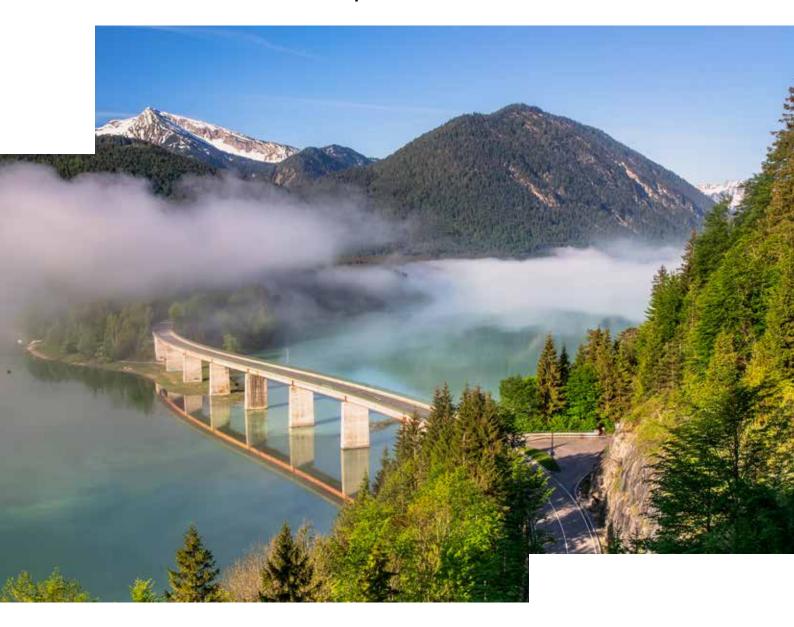


Research Institute

Global wealth report 2019



Editorial

Ten years ago, the Credit Suisse Research Institute launched the first Global wealth report providing the most comprehensive and up-to-date survey of household wealth. Since then the Global wealth report has become the standard reference point to monitor wealth growth across countries and the extent to which wealth inequalities are widening or narrowing.

For the past decade, global wealth creation has centered around China and the United States. This year, the United States extended its unbroken spell of wealth gains, which began after the global financial crisis in 2008. The United States also accounts for 40% of dollar millionaires worldwide and for 40% of those in the top 1% of global wealth distribution. Wealth in China started the century from a lower base, but grew at a much faster pace during the early years. It was one of the few countries to avoid the impact of the global financial crisis. China's progress has enabled it to replace Europe as the principal source of global wealth growth and to replace Japan as the country with the second-largest number of millionaires. More tellingly, China overtook the United States this year to become the country with most people in the top 10% of global wealth distribution.

The rest of the world has not stood still. Other emerging markets - India in particular - have made a steady contribution, which we expect to continue over the next five years. However, overall worldwide growth was modest in the 12 months up to mid-2019. Aggregate global wealth rose by USD 9.1 trillion to USD 360.6 trillion, representing a growth rate of 2.6%. Wealth per adult grew by just 1.2% to USD 70,850 per adult in mid-2019. The number of new millionaires was also relatively modest, up 1.1 million to 46.8 million. The United States added 675,000 newcomers, more than half of the global total. Japan and China each contributed more than 150,000, but Australia lost 124,000 millionaires following a fall in average wealth.

To mark its tenth anniversary, this year's report examines in more detail the underlying factors for the evolution of wealth levels and wealth distribution. The growth records of countries can be quite different depending on whether wealth is measured in US dollars or domestic currencies, or in nominal or inflation-adjusted units. In the longer term, the most successful countries are those that succeed in raising wealth as a multiple of Gross Domestic Product (GDP) by addressing institutional and financial-sector deficiencies. This can result in a virtuous cycle in which higher wealth stimulates GDP growth, which in turn raises aggregate wealth. China, India and Vietnam provide examples of this virtuous cycle in action.

Second, the report looks at the evolution of wealth inequality. The bottom half of wealth holders collectively accounted for less than 1% of total global wealth in mid-2019, while the richest 10% own 82% of global wealth and the top 1% alone own 45%. Global inequality fell during the first part of this century when a narrowing of gaps between countries was reinforced by declining inequality within countries. While advances by emerging markets continued to narrow the gaps between countries, inequality within countries grew as economies recovered after the global financial crisis. As a result, the top 1% of wealth holders increased their share of world wealth. This trend appears to have abated in 2016 and global inequality is now likely to edge downward in the immediate future.

Given some of this year's intriguing findings, we hope you will find the Global wealth report 2019 a valuable source of information and wish you interesting reading.

Urs Rohner

Chairman of the Board of Directors Credit Suisse Group AG



- 02 Editorial
- 05 Global wealth 2019: The year in review
- 17 The evolution of wealth levels
- 25 The evolution of wealth distribution
- 37 Wealth outlook
- 43 Wealth of nations
 - 44 United States Growth amid worries
 - 45 China Stalled growth
 - 46 India Still growing
 - 47 Russia Changing fortunes
 - 48 Germany Holding pattern
 - 49 United Kingdom On the brink?
 - 50 Switzerland View from the top
 - 51 Singapore Renewed growth
 - 52 Japan Keeping calm
 - 53 South Korea Carrying on
 - 54 Indonesia Renewed growth
 - 55 South Africa Little movement
 - 56 Brazil South American giant
 - 57 Chile Latin American wealth leader
 - 58 Canada Paused growth
 - 59 Australia Still resilient
- 60 About the authors
- 61 General disclaimer / important information

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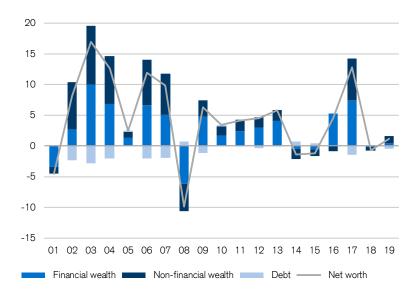


Global wealth 2019: The year in review

Anthony Shorrocks, James Davies and Rodrigo Lluberas

Now in its tenth edition, the Credit Suisse Global wealth report is the most comprehensive and up-to-date source of information on global household wealth. Global wealth grew during the past year, but at a very modest pace. Although wealth per adult reached a new record high of USD 70,850, this is only 1.2% above the level of mid-2018, before allowing for inflation. While more than half of all adults worldwide have a net worth below USD 10,000, nearly 1% of adults are millionaires who collectively own 44% of global wealth. However, the trend toward increasing inequality has eased, and the share of the top 1% of wealth holders is below the recent peak in 2016.

Figure 1: Annual contribution (%) to growth of wealth per adult by component, 2000–19



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Prospects for global wealth growth

The wealth growth spurt in 2017 evoked memories of the "golden age" for wealth during the early years of the century, when annual growth averaged 10%. However, it was not sustained (Figure 1). Total global wealth reached USD 351.5 trillion at end-2017, but then dipped to USD 345.4 trillion at end-2018 before recovering to USD 360.6 trillion in mid-2019. The 2.6% increase in total global wealth since end-2017 is reduced to 0.6% for global wealth per adult, which rose from USD 70,460 to USD 70,850 over the same period. But this low growth is partly attributable to US dollar appreciation: using 5-year average exchange rates, total wealth has grown by 5.9% since end-2017, and wealth per adult by 3.8%.

Based on the evidence since the financial crisis, secular global wealth growth appears to be closely aligned with global Gross Domestic Product (GDP) growth. Asset price inflation and/or USD depreciation can temporarily flatter the wealth growth figures, but cannot alter the longer-term trends. From this perspective, the golden age at the start of the century was probably due to a favorable combination of factors,

Table 1: Change in household wealth 2018-19 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	
	2019	2018-19	2018-19	2019	2018-19	2018-19	2018-19	2018-19	2018-19	2018-19	2018-19
	USD bn	USD bn	%	USD	%	USD bn	%	USD bn	%	USD bn	%
Africa	4,119	130	3.3	6,488	0.4	1	0.1	164	6.6	35	7.7
Asia-Pacific	64,778	825	1.3	54,211	-0.3	539	1.5	672	1.9	386	4.2
China	63,827	1,889	3.1	58,544	2.6	88	0.2	2,273	7.5	471	10.9
Europe	90,752	1,093	1.2	153,973	1.2	127	0.3	1,156	2.0	190	1.4
India	12,614	625	5.2	14,569	3.3	37	1.4	708	6.9	120	11.5
Latin America	9,906	463	4.9	22,502	3.2	193	4.0	340	5.7	70	5.0
North America	114,607	4,061	3.7	417,694	2.7	3,334	3.6	1,353	3.8	626	3.8
World	360,603	9,087	2.6	70,849	1.2	4,319	2.0	6,666	3.7	1,898	4.0

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

most especially the rapid transformation of China from an emerging nation in transition to a fully fledged market economy. There is no reason to expect that comparable conditions will occur in the near future. Indeed, as interest rates recover, lower house-price rises and lower equity-price inflation will likely depress wealth growth in many countries.

An overview of the past year

More details of wealth growth during the 12 months to mid-2019 are provided in **Table 1**. Aggregate global wealth rose by USD 9.1 trillion to USD 360.6 trillion, representing a growth rate of 2.6%. This is an improvement on the decline experienced during 2014–15, but below the average growth recorded since the financial crisis in 2008. Nevertheless, it exceeded population growth, so that average wealth grew by 1.2% to USD 70,850 per adult, an all-time high yet again.

Financial assets suffered most during the financial crisis, and recovered better in the early post-crisis years. This year, their value rose in every region, contributing 39% of the increase in gross wealth worldwide, and 71% of the rise in North America. However, non-financial assets have provided the main stimulus to overall growth in recent years. Over the 12 months to

mid-2019, they grew faster than financial assets in every region. Non-financial wealth accounted for the bulk of new wealth in China, Europe and Latin America, and almost all new wealth in Africa and India. Household debt rose even faster, at 4.0% overall. Our estimates indicate that household debt increased in all regions, and at a double-digit rate in China and India.

Total wealth rose in all regions last year. North America added USD 4.1 trillion to its stock of household wealth, of which USD 3.9 trillion came from the United States. China and Europe contributed another USD 3.0 trillion, and Asia-Pacific (excluding China and India) a further USD 825 billion. Despite the economic troubles in Argentina and Venezuela, wealth in Latin America rose by USD 463 billion, with Brazil accounting for USD 312 billion. In percentage terms, India (5.2%) and Latin America (4.9%) grew at the fastest rate, with Africa, China and North America recording gains of 3%–4%.

US dollar appreciation is one reason for these relatively modest increases. Using smoothed exchange rates, total global wealth rose by USD 11.8 trillion, rather than USD 9.1 trillion. New wealth in China is assessed as USD 3.5 trillion instead of USD 1.9 trillion, and the gain in Europe becomes USD 2.7 trillion rather than USD 1.1 trillion. However, smoothed exchange rates result in a net loss in other regions.

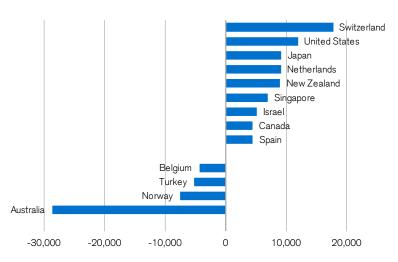
Winners and losers among countries

Comparing total wealth gains and losses across the most important countries, the United States (USD 3.8 trillion) again leads the way by a considerable margin, continuing an astonishing spell that has seen wealth per adult increase each year since 2008 (however, even the United States is not immune to temporary blips: wealth per adult fell by 2% during the latter half of 2018, then recovered during the first half of 2019). China (USD 1.9 trillion) is in second place

again, followed by Japan (USD 930 billion), India (USD 625 billion), and Brazil (USD 312 billion). The main losses occurred in Australia (down USD 443 billion), Turkey (down USD 257 billion) and Pakistan (down USD 141 billion).

Viewed in terms of wealth per adult, Switzerland tops the winners (up USD 17,790) followed by the United States (USD 11,980), Japan (USD 9,180) and the Netherlands (USD 9,160): see **Figure 2**. The main loser was Australia (down USD 28,670), with other significant losses in Norway (down USD 7,520), Turkey (down USD 5,230) and Belgium (down USD 4,330).

Figure 2: Change in wealth per adult 2018–19, biggest gains and losses



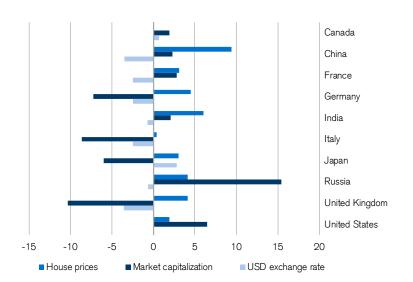
Non-financial assets have provided the main stimulus to overall growth in recent years

USD Asset prices and exchange rates

Much of the year-on-year variation in wealth levels is due to changes in asset prices and exchange rates. Exchange-rate fluctuations are frequently the source of the biggest gains and losses. However, exchange rates have been relatively stable over the past 12 months. Among the countries reported in **Figure 3** (G7 countries plus China, India and Russia), the largest changes affected China and the United Kingdom – both depreciating about 3.5% versus the US dollar. Currency falls were modest elsewhere in the world, except for Turkey (–21%), Pakistan (–24%) and Argentina (–32%). Currency appreciation was even rarer, with Thailand (+8%) and Egypt (+7%) recording the biggest gains.

Equity prices showed greater regional fluctuations. Market capitalization rose in North America, but declined in much of Europe by an average of about 10%. Markets rose significantly in Russia (+15%), and by an even greater extent in Kuwait (+25%), Brazil (+35%) and Romania (+36%). In Pakistan, market capitalization dropped by 42%, compounding the impact of exchange rate losses.

Figure 3: Change in market capitalization, house prices and USD exchange rate (%), 2018–19



House-price movements are a proxy for changes in household non-financial assets, and have been relatively subdued in recent years. House price declines did not happen in the ten countries listed in **Figure 3**, and were also rare elsewhere in the world, Australia (–6%) being the only recorded instance of a drop of more than 2%. India (+6%) and China (+9%) were among the nations experiencing a robust housing market, joined at the top by Colombia, Portugal, Hungary and the Philippines in the 10%–13% range, and Argentina, where house prices rose 45% in domestic currency (but only 11% in USD).

Wealth per adult across countries

The world wealth map (**Figure 4**) captures the huge differences in average wealth across countries and regions. Nations with wealth per adult above USD 100,000 are located in North America, Western Europe, and among the richer Asia-Pacific and Middle Eastern countries. Switzerland (USD 564,650) again tops the ranking according to wealth per adult, but our revised estimates now place Hong Kong SAR, (USD 489,260) second, followed by the United States (USD 432,370) and Australia (USD 386,060). New Zealand, Singapore, Canada, Denmark, the United Kingdom and the Netherlands occupy the remaining slots in the top ten, with wealth per adult ranging from USD

279,000 to 304,000. Iceland and Luxembourg probably rank above this last group, but data for these two countries is less reliable.

The ranking by median wealth per adult favors places with lower levels of wealth inequality and produces a slightly different table. Australia (USD 181,360) overtakes Hong Kong SAR (USD 146,890) to gain second place, but remains below Switzerland (USD 227,890). New Zealand, Canada, and the United Kingdom retain similar positions in the top ten, but lower-than-average inequality raises Belgium (USD 117,090) to fourth place, Japan (USD 110,410) to sixth, Ireland (USD 104,840) to eighth, and France (USD 101,940) to ninth. In contrast, Singapore slips to eleventh, while the United States, Denmark and the Netherlands all drop ten places or more.

The "intermediate wealth" group in **Figure 4** covers countries with mean wealth in the range of USD 25,000–100,000. The core members are China and Russia. 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 encompasses many heavily populated countries including India, Brazil, Indonesia, Iran, the Philippines, and Turkey. The segment also contains most of Latin America, many countries bordering the Mediterranean, and transition nations outside the EU. The remaining

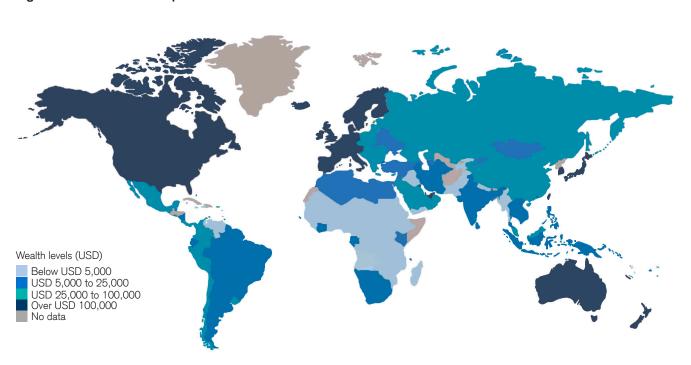
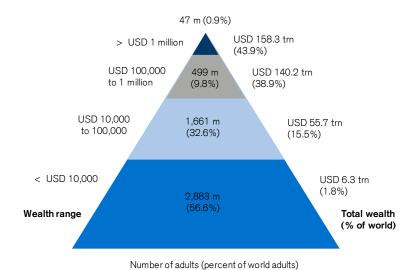


Figure 4: World wealth map 2019

Figure 5: The global wealth pyramid 2019



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks,

Global wealth databook 2019

members of this category include South Africa and other leading sub-Saharan nations, along with several fast-developing Asian countries like Cambodia, Laos, 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 4) illustrates the geographical imbalance in the distribution of household wealth. North America and Europe together account for 57% of total household wealth, but contain only 17% of the world adult population. The two regions had similar total wealth at one time, but North America now accounts for 32% of global wealth compared to 25% 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 20%-30% higher than the wealth share. But the population share is more than three times the wealth share in Latin America. five times the wealth share in India, and over ten times the wealth share in Africa.

Distribution of wealth across individuals

Variation in average wealth across countries accounts for much of the observed inequality in global wealth, but there is also considerable disparity within nations. To determine how global wealth is distributed across individual adults, we combine our estimates of the level of household wealth across countries with information on the pattern of wealth distribution within countries. The wealth pyramid in Figure 5 captures the wealth differences between adults. The large base of low-wealth holders underpins higher tiers occupied by progressively fewer adults. We estimate that 2.9 billion individuals - 57% of all adults in the world - have wealth below USD 10,000 in 2019. The next segment, covering those with wealth in the range USD 10,000-100,000, has seen the biggest rise in numbers this century, trebling in size from 514 million in 2000 to 1.7 billion in mid-2019. This reflects the growing prosperity of emerging economies, especially China, and the expansion of the middle class in the developing world. The average wealth of this group is USD 33,530, a little less than half the level of average wealth worldwide, but considerably above the average wealth of the countries in which most of the members reside. Total assets amounting to USD 55.7 trillion provide this segment with considerable economic leverage.

44

This reflects the growing prosperity of emerging economies, especially China

The upper-middle segment, with wealth ranging from USD 100,000 to USD 1 million, has also expanded significantly this century, from 212 million to 499 million. They currently own net assets totaling USD 140.2 trillion or 39% of global wealth, which is four times their share of the adult population. The wealth middle class in developed nations typically belongs to this group. Above them, the top tier of high net worth (HNW) individuals (i.e. USD millionaires) remains relatively small in size – 0.9% of all adults in 2019 – but increasingly dominant in terms of total wealth ownership and their share of global wealth. The aggregate wealth of HNW adults has grown nearly four-fold from USD 39.6 trillion

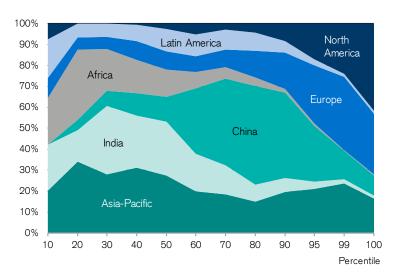
in 2000 to USD 158.3 trillion in 2019, and the share of global wealth has risen from 34% to 44% over the same period.

Membership of the layers of the wealth pyramid is quite distinctive in terms of residence and personal characteristics. The base tier has the most even distribution across regions and countries, 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, in many lower-income countries, more than 80% of the adult population fall within this wealth range, so life membership of the base tier is often the norm.

The aggregate wealth of HNW adults has grown nearly four-fold

The main feature of the two middle pyramid segments is the dominance of China, which accounts for 38% of the total membership, compared to 9% from India, 7% from Latin America, and just 3% from Africa. Regional representation is skewed further still among millionaires, where 43% of all members reside in North America, 28% in Europe, and 16% in Asia-Pacific (excluding China and India). Thus, in marked contrast to the base of the wealth pyramid (which is characterized by a wide variety of people from all countries and all stages of the life-cycle), HNW 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.

Figure 6: Regional composition of global wealth distribution in 2019



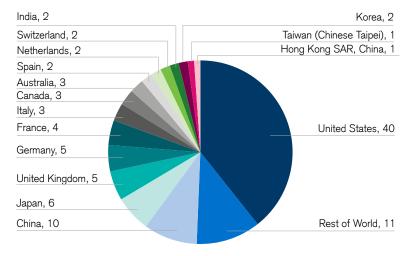
Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Global wealth distribution

The regional pattern of wealth distribution can be explored further by assigning adults to their corresponding global wealth positions. Our calculations indicate, for example, that a person needs net assets of just USD 7,087 to be among the wealthiest half of world citizens in mid-2019. However, USD 109,430 is required to be a member of the top 10% of global wealth holders, and USD 936,430 to belong to the top 1%. Determining global wealth percentiles in this way enables the regional membership of each global decile (i.e. 10% slice) to be portrayed, as in **Figure 6**.

Figure 6 illustrates well the features noted above: the concentration of African and Indian citizens in the base segment of the wealth pyramid, the dominance of China in the middle tiers, and the substantial over-representation of North America and Europe in the top percentile. Also evident is the significant number of North American and European residents in the bottom global wealth decile, a reflection of the ease with which individuals - especially younger adults - acquire debt in advanced economies, resulting in negative net wealth. Note too, that while the bulk of Indians are located in the bottom half of the global distribution, high wealth inequality and an immense population mean that India also has a significant number of citizens in the top wealth echelons.

Figure 7: Number of dollar millionaires (% of world total) by country 2019



Our estimates for mid-2019 show 46.8 million millionaires worldwide

High net worth individuals by country

For any given country, the number of millionaires depends on three factors: the size of the adult population, average wealth and wealth inequality. The United States scores highly on all three criteria and has by far the greatest number of millionaires: 18.6 million, or 40% of the world total (Figure 7). For many years, Japan held second place in the millionaire rankings by a comfortable margin. However, Japan is now in third place with 6%, overtaken by China (10%). Next come the United Kingdom and Germany with 5% each, followed by France (4%), then Italy, Canada and Australia (3%). Spain, the Netherlands, Switzerland, India and Korea each host 2% of global millionaires, with Taiwan (Chinese Taipei) and Hong Kong SAR also accounting for at least 1% of HNW citizens worldwide.

Millionaire trends

Our estimates for mid-2019 show 46.8 million millionaires worldwide, up 1.1 million on mid-2018 (**Table 2**). The United States added more than half of this number – 675,000 new millionaires – to its sizable stock. This exceeded the extra newcomers in the next nine countries combined: Japan, China, Germany, the Netherlands, Brazil, India, Spain, Canada and Switzerland. The decline in average wealth in Australia resulted in 124,000 fewer millionaires, but losses were relatively modest elsewhere, e.g. 27,000 in the United Kingdom and 24,000 in Turkey.

Table 2: Change in the number of millionaires by country, 2018-19

Main gains	•	thousands) with above USD 1 m	wealth	Main losses	Adults (thousands) with wealth above USD 1 m			
Country	2018	2019	Change	Country	2018	2019	Change	
United States	17,939	18,614	675	Australia	1,303	1,180	-124	
Japan	2,838	3,025	187	United Kingdom	2,488	2,460	-27	
China	4,289	4,447	158	Turkey	118	94	-24	
Germany	2,122	2,187	65	Italy	1,516	1,496	-19	
Netherlands	789	832	43	Saudi Arabia	163	147	-16	
Brazil	217	259	42	Hong Kong SAR	528	516	-12	
India	725	759	34	France	2,083	2,071	-11	
Spain	945	979	33	Greece	76	68	-7	
Canada	1,293	1,322	30					
Switzerland	791	810	19					
World	45,647	46,792	1,146	World	45,647	46,792	1,146	

Source Figure 7 and Table 2: James I avies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

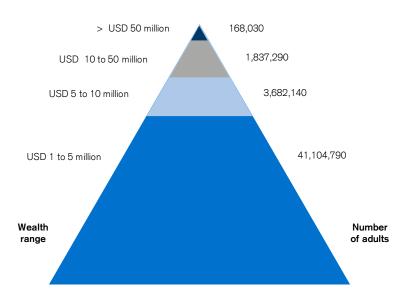
The apex of the pyramid

The methodology we employ allows us to examine the distribution of wealth within the HNW group in more detail. Our calculations suggest that the vast majority of the 46.8 million millionaires in mid-2019 have wealth between USD 1 million and USD 5 million: 41.1 million or 88% of the HNW group (**Figure 8**). Another 3.7 million adults (7.9%) are worth between USD 5 million and 10 million, and almost exactly two million adults now have wealth above USD 10 million. Of these, 1.8 million have assets in the USD 10–50 million range, leaving 168,030 Ultra High Net Worth (UHNW) individuals with net worth above USD 50 million in mid-2019.

Ultra-high net worth individuals

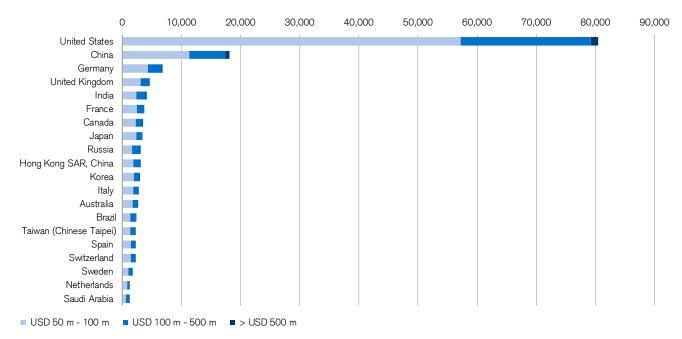
Among the UHNW group in mid-2019, we estimate that 55,920 adults are worth at least USD 100 million, and 4,830 have net assets above USD 500 million. North America dominates the regional breakdown, with 84,050 members (50%), while Europe has 33,550 (20%), and 22,660 (14%) live in Asia-Pacific countries, excluding China and India. Among individual countries, the United States leads by a huge margin with 80,510 members, equivalent to 48% of the world total (Figure 9). China is a clear second with 18,130 UHNW individuals, followed by Germany (6,800), the United Kingdom (4,640), India (4,460) and France (3,700). The remaining countries in the top ten list are Canada (3,530), Japan (3,350), Russia (3,120) and Hong Kong SAR (3,100).

Figure 8: The top of the pyramid, 2019



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Figure 9: Ultra-high net worth individuals in 2019, top 20 countries



During the past year, the total number of UHNW adults has risen by 6,870 (4%), with every region except Africa recording a net increase. The regions adding most members were North America (4,570), Latin America (870) and Europe (710). China (up 370) and India (up 54) had a relatively quiet year. The individual countries gaining the most members were the United States (4,200) and – more surprisingly – Brazil (860) and Russia (400). Losses occurred in Korea (down 140), Turkey (down 230), Italy (down 270) and Australia (down 280).

Wealth inequality

The level and trend of wealth inequality is monitored closely as an indicator of broader social trends. There is no doubt that the level of wealth inequality is high, both within countries and for the world as a whole. For example, the bottom half of adults account for less than 1% of total global wealth in mid-2019, while the richest decile (top 10% of adults) possesses 82% of global wealth and the top percentile alone owns nearly half (45%) of all household assets. Wealth inequality is lower within individual countries: typical values would be 35% for the share of the top 1% and 65% for the share of the top 10%. But these levels are still much higher than the corresponding figures for income inequality, or any other broad-based welfare indicator.

The trend in wealth inequality is less clear. Our estimates suggest that wealth inequality declined within most countries during the early years of the century. For the world as a whole, the decline is more evident as the decline in inequality within countries was reinforced by a drop in "between-country" inequality fueled by rapid rises in average wealth in emerging markets. The trend became mixed after the financial crisis as financial assets grew rapidly in response to quantitative easing and artificially low interest rates. These factors raised the share of the top 1% of wealth holders, but inequality continued to decline for those below the upper tail. Today, the share of the bottom 90% accounts for 18% of global wealth, compared to 11% in the year 2000.

Since 2016, non-financial assets have grown faster than financial assets and the share of the top 1% has eased back. **Figure 10** shows that the top 1% share rose between 2007 and 2016 in every one of the selected countries (except India), but has subsequently declined in every country (except Brazil). Inequality in the world as a whole echoes these trends within countries. While it is too early to say that wealth inequality is now in a downward phase, the prevailing evidence suggests that 2016 may have been the peak for the foreseeable future.

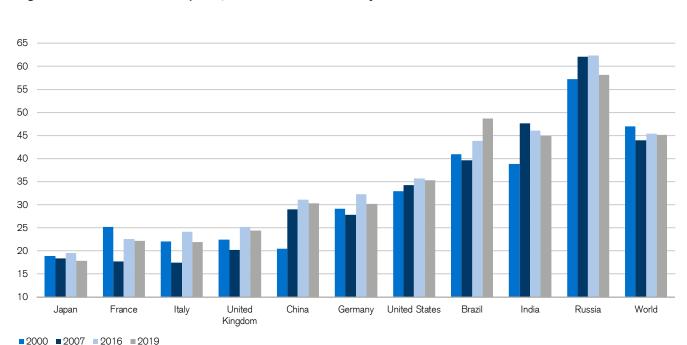


Figure 10: Wealth share of top 1%, selected countries and years

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.

44

Our estimates suggest that wealth inequality declined within most of the countries during the early years of the century

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 9.1 trillion (or 2.6%) in the year to mid-2019. However, the gain increases to USD 11.8 trillion when exchange rates are averaged over five years. The United States again led the way with a gain of USD 3.8 trillion due mostly to financial assets, although non-financial wealth increased at a faster rate. In other regions, the gains accrued primarily from non-financial assets.

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 82% of all wealth and the top 1% account for almost half of all global assets. Wealth inequality fell at all levels of the distribution from the year 2000 until the global financial crisis in 2008, and has continued to do so for those below the upper tail of the world wealth distribution. However, after the global financial crisis, the share of the top 1% rose in response to bullish financial markets, and a strengthening US dollar. These underlying factors have waned and it seems more likely that wealth inequality is now falling at all levels.

For this tenth anniversary edition, we have adopted a new format. The next two chapters explore in more detail the drivers which influence the level and distribution of wealth. Chapter 2 examines the level and trend of wealth per adult, focusing where possible on the real wealth per adult in local currency units. Particular attention is also given to the contribution of China and other emerging markets to the overall global trends. Chapter 3 explores in a similar way the links between wealth distribution and factors such as savings rates, population growth, equity price rises and house price inflation. Chapter 4 contains our usual 5-year projections for wealth holdings for the period up to 2024.

Our estimates for the past are regularly updated when new or revised data from reliable sources becomes available. We also strive continuously to improve the methods used to estimate the level and distribution of wealth. The Global wealth databook 2019 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 5.1 billion in 2019. For convenience also, residence location is referred to as "region"

or "country," although the latter also includes economically self-governing territories such as Hong Kong SAR, China, Macau SAR, China, and Taiwan (Chinese Taipei).

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

Data for 2018 and 2019 refer to **mid-year** (end-June) estimates; the figures for earlier years indicate **year-end** values.

The Forbes annual global list of billionaires is used to improve the estimates of wealth holdings above USD 1 million. The Forbes data is pooled for all years since 2000, and well-established statistical techniques are then applied 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. Further details are given in the Global wealth databook 2019.

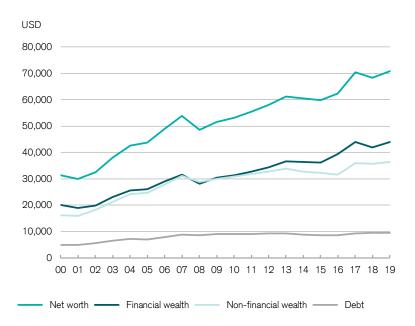


The evolution of wealth levels

James Davies and Anthony Shorrocks

The century began with a "golden age" of robust and inclusive wealth creation. But wealth collapsed during the financial crisis and growth never recovered to the level experienced earlier. This chapter examines the evolution of the level of wealth this century. We document the seismic change at the time of the financial crisis, when China and other emerging market economies took over as the engine of wealth creation. We also explore how GDP growth and variations in the wealth/GDP ratio help explain trends over time in wealth levels for individual countries.

Figure 1: Global trends in assets and debts per adult, 2000–19



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

The end of the "golden age"

This century, household wealth experienced two distinct phases. The early years saw the most remarkable spell of wealth creation in recent history. It was notable not only for the rapid expansion – total wealth grew at an annual rate exceeding 10% – but also for the breadth of coverage. Wealth increased significantly in every region of the world. Emerging market economies, especially China and India, did not simply benefit from this growth, but drove much of the action. Coverage of assets was broad too, with both financial assets and non-financial assets rising at a fast pace. Last but not least, it was socially inclusive: all levels of the wealth pyramid shared in the rewards.

This golden age came to an abrupt halt with the global financial crisis. While glimpses of the past occasionally resurface, robust wealth growth has not been sustained for any length of time. In fact, real global wealth per adult has fallen one third of the time since 2007.

Trends in nominal global wealth

Figure 1 illustrates some of the core components of the evolution this century of household wealth measured in current US dollars. On this nominal basis, global wealth per adult initially rose from USD 31,410 in 2000 to USD 53,850 in 2007 before dropping back to USD 48,500 during the financial crisis. Growth resumed after 2008, but at a lower and more erratic pace. Global wealth per adult in mid-2019 is USD 70,840, representing average annual growth of 3.7% since 2008 compared to 8.0% before the crisis.

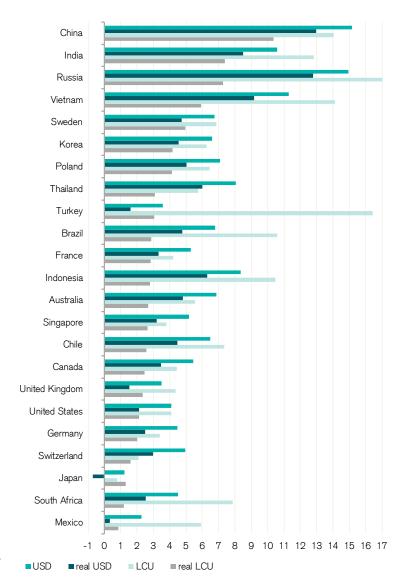
Figure 1 also shows the performance of financial versus non-financial wealth this century. Financial wealth exceeded non-financial wealth at the start, but non-financial assets grew faster in the precrisis era. By 2007, they each accounted for half of global household wealth. Post-crisis, financial assets recovered quickly, fueled by a worldwide upsurge in equity markets. The growth rate was not far short of that experienced in the pre-crisis years. However, non-financial assets grew very sluggishly after 2008. By 2016, they were barely above the pre-crisis peak. They have fared better more recently and the gap with financial assets has narrowed. However, financial assets remain clearly ahead in household portfolios worldwide, accounting for 55% of gross wealth in mid-2019. Household debts showed more extreme trends both before and after the financial crisis, doubling in the period 2000-07, but showing almost no change since then.

Exchange rates and real wealth

Previous editions of the Global wealth report have focused on wealth measured in current US dollars. There are practical reasons for doing so - a common currency unit is needed to compare country performance and to provide estimates for regions and the world as a whole. But it is also a potential source of distortions, which can influence assessments. This is particularly true for year-to-year changes in a country's total wealth, average wealth and the number of millionaires. In Figure 1, for example, annual fluctuations in average wealth are largely attributable to shortterm exchange rate movements as the US dollar appreciates or depreciates over time. Replacing current exchange rates with 5-year average exchange rates yields smoother graphs and often eliminates instances where growth has been negative when measured in current US dollars.

Another issue is the reliance on nominal rather than real currency units. This is less important over short time periods, but becomes problematic over the two decades covered by our data. A US dollar now is worth only 69% of its value in the year 2000;

Figure 2: Growth of wealth per adult using alternative currency units, selected countries, 2000–19



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

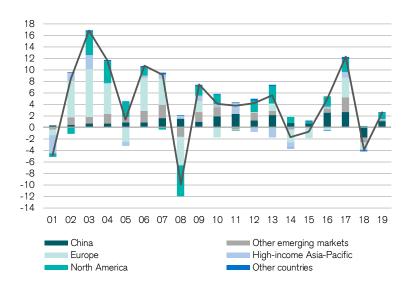
millionaires now would need assets worth USD 1,438,885 to compare properly with their counterparts at the start of the century. When assessing the performance of countries in more detail, as we do here, the natural basis for evaluation is the local currency unit (LCU), rather than USD, and real rather than nominal values since inflation may otherwise distort the underlying trends.

Figure 2 illustrates the implications of changing the valuation unit by comparing the average annual growth rate of wealth per adult calculated in USD, real USD, LCU and real LCU, using the Gross Domestic Product (GDP) deflator to convert from nominal to real units. Results are given for a representative selection of countries and ordered in terms of the growth rate in real LCU. China has performed extremely well under any criteria and heads the ranking for three of

them. However, in terms of growth of wealth per adult in LCU, China is fractionally behind Vietnam and falls some way short of Turkey and Russia. In these three countries, high wealth growth is accompanied by high inflation which flatters the comparison in nominal LCU. More generally, emerging markets and developing countries experience higher inflation than developed nations. This leads to faster growth in LCU terms, but this premium disappears once inflation is taken into account. Converting into USD performs a similar function, since exchange rates reflect domestic inflation relative to inflation in the United States. But the USD exchange rate reflects other factors as well, so that wealth growth in real US dollars does not exactly match growth in real LCU. The results given in Figure 2 show that real wealth growth has tended to be higher when measured in USD, suggesting that the US dollar has depreciated on balance against other currencies this century.

Another notable feature of **Figure 2** is the strong wealth performance of transition nations (China, Russia, Vietnam and Poland), which is perfectly understandable. State ownership severely limits opportunities for private wealth, so that when these restrictions are relaxed, there is usually a catch-up period during which private businesses are established and thrive, and asset markets open up. Further stimulus is provided when state-owned assets — especially land and housing — are given away or sold at discounted rates. It is sometimes forgotten, however, that transition is a one-time event, not to be repeated. It will be more difficult for transition countries to maintain the growth achieved in the early years of reforms.

Figure 3: Annual growth (%) of real wealth per adult (in real USD) by country type, 2000–19



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

The contribution of emerging markets

Emerging markets have become increasingly important to the world economy and this is reflected in their contribution to the evolution of global household wealth. **Figure 3** provides a breakdown of growth of global wealth per adult in real USD into the contributions of six groups of countries: China, Other emerging markets, Europe, High-income Asia-Pacific, North America, and Other countries. China is reported separately from the other emerging markets because it would otherwise dominate the category.

Emerging markets have become increasingly important to the world economy

The overall picture confirms the rapid wealth expansion at the start of the century followed by a more subdued and more erratic growth record in the period since 2007. While China and other emerging markets grew at fast pace in the early years, they did so from a low base. As a result, their contribution to global wealth growth was guite modest until 2007. Instead, and perhaps surprisingly, Europe is revealed as the dominant source of wealth growth in the pre-crisis years, contributing more than half of the rise in world wealth per adult in real USD. North America is in second place, averaging 19% of the global rise. Of course, both Europe and North America started with a large stock of wealth. But Europe's contribution is also greatly flattered by exchangerate appreciation: the euro gained 67% against the US dollar between 2001 and 2007. Valuing Eurozone wealth at year 2000 exchange rates would reduce European wealth in 2007 by 25% and global wealth by 10%.

Since 2008, average real USD wealth growth in Europe has been negative, in part due to retrenchment of the euro. North America has taken the lead among the developed nation groupings, accounting for one-third of the rise in global wealth per adult. However, China has more than matched North America in the post-crisis era, and the gap widens if the period is extended to 2007 when North America suffered a heavy loss. Other emerging market economies have

also made a significant contribution to real global growth since 2008. The net result is that emerging economies including China account for two-thirds of the real wealth gain since 2008, or double the contribution of North America. High-income Asia-Pacific has only a small role in this changing scenario, handicapped by a laggard Japan. The rest of the world (including most of Africa and Latin America) hardly registers at all in the post-crisis era: their combined contribution simply offsets the negative impact of Europe. Thus the global financial crisis marks a turning point in the history of wealth creation the year in which the influence of the "old world" wanes and the "new world" takes over as the engine of global advancement. A new regime is now in place and looks set to continue.

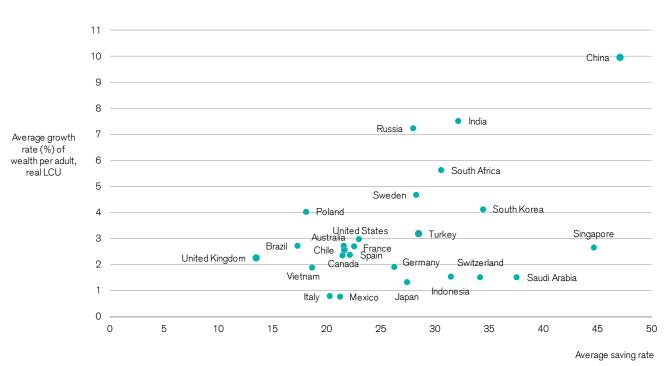
Savings behavior is a more likely candidate because household wealth is effectively an accumulation of past household savings. A higher savings rate should eventually translate into higher wealth. Figure 4 plots the growth of wealth per adult against the savings rate, both averaged over the period 2000-19. It confirms a strong positive relationship between wealth growth and savings, even when China is excluded as an outlier. Overall, a percentage point rise in the savings rate raises the growth rate of wealth per adult by 0.13% each year on average. Thus, for example, household wealth in Poland (with an 18% savings rate) would be expected to be 27% higher in mid-2019 if it had matched the savings rate of Sweden (28%).

The drivers of wealth growth

There are many factors that help explain why wealth per adult follows a different path in different countries. Increasing population size is one potential explanation for lower growth on the grounds that total household wealth is shared among a larger number of adults. However, this is offset by the economic opportunities offered by a growing population and by the way that population growth underpins the rising price of scarce resources, especially land and housing. Overall, there is no evidence that population growth systematically affects average wealth in either direction.

The global financial crisis marks a turning point in the history of wealth creation

Figure 4: Impact of savings rate on wealth per adult, 2000-19, selected countries



The factor that accounts most for the different trends in household wealth among countries is the general level of economic activity as represented by aggregate income, aggregate consumption or GDP. The reasons are clear – economic expansion increases savings and investment by households and businesses, and raises the value of household-owned assets, both financial and non-financial. Wealth and GDP do not always move in tandem, especially when asset prices fluctuate markedly as they did during the financial crisis. Nevertheless, there is a strong correlation between wealth growth and GDP growth.

Figure 5 illustrates the relationship for the 29 countries for which we have independent estimates of the level of household wealth. There is a clear positive growth correlation between wealth per adult and GDP per adult, even excluding China and India whose experience does most to confirm the link. Average wealth in Sweden has grown faster than GDP growth would predict, while Israel and Indonesia have grown more slowly than expected. But the overall pattern suggests that GDP is the starting point for explaining variations in the level and growth of wealth per adult across countries. In fact, the link between GDP and household wealth is the central component of the model we use to estimate the wealth level of countries lacking direct data.

The ratio of wealth to GDP

The level and growth of GDP, together with shortterm fluctuations due to changes in the price of assets (especially equities and houses), explains much of the variation in the level and trend of household wealth across countries. However, another important consideration is the systematic way in which the wealth/GDP ratio tends to rise during the course of development. For a lowincome country with uncertain property rights, poor infrastructure, weak institutions and a rudimentary financial sector, the wealth/GDP ratio could be around one, as Figure 6 records for the "other countries" group. As development progresses and the various constraints are removed or relaxed, confidence grows in wealth ownership, asset management, and perhaps debt acquisition for investment purposes. This allows the wealth/ GDP to double or perhaps treble in the right circumstances. The prospects for further rises in the wealth/GDP ratio depends on the existence of a secure legal infrastructure and a developed financial sector offering advanced credit facilities, as is now commonplace among richer nations.

The implications for wealth growth in individual countries is clear. Broadly speaking, wealth can be expected to rise in line with GDP. But those countries that address institutional deficiencies, and which encourage the development of appropriate financial instruments, can achieve higher-than-average growth rates via a rise in the

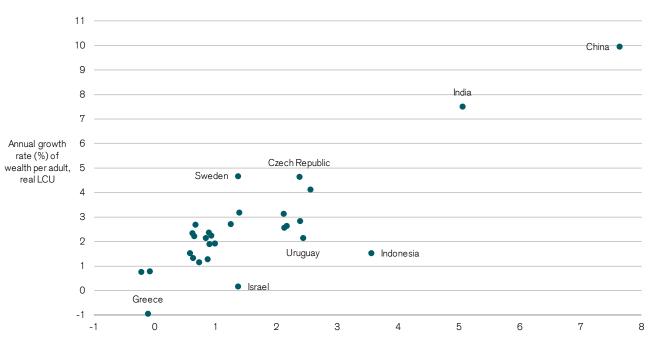


Figure 5: Growth of wealth vs. GDP growth, 2000-19, selected countries

Annual growth rate (%) of GDP per adult, real LCU

wealth/GDP ratio. **Figure 6** suggests that other emerging markets are having some success in this respect. The "other countries" group shows similar progress. But it is China that has improved the most, raising its wealth/GDP ratio this century from a starting value of three to a level which now exceeds that in High-income Asia-Pacific and Europe, and is comparable to that in North America. Elsewhere, the profiles for High-income Asia-Pacific and Europe show less of an upward trend since 2000, suggesting that the opportunities for raising wealth growth above GDP growth are largely exhausted.

44

This in turn leads to a concern that asset price bubbles could be developing

While the wealth/GDP ratio is expected to rise with GDP as countries develop, Figure 6 hints that the ratio may have risen over the past two decades for other reasons. One obvious candidate is widespread inflation-rate targeting by central banks, which has reduced inflation expectations and real interest rates. Quantitative easing has reinforced this shift. The consequences are evident in the rising price of assets - especially real estate and equities - which has become a common feature of economies in all regions of the world, but especially North America and Europe. The higher wealth/GDP ratio in North America in recent years is a case in point. While the higher values may indicate an improved wealth creation environment, it more likely reflects the consequences of asset price inflation fueled by low interest rates. These factors are likely to reverse at some future date.

Figure 7 casts some light on this issue by plotting the evolution of the wealth/GDP ratio for a subset of countries for which the ratio has exceeded three at some point in time. The evidence suggests that the wealth/GDP ratio tends to rise with average wealth as expected for the reasons discussed above. Vietnam, India and China show this kind of progression. But the rise in the ratio among high-wealth countries is less expected after they are already mature, so that opportunities for institutional and financial sector improvements are limited. It seems more likely,

therefore, that instances of wealth growth at a faster rate than GDP reflect asset price inflation. This in turn leads to a concern that asset price bubbles could be developing.

Figures 6 and 7 suggest that the benchmark level for the wealth/GDP ratio in fully developed economies is about four in normal times. Germany and Sweden remain below this level, probably reflecting generous state provision of pensions and healthcare, which reduces the incentive for individuals to save for their retirement needs. But Figure 7 shows that an increasing number of countries have not only achieved the benchmark, but have continued well beyond. The ratio rose to six in Spain in 2010, providing a forewarning, perhaps, of unsustainable trends that Spain has had to tackle during the last decade. The United States, France, the United Kingdom, Australia, Switzerland and Italy have also seen the wealth/GDP ratio rise to five or more. Such levels may become more common in the future if interest rates remain low. But historical evidence suggests that economies with unusually high wealth/GDP ratios underpinned by high asset prices can be vulnerable when economic downturns occur.

Figure 6: Ratio of wealth to GDP by country type, various years

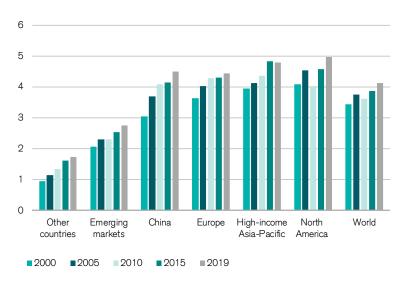
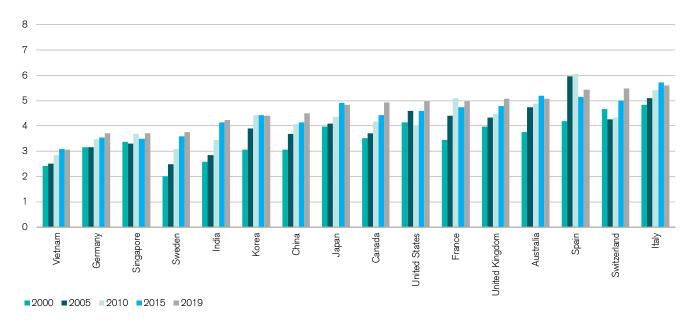


Figure 7: Wealth/GDP ratio, selected years and countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Summary

This chapter set out to document the wealth growth record of different countries this century and to delve into the reasons why countries have grown at different rates. Previous Global wealth reports have measured household wealth in nominal USD, but country performance is best evaluated in terms of real domestic currency units. Figure 2 shows that the choice of currency unit can make quite a difference to the values recorded for wealth growth. It can also change our perspective on the relative contribution of countries to global trends. Simply shifting from nominal USD as used in the past to real USD as used in Figure 3 highlights the seismic change that occurred at the time of the financial crisis, when China and other emerging market economies took over as the principal engine of global wealth creation.

The starting point for assessing wealth performance across countries is the growth of wealth compared to GDP. The baseline is growth at a similar rate. Wealth can grow faster than GDP if institutional and financial sector deficiencies are addressed. This is the optimistic outcome of economic development and can result in a virtuous cycle in which higher wealth stimulates GDP growth, which in turn raises wealth. China, India and Vietnam provide examples of virtuous cycles in action. However, historical

evidence suggests that a wealth/GDP ratio of around four is the normal safe upper limit. Higher ratios may be commonplace in the future as financial instruments become more refined. But, at present, they may well reflect high asset valuations - especially house prices and equity prices - which are unsustainable in the longer run. Unfortunately, reliable wealth data is unavailable for most countries. This limits the insights that could otherwise be drawn from wealth data in order to assess the degree of past success in addressing defective institutions and inadequate financial markets to identify unsustainable asset-price rises, and to understand the contribution of wealth to future economic growth.

Notes on country groupings

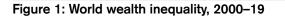
Emerging Markets refer to China plus Argentina, Brazil, Chile, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan (Chinese Taipei), Thailand, Turkey and United Arab Emirates. To avoid double counting, countries in this list are excluded from the "Europe" and "High-Income Asia-Pacific" categories.

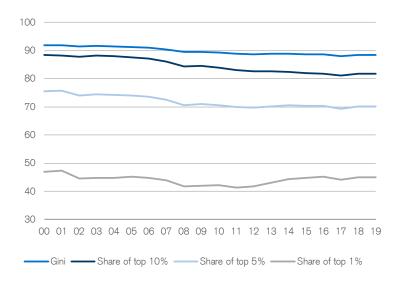


The evolution of wealth distribution

James Davies and Anthony Shorrocks

Wealth ownership is highly concentrated by any standard. It is also widely believed that wealth inequality has risen in recent years. This chapter summarizes our estimates for wealth distribution and wealth inequality over the course of this century, drawing particular attention to the different ways in which the available evidence can be interpreted. We then consider possible explanations for the observed trends before considering some key subgroups: millionaires, women and the millennials.





Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Trends in wealth inequality

Wealth inequality is most often measured by the share of wealth owned by top wealth groups, or by the Gini coefficient, an index which reflects differences at all parts of the distribution and which has a minimum value of zero (representing complete equality) and usually an upper bound of one. These indices usually follow a similar time path, but not always. When that happens, a more nuanced interpretation of the prevailing trends is required.

The evolution of wealth inequality this century for the world as a whole is a case in point. Our estimates indicate that the share of the top 1% declined until the global financial crisis, then trended upward until 2016, when it stabilized. The top 1% currently own 45.0% of global net assets, down slightly from the 46.9% share in 2000. Figure 1 shows that the Gini coefficient and the shares of the top 5% and 10% also declined between 2000 and 2008. But the trends have diverged from the top 1% pattern in the post-crisis era. The share of the top 5%, for example, has hardly changed, going from 70.6% in 2008 to 70.2% in 2019. This is 5.4 percentage points lower than the value in 2000. And the top 10% and Gini coefficient have continued to trend downward.

The conclusion to be drawn is that – according to the latest and most reliable source data – global wealth gaps have generally narrowed over the last two decades. The only group countering this trend is the upper tail, accounting for no more than 5% of the world's population. The suggestion that most people have improved their relative wealth position is reinforced by the observation that the share of the bottom 90% of global wealth holders (portrayed in the graph as the gap between the top 10% share and the 100% upper line) rose from 11.5% in the year 2000 to 18.3% in 2019.

The other factor contributing to changes in global inequality is the inequality trend within countries. For each of our country groups, **Figure 3** shows the average wealth share of the top 1% at various points of time. During the period 2000–10, the share rose on average in "Other emerging markets," "Other countries," and especially rapidly in China. It fell in Europe, but changed little in North America and High-income Asia-Pacific. The conclusion we draw is that underlying trends within countries tended to raise the share of the top 1% at a global level in this period, but that this was more than offset by robust growth by low-wealth nations, most especially China, which narrowed the gap in average wealth between countries.

Global wealth gaps have generally narrowed over the last two decades

The trend in global inequality reflects two contributory factors: changes in wealth inequality within individual countries and changes in relative average wealth between countries. The previous chapter documented the rapid growth of average wealth in emerging markets, most notably China. To explore the impact on global wealth inequality, we divide countries into the same six broad categories: China; other Emerging Markets; Europe; North America; High-income Asia-Pacific; and other countries. China is again detached from other emerging economies due to its dominant impact.

Figure 2 shows that there was a clear division between country types in 2000: North America, High-income Asia-Pacific and Europe had high wealth, while China, Other emerging markets and Other countries had lower wealth. Since 2000. China's wealth has increased ten-fold in real terms, and average wealth in both "Other Emerging Markets" and "Other countries" has also grown faster than in all the richer country types. This has promoted citizens of China and elsewhere from the lower rungs of the wealth ladder to the middle ranges, narrowing the gap between the global wealth-poor and the global wealth-rich. The outcome is a significant reduction in between-country wealth inequality throughout the past two decades, and a powerful contribution towards declining wealth inequality for the world as a whole.

Figure 2: Mean wealth per adult by country type, 2019 USD: 2000–19 (log scale)

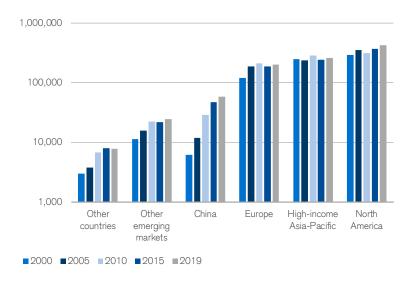
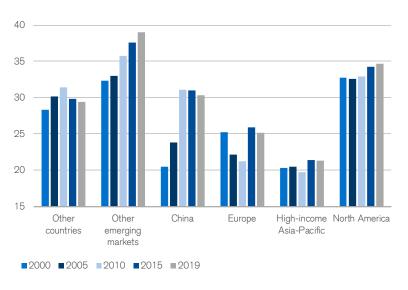


Figure 3: Wealth share of top 1% by country type, 2000-19



After 2010, the share of the top 1% eased down in China and "Other countries," but continued to rise quickly in "Other emerging markets." More significantly, inequality rose in North America, High-income Asia-Pacific, and especially Europe. These regional groups continue to account for a disproportionate share of global wealth, and an even greater share of top wealth holders. For this reason, rising inequality within these wealth-rich country groups contributed a strong upward fillip to the share of the global top percentile, which was too strong to be offset by narrowing gaps, at least until 2016. From 2016 onward, the two opposing forces appear to be roughly in balance.

Unlike the global trends shown in **Figure 1**, inequality trends within countries are broadly consistent across all the various inequality indicators, including the Gini coefficient. However, the trends are dampened, as shown by the average top 10% shares within country groups portrayed in **Figure 4**.

This explains why the graphs in **Figure 1** appear to lead to contradictory conclusions. The trend in the share of the top 1% exhibits more variability, and the global weights are tilted toward the wealth-rich country groups. Thus, the trend in the share of the top 1% is more likely than other indicators to reflect changes in inequality within countries (rather than between countries), which in turn is more likely to be weighted toward inequality trends in wealth-rich countries.

In summary, between-country wealth inequality has fallen throughout this century. Until 2010, this downward pressure more than offset rising inequality within lower-wealth countries, and all inequality indicators agree that global inequality declined. After the financial crisis, wealth inequality stabilized in China, but rose on average in all the wealth-rich country groupings. Increased within-country inequality was not strong enough to offset the between-country trend for the top 10% share and the Gini coefficient, which continued to decline. However, the wealth share of those in the top 1% worldwide gives more weight to within-group inequality among wealth-rich nations. This has led to the leveling off in the share of the top 5% since 2010 and the rise in the share of the top 1%.

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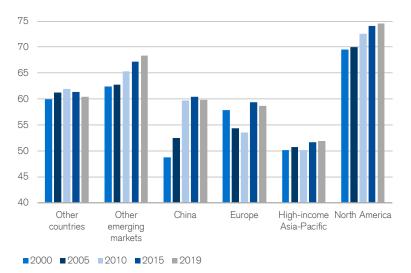
Between-country wealth inequality has fallen throughout this century

Drivers of wealth inequality within countries

While reduced wealth inequality between countries has been the dominant factor in determining the direction of wealth inequality worldwide, wealth inequality within countries remains important and is of interest in itself. Savings behavior, rates of return on assets, wealth transfers (gifts and bequests), and population growth are some of the factors that can affect the level and trend of inequality within countries. Changes in savings behavior can be further split into the impact of changes in income or saving rates, while rates of return are affected by asset price changes and the capital gains and losses they create.

A recent study for the United States casts light on the contribution of these different factors during the period 2000–06. Changes in saving had an impact on wealth inequality, but capital gains and losses have been a more important factor. From 2001 to 2007, house prices rose rapidly, increasing the wealth share of middle groups, since housing forms a larger fraction of their portfolios. This effect reversed between 2007 and 2010 due to the collapse of the US

Figure 4: Wealth share of top 10% by country type, 2000-19

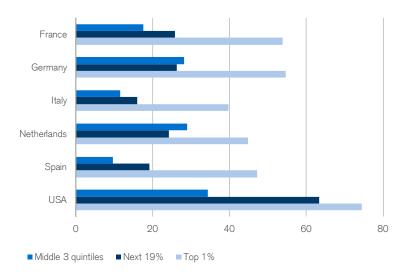


housing market, reinforced by the relatively high leverage of many middle-class home owners. From 2010 onward, the dominant influence was rising equity prices, which increased the share of the top 1% and reduced the relative wealth of middle groups. Lower saving by middle groups due to stagnating incomes also contributed to the fall in their wealth share between 2007 and 2013.

The time series of US wealth statistics from 1922 onward has also been used to identify the determinants of the share of the top 1%. The top percentile wealth share rises with the income share of the top 1% and with the ratio of equity prices to house prices. In addition, it falls alongside the overall ratio of household debt to net worth, which is a consequence of middle groups earning higher rates of return on their housing when they are more indebted due to higher leverage.

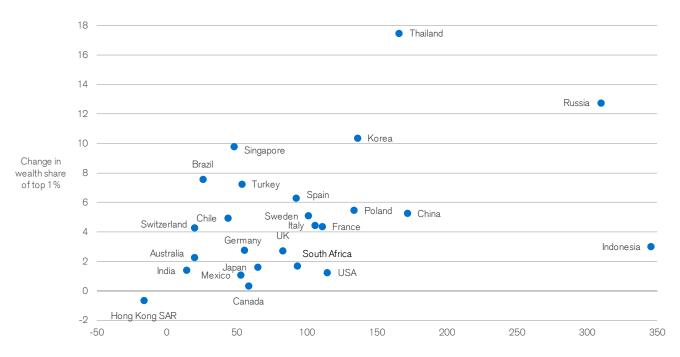
Although less is known about the determinants of wealth inequality in most other countries, similar conclusions seem to apply. In Europe and North America (and likely elsewhere too), financial assets increase strongly as a fraction of total household assets when moving up from the middle quintiles to the top groups (**Figure 5**).

Figure 5: Financial assets as % of total assets by wealth group, selected countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Figure 6: Change in the wealth share of the top 1% vs. change in the ratio of market capitalization to house prices, selected countries, 2008–18



% change in ratio of market capitalization to house prices

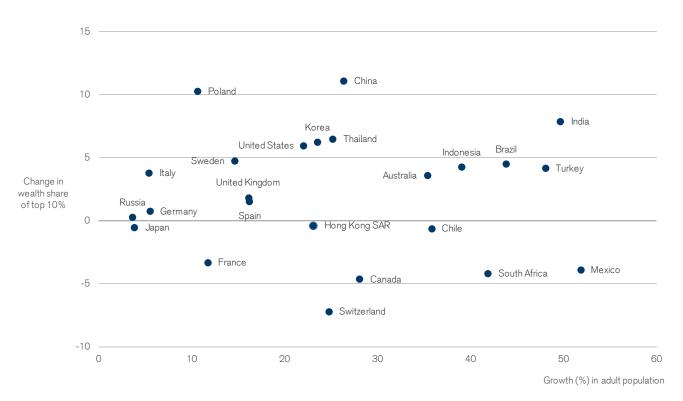
In France, for example, the middle three quintiles (i.e. adults from the 21st to the 80th percentile) hold 18% of their total assets in financial form, but for individuals in the 81st to the 99th percentile (the "next 19%" in the chart) financial assets are 26% of the total and, in the top percentile, the financial assets fraction is 54%. So a rise in equity prices relative to house prices is expected to raise wealth inequality in most countries.

Our data provides confirmation of the tendency for wealth inequality to increase when financial wealth grows faster than non-financial wealth. **Figure 6** compares the change in the share of the top 1% with the change in the ratio of equity market capitalization to house prices across a representative selection of countries. For the period 2008–18 (limited by the availability of house price data), the cross-tabulation shows a strong positive relationship between these variables. This is illustrated by the experience of Russia, where a 13-point rise in the wealth share of the top 1% has accompanied equity prices rising three times

faster than house prices. Among the countries considered, Hong Kong SAR is the only place where house prices rose faster than equity prices, and the only place where the share of the top 1% declined.

The impact of population growth on wealth inequality is another issue that can be explored with our data. Population growth reduces the relative number of older adults who are wealthier than the young on average, so this tends to reduce wealth inequality or limit its increase. This expectation is confirmed – for a selection of countries at least – by the negative relationship evident in **Figure 7** between the rate of population growth over the period 2000–19 and the change in the share of the top decile.

Figure 7: Growth of wealth vs. GDP growth, 2000-19, selected countries



Millionaires

According to our estimates, the century started with 13.9 million USD millionaires worldwide, just 0.37% of the adult population. In mid-2019, they number 46.8 million, or 0.92% of the world's adults. In 2000, they collectively owned USD 39.6 trillion (34% of total global wealth). This has now risen four-fold to USD 158.3 trillion (44% of the global total). This rapid growth has not occurred at a constant rate: millionaire numbers rose quickest in the years 2003–04, 2006–07, 2013 and 2017 (**Figure 8**).

China and other emerging markets have seen the fastest growth in millionaires, but they started from a low base. Prior to the financial crisis in 2007-08, their contribution to the global total was modest. North America and most especially Europe (greatly assisted by EUR appreciation) accounted for 80% of new millionaires during this period. Since 2007, millionaire numbers in Europe have fluctuated along with the EUR/USD exchange rate: the net number of new European members is very low - barely 1% of the increase worldwide. Instead, half of the new millionaires reside in North America, one guarter are found in China, and a further 10% originate from other emerging markets. The "new world" has not yet overtaken the "old world" as the source of most new millionaires, but that prospect is fast approaching.

China and other emerging markets have seen the fastest growth in millionaires

It is often thought that rising numbers of millionaires reflect rising inequality. Changing inequality, or more accurately "changes to the distribution shape," can certainly be a contributory factor by raising or lowering the relative wealth of those at the top of the distribution. But two other factors also contribute to millionaire growth: rising average wealth helps more individuals to pass the USD 1 million threshold and a rising population size expands the pool of potential members. The relative importance of each of these three factors can be assessed by asking various counterfactual questions. How many new millionaires would

Figure 8: Change in number of USD millionaires by country type, 2000–19 (millions)



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

have been created if populations grew as they did, but average wealth and distributions (i.e. Lorenz curves) remained unchanged? How many if average wealth had changed, but populations and distributions were fixed? How many if only the Lorenz curves had changed? Fortunately, our rich data set enables these questions to be answered. The precise answers depend on the year chosen to fix the variable values, but averaging over the possible choices yields an exact decomposition of the rise in millionaire numbers into the three component sources.

The results reported in Table 1 show that, for the world as a whole, rising average wealth was responsible for 78% of the increase in the number of millionaires. Population growth accounted for 16% and increasing inequality for 6%. Thus the general rise in wealth and population accounts for most new millionaires, while increased inequality in the distribution of wealth within countries accounts for a relatively small number. The small contribution of inequality may surprise some people, but the reasons are clear on reflection. For example, if the wealth of every individual doubles, then relative inequality remains unchanged. But the number of millionaires will rise dramatically, probably more than doubling, because everyone with at least USD 500,000 previously will now be promoted to the millionaire group. Note here that no allowance is made for inflation. A more sophisticated decomposition would further subdivide the contribution of average wealth rises into the impact of inflation and the contribution of changes in real average wealth.

Table 1 also records the millionaire decomposition for the 25 countries with the most millionaires in 2019. The results confirm that rising average wealth is the main reason for growing millionaire numbers, explaining two-thirds or more of the rise in every country except Mexico. However, closer inspection reveals interesting differences between nations. For understandable reasons, the population effect tends to be stronger - and the wealth effect therefore relatively weaker - in the countries with higher population growth. For example, among high-income countries, the major continental European countries, with their slow population growth, show a smaller population effect and a larger wealth effect than Australia, Canada, the United Kingdom or the United States – countries where immigration has supported more rapid population growth. Similar effects are seen elsewhere. Russia has had very little population growth, China slightly more, and India considerably more. Accordingly, among these three countries, the population effect is strongest in India and weakest in Russia, and the reverse is true for the wealth effect.

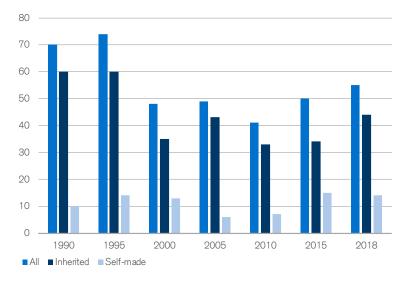
The impact of inequality on the number of millionaires may seem surprising. The contribution of changing distribution shape is low for most countries and, in nine of the 25 countries in Table 1, inequality changes acted to reduce the number of millionaires. This is initially unexpected since the share of the top 1% in the distribution of wealth has been rising since the global financial crisis. However, the comparison here is between 2019 and 2000. From 2000 to 2008, wealth inequality trended downward both globally and within most of the countries in Table 1. Top wealth shares are higher now than in 2008 in almost all of these countries, but they are lower than in the year 2000 in about a third of them. Mexico, where the share of the top 10% fell 3.9 percentage points from 2000 to 2019, has the largest such effect. In contrast, China, Italy and the Netherlands had an average increase of 7.3 percentage points in the share of the top 10%, leading to the largest positive effects of distributional change on the number of millionaires seen in the table.

Table 1: Decomposition of the change in number of USD millionaires since 2000, selected countries

		millionaires sands)	Percentage change in the number of millionaires due to change in			
	2010	2019	Average wealth level	Population	Distribution shape	
United States	7,440	18,614	70.5	22.5	7.0	
China	38	4,447	75.4	9.6	15.0	
Japan	1,990	3,025	87.5	9.1	3.4	
United Kingdom	750	2,460	86.8	13.6	-0.4	
Germany	618	2,187	95.7	4.7	-0.5	
France	428	2,071	93.8	8.1	-1.9	
Italy	424	1,496	80.6	4.5	14.9	
Canada	274	1,322	86.3	17.6	-3.9	
Australia	108	1,180	79.7	15.9	4.4	
Spain	172	979	83.2	9.9	6.9	
Netherlands	185	832	73.8	7.3	18.9	
Switzerland	177	810	81.1	15.9	3.0	
India	34	759	74.4	17.8	7.8	
Korea	78	741	83.6	12.3	4.1	
Taiwan (Chinese Taipei)	164	528	74.2	21.1	4.8	
Hong Kong SAR	104	516	87.6	14.8	-2.4	
Sweden	55	374	86.7	8.6	4.7	
Austria	78	313	78.3	9.6	12.2	
Belgium	72	279	91.6	10.2	-1.9	
Brazil	36	259	73.3	20.9	5.7	
Russia	14	246	98.3	2.0	-0.3	
Denmark	52	237	94.5	7.1	-1.6	
Singapore	35	207	68.1	29.6	2.3	
New Zealand	16	185	83.9	13.7	2.4	
Mexico	78	173	62.8	52.7	-15.5	
All countries	13,883	46,792	78.3	15.7	6.0	

The decomposition exercise reported in Table 1 for millionaire numbers can be repeated to establish the contributions of average wealth, population and distribution shape to the extra wealth of millionaires since the start of the century. For the world as a whole, the results are very similar to Table 1. Rising average wealth has been responsible for 78% of the increase in millionaires' wealth, while population growth has contributed 15% and changing distribution accounts for 8% (see the Credit Suisse Global Wealth Databook for more details). For individual countries the contributions of average wealth and population are similar to the figures in Table 1, but the impact of distribution shape is sometimes different. In a few countries, the contribution changes sign. For example, changing distribution accounts for 3.4% of new millionaires in Japan and 3.0% in Switzerland. However, changing distribution acted to reduce the wealth of millionaires in these two countries by 8.5% and 9.2%, respectively. This illustrates the fact that the upper tail of a country's wealth distribution can change in complex ways, e.g. the number of people with at least USD 1 million can rise, while the number with at least USD 10 million falls, thus reducing total millionaire wealth.

Figure 9: Number of women in the United States Forbes 400 list, 1990–2018



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

44

Women's wealth has grown relative to that of men in most countries

Women

Taking a long horizon, women's wealth has grown relative to that of men in most countries due to rising female labor force participation, more equal division of wealth between spouses and other factors. But over the last 10-15 years the picture is more mixed. United Kingdom estate tax data show a rise in female representation at top wealth levels, but there was a slight decline in the United States. US survey data show that single women's wealth fared worse than that of single men in the five years following the global financial crisis. These trends likely reflect the fact that housing forms a larger fraction, and equities a smaller fraction, of women's wealth compared to men. While equity prices soared in the United States over the last decade, house prices were slow to recover after the crisis.

Traditionally, inheritance has been a more important source of wealth for women than for men – partly because lower incomes restricted accumulation on their own account, partly due to widowhood, and partly because females hold on to bequests longer than male heirs because they tend to live longer. The reduced flow of inherited wealth over the first half of the 20th century, which continued longer in the United Kingdom and the United States than in France and other western European countries, tended to lower the relative wealth of women due to their greater dependence on inheritance.

Evidence on inheritance is hard to come by. But the Forbes 400 data on top wealth holders in the United States distinguishes women who were inheritors from those who were "selfmade." There were 70 women on the Forbes 400 list in 1990 and 74 in 1995, but their numbers fell sharply to 48 between 1995 and 2000 (Figure 9). The number of women on the list fell further to 41 in 2010, but has since rebounded to 55. This U-shaped pattern could reflect a long-term fall in the importance of inherited wealth in the United States followed by a mild increase in importance in the last three decades, but it could also be due to other factors. Changes over time in the number of inheritors versus self-made women in the Forbes 400 casts some light on this issue.

Most women on the Forbes 400 list have always been inheritors and the drop in the total number of women on the Forbes 400 up to 2010 can be explained by a fall in the number of female inheritors. The 74 women on the list in 1995 included 60 inheritors. By 2010, there were 26 fewer inheritors, accounting for most of the fall in the total number of women on the list (by 33 to 41). The rebound in Forbes 400 women since 2010 has been primarily due to a resurgence of inheritance. By 2018, there were 14 more women in total on the list, of which only three were selfmade. While inheritance thus seems to account for most of the increased female representation at the top of the US wealth pyramid in recent years, there has also been an increase from 8 to 11 self-made women on the Forbes 400 list. And, also according to Forbes, there are a total of 23 self-made women in 2019 among all US billionaires – a broader group than the Forbes 400. A rise in the number of self-made women in the highest wealth ranks is also seen in the Hurun global self-made women billionaires list, which has 89 names in 2019, more than double the number five years ago.

in many countries by high house prices, low interest rates and low incomes, making it difficult for them to buy property or accumulate wealth. Studies in several countries have indicated that the millennials can expect to be worse off than their parents. Some recent evidence in the United States shows millennials beginning to earn higher incomes than previous generations at the same age, but it will take time to overcome the lingering disadvantage of their poorer start in economic life and their deficits in terms of lower assets and higher debt than earlier cohorts.

Millennials have not been a lucky cohort

cohort

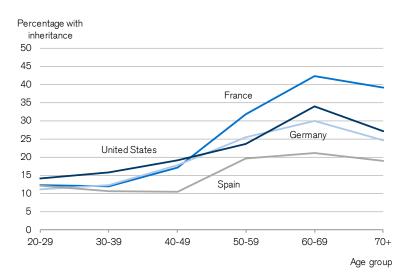
While millennials suffer from many disadvantages, parental financial help and inheritance may come to their aid. This is especially true in countries like the United States, Canada and Australia, which experienced a very pronounced baby boom from the late 1940s to the early 1960s. Roughly speaking, the millennials are the offspring of the baby boomers who, despite setbacks, have been a fortunate cohort, acquiring considerable wealth. The oldest baby boomers are now in their mid-70s, so bequests to millennials will grow in the coming years. Meanwhile, asset-rich baby boomers often provide wealth assistance to their millennial offspring - helping them to buy houses for example. This effect is likely to be stronger than usual because baby boomers did not have a high birth rate themselves, so that there are fewer children to support per parent than for most earlier cohorts.

While baby boomer parents may be a boon to the millennials, the bequest bounty may take some time to materialize. Even the oldest boomers can expect to live for another decade. Furthermore, the surviving spouse typically inherits most of the estate. This explains why a recent survey in the United Kingdom found that the mean age at which millennials expect to inherit is 61 – still a long way off. However, other international evidence suggests that about half of those who will inherit have done so by age 50 (**Figure 10**).

Millennials

Millennials (people who came of age after the turn of the century) have not been a lucky cohort. Not only were they hit at a vulnerable age by the global financial crisis, its associated recession and the poor job prospects that followed, but they have also been disadvantaged

Figure 10: Incidence of inheritance by age, selected OECD countries



The expected surge in inherited wealth has consequences for wealth distribution and wealth inequality, enhanced by the fact that there is high wealth inequality among the boomers, as among most cohorts by the time they arrive at late middle age or early old age. So the financial help and inheritances received by millennials will tend to be quite unequally distributed. This inequality is reinforced by uncertain lifetime - the children of parents who die early will inherit more than those who die late. While wealth still tends to grow in early retirement, people begin to decumulate after about ten years, and that effect accelerates in late life. A further factor is the trend toward smaller families, which means that inherited wealth is likely to be more concentrated among the beneficiaries. The impact will be most evident in China, where the repercussions of the one-child policy will combine with enormous new wealth in a society in which personal wealth was previously very limited. Thus, for developed countries and emerging economies alike, inheritances are expected to have more significant wealth distribution consequences in the future, probably adding to the inequality pressures from other sources.

This century, wealth growth in the

developing world has outpaced that in advanced nations

Conclusion

This century, wealth growth in the developing world has outpaced that in advanced nations, leading to narrowing wealth gaps and a decline in wealth inequality between countries. Since the global financial crisis, this trend has been countered by an increase in wealth inequality within many countries, especially at the top end. The net result for the world as a whole is a clear downward trend in global wealth inequality prior to the financial crisis, but a mixed picture afterward. Globally, the share of the top 1% has been rising since 2007 and is now close to the level in the year 2000 (45% versus 47%). But the share of the top 5% has shown little change, staying steady at 70%-71%, and inequality lower down the distribution has declined. The

share of the bottom 90% has risen from 11% in the year 2000 to 18% in mid-2019 according to our estimates.

The number of millionaires worldwide has more than tripled since the year 2000 as average wealth levels have risen and populations have expanded. Interestingly, our analysis indicates that the changing shape of wealth distribution accounts for relatively few of the new millionaires. Among the 25 countries with the most millionaires, the changing shape of wealth distribution has acted to reduce the rise in the number of millionaires in about a third of the cases. This reflects the fact that, although wealth inequality has been rising globally in the last decade, it did not over the last two decades as a whole.

The position of women and millennials is of special interest. Despite a long-run rise, the average wealth of women remains below that of men. However, two current trends are beginning to narrow the gap. Inheritance is a more important source of wealth for women than for men, so women should benefit disproportionately from the rise in the flow of inherited wealth that is occurring in high-income economies, and which has begun to occur in the transition countries. In addition, women's earnings are rising and more are becoming business leaders, so the self-made wealth of women is also rising.

As is well known, the millennials have had a difficult path. They suffered from poor job opportunities resulting from the financial crisis, global recession and slow recovery, but have also faced special problems on the wealth front. They have wisely invested more in education, but have had to do so while paying higher tuition fees than in the past, thus accumulating substantial student debt. And high house prices in many countries have thwarted aspirations for home ownership, which was a core feature of wealth accumulation by previous cohorts. One bright spot for some millennials is that their wealthy baby-boomer parents can provide help, e.g. with home purchases. Eventually, there is also the prospect of inheritance. However, these developments will likely raise wealth inequality since wealth inequality is high among boomer parents.

Notes on country groupings

Emerging Markets refer to China plus Argentina, Brazil, Chile, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan (Chinese Taipei), Thailand, Turkey and United Arab Emirates. To avoid double counting, countries in this list are excluded from the "Europe" and "High-income Asia-Pacific" categories.





Wealth outlook

Rodrigo Lluberas and Anthony Shorrocks

Global wealth is projected to rise by 27% over the next five years, reaching USD 459 trillion by 2024. Low- and middle-income countries are responsible for 38% of the growth, although they account for just 31% of current wealth. Growth by middle-income countries will be the primary driver of global trends. The number of millionaires will also grow markedly over the next five years to reach almost 63 million, while the number of UHNWIs will reach 234,000.

The global picture

Despite the turbulent years in the global economy during the 2008 financial crisis, and despite the problems that both emerging and developed economies have recently faced, global household wealth increased by USD 244 trillion between 2000 and 2019. Low- and middle-income countries have raised their share of 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? This section offers our assessment as to how total global wealth and its distribution across countries and regions will develop over the next five years. Particular attention is paid to the prospects of low- and middle-income countries - which we refer to collectively as "emerging economies" - compared to the likely future outcomes for high-income nations. We expect that emerging economies will recover from the recent belowpar performance and continue to catch up with the developed world.

Since the year 2000, global wealth in US dollars has increased at an annual rate of approximately 6.1%, but with two distinct phases. Prior to the global financial crisis, global wealth grew at an annual pace of 10%. During that period, wealth increased by 83% in high-income countries, but more than tripled in low- and middle-income

countries. Global wealth fell sharply by 8% in 2008. Growth then resumed, but at a lower average annual rate of just 5.1% due to the lackluster performance of high-income countries for which total wealth rose by 48% between 2008 and 2019. The total wealth of low- and middle-income countries more than doubled over the same period. We believe that total global wealth will continue to grow at a similar moderate pace, averaging 4.9% p.a. over the next five years. This amounts to an additional USD 98 trillion by 2024, equivalent to an extra USD 14,400 per adult.

Low- and middle-income countries set to increase their share of global wealth

Between 2000 and 2019, the wealth share of emerging economies has more than tripled from 9% to 29%. However, this rising share has slowed down over the last five years. We expect wealth generation in emerging economies to regain momentum and continue at a faster rate than developed markets over the next five years, causing the wealth share of emerging economies to reach 31% by 2024 (Figure 1). The annual wealth growth rate is projected to be 7.4% for low-income countries and 5.9% for middle-income countries, against 4.4% for high-income nations.

Among emerging economies, middle-income countries currently account for 23% of global wealth. We expect that they will contribute about a third of wealth growth in the next five years, raising their share of global wealth to 24% (**Figure 2**). China, the leading member of the middle-income group, will add a total of USD 23 trillion to the stock of global wealth by 2024, an increase of 36%. India will also grow its wealth very rapidly and add USD 4.4 trillion, an increase of 43% in just five years.

Leapfrogging

Given the projected good performance of middle- and, especially, low-income economies, we expect to see a big 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 wealth of the United States during the course of the 20th century, after 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.

Figure 1: Share of global wealth and contribution to wealth growth by country income group

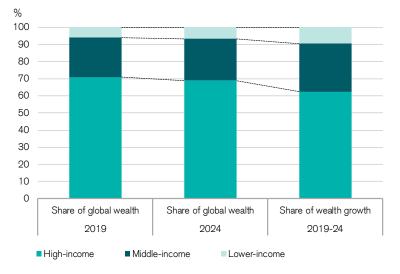


Figure 2: Wealth shares of middle- and lower-income countries

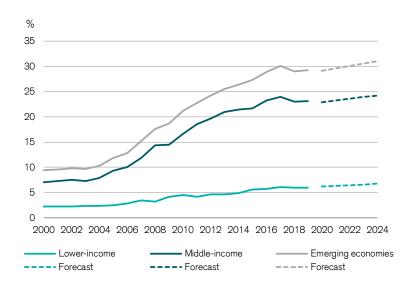
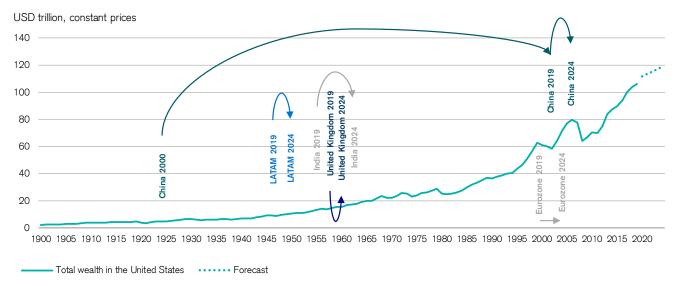


Figure 3: Total wealth in the United States, 1900–2024, and relative position of selected economies



Source Figures 1-3: Original estimates by authors

The Eurozone's total wealth of USD 60 trillion in 2019 is comparable to the total wealth of the United States at the end of the 1990s. Given the recent lackluster performance of the main European economies, we expect that in five years' time, the Eurozone's wealth will have grown the equivalent of four years in terms of the history of the United States. China's progress between 2000 and 2019 is striking, but is expected to slow down. Its increase in wealth between 2000 and 2019 equates to US wealth growth over the course of 32 years from 1970 onward. However, it is expected to increase the equivalent of just four US years between 2019 and 2024 to reach USD 78 trillion in real terms, similar to the United States' level in 2006.

Figure 4: Evolution of wealth by component

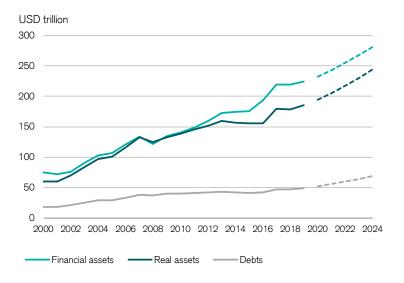
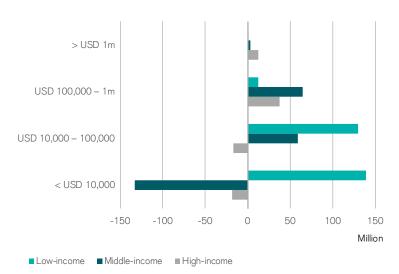


Figure 5: Number of extra adults by wealth segment and country source



Source Figures 4-5: Original estimates by authors

India is also noteworthy. Total wealth in India increased four-fold between 2000 and 2019, reaching USD 12.6 trillion in 2019. Despite this impressive 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 70 years ago. We expect it to reach USD 16 trillion in real terms by 2024, similar to the level in the United States at the beginning of the 1960s.

The contrasting prospects of India and the United Kingdom are interesting. Total wealth in the United Kingdom currently equates to that of the United States in 1957. It is expected to reach USD 15 trillion in 2024, an improvement of only two "US years," reflecting the likely effect of Brexit on the economy. So, within the next five years, we expect total household wealth in India to overtake that of the United Kingdom. We also expect modest wealth growth in Latin America following the economic slowdown in Brazil last year and this year's economic crisis in Argentina. Over the next five years, total wealth in Latin America is projected to approach USD 10.9 trillion in real terms, representing a gain equivalent to two "US years" growth starting in 1948.

The components of wealth

Over the course of this century, financial wealth has grown at a slower rate than non-financial wealth. Financial assets suffered most during the financial crisis. However, they recovered faster afterwards and have outpaced non-financial assets since 2009. Our forecasts indicate that non-financial assets will grow faster than financial assets over the next five years - by about 1% more each year. After a period of stability between 2007 and 2017, household debt will likely outpace both financial and non-financial wealth in the coming years. Household debt is expected to increase 42% by 2024 and reach 13% of gross assets, a similar level to that observed at the beginning of the century.

Wealth distribution in the 21st century

The lowest wealth band, covering those with net worth below USD 10,000, will likely shed around 13 million adults over the next five years. Population growth will add 139 million adults from low-income countries, but this is offset by a net decline from middle-income countries (133 million) and high-income countries (19 million) as shown in **Figure 5**. The global middle class – adults with net worth between USD 10,000 and USD 100,000 – is expected to expand by about 172 million people, pushing total membership above 1.8 billion

by 2024. This represents growth of about 10%, some from middle-income countries, but most (130 million new members) from low-income countries.

The upper-middle segment, consisting of those with wealth between USD 100,000 and USD 1 million, will grow by 114 million adults, according to our estimates. Of these, 65 million will come from middle-income countries, 37 million from high-income countries, and nearly 12 million from low-income countries.

Trends in millionaires and UHNWIs

Catch-up by emerging economies is also evident in the increasing proportion of members in the top segment of global wealth distribution. According to our estimates, the number of global millionaires could exceed 62 million in 2024, a rise of almost 16 million from today, and 49 million from the beginning of the century (see **Table 1**). While millionaire numbers in lower-income countries are still far below the levels in the United States or Europe, they are expected to increase rapidly in the next five years.

44

Catch-up by emerging economies is also evident in the increasing proportion of members in the top segment of global wealth distribution

The United States tops the world league table, far ahead of China in second place. But the relative positions are likely to be eroded: we project a 23% rise in the number of millionaires in the United States compared to a 55% increase (to 6.9 million) for China, which will surely retain second place in the millionaires' world ranking, above Japan, the United Kingdom and Germany. Millionaires in India could number 1.2 million in 2024, representing an increase of 56% over the next five years. Latin America will be affected by the recent economic turbulence and our resulting lower wealth growth projection for the region.

The number of millionaires is expected to rise by 27%, held back by the outlook for Brazil. Latin America will likely underperform Africa and Asia-Pacific, producing the second-lowest growth rate among regions (although still ahead of North America).

Among developed economies, millionaire numbers in Germany, France, Italy and Sweden are expected to rise roughly in line with the global average. Canada and Spain should perform a little better, and Japan and Portugal much better. However, growth of millionaire numbers in the United Kingdom after Brexit is unlikely to match the rest of the world and we think this will also be the case with Australia and Norway.

Table 1: Number of millionaires in 2019 and 2024, regions and selected countries

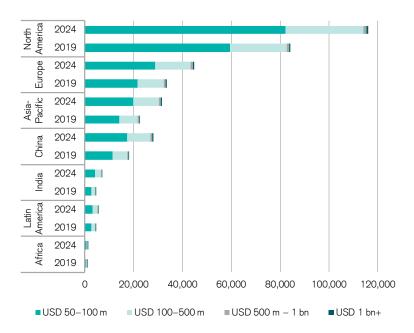
Number (thousand)

	Number (thousand)		Change
	2019	2024	(%)
United States	18,614	22,930	23
China	4,447	6,874	55
Japan	3,025	5,161	71
United Kingdom	2,460	3,179	29
Germany	2,187	3,018	38
France	2,071	2,826	36
Italy	1,496	1,992	33
Canada	1,322	1,874	42
Australia	1,180	1,527	29
Spain	979	1,394	42
Netherlands	832	1,092	31
Switzerland	810	1,032	27
Korea	741	965	30
Taiwan (Chinese Taipei)	528	760	44
Hong Kong SAR	516	700	36
Sweden	374	519	39
Austria	313	425	36
Belgium	279	377	35
Brazil	259	319	23
Poland	116	202	74
Norway	163	184	13
Portugal	117	174	49
Israel	131	173	32
Africa	171	234	37
Asia-Pacific	7,505	11,054	47
China	4,447	6,874	55
Europe	13,290	17,892	35
India	759	1,186	56
Latin America	673	855	27
North America	19,946	24,814	24
World	46,792	62,908	34

Source: Original estimates by authors

The number of ultra-high net worth individuals (UHNWIs) with wealth above USD 50 million, is expected to reach 234,000 by 2024, a rise of 66,000 (Figure 6). About half of all UHNWIs currently reside in North America, while countries in the Asia-Pacific region (including China and India) are home to more than 45,000. This is already considerably more than the roughly 33,000 living in Europe, and this difference in favor of Asia-Pacific will increase further. By 2024, the Asia-Pacific region will host another 21,300 UHNWIs, reaching a total of nearly 66,000, of whom 42% will be from China. While Latin America accounts for 9% of global adults, only 2.6% of global UHNWIs reside in the region. Given the projected modest performance of Brazil and Argentina, we expect this number to decline slightly as the region will likely add only 1,100 UHNWIs in the next five years. Assuming no change in global wealth inequality, the global economy will likely add another 670 billionaires during the next five years, increasing the total number to nearly 2,450.

Figure 6: UHNWIs by region: 2019 and 2024



Source: Original estimates by authors

Methodology

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

Aggregate financial wealth is estimated using a combination of GDP and equity market capitalization growth. We forecast 5-year market value using a dividend discount model at the country level. To compute the discount rate, we assume normalization in market conditions (risk appetite and volatility). We estimate dividends by using analyst consensus expectations and trend GDP growth. Then we estimate the 5-year forward target price and finally compute the corresponding change in market value (this typically grows at a higher rate than the price index). Estimates are obtained for 42 countries in local currency and these are 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, using IMF projections of these variables. Again, forecasts are in local currency, converted into US dollars using IMF FX projections. For countries lacking projections, we use GDP per capita growth to forecast net worth and assume that the percentage in financial/non-financial/debts is the same as for 2019.

"Lower-income" countries refer to those classified "Low income" or "Lower middle income" by the World Bank.



Wealth of nations

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

Quality of wealth data improving

The quality of wealth data is good in the highincome countries that are home to most of the world's wealth. It is also improving elsewhere. Our assessment of the reliability of the source material is reported for each country discussed. 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 is 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 2000–19. Since exchange rate changes can alter the apparent trend, an alternative series is provided for each country using a 5-year moving average USD exchange rate. A typical pattern is a mild decline in average wealth between 2000 and 2002, an increase until 2006 or 2007, then a drop in 2008 with a subsequent recovery. By mid-2019, wealth was invariably higher than in 2000 and in most cases higher than in 2007.

From mid-2018 to mid-2019, the value of a number of important currencies, such as the euro, fell in terms of US dollars. The euro fell

3%, the British pound went down 4%, and the renminbi fell 3%. A few key currencies went in the opposite direction. For example, against the US dollar, the Swiss franc rose 2%, the yen went up 3%, and the Canadian dollar appreciated 1%. Although currency movements were mixed, the top chart in this section shows wealth increasing in most countries since mid-2018. However, wealth per adult fell in USD terms in Australia, Chile, Korea and the United Kingdom, 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 54% of total gross assets and debt equals 12% 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 in Australia and Germany among the wealthier countries.

The last chart shows the distribution of wealth. There are some notable comparisons. For example, 78% of adults in India have net worth less than USD 10,000, whereas this percentage is only 25% 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

Growth amid worries

The United States economy continued to grow in 2018–19, leading to an 11th year of rising wealth. Important drivers have been low interest rates and a large tax reduction. Headwinds have gathered, however, in the form of a lengthening trade war with China, tension in the Middle East, stock-market volatility, and concern about mounting government debt.

Average wealth was USD 211,000 in 2000, and rose fairly steadily until 2006, before falling during the global financial crisis. Wealth per adult has now fully recovered, and is 45% above the 2006 level. The rising tensions and uncertainties that have been experienced in the United States over the last few years may be reflected in the recent deceleration of wealth growth. Wealth per adult rose just 3% in the 12 months to mid-2019, compared to an average annual increase of 5% in the previous five years.

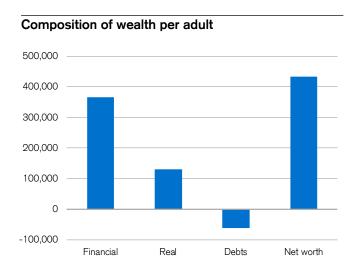
The United States has a high proportion of assets (74%) reported as financial, partly because it includes business equity wholly as a financial asset. Adopting the more usual procedure of treating unincorporated enterprises as part of the household sector, the share would be around 65%, which is still relatively high. This reflects the fact that, compared with other OECD countries, the United States tends to have more economic activity in the private sector relative to the public sector. It also has more outward foreign investment. Debts equal 13% of gross household assets, which is average by international standards.

The United States has a high fraction of adults with wealth above USD 100,000 compared to the world as a whole. The percentage of people with wealth at higher levels is even more striking. The United States has the most members of the top 1% global wealth group, and currently accounts for 40% 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.

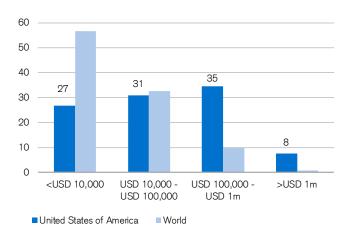
Country summary 2019

328	million
245	million
85,319	USD per adult
432,365	USD per adult
65,904	USD per adult
106.0	trillion USD
18,614	thousand
98,855	thousand
19,816	thousand
85.2	Gini index
ជជជជជ	good
	245 85,319 432,365 65,904 106.0 18,614 98,855 19,816 85.2

Wealth per adult over time 500,000 450,000 400,000 350,000 250,000 200,000 100,000 50,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult Wealth per adult with smoothed exchange rates



Wealth distribution relative to world (in %)



China

Stalled growth

China has had a difficult year, having been slapped with tariffs by the United States, and suffering from a slowdown in economic growth in a number of its key export markets. This was reflected in a second year of slow wealth growth that is very atypical for this burgeoning country.

This century, total household wealth in China has risen from USD 3.7 trillion to USD 63.8 trillion, which is a multiple of more than 17. This is more than three times the rate of most other nations. The global financial crisis caused a small setback, but wealth growth soon resumed and, unlike most other economies, China came close to matching its pre-crisis pace, at least until 2014. Trade conditions and debt levels are causing concern, 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 strong property market, the proportion of household assets in non-financial form rose from 43% in 2015 to 53% in 2019. Real assets comprised USD 29,760 per adult in mid-2018. Debt averaged just USD 4,410, equivalent to 7% of gross assets. While concern has been expressed about growing household debt in China, this debt ratio remains low by international standards.

Although significant gaps are 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 risen considerably since the year 2000. China now has 4.4 million millionaires and achieved another landmark this year with 100 million members of the global top 10%, overtaking for the first time the 99 million members in the United States.

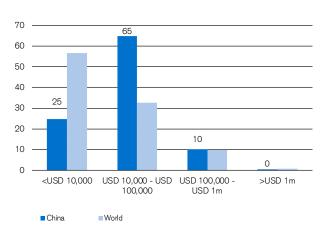
Country summary 2019

Population	1,418	million
Adult population	1,090	million
GDP	12,663	USD per adult
Mean wealth	58,544	USD per adult
Median wealth	20,942	USD per adult
Total wealth	63.8	trillion USD
US dollar millionaires	4,447	thousand
Top 10% of global wealth holders	99,908	thousand
Top 1% of global wealth holders	4,878	thousand
Wealth inequality	70.2	Gini index
Quality of wealth data	ል ልልል	good

Wealth per adult over time 70,000 60,000 40,000 30,000 20,000 10,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult Wealth per adult with smoothed exchange rates

Composition of wealth per adult 70,000 60,000 50,000 40,000 20,000 10,000 Financial Real Debts Net worth

Wealth distribution relative to world (in %)



India

Still growing

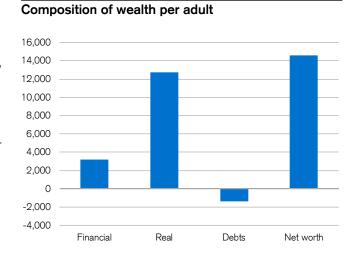
India's wealth has trended upward strongly since the turn of the century, although there was a setback in 2008 due to the global financial crisis and there have been bumps due to currency fluctuations. Annual growth of wealth per adult averaged 11% over 2000–19. Prior to 2008, wealth rose strongly, from USD 2,127 in 2000 to USD 6,378 in 2007. After falling 29% in 2008, it rebounded and grew at an average rate of 12% up to 2019. Wealth per adult is estimated at USD 14,569 in mid-2019 after a year of moderate growth.

Personal wealth in India is dominated by property and other real assets, which make up the bulk of household assets. Personal debts are estimated to be only USD 1,345, or just 8% 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 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 78% of the adult population has wealth below USD 10,000.

At the other extreme, a small fraction of the population (1.8% of adults) has a net worth over USD 100,000. However, owing to India's large population, this translates into 15.6 million people. The country has 827,000 adults in the top 1% of global wealth holders, which is a 1.6% share. By our estimates 4,460 adults have wealth over USD 50 million and 1,790 have more than USD 100 million.

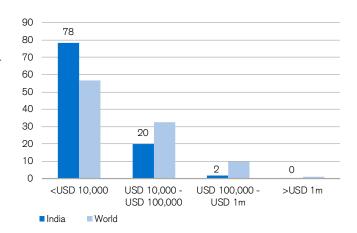
Wealth per adult over time 16,000 14,000 12,000 10,000 8,000 4,000 2,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult Wealth per adult with smoothed exchange rates



Country summary 2019

Population	1,361	million
Adult population	866	million
GDP	3,282	USD per adult
Mean wealth	14,569	USD per adult
Median wealth	3,042	USD per adult
Total wealth	12.6	trillion USD
US dollar millionaires	759	thousand
Top 10% of global wealth holders	13,854	thousand
Top 1% of global wealth holders	827	thousand
Wealth inequality	83.2	Gini index
Quality of wealth data	**	fair

Wealth distribution relative to world (in %)



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. As with many countries, the pre-financial crisis and post-financial crisis periods are quite distinct. A notable factor for Russia is the substantial currency revaluation in 2014. Before 2014, the ruble had ended each year in a fairly narrow range of around 30 rubles to the US dollar. But, in 2014, the currency fell sharply, ending the year at 60 rubles to the dollar. At mid-2019 it was 63 rubles to the dollar. Hence the ruble was fairly stable from 2000 to 2013 and again from 2015 to 2019. This pattern is reflected in wealth per adult, which grew at an average annual rate of 22% before 2014 and at 17% after 2014, but fell 44% from 2013 to 2015.

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 estimate the value of non-financial assets using the same procedures applied elsewhere. Our results are similar to those recently obtained by another group of academic researchers. The estimated value of financial assets per adult for mid-2019 is USD 10,570, while non-financial assets average USD 19,530. Personal debt grew rapidly in the period 2000–07, and more slowly after that. We estimate that it now equals 9% of gross assets.

According to our estimates, the top decile of wealth holders owns 83% of all household wealth in Russia. This is a high level, above the figure of 76% for the United States, which has one of the most concentrated distributions of wealth among advanced nations. Interestingly, it is also higher than the top decile share of 60% in China. The high concentration of wealth is reflected in the fact that, despite its modest average wealth, we estimate that 110 Russian adults are billionaires.

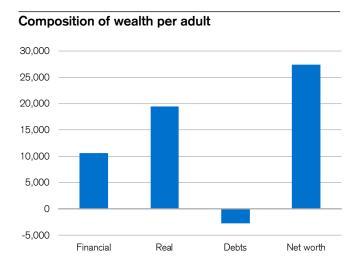
Country summary 2019

Population	144	million
Adult population	111	million
GDP	14,536	USD per adult
Mean wealth	27,381	USD per adult
Median wealth	3,683	USD per adult
Total wealth	3.1	trillion USD
US dollar millionaires	246	thousand
Top 10% of global wealth holders	2,903	thousand
Top 1% of global wealth holders	264	thousand
Wealth inequality	87.9	Gini index
Quality of wealth data	ជជជជ	satisfactory

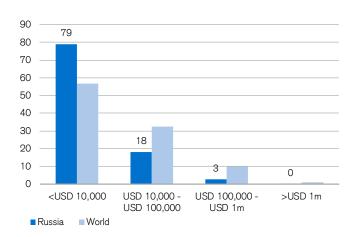
Wealth per adult over time 30,000 25,000 15,000 10,000 5,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

Wealth per adult with smoothed exchange rates

Wealth per adult -



Wealth distribution relative to world (in %)



Germany

Holding pattern

In 2000–13, wealth per adult in Germany rose at an average annual rate of 6% in USD terms. But there was then a sharp fall until 2016. Although that was followed by a rebound in 2017, average wealth has been flat since then. The recent patterns are largely explained by the 30% decline of the euro relative to the US dollar from 2013 to 2016 and its subsequent increase of about 10%. Expressed in EUR, year-on-year wealth growth in Germany has been relatively slow, but remarkably steady. Germany now ranks fourth in the world according to total wealth, behind Japan and ahead of the UK. However, in terms of wealth per adult, it is in 19th place alongside Italy and Taiwan (Chinese Taipei).

Real estate is a large component of household wealth in Germany, with the result that non-financial assets make up 58% of gross assets. They average USD 143,200 per adult. Personal debts, at USD 30,770, equal 12% of gross assets, which is about average for high-income countries.

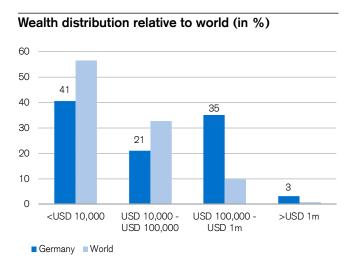
Wealth inequality is higher in Germany than in other major West European nations. Germany's wealth Gini coefficient is 82%, for example, compared to 67% in Italy and 70% in France. We estimate the share of the top 1% of adults in total wealth to be 30%, which is also high compared with Italy and France, where it is 22% in both cases. As a further comparison, the United Kingdom has a Gini coefficient of 75% and its share of the top 1% is 24%. The proportion of adults in Germany with wealth less than USD 10,000 is 41%, while at the top end, the proportion with assets over USD 100,000 is almost four times the global figure. Overall, Germany hosts 2.2 million millionaires, which equates to 16% of the total number from Europe.

Country summary 2019

Population	82	million
Adult population	68	million
GDP	58,848	USD per adult
Mean wealth	216,654	USD per adult
Median wealth	35,313	USD per adult
Total wealth	14.7	trillion USD
US dollar millionaires	2,187	thousand
Top 10% of global wealth holders	25,037	thousand
Top 1% of global wealth holders	2,409	thousand
Wealth inequality	81.6	Gini index
Quality of wealth data	***	good

Wealth per adult over time 250,000 200,000 150,000 50,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult — Wealth per adult with smoothed exchange rates

Composition of wealth per adult 250,000 200,000 150,000 50,000 Financial Real Debts Net worth



United Kingdom

On the brink?

The United Kingdom had a difficult year immediately after the vote to leave the European Union in the 2016 Brexit referendum. Both the exchange rate and the stock market fell sharply. Nevertheless, over 2017 and 2018, wealth per adult rose 13% in USD terms and 21% in GBP terms. The stock market recovered and UK equity market capitalization rose 6%. However, the outlook is now uncertain, with future prospects depending very much on what happens in terms of Brexit. Our estimates indicate a rise of 7.7% in market cap and of 2.2% in wealth per adult from the end of 2018 to mid-2019. However, both the stock market and exchange rate showed increased volatility over the summer, reflecting the heightening of Brexit worries.

In the early years of the century, UK wealth grew rapidly. The boom ended with the global financial crisis. By 2006, the wealth/GDP ratio had risen to 4.9, one of the highest levels ever recorded at that time. The subsequent fall in asset prices led to a 13% drop in average wealth using smoothed exchange rates, but GBP depreciation caused wealth per adult in US dollars to fall 35%. Average wealth in GBP, however, has risen every year since 2008 and is now 41% above its 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, doubling in value from 1987 to 2008 to reach 148%. The debt-to-income ratio has since subsided, reaching 132% at the end of the first quarter of 2019.

The pattern of wealth distribution in the United Kingdom is fairly typical for a developed economy as reflected in a Gini coefficient of 75% and a 24% wealth share of the top 1%. Half of the adult population has wealth exceeding USD 100,000, and there are 2.5 million USD millionaires, representing 5% of all millionaires globally.

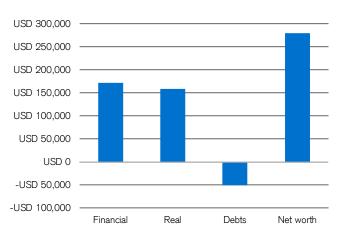
Country summary 2019

67	million
51	million
55,243	USD per adult
280,049	USD per adult
97,452	USD per adult
14.3	trillion USD
2,460	thousand
24,413	thousand
2,733	thousand
74.6	Gini index
***	good
	51 55,243 280,049 97,452 14.3 2,460 24,413 2,733 74.6

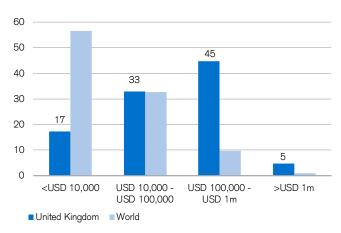
Wealth per adult over time USD 350,000 USD 300,000 USD 250,000 USD 200,000 USD 150,000 USD 100,000 USD 50,000 USD 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult -

Wealth per adult with smoothed exchange rates

Composition of wealth per adult



Wealth distribution relative to world (in %)



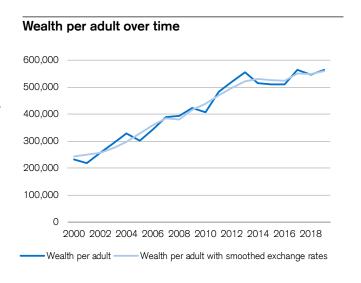
Switzerland

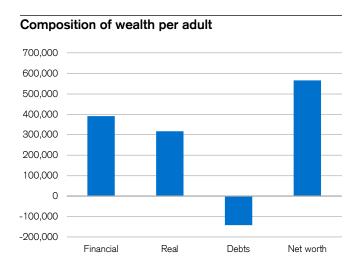
View from the top

Since the year 2000, wealth per adult in Switzerland has risen by 144% to USD 564,653. The country heads the global ranking this year, as it has in every other year, disregarding small countries like Iceland, for which the data is less reliable. Much of the rise since 2000 has been due to appreciation of the Swiss franc against the US dollar, especially between 2001 and 2013. In Swiss francs, household wealth rose 45% from 2000 to 2019, representing an average annual rate of 2.0%.

Financial assets make up 55% of gross wealth in Switzerland – a little higher than their share in the United Kingdom, but less than in Japan or the United States. Debts average USD 142,620 per adult, which is one of the highest levels in the world, and represent 20% of total assets. The debt ratio has risen slightly from a low of 19% in 2014.

Among the ten countries with a long series of wealth distribution data, Switzerland alone has seen no appreciable reduction in wealth inequality over the past century. High average wealth and relatively high wealth inequality result in a large proportion of the Swiss population being in the top levels 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 adult population. About two-thirds of Swiss adults have assets above USD 100,000, and 12% are USD millionaires. An estimated 2,200 individuals are in the UHNW group, with wealth over USD 50 million and 770 have net worth exceeding USD 100 million.

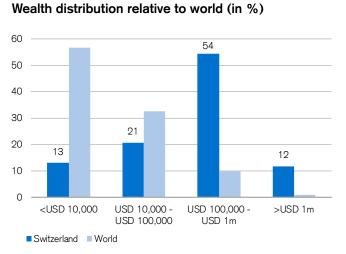




Country summary 2019 Population 9 million Adult population million **GDP** 102,782 USD per adult USD per adult Mean wealth 564,653 USD per adult Median wealth 227,891 trillion USD Total wealth US dollar millionaires 810 thousand Top 10% of global wealth holders 4,443 thousand Top 1% of global wealth holders 893 thousand Wealth inequality Gini index 70.5

ជជជជជ

good



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Quality of wealth data

Singapore

Renewed growth

In Singapore, wealth per adult measured in US dollars grew strongly during 2000–12. After that it fell, mostly due to currency depreciation, but has been growing again since 2015. Average wealth is high at USD 297,873 per adult in mid-2019, compared to USD 114,720 in 2000. The rise was mostly caused by high savings, asset price increases, and an overall 28% increase in the exchange rate from 2000 to 2019. Singapore is eleventh in the world in terms of household wealth per adult. Within Asia, it is second only to Hong Kong SAR. Since 2000, its wealth per adult has grown at an average annual rate of 5.3%, more than double the average growth rate in the Asia-Pacific region and exceeding the 4.5% average growth rate of world wealth per adult.

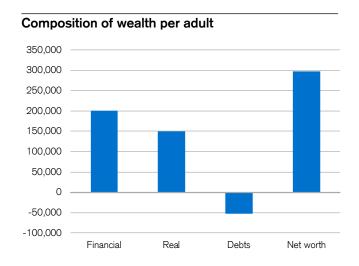
Financial assets make up 57% of gross household wealth in Singapore, which is a ratio similar to that of Switzerland, for example. The average debt of USD 52,340 is moderate for a high-wealth country, equaling 15% of total assets. Singapore publishes household sector balance sheet data, which means that its wealth information is more reliable than that of most of its neighbors in Southeast Asia.

Wealth inequality in Singapore is not extreme compared with other countries, as indicated by its wealth Gini coefficient of 76% and share of the top 1% of wealth holders of 32%. Just 14% of its people have wealth below USD 10,000, compared with 58% globally. At the other end of the scale, the fraction with wealth above USD 100,000 is almost five times the world average. Reflecting its very high average wealth, 5% of its adults, or 226,000 individuals, are in the top 1% of global wealth holders.

Wealth inequality

Quality of wealth data

Wealth per adult over time 350,000 300,000 250,000 150,000 100,000 50,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult Wealth per adult with smoothed exchange rates



Wealth distribution relative to world (in %)

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks,

Global wealth databook 2019

60 50 45 37 Country summary 2019 40 30 6 Population million Adult population 5 million 20 GDP 79,123 USD per adult 10 297,873 USD per adult Mean wealth 4 Median wealth 96,967 USD per adult Total wealth 1.4 trillion USD USD 10,000 -USD 100,000 -<USD 10.000 >USD 1m US dollar millionaires USD 100,000 USD 1_m 207 thousand ■ Singapore ■ World Top 10% of global wealth holders 2,179 thousand Top 1% of global wealth holders 226 thousand

Gini index

good

75.7

Japan

Keeping calm

Japanese total wealth, and wealth per adult, rose 4.0% over the 12 months to mid-2019. The yen rose 2.7% against the US dollar at the same time, so that wealth rose only 1.3% in domestic currency. However, this extends the previous 4-year period of growth, which followed several years of decline. The trend may continue, but some headwinds are being felt by the Japanese economy due to international trade tensions and the slowing of growth in some of Japan's key export markets.

In the first decade of this century, Japan held second place in the global ranking according to total wealth, behind the United States. However, due 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 24% higher today. The slow growth is due to mixed performance of the stock market and real estate, low interest rates, and a lower saving rate than in earlier years.

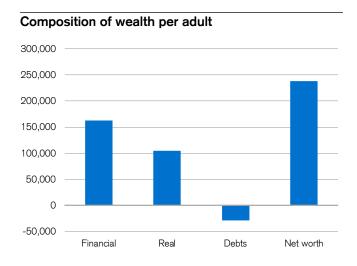
While financial asset prices have not risen much in Japan, neither have house prices. As a consequence, the relative importance of financial versus non-financial assets has changed little. Financial assets remain at the relatively high level of 61% of gross household assets. Debts have been declining, and are modest by international standards, at 11% of total assets.

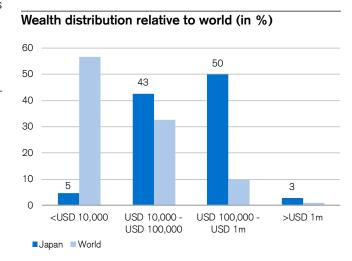
Japan has a more equal wealth distribution than any other major country, as reflected in a Gini coefficient of 63%. Together with its still-high average wealth, this relative equality means that few adults – just 4.6% – have assets below USD 10,000. The proportion of the population with wealth above USD 100,000 is five times the global average. Owing to its population size and wealth, Japan has 7% of the world's top 1% of wealth holders.

Country summary 2019

127	million
105	million
48,332	USD per adult
238,104	USD per adult
110,408	USD per adult
25.0	trillion USD
3,025	thousand
52,781	thousand
3,391	thousand
62.6	Gini index
ል	good
	105 48,332 238,104 110,408 25.0 3,025 52,781 3,391 62.6

Wealth per adult over time 300,000 250,000 150,000 100,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult — Wealth per adult with smoothed exchange rates





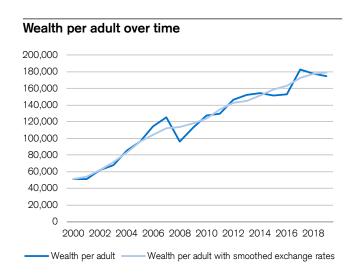
South Korea

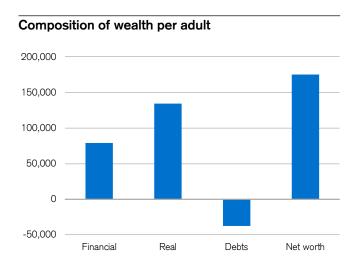
Carrying on

South Korea's wealth per adult, at USD 175,020, 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, using smoothed exchange rates. Over the entire 2000–19 period, wealth per adult grew at an average annual rate of 6.9%, which is one and a half times 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. Since 2017, there has been a small decline in wealth per adult in USD terms, but that is largely the result of currency depreciation. In Korean won, wealth growth has continued at an average rate of 2.2% per year.

South Korea has a high saving rate and well-developed financial institutions, so it is surprising to find that household wealth is somewhat skewed toward non-financial assets. The latter now make up 63% 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 61% and the share of the top 1% of wealth holders is 30%. The high wealth of the country results in 33% of adults having wealth over USD 100,000, which is more than triple the worldwide average of 10%. There are 741,000 USD millionaires and 806,000 South Koreans in the global top 1%.

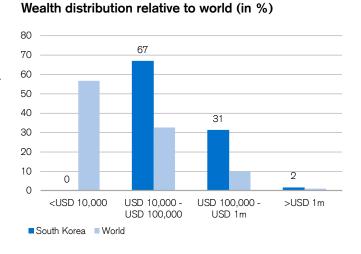




Country summary 2019 Population 51 million Adult population 42 million GDP 39,259 USD per adult 175,015 USD per adult Mean wealth Median wealth 72,198 USD per adult Total wealth 7.3 trillion USD US dollar millionaires 741 thousand Top 10% of global wealth holders 12,308 thousand Top 1% of global wealth holders 806 thousand Wealth inequality Gini index 60.6

good

Quality of wealth data



Indonesia

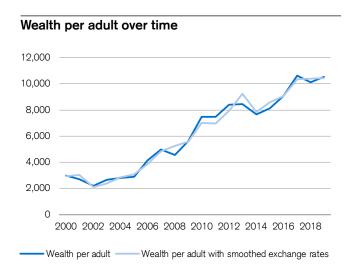
Renewed growth

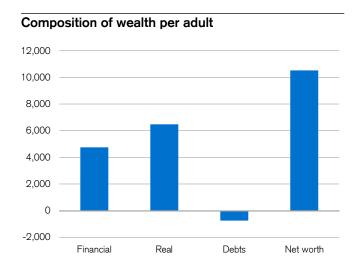
Wealth per adult in Indonesia has risen by a factor of four since the year 2000, and currently stands at USD 10,545. It approximately doubled from 2000 to 2007, just before the global financial crisis. It has now doubled again since the crisis. Mean wealth in mid-2019 is currently similar to that in India, the Philippines or Vietnam, but significantly behind Malaysia and Thailand.

Personal wealth in Indonesia is less dominated by non-financial assets than formerly. Financial assets now stand at 42% of gross household assets, a level first reached in 2013 after a steep climb from 31% in 2010. Personal debts are estimated to be only USD 730 per adult, or just 7% of total assets, which is low by international standards.

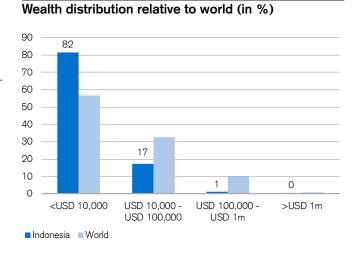
In Indonesia, 82% of the adult population has wealth less than USD 10,000 – well above the global figure of 58%. And representation at higher wealth levels is much less than for the world as a whole. Only 1.1% of adults have wealth above USD 100,000, compared with 10.6% globally. Just 115,000 Indonesians are in the top 1% of global wealth holders, which is a low number for a country with 173 million adults.

Despite the relatively low number of adults at higher wealth levels in Indonesia, wealth inequality is greater than average. Thus the country combines low average wealth with high concentration. The Gini coefficient for wealth is 83% and the share of the top 1% in the country's total household wealth is 45% – both high figures by international standards.





Country summary 2019 Population 268 million Adult population 173 million **GDP** 6,136 USD per adult Mean wealth 10,545 USD per adult USD per adult Median wealth 1.977 trillion USD Total wealth 1.8 US dollar millionaires 106 thousand Top 10% of global wealth holders thousand 1.675 Top 1% of global wealth holders 115 thousand Wealth inequality Gini index 83.3 Quality of wealth data fair \$ \$ \$



South Africa

Little movement

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 on a per adult basis. The country exceeded its 2007 wealth level for a single year in 2010, but mean wealth has declined by USD 5,000 since then, leaving it with wealth per adult of USD 21,380 in mid-2019. This is largely due to currency depreciation, as the rand has lost half its value since 2010. In local currency units, wealth per adult rose 55.9% from 2010 to 2019, although, after correcting for inflation, there was a fall of 0.1%, i.e. virtually no change.

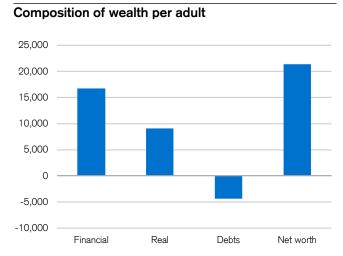
Unusually among emerging market countries, South Africa has complete official household balance sheets. This means that our estimates of the level and composition of household wealth are more reliable than for most other emerging markets. Personal wealth is largely comprised of financial assets, which contribute 65% to the household portfolio. This reflects a vigorous stock market and strong life insurance and pension industries. Due in part to relatively low real estate prices, average real assets of USD 9,090 are only around double the level of average debt (USD 4,400).

In South Africa, 65% of adults have wealth below USD 10,000, which is higher than the 58% rate for the world as a whole. However, the country also has fewer individuals with wealth above USD 100,000 - 3.2% versus 10.6%. Nevertheless, we estimate that 51,000 South Africans are members of the top 1% of global wealth holders and that 46,000 are USD millionaires. The overall level of wealth inequality is high. South Africa has a wealth Gini coefficient of 81% and the share of the top 1% in total household wealth is 35%.

25,000 20,000 15,000 10,000 5,000 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Wealth per adult -Wealth per adult with smoothed exchange rates

Wealth per adult over time

30,000



70 65 60 50 Country summary 2019 40 32 30 20 10 3 0 USD 100.000 -<USD 10.000 USD 10.000 ->USD 1m USD 100,000 USD 1_m ■ South Africa ■ World

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Wealth distribution relative to world (in %)

Population	58	million
Adult population	36	million
GDP	10,262	USD per adult
Mean wealth	21,380	USD per adult
Median wealth	6,476	USD per adult
Total wealth	8.0	trillion USD
US dollar millionaires	46	thousand
Top 10% of global wealth holders	1,030	thousand
Top 1% of global wealth holders	51	thousand
Wealth inequality	80.6	Gini index
Quality of wealth data	ជជជជជ	good

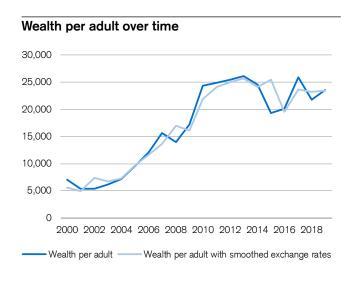
Brazil

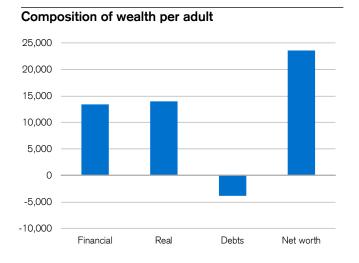
South American giant

Brazil has faced serious difficulties in recent years and has now taken bold policy turns aimed at raising growth. It is too soon to say what the impact on wealth will be. Earlier this century, average household wealth more than tripled between 2000 and 2011, rising from USD 7,050 per adult to USD 24,920. But wealth per adult in US dollars has been on a roller-coaster since the financial crisis, in large partly because of exchange rate fluctuations. Since 2010, for example, average wealth has fallen by 3% in US dollars, but has risen by 33% in terms of real domestic currency units.

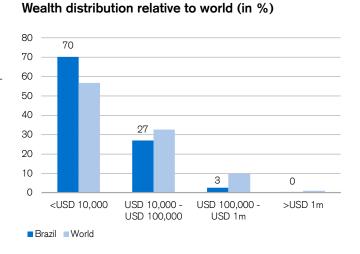
Financial assets now comprise 49% of gross household wealth, up from 42% in 2010, according to our estimates. Traditionally, many Brazilians have had a special attachment to real assets, particularly in the form of land, as a hedge against inflation. This preference appears to be weakening, at least outside the Amazon. Household liabilities are 14% of gross assets, down from the post-2009 peak of 17% in 2015.

The proportion of Brazilians with wealth less than USD 10,000 is higher than we see in the world as a whole – 70% versus 58%. This is due to the country's high level of inequality. The wealth Gini coefficient is 85% and we estimate that the top 1% of Brazilians own 49% of the country's household wealth. The relatively high level of inequality partly reflects high income inequality, which is a long-running feature in Brazil. 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 2019 Population 212 million Adult population 150 million **GDP** 12,750 USD per adult Mean wealth 23,550 USD per adult Median wealth 5,031 USD per adult trillion USD Total wealth 3.5 US dollar millionaires 259 thousand Top 10% of global wealth holders 3,636 thousand Top 1% of global wealth holders 280 thousand Wealth inequality Gini index 84.9 Quality of wealth data ☆☆ poor



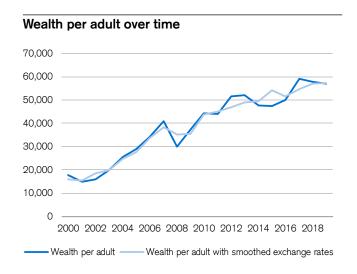
Chile

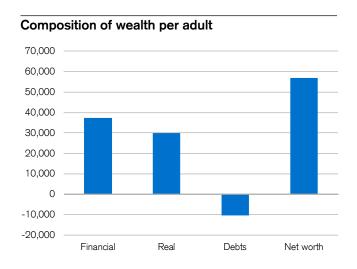
Latin American wealth leader

Chile has the highest wealth per adult in Latin America. The comparison with its neighbors is striking. Chile's GDP per adult is only one-third higher than Argentina's and 70% greater than Brazil's, but its average wealth is over five times greater than Argentina's and more than twice Brazil's. Since the turn of the century, wealth per capita has risen at an annual average rate of 6.5% in US dollars. In the last two years this growth has turned slightly negative in US dollars, but wealth per adult has continued to rise in real domestic currency terms.

Chilean household assets are slightly tipped toward the financial form, with financial assets making up 55% of total household assets overall. 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 64% found in the United States and contributes to substantial holdings of real estate. At 15% of gross assets, household liabilities are moderate by international standards.

Chile's wealth per adult, at USD 56,972, is below the world average of USD 70,400, but 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 (39% versus 58%), but also slightly fewer above USD 100,000 (9% versus 11%). Chile's wealth Gini coefficient is 80%, which is somewhat high by international standards. By our estimates, Chile has 64,000 USD millionaires and 70,000 adults in the top 1% of global wealth holders.





Wealth distribution relative to world (in %) 52 50 39 40 30 20 10 0 <USD 10,000 USD 10,000 -USD 100,000 ->USD 1m USD 100.000 USD 1_m ■Chile ■World

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Global wealth databook 2019

Country summary 2019

Population	18	million
Adult population	13	million
GDP	22,271	USD per adult
Mean wealth	56,972	USD per adult
Median wealth	19,231	USD per adult
Total wealth	0.8	trillion USD
US dollar millionaires	64	thousand
Top 10% of global wealth holders	1,075	thousand
Top 1% of global wealth holders	70	thousand
Wealth inequality	79.8	Gini index
Quality of wealth data	ជជជជ	satisfactory

Canada

Paused growth

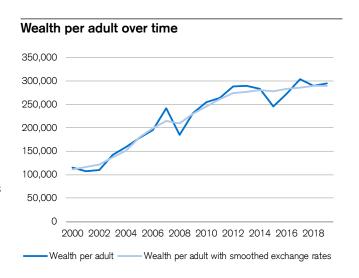
Wealth per adult in Canada grew at an average rate of 5.2% over 2000–19 in US dollars, which exceeds the 4.0% rate seen in the United States. The difference is mostly due to the appreciation of the Canadian dollar over this period, but also reflects rising house prices in Canada that pushed the growth rate of wealth per adult to an average of 6.1% per year in CAD terms from 2009 to 2016. The buoyancy of the housing market was due to the lack of a meltdown in that market in Canada during the global financial crisis and low interest rates. Slower wealth growth since 2016 reflects a lower rate of increase of house prices associated with a tightening of mortgage regulations.

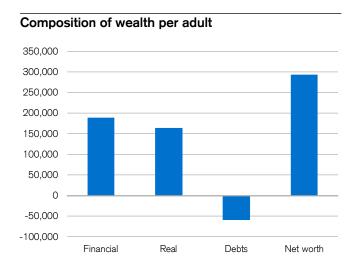
The Canadian economy faces some headwinds. Approval has not been obtained for new oil pipelines, contributing to a glut of oil in the Canadian West. This has forced the price of oil from Canada's oil sands below the world price. Trade frictions have been serious, with the United States imposing tariffs on steel and aluminum from Canada until recently, flouting the North American Free Trade Agreement. The outlook for the economy, and wealth, is somewhat uncertain given international trade tensions and the global slowdown.

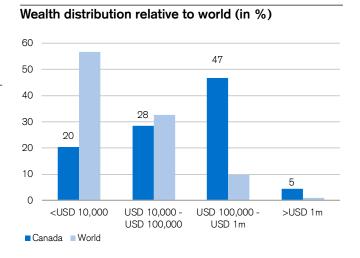
Wealth per adult in Canada, at USD 294,255, is 32% lower than that in the United States, but 5% above the G7 average. Wealth inequality is about average. At 73%, the Gini coefficient matches the mean across countries globally. Canada has 20% of adults with wealth less than USD 10,000, compared with the world figure of 58%, and 52% have wealth above USD 100,000. The country 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 2019

Population	37	million
Adult population	29	million
GDP	59,212	USD per adult
Mean wealth	294,255	USD per adult
Median wealth	107,004	USD per adult
Total wealth	8.6	trillion USD
US dollar millionaires	1,322	thousand
Top 10% of global wealth holders	14,433	thousand
Top 1% of global wealth holders	1,461	thousand
Wealth inequality	72.8	Gini index
Quality of wealth data	ជជជជជ	good







Australia

Still resilient

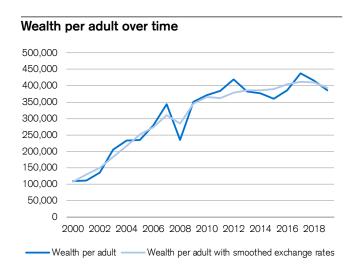
Household wealth in Australia grew quickly between 2000 and 2012 in USD terms, except during 2008. The average annual growth rate of wealth per adult was 12%, with about half due to exchange-rate appreciation against the US dollar. The exchange-rate effect went into reverse after 2012, with the Australian dollar declining 33% relative to the US dollar. The result is that wealth per adult in 2019, at USD 386,058, is close to its 2011 level of USD 384,640. In real AUD terms, however, wealth per adult today is 16% above its 2011 level. Despite the exchange rate effects, Australia's wealth per adult is fourth highest in the world in US dollars. In terms of median wealth, it ranks second after Switzerland.

The composition of household wealth in Australia is skewed toward non-financial assets, which average USD 275,420 and form 58% of gross assets. The high level of real assets reflects a large endowment of land and natural resources relative to the population, but also high property prices in the largest cities. While financial assets are just 42% of total assets, they are also high in absolute terms in part because of Australia's mandatory superannuation system, which generates strong pension wealth. Average debt is 19% of gross assets.

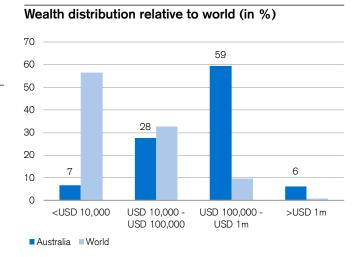
High average wealth is combined with relatively low wealth inequality in Australia. The Gini coefficient is just 66% and only 7% of Australians have net worth below USD 10,000. The latter figure compares with 17% in the United Kingdom and 27% in the United States. The high average wealth boosts representation at high wealth levels despite the low inequality. The proportion of those with wealth above USD 100,000, at 66%, is one of the highest in any country and about six times the world average. With 1,307,000 people in the top 1% of global wealth holders, Australia accounts for 2.6% of this top slice, although it is home to just 0.4% of the world's adult population.

Country summary 2019

25	million
19	million
75,993	USD per adult
386,058	USD per adult
181,361	USD per adult
7.2	trillion USD
1,180	thousand
11,880	thousand
1,307	thousand
65.5	Gini index
***	good
	19 75,993 386,058 181,361 7.2 1,180 11,880 1,307 65.5



Composition of wealth per adult USD 500,000 USD 400,000 USD 300,000 USD 100,000 USD 100,000 -USD 200,000 Financial Real Debts Net worth



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 Statistics 1975), "The portfolio composition of asset holdings in the United 2013). Kingdom" (Economic Journal 1982), and, with Jim Davies and others, "Assessing the quantitative Dr. Rodrigo Lluberas is an Analyst at the 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 household 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 Household 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 that 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. 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 a number of articles and chapters on the distribution of wealth authored jointly with Anthony Shorrocks and others, a recent example being "Estimating the Level and Distribution of Global Wealth, 2000-2014" (co-authored with Anthony Shorrocks and Rodrigo Lluberas, Review of Income and Wealth, 2017). Jim has written a series of articles on wealth in Canada, including "Long Run Canadian Wealth Inequality in International Context" (co-authored with Professor Livio Di Matteo, forthcoming in the Review of Income and Wealth). In addition, he was the editor of the volume, "Personal Wealth from a Global Perspective" (Oxford University Press 2008) and of "The Economics of the Distribution of Wealth," (Edward Elgar Publishers,

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" (Review of Income and Wealth, 2017).

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