2017 is comparable to the total wealth of the United States at the end of the 1990s. Five years from now, it should only grow the equivalent of one year in terms of the history of the United States. The case of China between 2000 and 2017 is striking, but is expected to slow down. Its wealth increased between 2000 and 2017 to the same extent as US wealth increased over the course of the 70 years from 1916, but is expected to increase by the equivalent of eight US years between 2017 and 2022 to reach USD 35 trillion, comparable to the US level in 1994.

Total wealth in Japan is comparable to that of the United States in 1973, and is expected to reach USD 25 trillion in 2022, which is an improvement of only four "USA years." The case of India is also noteworthy. Total wealth in India increased fourfold between 2000 and 2017, reaching USD 5 trillion in 2017. Despite this remarkable increase and having four times the population of the United States, total wealth in India is comparable to the level for the United States 90 years ago. We expect it to reach USD 6 trillion in real terms by 2022, which is comparable with the level in the United States in 1936.

Figure 4

Wealth components (2008=100)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 5

Proportion of adults by wealth segment (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Figure 6





Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Finally, after the economic slowdown of the last three years, we expect Brazil to recover and grow in the next five years by the equivalent of ten "US years" from 1901, reaching almost USD 4 trillion in real terms by 2022.

The components of wealth

Among the components of wealth, financial wealth has outpaced the growth in non-financial wealth since 2009, but has actually underperformed since 2000. While the level of financial assets was hit harder by the financial crisis than nonfinancial assets, it has recovered faster than real assets since then. Our forecasts assume that nonfinancial wealth will slightly outpace financial wealth by around 1% annually in the next five years. We also expect debt to grow at a faster pace than both financial and non-financial wealth in the coming years after a period of stability between 2007 and 2010 (Figure 4). Household debt is expected to increase by 37% in the next five years to reach 15% of gross assets.

Wealth distribution in 2022

The proportion of adults in the lower strata of wealth (less than USD 10,000) will likely decrease from 70% today to 66% in 2022 (Figure 5). The global middle class – those with net worth between USD 10,000 and USD 100,000 – is projected to grow by nearly 230 million adults, 40% of whom will be from China, exceeding 1.2 billion adults by 2022. The aggregate wealth of the middle class will likely grow by around 20%, resulting in a small decline in average wealth per adult (Figure 6). The number of adults in the upper middle segment, which consists of those with wealth between USD 100,000 and USD 1 million should grow by 52 million adults, while wealth per adult in this segment could rise by about 3% between 2017 and 2022.

Trends in millionaires and UHNWIs

The millionaire segment is projected to rise in number by 22%, from 36 million today to 44 million in five years' time (see Table 1). The lower world wealth growth that we expect in the next five years should result in a slower pace of growth in the global number of millionaires and ultra high net worth individuals (UHNWIs). But there are differences across regions. While millionaire numbers in emerging economies are still far below the levels in the United States or Europe, they are expected to increase substantially by 2022. China could see its number increase by 41% to 2.7 million to reach the third position in the millionaires' world ranking behind the United States and Japan, but ahead of Germany and the United Kingdom. India could reach 370,000 millionaires in 2022, an increase of more than 50% in the next five years. We also project substantial increases in Latin America, pushed by the improved performance of Argentina (127%) and Brazil (81%). In addition, the number of millionaires in transition economies is predicted to rise substantially over the next five years, reaching 196,000 in Russia, 74,000 in Poland and 44,000 in the Czech Republic.

Among developed economies, the United States and Japan should see their millionaires rise by more than one million, and also Canada and Australia will experience important rises in their number of millionaires. On the other hand, given the expected poor performance of the United Kingdom after Brexit, we estimate a slight decline in its number of millionaires.

Bv 2022, the number of UHNWIs, those with wealth above USD 50 million, will likely increase by 45,000 to reach 193,000 individuals, more than half of whom will reside in North America. Countries in the Asia-Pacific region, including China and India, are home to more than 37,000 UHNWIs, compared to almost 32,000 living in Europe. This difference in favor of Asia-Pacific will increase further and, by 2022, the region is projected to accumulate another 14,400 UHNWIs to reach a total of nearly 52,000, 49% of whom will be from China. While Latin America is home to 8.5% of global adults, only 2% of global UHNWIs reside in the region. Despite the projected good performance of Brazil and Argentina, we expect this to continue as the region will likely add only 1,600 UHNWIs in the next five years.

Assuming no change in global wealth inequality, the global economy is projected to add another 719 billionaires in the next five years, meaning that their number will rise to nearly 3,000. Of these, 230 will be from North America and 205 from China. Of the additional 95 billionaires expected from Europe, 33 are likely to be from Russia.

Table 1

Number of millionaires in 2017 and 2022 (regions and selected countries)

Country	N	Number (thousand)		
	2017	2022	(%)	
United States	15,356	17,784	16%	
Japan	2,693	3,821	42%	
United Kingdom	2,189	2,126	-3%	
Germany	1,959	2,240	14%	
China	1,953	2,748	41%	
France	1,949	2,258	16%	
Italy	1,288	1,451	13%	
Australia	1,160	1,699	46%	
Canada	1,078	1,453	35%	
Korea	686	972	42%	
Switzerland	594	670	13%	
Spain	428	506	18%	
Taiwan	381	501	31%	
Belgium	340	405	19%	
Sweden	335	408	22%	
Netherlands	335	373	11%	
Austria	250	287	15%	
India	245	372	52%	
Brazil	164	296	81%	
Russia	132	196	49%	
Hong Kong	119	138	16%	
Mexico	84	88	5%	
Argentina	30	68	127%	
Africa	121	210	73%	
Asia-Pacific	6,069	8,552	41%	
China	1,953	2,748	41%	
Europe	10,763	12,115	13%	
India	245	372	52%	
Latin America	460	706	54%	
North America	16,440	19,245	17%	
World	36,051	43,948	22%	

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Methodology

We project total wealth at the country level by forecasting the two components of wealth – financial and non-financial – separately, but by using the same inputs (GDP and inflation) from the IMF's latest World Economic Outlook database.

We project aggregate financial wealth using a combination of GDP and equity market capitalization growth. We forecast 5-year market value using a dividend discount model at the country level. To compute the discount rate we assume normalization in market conditions (risk appetite and volatility). We estimate dividends by using analyst consensus expectations and trend GDP growth. Then we estimate the 5-year forward price target and finally compute the corresponding change in market value (this typically grows at a higher rate than the price index). We have estimates for 42 countries in local currency and they are converted to dollars using IMF exchange rate projections.

For non-financial wealth, we base our model on a regression of non-financial wealth on GDP and inflation and we produce a forecast based on IMF projections of these variables. Again, forecasts are in local currency and they are converted into dollars using IMF FX projections. For countries where we do not have projections, we use GDP per capita growth to forecast net worth, and assume that the percentage in financial/non-financial/debts is the same as for 2017.



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Wealth of nations

Both the levels and the distribution of household wealth differ widely across countries. This section of our report provides a sample of the variety of country circumstances, and the range of experiences.

The quality of wealth data is good in the high income countries that are home to most of the world's wealth, but is patchy elsewhere. Our assessment of the reliability of the source material is reported for each country discussed below. For all of the countries featured, data quality is rated as no worse than "fair," meaning that there is at least some credible source of data on wealth, such as a recent household survey. In most of the selected countries, the quality is "good," indicating that there is household sector balance sheet data as well as a household wealth survey. A "satisfactory" rating is an intermediate assessment given, for example, when the data are good but somewhat out of date.

The charts in this section highlight some of the most important facts, and are generally based on wealth per adult in US dollars at the prevailing exchange rate. The first chart shows changes in average wealth for the period 2000–2017. Since exchange rate changes can alter the apparent trend, an alternative series is provided for each country using a moving average USD exchange rate for the previous five years. A typical pattern is a mild decline in average wealth between 2000 and 2002, an increase until 2006 or 2007, and a drop in 2008 with a subsequent recovery. By mid-2017, wealth was invariably higher than in 2000, and in most cases higher than in 2007. Many currencies rose against the US dollar between 2000 and 2017, so that wealth growth over this period often appears slower when measured using average exchange rates.

From mid-2016 to mid-2017, the value of a number of important currencies, such as the euro, rose in terms of US dollars. The yen fell against the US dollar, dropping 9%, the renminbi went down 2%, and the British pound fell 3%, but several other key currencies went in the opposite direction. For example, against the US dollar, the euro rose 3%, the Indian rupee 4%, and the Russian ruble 8%. Although not all currencies rose against the US dollar, the charts hereafter show wealth in 2017 increasing in most countries. However, wealth per adult fell in USD terms in Brazil, Japan and the UK, in part due to exchange rate changes.

Our second chart shows the current split between financial and real (nonfinancial) assets, as well as the average level of debt. Globally on average, financial assets comprise 54% of total gross assets, and debt accounts for 13%. There are several countries for which financial assets are significantly more important, including Japan and the United States. In contrast, real assets dominate in India and Indonesia, and in Australia and France among the wealthier countries.

The last chart shows the distribution of wealth. There are some notable comparisons. For example, 92% of adults in India have net worth less than USD 10,000, whereas this figure is only 63% in China. Moreover, the percentage of those with very little wealth is surprisingly high in some developed countries, while in others it is very low. This reflects aspects such as the availability of credit, including student loans, and whether young adults are counted separately from their parents, making their wealth more evident in household surveys.

United States

Record spell continues

The US economy and its financial markets continued to perform well in 2016–2017, leading to a ninth successive year of rising wealth. An important driver for a number of years was the Fed's quantitative easing, yielding low interest rates that raised bond prices and contributed to economic recovery and higher stock prices. In the past year, business and market conditions have strengthened further, in spite of somewhat higher interest rates, in part due to the prospect of fiscal stimulus, deregulation and lower tax rates proposed by the president.

Average wealth was USD 211,000 in 2000, and rose fairly steadily until 2006, before falling during the global financial crisis. Wealth per adult has now fully recovered, and is 30% above the 2006 level. There is some uncertainty about future interest rates and stock market prospects, but otherwise the signs are mostly positive for household wealth.

The USA has a high proportion of assets (71%) reported as financial, partly because it includes business equity wholly as a financial asset. Adopting the more usual procedure of treating unincorporated enterprises as part of the household sector, the share would be around 63%, which is still relatively high. This reflects the fact that, compared with many other OECD (Organisation for Economic Co-operation and Development) countries, the USA has more economic activity in the private relative to the public sector. The USA also has more outward foreign investment. Debts of USD 60,200 per adult are not extreme by international standards.

US wealth distribution has a high fraction of adults with wealth above USD 100,000 compared to the world as a whole. The percentage of people with wealth at higher levels is even more striking. The USA has the most members of the top 1% global wealth group, and currently accounts for 43% of the world's millionaires. The number of UHNWIs with wealth above USD 50 million is four times that of the next country, China.

Country summary 2017

Population	323	million
Adult population	241	million
GDP	78,483	USD per adult
Mean wealth	388,585	USD per adult
Median wealth	55,876	USD per adult
Total wealth	93.6	trillion USD
US dollar millionaires	15,356	thousand
Top 10% of global wealth holders	107,708	thousand
Top 1% of global wealth holders	19,134	thousand
Quality of wealth data	ል ፡፡	good

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Japan

Still in the doldrums

Japanese wealth fell 6.1% to mid-2017, but only because of exchange-rate depreciation. In yen terms, total wealth rose 2.8%, and wealth per adult rose 2.9%. This represents a growth rate of wealth about equal to the average for the period since 2010.

The yen depreciation relegated Japan to third place in the global rankings of aggregate wealth, behind the United States and China. Long-term trends remain unimpressive. Japan's wealth per adult was USD 191,100 in 2000. Today, average wealth is only 18% higher in US dollar terms, and just 15% higher when measured in yen. The slow underlying growth is due to the combined effects of the unsteady performance of the stock market and real estate, low interest rates, and a lower saving rate than in earlier years.

Neither financial asset prices nor house prices have risen steadily in Japan. As a consequence, the relative importance of financial assets in household portfolios has changed little, and remains at the fairly high level of 61% of gross assets. Debts have been declining, and are modest by international standards, at 13% of total assets.

Japan has a more equal wealth distribution than any other major country, as reflected in a Gini coefficient of 61%. Together with its high average wealth, this relative equality means that few adults have assets below USD 10,000. The proportion of the population with wealth above USD 100,000 is six times the global average. At the turn of the century, Japan was a close second to the USA regarding the number of residents in the top 10% and top 1% of global wealth holders. Japan still retains second place, but the gap has widened considerably.

Population 128 million Adult population 105 million GDP 46,786 USD per adult Mean wealth 225,057 USD per adult Median wealth 123,724 USD per adult Total wealth 23.7 trillion USD US dollar millionaires 2,693 thousand Top 10% of global wealth holders 6 Top 1% of global wealth holders

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Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



luberas and Anthony Shorrocks, Credit Suisse Global

Country summary 2017

Quality of wealth data

203D 10,000 03D USD	thousand	5,579
■Japan ■World	thousand	4,487
Source: James Davies, Rodrigo L Wealth Databook 2017	good	ልዋዋ

China

Rising steadily

Wealth per adult has grown strongly in China, rising from USD 5,410 to USD 26,870 over 2000-2017. The global financial crisis caused a major setback, and wealth fell by almost 20%. It soon overtook its pre-crisis level, however, and although it grew more slowly than before the crisis, wealth per adult is now 70% above its 2007 level. Signs for the next year are generally positive, with GDP growth having stabilized and infrastructure and other investment strong. There is reason to be cautiously hopeful about the prospects for growth in China's household wealth in the near term.

In terms of total household wealth, China currently lies in second place, behind the United States and ahead of Japan. Reflecting a still strong property market, the proportion of household assets in non-financial form rose from 53% in 2016 to 55% in 2017. Real assets comprised USD 15,980 per adult in mid-2017, having risen 10% in the previous 12 months. Debt averages just USD 2,380, equivalent to 8% of gross assets. While concern has been expressed about growing household debt in China, this debt ratio is low by international standards.

Although significant inequality is created by the strong urban/rural divide in China, overall wealth inequality was low at the turn of the century. This was in part due to the absence of inherited fortunes, and the relatively equal division of rural land and privatized housing. Inequality has been rising quickly, however, since 2000. China now has 2.0 million millionaires, and more residents with wealth above USD 50 million than any country except the United States.

Figure 1

Wealth per adult over time



Figure 2

30000

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Country summary 2017

Population	1,407	million
Adult population	1,079	million
GDP	10,803	USD per adult
Mean wealth	26,872	USD per adult
Median wealth	6,689	USD per adult
Total wealth	29.0	trillion USD
US dollar millionaires	1,953	thousand
Top 10% of global wealth holders	42,084	thousand
Top 1% of global wealth holders	2,668	thousand
Quality of wealth data	ል ፡፡	good

India

Continued growth

In terms of its own currency, India's wealth has grown quite quickly since the turn of the century, except during the global financial crisis. Annual growth of wealth per adult in rupees averaged 7% over 2000–2017. Prior to 2008, wealth also rose strongly in US dollar terms, from USD 2,010 in 2000 to USD 5,020 in 2007. After falling 26% in 2008, it rebounded, reaching USD 5,050 in 2010, but since then has risen only 18%, being held back by currency depreciation. Wealth per adult is estimated at USD 5,980 in mid-2017.

Personal wealth in India is dominated by property and other real assets, which make up 86% of estimated household assets. This is typical for developing countries. Personal debts are estimated to be only USD 376, or just 9% of gross assets, even when adjustments are made for under-reporting. Thus, although indebtedness is a severe problem for many poor people in India, overall household debt as a proportion of assets in India is lower than in most developed countries.

While wealth has been rising in India, not everyone has shared in this growth. There is still considerable wealth poverty, reflected in the fact that 92% of the adult population has wealth below USD 10,000.

At the other extreme, a small fraction of the population (just 0.5% of adults) has a net worth over USD 100,000. However, due to India's large population, this translates into 4.2 million people. The country has 340,000 adults in the top 1% of global wealth holders, which is a 0.7% share. By our estimates, 1,820 adults have wealth over USD 50 million, and 760 have more than USD 100 million.

Country summary 2017

Population	1,332	million
Adult population	835	million
GDP	2,838	USD per adult
Mean wealth	5,976	USD per adult
Median wealth	1,295	USD per adult
Total wealth	5.0	trillion USD
US dollar millionaires	245	thousand
Top 10% of global wealth holders	6,136	thousand
Top 1% of global wealth holders	340	thousand
Quality of wealth data	ል ተ ታ	fair

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



India World

France

Opportunity to recover

The year to mid-2017 saw an increase in growth and a slight decline in unemployment in France. However, this comes after years of low growth, high unemployment, and rising debt. Reflecting those challenges it now ranks 10th in the world according to wealth per adult, just behind Singapore and ahead of Sweden. It is in sixth place in terms of aggregate household wealth, slightly behind the United Kingdom and Germany.

Wealth per adult in US dollars grew quickly in France from 2000 to 2007, then decreased 9% in 2008. The pre-crisis wealth peak has still not been matched in US dollar terms, although in euro terms average wealth is now 13% higher than in 2007. Much of the rise of French wealth in earlier years in US dollar terms was due to appreciation of the euro, reinforced by a rapid rise in house prices. The fall in the euro-dollar exchange rate after 2013 sent average wealth in US dollars back to levels not seen for a decade. That decline is just beginning to be corrected. The country clearly has an opportunity to recover. It remains to be seen whether that opportunity will be realized.

Real estate is a large component of household wealth in France, with the result that non-financial assets make up 60% of gross assets. Personal debts equal just 10% of gross assets. Europe overall accounts for 31% of the adults in the global top 1% by wealth, with almost a fifth of the European contribution coming from France. This reflects the high total net worth of French households.

Wealth inequality is not extreme in France. We estimate the share of the top 1% of adults in total wealth to be just 22%, for example, which is moderate by international standards. Still, a quarter of adults in France have wealth less than USD 10,000. And at the top end, the proportion with assets over USD 100,000 is six times the global figure.

Country summary 2017

Population	65	million
Adult population	49	million
GDP	49,644	USD per adult
Mean wealth	263,399	USD per adult
Median wealth	119,720	USD per adult
Total wealth	13.0	trillion USD
US dollar millionaires	1,949	thousand
Top 10% of global wealth holders	28,056	thousand
Top 1% of global wealth holders	2,783	thousand
Quality of wealth data	ል ፡፡	good

Figure 1





Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



United Kingdom

Brexit looms

The United Kingdom had a tumultuous year after the vote to leave the EU in the 23 June 2016 referendum. This was followed by sharp declines in the exchange rate and the stock market. Nevertheless, over the next 12 months, wealth per adult rose 2% in pounds sterling, although it fell 1% in US dollars. The stock market recovered and UK market capitalization went up 10%. But the outlook is still very uncertain, both for the economy and for household wealth.

In the early years of the century, UK wealth grew rapidly, fuelled by a robust housing market and good equity returns. The boom ended with the global financial crisis in 2008. By 2007, the wealth/income ratio had risen above 9, the highest level recorded for any country apart from Japan at the peak of its asset price bubble in the late 1980s. The subsequent fall in both real property and financial assets led to a 13% drop in average wealth measured in pounds sterling; but the simultaneous depreciation of the pound caused wealth per adult in US dollars to plummet by 37%. Average wealth in pounds sterling fluctuated around the pre-crisis peak up to 2012, but since then has risen to a level 33% above the 2007 benchmark. In US dollar terms, however, wealth per adult is 14% below the 2007 figure.

Financial and non-financial assets are roughly equal in importance in the United Kingdom. Along with many other countries, household debt grew quickly as a multiple of income from 1980 onwards, tripling in value to reach 180% in 2008. The debt-to-income ratio subsided to 150% by 2013, but has subsequently risen back to around 170%. At 15% of gross wealth, debt is not exceptionally high by international standards.

The pattern of wealth distribution in the United Kingdom is fairly typical for a developed economy. A little more than half of the adult population has wealth exceeding USD 100,000, and there are 2.2 million US dollar millionaires, representing 6.1% of all millionaires globally.

Country summary 2017

Population	66	million
Adult population	51	million
GDP	50,754	USD per adult
Mean wealth	278,038	USD per adult
Median wealth	102,641	USD per adult
Total wealth	14.1	trillion USD
US dollar millionaires	2,189	thousand
Top 10% of global wealth holders	27,770	thousand
Top 1% of global wealth holders	3,296	thousand
Quality of wealth data	ል ፞፞፞፞፞፞፞፞	good

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Switzerland

View from the top

Since the turn of the century, wealth per adult in Switzerland has risen by 130% to USD 537,600. Disregarding Iceland, for which the data are less reliable, Switzerland has headed the global rankings every year. Most of the rise since 2000 has been due to appreciation of the Swiss franc against the US dollar, especially between 2001 and 2013. Measured in Swiss francs, household wealth rose 35% from 2000 to 2017 – an average annual rate of 1.8%.

Financial assets make up 54% of gross wealth in Switzerland – somewhat higher than their share in the United Kingdom, but less than in Japan or the United States. Debts average USD 140,500 per adult, one of the highest absolute levels in the world, and represent 21% of total assets. The debt ratio has changed little in recent years, and appears to reflect the country's high level of financial development, rather than excessive borrowing.

Among the ten countries with long series of wealth distribution, Switzerland is alone in having seen no significant reduction in wealth inequality over the past century. A combination of high average wealth and relatively high wealth inequality results in a large proportion of the Swiss population being in the upper echelons of the global distribution. Switzerland accounts for 1.7% of the top 1% of global wealth holders, which is remarkable for a country with just 0.1% of the world's population. Over two-thirds of Swiss adults have assets above USD 100,000, and 8.8% are US dollar millionaires. An estimated 2,780 individuals are in the UHNW bracket, with wealth over USD 50 million, and 1,070 have net worth exceeding USD 100 million.







Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Country summary 2017

Population	8	million
Adult population	7	million
GDP	98,395	USD per adult
Mean wealth	537,599	USD per adult
Median wealth	229,059	USD per adult
Total wealth	3.6	trillion USD
US dollar millionaires	594	thousand
Top 10% of global wealth holders	5,238	thousand
Top 1% of global wealth holders	820	thousand
Quality of wealth data	ል ፡፡	good

Switzerland World

Russia

Mixed results

Household wealth in Russia grew rapidly in the initial years of this century, as the country boomed along with global commodity markets. Between 2000 and 2007, wealth per adult rose eightfold. Since 2007, however, growth has been slow and uneven – up 73% to date in ruble terms, but down 28% when measured in current US dollars, due to ruble depreciation. The USD/RUB rate rose from 25 in 2007 to 34 in mid-2014, and then shot up to 60 by the end of 2014 due to the imposition of financial sanctions. The rate was 59 in mid-2017. While household wealth per adult has risen from USD 2,940 in 2000 to USD 16,770, the current level is barely above that of 2006.

The quality of wealth data for Russia is mixed. There are official financial balance sheets for the household sector, but no household wealth survey and no official non-financial balance sheet data. Recently, however, academic researchers have provided new estimates of the household balance sheet, including non-financial assets. We have made use of that new evidence in our wealth estimates for Russia this year. The estimated value of financial assets per adult for mid-2017 is USD 3,730, while non-financial assets average USD 16,420. Personal debt grew rapidly in the period from 2000 to 2007, and more slowly after that. We estimate that it now equals 17% of gross assets.

According to our estimates, the top decile of wealth holders owns 77% of all household wealth in Russia. This is a high level, the same as the figure for the United States, which has one of the most concentrated distributions of wealth among advanced nations. Also interesting is that it is higher than the top decile share of 72% in China. The high concentration of wealth in Russia is also reflected in the fact that it has an estimated 69 US dollar billionaires, despite its modest level of wealth per adult.

Country summary 2017

Population	144	million
Adult population	113	million
GDP	12,640	USD per adult
Mean wealth	16,773	USD per adult
Median wealth	3,919	USD per adult
Total wealth	1.9	trillion USD
US dollar millionaires	132	thousand
Top 10% of global wealth holders	2,184	thousand
Top 1% of global wealth holders	175	thousand
Quality of wealth data	አ ታታ	fair

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Russia World

Singapore

Slow growth

Personal wealth per adult grew strongly in Singapore up to 2012. Since then it has risen slowly in domestic currency units, and declined a little in terms of US dollars. Despite this drop, average wealth remains at a high level - USD 268,780 per adult in mid-2017, compared to USD 115,560 in 2000. The rise was mostly caused by high savings, asset price increases, and a favorable rising exchange rate from 2005 to 2012. Singapore is now ninth in the world in terms of household wealth per adult, giving it the highest rank in Asia. Significantly, it is now well ahead of Hong Kong, which was ranked ahead of Singapore in 2000. Wealth per adult in Hong Kong grew at an average annual rate of only 3.0% between 2000 and 2017, versus 5.1% for Singapore. This conformed with higher GDP per capita growth in Singapore over the same period.

Financial assets make up 56% of gross household wealth in Singapore, a ratio similar to that of Switzerland, for example. The average debt of USD 50,570 is moderate for a high-wealth country, equaling just 16% of total assets. Singapore publishes household sector balance sheet data, which means that wealth information is more reliable than for most of its neighbors in Southeast Asia.

Wealth distribution in Singapore is only moderately unequal. Just 22% of its people have wealth below USD 10,000, compared with 70% globally. The fraction with wealth above USD 100,000 is six times the world average. Reflecting its very high average wealth, 0.4% of its adults, or 213,000 individuals, are in the top 1% of global wealth holders, which is a high number given that it has just 0.1% of the world's adult population.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Country summary 2017

Population	6	million
Adult population	4	million
GDP	66,100	USD per adult
Mean wealth	268,776	USD per adult
Median wealth	108,850	USD per adult
Total wealth	1.2	trillion USD
US dollar millionaires	152	thousand
Top 10% of global wealth holders	2,668	thousand
Top 1% of global wealth holders	213	thousand
Quality of wealth data	ል ቋቋቋቋ	good

Singapore

Taiwan

Asian tiger

Taiwan's average level of wealth, at USD 188,080, is well above that of most countries in the Asia-Pacific region, and similar to that of Western Europe. From USD 120,000 at the turn of the century, wealth per adult grew to USD 165,850 in 2010, with no drop during the financial crisis, although currency depreciation has caused dips in several years after 2010. Over the entire 2000– 2017 period, wealth per adult grew by 57% in USD terms, and by 81% using constant exchange rates.

Taiwan has a high saving rate and well-developed financial institutions, so it is not surprising that the composition of household wealth is skewed towards financial assets. The latter now make up 66% of total assets. Debt is relatively modest, equaling 14% of gross assets.

Compared to the world as a whole, Taiwan has high average wealth and only moderate wealth inequality. Only 7% of the adult population has wealth below USD 10,000, which is very low internationally – this ratio is 70% for the world as a whole. Forty-four percent of adults in Taiwan have wealth over USD 100,000, which is almost five times greater than the worldwide average of 9%. The large number of Taiwanese with high wealth reflects high mean wealth, rather than high wealth inequality: looking across countries, Taiwan's wealth Gini coefficient of 68% lies in the moderate range, and is one of the lowest among emerging-market economies.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Country summary 2017

Population	24	million
Adult population	19	million
GDP	28,798	USD per adult
Mean wealth	188,081	USD per adult
Median wealth	87,257	USD per adult
Total wealth	3.6	trillion USD
US dollar millionaires	381	thousand
Top 10% of global wealth holders	10,245	thousand
Top 1% of global wealth holders	545	thousand
Quality of wealth data	ል ፡ል፡፡	satisfactory

Taiwan World

Indonesia

Growth with depreciation

Indonesia recovered well from the 1997–1998 Asian financial crisis, and, measured in rupiah, wealth per adult has risen more than six-fold over the 2000–2017 period as a whole. Seen in domestic currency terms, the global financial crisis had little effect on wealth, and average net worth has risen fairly smoothly since 2008, at an average annual rate of 6.2%. However, exchange rate depreciation totaling 32% since 2010 has caused wealth per adult to rise more slowly in US dollar terms. Despite this setback, wealth per adult in US dollars has more than quadrupled since the year 2000.

A comparison of Indonesia and India is interesting. In 2000, wealth per adult in the two countries was fairly similar, with Indonesia just 22% ahead of India. However, the figure for Indonesia is now 84% higher than that for India. This is in line with Indonesia's faster growth in GDP. The composition of wealth is similar, with real assets making up 86% of gross assets in India and 88% in Indonesia, according to our estimates. Personal debts in the two countries are low, averaging just 9% of gross assets in India, and 7% in Indonesia.

In Indonesia, 82% of the adult population owns less than USD 10,000 – above the global figure of 70%. At higher wealth levels, there are fewer people than there are for the world as a whole. This reflects the fact that average wealth in Indonesia remains low by international standards. However, due to the considerable dispersion of wealth, 153,000 people in the country are in the top 1% of global wealth holders, and we calculate that 111,000 are US dollar millionaires.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Country summary 2017

Population	263	million
Adult population	168	million
GDP	5,857	USD per adult
Mean wealth	11,001	USD per adult
Median wealth	1,914	USD per adult
Total wealth	1.8	trillion USD
US dollar millionaires	111	thousand
Top 10% of global wealth holders	2,663	thousand
Top 1% of global wealth holders	153	thousand
Quality of wealth data	***	fair

Australia

Still resilient

Household wealth in Australia grew at a fast pace between 2000 and 2012 in US dollar terms, except for a short interruption in 2008. The average annual growth rate of wealth per adult was 12%, with about half the rise due to exchange-rate appreciation against the US dollar. The exchange rate effect went into reverse for three years after 2012 and, like other resource-rich countries, Australia was badly hit by sagging commodity prices. Despite that slowdown, Australia's wealth per adult in 2017 is USD 402,600, the second highest in the world after Switzerland.

The composition of household wealth in Australia is heavily skewed towards non-financial assets, which average USD 303,200, and form 60% of gross assets. The high level of real assets partly reflects a large endowment of land and natural resources relative to population, but also results from high property prices in the largest cities.

Wealth inequality is relatively low in Australia, as reflected in a Gini coefficient of just 65% for wealth. Only 5% of Australians have net worth below USD 10,000. This compares to 19% in the UK and 29% in the USA. Average debt amounts to 20% of gross assets. The proportion of those with wealth above USD 100,000, at 68%, is the fourth highest of any country, and almost eight times the world average. With 1,728,000 people in the top 1% of global wealth holders, Australia accounts for 3.5% of this top slice, despite being home to just 0.4% of the world's adult population.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3



Wealth distribution relative to world (in %)

Country summary 2017

24	million
18	million
71,403	USD per adult
402,603	USD per adult
195,417	USD per adult
7.3	trillion USD
1,160	thousand
13,146	thousand
1,728	thousand
ል ፡፡	good
	18 71,403 402,603 195,417 7.3 1,160 13,146 1,728

Australia World

South Africa

Vigorous stocks

Household wealth in South Africa grew strongly prior to the global financial crisis, rising from USD 8,300 in 2000 to USD 25,500 in 2007. Growth was similar in constant exchange rate terms. Since 2007, progress has been slower. In domestic currency terms, wealth declined slightly in 2008, but growth soon recovered and has averaged 7.5% per annum since 2010. Depreciation of the rand greatly amplified the wealth decline in 2008. This was reversed the following year, but a falling exchange rate caused wealth to decline in US dollar terms from 2010 to 2015. The rand has rebounded somewhat in the last two years, so that wealth per adult has risen fairly strongly in US dollar terms at the same time that its growth rate has fallen in domestic currency units.

South Africa has complete official household balance sheets, which is unusual among emerging market countries. This means that our estimates of the level and composition of household wealth are more reliable than for most other emerging markets. Personal wealth is largely comprised of financial assets, which contribute 64% to the household portfolio. This reflects a vigorous stock market, and strong life insurance and pension industries. Due in part to relatively low real estate prices, average real assets of USD 9,400 are only around twice the level of average debt (USD 4,500).

Along with Brazil and Indonesia, South Africa has a distribution of wealth that is similar to the distribution for the world as a whole, although a smaller fraction of individuals have wealth above USD 100,000 (4% versus 9%). Still, we estimate that 84,000 South Africans are members of the top 1% of global wealth holders, and that 58,000 are US dollar millionaires.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



South Africa World

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2017

Country summary 2017

Population	56	million
Adult population	35	million
GDP	8,753	USD per adult
Mean wealth	21,849	USD per adult
Median wealth	5,136	USD per adult
Total wealth	0.8	trillion USD
US dollar millionaires	58	thousand
Top 10% of global wealth holders	1,536	thousand
Top 1% of global wealth holders	84	thousand
Quality of wealth data	ልቋቋ	fair

Chile

Sustained growth

Chile has one of the strongest economies in Latin America. The contrast in household wealth with its neighbors is striking. Chile's per-capita GDP is similar to Argentina's and 44% greater than Brazil's, but its average wealth is about three times greater than that in either of those two other countries. Since the turn of the century, wealth per capita has risen at an annual average rate of 7.7% based on constant exchange rates, and 6.8% in current exchange rate terms. At a constant exchange rate, wealth fell only slightly during the global financial crisis, and has grown almost uninterrupted ever since.

Chilean household wealth is split slightly in favor of financial assets, which make up 54% of gross wealth. Holdings of financial assets have been encouraged by low inflation, well-developed financial markets, and a strong pension system. The high urban home ownership rate of 69% exceeds the 65% found in the United States, and contributes to substantial holdings of real estate. At 15% of gross assets, household liabilities are moderate by international standards.

Chile's wealth per adult, at USD 52,800, is only a little below the world average of USD 56,540, and is high relative to most emerging market countries. It has a smaller fraction of adults with wealth below USD 10,000 than does the world as a whole (37% versus 70%), and a slightly smaller fraction of adults above USD 100,000 (8% versus 9%). Overall inequality is relatively high, as indicated by a Gini coefficient of 79%, and by our estimates that Chile has 57,000 US dollar millionaires, and 79,000 adults in the top 1% of global wealth holders.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Country summary 2017

Population	18	million
Adult population	13	million
GDP	18,794	USD per adult
Mean wealth	52,829	USD per adult
Median wealth	20,141	USD per adult
Total wealth	0.7	trillion USD
US dollar millionaires	57	thousand
Top 10% of global wealth holders	1,350	thousand
Top 1% of global wealth holders	79	thousand
Quality of wealth data	ልቋቋ	good

Canada

Steady growth

Wealth per adult in Canada grew at an average rate of 5.3% over 2000–2017 when measured in US dollars. Over the same period, wealth per adult in Canadian dollars grew at the more modest pace of 4.4%. The small dip in wealth during the global financial crisis, and subsequent moderate growth in domestic currency units, is characteristic of the experience in several other major economies.

While Canada's exports are not limited to commodities, it is a resource-intensive economy and has suffered from low commodity prices in recent years. The economy was hit hard in 2015 by the drop in the world price of oil, but has weathered that and performed well in the 12 months to mid-2017. Low interest rates were maintained, helping to stimulate house prices in major cities. For these and other reasons, wealth per adult rose quite strongly in both US dollars (6.8%) and Canadian dollars (6.7%) between mid-2016 and mid-2017.

Wealth per adult in Canada (USD 259,271) is 33% lower than in the United States (USD 388,585). Wealth is more equally distributed than south of the border, however, which accounts for the much higher median wealth of USD 91,100, compared with USD 55,900 for the USA. Relative to its neighbor to the south, Canada has both a smaller percentage of people with less than USD 10,000, and a larger percentage with wealth above USD 100,000. It has 1.1 million millionaires, and accounts for 3% of the top 1% of global wealth holders, despite having only 0.6% of the world's adult population.

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Country summary 2017

Population	36	million
Adult population	29	million
GDP	54,716	USD per adult
Mean wealth	259,271	USD per adult
Median wealth	91,058	USD per adult
Total wealth	7.4	trillion USD
US dollar millionaires	1,078	thousand
Top 10% of global wealth holders	15,181	thousand
Top 1% of global wealth holders	1,598	thousand
Quality of wealth data	ል ፞፞፞፞፞፞፞፞	good

Canada World

Brazil

Challenging times

Afflicted by both political and economic crises, Brazil has faced some serious difficulties in recent years. In keeping with this picture, wealth per adult has fallen by 35% since 2011 in US dollar terms. While wealth rose in domestic currency units over that period, those gains were largely inflationary. The earlier record shows that average household wealth tripled between 2000 and 2011, rising from USD 8,000 per adult to USD 26,800. The inflation rate is currently low, but unemployment is high and GDP is expected to rise by only about 0.5% in 2017. The story of Brazil's economy and household wealth has been one of boom and bust.

Financial assets now comprise 41% of household gross wealth, up from a low of 36% in the period from 2009 to 2015, according to our estimates. Traditionally, many Brazilians have had a special attachment to real assets, particularly in the form of land, as a hedge against inflation, a preference that is perhaps weakening. Household liabilities are 20% of gross assets, up from 18% last year, which takes household debt to a perhaps worrisome level.

Like a number of other Latin American countries, Brazil has more people in the USD 10,000–100,000 bracket relative to the rest of the world, but fewer people in the higher ranges. This may give a misleading impression that inequality is lower than average. Actually, overall inequality is relatively high, as indicated by the wealth Gini coefficient value of 83%, and our estimate that the top 1% of Brazilians own 44% of the country's household wealth. The relatively high level of inequality partly reflects high income inequality, which is in turn related to the uneven standard of education across the population, and the lingering divide between the formal and informal sectors of the economy.

Country summary 2017 Population 208 million Adult population 146 million GDP 13,532 USD per adult Mean wealth 17,485 USD per adult Median wealth USD per adult 4,591 Total wealth trillion USD 2.5 US dollar millionaires 164 thousand Top 10% of global wealth holders 3,996 thousand 227 Top 1% of global wealth holders thousand Quality of wealth data *** fair

Figure 1

Wealth per adult over time



Figure 2

Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)





About the authors

Professor Anthony Shorrocks is Director of Global Economic Perspectives Ltd. After receiving his PhD from the London School of Economics (LSE), he taught at the LSE until 1983, when he became Professor of Economics at Essex University, serving also as Head of Department and Director of Economic Research for the British Household Panel Study. In 2001, he was appointed Director of the World Institute for Development Economics Research of the United Nations University (UNU-WIDER) in Helsinki, where he remained until 2009. He has published widely on income and wealth distribution, inequality, poverty and mobility, and was elected a Fellow of the Econometric Society in 1996. Publications include "The age-wealth relationship: A cross section and cohort analysis" (Review of Economics and Statistics1975), "The portfolio composition of asset holdings in the United Kingdom" (Economic Journal 1982), and, with Jim Davies and others, "Assessing the quantitative importance of inheritance in the distribution of wealth" (Oxford Economic Papers "The distribution of wealth" 1978). (Handbook of Income Distribution 2000). "The world distribution of house-hold wealth" in Personal Wealth from a Global Perspective (Oxford University Press 2008), "The global pattern of household wealth" (Journal of International Development 2009), "The Level and Distribution of Global House-hold Wealth" (Economic Journal 2011) and "Estimating the Level and Distribution of Global Wealth, 2000-2014" (Review of Income and Wealth, forthcoming).

Professor Jim Davies has been a member of the Department of Economics at the University of Western Ontario in Canada since 1977 and served as chair of the department from 1992 to 2001. He received his PhD from the London School of Economics in 1979. Jim was the director of the Economic Policy Research Institute at UWO from 2001 to 2012. In 2010, he completed a five-year term as managing editor of the academic journal Canadian Public Policy. From 2006 to 2008, he directed an international research program on household wealth holdings at UNU-WIDER in Helsinki and edited the resulting volume, "Personal Wealth from a Global Perspective" (Oxford University Press 2008). He has authored two books and over 70 articles and chapters in books on topics ranging from tax policy to household saving and the distribution of wealth. Publications "The include Relative Impact of Inheritance and Other Factors on Economic Inequality" (Quarterly Journal of Economics 1982), "Wealth and Economic Inequality" (Oxford Handbook of Economic Inequality, Oxford University Press, 2009), and several publications on wealth authored jointly with Anthony Shorrocks and others. Jim is also the editor of "The Economics of the Distribution of Wealth," published in 2013 by Edward Elgar.

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