October 2018

CREDIT SUISSE

Research Institute

Global Wealth Report 2018



Thought leadership from Credit Suisse Research and the world's foremost experts

Introduction

The Credit Suisse Global Wealth Report is the most extensive and current source of information on global household wealth. Now in its ninth edition, the report not only provides insights into the wealth development of regions and segments, but for the first time it also focuses on the most recent evidence on female wealth holdings, in particular on gender differences with males.

During the 12 months since our last report to mid-2018, aggregate global wealth rose by USD 14 trillion to USD 317 trillion, which represents a growth rate of approximately 4.6%. This growth rate was lower than last year, but higher than the average growth rate in the post-2008 era. This was sufficient to outpace population growth, so that wealth per adult grew by approximately 3.2%, a record high. Looking at the number of millionaires, we see that there are 42.2 million millionaires worldwide, which is up 2.3 million over the previous 12 months. Our research indicates that the United States added 878,000 new millionaires – representing around 40% of the global increase – to its already sizable stock, whereas the number of newcomers in France, Germany, the United Kingdom and Italy was around 200,000 each. In China, the number of millionaires rose by a modest 186,000 and in Japan 94,000. The main explanation for these increases in millionaire numbers within countries lies in the real wealth growth, rather than in exchange-rate movements. Millionaire numbers fell in very few countries (such as Turkey and Brazil), and by relatively small amounts, the main driver being currency depreciation.

The key finding of this year's new wealth valuation is for many observers not surprising – China is now clearly established second place in the world wealth hierarchy. The country overtook Japan with respect to the number of ultra-high net worth (UHNW) individuals in 2009, total wealth in 2011 and the number of millionaires in 2014. Nevertheless, the data shows that mean wealth per adult in China (USD 47,810 in mid-2018) remains far below the level in Japan (USD 227,240).

Turning our interest to the lower level of the wealth distribution, we see that 3.2 billion adults or about 64% of the adult population lives with a wealth below USD 10,000, which corresponds to only 1.9% of the global wealth. Those with low wealth are disproportionately found among the younger age groups, those who live in regions where prospects for wealth creation are very limited (most notably Africa) and where opportunities are sometimes constrained.

The wealth of women has been receiving increasing attention and we estimate that women account for about 40% of global wealth overall. During the 20th century, their share of wealth rose considerably and, since the year 2000, the level of women's wealth has risen along with all household wealth, especially in Asia alongside the rise of China's wealth. The tendency shows that more self-made women are succeeding in business and are entering the highest wealth ranks. Despite this trend, even in those countries where progress is the strongest, some categories of women – such as single mothers and divorcees – remain disadvantaged. While more is required to be done to ensure that women have an equal opportunity to build up, inherit and share in wealth, there are signs that progress has been happening in many parts of the world.

Given some of this year's intriguing findings, we hope you find the 2018 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



02
Introduction

04
Global wealth 2018: The year in review

13
Global trends in household wealth

20
The global wealth pyramid

25
Women and wealth

33
Wealth outlook

39
Wealth of nations

40 United States – The boom goes on
41 China – Growth champion
42 India – Growth story
43 Russia – Changing fortunes
44 Germany – Powerhouse of Europe
45 United Kingdom – Brexit gets close
46 Switzerland – View from the top
47 Singapore – Renewed growth
48 Japan – Hanging on
49 South Korea – Growth star
50 Indonesia – Little recent growth
51 South Africa – Wealth uptick
52 Brazil – Sliding
53 Chile – LatAm wealth champion
54 Canada – Slower growth
55 Australia – Still resilient

57
About the authors

58
General disclaimer / Important information

For more information, contact:
Richard Kersley, Head Global Thematic Research,
Credit Suisse Investment Banking,
richard.kersley@credit-suisse.com, or

Michael O'Sullivan, Chief Investment Officer,
International Wealth Management, Credit Suisse,
michael.o'sullivan@credit-suisse.com

Global wealth 2018: The year in review

Anthony Shorrocks, James Davies and Rodrigo Lluberas

Now in its ninth edition, the Credit Suisse Global Wealth Report is the most comprehensive and up-to-date source of information on global household wealth. Wealth continued to grow at a moderate pace in 2018, partly reflecting continued rises in equity markets but due more to increases in non-financial assets. The United States continued its unbroken spell of wealth gains since the global financial crisis, adding another USD 6 trillion to the stock of global wealth. China and Europe also made significant contributions to the new record level of global wealth, which is equivalent to USD 63,100 per adult.

Wealth landmarks in mid-2018

The world was wealthier in the past than we believed a year ago. New official statistical data and other reliable sources have led us to revise our estimate of total global wealth in mid-2017 upward by nearly USD 23 trillion, or 8%. China is the main beneficiary of this newly recorded wealth, although Spanish wealth has also been subjected to a major upgrade. The revision mostly relates to non-financial assets owned by the middle class. This reduces our estimate of the share of financial assets in total global wealth by 1% and the shares of the top 1% and top 10% of wealth holders by about three percentage points.

The main outcome of the new wealth valuations is confirmation of what many observers already suspected – that China is now clearly established in second place in the world wealth hierarchy. Our revised figures suggest that China overtook Japan with respect to the number of ultra-high net worth (UHNW) individuals in 2009, total wealth in 2011, and the number of millionaires in 2014. However, mean wealth per adult in China (USD 47,810 in mid-2018) remains far below the level in Japan (USD 227,240), and median wealth lags even further behind Japan (USD 16,330 versus USD 103,860).

Another prominent feature of the world wealth outlook this year is the seemingly relentless rise in household wealth in the United States. Total wealth and wealth per adult in the United States have grown every year since 2008, even when total global wealth suffered a reversal in 2014 and 2015. The United States has accounted for 40% of all increments to world wealth since 2008, and 58% of the rise since 2013. While not wishing to cast doubt on the "Trump Effect" on financial markets, it seems inevitable that the uninterrupted spell of increasing wealth in the United States will come to an end at some time. Fortunately, there are signs that wealth inequality is no longer rising, which should mitigate the impact of any setback on the middle classes.

An overview of the past year

During the 12 months to mid-2018, aggregate global wealth rose by USD 14.0 trillion to USD 317 trillion, representing a growth rate of 4.6% (see **Table 1**). This growth rate was lower than for calendar year 2017, but higher than the average growth rate in the post-2008 era, and a considerable improvement on the decline during 2014–15. It was also sufficient to outpace population growth, so that wealth per adult grew by 3.2%, raising global mean wealth to USD 63,100 per adult, a record high.

Table 1: Change in household wealth 2017–18, 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	
	2018	2017–18	2017–18	2018	2017–18	2017–18	2017–18	2017–18	2017–18	2017–18	2017–18
	USD bn	USD bn	%	USD	%	USD bn	%	USD bn	%	USD bn	%
Africa	2,553	108	4.4	4,138	1.5	37	2.8	68	4.8	-4	-1.3
Asia-Pacific	56,715	929	1.7	48,119	0.0	675	2.1	833	2.6	578	6.6
China	51,874	2,266	4.6	47,810	4.0	422	2.0	2,786	8.5	942	22.7
Europe	85,402	4,432	5.5	144,903	5.4	1,167	2.7	4,047	7.9	782	5.9
India	5,972	151	2.6	7,024	0.7	-16	-2.5	251	4.3	84	13.3
Latin America	8,055	-415	-4.9	18,605	-6.5	-215	-6.1	-127	-2.0	72	5.1
North America	106,513	6,486	6.5	391,690	5.5	4,960	6.0	2,203	6.5	677	4.2
World	317,084	13,958	4.6	63,100	3.2	7,030	3.8	10,061	6.2	3,133	7.1

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

"China is now clearly established in second place in the world wealth hierarchy"

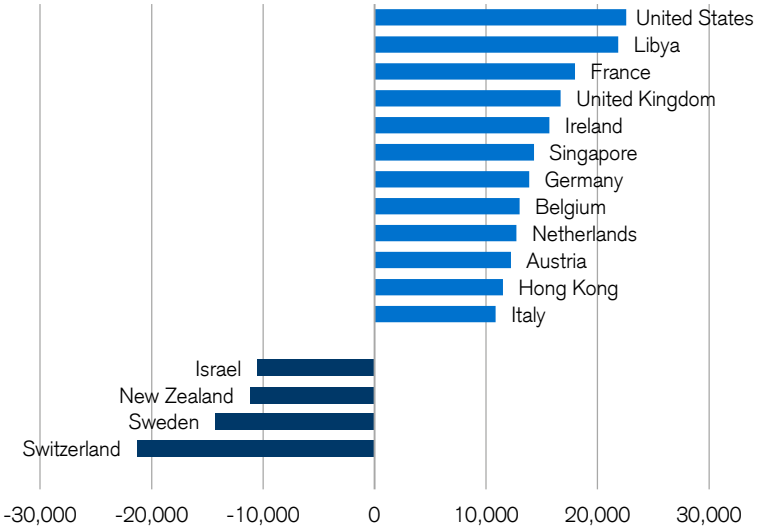
Financial assets suffered most during the financial crisis and recovered better in the early post-crisis years. They continue to make a substantial contribution to growth of household wealth, accounting for 41% of the increase in gross wealth worldwide, and more than two-thirds of the rise in North America. However, non-financial assets have grown faster in recent years. Over the past 12 months, they have provided the main impetus to overall growth in all regions except North America, accounting for more than 75% of the rise in China and Europe, and all of the rise in India. Household debt rose even faster at an overall rate of 7.1%. According to our estimates, debt increased in all regions except Africa and achieved double-digit growth in China and India.

North America added USD 6.5 trillion to its stock of household wealth in the last year, almost all in the United States, which accounted for USD 6.3 trillion. Europe contributed an additional USD 4.4 trillion, China USD 2.3 trillion, and Asia-Pacific (excluding China and India) almost USD 1 trillion. But Africa, India and Latin America together saw a net loss, partly due to the economic troubles in Argentina and Brazil. In percentage terms, the 6.5% loss in Latin America exceeded the percentage gains in North America, Europe or China. Adverse currency movements were partly to blame. Using smoothed exchange rates, wealth growth was positive in Latin America and slightly higher in Africa and India. But the overall assessment changes very little when smoothed exchange rates are used.

Winners and losers among countries

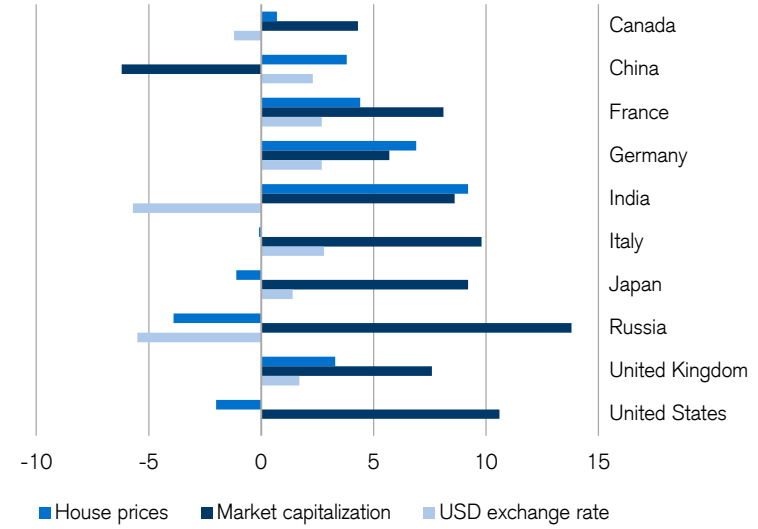
Comparing wealth gains and losses across countries, the United States and China led the pack by some margin, although Germany, France and the United Kingdom all recorded an increase of nearly USD 1 trillion, and Italy and Japan about USD 500 billion each. The main losses occurred in Brazil (down USD 380 billion), Turkey (down USD 190 billion) and Argentina (down USD 130 billion). Venezuela probably did worse, but we are unable to offer a reliable estimate given the exchange rate collapse.

Figure 1: Change in household wealth per adult 2017–18, biggest gains and losses (USD)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 2: Change in market capitalization, house prices and USD exchange rate (%), 2017–18



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Viewed in terms of wealth per adult, the United States again heads the list of increases (**Figure 1**). But a number of smaller countries also appear in the top ten: Ireland (up USD 15,690), Singapore (up USD 14,290), Belgium (up USD 13,020) and Hong Kong (up USD 11,510). On the downside, wealth per adult dropped by more than USD 10,000 in Israel, New Zealand and Sweden, and by a greater amount in Switzerland (down USD 21,340).

Asset prices and exchange rates

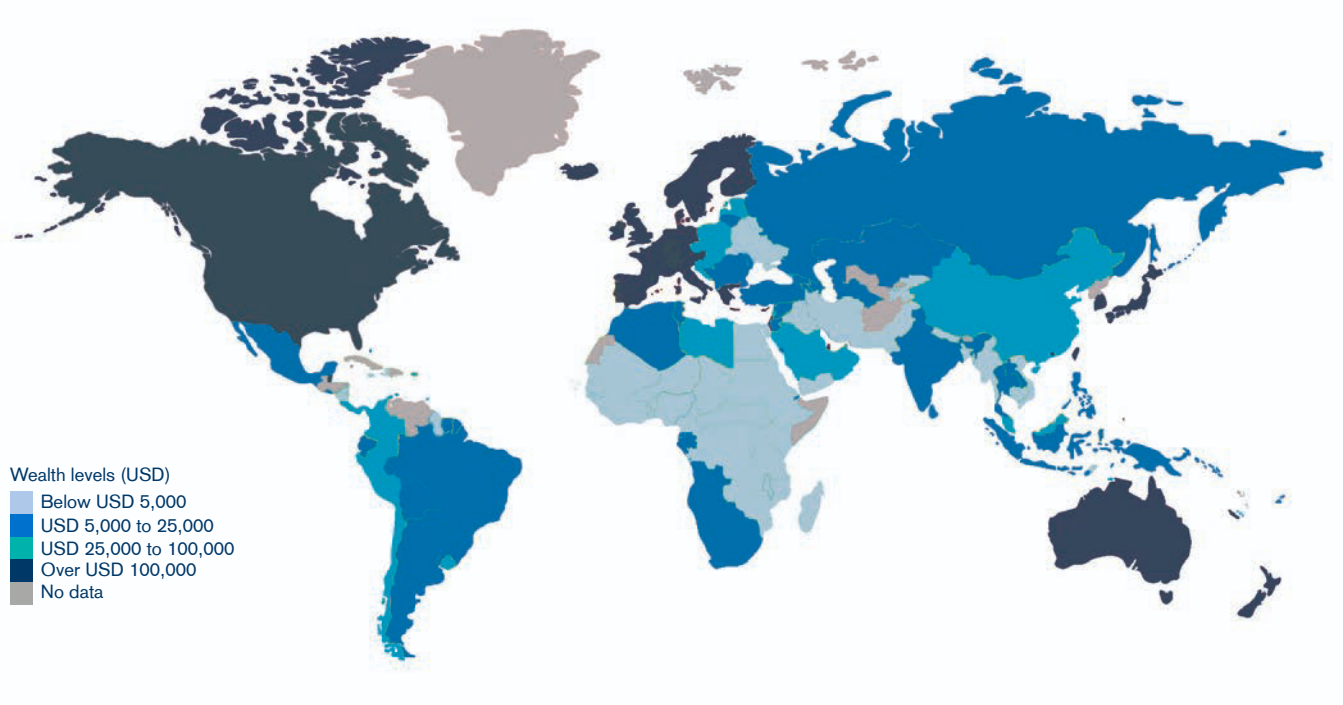
Much of the year-on-year variation in wealth levels can be traced to changes in asset prices and exchange rates. Exchange-rate movements usually underlie the biggest gains and losses. During the past 12 months, exchange rates have been relatively stable compared to recent history. Among the countries listed in **Figure 2** (the G7 countries plus China and India), exchange-rate changes versus the US dollar did not exceed 3%, apart from a 6% depreciation in Russia and India. This was broadly true of the rest of the world, except for the large depreciations recorded for Pakistan and Brazil (both 14%), Turkey (23%) and Argentina (42%).

"Much of the year-on-year variation in wealth levels can be traced to changes in asset prices and exchange rates"

While equity markets continued to achieve new peaks, the rises were down on average from last year. **Figure 2** shows that market capitalization growth was within the 4%–11% range among G7 nations, although Russia managed 14% growth and China fell by 6%. Elsewhere, markets rose by more than 20% in Tunisia and Colombia, and by a greater amount in Norway (33%), Egypt (48%), Vietnam (60%) and Ukraine (130%). Falls of more than 10% were recorded in the Philippines, Poland, Serbia and Pakistan, and in excess of 20% in Turkey and Argentina.

House-price movements are a proxy for the non-financial component of household assets. Here again, the year-on-year change was modest at between –4% and +4% for the countries in **Figure 2** except for slightly higher values in Germany (7%) and India (9%). In the rest of the world, house prices did not fall by more than 10%, or rise by more than 12%, except in Argentina (up 29%).

Figure 3: World Wealth Map 2018



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth per adult across countries

The global figure of USD 63,100 for wealth per adult masks considerable variation across countries and regions, as is evident in **Figure 3**. 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. Switzerland (USD 530,240), Australia (USD 411,060) and the United States (USD 403,970) again head the league table according to wealth per adult, followed by Belgium (313,050), Norway (291,100), and New Zealand (USD 289,800). Canada (288,260), Denmark (286,710), Singapore (283,260) and France (280,580) occupy the remaining places in the top ten.

The ranking by median wealth per adult favors countries with lower levels of wealth inequality and produces a slightly different table. This year, Australia (USD 191,450) edged ahead of Switzerland (USD 183,340) into first place according to our estimates. The median wealth placements of Belgium (USD 163,430), Canada (USD 106,340), New Zealand (98,610), the United Kingdom (97,170) and Singapore (USD 91,660) are similar to their mean wealth ranking, but lower inequality moves France (USD 106,830) up five places to fifth position, the Netherlands (USD 114,930) up eight places to fourth position, and Japan (USD 103,860) up ten places to seventh position. In contrast, high wealth inequality pushes Norway down seven places, and Denmark down 11 places, while median wealth of just USD 61,670 relegates the United States to 18th place, alongside Austria and Korea.

The "intermediate wealth" group in **Figure 3** covers countries with mean wealth in the range of USD 25,000–100,000. The core member these days is China. But the group also includes many recent entrants to the European Union (EU), together with important emerging-market economies in Latin America and the Middle East. One step below, the "frontier wealth" range from USD 5,000–25,000 per adult covers the largest land surface and most of the heavily populated countries including India, Russia, Brazil, Indonesia, the Philippines, and Turkey. The band also contains most of Latin America, many countries bordering the Mediterranean, and many transition nations outside the EU. The remaining members of this category include South Africa and other leading sub-Saharan nations, along with several fast-developing Asian countries like Malaysia, Thailand and Vietnam. This leaves the final group of countries with wealth below USD 5,000, which are heavily concentrated in central Africa and central and south Asia.

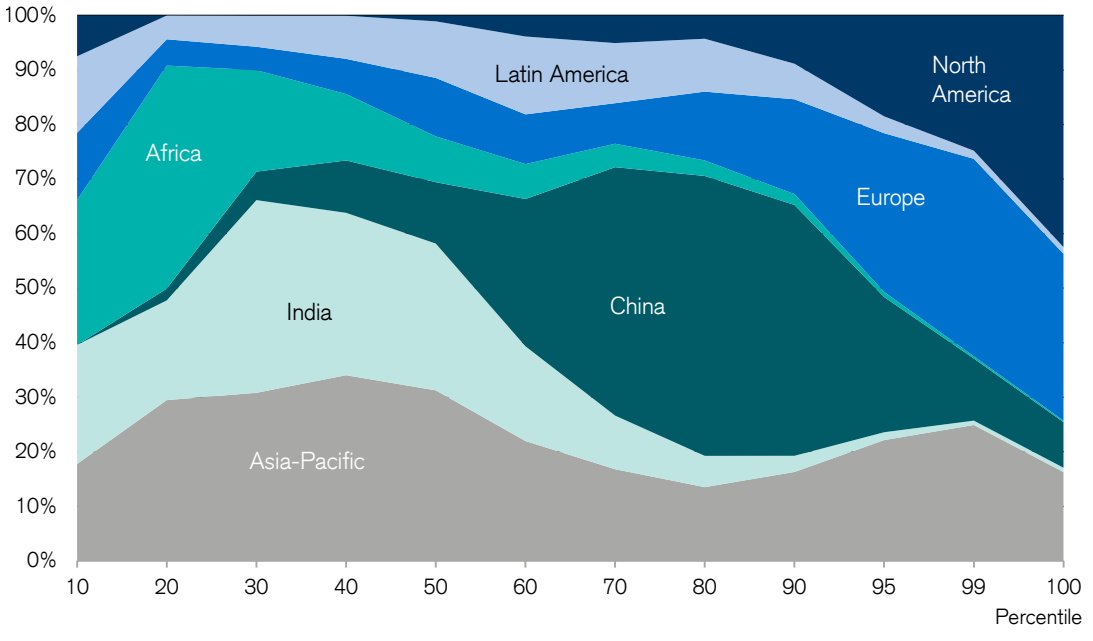
Regional distribution of wealth
The World Wealth Map (**Figure 3**) illustrates the geographical imbalance in the distribution of household wealth. North America and Europe together account for 60% of total household wealth, but contain only 17% of the world adult population. The total wealth of the two regions was similar at one time, with Europe's greater population compensating for higher average wealth in North America. However, North America pulled ahead after 2013, and now accounts for 34% of global wealth compared to 27% for Europe. Elsewhere, the share of wealth is below the population share. The discrepancy is modest in China and in the Asia-Pacific region (excluding China and India), where the population share is about 30% higher than the wealth share. But the population share is more than three times the wealth share in Latin America, nine times the wealth share in India, and 15 times the wealth share in Africa.

Distribution of wealth across individuals
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. A person needs net assets of just USD 4,210 to be among the wealthiest half of world citizens in mid-2018. However, USD 93,170 is required to be a member of the top 10% of global wealth holders, and USD 871,320 to belong to the top 1%.

Assigning individuals to their corresponding global wealth positions enables the regional pattern of wealth to be portrayed. The contrast between China and India is the most striking feature of **Figure 4**. Most Chinese adults are found in the upper middle section of global wealth distribution, where they now account for almost half 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 4** toward the right. China now accounts for 18% of the top decile of global wealth holders, slightly less than the number of residents in the United States (20%), but well above the number in Japan (11%), and a long way ahead of France, Germany, Italy, and the United Kingdom (each 5%), which it overtook in 2010. 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.

"Assigning individuals to their corresponding global wealth positions enables the regional pattern of wealth to be portrayed"

Figure 4: Regional composition of global wealth distribution in 2018



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Residents of Latin America are fairly evenly spread across the global wealth spectrum in **Figure 4**. 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: almost half of all adults in high-income 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 further down the wealth pyramid. 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 about a quarter of the members of the bottom half of the wealth pyramid.

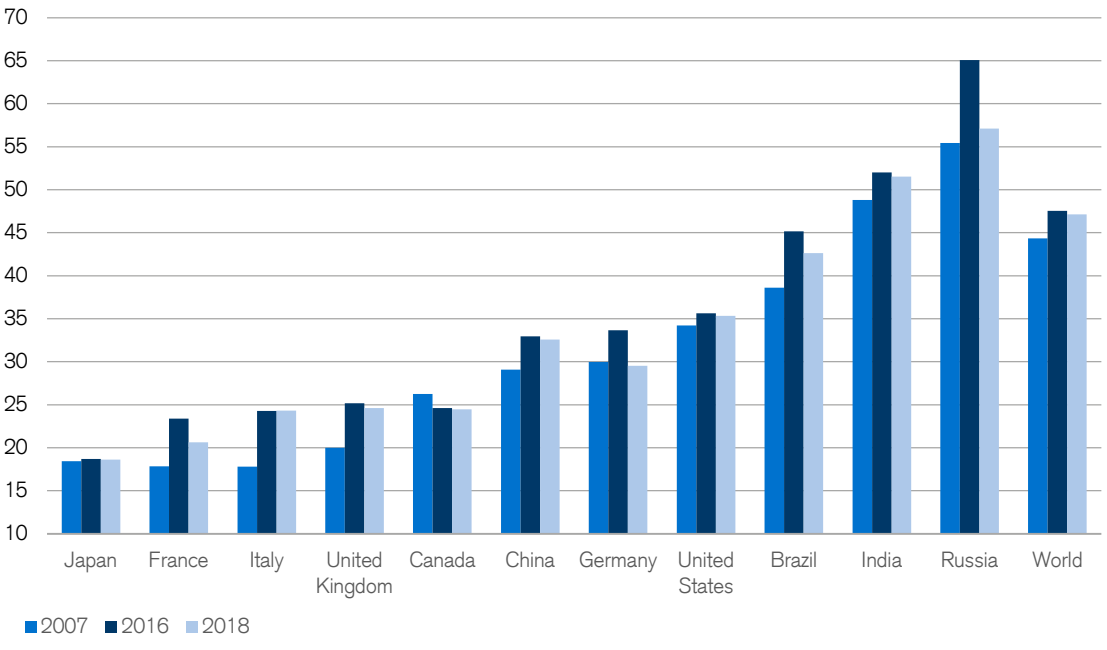
Africa is even more concentrated at the bottom end of the wealth spectrum: more than half of all African adults belong to the lowest two global wealth deciles. At the same time, wealth inequality is so high in Africa that some individuals are found among the top global wealth decile, and even among the top percentile. Interestingly, North America and Europe also contribute many members to the bottom wealth decile, a reflection of the ease with which individuals – especially younger adults – acquire debt in advanced economies. Overall, however, North America and Europe are heavily skewed toward the top tail, together accounting for 56% of adults in the top 10%, and 73% of adults in the top percentile. Europe alone accounts for 32% 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.

Wealth inequality

While the bottom half of adults collectively owns less than 1% of total wealth, the richest decile (top 10% of adults) owns 85% of global wealth, and the top percentile alone accounts for almost half of all household wealth (47%). The shares of the top 1% and top 10% in world wealth fell significantly between 2000 and 2008: the share of the top percentile, for instance, declined from 47% to 43%. However, the trend reversed after the financial crisis. The share of the top 10% was little affected. But in 2016 the share of the top 1% rose back 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 2000–08 and then began to rise after the global financial crisis, raising the wealth of many of the richest countries, and of many of the richest people.

The share of financial assets peaked in 2015 and has been declining since then. In previous reports, we predicted that wealth inequality would follow suit – possibly with a slight lag – and there is evidence that this is now the case. The share of the top decile and the top 5% remains at the same level as in 2016, while the share of the top 1% has edged down from 47.5% to 47.2% according to our best estimate (see **Figure 5**).

Figure 5: Share of top 1% of wealth holders since 2007, selected countries, % of wealth



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

The trends are replicated in the individual countries portrayed in **Figure 5**. The share of the top 1% rose in every country bar Canada between 2007 and 2016. But, in the past two years, there have been no further rises. The level has flattened out in Japan, Italy, Canada, China and the United States, and declined in France, the United Kingdom, Germany, Brazil, India and Russia. The pattern is almost identical with respect to the share of the top decile (**Figure 6**), except for Italy, which shows a slight rise after 2016. While it is too early to say that wealth inequality is now on a downward trend, the prevailing evidence suggests it may well have leveled out, albeit at a very high level.

Millionaire trends

The number of millionaires in a country and its trend over time is often seen as a sign of a country's economic health and its ability to generate opportunities for wealth creation. Our estimates for mid-2018 show 42.2 million millionaires worldwide, up 2.3 million over the previous 12 months. **Table 2** indicates that the United States added 878,000 new millionaires – around 40% of the global increase – to its already sizable stock. This was considerably more than the number of newcomers in France, Germany, the United Kingdom and Italy (around 200,000 each), but a fraction below their combined total. Millionaire numbers rose by a modest 186,000 in China and by 94,000 in Japan. Real wealth growth, rather than exchange-rate movements, is the main explanation this year for these increases in millionaire numbers within countries.

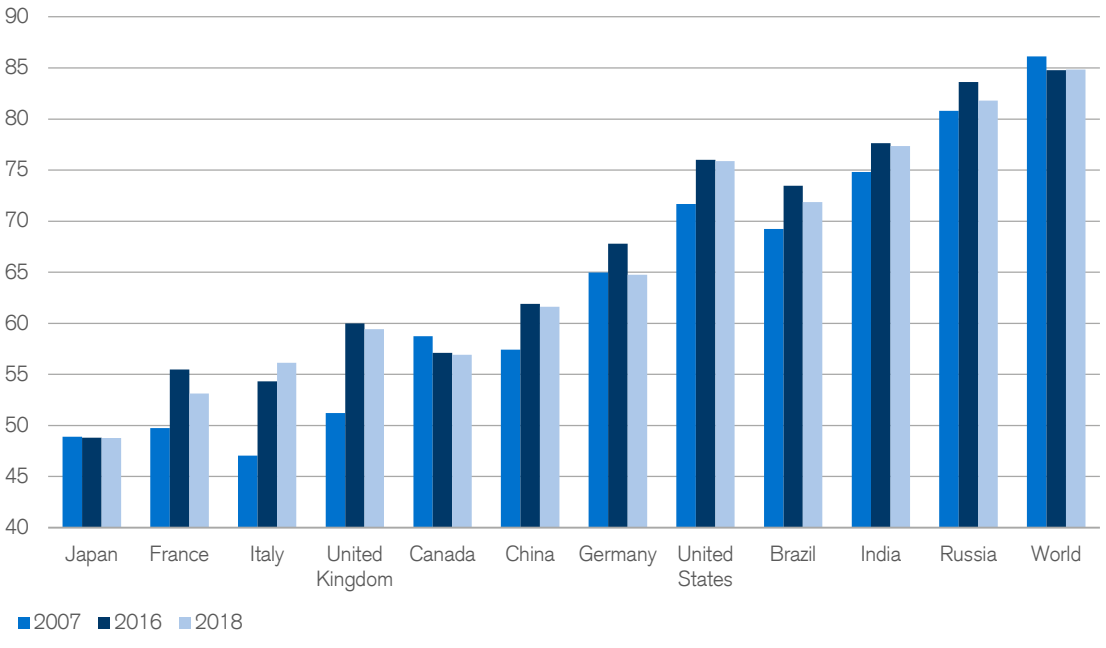
Millionaire numbers fell in very few countries, and by relatively small amounts, the principal driver being currency depreciation. **Table 2** lists the eight countries with the largest losses, headed by Turkey (down 16,000), Sweden (down 20,000), Australia (down 32,000) and Brazil (down 36,000).

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 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 14.0 trillion, or 4.6%, in the year to mid-2018. Using smoothed exchange rates, the rise was a little larger, at USD 16.6 trillion. The United States again led the way with a gain of USD 6.3

Figure 6: Share of top 10% of wealth holders since 2007, selected countries, % of wealth



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Table 2: Change in the number of millionaires by country, 2017–18

Main gains	Adults (thousand) with wealth above USD 1 m			Main losses	Adults (thousand) with wealth above USD 1 m		
Country	2017	2018	Change	Country	2017	2018	Change
United States	16,472	17,350	878	**Brazil**	190	154	-36
France	1,888	2,147	259	**Australia**	1,320	1,288	-32
Germany	1,929	2,183	253	**Sweden**	368	348	-20
United Kingdom	2,189	2,433	244	**Turkey**	96	79	-16
Italy	1,161	1,362	200	**Argentina**	29	21	-9
China	3,294	3,480	186	**New Zealand**	162	155	-7
Japan	2,715	2,809	94	**Israel**	117	111	-6
Spain	792	852	60	**Mexico**	115	109	-6
Netherlands	438	477	40				
Canada	1,257	1,289	32				
World	39,845	42,155	2,310	**World**	39,845	42,155	2,310

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

trillion, mostly due to 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, Canada, France, and the United States. Notable cases of emerging wealth are found in Chile, the Czech Republic, Estonia, Malaysia, Poland and the United Arab Emirates, while "frontier" wealth is evident in Bolivia, Indonesia, Peru, Romania, Sri Lanka and Thailand.

Wealth varies greatly across individuals in every part of the world. Our estimates suggest that the lower half of the global population collectively owns less than 1% of global wealth, while the richest 10% of adults own 85% of all wealth and the top 1% account for almost half of all global assets. Since the global financial crisis, wealth inequality has trended upward, propelled in part by the rising share of financial assets, and a strengthening US dollar. These underlying factors appear to be waning, so that it seems more likely that wealth inequality will fall in the future rather than rise.

The next two chapters consider longer-term trends in wealth holdings, and examine in detail the pattern of holdings across individuals. A separate chapter is devoted to the wealth of women, examining gender differences in the level and composition of wealth holdings. Our estimates for the past are regularly updated when new data from reliable sources becomes available, such as the revised figures this year for China. We also strive continuously to improve the methods used to estimate the level and distribution of wealth. The Credit Suisse Global Wealth Databook 2018 provides details of the data sources and outlines the research methodology underpinning our results. It also contains 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).

Valuations are usually expressed in terms of US dollars using end-period exchange rates, but "smoothed exchange rates" (specifically 5-year moving end-period averages) are used instead where indicated.

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 2018.

The "Asia-Pacific" region excludes **China** and **India**, which are treated separately due to the size of their populations. Data for 2017 and 2018 refer to **mid-year** (end-June) estimates; the figures for earlier years indicate **year-end** values.



Global trends in household wealth

Anthony Shorrocks, James Davies and Rodrigo Lluberas

This chapter reviews trends in global household wealth since 2000. The early years of the century were characterized by robust and inclusive wealth creation, but wealth growth fell considerably after the financial crisis and inequality rose among the top wealth holders. This phase now appears to have ended. In the past couple of years, wealth growth has resumed at a modest pace, and median wealth has also grown in most regions. The wealth share of the top 1% of adults has edged down from its peak value in 2015, and is now back to the level recorded at the start of the century.

The golden age of wealth creation

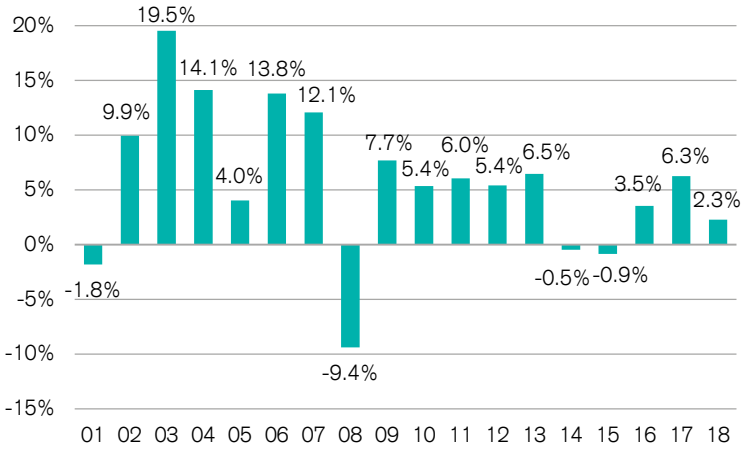
The early years of this century saw the most broad-based spell of wealth creation in recent history. The period was remarkable for the breadth of its geographic coverage, with emerging market economies – especially China and India – not just sharing in the growth, but driving much of the action. It was also broad in its coverage of assets, with both financial assets and non-financial assets growing at a fast pace. More importantly, it was socially inclusive: all levels of society shared in the rewards. While global mean wealth per adult grew at 8% 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 14% per year.

This golden age came to a halt with the global financial crisis. Wealth growth resumed soon afterward, but at a lower and more erratic pace. Widespread depreciation against the US dollar was partly responsible: measured in local currencies, wealth growth after 2008 has been closer to the earlier rate and relatively stable. The pattern of wealth creation also changed significantly. The source of wealth growth shifted strongly toward the United States, opening a wide gap with Japan and all of Africa, for example. Furthermore, financial assets initially recovered faster than non-financial assets, assisted by the low interest rates that have spurred asset price inflation. Top wealth holders benefited most from the rise in financial wealth, leading to rising wealth inequality in all parts of the world. In every region bar China, median wealth stopped rising, and in many places declined.

"The early years of this century saw the most broad-based spell of wealth creation in recent history"

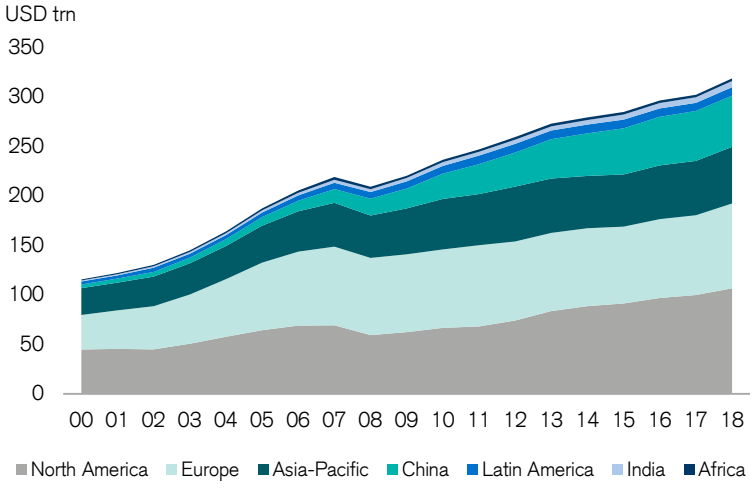
The evidence reviewed in this chapter suggests that the growth pattern has recently shifted back toward the pre-crisis pattern. The growth rate has risen a little and is more balanced between real and financial wealth. Wealth inequality has not yet fallen significantly, but has stabilized according to most indicators. Median wealth is also stable or rising in all regions apart from Africa. Thus the future prospects for inclusive wealth growth look more promising than they have for the past couple of years.

Figure 1: Annual percentage change in total global wealth, 2000–18



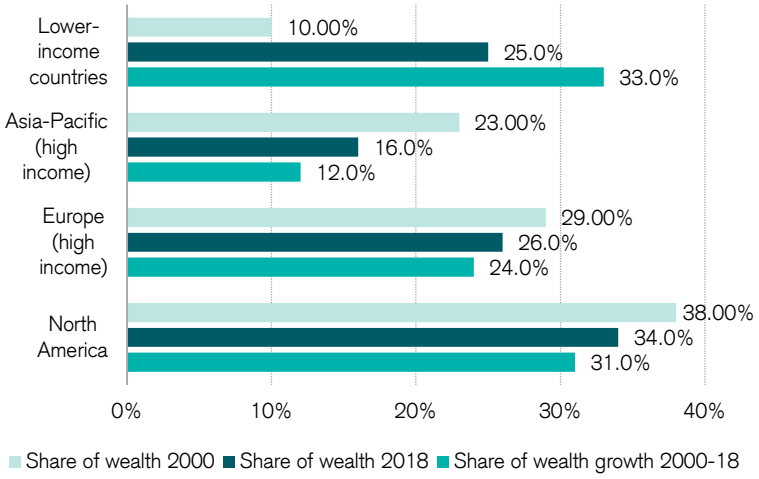
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 2: Total global wealth 2000–18, smoothed exchange rates



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 3: Share of wealth in 2000 and share of wealth growth 2000–18, selected regional groupings



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Trends in global wealth

Measured in current US dollars, total global wealth rose from USD 117 trillion in 2000 to 317 trillion in mid-2018, a rise of USD 200 trillion, equivalent to roughly 2.5 times global GDP. Most of this increase took place in the early years of the century: global wealth increased by USD 111 trillion between 2000 and 2007, only to fall by USD 21 trillion the following year. **Figure 1** shows the annual growth rate measured in current US dollars. Double-digit growth (exactly 10%) was achieved until 2007, but the average rate over the next eight years was just 2.4%. Growth picked up after 2015, and has since averaged 5.8% per year, an improvement on the previous years, although still well short of the rate in the pre-crisis era.

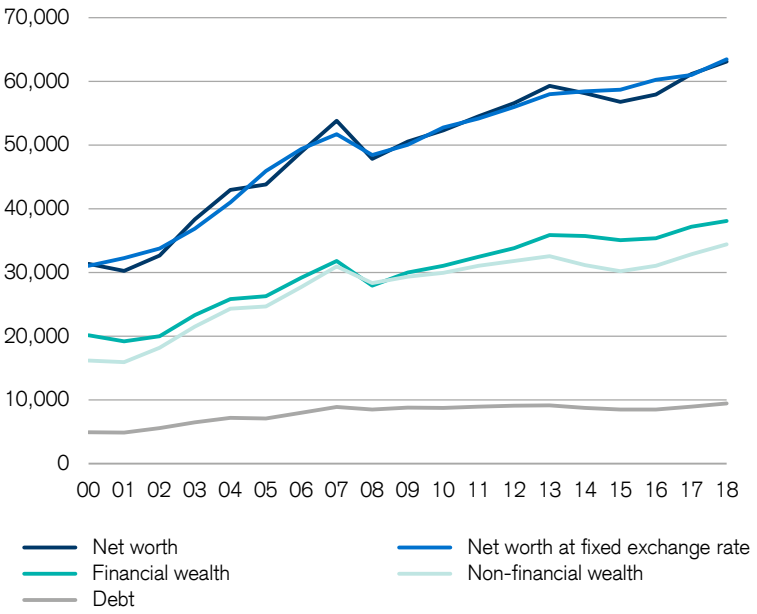
Figure 1 shows that global wealth fell significantly in 2008 and that there were also setbacks in 2001 and during 2014–15. With the exception of 2008, these negative growth episodes can be attributed to short-term exchange rate movements, which accounted for much of the year-to-year variation in growth rates. When current exchange rates are replaced by smoothed exchange rates (thereby eliminating short-run currency fluctuations), global wealth has risen every year this century apart from 2008 (see **Figure 2**).

North America, Europe, and Asia-Pacific (excluding China and India) accounted for the bulk of global wealth in the year 2000, and continue to do so today, although their share has fallen from 92% to 78%. **Figure 2** shows that much of this fall is due to China, which has seen its share of global wealth rise from 3.1% to 16.4%. This major rebalancing toward China and other emerging economies becomes more evident when attention shifts to the change in wealth this century. **Figure 3** reveals that lower-income countries accounted for 10% of global wealth in 2000, but have contributed 33% of wealth growth in the intervening period, raising their aggregate share to 25%. This compares to the 24% share of wealth growth from Europe and the 31% share of global wealth growth from North America, despite a much higher level of initial wealth and very large year-on-year gains. The contrast with high-income Asia-Pacific nations is even more pronounced: their share of global wealth growth (12%) is barely one third of that achieved by lower income countries, and less than half their starting share of aggregate wealth in 2000 (23%).

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 4** displays each of these components, expressed in terms of average values per adult. Net worth per adult in US dollars doubled over the 2000–18 period, but most of this increase (71%) occurred before the global financial crisis. It took until 2011 to restore the crisis losses, and gains in USD terms have been modest since that time, not helped by the reversals during 2014 and 2015. A somewhat different picture emerges when smoothed exchange rates are applied. The graph is smoother and shows continuous growth since 2009, with new peak levels recorded every year from 2010 onward. This reinforces the view that short-term currency movements with respect to the US dollar obscure the true trend in wealth over time, which shows a pattern of stable growth, with just a single setback in 2007–08.

Figure 4: Global trends in assets and debts per adult, 2000–18 (USD)



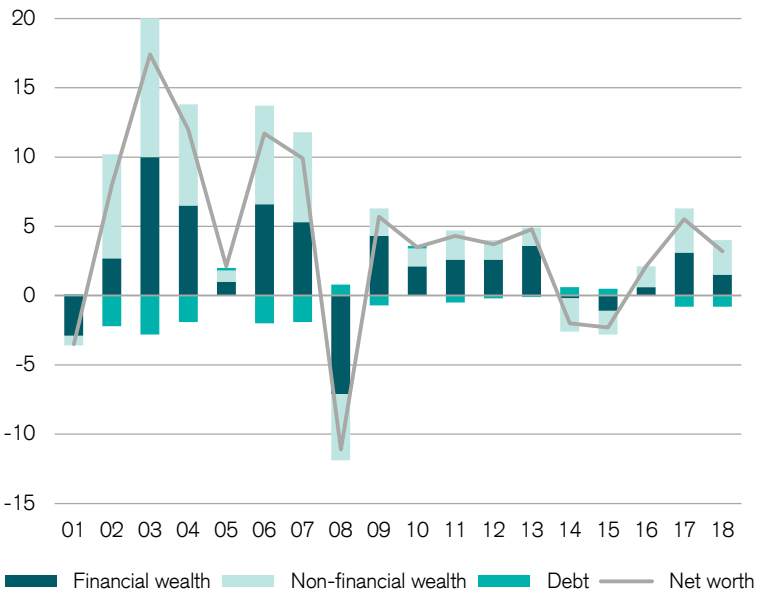
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

"Financial assets, non-financial assets and debts have moved in tandem for much of this century"

Regarding the individual components of wealth, the most noticeable feature is the rise in financial assets since 2007, fueled largely by the strong performance of equity markets in recent years. Financial wealth per adult is now 20% above the level in 2007 and 36% above the low in 2008. In contrast, non-financial wealth declined between 2007 and 2015, but growth resumed in 2015 at a robust pace, so that non-financial wealth per adult is now 11% higher than 2007 and 14% above the level in 2015.

Taking a longer perspective, financial assets accounted for 56% of gross wealth when the century began. Non-financial assets grew at a faster pace during the early years, and matched the level of financial assets in 2008. But the gap opened up again after the financial crisis, with financial assets rising to 54% of gross wealth in 2015 before falling back slightly to 53% in mid-2018. In terms of absolute gains, gross wealth per adult has increased by USD 36,230 since 2000, of which half (USD 17,970) is due to gains in financial wealth. **Figure 5** provides more details, by plotting the year-on-year change in wealth per adult, and identifying the contributions

Figure 5: Annual contribution (%) to growth of wealth per adult by component, 2000–18



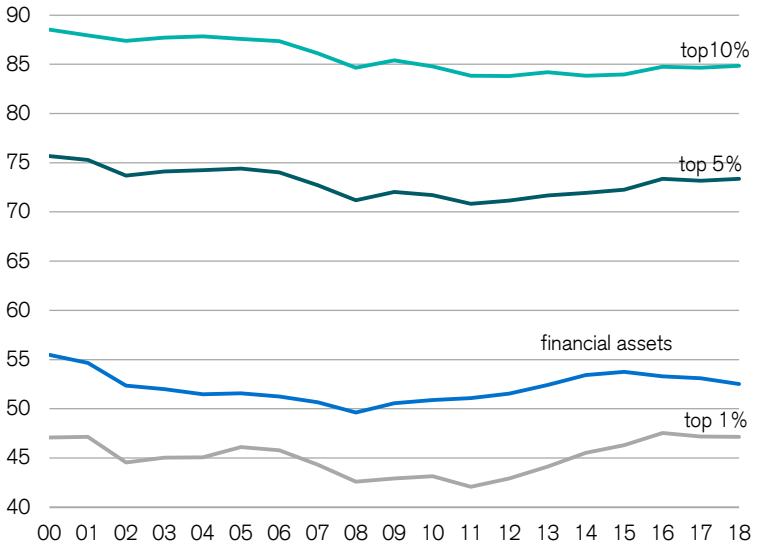
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

of each component of wealth. The graph captures the slowdown in growth after the financial crisis, and the dominant contribution of financial assets to the modest growth achieved between 2008 and 2015.

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 per adult grew at a fast rate (9%) until the financial crisis, but has been flat since then, and only recently overtook the previous peak value achieved in 2007. Nowadays global household debt equates to 15.0% of net wealth, compared to 17.5% in 2009.

The contribution of debt to net wealth is somewhat ambiguous. On the one hand, it leads directly to lower levels of measured wealth. But rising debt fuels demand for assets and supports asset price inflation, both of which tend to raise the level of wealth. In that respect, the rapid growth prior to 2007 and its subsequent decline may help explain the time path of changes in other components of wealth – especially non-financial wealth – although cause and effect are difficult to untangle.

Figure 6: Share of top wealth holders in global wealth and share of financial assets, 2000–18



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Trends in wealth inequality

Figure 6 displays global wealth inequality trends this century, as captured by the shares of the top 1%, 5% and 10% of adults. The three series show the same broad pattern until the financial crisis: a modest fall during 2000–06 followed by a sharper drop over the next two years. But the trends diverge after 2008.

The top 1% of global wealth holders started the millennium with 47.1% of all household wealth. This share changed little between 2000 and 2005, but then fell to 42.6% by 2008. Our latest estimates suggest that the share of the top percentile continued downward until 2011, but then rose sharply from 42.1% in 2011 to a peak of 47.5% in 2016, before edging back to 47.2% in mid-2018. Thus, despite the intervening gyrations, the current share of the top 1% is the same as that at the start of the century.

The shares of the top 5% and top 10% wealth holders also fell until 2008, and by a similar amount to that of the top 1%, indicating that the share of percentiles 90–99 remained fairly constant. In the subsequent period, the share of the top 10% has been almost flat. So the changes that have occurred since 2008 have been within the top decile – a redistribution in favor of the top percentile and away from the remaining members of this top group. Taking the period as a whole, the share of the top 10% has fallen from 88.5% in 2000 to 84.8% in mid-2018, a drop of 3.7 percentage points. The trend in the share of the top 5% is – unsurprisingly – intermediate between that of the top percentile and top decile. It declined by 4.5 percentage points during 2000–08 and has since moved up by 2.2 percentage points. Thus the current share of the top 5% of wealth holders (73.4%) is higher than in 2008 (71.2%), but lower than the share at the turn of the century (75.7%).

Wealth inequality tends to change at a slow pace, so it is difficult to identify the drivers of the trend. However, wealthier individuals hold a disproportionate share of their assets in financial form, especially company securities, so that the share of the top 1%, in particular, is expected to be sensitive to equity prices and, more generally, to the relative importance of financial assets. **Figure 6** confirms this suggested link. The graph shows that the share of the top 1% has similarities with that for the share of financial assets, declining prior to the financial crisis and then reversing after 2008. The share of financial assets peaked in 2015 and then trended downward over the past three years.

The share of the top 1% peaked a year later, suggesting that it takes a year or so for movements in financial assets to be reflected in our estimates of the top wealth shares. Overall, the

share of financial assets dropped by three percentage points over the entire period, while the share of the top 1% is fractionally above the starting value. This may reflect the other factors likely to be at play, such as cross-country differences in the growth rate of population or wealth. The relationship with financial assets may also be more nuanced, depending more on equities, for example, which have shown strong growth recently relative to broader categories of financial assets. Either way, the trend in equity prices and financial assets is likely to remain an important indicator of the direction in which wealth inequality is heading.

"The millionaire and UHNW portions of the wealth pyramid have changed more than any other segment this century"

Trends in median wealth

Median wealth values reflect the circumstances of the average adult, so trends in median wealth within countries or regions are a good indication 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 more than three times the level in Europe and China, 50 times the level in India, and almost 200 times the level in Africa.

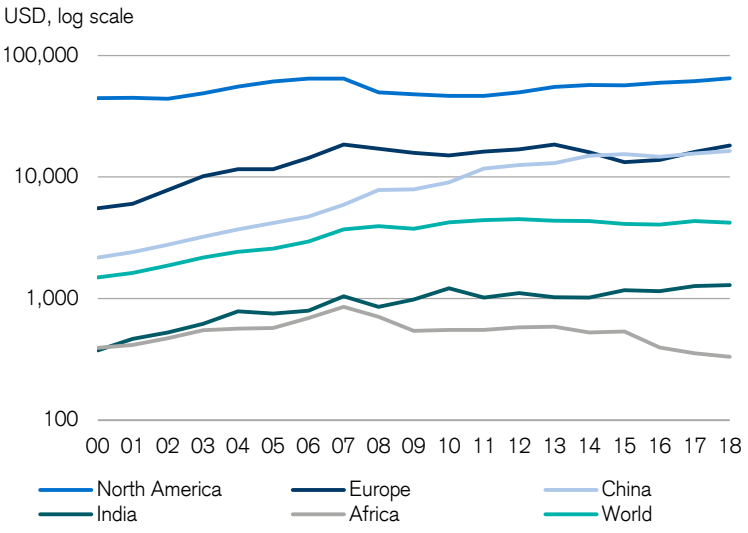
Global median wealth per adult (in current US dollars) rose continuously during the early years of the century, more than doubling in value from USD 1,490 in 2000 to USD 3,940 in 2008 (**Figure 7**). It then remained around that level until the present day. The current value of USD 4,210 is a little above the 2008 level and nearly three times the value at the start of the century.

Prior to the financial crisis, the regional trends were similar and all moving strongly upward, with median wealth rising by at least 80% in every region apart from North America. The upward trend then halted or reversed in all regions except China. The decline in median wealth was less pronounced than the upswing, and the median recovered in some regions, so that North America and Europe are now back to their previous peak and India is 20% ahead. Latin America and Asia-Pacific (excluding China and India), however, remain 10% below the 2007 level. For Africa, we estimate that median wealth is now just USD 332, less than half the value in 2007 (USD 856) and – alone among regions – below the level in 2000. China is – again – the exception. Median wealth has increased every year, rising by a factor of over seven from USD 2,170 in 2000 to USD 16,330 currently. Remarkably, median wealth in China exceeded the median value in Europe briefly in 2016 and remains close to the European level (USD 18,150) today. This is partly a reminder that Europe is quite heterogeneous and includes a number of countries with relatively low wealth.

Trends in the number of millionaires

The millionaire and ultra-high net worth (UHNW) portions of the wealth pyramid have changed more than any other segment this century. The number of millionaires has trebled, while the number of UHNW individuals (with net worth exceeding USD 50 million) has risen fourfold, making them the fastest-growing group of wealth holders. This is due in part to the fact that the millionaire and UHNW boundaries 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. Rising inequality can also boost the speed at which new millionaires are created.

Figure 7: Median wealth per adult 2000–18, selected regions



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

The regional origins of new millionaires and UHNW individuals

One of the most interesting aspects 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. At the beginning of the century, the 13.8 million millionaires in the world were heavily concentrated (97%) in high-income countries. Since then, 28.3 million "new millionaires" have appeared, of whom 4.3 million – 15% of the total additions – originated from emerging economies (identified by the lower income group in **Figure 8**). This is more than the new entrants to the millionaire class in high-income countries outside North America and Europe.

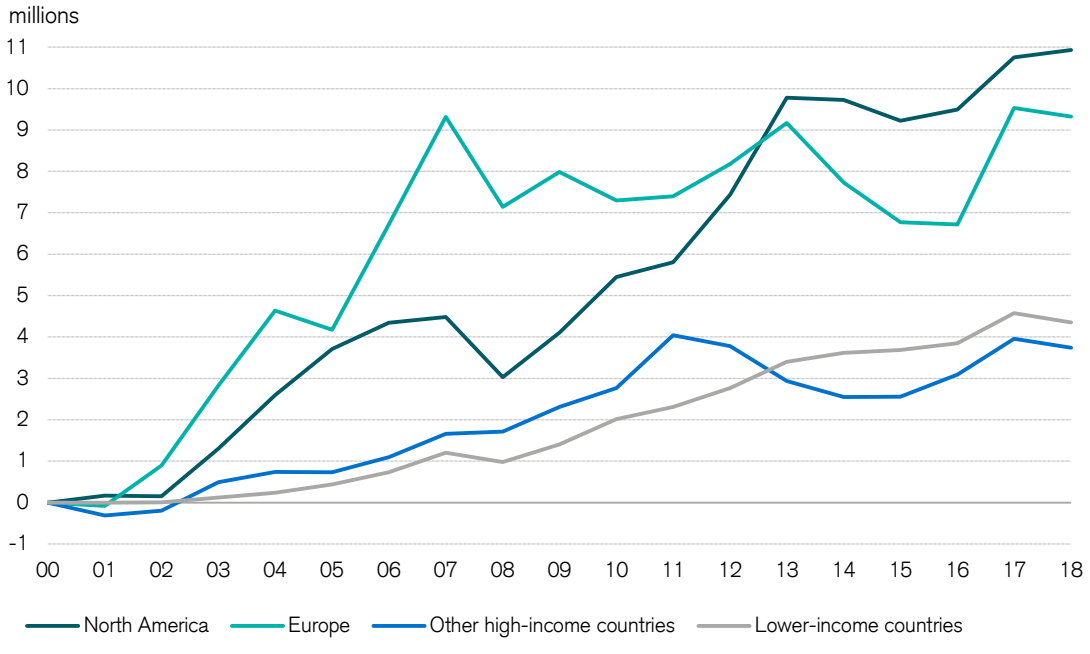
This transformation is even more pronounced in the UHNW segment. Emerging economies accounted for 6% of the segment in 2000, but since that time have seen 22% of the growth in UHNW individuals (24,830 adults), more than Europe. China alone added an estimated 16,430 adults – 15% of the new UHNW individuals in the world, and more than all other Asia-Pacific countries combined. As a result, emerging nations are now home to 18% of the world's UHNW population. Among richer economies, North America has added more than twice as many UHNW individuals as Europe, which is not surprising given that, in 2000, North America was home to 55% of all UHNW individuals, versus 24% for Europe.

Summary

Global wealth rose rapidly during the early part of the century, led by China, India, and other emerging economies. It fell at the time of the financial crisis, and while growth resumed after 2008, it did so at a significantly lower rate than before. The structure of wealth growth also changed, shifting from real assets to financial assets. As a consequence, the fraction of household wealth held in financial form – which had trended downward earlier – rose after 2008. The share of the top 1% of wealth holders followed a similar trajectory, and the patterns are likely related given the importance of financial assets in the portfolios of the wealthy.

According to our estimates, wealth growth has picked up again since 2015, with non-financial assets accounting for much of the recent growth. The trend toward greater wealth inequality has also stabilized, enabling median wealth to rise again. However, the level of median wealth remains at or below that of a decade ago in all regions except China and India.

Figure 8: Cumulative change in the number of millionaires since 2000, by region/income groups



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

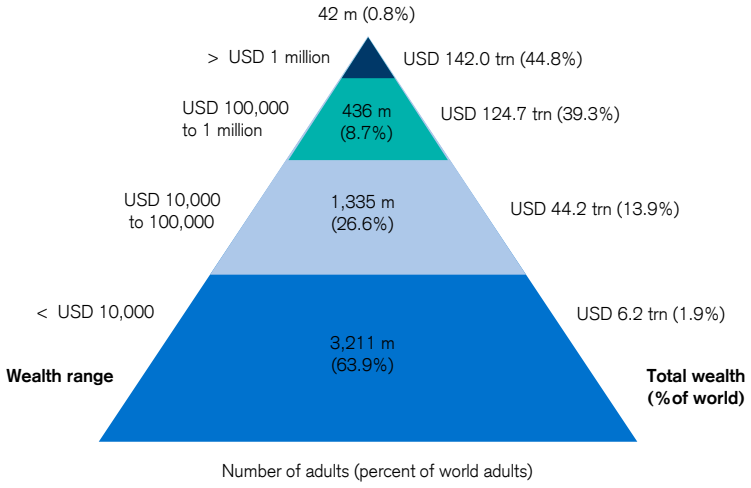


The global wealth pyramid

Anthony Shorrocks and James Davies

This chapter examines the entire wealth pyramid, from the less affluent groups at the bottom up to the wealthiest individuals at the top. The 3.2 billion adults with wealth below USD 10,000 account for 64% of all adults, but just 1.9% of global wealth. In contrast, 42 million millionaires comprise less than 1% of the adult population, but own 45% of household wealth. China is now firmly established in second place with respect to the number of dollar millionaires (behind the United States and above Japan) and in second place also (above Germany) with respect to the number of ultra-high net worth individuals.

Figure 1: The global wealth pyramid 2018



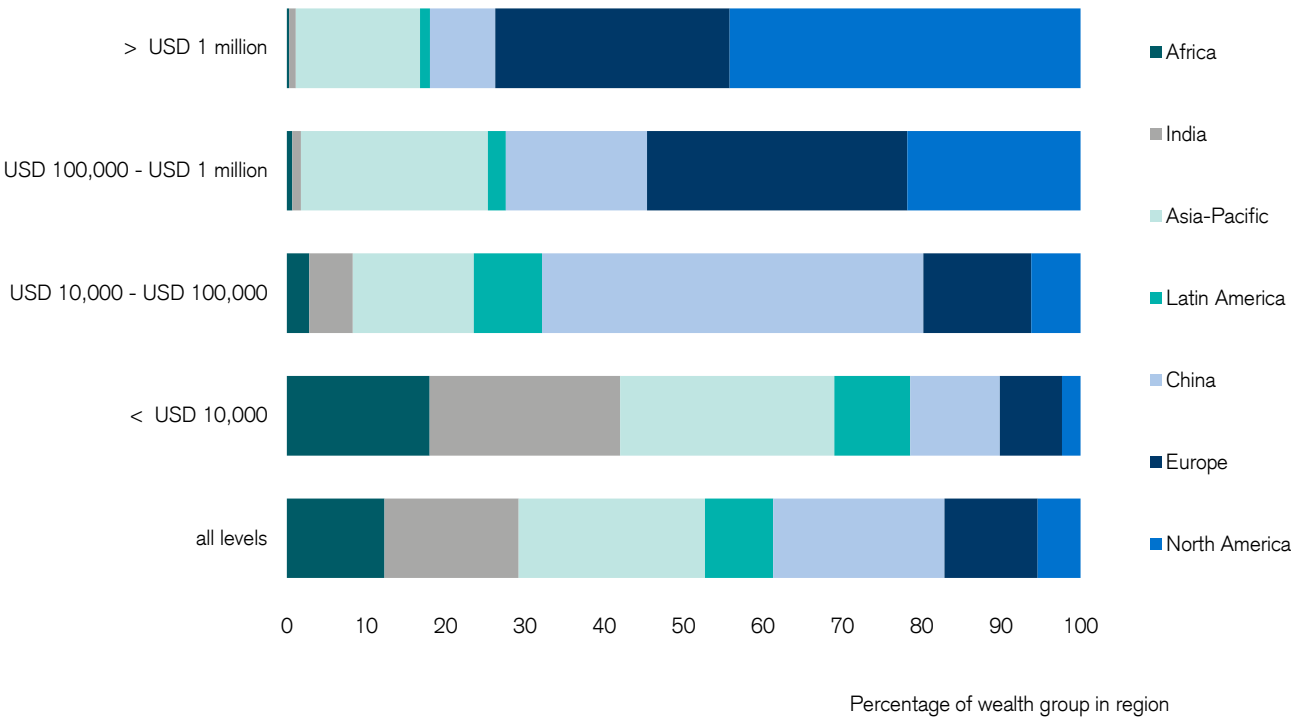
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

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, most notably Africa, where prospects for wealth creation are very 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 3.2 billion individuals – 64% of all adults in the world – have wealth below USD 10,000 in 2018. A further 1.3 billion adults (27% 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, their combined wealth exceeds USD 50 trillion, underlining the economic importance of this often overlooked segment.

Figure 2: Regional membership of global wealth strata



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

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 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 life-cycle 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

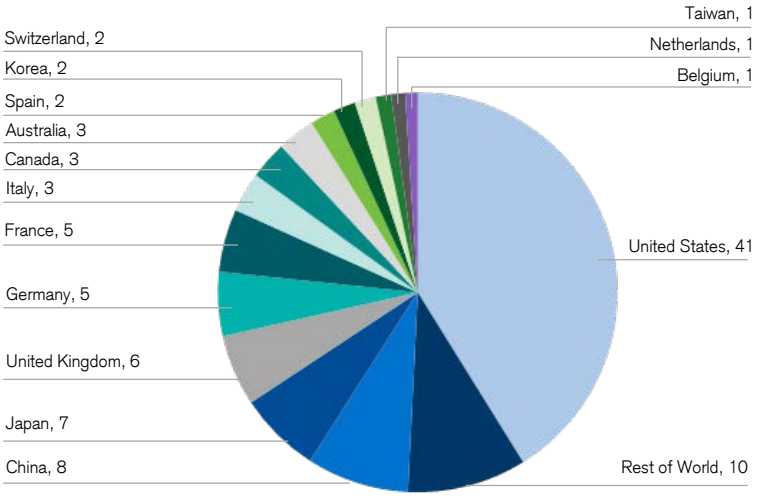
USD 10,000–100,000 is the mid-range band from a global wealth perspective, covering 1.3 billion adults and encompassing a high proportion of the middle class in many countries. The average wealth of this group is sizable at USD 33,100, around half the overall global mean. In combination with its size, this provides the group with considerable economic clout equating to USD 44 trillion in net assets. China completely dominates this segment, accounting for 48% of members, while Asia-Pacific and – to a greater extent – India and Africa are under-represented. The contrast between the number residing in China (641 million, 59% of Chinese adults) and India (73 million, 8.6% of Indian adults) is particularly striking.

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 9.3% by the time of the financial crisis, and then fluctuated in a fairly narrow band. The current level is 9.5%. Regional composition differs markedly from the strata below. Europe, North America and the Asia-Pacific region (omitting China and India) contribute the largest number of members and together account for 79% of the group. Europe alone hosts 156 million members (33% of the total), roughly double the number in China (81 million). However only five million members (1.1% of the global total) reside in India, and only three million (0.6%) in Africa.

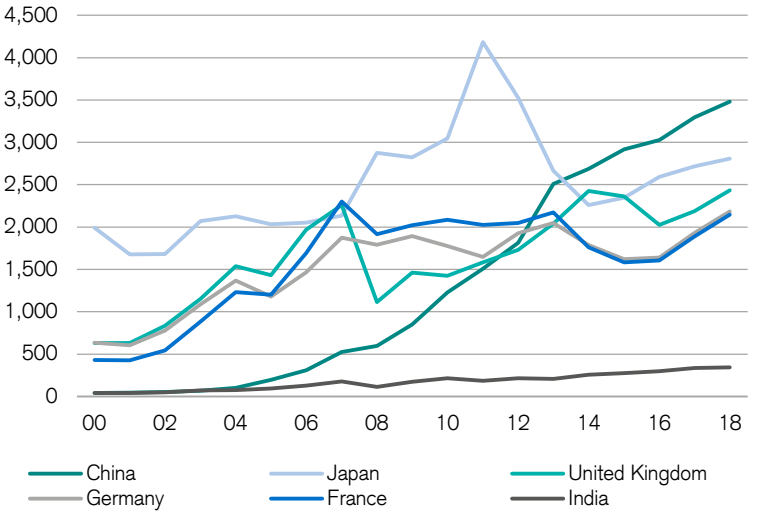
The pattern of membership changes once again for the US-dollar millionaires at the top of the pyramid. The number of millionaires in any given country is determined by three factors: the size of the adult population, average wealth, and wealth inequality.

Figure 3: Number of dollar millionaires (% of world total)



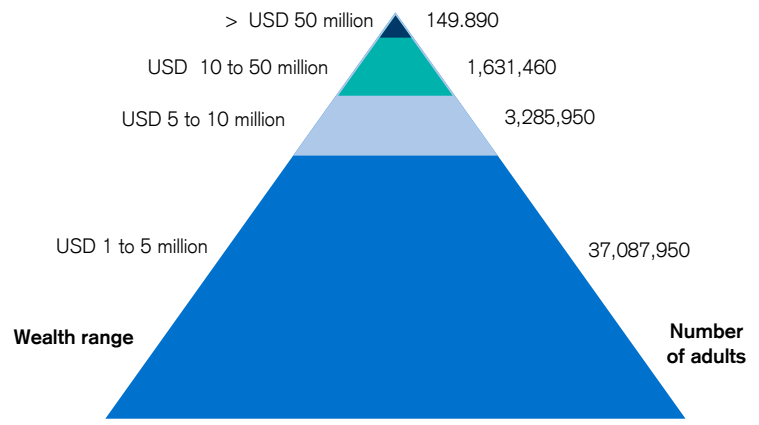
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 4: Number of dollar millionaires (thousand) 2000–18, selected countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 5: The top of the pyramid



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

The United States scores highly on all three criteria, and has by far the greatest number of millionaires: 17.3 million or 41% of the world total (**Figure 3**). For many years, Japan held second place in the millionaire rankings by a comfortable margin – with 12.5% of the global total in 2011, for example, twice as many as the third placed country. However, the number of Japanese millionaires fell after 2011 alongside a rise in other countries, most notably China. Our revised estimates for China now indicate that the number of millionaires overtook the number in Japan in 2014 and now stands at 3.4 million (8.2% of the world total) compared to 2.8 million (6.6%) for Japan.

The United Kingdom is in fourth place with 6% of millionaires worldwide, with Germany and France close behind (5% each). Italy, Canada and Australia each account for 3% of the global total, followed by Spain, Korea, and Switzerland (2%). Taiwan, the Netherlands and Belgium are the remaining countries hosting more than 422,000 millionaires, the minimum requirement for a one percent share of the global total.

The longer perspective portrayed in **Figure 4** illustrates the remarkable growth in the number of millionaires in China since the turn of the century. Millionaire numbers in the United Kingdom, Germany and France have risen four-fold and almost in tandem. The number in Japan has hardly risen at all. But from a humble 41,000 in 2000, Chinese millionaires have grown by a factor of more than 80 to reach the current level of 3.5 million. By 2014, China had overtaken all other countries bar the United States, and the millionaire growth rate continues to outpace its competitors. In the year 2000, India had a similar number of millionaires (39,000) to China, but it now hosts just 343,000, one tenth of the Chinese total according to our estimates.

High net worth individuals

The most common 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. We make use of the Forbes data for each year since 2000, applying well-established statistical techniques to estimate 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 upward.

While the base of the wealth pyramid is characterized by a wide variety of people from all countries and all stages of the life-cycle, HNW and UHNW individuals are heavily

concentrated in particular regions and countries, and tend to share similar lifestyles – participating in the same global markets for luxury goods, for example, 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.

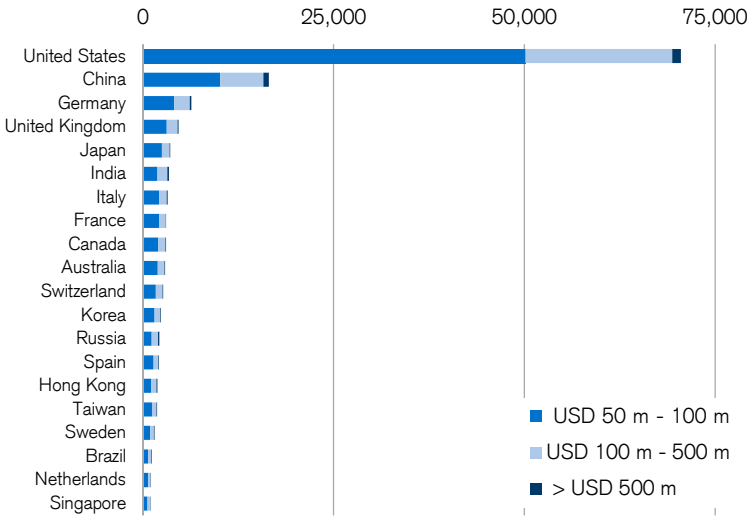
For mid-2018, we estimate that there are 42.0 million HNW adults with wealth between USD 1 million and USD 50 million, of whom the vast majority (37.1 million) fall in the USD 1–5 million range (**Figure 5**). There are 3.3 million adults worth between USD 5 million and USD 10 million, and another 1.6 million have assets in the USD 10–50 million range. Europe and North America had similar numbers of HNW individuals in 2007–09, but North America opened up a gap after 2009, which widened significantly from 2013 onward. North America now accounts for 18.6 million members (44% of the total), compared to 12.4 million (30%) in Europe. Asia-Pacific countries, excluding China and India, have 6.6 million members (16%), and a further 3.5 million are found in China (8% of the global total). The remaining 976,000 HNW individuals (2% of the total) reside in India, Africa or Latin America.

Ultra-high net worth individuals

Our calculations suggest that 149,890 adults worldwide can be classed as UHNW individuals, with net worth above USD 50 million. Of these, 50,230 are worth at least USD 100 million, and 4,390 have net assets above USD 500 million. During the past year, the total number of UHNW adults has risen by 4% (5,790 adults), but the distribution has been very uneven. The rise in North America alone (6,170 adults) exceeded the global total, and China (up 640) Asia-Pacific (up 180) and India (up 31) also recorded increases. But this was offset by falls in UHNW individuals in Latin America (down 620), Europe (down 600) and Africa (down 10).

North America dominates the regional rankings in mid-2018, with 73,560 UHNW residents (49%), while Europe has 32,860 (22%), and 19,780 (13%) live in Asia-Pacific countries, excluding China and India. Among individual countries, the United States leads by a huge margin with 70,540 members, equivalent to 47% of the world total (**Figure 6**). China occupies second place with 16,510 UHNW individuals, followed by Germany (6,320, down 710), the United Kingdom (4,670, up 400) and Japan (3,580, up 100). The remaining countries in the top ten list are India (3,400), Italy (3,220), France (3,040), Canada (3,010) and Australia (2,910).

Figure 6: Ultra-high net worth individuals 2018, top 20 countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

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. While other wealth studies 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 size of these groups and their political power. However, their combined wealth of USD 50 trillion also yields opportunities to serve them that are sometimes 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, acquiring new tastes and new assets as they do so.

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-2018 indicate that there are now over 42 million HNW individuals, including 3.5 million in China, and 6.9 million more in India and other Asia-Pacific countries. At the apex of the pyramid, 149,890 UHNW adults are each worth more than USD 50 million. This includes 16,510 UHNW individuals in China (11% of the global total), almost 200 times the number at the turn of the century.



Women and wealth

James Davies and Anthony Shorrocks

This chapter reviews the most recent evidence on female wealth holdings, focusing in particular on gender differences with males. This century, the wealth of women has risen in absolute terms, and also relative to men in certain respects. Evidence also suggests that women are becoming more successful within the highest wealth echelons. However, certain categories of women remain at a disadvantage as far as wealth creation is concerned.

The wealth of women has been receiving increasing attention. There is a perception that women's wealth is on the rise, not just in a few places, but globally. Many implications have been discussed, ranging from the impact on the financial services industry to gender equality and social welfare.

This chapter reviews evidence on women's wealth from around the world. Hard evidence is more limited than might be expected given the interest in the topic. Household wealth surveys frequently fail to record which family member owns a particular household asset: and, in any case, the nominal ownership of a particular asset may differ from the way ownership may be viewed if a couple divorce, for example. Bearing that qualification in mind, we estimate that women account for about 40% of global wealth overall. Their share of wealth rose considerably during the 20th century, and women's wealth levels have risen along with all household wealth since the year 2000. However, it is not clear that women's overall share of wealth has continued to rise in this century. On the other hand, there is some evidence that the representation of women – particularly self-made women – has been rising in the last 5–10 years at the very top of the wealth spectrum. In addition, women's share of wealth has almost certainly been rising in Asia due to the rise of China, where women have a higher wealth share than in the rest of the region.

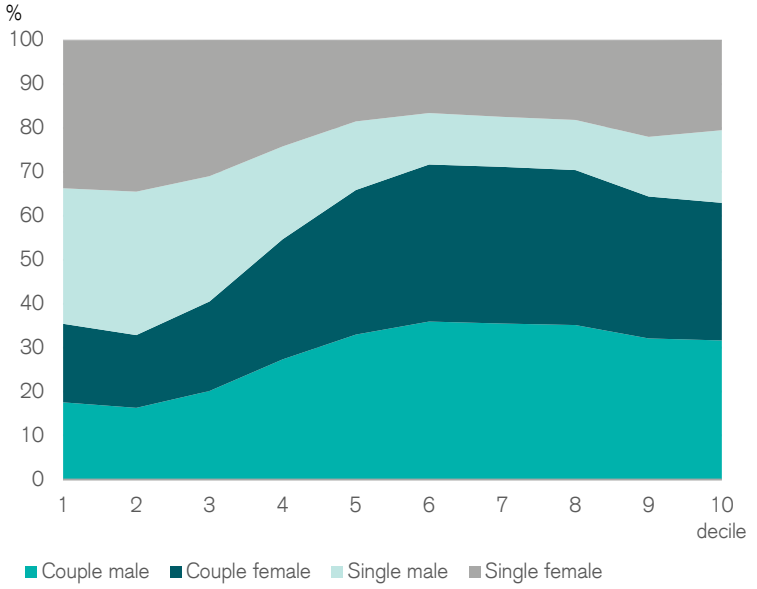
We begin by looking at the share of women's wealth around the world and how it may have been changing. Our attention then turns to the top of the wealth distribution, where women are often seen to be at a disadvantage, but where the handicaps may be lessening. Finally, we examine the kind of assets held by women, finding more non-financial assets and less-risky financial portfolios compared with men.

Women's share of global wealth

Studies in several European countries not only compare the wealth of single women and single men, but also examine the division of wealth within marriage. Evidence for France, Germany, Spain and the United Kingdom for the period 1996 to 2013 indicates that women held 43% of total wealth on average. A study for Sweden from 1979 to 1992 found a rapidly rising female share that would likely have reached a similar level had the study continued. And for Italian couples, it has recently been found that the wife held an average of 40% of their real estate wealth over the period from 1995 to 2012.

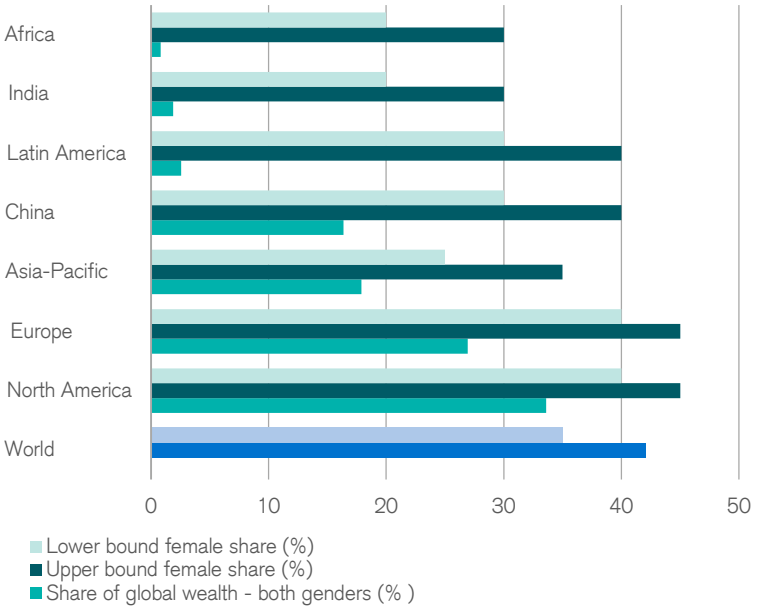
Figure 1 shows how women and men in Europe are distributed across the full wealth range. In the lowest wealth deciles (1 to 3), single people dominate, with single women slightly more numerous than single men. Many of these low-wealth singles have not been

Figure 1: Distribution of Eurozone adults across wealth deciles by gender and marital status, 2014



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 2: Women's estimated share of household wealth by region



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

married; others are widowed or divorced. Single mothers are concentrated at this lower level. In the middle deciles, married people dominate, while, in the highest deciles, they decline slightly as a fraction of the population. This is largely due to the presence of older high-wealth singles, including some people who never had children and were able to accumulate more without that expense, and some who inherited from their spouses on being widowed.

Compared to Europe, less is known about women's overall wealth share in the United States because very few studies for the United States record the division of wealth between husbands and wives. However, the wealth ratio for single women and men is available, and is similar to that in Europe. Another source is a large sample from the 1957 cohort of Wisconsin high school graduates whose wealth was recorded on an individual basis at ages 64–65 in 2004. The female:male wealth ratio suggests a 42% wealth share for women in the population as a whole. This leads us to conclude that women's share of wealth in both Europe and North America is probably in the 40%–45% range (**Figure 2)**. This figure is a strong indication of the share of women globally: Europe and North America host only 17% of world adults, but together they account for 61% of global wealth.

With regard to the rest of the world, recent studies for Africa and India indicate a significantly lower women's share, ranging between 20% and 30%. The wealth share in China is higher than in Africa or India, but below the level in Europe or North America. According to the global rich lists provided by Bloomberg, Forbes, and Hurun, women are well represented among the many billionaires in China. Hurun even claims that two-thirds of the world's self-made billionaire women are Chinese.

We believe that the overall share of female adults in China is between 30% and 40%. On the other hand, the Asia-Pacific region (excluding China and India) is very heterogeneous. It contains countries where the wealth situation of women is similar to that in India (e.g. Pakistan and Bangladesh), but other countries are more similar to China. We assess the women's share in the region at between 25% and 35%. Finally, studies in some Latin American countries indicate a small gender wealth gap, but, for the region as a whole, the women's share is below that in Europe and North America. We believe it is in the same 30%–40% range as China. Combining these figures places the women's share of global wealth in the range of 35%–42%, or 40% in round numbers. This is higher than found in some previous studies due to our inclusion of non-financial assets, which make up half of global household wealth and are more equally shared between women and men than financial assets.

Is there a trend in women's share?
In high-income countries, the last several decades have seen a revolution in the work and family lives of women. Rather than having less education than men, in many of these countries they now acquire more. Instead of marrying young and having children soon after, they are marrying later and waiting longer to have kids. They are employed and earning more, and saving more as a result. Further, they have greater financial independence, a rising share of wealth within marriage, and generally receive a more equal share in the event of divorce than years ago.

These trends have fueled the rise of women's wealth, and they dominated in the 20th century. However, opposing forces have stalled or reversed progress at times. For example, the wealth of divorced women typically falls over time compared with their partners. The rise in divorce rates may therefore tend to reduce women's share of wealth. And with continued gender pay inequity, young single women, whose numbers have been increasing, may accumulate less wealth than their male peers. Finally, there is much evidence that women are more risk averse than men and tend to invest in less-risky assets. When the prices of risky assets have been rising, as in recent years, this tends to reduce the relative wealth of women.

"In high-income countries, the last several decades have seen a revolution in the work and family lives of women"

Data alone can cast light on whether women's share of wealth has been rising or falling. The evidence is clear in high-income countries during the last century: women's share of wealth was rising. From 2000 onward, comparable data is available over various intervals up to the year 2013. Women's share of wealth rose a little in France, showed no trend in the UK and fell in Germany and Spain. In the United States, the wealth of single women rose in both relative and absolute terms from 2001 to 2007, but then fell sharply from 2007 to 2010 and from 2010 to 2013. Estate-tax-based evidence for the United Kingdom and the United States gives a mixed picture regarding changes in the representation of women in the highest wealth ranges.

For the world as a whole, the increase in China's wealth suggests a rise in the global share of women, since their share in China is relatively high. But the rise in China's share of wealth this century is almost perfectly offset by a decline in the wealth share of high-income countries, where women have an even higher share of wealth. That said, the rise of wealth in China has almost certainly increased the share of wealth of women in Asia.

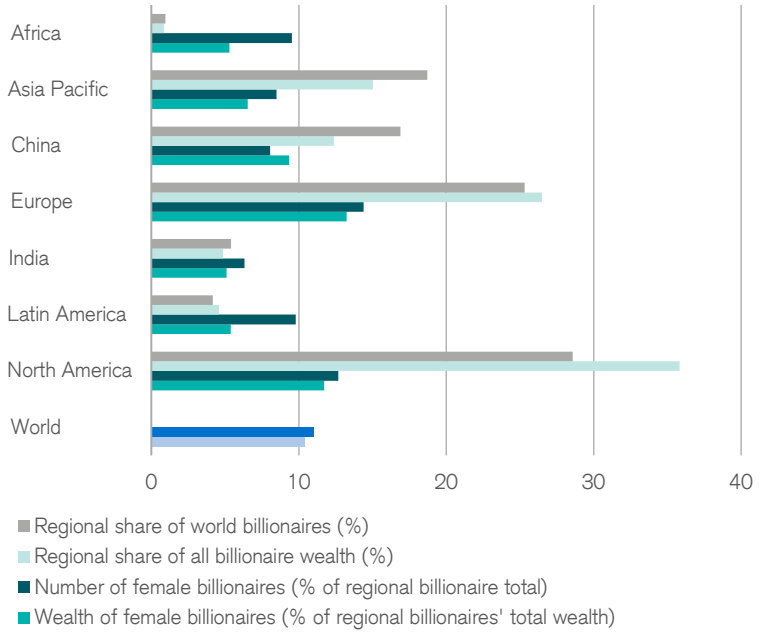
"China has almost certainly increased the share of wealth of women in Asia"

The top end
Estate-tax records are a better source of data than household wealth surveys for the upper tail of wealth distribution. The most recent data for the United States refers to 2013, when the tax threshold was USD 5.25 million, corresponding approximately to the top 0.25% of adults who held 9% of total household wealth. Women accounted for 39% of this group in 2013 and their mean net worth was 98% of that of men. Female representation declined slightly with wealth level, from 42% in the range of USD 5.25–10 million to 39% above USD 50 million.

Estate-tax estimates for the United Kingdom during 2011–13 show that 42% of those with wealth over GBP 2 million were female, fairly similar to the proportion in the United States. The mean wealth of women was 85% of that of the men, putting their share of total wealth in this top group at 38%, the same as in the United States. Thus it seems that women's share of wealth at the top end in the United States and the United Kingdom is slightly less than the 40%–45% share that we estimated for the population as a whole in Europe and North America.

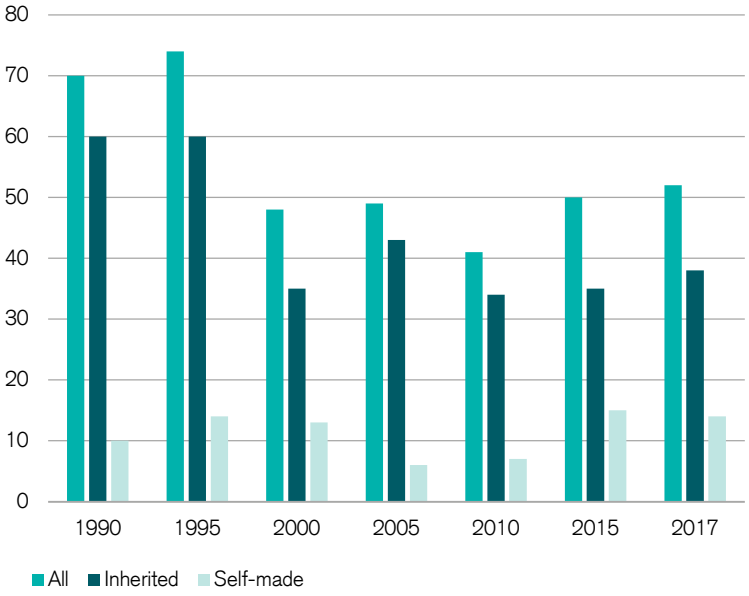
More countries can be included by looking at global billionaire lists, although these cover the super-rich rather than just wealthy individuals. Also, there is little effort to separate the wealth of husbands and wives – if a wife does not play an active role in running a business, she is unlikely to be recognized and the couple's entire wealth is recorded in the husband's name. This practice results in a much smaller fraction of women compared to estate-tax or survey data, and may reflect women's control of wealth rather than their legal ownership. Of the 2208 billionaires on the

Figure 3: Women's representation and wealth share among Forbes billionaires



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 4: Number of women in the United States Forbes 400 list, 1990–2017



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

2018 Forbes list, just 244 (11.1%) were female (**Figure 3**). Among the top 500 billionaires, the fraction is 12.0%, similar to the 12.8% fraction of women recorded in the Hurun list of the top 500 global billionaires.

Regional differences in female representation among the billionaires are marked (**Figure 3**). Reflecting their relatively high global share of women's wealth, Europe and North America have the highest fractions of female billionaires. Latin America, Africa, Asia-Pacific and China come next, although the figure for Africa may be misleading due to the small sample size: there are only 21 billionaires, of which just two are female. Among major countries, Germany has the largest female fraction among its billionaires (26.0%), followed by Sweden (25.0%), Switzerland (23.8%), and Australia and India (both 18.6%). Among countries with at least 20 billionaires, Indonesia, Singapore and Taiwan stand out with zero female billionaires.

Changes at the top end

The Global Wealth Report 2010 examined estate-tax-based evidence on gender differences in the upper tail of the wealth distributions in the United Kingdom and the United States, which related to 2004–05. These can be compared with the most recent estate-tax data, which refers to 2013. Trends in the two countries have been in opposite directions. For the United Kingdom, 35% of those with wealth over GBP 1 million were female in 2005, but that number rose to 45% in 2013. The female share of wealth above GBP 1 million also rose substantially, from 31% to 41%. In the United States, however, the fraction of women above the 2013 estate-tax threshold in real terms (USD 5.25 million) fell from 42% in 2004 to 39% in 2013, and the wealth share fell from 41% to 38%. This contrast in trends between the two countries could be due to the greater fall in real estate values in the United States during the financial crisis of 2007–08 because women own relatively more housing, and less stocks and shares than men.

Gender trends in wealth-holding can also be tracked at the top end using the Forbes 400 list in the United States, which covers the 400 wealthiest residents of the United States each year. There were 70 women on the list in 1990 and 74 in 1995, but their numbers fell sharply to 48 between 1995 and 2000 (**Figure 4**). The number of women on the list fell further to 41 in 2010, but has since rebounded to 52. This pattern is consistent with the conclusion from full-population data that women's share of wealth did not rise in the early years of this century, but also points to the possibility that the situation is now changing. Most women on the Forbes 400 list have inherited a fortune or a share in a family business. A key factor in the collapse in the number of women

during 1995–2000 was the drop in the number who had inherited (**Figure 4**). In the early and mid-1990s, there was still a relatively large number of heiresses who had inherited from the "robber barons": the 1990 list included 13 women who had inherited from the du Pont fortune, for example. Their median age was 79. By 1995, only eight of them were left, reduced to just one in 2000.

The fall in the number of Forbes 400 women from the mid-1990s to the early 2000s, and the fact that most women at this wealth level are inheritors, suggest that trends in female representation in the top wealth tail could reflect earlier changes in male wealth distribution. The drop in the number of women on the Forbes list after 1995 may be an "echo" of the fall in wealth inequality in the United States from its pre-World War II highs to its low point in the 1960s and 1970s. This suggests that there may be a rise in female inheritors on the Forbes 400 in the future, echoing the rise in wealth inequality in the United States that began around 1980.

The drop in the number of female inheritors in the Forbes 400 during 1995–2000, was reinforced after 2000 by a fall in the number of "self-made" women. That number fell from 13 in the year 2000 to six in 2005, partly due to mortality. Conversely, the rebound in the number of women in the Forbes 400 after 2010 is due to a doubling in the number of self-made women on the list, from seven in 2010 to 14 in 2017. An upsurge of self-made women is also evident in the Hurun Global Self-Made Women Billionaires list, which saw 14 new names on the list in 2017 alone, bringing the total to 102.

There have also been significant changes over time in the relative age and wealth of women versus men in the Forbes 400. In the 1990s, the women were on average a little older than the men, and had about 20% less wealth. From 2005 onward, they have been a little younger than the men and have caught up in wealth terms: median wealth was equal to that of men in 2010 and higher in 2017. These trends are partly related to the rising number of self-made women on the list.

Female millennials

Last year, the Global Wealth Report looked at the wealth of the millennials. This generation, who came of age after the year 2000, had a more difficult time than previous generations due to a variety of factors including the global financial crisis, the economic slump that followed, technological change, and high house prices. As a result, its rate of wealth accumulation has been slower than earlier generations at the same age. But is there a gender dimension to the millennials' problems? The answer is yes. Millennial women and men have both had a difficult time but, overall, the women have been less severely affected than the men. Female millennials have done better than their male counterparts because the industries most affected by the financial crisis and the global



recession that followed tended to be male dominated – finance and construction, for example – while the more stable parts of the economy were not – education, health care and public administration, for example. The outcome shows up most dramatically in unemployment rates. In the United States, average unemployment rates for men and women in their 20s were almost identical in the 1990s. This changed even before the financial crisis, with the female unemployment rate in this age group averaging 6.8% compared to the male rate of 7.4%. The male rate then rose rapidly after the crisis, peaking at 17.8% in April 2010, when the female rate also peaked, but at a much lower level of 10.8%. A greater rise in male unemployment rates after the financial crisis was also seen in the European Union.

Gender differences in the millennials' experience shows up in comparisons of how the wealth of male and female millennials evolved in their youth versus the experience of previous generations. Evidence can be gleaned from the Survey of Consumer Finance (SCF) for the United States, regarding the experience of the youngest millennials to be affected by the financial crisis: single adults aged 20–24 in 2007. The average wealth of women in this group was 61% of the men's in the 2010 and 2013 surveys, much higher that the ratio of 43% found at the same age for those aged 20–24 in 1997, the generation immediately before the millennials.

Portfolio composition

Gender differences in the portfolio composition of wealth is an interesting topic recently addressed in a major study for the European Commission using data from the first wave of the Household Finance and Consumption Survey (HFCS) covering 15 Eurozone countries around 2010–11. The main results are:

- Women had more of their assets in non-financial form (e.g. houses) than men: 75% versus 73%.
- Women had a smaller fraction of their financial assets in risky form (stocks and mutual funds) – 13% versus 19% – and fewer women than men owned such assets: 16% versus 22%.
- Single women had more of their assets in non-financial form than married women: 80% versus 72%.
- Women and men had similar debt ratios: 10% of gross assets for both.

Comparison with other countries is difficult since relatively few have recent studies that distinguish the wealth of men and women within couples. Estate-tax evidence for the United Kingdom does this, and covers about the top third of the population who own most of the wealth in the United Kingdom, as elsewhere. This data does not distinguish between married and single persons, but the broad pattern of differences between female and male portfolios are similar to those in Europe. The women hold more of their assets in non-financial form – 57.5% in 2011/13 versus 53.1% for men. They are also less likely than men to hold risky assets, and dedicate a smaller proportion of their portfolios to them – 25% versus 31%.

The United States Survey of Consumer Finances (SCF) also casts some light on gender differences in portfolios. While it does not divide household wealth between spouses, single women and men can be compared with each other and with married couples. The evidence shows that single women in the United States have a much higher home ownership rate than single men or married couples – 75% versus 59% and 65% in 2013. Consequently, it is not surprising to find that, as in Europe, they also hold a higher fraction of their wealth in non-financial assets – 36% versus about 20% for both single men and couples.

"Women are less likely than men to hold risky assets, and dedicate a smaller proportion of their portfolios to them"

Pension coverage is another aspect of gender differences that has attracted attention. In countries with compulsory superannuation schemes, like Australia and much of Europe, this is less of an issue, although since women still earn less over the lifetime, they must also have lower equity in earnings-related pension schemes. Bigger concerns develop in countries where "second pillar" pension coverage depends on whether or not one's employer has a pension plan. People without such coverage can compensate to some extent through their own retirement saving (the "third pillar" of retirement income). In practice, however, those without employer-based pensions have less retirement-related assets. In the past, there were very marked gender difference in both participation in such pensions and in the amounts held. This difference has tended to decline in recent decades – in Canada, the United Kingdom and the United States, for example – as more women have a strong lifetime attachment to the labor force.

Estate-tax evidence also illuminates gender differences in portfolio composition at the top end. In the United States in 2013, 75.9% of women in the very high wealth group covered by estate-tax data held publicly traded stock, slightly more than the 74.0% of men who did so. Public stock made up 22.0% of the women's portfolios on average, compared with 16.4% for men. It may well be that women are more likely to hold less risky varieties of stock, in keeping with their well-established greater risk aversion. Women were much less likely to have closely held stock or to participate in non-corporate business. Other gender differences reflect factors such as the lower average age of the men and the greater likelihood that they are, or were, in paid employment or had a pension plan. These differences show up in the greater importance of life insurance and retirement assets for men. It is also worth noting that the women had about half as much debt as the men, relative to their total assets. Estate tax evidence for the United Kingdom in 2013 reveals a lower incidence and portfolio share of securities for women than for men. Other gender differences in portfolio composition for the United Kingdom are broadly similar to those in the United States.

Work coordinated by the international Gender Asset Gap Project provides a window on differences in the portfolios of women and men in Ecuador, Ghana and India. The sexes are remarkably similar in their ownership of different asset types in Ecuador, except for businesses. While women owned 54% of the businesses owned by the couples surveyed, their businesses were smaller. Women held only 28% of the business wealth in the sample, by value. The situation in Ghana and India is very different. In Ghana, men are about twice as likely – and in India more than twice as likely – to own agricultural land or a principal residence. Except for jewelry, women are also much less likely to own consumer durables, including vehicles and mobile phones. Given their increasing importance in business and financial activities, lower ownership of mobile phones is both indicative of women's lower opportunities to take part in those activities and a barrier to greater participation in them.

Saving, investment and risk aversion

It is sometimes thought that women tend to save more than men, but also tend to be more risk averse. Research supports the idea that they are more risk averse, but not that they are higher savers. From a life-cycle saving perspective, they would be expected to have a higher saving rate, since they live longer. However, women also spend more on their children than do men, which tends to reduce their saving. More generally, there is a complex behavioral interaction between wives and husbands in making saving decisions where results are hard to predict. Evidence concerning the saving behavior of single women and men may tell us little about the likely saving behavior of married couples.

Much recent attention has been given to differences between men and women in investment styles. Advisors need to understand those differences in order to best serve female clients. Surveys have shown that women tend to save for particular purposes rather than simply to accumulate greater wealth. Their greater risk aversion shows up as well in their interest in sustainable investments, and in their avoidance of risky activities like day trading and speculation. But there are other important gender differences. For example, it has been found that women on average have less investment knowledge and are less confident about investing than men. This does not necessarily handicap them relative to men, however. It has also been found that men tend to be overconfident about their investing ability, leading them to trade more frequently than women, and therefore to incur significantly higher brokerage fees. Caution and patience can yield dividends in the world of investment.

"There are signs that more self-made women are succeeding in business and entering the highest wealth ranks"

Conclusion

After rising as a share of global wealth in the 20th century, women's wealth has risen this century in absolute terms and also relative to men's wealth in some respects. In recent decades, women's share of wealth has risen in Asia, along with the rise of China's wealth. And there are signs that more self-made women are succeeding in business and entering the highest wealth ranks. However, even in the countries where progress is the strongest, some categories of women – for example, single mothers and divorcees – remain handicapped. Women's employer-based pension wealth also lags behind men in some countries, although it has been rising. Furthermore, improvements in women's wealth situations are not universal. Large gender wealth gaps remain in some regions. While more needs to be done to ensure that women have an equal opportunity to build up, inherit and share in wealth, there are signs that progress has been happening in much of the world.



Wealth outlook

Rodrigo Lluberas and Anthony Shorrocks

Global wealth is projected to rise by nearly 26% over the next five years, reaching USD 399 trillion by 2023. Emerging markets are responsible for 32% of the growth, although they account for just 21% of current wealth. Wealth will primarily be driven by growth in the middle segment, but the number of millionaires will also grow markedly over the next five years to reach a new all-time high of 55 million, while the number of ultra-high net worth individuals will reach 205,000.

The global picture

Despite the turbulence experienced by the global economy during the 2008 financial crisis and the recent problems faced by emerging economies, global household wealth increased by USD 200 trillion between 2000 and 2018. Emerging markets have raised 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 offer a possible scenario by presenting estimates of total wealth and its distribution across regions in the year 2023. Emerging economies are expected to recover from their recent doldrums and to continue to catch up with developed economies.

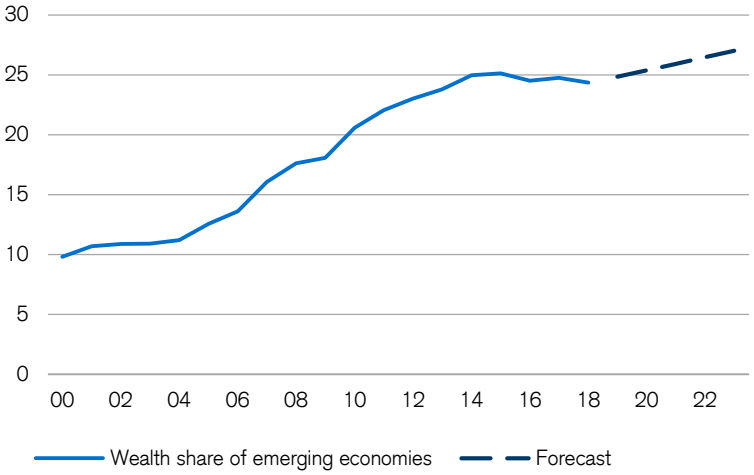
Since the year 2000, global wealth in US dollars has increased at an average annual rate of 5.7%, but with two distinct periods. Global wealth grew at 10% per year prior to the global financial crisis. During that period, wealth more than tripled in emerging countries, compared to an increase of 82% in high-income countries. Global wealth then declined sharply in 2008. Since then, the increase in wealth has moderated to an annual rate of just 4.4%. This was due to lackluster performance in both high- and low-income countries. Wealth in middle-income countries more than doubled between 2008 and 2018, but rose by 41% and 57% in high- and low-income countries, respectively. We believe that the global pace of increase will continue to be moderate and will average 4.7% per annum over the next five years. This implies an extra USD 82 trillion in total global wealth by 2023, equivalent to 11,100 per adult.

"Emerging markets have raised their share in world wealth and have increased their contribution to wealth growth since the beginning of this century"

Emerging economies set to gain momentum and increase their share of global wealth

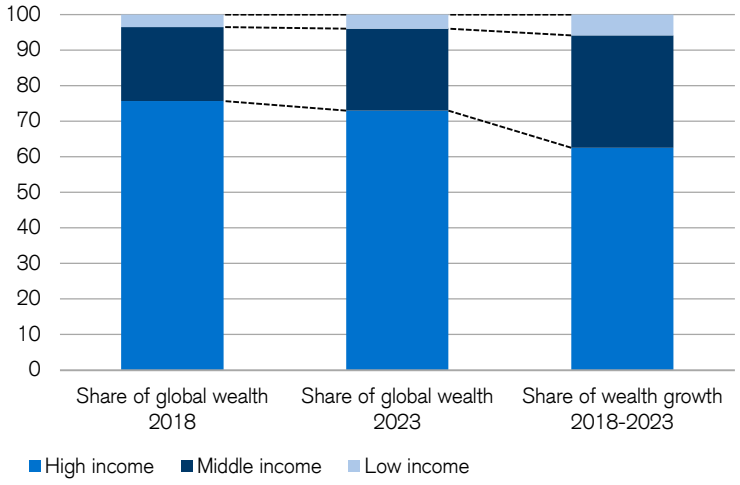
Between 2000 and 2018, emerging markets have more than doubled their share of global wealth from 10% to 24%, but the growth rate has slowed down during the last five years. We expect emerging economies to regain momentum. The annual rate of growth is projected to be 7%

Figure 1: Wealth share trend in emerging markets (% of global wealth)



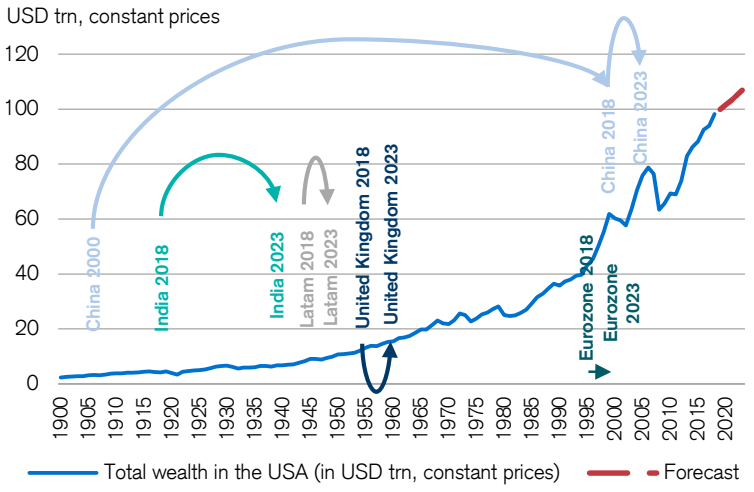
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 2: Share of global wealth and contribution to wealth growth by country income group



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 3: Total wealth in the United States and relative position of selected economies



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

for emerging markets against 4% for developed markets (**Figure 1**). The share of global wealth of emerging markets will likely reach 27% by 2023, increasing their share by 0.5 percentage points on average each year.

Among emerging economies, those in the middle-income segment currently account for 21% of global wealth. It is expected that these countries will contribute about a third of wealth growth in the next five years and that their share of global wealth will climb to 23% (**Figure 2**). China, a member of the middle-income group, will add USD 23 trillion to the stock of global wealth in the next five years, an increase of 44%. China's share of global wealth will rise from 16% to just below 19% by 2023. Among the low- or low middle-income countries, wealth in India will grow very rapidly and add USD 2.7 trillion, an increase of 47% in just five years.

Leapfrogging

Given the projected performance of emerging economies, we expect to see a considerable improvement in their position over the next five years. **Figure 3** compares the total wealth of some of the largest economies today and five years from now with the total wealth of the United States during the course of the 20th century, adjusting for inflation. The chart shows the position of the Eurozone, Latin America, the United Kingdom, China and India relative to the United States from a historical perspective. The Eurozone's total wealth of USD 58 trillion in 2018 is comparable to the total wealth of the United States at the end of the 1990s. Five years from now, it should have grown the equivalent of four years in terms of United States history. The performance of China between 2000 and 2018 is striking, but expected to slow down. Its wealth increase between 2000 and 2018 matched the increase in the United States over the course of the 85 years from 1910 onward. But it is expected to increase the equivalent of just seven "US years" during 2018–23 to reach USD 68 trillion in real terms, comparable to the level of the United States in 2004.

Total wealth in the United Kingdom is the same now as it was in the United States in 1958. It is expected to reach USD 15 trillion in 2023, an improvement of only two "US years," reflecting the likely effect of Brexit on the economy. The case of India is also noteworthy. Total wealth in India increased fivefold between 2000 and 2018, reaching USD 6 trillion in 2018. Despite this remarkable increase and despite 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 8 trillion in real terms by 2023, the level achieved by the United States in 1944.

Finally, after the economic slowdown in Brazil during the past three years and this year's exchange-rate crisis in Argentina, we expect wealth growth in Latin America to slow down. In the next five years, Latin America is projected to grow the equivalent of three "US years" from 1944, reaching almost USD 9 trillion in real terms by 2023.

The components of wealth

Non-financial wealth has risen faster than financial wealth since the turn of the century, but has been outpaced since 2009. Financial assets were hit harder by the financial crisis, but recovered faster afterward. Like non-financial wealth, debts have also increased moderately and at a slower pace than financial assets after the global crisis. Our forecasts predict that non-financial wealth will slightly outpace financial wealth, by around 1% annually over the next five years. We also expect debts 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. Household debt is expected to increase 41% in the next five years to reach 14% of gross assets (**Figure 4**).

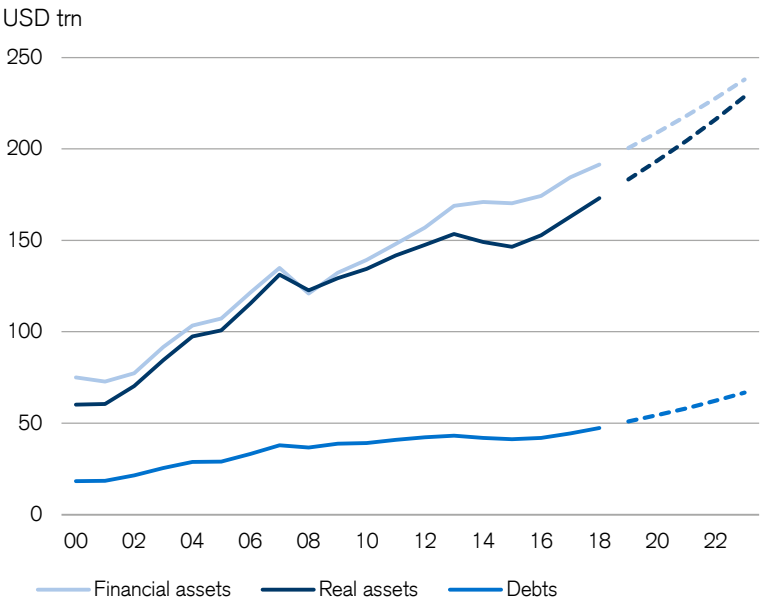
Wealth distribution in the 21st century

The proportion of global adults with wealth below USD 10,000 has decreased since 2000. At the beginning of the century, 80% of global adults belonged to this stratum: today the fraction is 64%. Our projections show it decreasing further to 61% in 2023 (**Figure 5**). The global wealth middle class – those with net worth between USD 10,000 and USD 100,000 – increased from 14% in the year 2000 to 27% today. By 2023, it will have grown by nearly 196 million adults to reach 29% of all global adults. The upper middle segment, covering those with wealth between USD 100,000 and USD million, will grow by 88 million adults between 2018 and 2023. About one in ten adults will then belong to this group.

Trends in millionaires and UHNW individuals

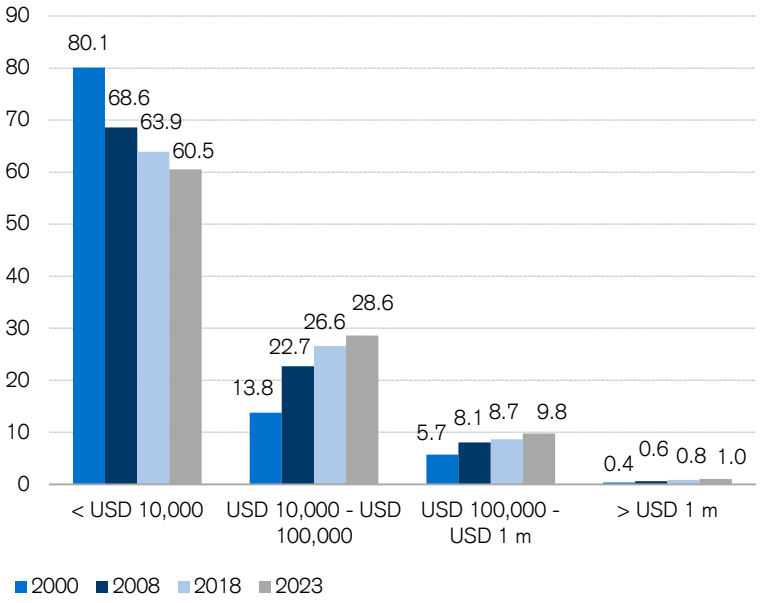
The catch-up of emerging economies is also evident in the increasing proportion of global millionaires. According to our estimates, the number of global millionaires will exceed 55 million in 2023, a rise of almost 13 million compared to today (see **Table 1**). While millionaire numbers in emerging economies are still far below the levels in the United States or Europe, they are expected to increase rapidly in the next five years. China is set to see its number increase by 62% to 5.6 million, retaining second position in the millionaire league table ahead of Japan, the United Kingdom and Germany. India could host 526,000 millionaires in 2023, an increase of more than 53% in the next five years. Given the recent economic turbulence in Latin America and our lower growth projection

Figure 4: Evolution of wealth by component (USD trn)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Figure 5: Proportion of adults by wealth stratum (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Table 1: Number of millionaires in 2018 and 2023, by selected countries and regions

Country	Number (thousand)		Change
	2018	2023	(%)
United States	17,350	20,478	18%
China	3,480	5,647	62%
Japan	2,809	3,769	34%
United Kingdom	2,433	3,151	30%
Germany	2,183	3,077	41%
France	2,147	3,016	40%
Canada	1,289	1,991	54%
Australia	1,288	1,814	41%
Italy	1,362	1,808	33%
Spain	852	1,201	41%
Korea	754	1,026	36%
Switzerland	725	988	36%
Netherlands	477	639	34%
Belgium	424	588	39%
Taiwan	521	567	9%
Sweden	348	452	30%
Denmark	243	326	34%
Austria	229	318	39%
Hong Kong	179	242	35%
Singapore	184	240	30%
New Zealand	155	230	48%
Norway	185	219	18%
Russia	172	18	100%
Africa	120	171	43%
Asia-Pacific	6,606	8,848	34%
China	3,480	5,647	62%
Europe	12,439	16,880	36%
India	343	526	53%
Latin America	520	665	28%
North America	18,648	22,469	20%
World	42,155	55,206	31%

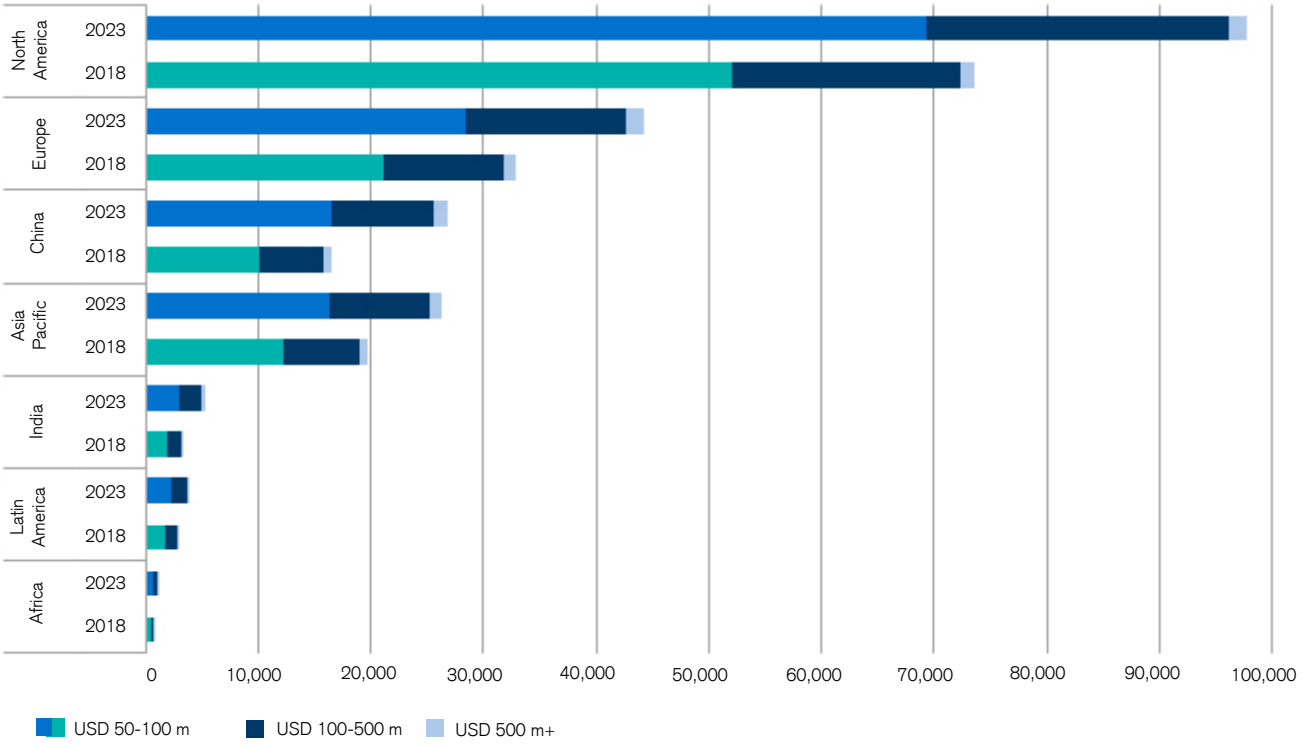
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

for the region, we expect the number of millionaires in Latin America to increase by 28%, the second-lowest growth rate. In particular – and this is a change from last year's positive perspective – we expect Latin America to underperform Africa and Asia-Pacific due to the lackluster performance of Argentina and Brazil.

Among developed economies, Germany and France will see their millionaires rise by just below 900,000 and Canada and Australia will also experience a significant rise in their numbers of millionaires. On the other hand, given the lower growth prospects after Brexit, we expect a smaller rise in millionaire numbers in the United Kingdom.

By 2023, the number of UHNW individuals – adults with wealth above USD 50 million – will likely increase by 55,000 to reach 201,000 individuals, about half of whom will reside in North America. Countries in the APAC region (Asia-Pacific, including China and India) are home to more than 40,000 UHNW individuals, compared to almost 33,000 living in Europe. This difference in favor of APAC will increase further, and by 2023 the APAC region will add another 18,600 UHNW members to reach a total of nearly 58,000, 46% of whom will be from China. While Latin America is home to 8.6% of global adults, only 2% of UHNW individuals reside in the region. Given the projected meagre performance of Brazil and Argentina, we expect this to continue, with the region adding only 900 UHNW individuals over the next five years (see **Figure 6**).

Figure 6: Ultra-high net worth individuals by region: 2018 and 2023



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Methodology

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

Aggregate financial wealth is projected using a combination of Gross Domestic Product (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). Dividends are estimated using analyst consensus expectations and trend GDP growth. We then 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). Estimates are produced for 42 countries in local currencies, which are then converted to US dollars using IMF exchange-rate projections.

For non-financial wealth, our model is based 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 converted into USD using IMF foreign exchange projections. For countries lacking these projections, we use GDP per capita growth to forecast net worth, and assume that the financial/non-financial/debt ratios are the same as for 2018.



Wealth of nations

James Davies, Anthony Shorrocks and Rodrigo Lluberas

The global picture

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 and is improving elsewhere. Our assessment of the reliability of the source material is reported for each country discussed below. For all of the countries featured, except Brazil, data quality is rated as at least "fair," meaning that there is 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 an official household sector balance sheet 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 or incomplete.

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 2000–18. Since exchange rate changes can alter the apparent trend, an alternative series is provided for each country using a five-year moving average US dollar exchange rate. 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-2018, wealth was invariably higher than in 2000, and in most cases higher than in 2007.

From mid-2017 to mid-2018, the value of a number of important currencies, such as the euro, rose in terms of US dollars. The Indian rupee fell against the US dollar, dropping 6%, the ruble went down 5%, and the Swiss franc fell 3%. But several other key currencies went in the opposite direction. For example, against the dollar, the euro rose 3%, the renminbi 2%, and the yen 1%. Although currency movements were mixed, the charts hereafter show wealth in 2018 increasing in most countries. However, wealth per adult fell in US dollar terms in Australia, Brazil, Indonesia and Switzerland, in part due to exchange-rate changes.

Our second chart shows the current split between financial and real (non-financial) assets, as well as the average level of debt. Globally on average, financial assets comprise 53% of total gross assets, and debt equals 13% of that total. 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 Germany among the wealthier countries.

The last chart shows the distribution of wealth. There are some notable comparisons. For example, 91% of adults in India have a net worth less than USD 10,000, whereas this percentage is only 33% in China. Moreover, the percentage of those with very little wealth is surprisingly high in some developed countries, including Germany and the United States, while in others, like Australia and Japan, it is very low. This reflects aspects such as the availability of credit, the extent of student debt, home ownership rates, and whether young adults tend to live at home with their parents and are therefore not counted as separate units.

United States

The boom goes on

The United States economy and its financial markets continued to forge ahead in 2017–18, leading to a tenth year of rising wealth. An important driver for some years was the Federal Reserve's quantitative easing program, yielding low interest rates and contributing to economic recovery plus higher bond and stock prices. In the past year, business and market conditions have strengthened further in spite of slightly higher interest rates, amid the fiscal stimulus, deregulation and lower taxes brought in by the new administration.

Average wealth was USD 210,700 in 2000, and rose fairly steadily until 2006, before falling during the global financial crisis. Wealth per adult has now fully recovered, and is 35% above the 2006 level. There is some uncertainty caused by the prospect of rising debt, higher interest rates and trade tensions, but otherwise the signs are mostly positive for the economy and for household wealth.

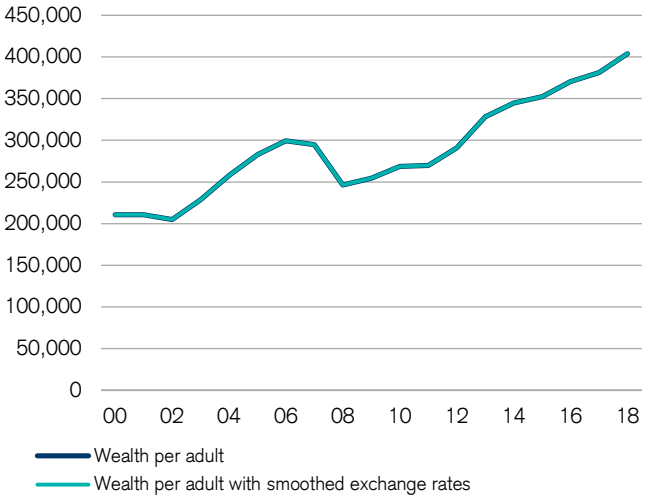
The United States has a high proportion of assets (72%) reported as financial, partly because it includes business equity wholly as a financial asset. Adopting the more usual procedure of treating unincorporated enterprises as part of the household sector, the share would be around 64%, which is still relatively high. This reflects the fact that, compared with many other OECD (Organisation for Economic Co-operation and Development) countries, the United States has more economic activity in the private relative to the public sector. It also has more outward foreign investment. Debts equal 13% of gross household assets, which is not extreme by international standards.

Wealth distribution in the United States indicates 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 United States has the most members of the top 1% global wealth group, and currently accounts for 41% of the world's millionaires. The number of UHNW individuals with wealth above USD 50 million is about four times that of the next country, China.

Country summary 2018

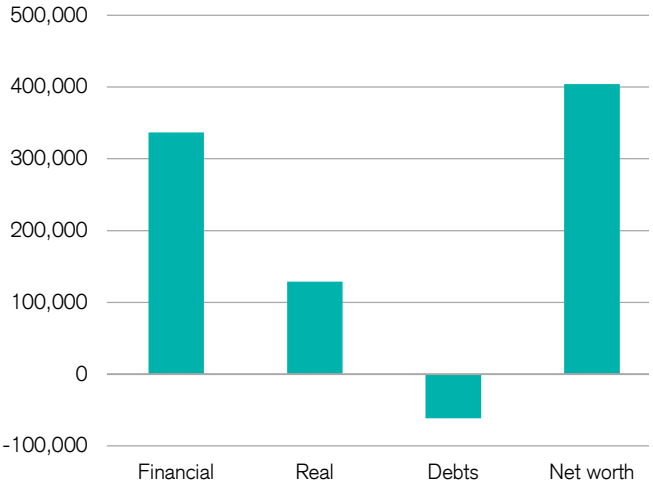
Population	326	million
Adult population	243	million
GDP	81,425	USD per adult
Mean wealth	403,974	USD per adult
Median wealth	61,667	USD per adult
Total wealth	98.2	trillion USD
US dollar millionaires	17,350	thousand
Top 10% of global wealth holders	102,478	thousand
Top 1% of global wealth holders	19,732	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



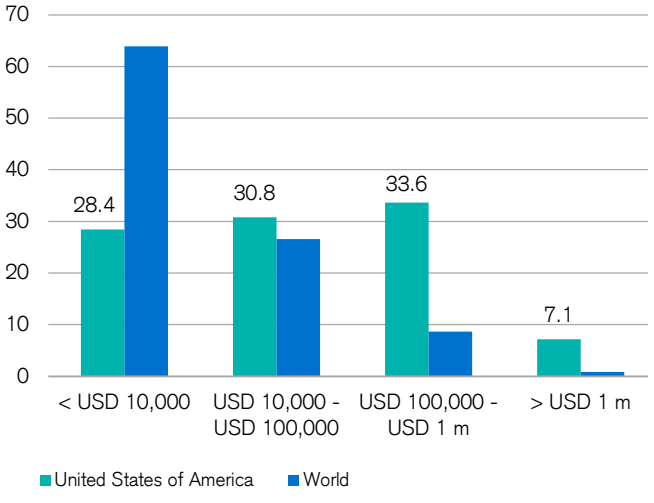
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

China

Growth champion

While the United States is still far ahead in terms of total household wealth and the number of citizens in the top wealth categories, China has advanced so rapidly this century that a wealth gap that once appeared unassailable could vanish within a generation. It is China, rather than the United States or Japan, to which much of the developing world looks for a model, inspiration, and often assistance, in wealth creation.

This century, total wealth in China has risen from USD 3.7 trillion to USD 51.9 trillion, a multiple of more than 14. This is double the rate of any other nation and three times the rate of most. The global financial crisis caused a small setback, but wealth growth soon resumed and, unlike most other economies, came close to matching the pre-crisis pace, at least until 2014. Trade conditions and debt concerns are causing some uncertainty, but signs for the coming years are otherwise fairly positive.

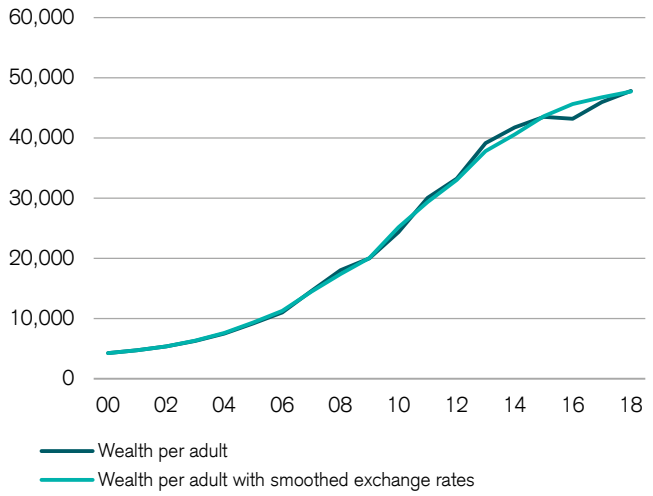
In terms of total household wealth, China currently lies in second place, behind the United States but ahead of Japan. Reflecting a still-strong property market, the proportion of household assets in non-financial form rose from 61% in 2017 to 62% in 2018. Real assets comprised USD 32,640 per adult in mid-2018. Debt averaged just USD 4,690, equivalent to 9% of gross assets. While concern has been expressed about growing household debt in China, this debt ratio remains 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. However, inequality has been rising quickly since 2000. China now has 3.5 million millionaires and more residents with wealth above USD 50 million than any country except the United States.

Country summary 2018

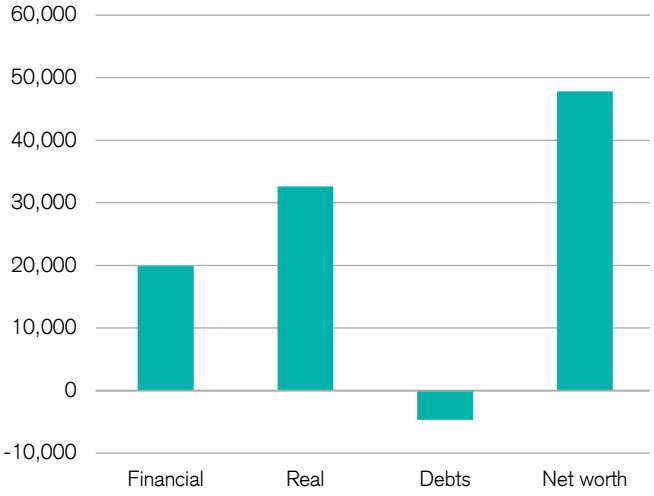
Population	1,412	million
Adult population	1,085	million
GDP	12,147	USD per adult
Mean wealth	47,810	USD per adult
Median wealth	16,333	USD per adult
Total wealth	51.9	trillion USD
US dollar millionaires	3,480	thousand
Top 10% of global wealth holders	89,402	thousand
Top 1% of global wealth holders	4,201	thousand
Quality of wealth data	☆☆☆	fair

Wealth per adult over time



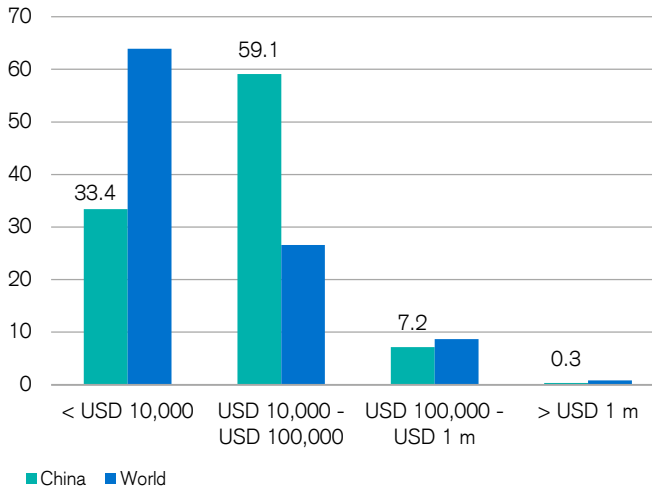
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

India

Growth story

India's wealth has trended upward strongly since the turn of the century, although there was a setback in 2008 due to the global financial crisis and there have been bumps due to currency fluctuations. Annual growth of wealth per adult averaged 8% over 2000–18. Prior to 2008, wealth also rose strongly, from USD 1,830 in 2000 to USD 5,020 in 2007. After falling 26% in 2008, it rebounded, and grew at an average rate of 7% up to 2018. Wealth per adult is estimated at USD 7,020 in mid-2018 after a year of slow growth in USD terms due to an exchange rate drop of 6%.

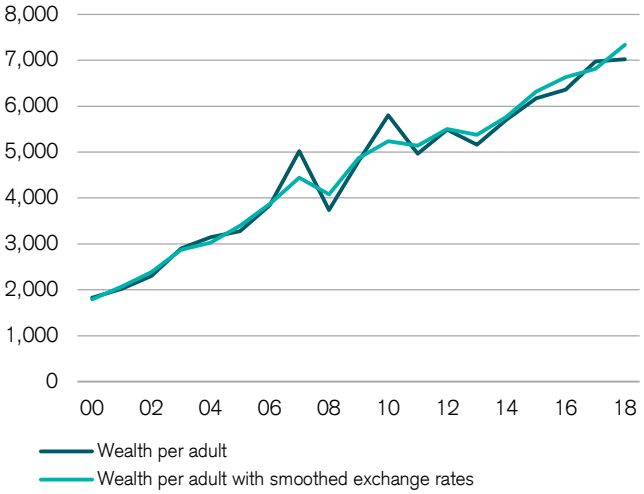
Personal wealth in India is dominated by property and other real assets, which make up 91% of estimated household assets. This is typical for developing countries. Personal debts are estimated to be only USD 840, or just 11% of gross assets, even when adjustments are made for under-reporting. Thus, although 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 91% of the adult population has wealth below USD 10,000. At the other extreme, a small fraction of the population (0.6% of adults) has a net worth over USD 100,000. However, owing to India's large population, this translates into 4.8 million people. The country has 404,000 adults in the top 1% of global wealth holders, which is a 0.8% share. By our estimates, 3,400 adults have wealth over USD 50 million, and 1,500 have more than USD 100 million.

Country summary 2018

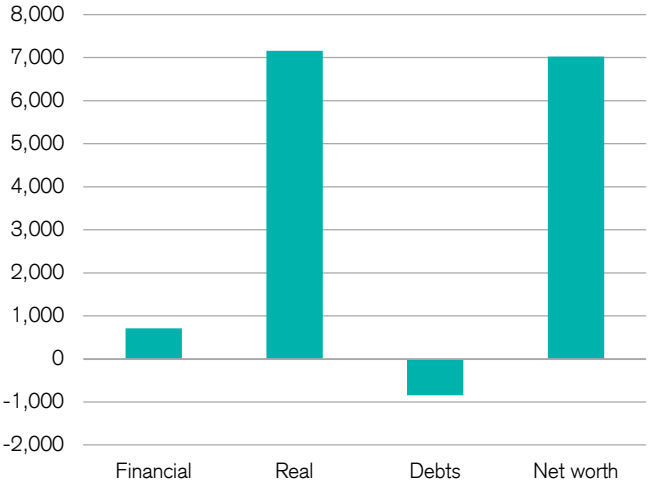
Population	1,347	million
Adult population	850	million
GDP	3,247	USD per adult
Mean wealth	7,024	USD per adult
Median wealth	1,289	USD per adult
Total wealth	6.0	trillion USD
US dollar millionaires	343	thousand
Top 10% of global wealth holders	5,639	thousand
Top 1% of global wealth holders	404	thousand
Quality of wealth data	☆☆☆	fair

Wealth per adult over time



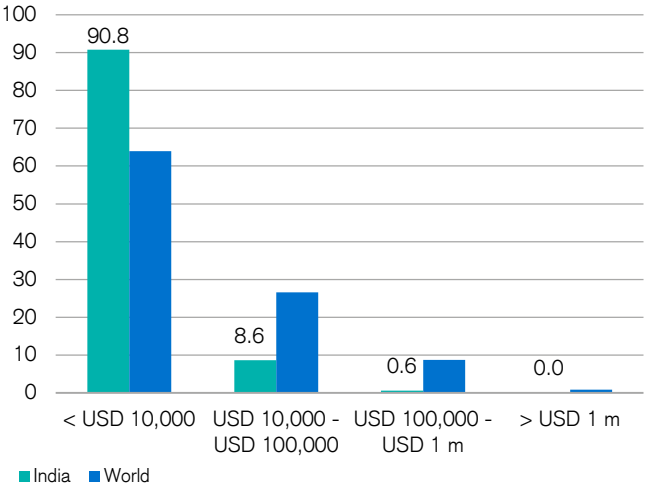
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Russia

Changing fortunes

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, the trend has been flat and there have been large fluctuations due to volatility of the ruble. The USD-RUB exchange 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 63 in mid-2018. Household wealth per adult rose from USD 2,942 in 2000 to USD 19,997 in mid-2018, but that is still below the level reached in 2007.

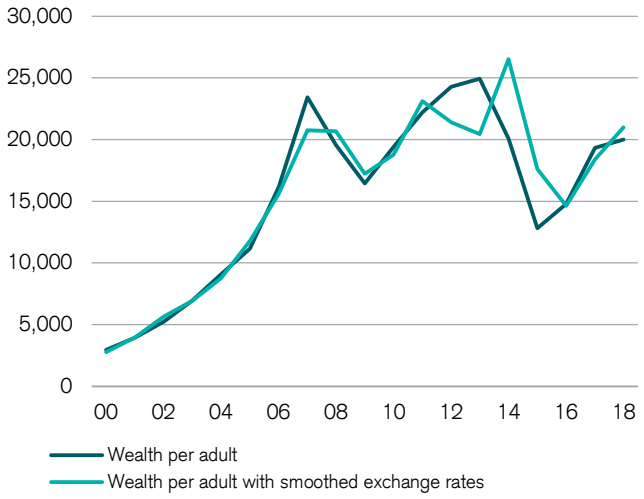
The quality of wealth data for Russia is mixed. There are official financial balance sheets for the household sector, but no household wealth survey and no official non-financial balance sheet data. We therefore impute the value of non-financial assets, using the procedures described in the Credit Suisse Global Wealth Databook. Results are similar to those recently obtained by an independent group of academic researchers. The estimated value of financial assets per adult for mid-2018 is USD 8,840, while non-financial assets average USD 13,530. Personal debt grew rapidly in the period 2000–07, and more slowly after that. We estimate that it now equals 11% of gross assets.

According to our estimates, the top decile of wealth holders owns 82% of all household wealth in Russia. This is a high level, greater even than the figure of 76% 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 62% in China. The high concentration of wealth in Russia is also reflected in the fact that it is estimated to have 74 adults who are billionaires, despite its modest level of wealth per adult.

Country summary 2018

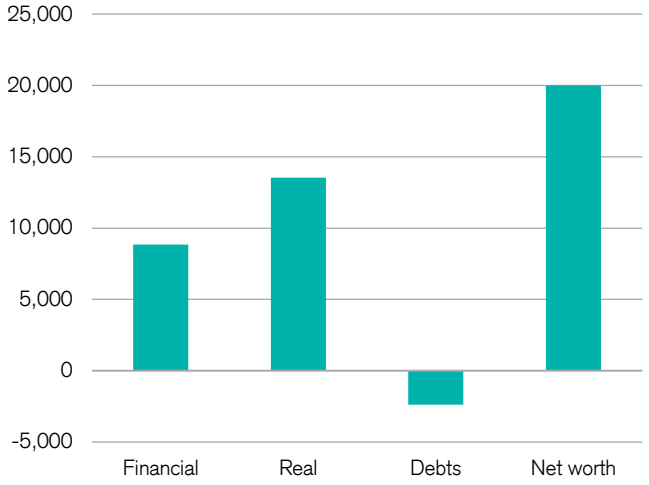
Population	144	million
Adult population	112	million
GDP	14,500	USD per adult
Mean wealth	19,997	USD per adult
Median wealth	2,739	USD per adult
Total wealth	2.2	trillion USD
US dollar millionaires	172	thousand
Top 10% of global wealth holders	2,471	thousand
Top 1% of global wealth holders	201	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



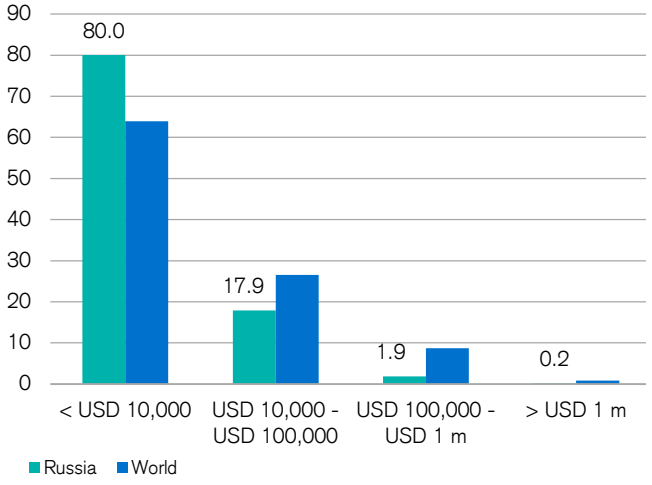
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Germany

Powerhouse of Europe

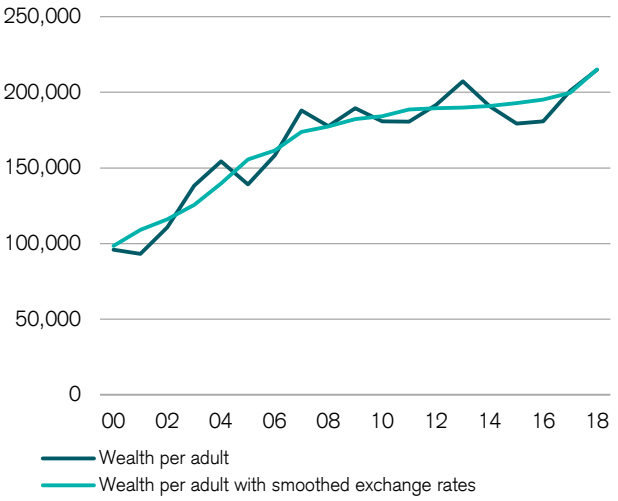
Since 2016, wealth per adult in Germany has risen 19% in US dollar terms. This comes after years of slow wealth growth that began with the global financial crisis. These patterns are largely explained by the 24% decline of the euro relative to the US dollar from 2008 to 2016 and its subsequent increase of over 10%. In euro terms, wealth rose at a relatively steady pace after 2008. Germany now ranks fourth in the world according to total wealth, just behind Japan and ahead of the United Kingdom. It is in 19th place in terms of wealth per adult, behind Italy, but ahead of Taiwan.

Real estate is a large component of household wealth in Germany, with the result that non-financial assets make up 59% of gross assets. They average USD 144,770 per adult. Personal debts, at USD 30,870, equal 13% of gross assets, which is about average for high-income countries.

Overall, Europe accounts for 30% of the adults in the global top 1% by wealth, with almost a fifth of the European contribution coming from Germany. This reflects the high total net worth of German households.

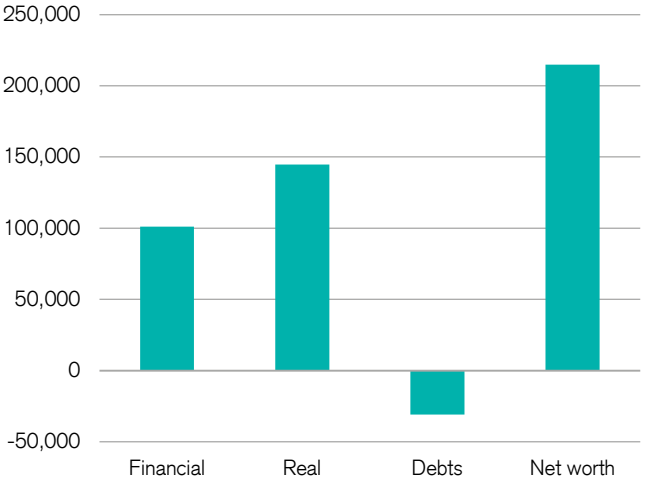
Wealth inequality is not extreme in Germany. We estimate the share of the top 1% of adults in total wealth to be 30%, for example, which is moderate by international standards. Still, 41% of adults in Germany have wealth less than USD 10,000. And at the top end, the proportion with assets over USD 100,000 is four times the global figure.

Wealth per adult over time



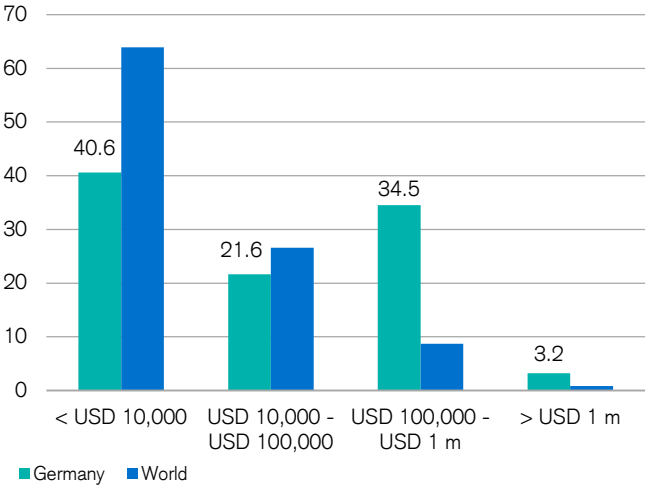
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Country summary 2018

Population	82	million
Adult population	67	million
GDP	57,955	USD per adult
Mean wealth	214,893	USD per adult
Median wealth	35,169	USD per adult
Total wealth	14.5	trillion USD
US dollar millionaires	2,183	thousand
Top 10% of global wealth holders	26,254	thousand
Top 1% of global wealth holders	2,681	thousand
Quality of wealth data	☆☆☆☆☆	good

United Kingdom

Brexit gets close

After the vote to leave the European Union in the 2016 Brexit referendum, the United Kingdom had a difficult year. Both the exchange rate and the stock market fell sharply. Nevertheless, over the next 12 months, wealth per adult rose 1% in terms of US dollars and 2% in terms of British pounds. The stock market recovered and UK market capitalization went up 10%. During the past year, market capitalization went up by a further 8%, the exchange rate stabilized and wealth per adult rose 6%. However, the outlook is now uncertain, with the probability of a "no-deal Brexit" and attendant disruptions apparently rising.

In the early years of the century, UK wealth grew rapidly. The boom ended with the global financial crisis. By 2007, the wealth/income ratio had risen above 9, the highest level recorded for any country apart from Japan in the late 1980s. The subsequent fall in asset prices led to a 13% drop in average wealth with a smoothed exchange rate, but depreciation of the pound caused wealth per adult in US dollars to fall 35%. Average wealth with smoothed exchange rates was below the pre-crisis peak up to 2015, but then rose and is now slightly above the 2007 level.

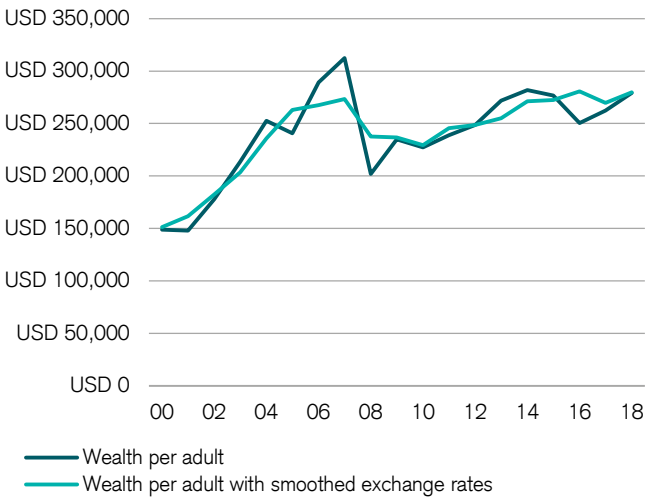
Financial and non-financial assets are roughly equal in importance in the United Kingdom. Along with many other countries, household debt grew quickly as a multiple of income from 1980 onward, tripling in value to reach 180% in 2008. The debt-to-income ratio subsided to 150% by 2013, but has subsequently 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. Close to half of the adult population has wealth exceeding USD 100,000, and there are 2.4 million US dollar millionaires, representing 6% of all millionaires globally.

Country summary 2018

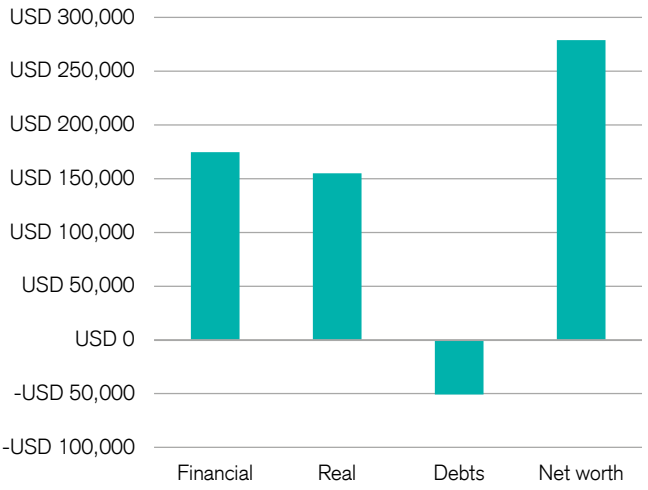
Population	66	million
Adult population	51	million
GDP	54,621	USD per adult
Mean wealth	279,048	USD per adult
Median wealth	97,169	USD per adult
Total wealth	14.2	trillion USD
US dollar millionaires	2,433	thousand
Top 10% of global wealth holders	25,799	thousand
Top 1% of global wealth holders	3,032	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



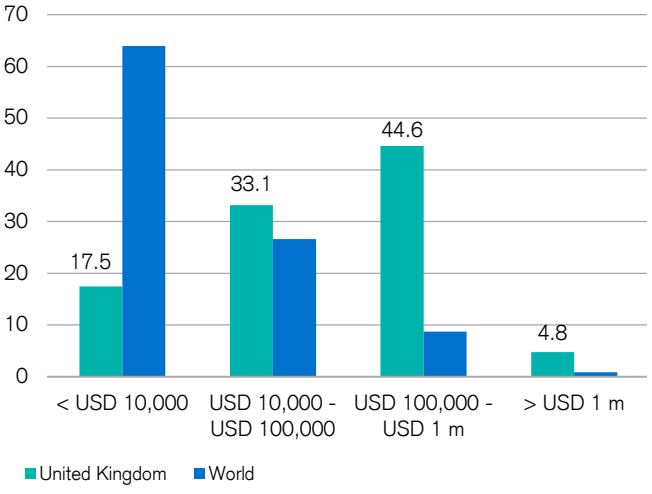
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Switzerland

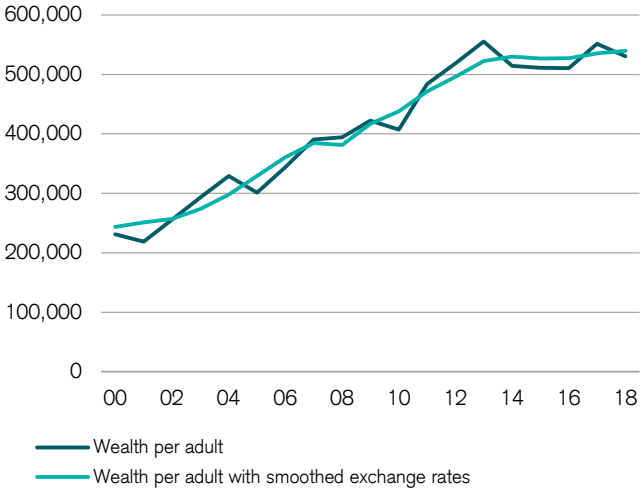
View from the top

Since the turn of the century, wealth per adult in Switzerland has risen by 129% to USD 530,240. Disregarding Iceland, for which the data are unreliable, 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 39% from 2000 to 2018 – an average annual rate of 1.9%.

Financial assets make up 56% 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 138,810 per adult, one of the highest absolute levels in the world, and represent 21% of total assets. The debt ratio has crept up from a low of 19% in 2014.

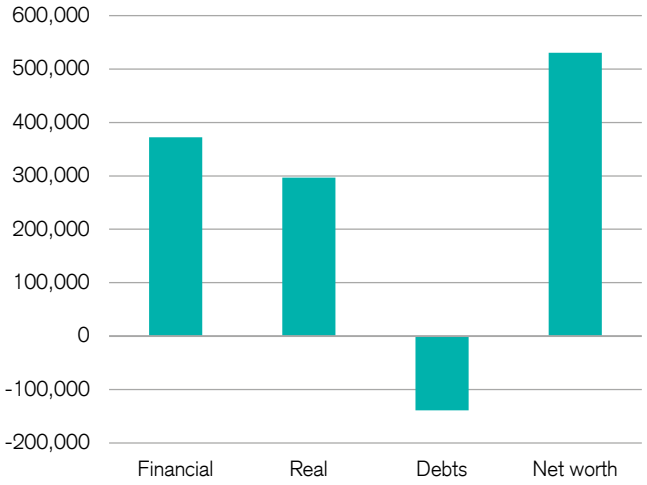
Among the ten countries with long series of wealth distribution, Switzerland is alone in having seen no significant reduction in wealth inequality over any subperiod of the past century. A combination of high average wealth, and relatively high wealth inequality, results in a large proportion of the Swiss population being in the upper echelons of the global distribution. Switzerland accounts for 1.8% of the top 1% of global wealth holders, which is remarkable for a country with just 0.1% of the world's population. Over 60% of Swiss adults have assets above USD 100,000, and 11% are US dollar millionaires. An estimated 2,650 individuals are in the UHNW bracket, with wealth over USD 50 million, and 980 have net worth exceeding USD 100 million.

Wealth per adult over time



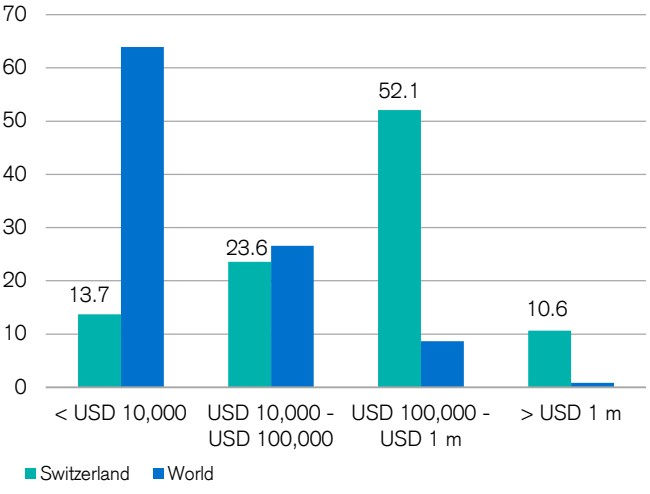
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Country summary 2018

Population	9	million
Adult population	7	million
GDP	104,515	USD per adult
Mean wealth	530,244	USD per adult
Median wealth	183,339	USD per adult
Total wealth	3.6	trillion USD
US dollar millionaires	725	thousand
Top 10% of global wealth holders	4,349	thousand
Top 1% of global wealth holders	876	thousand
Quality of wealth data	☆☆☆☆☆	good

Singapore

Renewed growth

Personal wealth per adult grew strongly in Singapore up to 2012. After that it dipped, mostly due to depreciation against the US dollar, but it has been growing again since 2015. Average wealth is at a high level – USD 283,120 per adult in mid-2018, compared to USD 114,720 in 2000. The rise was mostly caused by high savings, asset price increases, and a rising exchange rate from 2005 to 2012.

Singapore is ninth in the world in terms of household wealth per adult, giving it the highest rank in Asia. Interestingly, it is now significantly ahead of Hong Kong, which was ranked above Singapore in 2000. Wealth per adult in Hong Kong grew at an average annual rate of 4.3% between 2000 and 2018, versus 5.3% for Singapore. This went along with higher GDP per capita growth in Singapore over the same period.

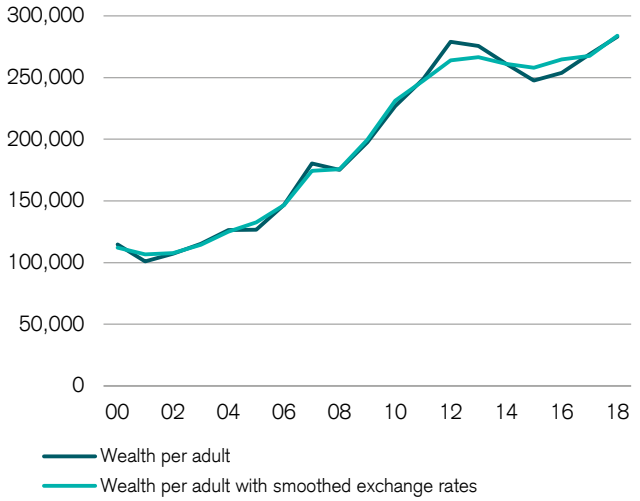
Financial assets make up 55% of gross household wealth in Singapore, a ratio similar to that of Switzerland, for example. The average debt of USD 53,000 is moderate for a high-wealth country, equaling 16% of total assets. Singapore publishes household sector balance sheet data, which means that wealth information is more reliable than for most of its neighbors in Southeast Asia.

Wealth inequality in Singapore is not extreme, as indicated by its wealth Gini coefficient of 76% and share of the top 1% of wealth holders of 33%. Just 14% of its people have wealth below USD 10,000, compared with 64% globally. At the other end of the scale, the fraction with wealth above USD 100,000 is five times the world average. Reflecting its very high average wealth, 0.5% of its adults, or 220,000 individuals, are in the top 1% of global wealth holders, a high number given that Singapore has just 0.1% of the world's adult population.

Country summary 2018

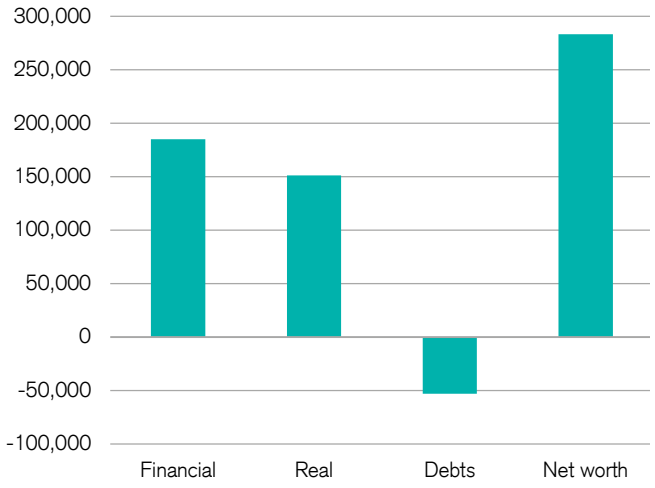
Population	6	million
Adult population	5	million
GDP	75,242	USD per adult
Mean wealth	283,118	USD per adult
Median wealth	91,656	USD per adult
Total wealth	1.3	trillion USD
US dollar millionaires	184	thousand
Top 10% of global wealth holders	2,267	thousand
Top 1% of global wealth holders	220	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



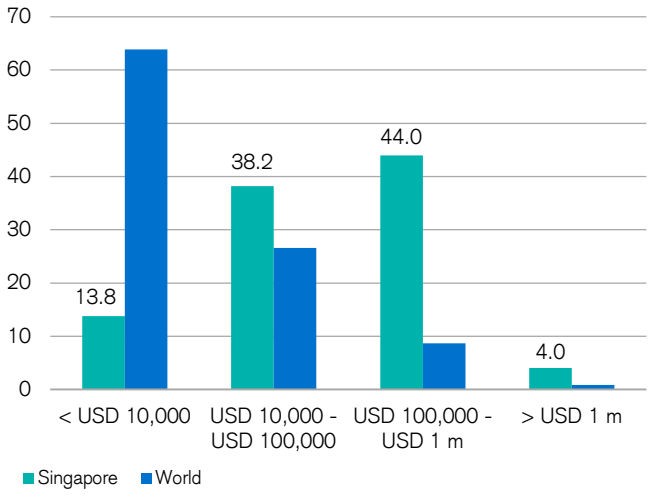
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Japan

Hanging on

Japanese wealth per adult rose 2.1% over the 12 months to mid-2018. The yen rose 1.4% against the US dollar over this period, so that in domestic currency terms, wealth rose only 0.7%. However, this extends the previous 3-year period of growth, which came on the heels of several years of decline. The improvement seems set to continue, barring significant deterioration in the growth of trade and global economic conditions.

In the early years of the century, Japan was in second place in the global ranking according to total wealth, behind the United States. Owing to its low growth, it was overtaken by China in 2011, and now occupies third place. Japan's wealth per adult was USD 191,990 in 2000. Average wealth is only 18% higher today. The slow 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.

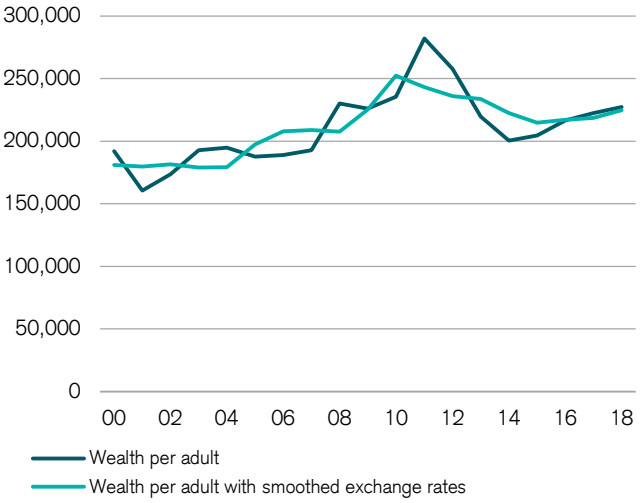
Neither financial asset prices nor house prices have risen steadily in Japan. As a consequence, the relative importance of financial assets in household portfolios has changed little, and remains at the relatively high level of 62% of gross assets. Debts have been declining, and are modest by international standards at 11% of total assets.

Japan has a more equal wealth distribution than any other major country, as reflected in a Gini coefficient of 63%. Together with its still-high average wealth, this relative equality means that few adults – just 5.3% – have assets below USD 10,000. The proportion of the population with wealth above USD 100,000 is 5.4 times the global average. Reflecting its population size and wealth, Japan has 7% of the world's top 1% of wealth holders.

Country summary 2018

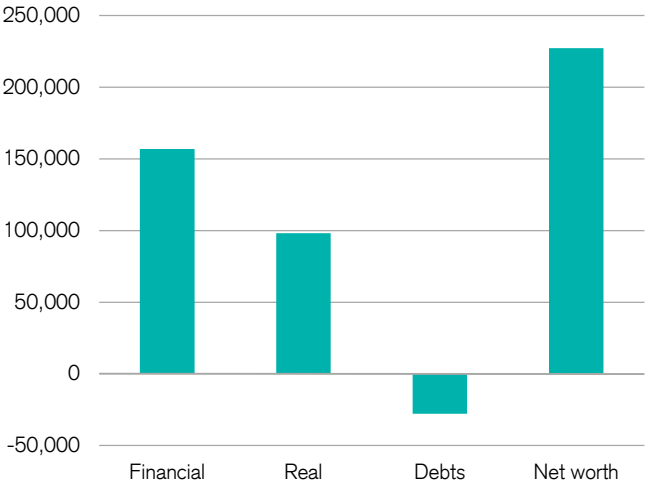
Population	127	million
Adult population	105	million
GDP	47,980	USD per adult
Mean wealth	227,235	USD per adult
Median wealth	103,861	USD per adult
Total wealth	23.9	trillion USD
US dollar millionaires	2,809	thousand
Top 10% of global wealth holders	55,727	thousand
Top 1% of global wealth holders	3,552	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



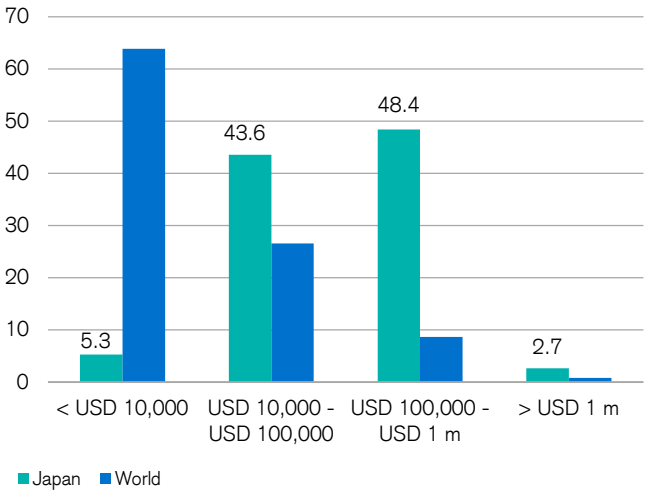
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

South Korea

Growth star

South Korea's average level of wealth, at USD 171,740, is well above that of most countries in the Asia-Pacific region, and similar to that of Western Europe. From USD 50,770 at the turn of the century, wealth per adult more than doubled by 2006 and did not drop during the global financial crisis with smoothed exchange rates. Over the entire 2000–18 period, wealth per adult grew at an average annual rate of 7.2%. This is almost twice the growth rate for the world as a whole and much greater than the 1.9% average annual growth rate in the Asia-Pacific region. South Korea is truly a wealth growth star.

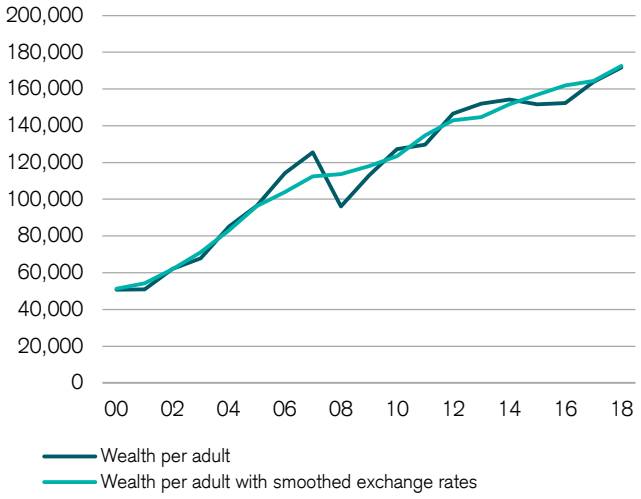
South Korea has a high saving rate and well-developed financial institutions, so it is perhaps surprising that the composition of household wealth is skewed more toward non-financial assets. The latter now make up 62% of total assets, reflecting the high value of real estate in a crowded and prosperous country. Debt equals 18% of gross assets, which is above average for a high-income country, but not alarming.

South Korea combines high average wealth and relatively low wealth inequality. The wealth Gini coefficient is 67% and the share of the top 1% of wealth holders is 26%. Low relative inequality shows up in the fact that only 2% of the adult population has wealth below USD 10,000. The high wealth of the country results in 40% of adults having wealth over USD 100,000, which is about four times the worldwide average of 9%. There are 750,000 US dollar millionaires and 922,000 South Koreans in the global top 1%.

Country summary 2018

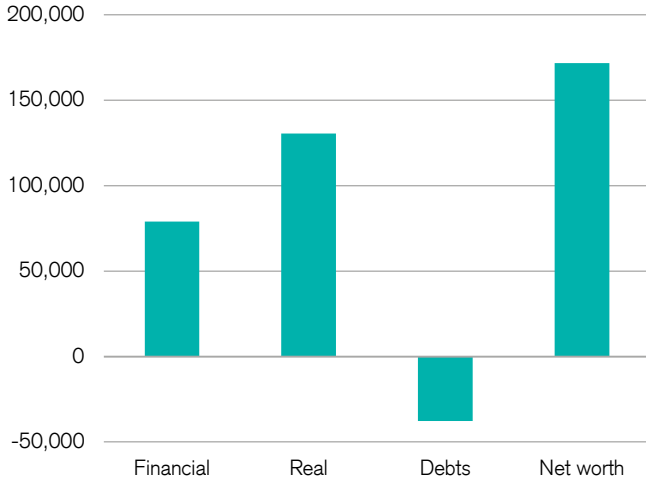
Population	51	million
Adult population	41	million
GDP	38,534	USD per adult
Mean wealth	171,739	USD per adult
Median wealth	65,463	USD per adult
Total wealth	7.1	trillion USD
US dollar millionaires	754	thousand
Top 10% of global wealth holders	17,311	thousand
Top 1% of global wealth holders	922	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



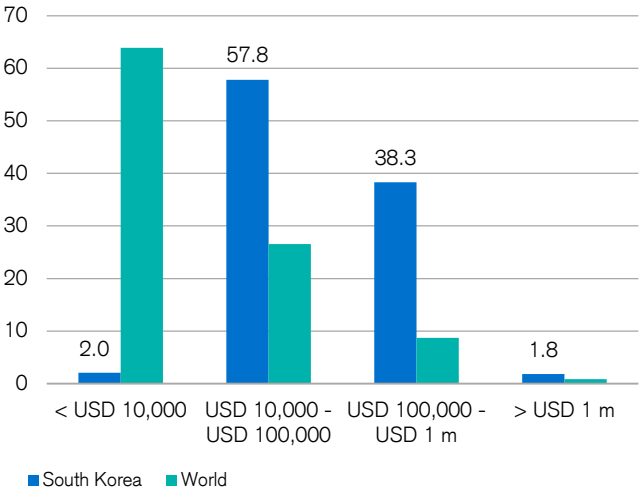
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Indonesia

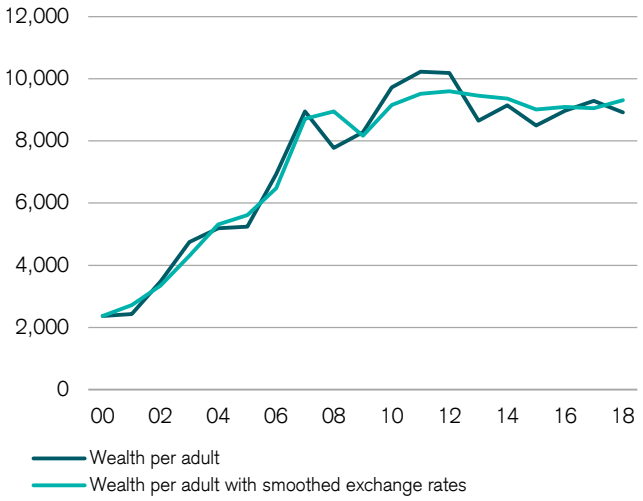
Little recent growth

Indonesia recovered well from the 1997–98 Asian financial crisis, and its wealth per adult has risen almost four times since the year 2000. However, most of that growth occurred before the global financial crisis in 2008. Wealth rebounded fairly quickly afterward, but then fell back and entered a period of no growth in US dollar terms. In Indonesian rupiah terms, the average growth rate since 2010 has been 6%, but that was largely accounted for by inflation. Wealth per adult is estimated at USD 8,920 in mid-2018, which is 27% above India's level, but 11% below Thailand and only a third of Malaysia's figure.

Personal wealth in Indonesia is less dominated by non-financial assets than formerly, with financial assets approximately doubling in relative size since the early years of the century. They now stand at 16% of gross household assets. Personal debts are estimated to be only USD 736 per adult, or just 8% of total assets, which is low by international standards.

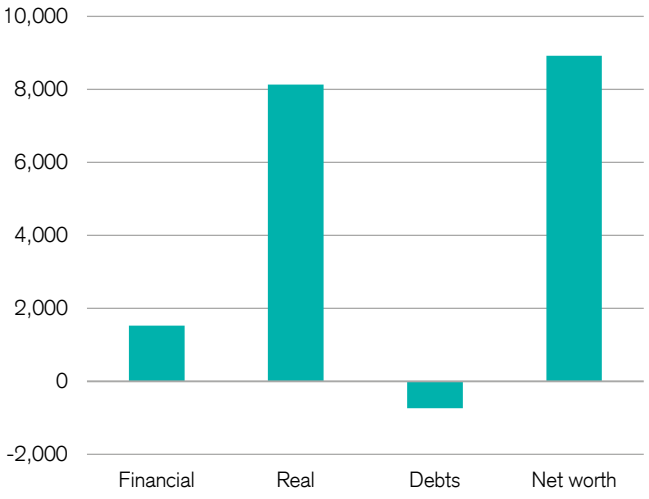
In Indonesia, 85% of the adult population owns less than USD 10,000 – much above the global figure of 64%. And representation at higher wealth levels is strikingly less than for the world as a whole. Only 0.9% of adults have wealth above USD 100,000, compared with 9.4% globally. However, despite the relatively low number of adults at higher wealth levels, wealth inequality is greater than average. Thus the country combines low average wealth with high dispersion. The Gini coefficient for wealth is 84% and the share of the top 1% in the country's total household wealth is 47% – both high figures by international standards.

Wealth per adult over time



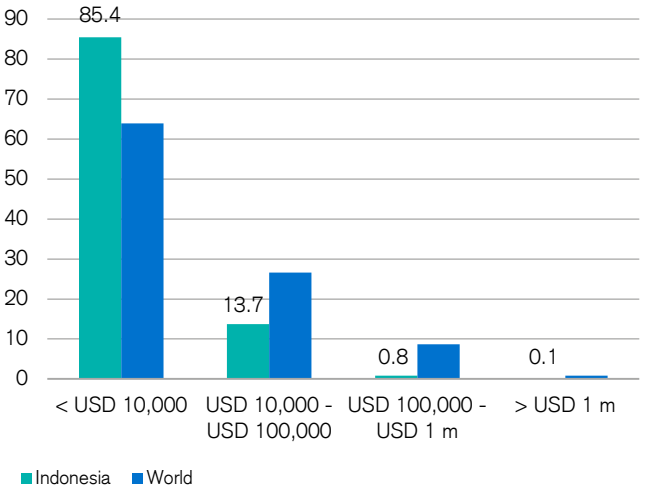
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Country summary 2018

Population	265	million
Adult population	170	million
GDP	6,162	USD per adult
Mean wealth	8,919	USD per adult
Median wealth	1,597	USD per adult
Total wealth	1.5	trillion USD
US dollar millionaires	89	thousand
Top 10% of global wealth holders	1,619	thousand
Top 1% of global wealth holders	105	thousand
Quality of wealth data	☆☆☆	fair

South Africa

Wealth uptick

Household wealth in South Africa grew strongly prior to the global financial crisis, rising from USD 9,560 in the year 2000 to USD 25,280 in 2007. The country has not yet regained that pre-crisis wealth level. However, since 2015, wealth has risen by 26% in US dollar terms. In part that is due to currency appreciation, but, correcting for the rising rand, there has still been an increase of 13%. This reflects increased real growth in the domestic economy, stimulated partly by the strong rise in global trade seen in recent years.

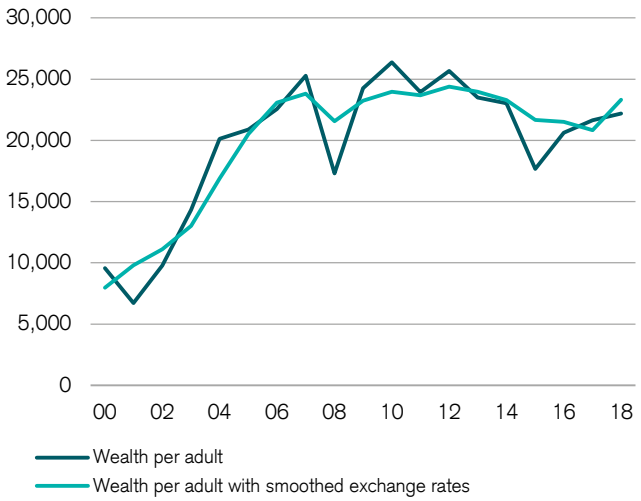
South Africa has complete official household balance sheets, which is unusual among emerging-market countries. This means that our estimates of the level and composition of household wealth are more reliable than for most other emerging markets. Personal wealth is largely comprised of financial assets, which contribute 66% to the household portfolio. This reflects a vigorous stock market, and strong life insurance and pension industries. Owing in part to relatively low real estate prices, average real assets of USD 9,180 are only around twice the level of average debt (USD 4,450).

South Africa has the same fraction of adults with wealth below USD 10,000 as the world as a whole, i.e. 64%. However, it also has fewer individuals with wealth above USD 100,000 (3.2% versus 9.4%). Nevertheless, we estimate that 61,000 South Africans are members of the top 1% of global wealth holders, and that 50,000 are US dollar millionaires. The overall level of wealth inequality is high. The country has a wealth Gini coefficient of 81% and the share of the top 1% in total household wealth is 36%.

Country summary 2018

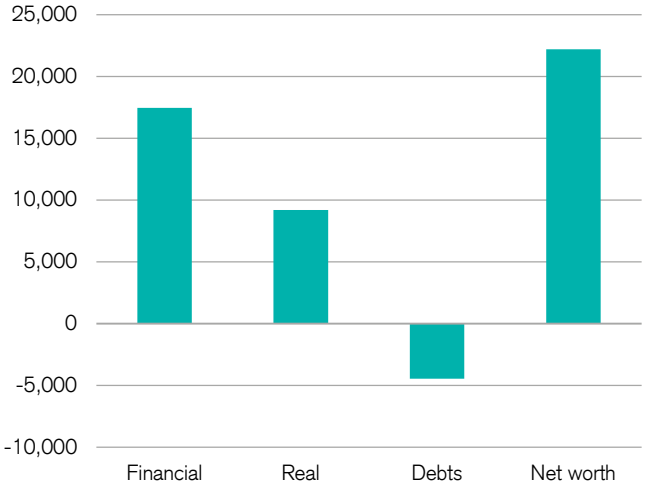
Population	57	million
Adult population	35	million
GDP	10,149	USD per adult
Mean wealth	22,191	USD per adult
Median wealth	6,726	USD per adult
Total wealth	0.8	trillion USD
US dollar millionaires	50	thousand
Top 10% of global wealth holders	1,235	thousand
Top 1% of global wealth holders	61	thousand
Quality of wealth data	☆☆☆	fair

Wealth per adult over time



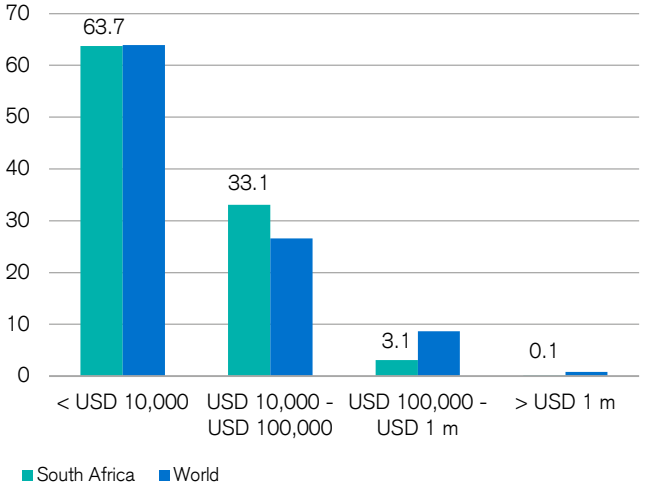
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Brazil

Sliding

Afflicted by both political and economic crises, Brazil has faced serious difficulties in recent years. In keeping with this picture, wealth per adult has fallen by 36% 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 more than tripled between 2000 and 2011, rising from USD 8,040 per adult to USD 26,200. The inflation rate has been rising, unemployment was at 12% in mid-2018, and Gross Domestic Product is expected to rise by only 1.5% in 2018. The story of Brazil's economy and its households' wealth has been one of boom and bust.

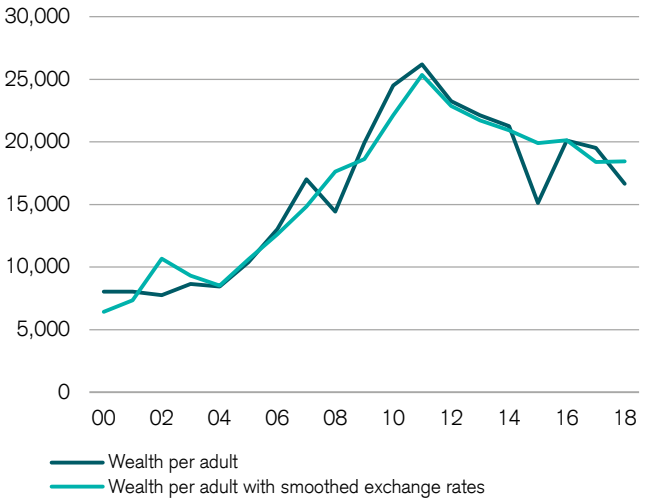
Financial assets now comprise 45% of gross household wealth, up from an average of 41% in the period from 2010 to 2015, according to our estimates. Traditionally, many Brazilians have had a special attachment to real assets, particularly in the form of land, as a hedge against inflation, a preference that appears to be weakening. Household liabilities are 20% of gross assets, up from 17% a year ago, which takes household debt to a somewhat worrisome level.

Brazil has a larger share of its people with wealth less than USD 10,000 than we see in the world as a whole – 74% versus 64%. This is due to the country's high level of inequality. The wealth Gini coefficient is 82%, and we estimate that the top 1% of Brazilians own 43% of the country's household wealth. The relatively high level of inequality partly reflects high income inequality, a long-running feature in Brazil that has been exacerbated by the current high unemployment. Two key factors contributing to the persistent high income inequality are the uneven educational achievement across the labor force and the divide between formal and informal sectors of the economy.

Country summary 2018

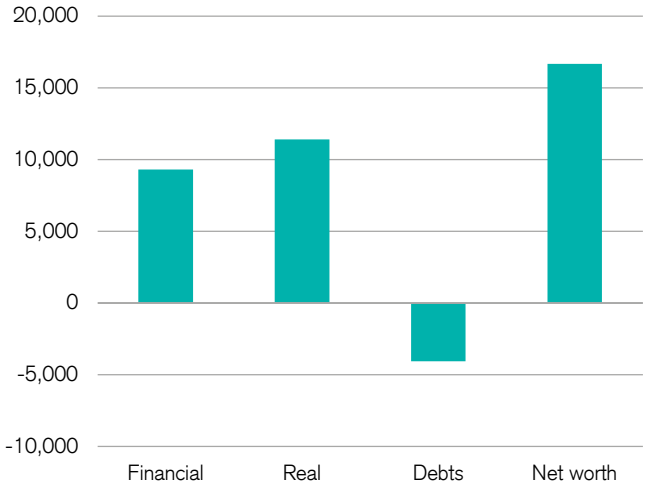
Population	210	million
Adult population	148	million
GDP	14,236	USD per adult
Mean wealth	16,664	USD per adult
Median wealth	4,263	USD per adult
Total wealth	2.5	trillion USD
US dollar millionaires	154	thousand
Top 10% of global wealth holders	3,048	thousand
Top 1% of global wealth holders	184	thousand
Quality of wealth data	☆☆☆	fair

Wealth per adult over time



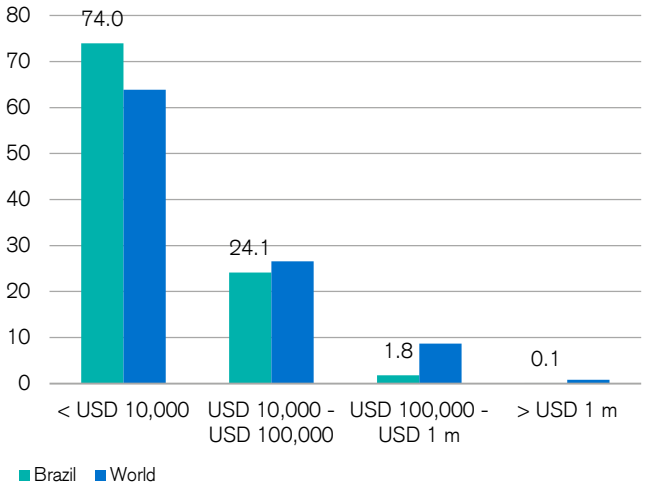
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Chile

LatAm wealth champion

Chile has the highest wealth per adult in Latin America. The contrast in household wealth with its neighbors is striking. Chile's Gross Domestic Product per adult is similar to Argentina's and 46% greater than Brazil's, but its average wealth is more than three times greater than that in either of those two countries. Since the turn of the century, wealth per capita has risen at an annual average rate of 7.6% in US dollars. Using current exchange rates, all of that growth occurred before 2013, but using a smoothed exchange rate indicates that growth continued over the last five years, although at a lower rate than before.

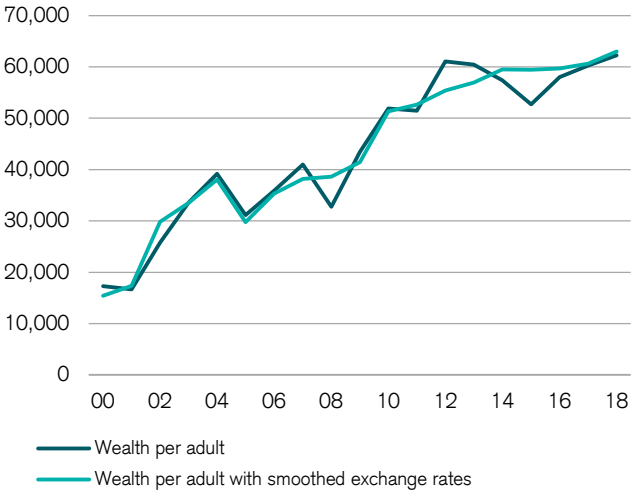
Chilean household assets are split evenly between real and financial form. Holdings of financial assets have been encouraged by low inflation, well developed financial markets, and a strong pension system. The high urban home-ownership rate of 69% exceeds the 65% found in the United States, and contributes to substantial holdings of real estate. At 14% of gross assets, household liabilities are moderate by international standards.

Chile's wealth per adult, at USD 62,220, is close to the world average of USD 63,100, and is high relative to most emerging-market countries. It has a smaller fraction of adults with wealth below USD 10,000 than the world as a whole (36% versus 64%), and slightly more above USD 100,000 (11.4% versus 9.4%). Overall inequality is relatively high, as indicated by a Gini coefficient of 77%. By our estimates, Chile has 67,000 US dollar millionaires, and 80,000 adults in the top 1% of global wealth holders.

Country summary 2018

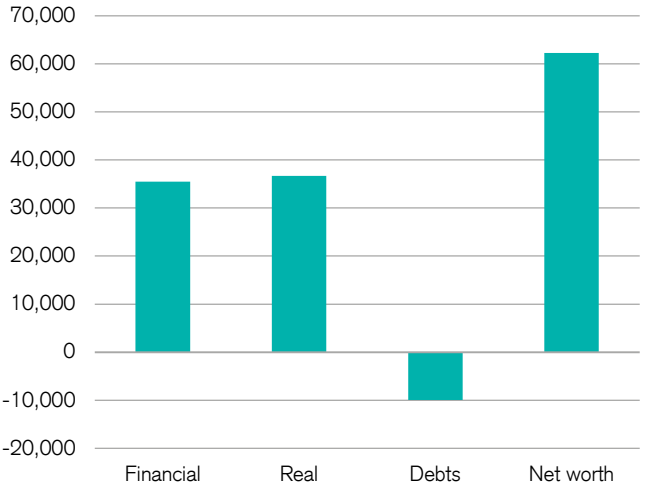
Population	18	million
Adult population	13	million
GDP	20,710	USD per adult
Mean wealth	62,222	USD per adult
Median wealth	23,812	USD per adult
Total wealth	0.8	trillion USD
US dollar millionaires	67	thousand
Top 10% of global wealth holders	1,655	thousand
Top 1% of global wealth holders	80	thousand
Quality of wealth data	☆☆☆	fair

Wealth per adult over time



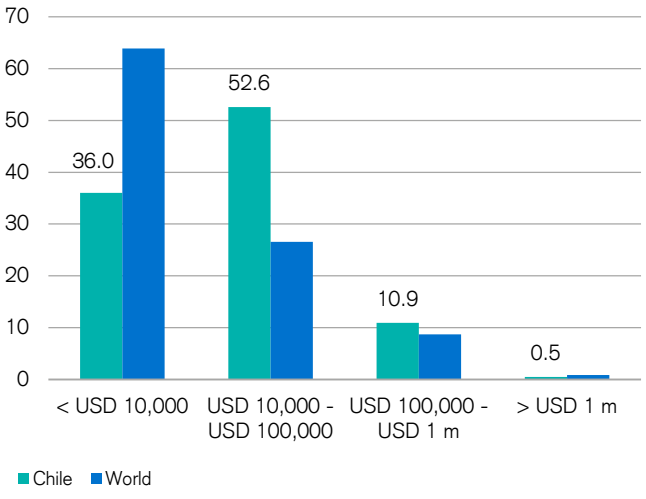
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Canada

Slower growth

Wealth per adult in Canada grew at an average rate of 5.4% over 2000–18 in US dollars. The small dip in wealth during the global financial crisis, and subsequent moderate growth is typical of the experience of G7 countries.

Canada is a major oil exporter. Its economy was hit hard in 2015 by a sharp drop in the world price of oil, but weathered that fairly well. Low interest rates were maintained, helping to stimulate a housing boom in major cities. There was concern that that boom was getting out of hand. A range of measures have been undertaken by provincial governments as well as the federal authorities over the last three years to contain it, with some success. High real estate values nevertheless continue to be an important driver of household wealth in Canada.

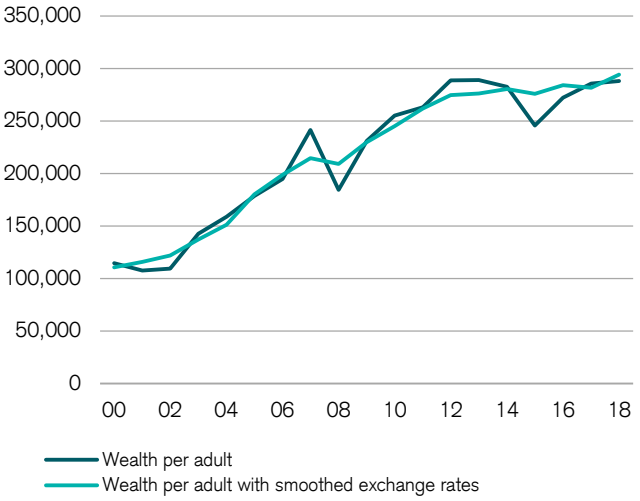
The Canadian economy faces some current "headwinds." Approval has not been obtained for new oil pipelines, contributing to a glut of oil in the United States Midwest. This has forced the price for oil from Canada's tar sands well below the world price. Trade frictions have become serious, with the United States continuing punitive tariffs on Canadian lumber, steel and aluminum, despite having reached a tentative free trade agreement with Canada and Mexico to replace NAFTA. The outlook for the economy, and wealth, is therefore somewhat uncertain.

Wealth per adult in Canada, at USD 288,260, is 29% lower than that in the United States. Wealth is more equally distributed than in the United States, which accounts for the much higher median wealth in Canada – USD 106,340 compared with USD 61,670 in the United States. Relative to the United States, Canada has both a smaller percentage of people with less than USD 10,000, and a larger percentage above USD 100,000. It has 1.3 million millionaires, and accounts for 3% of the top 1% of global wealth holders, despite having only 0.6% of the world's adults.

Country summary 2018

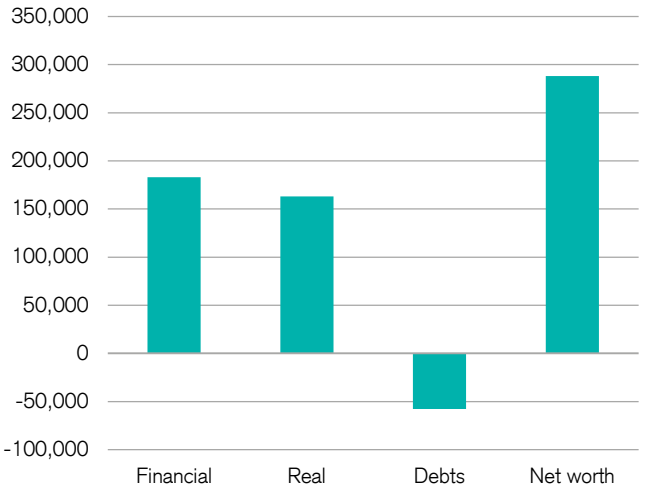
Population	37	million
Adult population	29	million
GDP	59,564	USD per adult
Mean wealth	288,263	USD per adult
Median wealth	106,342	USD per adult
Total wealth	8.3	trillion USD
US dollar millionaires	1,289	thousand
Top 10% of global wealth holders	15,096	thousand
Top 1% of global wealth holders	1,595	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



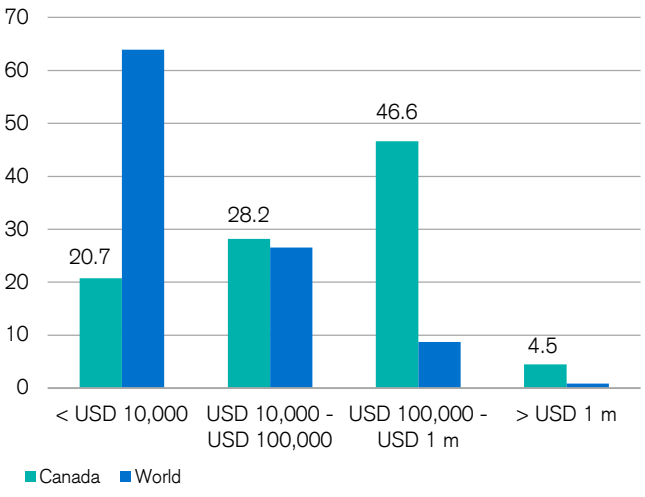
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

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 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 2018 is USD 411,060, the second-highest in the world after Switzerland. In terms of median wealth, it has edged above Switzerland into first place.

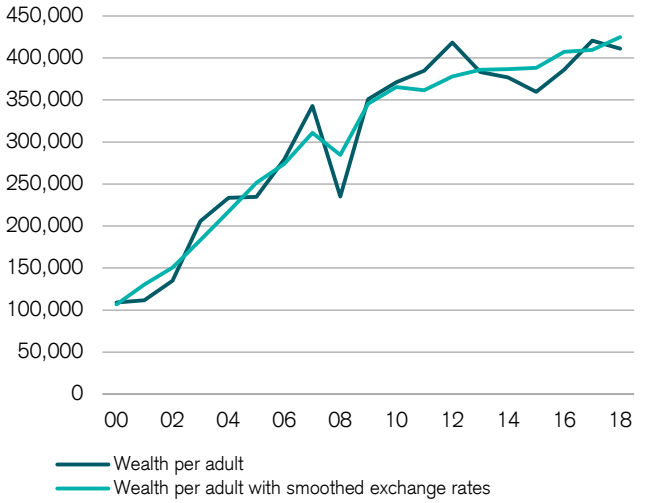
The composition of household wealth in Australia is heavily skewed toward non-financial assets, which average USD 304,500, and form 60% of gross assets. The high level of real assets partly reflects a large endowment of land and natural resources relative to population, but also results from high property prices in the largest cities. While financial assets are just 40% of total assets, they are also high on average, in part reflecting Australia's mandatory superannuation system, which generates strong pension wealth. Average debt amounts to 19% of gross assets.

High average wealth is combined with relatively low wealth inequality in Australia. The Gini coefficient is just 66% and only 6% of Australians have net worth below USD 10,000. The latter figure compares with 18% in the United Kingdom and 28% in the United States. The high average wealth boosts representation at high wealth levels, despite the low inequality. The proportion of those with wealth above USD 100,000, at 67%, is the fourth-highest of any country, and about seven times the world average. With 1,596,000 people in the top 1% of global wealth holders, Australia accounts for 3.2% of this top slice, despite being home to just 0.4% of the world's adult population.

Country summary 2018

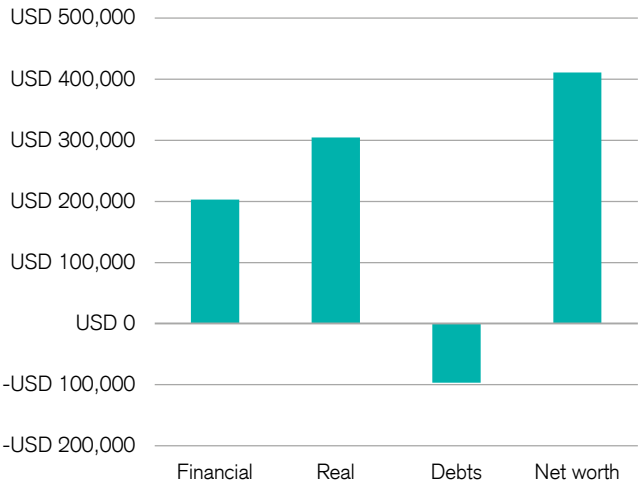
Population	25	million
Adult population	18	million
GDP	77,007	USD per adult
Mean wealth	411,060	USD per adult
Median wealth	191,453	USD per adult
Total wealth	7.6	trillion USD
US dollar millionaires	1,288	thousand
Top 10% of global wealth holders	12,603	thousand
Top 1% of global wealth holders	1,596	thousand
Quality of wealth data	☆☆☆☆☆	good

Wealth per adult over time



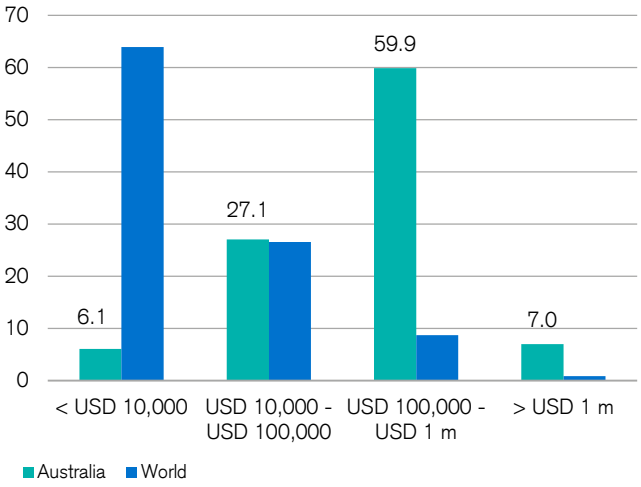
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Composition of wealth per adult



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018

Wealth distribution relative to world (in %)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2018



About the authors

Professor Anthony Shorrocks is an Honorary Professorial Research Fellow at the University of Manchester, a Senior Research Fellow at the World Institute for Development Economics Research UNU-WIDER) in Helsinki, and 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. From 2001 to 2009, he was Director of UNU-WIDER in Helsinki. 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 1978), "The distribution of wealth" (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, 2017).

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 include "The 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.

Dr. Rodrigo Lluberas is an Analyst at the Research department of Uruguay Central Bank. He received his PhD in Economics from Royal Holloway College, University of London and his MSc in Economics from University College London. He has been a visiting scholar at the Institute for Fiscal Studies and an Economist at Towers Watson in London. Prior to undertaking his MSc, he worked for three years as an economic analyst at Watson Wyatt Global Research Services and more recently as a research assistant at NESTA. His main areas of expertise are pensions, consumption and wealth. Rodrigo is a co-author of "Estimating the Level and Distribution of Global Wealth, 2000–2014."

General disclaimer / Important information

This document was produced by and the opinions expressed are those of Credit Suisse ("CS") as of the date of writing and are subject to change. It has been prepared solely for information purposes and for the use of the recipient. It does not constitute an offer or an invitation by or on behalf of CS to any person to buy or sell any security. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. The price and value of investments mentioned and any income that might accrue may fluctuate and may fall or rise. Any reference to past performance is not a guide to the future.

The information and analysis contained in this document have been compiled or arrived at from sources believed to be reliable but CS does not make any representation as to their accuracy or completeness and does not accept liability for any loss arising from the use hereof. A Credit Suisse Group company may have acted upon the information and analysis contained in this publication before being made available to clients of CS. Investments in emerging markets are speculative and considerably more volatile than investments in established markets. Some of the main risks are political risks, economic risks, credit risks, currency risks and market risks. Investments in foreign currencies are subject to exchange rate fluctuations. Any questions about topics raised in this piece or your investments should be made directly to your local relationship manager or other advisers. Before entering into any transaction, you should consider the suitability of the transaction to your particular circumstances and independently review (with your professional advisers as necessary) the specific financial risks as well as legal, regulatory, credit, tax and accounting consequences. This document may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyper-links to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in European Union (except Switzerland): by Credit Suisse (UK) Limited and Credit Suisse Securities (Europe) Limited. Credit Suisse Securities (Europe) Limited and Credit Suisse (UK) Limited, both authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, are associated but independent legal entities within Credit Suisse; Germany: Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistung-saufsicht ("BaFin"); United States and Canada: Credit Suisse Securities (USA) LLC; Switzerland: Credit Suisse AG authorized and regulated by the Swiss Financial Market Supervisory Authority (FINMA); Brazil: Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates; Mexico: Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); Japan: by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; Hong Kong: Credit Suisse (Hong Kong) Limited; Australia: Credit Suisse Equities (Australia) Limited; Thailand: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahim Place, 27th Floor, Unit 2701, Rama IV Road, Silom, Bangrak, Bangkok10500, Thailand, Tel. +66 2614 6000; Malaysia: Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch; India: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030) and as Stock Broker (registration no. INB230970637; INF230970637; INB010970631; INF010970631), having registered address at 9th Floor, Ceejay House, Dr.A.B. Road, Worli, Mumbai - 18, India, Tel. +91-22 6777 3777; South Korea: Credit Suisse Securities (Europe) Limited, Seoul Branch; Taiwan: Credit Suisse AG Taipei Securities Branch; Indonesia: PT Credit Suisse Securities Indonesia; Philippines: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorized affiliate of the above.

Additional regional disclaimers

Hong Kong: Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHKL does not hold an Australian financial services license (AFSL) and is exempt from the requirement to hold an AFSL under the Corporations Act 2001 (the Act) under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Act). Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person. Malaysia: Research provided to residents of Malaysia is authorized by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. Singapore: This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore branch to overseas investors (as defined under the Financial Advisers Regulations). By virtue of your status as an institutional investor, accredited investor, ex-pert investor or overseas investor, Credit Suisse AG, Singapore branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. UAE: This information is being distributed by Credit Suisse AG (DIFC Branch), duly licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. UK: The protections made available by the Financial Conduct Authority and/or the Prudential Regulation Authority for retail clients do not apply to investments or services provided by a person outside the UK, nor will the Financial Services Compensation Scheme be available if the issuer of the investment fails to meet its obligations. To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future EU: This report has been produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division and/or International Wealth Management Division.

This document may not be reproduced either in whole, or in part, without the written permission of the authors and Credit Suisse.

© 2018 Credit Suisse Group AG and/or its affiliates. All rights reserved.

Also published by the Research Institute



The Future of Monetary Policy
January 2017



Getting over Globalization
January 2017



CS Global Investment Returns Yearbook 2017
February 2017



Emerging Consumer Survey 2017
March 2017



CSRI Special Report: The Chinese Consumer in 2017
April 2017



Switzerland: A Financial Market History
June 2017



The CS Family 1000
September 2017



The Swiss Family Business Model
September 2017



Global Wealth Report 2017
November 2017



The Future of Politics – Davos edition
January 2018



Eradicating Extreme Poverty – Davos edition
January 2018



Summary Edition: CS Global Investment Returns Yearbook 2018
February 2018



Emerging Consumer Survey 2018
March 2018



The Future of GDP
May 2018



The CS Family 1000 in 2018
September 2018

CREDIT SUISSE AG
Research Institute
Paradeplatz 8, CH-8070 Zurich, Switzerland
research.institute@credit-suisse.com
credit-suisse.com/researchinstitute