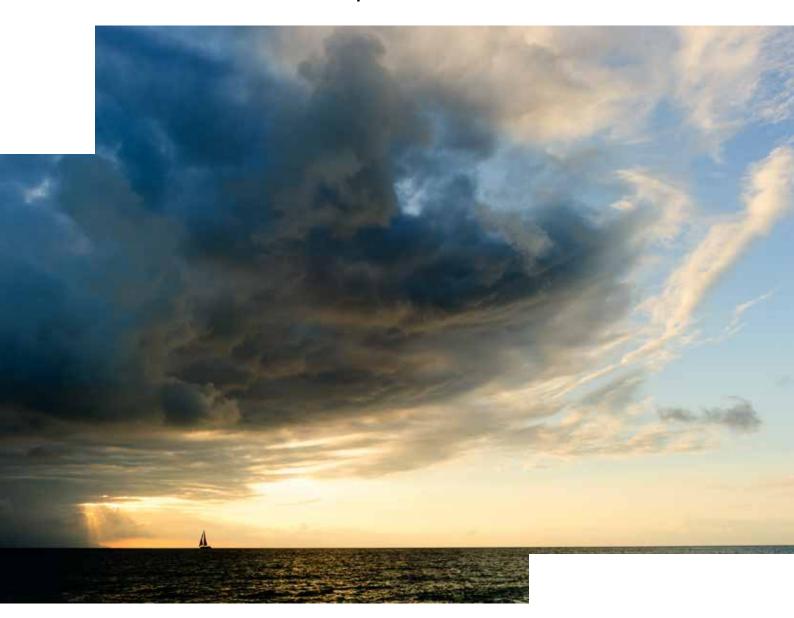


## Research Institute

Global wealth report 2020



## Editorial

The COVID-19 pandemic has had a huge impact on regions all around the globe and affected people's lives in countless ways. How it has impacted wealth and the distribution of wealth is the subject of this special Credit Suisse Global Wealth Report 2020.

Given the difficulties encountered in assembling our full dataset in these turbulent times, we have chosen to publish an interim edition of the Global Wealth Report for 2020. We will publish a full edition in the second quarter of 2021, providing further insights into the impact of the pandemic on global wealth.

Whereas 2019 was a year of tremendous wealth creation - total global wealth rose by USD 36.3 trillion during the year - our experts estimate total household wealth dropped by USD 17.5 trillion between January and March. From March onward, stock markets have rebounded and house prices have soared, and the data available for Q2 2020 suggests that household wealth is roughly back to the level at the end of last year. Lower economic growth for some time and changes in corporate and consumer behavior will result not only in lost output, but also in redundant facilities as well as sectoral changes that may restrain household wealth accumulation for many years. Thus our authors believe that household wealth will, at best, recover slowly from the pandemic throughout 2021. Among major economies, only China is projected to see material gains in wealth over the period.

Without the pandemic, our experts' best estimate of global wealth per adult would have risen from USD 77,309 at the start of the year to USD 78,376 at end-June. Instead, the pandemic has caused average wealth to drop to USD 76,984. The most adversely affected region was Latin America, where currency devaluations reinforced reductions in gross domestic product (GDP) to result in a 12.8% decline in total wealth in US dollar terms. The pandemic eradicated the expected growth in North America and caused

losses in every other region, except China and India. Among the major global economies, the United Kingdom has seen the most notable relative erosion of wealth.

The worldwide impact on wealth distribution within countries has been remarkably small given the substantial pandemic-related GDP losses. Indeed, there is no firm evidence that the pandemic has systematically favored broad higherwealth groups over lower-wealth groups or vice versa. Although it is too early to fully assess the impact of the COVID-19 pandemic on global wealth distribution, it is notable that the latest data indicate that overall wealth inequality has declined in at least one key country – the United States.

Nevertheless, we are likely to see a differential impact on low-skilled labor, women, minorities and young workers that will require the attention of policymakers. Importantly, the worldwide distribution of wealth will change in response to the changing pattern of household wealth across countries and regions, with China very likely to be among the countries to benefit most.

Wealth plays an essential role in household financial resilience and serves as a foundation for broader economic development, especially during times of crisis. We at Credit Suisse remain committed to delivering our financial expertise and experience to all of our clients and stakeholders.

I hope readers find the insights of this edition of the Global Wealth Report to be of particular relevance in present times.

### **Urs Rohner**

Chairman of the Board of Directors Credit Suisse Group AG



- 02 Editorial
- 05 Global wealth 2019: Before the storm
- 13 Household wealth in a pandemic
- 29 Distributional impact of COVID-19
- 41 Wealth of nations
  - 42 United States Challenging times
  - 43 China Keeping calm
  - 44 India Working hard
  - 45 Germany Good management
  - 46 United Kingdom Perfect storm
  - 47 Switzerland Still at the top
- 49 About the authors
- 50 General disclaimer / important information

## **Authors:**

Professor Anthony Shorrocks Professor James Davies Dr. Rodrigo Lluberas

## For more information, contact:

Richard Kersley
Head Global Thematic Research, Global Markets
Credit Suisse International
richard.kersley@credit-suisse.com

Nannette Hechler-Fayd'herbe Chief Investment Officer International Wealth Management and Global Head of Economics & Research Credit Suisse AG nannette.hechler-fayd'herbe@credit-suisse.com

Credit Suisse Research Institute research.institute@credit-suisse.com credit-suisse.com/researchinstitute



## Global wealth 2019: Before the storm

Anthony Shorrocks, James Davies and Rodrigo Lluberas

The Credit Suisse Global Wealth Report provides the most comprehensive and up-to-date coverage of information on household wealth worldwide. Last year, total global wealth rose by USD 36.3 trillion and wealth per adult reached USD 77,309, up 8.5% versus 2018. As a consequence, the world has been better placed to absorb any losses from COVID-19 during 2020. However, while events this year caused wide-spread wealth losses during January–March, these were reversed by June in most countries. Surprisingly, global household wealth is slightly above the level at the start of the year.

## A new era

The COVID-19 pandemic has posed a series of unanticipated and unprecedented challenges for the world in 2020. Medical resources have been stretched as greater mobility in a globalized world caused the virus to spread quickly. Economic resources have been stretched as countries discovered their vulnerability to disruptions in normal work practices and social arrangements. Lessons have also been quickly learned. There is increasing recognition, for example, of the benefits of international collaboration in virus research and vaccine technology. Better appreciated too are the benefits of pre-emptive, coordinated and targeted economic intervention, which has helped to mitigate potential economic catastrophe.

These developments have been accompanied by a huge appetite for information that helps people understand and respond to the unfolding events. Stock market prices provided the first hint of the economic consequences of the pandemic, falling dramatically during March, but soon recovering most of their losses after markets were reassured that governments would take robust action

despite the impact on public debt, and also buoyed by the likelihood of low interest rates for some years to come. The figures released so far on unemployment, gross domestic product (GDP) and government expenditure document some of the macroeconomic trends. But the prospects for employment, average incomes, exchange rates, equity prices and government debt remain highly uncertain. The distributional consequences are even harder to ascertain. But since lower-wage workers with insecure jobs have been among the worst casualties, it is likely that income inequality has grown in many countries, despite efforts by governments to support those most in need.

Apart from news on equity prices, little attention has been paid to the ramifications of the pandemic for household assets and debts. The Credit Suisse Research Institute, via the Global Wealth Report, is uniquely qualified to provide insights on recent developments. Although the usual lags in releasing government data handicap any assessment, there is sufficient information to provide tentative estimates of global trends in household wealth during the first half of this year. We are also able to make projections for the year ahead, albeit with more than the usual degree of uncertainty.

## Household wealth changes during January–June 2020

As economies advance, household wealth tends to grow broadly in line with GDP. By the same token, household wealth is expected to decline when GDP falls. However, since the physical assets remain largely intact, the impact is usually registered through changes in asset prices such as house price and stock market indices and the valuations of small and medium-sized enterprises (SMEs). Variations in the prospects of different countries may also be reflected in exchange rates.

## 44

# Global household wealth...has held up extremely well in the face of the economic turmoil confronting the world

This year, reductions in GDP throughout the world, and lower growth prospects in the future, had the anticipated consequences for household wealth during January to March. Stock markets fell everywhere, often significantly. Among 35 countries with financial balance sheet data, 27 experienced a decline in household net financial wealth, and four (Denmark, Australia, the United States and Canada) recorded losses above 9%. For the world as a whole, we estimate that total household wealth dropped by USD 17.5 trillion between January and March, a 4.4% decrease compared to the value at the end of 2019. Roughly two-thirds of this is due to currency depreciation against the US dollar. If exchange rates had remained fixed, the decline would have been just 1.2%.

From March onward, a remarkable reversal of fortune occurred. Stock markets rebounded and house prices edged upwards. The limited balance sheet data available for Q2 2020 suggests that household wealth is roughly back to the level at the end of last year, at least for most countries whose currencies have not depreciated. We estimate that total global wealth at mid-2020 was marginally higher than the level at the start

of the year, a rise of USD 1 trillion or 0.3%. Had exchange rates remained fixed, total global wealth would have been USD 10.8 trillion higher, a gain of 2.4% over the six-month period.

A word of caution is in order here. Very little balance sheet information is available for Q2 2020, and what is available may be subject to future revision, particularly in regard to the valuations of smaller businesses, many of which have suffered greatly during the pandemic. Nevertheless, it seems highly likely that global household wealth, as we define and measure it, has held up extremely well in the face of the economic turmoil confronting the world. This unexpected outcome can be traced to three sources. First, restricted consumption opportunities have translated into higher savings and then into higher financial assets or lower debts. Second, lower interest rates and relaxed credit conditions have supported asset prices, including house prices and the valuations of pension entitlements. Finally, there has been massive economic support by governments involving the transfer of many trillions of US dollars from the government sector to the private sector, and ultimately to households.

## 44

## There has been massive economic support by governments

These support mechanisms are temporary, of course. Emergency measures are being phased out, and interest rates will need to rise again at some point. Furthermore it seems likely that governments will seek to recover some of the increased expenditure via higher taxation in the future. This, together with reduced GDP prospects, will hamper growth of household wealth for several years ahead.

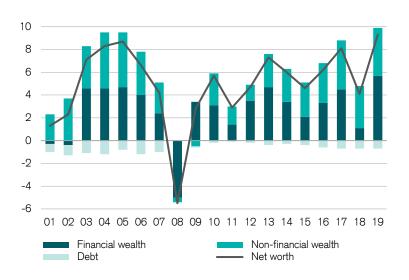
The evolution of the level of household wealth from January to June 2020 is explored in detail in Chapter 2 of this report, together with our assessment of the likely trends for regions and individual countries until the end of 2021. Chapter 3 looks in depth at the distributional consequences of the pandemic. But, before addressing these questions, we take the

opportunity to review household wealth developments during the calendar year 2019, both as a reminder of how wealth might have evolved in the absence of the pandemic and to provide a baseline for assessing the changes that have occurred this year. The figures below update and extend those reported in the Global Wealth Report 2019, which cover the period up to mid-2019.

### Wealth trends this century

Household wealth has grown at a significant pace this century. Using current USD exchange rates, total household wealth rose from USD 117.9 trillion in 2000 to 399.2 trillion at end-2019, averaging 6.6% growth per annum. But growth has not been even over time. Again measured in current US dollars, there have been two distinct phases separated by the global financial crisis: a "golden era" between 2000 and 2007 when total wealth grew by 10.3% p.a., followed by a sharp 7.5% decline in 2008, after which growth resumed at a modest pace averaging 5.7% p.a. from 2008 onward. From this perspective, the financial crisis appears to have permanently damaged the growth prospects for household wealth. Similar conclusions apply when allowance is made for population growth: wealth per adult in US dollars grew by 4.9% per annum during 2000–19, split between 8.2% pre-2008 and 4.1% post-2008. This is not a good omen for wealth growth after the COVID-19 crisis.

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



Source: Original estimates by the authors

However, an alternative, more positive assessment emerges after further examination. The early years of the century were marked by widespread depreciation of the US dollar, which flattered growth of wealth in USD terms, particularly among Eurozone countries. From 2007 onward, the situation reversed and, as the US dollar appreciated, wealth growth contracted for nations not pegged to the US dollar.

This distortion is rectified by applying fixed USD exchange rates instead. For this century as a whole, global growth in wealth per adult is 4.9%, the same as that obtained using current USD. However, **Figure 1** shows that the time pattern is markedly different. Using fixed exchange rates, there is no secular decline in wealth growth after the financial crisis: indeed, average growth after 2008 (5.6% per annum) slightly exceeds the rate prior to 2008 (5.5%). Thus, while the data suggest that the financial crisis may have dampened wealth growth for a few years, they do not support the idea that it permanently damaged worldwide prospects for wealth growth.

#### A review of 2019

Regardless of whether growth is measured in terms of fixed exchange rates (see **Figure 1**) or current US dollars (see **Table 1**), global wealth grew at a relatively fast pace in 2019. **Table 1** shows that aggregate global wealth increased by USD 36.3 trillion to USD 399.2 trillion, a rise of 10.0%. Allowing for population growth, wealth per adult also grew rapidly by 8.5% to reach USD 77,309, another alltime high. Every region recorded notable gains in both total wealth and wealth per adult, with Africa, China and North America leading the way.

Robust equity markets during 2019 meant that financial assets recorded most of the gains: USD 24.0 trillion compared to USD 15.3 trillion for non-financial assets. The corresponding growth rates for the world as whole (11.2% versus 7.7%) echo this disparity. Financial assets and non-financial assets advanced markedly in every region, but there are variations across regions. North America alone accounted for half of the rise in financial assets. China, Europe and the Asia-Pacific region (excluding China and India) also posted large increases. Rises in non-financial assets were also unevenly spread across regions, with China, Europe and North America recording the largest gains. As regards household debt, our estimates suggest a rise of 6.0% worldwide, with particularly large increases in China, India and Africa.

Table 1: Change in household wealth 2019, by region

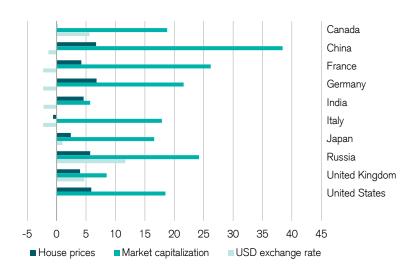
	Total wealth	Chang	e in total wealth	Wealth per adult	Change in wealth per adult	Change in	financial assets	ū	e in non- al assets	Change	in debts
	End-2019	2019	2019	end-2019	2019	2019	2019	2019	2019	2019	2019
	USD bn	USD bn	%	USD	<u></u> %	USD bn	%	USD bn	%	USD bn	%
Africa	4,805	588	14.0	7,372	10.7	298	14.5	346	13.3	56	12.9
Asia-Pacific	70,397	4,684	7.1	57,739	5.4	2,948	7.7	2,150	5.8	414	4.4
China	77,978	9,292	13.5	70,962	12.8	4,839	14.9	5,855	13.7	1,402	20.9
Europe	94,289	5,408	6.1	159,730	6.1	2,949	6.6	2,664	4.6	205	1.5
India	15,309	1,569	11.4	17,299	9.4	281	8.6	1,408	12.5	120	14.4
Latin America	12,418	1,081	9.5	28,180	7.8	619	11.0	562	7.9	100	7.0
North America	123,983	13,674	12.4	446,638	11.4	12,029	13.6	2,299	6.0	654	3.9
World	399,179	36,296	10.0	77,309	8.5	23,963	11.2	15,284	7.7	2,952	6.0

Source: Original estimates by the authors

Among individual regions, North America recorded respectable growth in non-financial assets (6.0%), but the overall wealth growth rate of 11.4% was heavily biased toward financial assets, which grew at a much faster pace (13.6%). The bias toward financial assets is evident in other regions too, the only exception being India where non-financial assets rose by 12.5% compared to 8.6% growth in financial assets.

Equity markets had a stellar performance during 2019

Figure 2: Change in market capitalization, house prices and USD exchange rate (%), 2019



Source: Original estimates by the authors

## Asset prices and exchange rates

Longer-run gains in household wealth depend heavily on growth in GDP. But changes in asset prices and exchange rates account for much of the year-on-year variation. Although, exchange-rate fluctuations are often the source of the biggest gains and losses, they had little impact during 2019. Among the countries listed in **Figure 2** (G7 countries plus China, India and Russia), the largest changes (all positive) affected Russia (11.7%), Canada (5.6%) and the United

Kingdom (4.7%). Eurozone countries depreciated 2.3% against the US dollar and China lost 1.4%. Exchange-rate movements were also modest elsewhere in the world, with the largest changes recorded for Egypt (+12%), Pakistan (–10%) and Turkey (–11%).

As **Figure 2** makes clear, equity markets had a stellar performance during 2019, rising markedly throughout the world with few exceptions. Market capitalization rose by 5%–10% in India and the United Kingdom, by 16%–21% in Canada, Germany, Italy, Japan and the United States, by around 25% in France and Russia, and by 38% in China. Elsewhere, modest losses in Chile (–12%) and Bangladesh (–14%) were more than offset by gains of more than 30% in Brazil, Sweden and Romania, and by gains of more than 40% in the Netherlands, Turkey and Greece.

House-price movements are a good indicator of changes in the value of household non-financial assets. They tend to rise at a relatively steady positive rate, and this was true in 2019. **Figure 2** shows rises of 4%–7% in every country bar Japan (+2%), Canada (0%) and Italy (–1%). In the rest of the world, house prices rose by at least 10% in Chile, Turkey, Ireland and the Philippines. Among countries with data, the United Arab Emirates (–8%) recorded the only significant drop.

The surge in equities was the main reason why many countries posted exceptional rises in household wealth during 2019. The United States not

only continued its unbroken spell of increases in total wealth each year since 2008, but recorded a gain of USD 42,090 per adult, far above the rise in any previous year. Canada (USD 35,850) and Australia (USD 35,110) also recorded very high rises in average wealth, while Hong Kong SAR (USD 23,740), Singapore (USD 23,380) and Israel (USD 20,930) saw gains that would have topped the ranking most years.

#### Wealth per adult across countries

There are huge variations in average wealth across countries and regions. The World Wealth Map (Figure 3) shows that nations with wealth per adult above USD 100,000 are located in North America, Western Europe, and among the richer parts of East Asia, the Pacific and the Middle East, with a sprinkling of outposts in the Caribbean. Switzerland (USD 598,410) heads the list again at the end of 2019. It is possible that Liechtenstein and Monaco have higher average wealth, but there is insufficient evidence to make that judgment. Among the countries that we can rank, Hong Kong SAR (USD 518,810) is in second place, followed by the United States (USD 463,550), Australia (USD 419,460) and New Zealand (USD 341,060). The Netherlands, Singapore, Canada, Denmark, and Ireland occupy the remaining slots in the top ten, in descending order, with wealth per adult ranging from USD 286,000 to 337,000.

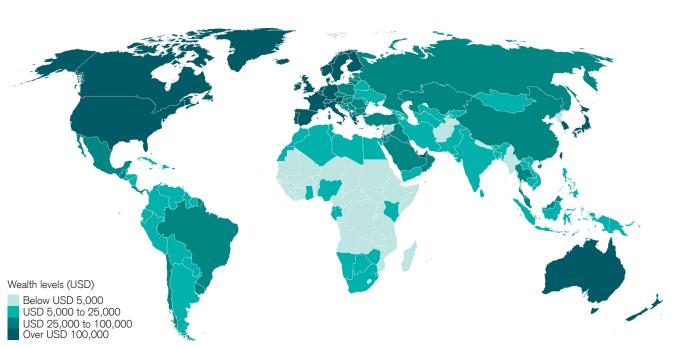


Figure 3: World wealth map 2019

Ranking countries by median wealth per adult favors those with lower levels of wealth inequality and results in a different list. This year, we have taken account of wealth survey data for Switzerland which suggest that the wealth pattern in the middle wealth range is similar to that in Germany. Our new estimate of USD 131,590 for median wealth per adult in Switzerland is sixth highest among countries. Top place in 2019 is occupied by Australia (USD 206,480) followed by Hong Kong SAR (USD 180,510), New Zealand (USD 168,400), Belgium (USD 166,280), and Denmark (USD 132,470). Among the top ten mean wealth countries, the Netherlands retains a similar position in the median wealth table, but, like Belgium, relatively low inequality promotes the United Kingdom, France and Norway to seventh, eighth and tenth place, respectively. In contrast, higher-than-average inequality causes Singapore to drop 12 places, and the United States to drop more than 20 places.

The "intermediate wealth" group in Figure 3 covers countries with mean wealth in the range of USD 25,000-100,000. The core members are China and Russia, but it also includes more recent members of the European Union, and important emerging-market economies in Latin America and the Middle East. One step below, the "frontier wealth" range of USD 5,000-25,000 per adult is a heterogeneous group that covers heavily populated countries such as India, Indonesia, Iran, and the Philippines, plus most of Latin America and leading sub-Saharan nations such as South Africa. Fast-developing Asian countries like Cambodia, Laos and Vietnam also fall within this category. Countries with average wealth below USD 5,000 comprise the final group, which is heavily concentrated in central Africa and central Asia.

## 44

## Wealth is a key component of the economic system

### Household wealth in times of emergency

Wealth is a key component of the economic system. It is used as a store of resources for future consumption, particularly during retirement. It also enhances opportunities for informal sector and entrepreneurial activities when used either directly or as collateral for loans. But, most of all, wealth is valued for its capacity to reduce vulnerability to shocks such as unemployment, ill health, natural disasters or indeed a pandemic. These functions are important even in countries that have generous state pensions, adequate social safety nets, and good public healthcare. But they have special significance in countries that have rudimentary social insurance schemes and healthcare limitations, as is the case in much of the developing world.

## 44

## The importance of household wealth is difficult to overestimate

The contrast between those who have access to an emergency buffer and those who do not is evident at the best of times. When, as now in 2020, vast numbers of individuals are simultaneously subjected to an adverse shock, the importance of household wealth is difficult to overestimate. Countries with low wealth face greater exposure to the negative consequences of COVID-19. Individuals with low wealth have many fewer options when facing emergency situations. It is too early to judge the importance of wealth in determining the resilience of both nations and individuals to the shocks caused by the pandemic. But this is likely to become evident in future studies.

The benign world of 2019 now seems a lifetime ago. But the relatively stable economic environment and the relatively rapid growth of household wealth which this chapter has documented for 2019 provides reassurance that many countries and individuals can absorb wealth losses from the pandemic as long as the episode is not prolonged. One possible weakness is the dominant influence in recent years of the United States, which alone accounted for one third of the increase in total global wealth during 2019.

At a time when economies throughout the world have become more vulnerable to changes in macroeconomic circumstances, the reliance of global household wealth developments on a single country adds a further dimension of risk to the uncertain prospects facing the world.

### 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).

Data for all years refer to **year-end** values unless otherwise indicated. Valuations are usually expressed in terms of US dollars using end-period exchange rates, but occasionally fixed exchange rates are used instead.

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 5.2 billion at end-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.

Estimates of wealth distribution across individual adults make use of the Forbes annual global list of billionaires to improve the estimates of wealth holdings above USD 1 million.

Further details of the data sources and the estimation procedures are described in the Credit Suisse Global Wealth Databook 2019.



## Household wealth in a pandemic

Anthony Shorrocks, James Davies and Rodrigo Lluberas

This chapter quantifies the impact of the COVID-19 pandemic on household wealth levels worldwide. The initial impact was felt through asset prices, causing global household net worth to decline by USD 17.5 trillion during January-March 2020, a 4.4% reduction. Actions taken by governments and central banks then reversed this fall. By June, global wealth was USD 1 trillion above the starting value. However, reduced GDP and rising debt will result in long-term damage, so wealth growth will be depressed for the next couple of years, and likely longer.

## Introduction

As far as household wealth is concerned, the most important event this century was the global financial crisis during 2007–08. This had a significant and long-lasting impact on the level of assets and debts, and on the distribution of personal wealth across countries and individuals. The COVID-19 pandemic has the potential to cause a similar degree of disruption with similar consequences for household wealth. The main aim of this chapter is to assess what has happened so far, and what is likely to happen in the near future as the economic impact of the pandemic unfolds.

The chapter begins with a review of the major economic events that have occurred this year, followed by a brief reminder of the household wealth consequences of the 2007–08 financial crisis. We then present our estimates of changes in the level and composition of household wealth during the first six months of 2020 before looking ahead to the trends in household wealth until the end of 2021.

## Major economic trends in 2020

The pandemic has thrown the world into a severe recession. Economies have contracted, unemployment has risen, and there have been major fluctuations in financial markets around the globe. However, the details vary across regions and countries, and there have been great variations across sectors as well.

#### Macroeconomic trends

Table 1 summarizes some of the main macroeconomic trends in major economies representing all regions. Among the worst affected in terms of GDP are Italy, where COVID-19 made a shocking European debut, France and the United Kingdom - all expected to see GDP reduced by 9% or more in 2020. Germany, Russia and the United States have predicted losses of 5%-6%, close to the global average. In contrast, while GDP in China fell 34% in the first quarter, it rebounded by 55% in the second quarter and is predicted to grow slightly over the year as a whole. Across regions, Europe and Latin America have above-average GDP losses, while the effects in most of Asia-Pacific are below average at present, due to the later

Table 1: Economic indicators, 2020

China         438         546         1.7         9.8         DQ         5.3           Japan         -22         -27.8         -54.4         2.8         June         -11.4           Carrada         -85         -55.8         -9.4         2.9         May         -18.1           Carrada         -62         -82         -5.6         10.9         July         -11.           Austria         -11.6         -11.6         -7         5.7         June         -7.5           Belgium         -13.6         -40.6         -8.1         .5.5         June         -9.3           Ferror         -19.7         -44.8         -10.4         7.7         June         -1.5           Germany         -8.6         -34.7         -5.9         4.2         June         -7.2           Greece         -6.2         -6.2         -6.2         -7.5         4.7         June         -7.2           Greece         -6.2         -6.2         -6.2         -7.5         9.4         June         -6.5           Haby         -19.6         -4.1         -10.8         9.5         9.4         June         -6.2           Debusins         -1.1		Change in GDP (%)	Change in GDP (%)	Change in GDP (%)	Unemplo	oyment rate	Change in government budget balance	
China         -53,8         56,6         1.7         3.8         CQ         -5.8         June         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.14         -1.15         -1.14         -1.14         -1.15         -1.14         -1.15         -1.15         -1.14         -1.15 <th>Country</th> <th>Q1 2020 vs. Q4 2019</th> <th>Q2 2020 vs. Q1 2020</th> <th>2020 forecast</th> <th>%</th> <th>Date</th> <th>2020 forecast</th>	Country	Q1 2020 vs. Q4 2019	Q2 2020 vs. Q1 2020	2020 forecast	%	Date	2020 forecast	
Japan         -1.22         -2.78         -5.4         2.8         June         -11.4           Brillain         -8.5         59.8         -9.4         3.9         May         18.1           Canada         -8.2         -5.8         10.9         JUly         -11.8           Austria         -1.16         -1.16         -1.16         -7.5         7.5         June         -7.5           Belgium         -1.36         -40.8         -8.1         10.4         7.7         June         -1.13           France         -1.97         -44.8         -10.0         7.7         June         -1.13           Greece         -6.2         -6.2         -7.5         9.4         June         -7.2           Greece         -6.2         -6.2         -7.5         17         May         -6.5           Italy         1.96         -4.1         -10.8         8.8         June         -1.2           Ulfburia         -1.4         -18.9         -5.6         3.8         Mure         -6.4           Fortugal         -1.4         -18.9         -6.6         -6.7         5.0         June         -6.2           Fortugal         -1.6	United States	-5	-32.9	-5.3	10.2	July	-15.9	
Betain         -8.5         -59.8         -9.4         3.9         May         -18.1           Canada         48.2         -48.2         -48.2         -5.8         10.9         July         -11.6           Austria         -11.6         -11.6         -11.6         -7.5         June         -7.5           Belgium         -13.6         -40.6         -8.1         5.5         June         -9.3           Franca         19.7         -44.8         -10.4         7.7         June         -11.5           Germany         8.6         34.7         -5.9         4.2         June         -7.2           Gerece         6.2         -6.2         4.2         -7.5         17         May         -6.5           Italy         -19.6         -41         -10.8         8.8         June         -12.2           Debutania         -14.4         -11.9         -7.5         9.4         June         -6.4           Netherlands         -5.8         -29.0         -6.7         2.0         June         -6.8           Spain         -19.3         -55.8         -29.0         -6.7         2.0         June         -6.2           Spain	China	-33.8	54.6	1.7	3.8	0.2	-5.3	
Canada         6.2         -8.2         -8.2         -5.8         10.9         July         -11           Austria         -11.6         -11.6         -11.6         -7         5.7         June         -7.5           Belgium         -13.6         -40.6         -8.1         5.5         June         -7.9           France         -19.7         -44.8         -10.4         7.7         June         -11.5           Germany         -8.6         -34.7         -5.9         4.2         June         -11.5           Germany         -8.6         -34.7         -5.9         4.2         June         -12.6           Greece         -6.2         -6.2         -6.2         -7.5         9.4         June         -6.5           Isby         -19.6         -41         -19.8         -7.5         9.4         June         -6.6           Nothorlands         -18.8         -29.0         -4.6         -3.8         June         -6.4           Portugal         -14.2         -4.5         -4.9         -3.8         June         -6.1           Portugal         -14.2         -4.6         -3.1         -4.0         June         -6.2	Japan	-2.2	-27.8	-5.4	2.8	June	-11.4	
Austrin         -11.6         -11.6         -1.1         -7.5         June         -7.5           Belgium         -13.6         -40.6         -8.1         -5.5         June         -9.3           Franco         -19.7         -44.8         -10.4         -7.2         June         -17.2           Groece         -6.2         -6.2         -7.5         17         May         -6.5           Italy         -19.6         -41         -10.8         8.8         June         -12           Lithunia         -1.4         -19.9         -7.5         9.4         June         -12           Herbriands         -5.8         -29.9         -7.5         9.4         June         -6.4           Portugal         -14.2         -4.6         -8         5.6         02         -8           Spain         -19.3         -55.8         -12.6         15.6         June         -6.4           Hortugaly         -16         -46.6         -5.7         2.6         June         -6.3           Spain         -19.3         -55.8         -12.6         June         -6.2           Luthragary         -16         -46.6         -5.7         4.6	Britain	-8.5	-59.8	-9.4	3.9	May	-18.1	
Belgium         -13.6         -40.6         -8.1         5.5         June         -9.3           Finnce         -19.7         -44.8         -10.4         7.7         June         -11.5           Germany         -8.6         -94.7         -5.9         4.2         June         -7.2           Greece         -6.2         -6.2         -7.5         1.7         May         -6.5           Italy         -19.6         -41         -10.8         8.8         June         -12           Lithuania         -1.4         -18.9         -7.5         9.4         June         -6.4           Notherlands         -5.8         -29.9         -6         3.8         June         -6.4           Notherlands         -5.8         -29.9         -6         3.8         June         -6.4           Portugal         -14.2         -45         -8.8         -12.6         June         -6.6           Flungary         -1.2         -4.6         -5.7         4.6         June         -6.6           Hungary         -1.6         -31.1         -4.6         -5.7         4.6         June         -5.3           Iceland         -1.2         -4.2	Canada	-8.2	-8.2	-5.8	10.9	July	-11	
France         -19.7         -44.8         -10.4         7.7         June         -11.5           Germeny         -8.6         -34.7         -5.9         4.2         June         -7.2           Greece         -6.2         -6.2         -7.5         1.7         May         -6.5           Italy         -19.6         -41         -10.8         8.8         June         -12.8           Netherlands         -1.4         -18.9         -7.5         19.4         June         -6.4           Netherlands         -5.8         -29.9         -6         3.8         March         -6.4           Netherlands         -19.3         -56.8         -12.6         3.8         March         -6.4           Portugal         -14.2         -46         -8.7         5.6         Q2         -8           Spain         -19.3         -56.8         -12.6         5.6         Q2         June         -6.6           Hurgary         -1.6         -4.8         -9.8         June         -6.3         July         -17.2           Poland         -1.6         -31.1         -4         6.1         10.1         -10.2         July         -17.2	Austria	-11.6	-11.6	-7	5.7	June	-7.5	
Germany         -8.6         -94.7         -5.9         4.2         June         -7.2           Greece         -6.2         -6.2         -7.5         17         May         -6.5           Italy         -19.6         -41         -10.8         3.8         June         -12           Libhuaria         1.14         -11.9         -7.5         9.4         June         -6.4           Netherlands         -5.8         -29.9         -6         3.8         March         -6.4           Portugal         -14.2         -45         -8         5.6         Q.2         -8           Spain         -19.3         -58.8         -12.6         15.6         June         -12.3           Caceh Republic         -12.8         -29.6         -6.7         2.6         June         -5.3           Hungary         -1.6         -46.6         -5.7         4.8         June         -5.3           Iculand         -25.2         -25.2         -10.8         8.8         July         -17.2           Polard         -1.6         -31.1         -4         6.1         June         -4.3           Sweden         0.5         -30.2         -4	Belgium	-13.6	-40.6	-8.1	5.5	June	-9.3	
Greece         -6.2         -6.2         -7.5         17         May         -6.5           Italy         -19.6         41         -10.8         8.8         June         -12           Lithuania         -1.4         -18.9         -7.5         9.4         June         -6.4           Netherlands         -5.8         -29.9         -6         3.8         March         -5.4           Portugal         -14.2         -45         -8         5.6         02         -8           Spain         -19.3         -55.8         -12.6         15.6         June         -6.6           Hungary         -1.6         -46.6         -5.7         2.6         June         -6.6           Hungary         -1.6         -46.6         -5.7         4.6         June         -5.3           Russia         na         na         -6.1         June         -9.4           Russia         na         na         -6.1         June         -4.8           Switzerland         -1.0         -10         -6         3.3         July         -6.2           Ukraine         -9.1         -30.7         -6         8.9         July         -7.6 </td <td>France</td> <td>-19.7</td> <td>-44.8</td> <td>-10.4</td> <td>7.7</td> <td>June</td> <td>-11.5</td>	France	-19.7	-44.8	-10.4	7.7	June	-11.5	
Italy         -196         -41         -10.8         8.8         June         -12           Uthuania         -1.4         -18.9         -7.5         9.4         June         -6.4           Netherlands         -5.8         -29.9         -6         3.8         March         -5.4           Portugal         -14.2         -45         -8         5.6         O2         -8           Spain         -19.3         -55.8         -12.6         15.6         June         -123           Czech Republic         -12.8         -29.6         -6.7         2.6         June         -6.6           Hungary         -1.6         -46.6         -5.7         4.6         June         -5.3           Iceland         -25.2         -25.2         -10.8         8.8         July         -17.2           Polard         -1.6         -31.1         -4         6.1         June         -4.3           Swtzerfand         -1.6         -31.1         -4         6.1         June         -4.3           Swtzerfand         -1.0         -10         -6         8.3         July         -6.2           Ukraine         -9.1         -30.7         -6	Germany	-8.6	-34.7	-5.9	4.2	June	-7.2	
Lithuania         -1,4         -18,9         -7,5         9,4         June         -6,4           Netherlands         -5,8         -29,9         -6         3.8         March         -5,8           Portugal         -14,2         -46         -8         5,6         CQ2         -8           Sppain         -19,3         -55,8         -12,6         5,6         CQ2         -8           Sppain         -19,3         -55,8         -12,6         5,6         CQ2         -10,8           Sppain         -19,3         -55,8         -12,6         5,7         2,6         June         -6,6           Hungary         -1,6         -46,6         -5,7         4,6         June         -6,6           Hungary         -1,6         -46,6         -5,7         4,6         June         -6,8           Hungary         -1,6         -46,1         -4,2         June         -4,8         -3,3           John         -1,6         -3,1         1,4         4,1         1,1         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4,2         -4	Greece	-6.2	-6.2	-7.5	17	May	-6.5	
Netherlands         .5.8         .29.9         -6         3.8         March         .5.4           Portugal         .14.2         .45         -8         5.6         CQ2         -8           Spain         .19.3         .56.8         .12.6         15.6         June         -12.3           Czech Republic         -12.8         .29.6         -6.7         2.6         June         -5.3           Icoland         -15.2         .29.2         .10.8         8.8         July         .17.2           Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -4.3           Sweden         0.5         -30.2         -4         9.8         June         -4.3           Switzerland         -10         -10         -6         3.3         July         -6.3           Ukrahe         0.5         -30.2         -4         9.8         June         -4.2           Witzerland         -10         -10         -6         3.3         July         -6.3           Ukrahe         -9.1         -30.7         -6         9.9 <td>Italy</td> <td>-19.6</td> <td>-41</td> <td>-10.8</td> <td>8.8</td> <td>June</td> <td>-12</td>	Italy	-19.6	-41	-10.8	8.8	June	-12	
Portugal         -14.2         -45         -8         5.6         Q2         -8           Spain         -19.3         -55.8         -12.6         15.6         June         -12.3           Czech Republic         -12.8         -29.6         -6.7         2.6         June         -6.6           Hungary         -1.6         -46.6         -6.7         4.6         June         -5.3           Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -9.4           Russia         na         na         -6.1         6.2         June         -9.4           Switzerland         -10         -10         -6         3.3         July         -6.3           Switzerland         -10         -10         -6         3.3         July         -6.3           Switzerland         -10         -10         -6         3.3         July         -6.3           Uraine         -9.1         -30.7         -6         3.9         July         -6.2           Australia         -1.2         -1.2         -4.2         5.2	Lithuania	-1.4	-18.9	-7.5	9.4	June	-6.4	
Spain         -19.3         -55.8         -12.6         15.6         June         -12.3           Czech Republic         -12.8         -29.6         -6.7         2.6         June         -6.6           Hungary         -1.6         -46.6         -5.7         4.6         June         -5.3           Icoland         -25.2         -25.2         -10.8         8.8         July         -17.2           Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -4.3           Switzerland         -10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         O1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         -1.2         -8.5 <td< td=""><td>Netherlands</td><td>-5.8</td><td>-29.9</td><td>-6</td><td>3.8</td><td>March</td><td>-5.4</td></td<>	Netherlands	-5.8	-29.9	-6	3.8	March	-5.4	
Czech Republic         112.8         -29.6         -6.7         2.6         June         -6.6           Hungary         -1.6         -46.6         -5.7         4.6         June         -5.3           Iceland         -25.2         -25.2         -10.8         8.8         July         -17.2           Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -4.3           Sweden         0.5         -30.2         -4         9.8         June         -4           Switzerland         -10         -10         -6         3.3         July         -6.3           Switzerland         -10         -10         -6         8.9         Q1         -7.5           Australia         -12         -1.2         -1.2         -4.4         7.5         July         -7.6           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           Indian         1.2         1.2	Portugal	-14.2	-45	-8	5.6	0.2	-8	
Hungary   1-16   -46.6   -5.7   4.6   June   -5.3     Iceland   -25.2   -25.2   -10.8   8.8   July   -17.2     Poland   1-16   -31.1   -4   6.1   June   -9.4     Russia   na   na   -6.1   6.2   June   -4.3     Sweden   0.5   -30.2   -4   9.8   June   -4.3     Switzerland   1-10   -10   -6   3.3   July   -6.3     Turkey   na   na   -5.2   12.9   May   -6.2     Utraine   -9.1   -30.7   -6   8.9   0.1   -7.5     Australia   1-12   -1.2   -4.4   7.5   July   -7.6     Hong Kong SAR   -19.6   -0.5   -4.2   6.2   June   -5.6     India   1.2   1.2   -8.5   7.4   July   -7.8     Indonesia   na   na   0.2   5   0.1   -6.6     Philippines   -18.9   -48.3   -3.7   17.7   0.2   -7.7     Singapore   -4.7   -42.9   -6   2.9   0.2   -13.5     South Korea   -5   -12.7   -18   4   July   -5.6     Taiwan (Chinese Taiper)   -3.6   -5.5   -2   4   June   -5.1     Thailand   -8.5   -33.4   -5.3   1   March   -6.4     Argentina   -18   -18   -11.1   10.4   0.1   -10     Brazil   -6   -6   -5.5   -3.5   1.3   June   -14     Colombia   -9.2   -47.6   -7.7   19.8   June   -7.8     Mexico   -4.9   -5.9   -7.7   -6.4   12.2   June   -7.8     Mexico   -4.9   -5.9   -7.7   -7.8   -7.7   -7.8     Mexico   -4.9   -5.9   -7.7   -7.8     Mexico   -4.9   -5.9   -7.7   -7.8     Mexico   -4.9   -7.9   -7.8     Mexico   -4.9   -7.9   -7.9   -7.8     Mexico   -4.9   -7.9   -7.9   -7.8     Mexico   -4.9   -7.9   -7.9   -7.9     Mexico   -4.9   -7.9   -7.9   -7.9     May   -7.0   -7.9   -7.9     May   -7.0   -7.9   -7.9     May   -7.0   -7.9   -7.9     May   -7.0   -7.9     May   -7.0   -7.0   -7.7     May   -7.6   -7.7     May   -7.6     May   -7.6   -7.7   -7.8     May   -7.8   -7.7   -7.8     Mexico   -4.9   -7.9     May   -7.8   -7.9     May   -7.8   -7.9     May   -7.8     May	Spain	-19.3	-55.8	-12.6	15.6	June	-12.3	
Iceland         -25.2         -25.2         -10.8         8.8         July         -17.2           Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -4.3           Sweden         0.5         -30.2         -4         9.8         June         -4           Switzerland         -10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -90.7         -6         8.9         0.1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kang SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           Hodia         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         0.1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7	Czech Republic	-12.8	-29.6	-6.7	2.6	June	-6.6	
Poland         -1.6         -31.1         -4         6.1         June         -9.4           Russia         na         na         -6.1         6.2         June         -4.3           Sweden         0.5         -30.2         -4         9.8         June         -4           Switzerland         10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         Q1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2<	Hungary	-1.6	-46.6	-5.7	4.6	June	-5.3	
Russia         na         na         -6.1         6.2         June         -4.3           Sweden         0.5         -30.2         -4         9.8         June         -4           Switzerland         -10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         Q1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -13.4         -5.1         March	Iceland	-25.2	-25.2	-10.8	8.8	July	-17.2	
Sweden         0.5         -30.2         -4         9.8         June         -4           Switzerland         -10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         Q1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -12.7         -1.8         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1	Poland	-1.6	-31.1	-4	6.1	June	-9.4	
Switzerland         -10         -10         -6         3.3         July         -6.3           Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         01         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           India         1.2         1.2         -8.5         7.7         7.0         2         -7.7           Singapore         -4.7         -42.9         -6         2.9         02         -13.5           South Korea         -5         -12.7         1.8         4	Russia	na	na	-6.1	6.2	June	-4.3	
Turkey         na         na         -5.2         12.9         May         -6.2           Ukraine         -9.1         -30.7         -6         8.9         01         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         01         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         02         -7.7           Singapore         -4.7         -42.9         -6         2.9         02         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thalland         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -11         10.4 <t< td=""><td>Sweden</td><td>0.5</td><td>-30.2</td><td>-4</td><td>9.8</td><td>June</td><td>-4</td></t<>	Sweden	0.5	-30.2	-4	9.8	June	-4	
Ukraine         -9.1         -30.7         -6         8.9         O1         -7.5           Australia         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         O1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         O2         -7.7           Singapore         -4.7         -42.9         -6         2.9         O2         -13.5           South Korea         -5         -12.7         -1.8         4         June         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         O1         -10           Brazil         -6         -6         -5.5 <td< td=""><td>Switzerland</td><td>-10</td><td>-10</td><td>-6</td><td>3.3</td><td>July</td><td>-6.3</td></td<>	Switzerland	-10	-10	-6	3.3	July	-6.3	
Australia         -1.2         -1.2         -1.2         -4.4         7.5         July         -7.6           Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7 <t< td=""><td>Turkey</td><td>na</td><td>na</td><td>-5.2</td><td>12.9</td><td>May</td><td>-6.2</td></t<>	Turkey	na	na	-5.2	12.9	May	-6.2	
Hong Kong SAR         -19.6         -0.5         -4.2         6.2         June         -5.6           India         1.2         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6 <td< td=""><td>Ukraine</td><td>-9.1</td><td>-30.7</td><td>-6</td><td>8.9</td><td>Q1</td><td>-7.5</td></td<>	Ukraine	-9.1	-30.7	-6	8.9	Q1	-7.5	
India         1.2         1.2         -8.5         7.4         July         -7.8           Indonesia         na         na         0.2         5         Q1         -6.6           Philippines         -18.9         -48.3         -3.7         17.7         Q2         -7.7           Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3<	Australia	-1.2	-1.2	-4.4	7.5	July	-7.6	
Philippines	Hong Kong SAR	-19.6	-0.5	-4.2	6.2	June	-5.6	
Philippines         18.9         -48.3         -3.7         17.7         O2         -7.7           Singapore         -4.7         -42.9         -6         2.9         O2         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         O1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3	India	1.2	1.2	-8.5	7.4	July	-7.8	
Singapore         -4.7         -42.9         -6         2.9         Q2         -13.5           South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6	Indonesia	na	na	0.2	5	Q1	-6.6	
South Korea         -5         -12.7         -1.8         4         July         -5.6           Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4	Philippines	-18.9	-48.3	-3.7	17.7	0.2	-7.7	
Taiwan (Chinese Taipei)         -3.6         -5.5         -2         4         June         -5.1           Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         na         0.6         9.6         O2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na	Singapore	-4.7	-42.9	-6	2.9	0.2	-13.5	
Thailand         -8.5         -33.4         -5.3         1         March         -6.4           Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         02         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         0.1         -10.5	South Korea	-5	-12.7	-1.8	4	July	-5.6	
Argentina         -18         -18         -11.1         10.4         Q1         -10           Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Taiwan (Chinese Taipei)	-3.6	-5.5	-2	4	June	-5.1	
Brazil         -6         -6         -5.5         13.3         June         -14           Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         O2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         O1         -10.5	Thailand	-8.5	-33.4	-5.3	1	March	-6.4	
Chile         12.7         12.7         -6.4         12.2         June         -14           Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Argentina	-18	-18	-11.1	10.4	Q1	-10	
Colombia         -9.2         -47.6         -7.7         19.8         June         -7.8           Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         O2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         O1         -10.5	Brazil	-6	-6	-5.5	13.3	June	-14	
Mexico         -4.9         -53.2         -9.7         3.3         March         -4.5           Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Chile	12.7	12.7	-6.4	12.2	June	-14	
Peru         -19.5         -19.5         -13         7.6         March         -11.5           Venezuela         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Colombia	-9.2	-47.6	-7.7	19.8	June	-7.8	
Venezuela         -31.6         -31.6         -31.6         -30.3         6.4         December         -21.5           Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Mexico	-4.9	-53.2	-9.7	3.3	March	-4.5	
Egypt         na         na         0.6         9.6         Q2         -10.6           Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Peru	-19.5	-19.5	-13	7.6	March	-11.5	
Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Venezuela	-31.6	-31.6	-30.3	6.4	December	-21.5	
Israel         -6.8         -28.7         -5.4         4.5         June         -11.8           Saudi Arabia         na         na         -5.2         5.7         Q1         -10.5	Egypt	na	na	0.6	9.6	Q2	-10.6	
	Israel	-6.8	-28.7	-5.4	4.5	June	-11.8	
South Africa -2 -2 -8 30.1 Q1 -16	Saudi Arabia	na	na	-5.2	5.7	Q1	-10.5	
	South Africa	-2	-2	-8	30.1	Q1	-16	

Source: Economist Intelligence Unit (via economist.com/indicators)

arrival of COVID-19 in some places and to more successful efforts to control the virus in countries such as Australia, Japan, Korea, New Zealand, Singapore and Taiwan.

Unemployment trends during 2020 have not always echoed GDP trends due to differences in labor market policies and practices. In some European countries, wage subsidies and other measures have limited layoffs, so that, as late as June, when the unemployment rate in the United States was 11%, it was only 8%–9% in France and Italy, and just 4% in Germany – similar to Britain in May. Greece and Spain, on the other hand, had rates of 17% and 16% in May and June, respectively. High unemployment effects are also seen in Latin America and in some parts of the Asia-Pacific region, such as Turkey and the Philippines.

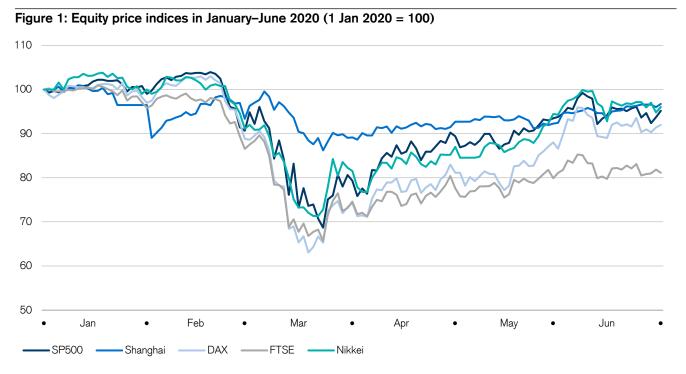
Government budget balance effects are noteworthy. These tend to be largest in the highincome countries hardest hit by the pandemic, such as Italy, the United Kingdom and the United States. Not only are tax revenues depressed, but these countries have also spent a great deal on relief. Impacts in other countries are also sizable, with an average 9% deficit increase anticipated for the European Union as a whole, for example. The predicted deficits in the United States and the United Kingdom will raise their overall public debt to about 115% and 125% of GDP, respectively. Rapid expansion of public debt has caused concern in the past, but low interest rates make the debt burden more manageable as long as countries revert soon to normal GDP growth

rates. Countries with weaker credit ratings face higher interest rates, so that some countries may experience financing difficulties even if their deficit increase is modest by the standards of **Table 1**. And the huge extra demand for borrowing by governments could lead to rising interest rates all round as the global economy recovers.

### **Equity markets**

The first, highly visible verdict on the economic implications of the pandemic was delivered by the financial markets from mid-February onward. At that time, very few countries other than China had a significant number of COVID-19 cases, and stock markets around the world were at or close to their peak. The S&P 500 index in the United States, for example, peaked on 19 February at a level 13% higher than a year earlier and 61% above five years ago. However, Figure 1 shows that equity prices dived in high-income countries from mid-February onward: the S&P 500 fell by 34%, the FTSE100 by 35%, the DAX by 39%, and the Nikkei by 31%. The Shanghai index also fell, but only by 13%. Each of these indexes bottomed out between 18 March and 23 March.

Markets gained confidence after 23 March, in part due to the large scale of relief packages announced by governments in the G7 and other rich countries. Although some fluctuations occurred, progress was fairly steady during this second phase and, by the end of June, most of the major indexes in G7 countries were within 10% of their peak earlier in the year. A notable exception was the FTSE 100, reflecting the severity of the health and economic impacts of the pandemic in Britain.



Source: Credit Suisse data

### **Sector variations**

The impact of the pandemic on equity prices has not been uniform across sectors. The differences are reflected in **Figure 2**, which shows the percentage shortfall on 23 March and 1 July of the S&P 500 sub-indexes relative to 19 February. The biggest losers with regard to both the market trough on 23 March and the mid-year value on 1 July were Energy, Financials and Industrials, components of "the old economy." The mid-year values of these sectors were still 18%–32% below their February levels. Real Estate and Utilities, also part of "the old economy," showed a similar pattern, although their decline was smaller. Materials had a large drop from February to March, but rebounded strongly in the second quarter.

In contrast, while the "new economy" sectors also experienced significant declines up to the March trough, they were smaller in magnitude (ranging from 25% to 32%) and shorter in duration. At mid-year, except for Consumer Staples, they were close to or above their February peaks. The resilient sectors were Consumer Discretionary (which includes companies such as Amazon, eBay, the Gap, Nike, General Motors and McDonald's), Information Technology (Apple, Google, Microsoft, etc.), Communication Services (Alphabet, AT&T, Facebook, Netflix, Verizon, Walt Disney, etc.) and Healthcare (Eli Lilly, Johnson & Johnson, Merck, Pfizer and the major US health insurers). The relative success of the first three of these sectors reflects the boom in internet commerce during the pandemic. The buoyancy of the Healthcare sector at this time is also unsurprising. Differences in

equity-price performance across sectors have obvious distributional consequences: share-holders in the most resilient sectors are better off compared with others. We return to this issue in Chapter 3 of this report.

### Other factors

During the first half of 2020, many currencies depreciated against the US dollar, including the Canadian dollar (down 4.8%), the Indian rupee (down 5.5%) and the British pound (down 6.7%). Turkey depreciated by 13%, the same as Russia. Even larger depreciations were recorded for Mexico (-18%), South Africa (-20%) and Brazil (-27%). Currency movements like these have a significant impact on the level of household wealth measured in current US dollars and affect the distribution across countries as well. Further repercussions follow from house price movements. Both buyers and sellers withdrew from the market during the early months of the pandemic, so there was little systematic movement in house prices at that time. However, by mid-summer house prices seemed to be moving upwards in many countries.

Credit availability is another major factor influencing household debt levels and will be of special significance given the actions taken by central banks to relax the credit constraints facing both individuals and businesses. Central banks have also signaled the likelihood of low interest rates for the foreseeable future, which has helped to stabilize equity markets and may account for the upward pressure on house prices.

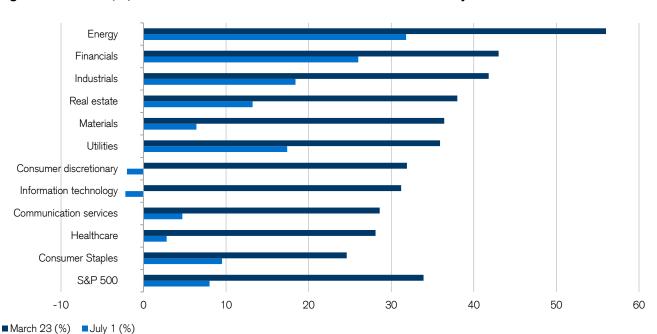


Figure 2: Shortfall (%) of S&P 500 and selected sub-indexes from 19 February 2020 levels

A significant development this year has been a rise in the savings rate. Among the Organisation for Economic Co-operation and Development (OECD) member countries, disposable income per capita dipped in the first quarter in those countries most affected by the pandemic, but remained fairly stable elsewhere. However, constrained spending opportunities saw consumption per capita drop by 2.5% on average and by more than 6% in Spain, Korea, Italy, Belgium and Israel. The net result was a rise in the savings rate in all OECD countries, ranging in the first quarter from 0.04 percentage points in Poland to 6.4 points in Belgium. Lockdowns and other pandemic-related constraints on spending combined with rent and mortgage deferrals magnified the fall in consumption during the second quarter of 2020. But the surprise development has been a large rise in disposable income in some countries. The United States reported a 10% rise in disposable personal income fueled by a 76% rise in government transfers, while Canada reported a 11% rise, again a result of generous government support. The consequences for savings were dramatic. The savings rate in the United States rose from 7.3% in Q4 2019 to 9.6% in Q1 2020 and then to 26.0% in Q2 2020.

This jump in savings cushions the reductions in wealth from other sources. It may show up in larger holdings in savings accounts or else as

lower debts, e.g. lower credit card balances and lower overdrafts. Either way, the overall impact on wealth is likely to be modest, since limitations on spending are not expected to persist in the long term and, in any case, annual savings typically equate to no more than 4% of household wealth.

## 44

## A significant development this year has been a rise in the savings rate

A final big unknown is how governments will deal with increased public debt in the years to come. In particular, whether they will seek to recover some of the emergency outlays via increased taxation, including possible new taxes on wealth, which have been promoted widely in recent years.



## Lessons from the 2007–08 global financial crisis

A review of what happened to household wealth during and after the 2007-08 global financial crisis provides valuable insights into the possible evolution of household wealth over the coming months and years, and guidance also regarding the policies best suited to minimize the potential damage. The crisis was triggered by a collapse of the housing market, initially in the United States, but later spread to other countries that had experienced a housing boom. This spilled over to the financial sector, revealing deep flaws in the operations of global financial markets at that time. Tight credit conditions at the outset compounded the problems, leading to reduced real GDP. As a consequence, while the impact on household wealth was initially felt via reduced asset prices, the longer-term harm was mainly associated with reduced asset quantities due to lower GDP. Past Global Wealth Reports have referred to the "lost decade," especially as far as Europe is concerned.

Two core conclusions can be drawn from the experience with the global financial crisis. First, the impact differed widely across countries and regions. Second, the crisis laid bare other weaknesses in economies and economic management, which exacerbated the problems and were often reflected in exchange-rate depreciation.

Figure 3 captures the impact across regions between 2007 and 2010.

For the world as a whole, average wealth fell 9.2% in 2008, but over half of the loss was recovered in 2009 and wealth per adult was 2.6% above the pre-crisis level by 2010. Latin America and India suffered high losses initially, but wealth growth resumed at a fast pace and the loss lasted only a year. Africa had also fully recovered by the end of 2009, along with the Asia-Pacific region (excluding China and India), which was little affected by the crisis. But the clear winner in relative terms was China, where average wealth growth did not even pause, surging ahead regardless and recording a 74% rise by 2010.

In contrast, wealth losses persisted in both Europe and North America. North America fared worse initially, with wealth per adult falling by 14.7% in 2008 compared to 12.1% in Europe. But, by 2010, North America had recovered to within 7.2% of the 2007 level, while Europe, handicapped by exchange-rate depreciation, was still down by 9.8%.

Figure 3: Wealth per adult by region 2007–10 (2007=100), current USD

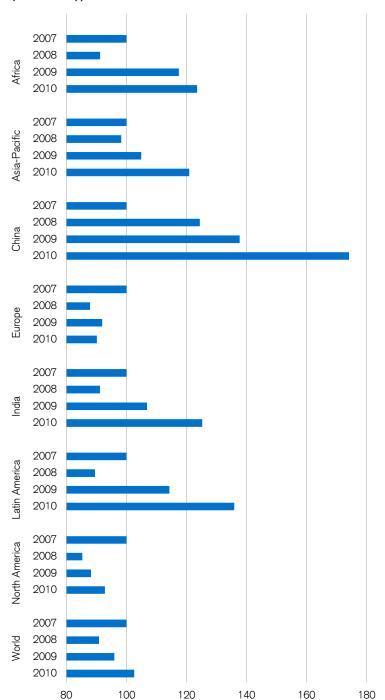
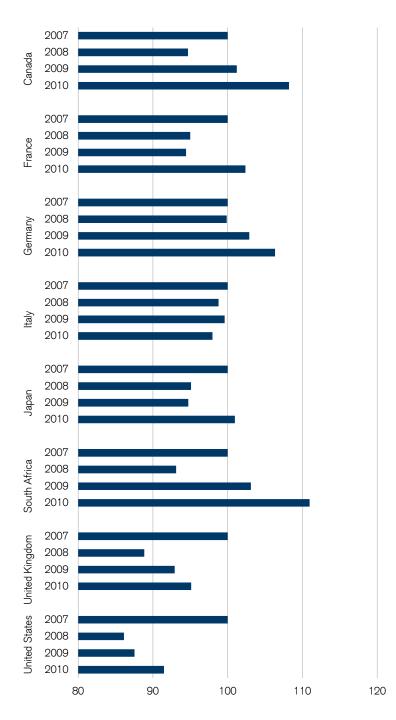


Figure 4: Wealth per adult for selected countries 2007–10 (2007=100), domestic currencies



Source: Original estimates by the authors

## Wealth impact of the financial crisis on individual countries

Figure 4 provides further details of average wealth for G7 countries plus South Africa, which also has highly reliable data. The figures here refer to domestic currency units in order to discount the volatile exchange-rate movements during these years. The results show that the United States performed worst in every year up to 2010, although successive Global Wealth Reports have documented the enormous increases in household wealth achieved in the United States since 2010. Among other countries, Figure 4 shows that Germany and Italy were little affected, while France and Japan suffered losses for a couple of years, but were back on track by 2000. Canada and South Africa did better, dipping for a single year and recording net growth of about 10% by 2010. The country which shows most similarities with the United States is the United Kingdom. It too experienced significant losses in both financial assets and in the housing market. By 2010, average wealth was still down 4.9% compared to 2007.

## 44

The main reason for optimism this time around is that the global financial sector is much healthier than it was in 2007–08

As regards the implications for the impact of the COVID-19 pandemic on household wealth, it seems clear that we can expect wide variations in the experience of different countries, and that the outcomes will depend critically on the ability of governments to deal with the ongoing health and social problems, and to ensure GDP growth returns to normal levels as quickly as possible. The main reason for optimism this time around is that the global financial sector is much healthier than it was in 2007–08. Also, governments and central banks have learned the importance of credit arrangements and quantitative easing during a severe crisis.

## Early evidence of the impact of COVID-19 on household wealth

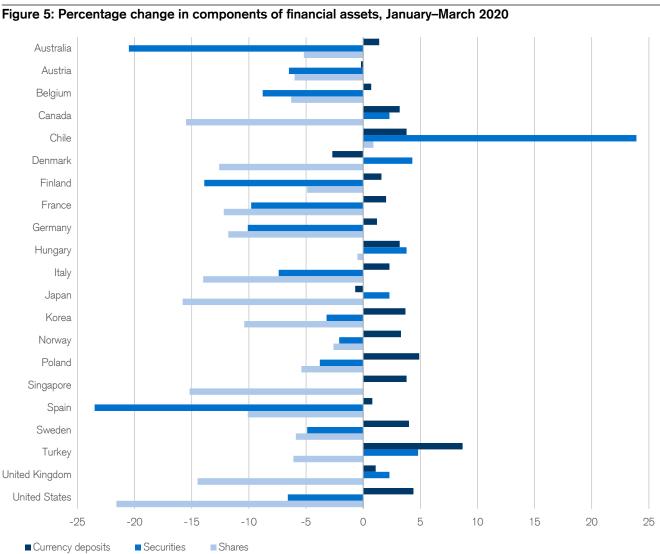
In terms of output and employment effects, the consequences of the pandemic outside China were not really felt until March, when there was some impact on employment, a large impact on world stock markets and a seismic shift in expectations. The implications are visible in official household balance sheet data for March 2020. Figures 5 and 6 summarize the evidence for a representative selection of the larger countries. The average values given below refer to the full list of 34 countries reporting data.

Figure 5 shows the percentage change in savings and bank accounts ("cash"), securities (mostly bonds, a small fraction of the average portfolio), and company shares between 1 January and 30 March, by which time there were 938,000 reported cases of COVID-19 infections around the world and 44,300 reported deaths. The anticipated macroeconomic repercussions

caused global stock markets to drop by an average of 13.2% during the first quarter of 2020 and are reflected in the change recorded for many countries in the value of household share ownership (measured in domestic currencies). The movement in securities varied considerably across countries, but was typically negative, averaging -4.7%.

#### The flight to liquidity

Falling stock markets prompt people to shift money from the stock market into cash, a trend which shows up clearly in Figure 5. While shareholdings fell 13.2% on average, currency and deposits rose 2.9%. The overall magnitudes of these opposing changes are more similar than the percentage figures suggest, because liquid assets are a larger fraction of the average portfolio in most countries outside North America. Also striking is the regularity of this pattern across counties. Of the 20 key countries shown in Figure 5, 19 countries (all bar Chile) saw a drop in the value of shares, and 17 saw an increase in cash holdings. France,

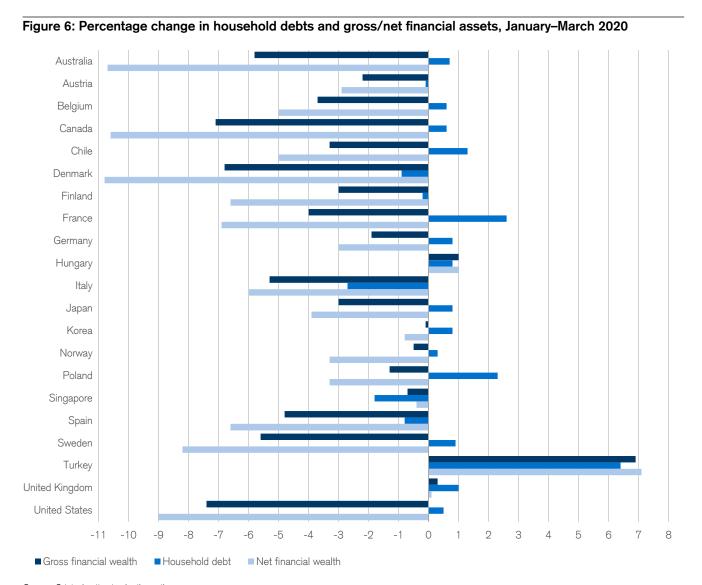


Germany and Italy display typical effects: share declines in the range of 12%–14% combined with a rise in currency and deposits of 1%–2%. The most marked shift in portfolio composition is seen in the United States, where a 21.6% fall in shares accompanied a 4.4% increase in cash. At the other end of the spectrum, the common pattern of falling shares was shared by Austria, Denmark and Japan, but cash went down slightly.

The implications for financial net worth
Figure 6 presents the broader picture, focusing
on changes in total household financial assets
and debts (again expressed in local currency
units). Overall, financial assets fell at an average
rate of 3.3% while debts rose by 1.0%. The
drop in financial assets owes much to the decline
in stock markets, while the rise in debts may be
an early reflection of the increased borrowing
needs of households and family businesses due
to pandemic-related income losses. At the end
of March, the United States recorded the largest
drop in financial assets (–7.4%), while at the

other extreme Hungary, Turkey and the United Kingdom reported a small increase in total financial assets. These latter countries all experienced currency depreciations against the US dollar, so the rise could signal higher domestic currency valuations of foreign financial assets.

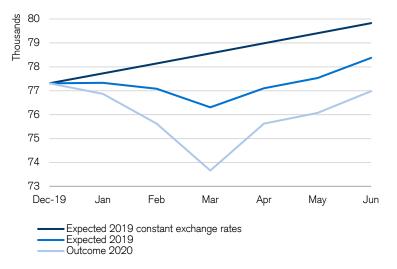
Debt changes showed greater variability, with six countries experiencing a decline. However, underlying trends pointed toward household debt reductions, so, even in these countries, household debts may have been higher than they would otherwise have been in the absence of COVID-19. Financial net worth fell at an average rate of 4.7%, with the largest declines of 10%-11% seen in Australia, Canada and Denmark, slightly above the 9.0% decline recorded for the United States. Turkey, Hungary and the United Kingdom again went against the general trend, with financial net worth increasing by 7.1%, 1.0% and 0.1%, respectively, possibly as a result of rising domestic currency valuation of foreign assets.



## Impact of the COVID-19 pandemic in January–June 2020

We now attempt to quantify the worldwide impact of the pandemic on household wealth during the first half of 2020. In order to do so, we assembled and processed the latest evidence on market capitalization, house prices, exchange rates, and changes in GDP. For comparison, we also prepared estimates of the likely evolution of household wealth if the pandemic had not occurred. These are based on International Monetary Fund (IMF) forecast GDP growth rates and exchange rates from 2019, combined with 3-year average historical growth rates for market capitalization, house prices and domestic credit. The pattern of wealth growth by month under these scenarios is displayed in **Figure 7**.

Figure 7: Global wealth per adult (USD), January-June 2020



Source: Original estimates by the authors

## 44

## The pandemic has already caused global wealth to fall by USD 7.2 trillion

The uppermost line in Figure 7 shows the outcome we think would have happened in the absence of the pandemic, assuming fixed exchange rates. It shows wealth per adult rising at an annual rate of 6.6% per annum, which is equivalent to total global wealth rising by 8.0% per annum. This is roughly 2% below the rate we reported for 2019. However, the US dollar was (correctly) expected to strengthen slightly against European and Latin American currencies this year. Incorporating this expectation leads us to believe that, after three months with little movement, total global wealth would have edged up from March onward, resulting in an increase of USD 8.2 trillion by end-June, a rise of 2.0% compared to December 2019. Population growth means that average wealth would have dipped during January-March, then recovered. Without the pandemic, our best estimate suggests that global wealth per adult would have grown by 1.0% over the whole 6-month period, from USD 77,309 at the beginning of 2020 to USD 78,376 at end-June.

Instead, the pandemic will result in much lower levels of household wealth. Over time, household wealth tends to rise roughly in line with GDP growth, so the 7.0% lower global GDP projected

for this year has the potential to reduce global wealth by 7%, or USD 27.9 trillion. Because downward wealth adjustments take place at a slower pace, global household wealth was never likely to fall by 7% immediately. But the stock market reaction during Q1 2020, and the available official balance sheet evidence for this period broadly conforms to expectations. Extrapolating from this data, we estimate that total global household wealth declined by USD 17.5 trillion between January and March, a drop of 4.4%. Wealth per adult fell by 4.7%.

Events then took an unexpected turn. The actions taken by governments and central banks bolstered asset values, and the stock market response combined with a number of other factors reversed the decline experienced during January-March. While hard evidence remains in short supply, the available data suggests that household wealth levels for most countries are roughly back to their year-start values, at least in domestic currency terms. For the world as a whole, we estimate that mid-year global household wealth was USD 1 trillion above the January level, a rise of 0.25%. This is less than the rise in adult numbers over the same period, so average global wealth fell by 0.4% to USD 76,984. Compared to what we would have expected before the COVID-19 outbreak, the pandemic has already caused global wealth to fall by USD 7.2 trillion, or USD 1,391 per adult worldwide.

Further details for the first half of 2020 are provided in **Table 2**. The top half of the table refers to our "business as usual" estimates based on 2019 expectations; the bottom half of the table reports our estimates of what has happened. Disregarding exchange rate changes, household

Table 2: Change in household wealth by region, January–June 2020

	Total wealth	to	Change in Wealth Change Change total wealth per adult in wealth financial asse per adult		Change in cial assets	Change in non- financial assets		Change in debts			
	June		JanJune	end-2019	JanJune		JanJune		JanJune	Ja	anJune
	USD bn	USD bn	%	USD	%	USD bn	%	USD bn	%	USD bn	%
2019 expectation	n										
Africa	4,787	-18	-0.4	7,241	-2	-59	-3	21	1	-20	-4
Asia-Pacific	71,587	1,190	1.7	58,255	1	844	2	462	1	116	1
China	82,236	4,257	5.5	74,621	5	2,273	6	2,774	6	790	10
Europe	94,940	651	0.7	160,824	1	261	1	431	1	41	0
India	15,473	164	1.1	17,328	0	10	0	179	1	24	3
Latin America	10,933	-1,484	-12.0	24,620	-13	-825	-13	-873	-11	-215	-14
North America	127,456	3,472	2.8	457,092	2	2,962	3	799	2	289	2
World	407,412	8,234	2.1	78,376	1	5,465	2	3,794	2	1,025	2
2020 outcome											
Africa	4,683	-122	-2.5	7,083	-3.9	-73	-3.1	-76	-2.6	-26	-5.4
Asia-Pacific	70,270	-127	-0.2	57,184	-1.0	164	0.4	-55	-0.1	235	2.4
China	81,446	3,468	4.4	73,904	4.1	2,740	7.3	1,572	3.2	844	10.4
Europe	93,370	-919	-1.0	158,165	-1.0	-683	-1.4	-262	-0.4	-26	-0.2
India	15,555	246	1.6	17,419	0.7	153	4.3	122	1.0	30	3.1
Latin America	10,831	-1,586	-12.8	24,390	-13.4	-780	-12.5	-978	-12.7	-172	-11.3
North America	124,026	43	0.0	444,792	-0.4	-731	-0.7	802	2.0	28	0.2
World	400,180	1,002	0.3	76,984	-0.4	790	0.3	1,125	0.5	913	1.7

Source: Original estimates by the authors

wealth would have grown in all regions without COVID-19. However, currency depreciation would probably have led to falling total wealth (in current USD terms) in Africa and especially Latin America (as reported in **Table 2**). China and North America were well poised to grow at a healthy rate, but the pandemic has wiped out the prospective gain in North America, and caused losses in every other region except China and India. The worst affected region is Latin America, where wealth declined by 12.8%. However most of this is attributable to currency devaluation, which was anticipated before the COVID-19 outbreak.

As regards the components of wealth, financial assets and non-financial assets have moved in the same direction as total wealth in most regions: upward for China and India, and downward for Africa, Europe and Latin America. However we believe that financial assets in the Asia-Pacific region (excluding China and India) have grown fractionally. In North America, non-financial assets have risen by the amount

we expected without COVID-19. However, this has been offset by a similar decline in financial assets. Overall, financial assets and non-financial assets have both grown slightly at similar rates, but non-financial assets have held up better compared to the outcome expected in the absence of the pandemic. While household debt has grown faster than either financial assets or non-financial assets, the rise is lower than the 2019 projection, possibly reflecting unintended saving by households - especially higher income households - whose opportunities for shopping, entertainment and travel have been severely curtailed. At the other end of the income spectrum, those who became unemployed or suffered a decline in income are likely to have reduced their savings and/ or incurred higher debt, especially in countries lacking government emergency income support. So the overall impact of changes in debt has an inequality bias - raising savings and wealth at the upper end, while reducing savings and wealth lower down.

Given the damage inflicted by COVID-19 on the global economy, it seems remarkable that household wealth has emerged relatively unscathed. It should be noted that this conclusion draws heavily on provisional household balance sheets for Q2 2020 issued by a small number of countries, in particular the United States. This provisional data may well be revised downward in future, especially with regard to the valuations of smaller businesses, many of which have suffered greatly during the pandemic. However, these revisions will not change the figures much. There are other, more important, reasons why household wealth values have held up in the face of the economic turmoil found everywhere.

## 44

## It seems remarkable that household wealth has emerged relatively unscathed

With respect to non-financial wealth, this category of assets is dominated by dwellings and land. These tend to grow alongside GDP in the longer run, but land and house prices can be sticky in the short term. During the COVID-19 pandemic, both buyers and sellers initially withdrew from the market. As activity returns, house prices are likely to respond to mortgage credit conditions, which have eased this year. As a consequence, the impact of lower interest rates on housing demand may well offset the impact of higher unemployment and lower incomes, leading to higher land and house prices. This contrasts sharply with the experience during the 2007-08 financial crisis, when tightened mortgage markets sent house prices into a sharp decline. Real estate prices may also be affected in the future by the shift of some work from the office to the home, and the need to give workers more space, not only in offices but in shops, factories, public transport and elsewhere. The shift of work to the home should increase the demand for more spacious housing. And the need to reduce crowding in workplaces may tend to raise the price of non-residential land generally.

As regards financial assets and debts, a number of factors are at work. In the short run, valuations are highly sensitive to changes in equity prices. The onset of the pandemic produced a sharp decline in stock prices, reflecting the

expected reduction in economic activity and future earnings as well as heightened uncertainty. A large negative effect on market capitalization resulted everywhere. But governments and central banks have learned their lessons from the financial crisis and took swift action to limit the immediate damage, reassuring markets that the financial crisis experience would not be repeated. The drop in equity prices was largely reversed by the end of June, and this rapid rebound of the markets neutralized most of the negative impact on household wealth. It remains to be seen how durable the correction will be. A slow recovery from the slump, combined with lower profits and dampened expectations, could constrain stock prices or even cause a relapse. A continuation of low interest rates will help counter such a trend. Lower interest rates have been critical in shoring up equity prices and also supporting the values of bonds and real estate.

Along with low interest rates, the other main reason why financial assets have rebounded is the unplanned savings caused by constraints on spending opportunities. As already noted, the impact of these extra savings is evident in the rise in liquid assets in household wealth portfolios, and in the lower-than-expected rise in household debt. In other circumstances, dissaving by households most harmed by the pandemic may well have offset the extra savings by those less affected. By and large, this has not happened because of emergency support provided by the governments of richer nations, which has limited the fall in disposable income, and, in some instances, even caused disposable income to rise.

The third – indirect – reason why household wealth has been relatively immune to the consequences of COVID-19 is government expenditure undertaken to limit the economic damage. In effect, governments have transferred many trillions of US dollars to the household sector via the support programs. This has disguised the true burden of the pandemic on household wealth. But the cost has been postponed, rather than reduced or eliminated. As governments seek to repair the damage to public finances, growth in household wealth is likely to be depressed for many years to come.

## Monthly trajectories for individual countries

Monthly wealth movements are difficult to estimate for individual countries, but we have attempted to do so and display the resulting patterns for six major economies in **Figure 8**. The graph plots wealth per adult for each country relative to the level at the start of the year. All countries show a decline in average wealth in March relative to the situation in January and February, and all bar China show a loss of wealth

Figure 8: Relative change in wealth per adult, January-June 2020 (USD, December 2019=100), selected countries

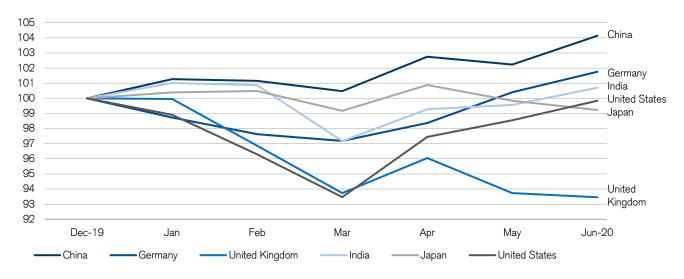


Figure 9: Change in wealth per adult (USD) in January–June 2020, biggest gains and losses

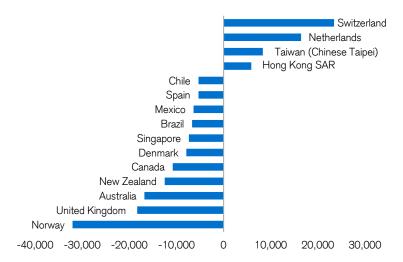
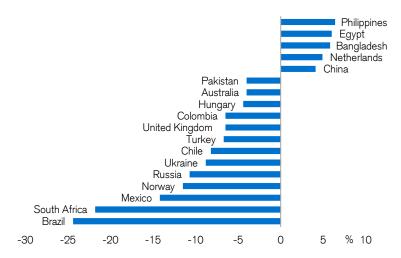


Figure 10: Percentage change in wealth per adult in January–June 2020, biggest gains and losses



Source Figures 8-10: Original estimates by the authors

by end of March. However, from March onward there are marked differences in the trajectories for individual countries.

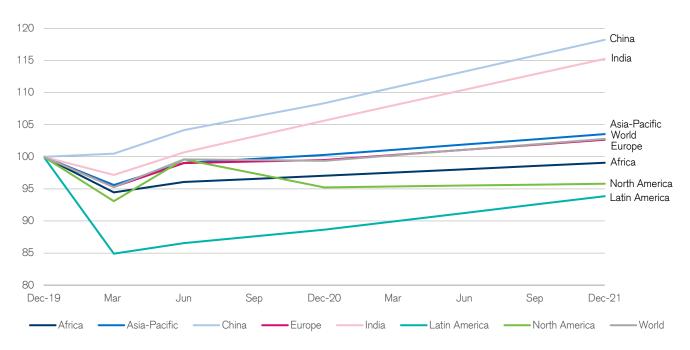
The United States experienced the greatest reduction by the end of March, but then recovered at the fastest rate. China, Germany and India also rebounded at a healthy rate, sufficient to ensure positive growth in wealth per adult over the six-month period. In contrast, Japan recovered into positive territory in April, but then dropped back to 1% below its initial position. Average wealth in the United Kingdom also recovered briefly in April, but then returned to its March level, 6.5% below the level in January.

Looking further afield, while most countries

suffered adversely from the pandemic during the first half of 2020, some countries escaped the negative consequences for household wealth. Figure 9 displays the biggest winners and losers in terms of wealth per adult. The impact of lower interest rates on asset values was one of the reasons why we think Hong Kong SAR (up USD 5,880), Taiwan (Chinese Taipei, up USD 8,330), the Netherlands (up USD 16,430) and Switzerland (up USD 23,430) were the main beneficiaries during the first half of 2020. In contrast, average wealth declined by USD 5,000-7,000 in Chile Spain, Mexico, Brazil, Singapore and Denmark. These were topped by losses in Canada (down USD 10,810) and New Zealand (down USD 12,510). Exchange-rate depreciation contributed to the drop in wealth per adult in Australia (down USD 16,820) and the United Kingdom (down USD 18,340) and accounted for much of the decline of USD 32,050 in Norway.

In percentage terms, our tentative estimates suggest that the Philippines, Egypt, Bangladesh and the Netherlands did relatively well, with gains above 4%, better than China (see **Figure 10**).

Figure 11: Relative change in wealth per adult by region, 2020-21 (USD, December 2019=100)



Source: Original estimates by the authors

This contrasts with losses of 4%–5% in Pakistan, Australia and Hungary, 6%–7% in Colombia, the United Kingdom and Turkey, and 8%–9% in Chile and Ukraine. Exchange rate depreciation was a big factor in the declines we estimate for Russia (–10.7%), Norway (–11.5%), Mexico (–14.2%), South Africa (–21.8%) and Brazil (–24.4%).

#### Wealth prospects in the near future

The immediate economic outlook is highly uncertain. There is little agreement on how GDP will evolve, even for the most important economies. Stock markets are likely to perform in unpredictable ways and exchange rates may be volatile as well. Household debt is a big unknown, possibly falling if consumers' spending habits are constrained, or rising if those suffering most from the consequences of the pandemic borrow to cover their day-today needs. Perhaps the biggest question mark concerns the medium-term actions of governments faced by a conflict between support for economies in stress and repayment of the debt incurred in dealing with the consequences of the pandemic.

In this context, predictions concerning the future path of household wealth are necessarily speculative. Nevertheless, we offer our appraisal of the likely outcome for the remainder of this year and the whole of 2021. **Figure 11** plots the trajectories for average wealth in each

region relative to their wealth at the end of 2019. For the world as a whole, we foresee average wealth remaining flat for the rest of 2020, ending up a fraction (0.6%) below the starting level for the year. Wealth growth will resume in 2021, but at a slowish pace equivalent to 3.4% p.a. At this rate, growth will have averaged 1.4% over the 2-year period 2020–01, well down from the rates achieved in recent years, or the rate we would have predicted in the absence of the pandemic.

The curves in Figure 11 illustrate our belief that wealth growth will resume next year in all regions, albeit at very different rates. Wealth per adult in both China and India is set to grow at 9%, similar to rates in the recent past. Latin America will also resume at a healthy 6% pace, although this means that average wealth will still be 6% below the starting value at the end of 2021. Growth of 3% is predicted for both Europe and Asia-Pacific (excluding China and India), similar to that for the world as a whole. The trajectory for Europe is almost identical to that of the world. The path for Asia-Pacific is slightly higher. Both regions should be at or about their starting point by the end of this year and will show a net gain by the end of 2021.

The main outlier is North America, where we see a continued weakness due to the high prevalence of COVID-19 in the United States, and its high dependency on financial assets. For this reason, we expect that, at the end of 2020, wealth per adult will be 5% below its

starting value, and that it will remain around this value for the whole of 2021. However, household wealth in North America may decline less than we expect if GDP holds up better than early predictions suggested.

These predictions are likely to change given current uncertainties, and exchange rate changes will be critical for individual countries. On balance, the repercussions that will surface as countries adjust to a radical change in circumstances are more likely to worsen the outcomes for household wealth rather than improve them.

However, reduced economic activity and greater debt has lessened the value of many smaller businesses, particularly those likely to recover slowly from the impact of COVID-19, if at all. Lower economic growth in the future, coupled with shifts in corporate and consumer behavior, will result in lost output, redundant facilities, and sectoral changes that will hamper household wealth accumulation for years to come. These shocks to the global economy lead us to believe that household wealth will, at best, recover slowly from the pandemic throughout 2021. Among the major economies, China is likely to be the clear winner.

### Conclusion

This chapter has examined the worldwide impact of the COVID-19 pandemic on the level of household wealth. In one major respect, the episode has highlighted a core reason for interest in household assets and debts: wealth acts as a form of self-insurance that households can draw upon when times are hard. The pronounced switch into cash is a strong indication that risk-averse households anticipated the need to use their wealth for this purpose. However, the robust responses of governments throughout the world reflect the fact that, even in the most advanced countries, many households lack the assets on which to draw or the ability to borrow funds without permanently damaging their futures. In some countries, the public sector has indemnified households by arranging emergency benefits, wage subsidies and the like. But not all governments have the resources to support this line of action. In addition, regardless of the degree of government support, many individuals throughout the world have been highly vulnerable as a result of inadequate backup funds.

The impact of the pandemic on household wealth during the initial phase - lasting about a month from mid-February - was felt mainly via the sharp worldwide decline in equity prices. When the commitment of governments and central banks became apparent, equity prices began to rise. In some countries, including the United States, the initial losses have now been reversed for equities as a whole, although many countries have not yet rebounded fully. On the non-financial side, there has been no global downward trend in prices for housing or real estate generally. Indeed, confinement during lockdown and enhanced prospects for working from home, combined with low interest rates, have reinvigorated interest in some countries, especially for larger rural properties. So stock market and house prices movements are not an immediate threat to household wealth.

## 44

# The situation within countries is changing fast and there is the promise of many more surprises to come

Our estimates this year are subject to a degree of caution. The situation within countries is changing fast and there is the promise of many more surprises to come. We may have misjudged the speed at which the impact of the pandemic on the value of smaller businesses is recognized in official statistics, and also the degree to which low interest rates support the valuations of household assets. If the US dollar weakens, then global household wealth will rise in terms of USD units. Nevertheless, we think our projections for the coming months represent a likely overall outcome.

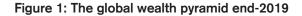


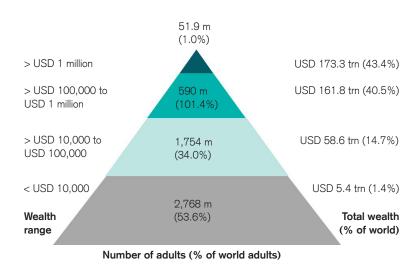
Photo: Gettylmages, Comezora

## Distributional impact of COVID-19

Anthony Shorrocks, James Davies and Rodrigo Lluberas

While it is too early to assess fully the impact of the COVID-19 pandemic on global wealth inequality, some of the puzzle is emerging. Public attention has been drawn to the rising wealth of some top billionaires, particularly those in Tech. But the latest data shows that overall wealth inequality has declined in at least one key country – the United States. Global inequality also depends on differences across countries, where assessment awaits the arrival of more data. Impacts on particular groups are easier to see: the low-skilled, women, minorities, the young, and small businesses have all suffered, while those linked with the few industries that have thrived in the pandemic have benefited.





Source: Original estimates by the authors

## Wealth inequalities

Household wealth is very unevenly distributed and this shows up in multiple ways. Geographical imbalance is evident in the fact that at the end of 2019 North America and Europe accounted for 55% of total global wealth, but only 17% of the world adult population. In contrast, the population share was three times the wealth share in Latin America, four times the wealth share in India, and nearly ten times the wealth share in Africa.

Wealth differences within countries are even more pronounced. The top 1% of wealth holders in a country typically own 25%–40% of all wealth, and the top 10% usually account for 55%–75%. Combining these between-country and within-country variations yields our estimates for the global wealth pyramid displayed in **Figure 1**. At the end of 2019, our figures indicate that millionaires around the world – which number exactly 1% of the adult population – accounted for 43.4% of global net worth. In contrast, the 54% of adults with wealth below USD 10,000 together mustered less than 2% of global wealth.

The pandemic will have important repercussions on income distribution. Although emergency benefits in high-income countries offset the effect to some extent, unemployment and reduced economic activity will almost certainly increase income inequality within countries since they tend to affect those with lower incomes disproportionately. International income differences may also rise as the pandemic spreads more through the third world, where governments have less resources to cushion the impact on household income. Other effects, e.g. reduced remittances from family members working abroad, will worsen impacts.

Increased income inequality will feed through to wealth distribution via effects on saving and borrowing. But the overall impact of the pandemic on wealth inequality is less clear since a number of factors are at play. Broadly speaking, reduced incomes for low-wealth families are likely to increase wealth inequality, both within countries and for the world as a whole. On the other hand, where there are reduced share prices, the capital losses for high-wealth groups will tend to reduce wealth inequality. Increases in debt can go either way: growing debts of less well-off households will increase wealth differentials, but this is offset by increased borrowing by business owners.

## 44

## The pandemic will have important repercussions on income distribution

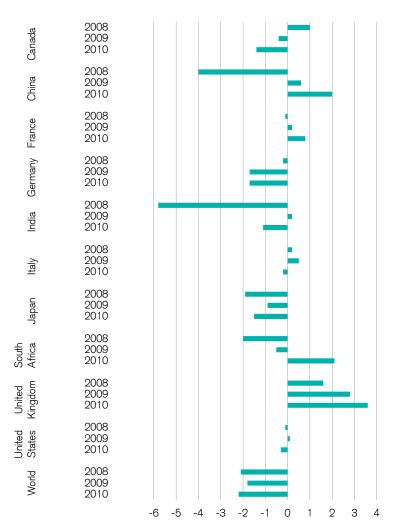
In this chapter, we first examine what possible lessons the distributional impact of the global financial crisis of 2007-08 may yield for wealth distribution changes in the aftermath of the pandemic. A core feature of the pandemic is the variation in outcomes across industries and sectors: some have been hard hit, while others have been boosted. We explore the resulting wealth mobility issues in the context of the only data readily available: the day-to-day fortunes of Forbes billionaires. Regardless of whether wealth inequality rises or falls, events this year and next have significant implications for the number of millionaires and ultra high net worth (UHNW) individuals. We then review the experience of demographic groups of special interest: women, minorities and young people. The chapter concludes with an evaluation of wealth

inequality trends this century and the changes likely to occur in the coming months.

## The distributional impact of the global financial crisis, 2007–10

The distributional changes that resulted from the global financial crisis provide interesting background for the outcome of the pandemic. The change in the share of the top 1% (relative to 2007) is recorded in Figure 2 for G7 countries plus China and India. The share fell markedly in India and China during 2008, although this change reversed a year later in both countries. Declines in Japan and Germany were also significant and persisted longer. Our estimates suggest that top wealth shares changed little at this time in the United States, France and Italy. But the combined impact was sufficient to reduce the share of the top 1% of global wealth holders by two percentage points in 2007, and for the share to remain at that lower level for the next two years.

Figure 2: Changes in the percentage share of the top 1% of wealth holders in 2008–10 relative to 2007, selected countries



The big difference now is that asset prices both financial and non-financial - either remained fairly stable or returned close to pre-pandemic levels by mid-year in most countries. As seen from the experience in 2007-10, the drop in equity prices during March was equalizing, since share ownership is relatively more important for high net worth households. But much of that effect vanished when the market recovery took place after March. The impact of changes in GDP on saving and asset acquisition take longer to appear in the statistics and have less distributional bias in either direction. On the other hand, changes in saving and borrowing patterns for people at different wealth levels could increase wealth inequality somewhat. As the pandemic takes its course, the main distributional effect may now be seen in higher debt levels, especially lower down the wealth distribution. But these will make little difference to the wealth shares of the top groups, or even to other broader-based measures of wealth inequality such as the Gini index.

Table 1: Mean net worth of top 1,000 2020 Forbes billionaires relative to 19 February 2020, by industry

	No. of billionaires	Mean net w	orth (19 Feb	9 February =100)		
Industry	18 March	18 March	30 May	30 June		
Finance & Investments	144	67.9	76.5	73.8		
Technology	125	71.9	87.8	96.2		
Fashion & Retail	120	67.5	78.8	79.5		
Real Estate	96	74.0	81.7	81.0		
Food & Beverage	85	71.2	82.6	88.2		
Manufacturing	71	69.7	82.8	84.2		
Diversified	64	71.2	81.9	84.7		
Healthcare	57	71.9	81.5	91.0		
Energy	43	69.4	84.0	89.5		
Media & Entertainment	36	71.5	83.2	82.5		
Service	35	73.3	84.5	84.7		
Metals & Mining	30	68.1	82.8	80.3		
Automotive	21	70.9	87.7	98.7		
Construction & Engineering	16	69.1	79.5	80.8		
Gambling & Casinos	15	69.6	81.1	80.7		
Logistics	14	70.3	75.0	79.5		
Sports	14	69.7	79.9	71.7		
Telecom	14	73.7	81.2	84.9		
All industries	1000	70.3	82.0	84.8		

Source: 18 March net worth refers to Forbes 2020 World's Billionaires list. 30 May and 30 June net worth refer to Forbes World's Real-Time Billionaires lists on those dates. 19 February net worth is authors' own estimate.

Almost no attention has been paid to the distributional repercussions of low interest rates, which now seem likely for an extended period following the pandemic. Low interest rates support higher asset prices, which disproportionately benefits wealthier individuals. At the same time, they disadvantage those with savings accounts, limiting the ability of low and middle-range wealth holders to grow their wealth. The secular decline in real interest rates over the past 40 years is one of the unrecognized reasons why mid-range wealth holders have lagged behind the top wealth echelons in many countries.

### Wealth mobility

A core feature of the pandemic is the variety of ways in which different sectors have been affected. Internet shopping and support for remote working arrangements have been given a huge boost, while high street shops and restaurants may suffer in both the short and long term, and the same is likely to be true especially for airlines and their suppliers now that the desirability of non-essential travel has been challenged. The pronounced differences across sectors will convert into pronounced differences in returns to wealth. As a consequence, wealth mobility will be much more rapid. Those fortunate to hold assets in growing sectors will move up the ranking; those holding less-desirable assets will move down.

The most readily available evidence on what to expect is provided by the daily update of the wealth of people listed on the Forbes Real-Time Billionaires website. The annual 2020 Forbes World's Billionaires list was finalized on 18 March, very close to the trough in global stock markets. Since then, billionaires' wealth has rebounded quite strongly, as Table 1 shows for those who were in the top 1,000 on 18 March. We extracted data for 18 March, 30 May and 30 June. However, wealth from 18 March onward is best compared with the billionaires' net worth when the markets were at their peak. We have therefore estimated their wealth on 19 February, when the S&P 500 was at its highest. **Table 1** shows mean wealth of the top 1,000 billionaires by industry relative to that date.

The table reveals that the net worth of the top 1,000 fell by 30% between 19 February and 18 March in line with the decline in world stock markets over this period. This drop did not vary much by industry, but the subsequent rebound did. By the end of June, the mean wealth of billionaires in the Automotive and Technology sectors were close to their 19 February values. At the opposite end of the spectrum, the means for Finance & Investments, Logistics and Sports were 20%–25% below their 19 February levels.

Overall, the average shortfall below 19 February was 15% on 30 June. While market trends in July and August buoyed stocks, the sectoral differences continued to be seen.

Looking in more detail at the 20 countries with the most billionaires, China, Japan and Korea stand out in **Table 2**: the wealth of their billionaires at the end of June was actually a little higher than in February. This conforms with the importance of the automotive and technology industries in those countries. Billionaires in the United States fared about average, reflecting their spread across all industries. The countries where billionaires have fared least well include Italy and the United Kingdom, both of which were badly affected by COVID-19, shackling firms across a broad swathe of industries.

The variation in individual experiences is also interesting. A few of the wealthiest billionaires have benefited enormously, experiencing wealth gains of about 50% between 18 March and 30 June. According to Forbes, Jeff Bezos of Amazon, for example, saw his wealth rise from USD 113 billion to USD 165 billion, while Mark Zuckerberg of Facebook went up from USD 55 billion to USD 84 billion. These increases far outstrip the average rise of 21% among the top 1,000 billionaires.

To give some idea of the degree of churning within this group of billionaires, we cross-classified billionaires according to their (100-member) decile groups on 19 February and 30 June. The results reported in **Table 3** show that most billionaires stayed within their decile group or moved one group up or down. However, 45 billionaires moved down more than one group and 85 moved up more than one.

Table 2: Mean net worth of top 1,000 Forbes billionaires relative to 19 February 2020

No. of

Mean net worth (19 February =100)

	billionaires		,	
Country	18 March	18 March	30 May	30 June
United States	358	70.0	81.7	83.1
China	142	80.1	93.4	103.2
Germany	66	67.3	77.0	80.0
Russia	43	67.0	79.2	79.2
Hong Kong SAR	39	74.5	83.3	82.8
India	39	70.6	83.2	88.8
France	28	61.6	77.4	82.4
United Kingdom	24	67.2	75.2	75.7
Canada	21	68.7	76.6	81.1
Switzerland	19	73.1	82.0	85.7
Italy	15	59.9	68.0	71.4
Japan	15	73.2	89.6	101.4
Sweden	13	64.9	81.4	85.4
Taiwan (Chinese Taipei)	13	73.3	83.7	84.3
Australia	12	69.1	84.1	90.5
Singapore	12	71.2	82.5	83.6
Brazil	11	68.6	77.1	86.4
Israel	10	68.4	76.7	74.0
Thailand	10	70.5	83.9	85.7
Korea	9	73.4	93.5	109.2
All countries	1000	70.3	82.0	84.8

Source: 18 March net worth refers to Forbes 2020 World's Billionaires list. 30 May and 30 June net worth refer to Forbes World's Real-Time Billionaires lists on those dates. 19 February net worth is authors' own estimate

Table 3: Mobility within decile groupings of 1000 Forbes billionaires, 19 February to 30 June

#### Decile group 30 June Decile group Top 10% **Bottom** 19 March 10% **Top 10%** Bottom 10%

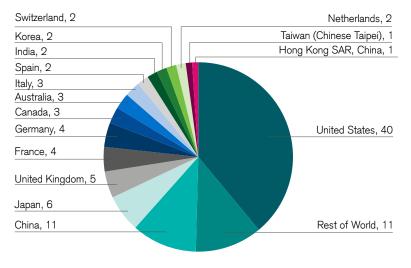
Source: Original estimates by authors based on the Forbes 2020 billionnaire data referred to in Table 3 and Table 4

The biggest loser (recorded in row 3) was a billionaire in the UK "fashion and retail" industry, whose wealth of USD 8.1 billion on 19 February dropped to USD 5.5 billion on 18 March and then down to USD 2.4 billion at the end of June. In contrast, a US billionaire in the used car business saw his wealth fall from USD 3.6 billion on 19 February to USD 2.4 billion on 18 March, but then recover to USD 7.9 billion by 30 June (Table 3, column 3). In all, we identified 13 billionaires whose wealth increased by more than 50% during this difficult period. These include six from China, four from the United States and one each from Canada, Hong Kong SAR and Malaysia. Most (7) list their industry as Technology, and the most common sector (4) is "e-commerce." However, there are some surprises: one is listed in the pig-breeding sector of the food and beverage industry. Less surprising, and more indicative of the age in which we live, is the doubling of wealth of a Malaysian manufacturer in the "synthetic glove" sector.

### Trends in the number of millionaires

While the consequences of the pandemic may not surface immediately in the headline wealth inequality figures, they are already evident in the number of millionaires in each country since these numbers are sensitive to changes in the average level of wealth and to changes in exchange rates, which have been very volatile this year. At the end of 2019, we estimate that there were 51.9 million millionaires worldwide. The United States had by far the greatest number: 20.2 million, or 39% of the world total (Figure 3). China, with 11% of the global total, is in second place, having overtaken Japan (6%) a few years ago. Next comes the United Kingdom (5%), followed by France and Germany with 4% each, then Canada, Australia and Italy (3%). Spain, India, Korea, Switzerland and the Netherlands each hosted 2% of global millionaires, with Taiwan (Chinese Taipei) and Hong Kong SAR also accounting for at least 1% of high net worth citizens worldwide.

Figure 3: Number of dollar millionaires (% of world total) by country, end-2019



Source: Original estimates by the authors

## 44

There will be an unusually large number of new millionaires and an unusually large number of new ex-millionaires

The number of millionaires soared in 2019, but changed very little overall during the first half of 2020. Table 4 lists the main net beneficiaries and the main losers ranked in order of the net gain or loss. Some of the individuals demoted this year will be people who just passed the threshold in 2019. But the high degree of mobility to which we have drawn attention means that there will be an unusually large number of new millionaires and an unusually large number of new ex-millionaires. At the start of the year, we estimate that there were 49.9 million millionaires worldwide, up 4.5 million during the course of 2019. The United States added half of this number – 2.3 million newcomers - to its sizable stock. This was more than the combined total of newcomers

Table 4: Change in the number of millionaires by country, 2019 and January-June 2020

Main gains	Adults (the	ousand) with	wealth abov	e USD 1 m	Main losses	Adults (thousand) with wealth above USD 1 m				
·	Number	Change	Change	Change	-	Number	Change	Change	Change	
Country	End-2019	2019	JanJun. 2020	Net 2019–20	Country	End-2019	2019	JanJun. 2020	Net 2019–20	
United States	20,215	2,193	58	2,251	Brazil	375	35	-116	-81	
China	5,788	916	365	1,281	Mexico	283	39	-56	-17	
Switzerland	884	193	53	246	South Africa	62	6	-18	-12	
Canada	1,452	272	-72	200	Chile	84	0	-9	-9	
Japan	3,322	234	-47	187						
Netherlands	852	107	74	181						
France	2,169	152	23	175						
Australia	1,420	220	-83	137						
Germany	2,163	79	58	137						
United Kingdom	2,357	374	-241	133						
World	51,882	5,688	-56	5,632	World	51,882	5,688	-56	5,632	

Source: Original estimates by the authors

in the next nine countries: China, the United Kingdom, Canada, Japan, Australia, Switzerland, India, Spain and Taiwan (Chinese Taipei). Few countries experienced a reduction in the number of millionaires during 2019, although the number dropped by 11 in Italy and by 33 in Brazil.

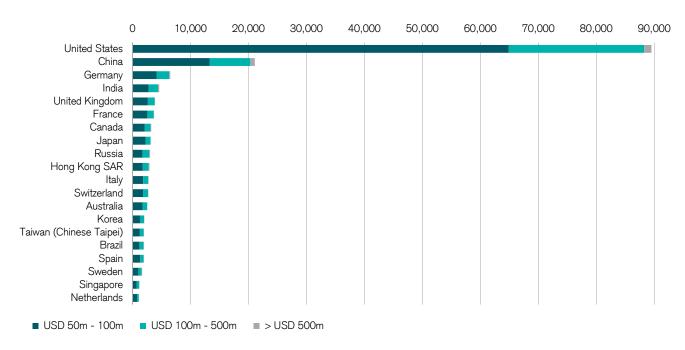
During the first half of 2020, we think the number of millionaires shrank by 56,000 overall, just 1% of the 5.7 million added in 2019. However, membership has expanded in some countries and some have lost significant numbers, in part due to stock market falls caused by the pandemic, but more likely resulting from currency devaluation which may have happened anyway. The United Kingdom (down 241,000), Brazil (down 116,000), Australia (down 83,000) and Canada (down 72,000) all shed more millionaires than the world as a whole. Most of these losses simply offset gains achieved in 2019, although Brazil, Mexico, South Africa and Chile have suffered a net loss since the start of 2019. China (up 365,000) recorded the largest gains in the first half of 2020, cementing its second place after the United States in the ranking of net gains since January 2019. Our estimates suggest that the Netherlands (up 74,000), the United States (up 58,000), Germany (up 58,000) and Switzerland (up 53,000) are the other countries with modest increases in millionaire numbers so far this year.

## Trends in ultra high net worth individuals

At the apex of the wealth pyramid, we estimate that at the start of this year there were 175,690 ultra high net worth (UHNW) adults in the world with net worth exceeding USD 50 million. Of these, 55,820 were worth at least USD 100 million and 4.410 had wealth over USD 500 million. North America dominates the regional breakdown, with 92,740 members (53%), while Europe accounts for 32,280 (18%), and 20,240 (12%) live in Asia-Pacific countries, excluding China and India. Among individual countries, the United States leads by a huge margin with 89,510 members, half of the world total (Figure 4). China is a clear second with 21,090 UHNW individuals, followed by Germany (6,524), India (4,590), the United Kingdom (3,900) and France (3,710). The remaining countries in the top ten list are Canada (3,210), Japan (3,140), Russia (3,030) and Hong Kong SAR (2,910).

The total number of UHNW adults rose by 16,760 (11%) in 2019 (**Table 5**), but 120 members were lost during the first half of 2020, leaving a net gain of 16,640 in UHNW membership since the start of 2019. The United States accounted for 84% of this expansion in global UHNW numbers, with China accountings for another 25% of the rise. Germany, France, India, Canada, Italy, the Netherlands, Sweden and Taiwan (Chinese Taipei) are other countries with more than 200 new members since January 2019.

Figure 4: Ultra high net worth individuals end-2019, top 20 countries



Source: Original estimates by the authors

Table 5: Change in the number of UHNW adults by country, 2019 and January-June 2020

Main gains		Adults with wealth above USD 50 m			Main losses		Adults with wealth above USD 50 m			
	Number	Change	Change	Change		Number	Change	Change	Change	
Country	End-2019	2019	JanJun. 2020	Net 2019–20	Country	End-2019	2019	JanJun. 2020	Net 2019–20	
United States	89,509	13,887	121	14,008	United Kingdom	3,901	-1,146	-398	-1,544	
China	21,087	2,818	1,330	4,148	Brazil	1,974	-137	-609	-746	
Germany	6,524	396	178	574	Switzerland	2,728	-701	184	-517	
France	3,712	395	41	436	Korea	2,033	-453	-30	-483	
India	4,593	338	85	423	United Arab Emirates	534	-410	-2	-412	
Canada	3,214	545	-159	386	Mexico	774	-105	-154	-259	
Italy	2,775	376	-5	371	Japan	3,137	-204	-45	-249	
Netherlands	1,102	271	96	367	Spain	1,960	-103	-78	-181	
Sweden	1,640	339	-23	316	Thailand	794	-139	-20	-159	
Taiwan (Chinese Taipei)	1,990	106	112	218	Belgium	147	-135	-4	-139	
World	175,688	16,759	-122	16,637	World	175,688	16,759	-122	16,637	

According to our figures, 2019 saw 1,146 fewer UHNW members in the United Kingdom, 701 fewer in Switzerland, and 453 fewer in Korea. Note that millionaire numbers rose in each of these countries, so the evidence points to redistribution of wealth within the high net worth group rather than an overall contraction of wealth at the upper end. Losses have continued into 2020 in each of these countries, and the same is true of the other seven countries who have lost most UHNW members over the 18-month period: Brazil, United Arab Emirates, Mexico, Japan, Spain, Thailand and Belgium. Taken together, these drops are very significant for some countries: since January 2019, UHNW numbers have dropped by more than 30% in Brazil and the United Kingdom.

The impact on women, minorities and the millennials

The wealth consequences of the pandemic have varied across population subgroups in two main ways: via differences in the composition of individual wealth portfolios and via income shocks. As reported above, although stock markets rebounded in most countries after March, some, like the United Kingdom, did not recover well. In those countries, individuals with larger holdings of equities no doubt lost wealth relative to others. People in late middle age, men, and wealthier groups in general are more likely to fall in that category. Individuals who invested heavily in the industries worst affected, such as bricks and mortar, retail or airlines, would have lost more, of course. Home owners in some markets have likely suffered, although house prices have been little affected overall, even rising in some cases. The Case-Shiller house price index in the United States was up 3.4% in June, for example, compared with its January 2020 level.

Although aggregate data is available, the distributional impact of income shocks has not shown up clearly yet in the available statistics and has been buffered in high-income countries by emergency benefits and employment policies. The pattern of shocks to labor earnings can be gauged to some extent from the published employment data. Unemployment effects have varied considerably across countries: high in North America; low in much, but not all, of Europe and Latin America; high in India; low in China, and so on. Between January and April 2020, unemployment rates approximately tripled in India to 24% and quadrupled in the United States to 15%. In contrast, over the same interval, measured unemployment only rose from 3.4% to 3.9% in Germany and from 5.3% to 6.0% in urban China. But, although the aggregate impact varied considerably, the differential impact across subgroups showed some common features. The available evidence

shows that female and young workers have fared particularly badly. For example, while the overall number of people employed in the United States fell by 13.0% between February and May 2020, the drop for workers aged less than 35 was 17.1%. Recent employment data by education level is readily available for only a few countries, but there it shows that a greater proportion of the less educated lost their jobs. In Canada, for example, between February and May 2020, employment of workers who did not graduate from high school fell 17.1%, while employment fell 14.7% for high school graduates and only 5.6% for university graduates. Since those losing their jobs are likely to run down their liquid assets or take on more debt, women, the young and the less educated likely saw a reduction in their relative wealth.

# Unemployment effects have varied considerably across countries

Female workers have suffered disproportionately. partly because of their high representation in businesses and industries such as restaurants, hotels, personal service and retail that have been badly affected by the pandemic. The International Labor Office (ILO) reports that, globally, 40% of female workers were employed before the pandemic in industries destined to be worst affected while 36.6% of men were in those industries. The results are evident in data from the Organisation for Economic Co-operation and Development (OECD) on employment rates in the second quarter of 2020, available for 13 countries. On average, these showed a 7.0% drop in job numbers for men, but a 9.5% drop for women in the second quarter of 2020 when the pandemic reached its first peak. There are some other notable effects. Across 140 countries studied by the World Health Organization (WHO), women form 70% of the labor force in health and social care, where rates of infection have been high. And lockdown may have caused women greater stress than men due to increased home and childcare duties as schools and restaurants closed and family incomes fell.



Single mothers suddenly faced with roundthe-clock childcare duties and possible job loss provide one illustration of the kind of challenges faced. Such stresses often show up in wealth effects as well as health and social impacts.

Worth considering also is the millennial generation (the cohort that came of age after the year 2000). Their age range, now 20-40, is sufficiently broad that the oldest members have likely not fared worse than the population as a whole, while the younger ones - especially women and the less educated - may have fared quite poorly, as indicated in the numbers quoted above. The disadvantage associated with millennials is partly attributable to the consequences of the 2007-08 crisis, which left many unemployed. The COVID-19 pandemic may not only mean a "double whammy" for the millennial generation, but also a repeat experience for the next post-COVID-19 generation as economic activity is reduced, globalization goes into reverse, and travel is discouraged.

Finally, it should be noted that visible minorities suffered worse than average in terms of both health and economic shocks during the pandemic. In the United States, for example, rates of infection and hospitalization for key minorities were much higher than for the white population.

The Centers for Disease Control and Prevention (CDC) reported recently that the total number of COVID-19 cases per capita was 2.6 times higher for African-Americans than for Caucasians, and for indigenous people and Hispanics was 2.8 times higher. With job losses also being higher than for the white population, these groups suffered even more. From February to June 2020, 7.5% of white workers lost their jobs, but 11.5% of African-Americans and 12.3% of Hispanics lost their jobs. Ironically, wealth impacts per affected person may have been smaller for these minorities because they had little wealth to begin with and poor borrowing opportunities. According to the 2016 Survey of Consumer Finance in the United States, the median wealth of Hispanics was just 12.1% of that of Caucasians, and the African American median only 10.1%.

#### Trends in wealth inequality in recent years

For reasons already explained, the distributional impact of the pandemic may not show up in measures of overall wealth inequality within most countries, at least for some time, as the underlying factors tend to offset one another. The United States, however, recently introduced a system of Distributional Financial Accounts that

provides interesting and timely estimates. This data indicates a drop in the wealth shares of the top 1% and 10% of households from 31.2% and 69.7%, respectively, at the end of 2019 to 30.5% and 69.0% at the end of June 2020. How long this decline will last and how widely a similar trend has occurred in other countries is unclear. Getting a full picture will also require estimates of the change in wealth inequality between countries, which seems likely to be positive, given that the pandemic will likely hamper growth in some regions more than in others.

So far this century, our estimates suggest that wealth inequality declined within most countries during the early 2000s. For the world as a whole, the decline is more evident because the fall 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 of 2008, when financial assets grew speedily 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 bottom 90% accounts for 19% of global wealth, compared to 11% in the year 2000.

**Figure 5** summarizes the wealth inequality trends for the world as a whole and for ten core countries. Between 2000 and 2007, the share of the top 1% of wealth holders declined in six of these countries, but rose a little in the United States, and at a fast rate in China, India and Russia. The rapid rise in financial assets during 2007–16 caused the share of the top 1% to rise in each of the countries under consideration. But it has subsequently stabilized or fallen in every country, sometimes quite markedly.

Inequality in the world as a whole echoes these trends within countries, but also reflects narrowing wealth differentials between countries as emerging economies, particularly China and India, have grown at above-average rates. This is the main reason why global wealth inequality fell in the early years of the century, and while it edged upward during 2007-16, we believe that global wealth inequality re-entered a downward phase after 2016. Our preliminary estimate for mid-2020 indicates a 43.3% share of the global top 1%, down 2.3 percentage points since 2016. However, the overall trend is highly sensitive to the prevailing macroeconomic environment and may well move upward again if financial assets outpace non-financial assets in the coming years.

70 65 60 55 50 45 40 35 30 25 20 15 10 United India Brazil Russia World Japan Germany States Kingdom **2000** 2007 2016 **2020** 

Figure 5: Percentage wealth share of top 1%, selected countries and years

As regards the share of the global top 10%, the impact of narrowing differences between countries is clear cut. With only a couple of minor blips, the top decile share has shown a consistent downward trend this century, falling from 88.6% in 2000 to 80.3% in mid-2020.

#### Conclusion

The COVID-19 pandemic has affected household wealth in a wide range of ways. Large numbers of individuals have lost jobs and income, which typically reduces savings and wealth. In response, many governments have arranged emergency benefits, wage subsidies, loans to small businesses and similar programs. And central banks have responded with lower interest rates and quantitative easing. These initiatives have cushioned households and given reduced spending opportunities during lockdowns - many households have seen their bank balances rise and credit balances recede. However, these positive impacts on wealth may soon wear off as government assistance is curtailed and severe recession takes its toll.

#### 44

The main legacy of the pandemic for the distribution of wealth may result from the huge variation in the impact across industries and sectors Income impacts and changes in saving or borrowing are not the only wealth effects of the pandemic. Stock prices fell sharply in the early stages, with resulting losses skewed toward higher-wealth groups. But the subsequent recovery has limited the impact. Overall, the worldwide impact on total household wealth has been remarkably small, bearing in mind the huge pandemic-related GDP losses. Also, there is currently no firm evidence on whether the pandemic has systematically favored higher-wealth groups over lower-wealth groups, or vice versa. Nevertheless, there have been significant distributional effects. First, while the wealth impacts of the COVID-19 pandemic have been cushioned by the actions of government and central banks, the cushioning has not been uniform. As a consequence, the impact has been greater in low-income countries where the borrowing capacity of government has limited the bailouts. This will lead to a changed pattern of household wealth across countries and regions, with China almost certain to be among the winners. Second, specific groups within countries, e.g. low-skilled, female or minorities - have fared worse than average. These trends have tended to increase global wealth inequality. But they are not the only factors in play.

The main legacy of the pandemic for the distribution of wealth may result from the huge variation in the impact across industries and sectors. Some industries, especially those in the tech and other "new economy" sectors, have seen increased business and a strong rise in stock prices. Wealth has risen fast for a handful of top billionaires who lead the major companies in this sector. In contrast, billionaires whose wealth is tied to "old economy" sectors that have suffered most from lockdowns, like retail business and personal services, have fared less well. These experiences will be echoed - more modestly - by ordinary investors who put their money into the new economy and by the owners of businesses linked to the growth sectors. Expect also to see a rise in the relative wealth of countries that specialize more in those activities, particularly China.



# Wealth of nations

Anthony Shorrocks, James Davies and Rodrigo Lluberas

Both the levels and the distribution of household wealth differ widely across countries. This section of our report focuses on a small set of countries that illustrate the range of circumstances around the world.

The quality of wealth data is good in the high-income 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 but one of the countries featured here, data quality is rated as "good," indicating that there is a house-hold sector balance sheet as well as a household wealth survey. India is close to having a good rating, but is not quite there as, although it has a financial balance sheet for the household sector prepared by a reputable private financial institution, it does not include non-financial assets. We therefore rate India's wealth data as "fair."

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 constant 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 the end of 2019, wealth was invariably higher than in 2000 and also higher than in 2007 with constant exchange rates.

Over 2019, the value of a number of important currencies fell in terms of US dollars. The euro fell 2.3%, the Indian rupee dropped 2.2% and the renminbi 1.4%. A few key currencies went in

the opposite direction. For example, against the US dollar, the Swiss franc rose 2.2%. Although currency movements were mixed, the top chart in this section shows wealth increasing strongly in most cases in 2019. The average increase was 8.7% with current exchange rates, and 8.6% with constant exchange rates.

Our second chart shows the split between financial and real (non-financial) assets, as well as the average level of debt beginning at the end of 2019, with projections to the end of 2021. Globally, financial assets comprised 53% of gross assets and debt equaled 12% of that total at end-2019. Among the countries featured here, financial assets are most important in Switzerland, the United Kingdom and the United States, forming at least 53% of gross assets in each case. Financial assets accounted for 43% or less of gross assets in China, Germany and India.

The last chart shows the distribution of wealth. There are some notable comparisons. For example, 73% of adults in India had net worth less than USD 10,000 at the end of 2019 versus only 19% in China. The percentage of those with very little wealth also differs in the developed world, being 29% in the United States, but only 11% in Germany. This variation reflects a range of factors including the availability of credit, the extent of student debt, home-ownership patterns and the age at which young people typically leave home and set up new households.

# **United States**

# Challenging times

The United States economy grew quickly in 2019. Wealth per adult rose 11.3% year on year, far exceeding the 4.2% per year growth over the previous five years. Non-financial assets rose 4.3% and financial assets 12.5%.

The United States has suffered badly from the pandemic, recording the tenth-highest number of total deaths per capita among countries with more than a million people by the end of August. The elderly, minorities, and low-income groups have been hardest hit. For the month beginning in late February, there was a 34% drop in the S&P 500 stock index. However, buoyed by low interest rates and quantitative easing, there was then a gradual rebound led by tech stocks. The S&P 500 was just 4.6% below its February peak at the end of June and, over the first half of the year, house prices rose 3.5% according to the Case-Shiller index. Personal saving rose and debt fell. The net result is that wealth per adult fell by just 0.2% in the first half of 2020. However, we expect wealth to decline about 5% in the second half of 2020 and to rise very slowly in 2021.

The United States has a high proportion of assets (72%) reported as financial, partly because of accounting practices. But, even with the procedures used elsewhere, the share would be about 64%. This high share reflects factors such as a relatively larger private sector and more outward foreign investment than in most other high-income countries. Debts are moderate at 12% of gross household assets.

Due to the combination of high average wealth and high inequality, the United States has a large fraction of adults with wealth above USD 100,000. The country has the most members in the top 1% global wealth group and 39% 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.

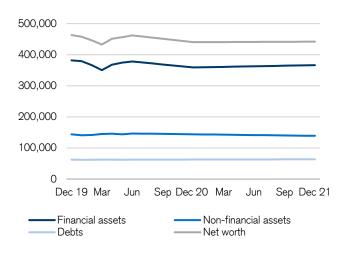
#### Country summary 2019

Population	330	million
Adult population	248	million
GDP	86,477	USD per adult
Mean wealth	463,549	USD per adult
Median wealth	69,117	USD per adult
Total wealth	114.9	USD trillion
US dollar millionaires	20,215	thousand
Top 10% of global wealth holders	97,217	thousand
Top 1% of global wealth holders	20,148	thousand
Wealth inequality	85.1	Gini index
Quality of wealth data	ជជជជជ	good

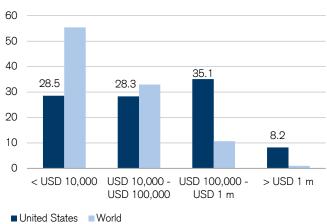
#### 

#### Estimates of wealth per adult components, December 2021 (current USD)

Current USD —— Constant USD



#### Wealth distribution relative to world (in %)



# China

## Keeping calm

The year 2019 was a challenging one for China, faced with tariffs imposed by the United States and a slowdown in some of its key export markets. Nevertheless, wealth per adult rose 12.8% using current exchange rates, versus an average growth rate of 8.8% in the preceding five years.

From the turn of the century to the end of 2019, total household wealth in China rose by a multiple of 21, from USD 3.7 trillion to USD 78.08 trillion at current exchange rates. The global financial crisis caused a small setback, but wealth growth soon returned. Although the country was the first hit by COVID-19, it took effective measures against the virus and recovered well in health terms. Although negative economic impacts could not be avoided, we estimate that wealth per adult grew 4.1% in the first half of 2020. Continued relatively strong growth can be expected through the rest of 2020 and in 2021.

China currently lies in second place in terms of total household wealth, behind the United States, but ahead of Japan. The proportion of household assets in financial form was steady at about 43% from 2015 to 2019, but rose slightly to 44.4% by June 2020. At the end of 2019, real assets comprised USD 44,349 per adult, and financial assets USD 34,008. Debt averaged just USD 7,395, equivalent to 9.4% of gross assets.

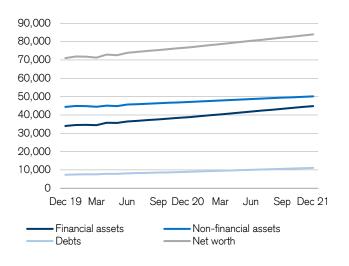
Although significant gaps are created by the strong urban/rural divide in China, overall wealth inequality was low in the early years of China's transition to a market economy. This was in part due to the absence of inherited fortunes and the relatively equal division of rural land and privatized housing. But wealth inequality has since risen quite quickly. At the end of 2019, China had 5.8 million millionaires and 21,100 residents with wealth above USD 50 million – more than any country except the United States.

#### Country summary 2019

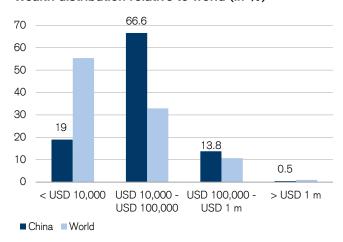
Population	1,437	million
Adult population	1,099	million
GDP	12,731	USD per adult
Mean wealth	70,962	USD per adult
Median wealth	25,758	USD per adult
Total wealth	78.0	USD trillion
US dollar millionaires	5,788	thousand
Top 10% of global wealth holders	107,517	thousand
Top 1% of global wealth holders	5,758	thousand
Wealth inequality	69.7	Gini index
Quality of wealth data	<b>ជជជជជ</b> ជ	good

# Wealth per adult over time 80,000 70,000 60,000 40,000 20,000 10,000 0 Current USD Constant USD

# Estimates of wealth per adult components, December 2021 (current USD)



#### Wealth distribution relative to world (in %)



# India

## Working hard

Over the last two decades, India's wealth has grown impressively, despite a setback in 2008 due to the global financial crisis and some currency fluctuations. Annual growth of wealth per adult averaged 9.7% over 2000–19 using current exchange rates, and 12.1% with constant exchange rates. Wealth per adult stood at USD 17,300 at the end of 2019 after a year of moderate growth and was USD 17,420 at end-June 2020, showing some growth despite the pandemic. Wealth growth is expected to be strong through the remainder of 2020 and 2021.

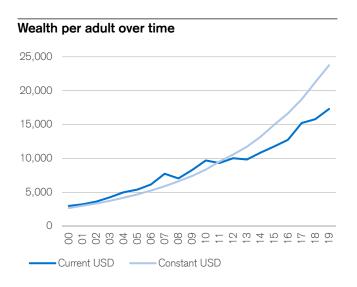
Household wealth in India is dominated by property and other real assets, although financial assets have grown over time, now forming 22% of gross assets. With an adjustment for survey underreporting, average debt was USD 1,080 at the end of 2019, which is just 6% of gross assets. Thus, although indebtedness is a severe problem for many poor people in India, overall household debt is relatively low.

The COVID-19 pandemic affected India with some delay, as in much of the developing world. While daily cases and deaths hit peaks in March or April in many high-income countries, this did not occur in India, which saw a rising incidence of infections and deaths through June and beyond. While average wealth rose by only 0.7% in the first half of 2020, we estimate that the full rise for 2020 will be 5%–6% and 2021 will see growth of about 9%.

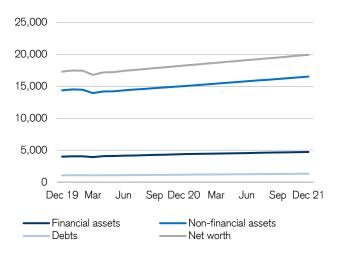
Wealth inequality remains quite high in India. There is considerable poverty reflected in the fact that 73% of the adult population had wealth below USD 10,000 at the end of 2019. At the other extreme, a small fraction of the population (2.3% of adults) had a net worth over USD 100,000. The country has 907,000 adults in the top 1% of global wealth holders, which is a 1.8% share. By our estimates, 4,600 adults have wealth over USD 50 million.

#### Country summary 2019

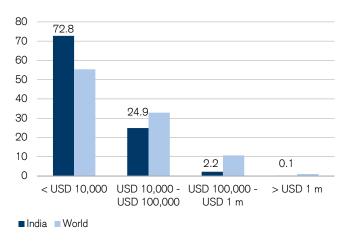
Population	1,373	million
Adult population	885	million
GDP	3,357	USD per adult
Mean wealth	17,299	USD per adult
Median wealth	3,943	USD per adult
Total wealth	15.3	USD trillion
US dollar millionaires	912	thousand
Top 10% of global wealth holders	14,311	thousand
Top 1% of global wealth holders	907	thousand
Wealth inequality	82.0	Gini index
Quality of wealth data	<b>ተ</b> ተ	fair



#### Estimates of wealth per adult components, December 2021 (current USD)



#### Wealth distribution relative to world (in %)



# Germany

# Good management

From 2000 to 2015, German wealth per adult in current US dollars rose at an average annual rate of 4.2%, despite significant drops in 2007 and 2010. There was then a decline ending with a rebound in 2019, mostly due to currency fluctuations. Using constant exchange rates, except for 2007 and 2010, wealth per adult rose at a steady pace after 2004, averaging 3.3% growth per annum. Germany now ranks fifth in the world in terms of total wealth, behind India and ahead of the United Kingdom.

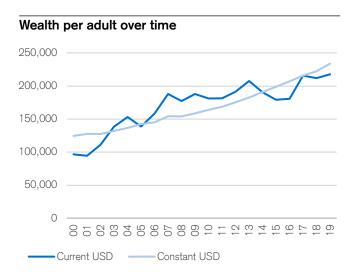
Germany controlled COVID-19 quickly with measures including vigorous testing and contact tracing. Nevertheless, its economy suffered from lockdown and reduced international trade. We estimate that, over the first half of 2020, wealth per adult rose 1.8% using current exchange rates. For the full-year 2020, we project growth of 3.9%, and, in 2021, we estimate wealth growth will be 3.3%

Non-financial assets bulk large in Germany, making up 57% of gross assets at end-2019 and averaging USD 141,900 per adult. Financial assets per adult stood at USD 106,760. Debts equaled 12% of gross assets, which is about average for high-income countries.

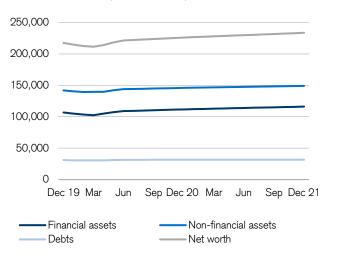
Wealth inequality is higher in Germany than in other major Western European nations. Its wealth Gini coefficient is 78%, compared to 66% in Italy and 70% in France. The share of the top 1% of adults in total wealth is 29%, also high compared to 22% in each of France, Italy and the United Kingdom. The fraction of adults in Germany with wealth less than USD 10,000 was 11% at the end of 2019, while, at the top end, the proportion with assets over USD 100,000 was almost four times the global figure at 40%. Germany hosted 2,152,000 USD millionaires at the end of 2019, making up 16% of the millionaires across Europe.

#### Country summary 2019

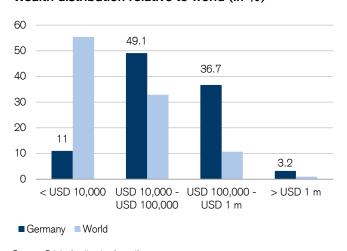
Population	84	million
Adult population	68	million
GDP	56,594	USD per adult
Mean wealth	217,655	USD per adult
Median wealth	52,777	USD per adult
Total wealth	14.8	USD trillion
US dollar millionaires	2,163	thousand
Top 10% of global wealth holders	23,236	thousand
Top 1% of global wealth holders	2,152	thousand
Wealth inequality	77.9	Gini index
Quality of wealth data	ជជជជ	good



# Estimates of wealth per adult components, December 2021 (current USD)



#### Wealth distribution relative to world (in %)



# **United Kingdom**

## Perfect storm

The United Kingdom was already facing multiple challenges in 2020, with the country still deeply divided over Brexit and political brinkmanship creating uncertainty about the terms of trade with the European Union from 2021 onward. The pandemic has exacerbated these problems. The government has struggled to cope with the medical consequences, leaving widespread complaints of "too little, too late." Better handling of the economic impact has helped preserve jobs and stave off bankruptcies, at least temporarily. But public spending has ballooned and no end is in sight. Among major economies, the United Kingdom may well be the biggest casualty of the pandemic.

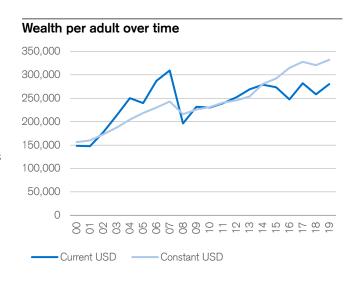
UK wealth grew rapidly in the early years of the century, helped by GBP appreciation versus the US dollar. But the United Kingdom suffered more than most from the financial crisis and took longer to recover. In fact, wealth per adult in 2019 was still 9% below the 2007 peak in USD terms, which is a bad omen for what may lie ahead. We estimate that average wealth fell by 6.5% in the first half of 2020 and that the United Kingdom will end 2020 with a drop of 8.5% versus 2019. We project slow growth, at 1.9%, in 2021.

Financial and non-financial assets are roughly equal in importance in the United Kingdom: the 53:47 split matches that for the world as a whole. 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 subsided somewhat in the following decade, but is likely to rise again as the economic impact of the pandemic unfolds.

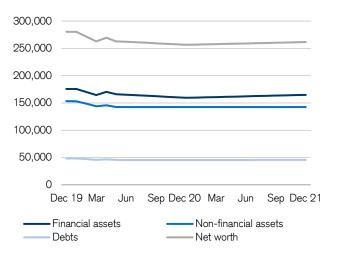
The pattern of wealth distribution in the United Kingdom is fairly typical for a developed economy as reflected in a Gini coefficient of 71% and a 22% wealth share of the top 1%. USD millionaires totaled 2.4 million at the end of 2019, but had fallen to 1.9 million by mid-2020.

#### Country summary 2019

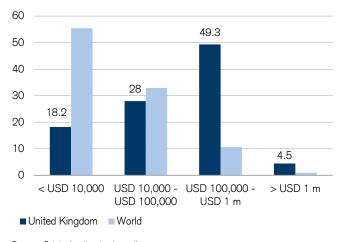
Population	68	million
Adult population	52	million
GDP	56,128	USD per adult
Mean wealth	280,440	USD per adult
Median wealth	127,932	USD per adult
Total wealth	14.6	USD trillion
US dollar millionaires	2,357	thousand
Top 10% of global wealth holders	25,746	thousand
Top 1% of global wealth holders	2,343	thousand
Wealth inequality	71.4	Gini index
Quality of wealth data	ជជជជជ	good



# Estimates of wealth per adult components, December 2021 (current USD)



#### Estimates of wealth per adult components, December



# Switzerland

## Still at the top

In current exchange-rate terms, wealth per adult in Switzerland was USD 598,400 at the end of 2019, representing a rise of 156% since the year 2000. Leaving aside small countries with inadequate data, like Liechtenstein and Monaco, Switzerland has led the global ranking each year. The rise in wealth owes much to currency appreciation. Wealth per adult in Swiss francs rose 53% from 2000 to 2019 – an average annual rate of 2.3%.

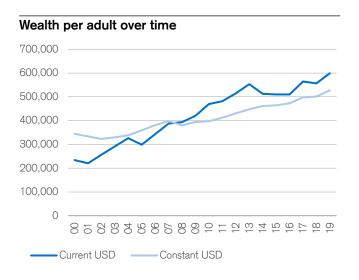
Switzerland contracted COVID-19 from international travelers quite early toward the end of February. Strong action was taken to bring it under control, but, as elsewhere, the country could not avoid the economic impacts of lockdown and global recession. Nonetheless, between 1 January and 30 June 2020, we estimate that, in current US dollars, average wealth in Switzerland rose by 3.9%. We project a rise of 6.1% for the year as a whole, and continued growth in 2021.

Financial assets made up 56% of gross wealth in Switzerland at the end of 2019 – higher than their share in France, Germany or the United Kingdom, but less than in Japan or the United States. Debts averaged USD 139,400 per adult, which equates to 19% of total assets, one of the highest levels in the world.

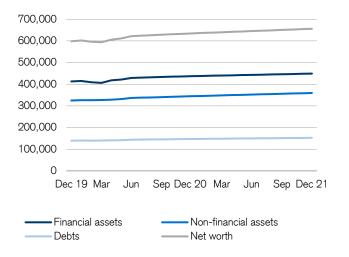
Due to its high average wealth, a large number of Swiss residents are at or near the top of the global distribution. Switzerland accounts for 1.7% of the top 1% of global wealth holders, which is remarkable for a country with just 0.1% of the world's population. More than half of Swiss adults have assets above USD 100,000, and 884,000 were USD millionaires at end-2019. An estimated 2,730 individuals were in the UHNW group at end-2019, with net worth over USD 50 million.

#### Country summary 2019

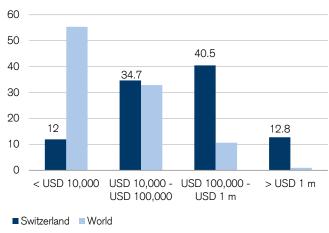
9	million
7	million
104,785	USD per adult
598,406	USD per adult
131,586	USD per adult
4.1	USD trillion
884	thousand
3,453	thousand
878	thousand
77.9	Gini index
ងជជជ	good
	7 104,785 598,406 131,586 4.1 884 3,453 878 77.9



# Estimates of wealth per adult components, December 2021 (current USD)



#### Estimates of wealth per adult components, December





### 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 Kingdom" (Economic Journal 1982), and, with Jim Davies and others, "Assessing the quantitative importance of inheritance in the distribution of wealth" (Oxford Economic Papers 1978), "The distribution of wealth" (Handbook of Income Distribution 2000), "The world distribution of 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 James 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, 2013).

Dr. Rodrigo Lluberas is an Analyst at the Research department of Uruguay Central Bank. He received his PhD in Economics from Royal Holloway College, University of London and his MSc in Economics from University College London. He has been a visiting scholar at the Institute for Fiscal Studies and an Economist at Towers Watson in London. Prior to undertaking his MSc, he worked for three years as an economic analyst at Watson Wyatt Global Research Services and more recently as a research assistant at NESTA. His main areas of expertise are pensions, consumption and wealth. Rodrigo is a co-author of "Estimating the Level and Distribution of Global Wealth, 2000-2014" (Review of Income and Wealth, 2017).

#### **Acknowledgments:**

The authors would like to thank Kyle Boutilier, University of Western Ontario, for his research assistance.

# General disclaimer / important information

The information provided herein constitutes marketing material. It is not investment advice or otherwise based on a consideration of the personal circumstances of the addressee nor is it the result of objective or independent research. The information provided herein is not legally binding and it does not constitute an offer or invitation to enter into any type of financial transaction. The information provided herein was produced by Credit Suisse Group AG and/or its affiliates (hereafter "CS") with the greatest of care and to the best of its knowledge and belief. The information and views that are expressed in this report are those of the authors and not necessarily those of Credit Suisse. The information and views provided by the authors are subject to change at any time without notice. Although the information has been obtained from and is based upon sources that Credit Suisse believes to be reliable, no representation is made that the information is accurate or complete. Credit Suisse has not independently verified any of the information to be provided by the authors and no representation or warranty, express or implied, is made and no responsibility is or will be accepted by Credit Suisse as to, or in relation to, the accuracy, reliability or completeness of any such information.

CS provides no guarantee with regard to the content and completeness of the information and where legally possible does not accept any liability for losses that might arise from making use of the information. If nothing is indicated to the contrary, all figures are unaudited. To the extent this document contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties predictions, forecasts, projections and other outcomes described or implied in forward-looking statements may not be achieved. Past performance, simulations and forecasts are not a reliable indication of future performance. Significant losses are always possible. The information provided herein is for the exclusive use of the recipient. It may not be reproduced, neither in part nor in full, without the written permission of CS.

#### Risk factor

Private equity is equity capital investment in companies that are not traded publicly (i.e., are not listed on a stock exchange). Private equity investments are generally illiquid and are seen as a long-term investment. Private equity investments, including the investment opportunity described herein, may include the following additional risks: (i) loss of all or a substantial portion of the investor's investment, (ii) investment managers may have incentives to make investments that are riskier or more speculative due to performance-based compensation, (iii) lack of liquidity as there may be no secondary market, (iv) volatility of returns, (v) restrictions on transfer, (vi) potential lack of diversification, (vii) high fees and expenses, (viii) little or no requirement to provide periodic pricing and (ix) complex tax structures and delays in distributing important tax information to investors.

This document is issued and distributed in the European Union (except Germany): by Credit Suisse (UK) Limited and Credit Suisse Securities (Europe) Limited. Credit Suisse Securities (Europe) Limited and Credit Suisse (UK) Limited, both authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, are associated but independent legal entities within Credit Suisse; Germany: Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"); United States and Canada: Credit Suisse Securities (USA) LLC; Switzerland: Credit Suisse AG authorized and regulated by the Swiss Financial Market Supervisory Authority (FINMA); Brazil: Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates: Mexico: Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); Japan: Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance

Bureau (Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; Hong Kong SAR, China: Credit Suisse (Hong Kong) Limited; Australia: Credit Suisse Equities (Australia) Limited; **Thailand**: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahim Place, 27th Floor, Unit 2701, Rama IV Road, Silom, Bangrak, Bangkok 10500, Thailand, Tel. +66 2614 6000; Malaysia: Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch; India: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030) and as Stock Broker (registration no. INB230970637; INF230970637; INB010970631; INF010970631), having registered address at 9th Floor, Ceejay House, Dr. A. B. Road, Worli, Mumbai - 18, India, T- +91-22 6777 3777; South Korea: Credit Suisse Securities (Europe) Limited, Seoul Branch; Taiwan (Chinese Taipei): Credit Suisse AG Taipei Securities Branch; Indonesia: PT Credit Suisse Securities Indonesia; Philippines: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorized affiliate of the above.

#### Additional regional disclaimers

Hong Kong SAR, China: Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong SAR, China, which differ from Australian laws. CSHKL does not hold an Australian financial services license (AFSL) and is exempt from the requirement to hold an AFSL under the Corporations Act 2001 (the Act) under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G

prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore branch to overseas investors (as defined under the Financial Advisers Regulations). By virtue of your status as an institutional investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. **UAE**: This information is being distributed by Credit Suisse AG (DIFC Branch), duly licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. Qatar: This information has been distributed by Credit Suisse (Qatar) L.L.C., which is duly authorized and regulated by the Qatar Financial Centre Regulatory Authority (QFCRA) under QFC License No. 00005. All related financial products or services will only be available to Eligible Counterparties (as defined by the QFCRA) or Business Customers (as defined by the QFCRA), including individuals, who have opted to be classified as a Business Customer, with net assets in excess of QR 4 million, and who have sufficient financial knowledge, experience and understanding to participate in such products and/or services. Therefore this information must not be delivered to, or relied on by, any other type of individual. Saudi Arabia: This document is being distributed by Credit Suisse Saudi Arabia (CR Number 1010228645), duly licensed and regulated by the Saudi Arabian

of the Act). Singapore: This report has been

Capital Market Authority pursuant to License Number 08104-37 dated 23/03/1429H corresponding to 21/03/2008AD. Credit Suisse Saudi Arabia's principal place of business is at King Fahad Road, Hay Al Mhamadiya, 12361-6858 Riyadh, Saudi Arabia. Website: www.credit-suisse. sa. Under the Rules on the Offer of Securities and Continuing Obligations "this document may not be distributed in the Kingdom except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorised financial advisor." Under the Investment Funds Regulations "this document may not be distributed in the Kingdom except to such persons as are permitted under the Investment Fund Regulations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document. and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective subscribers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document you should consult an authorised financial adviser. Bahrain: This material is distributed by Credit Suisse AG, Bahrain Branch, authorized and regulated by the Central Bank of Bahrain (CBB) as an Investment Business Firm Category 2. Related financial services or products are only made available to professional clients and Accredited Investors, as defined by the CBB, and are not intended for any other persons. The Central Bank of Bahrain has not reviewed, nor has it approved,

this document or the marketing of any investment vehicle referred to herein in the Kingdom of Bahrain and is not responsible for the performance of any such investment vehicle. Credit Suisse AG, Foreign Branch, a branch of Credit Suisse AG, Zurich/Switzerland, is located at Level 21, East Tower, Bahrain World Trade Centre, Manama, Kingdom of Bahrain. USA: This material is issued and distributed in the USA by CSSU, a member of NYSE, FINRA, SIPC and the NFA, and CSSU accepts responsibility for its contents. Clients should contact analysts and execute transactions through a Credit Suisse subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise. Canada: Where non-Canadian CS entities distribute marketing materials into Canada, there are no specific Canadian disclaimers required for general marketing materials. That said, we encourage regions to use the following disclaimer (which references requirements of the IDE referenced above) if they intend to send materials into Canada under the IDE/IAE/IFM. **IMPORTANT INFORMATION for distributions** by Credit Suisse (UK): The protections made available by the Financial Conduct Authority and/ or the Prudential Regulation Authority for retail clients do not apply to investments or services provided by a person outside the UK, nor will the Financial Services Compensation Scheme be available if the issuer of the investment fails to meet its obligations. To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the

UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future. This document is provided to you for your information and discussion only. It is not a solicitation or an offer to buy or sell any security or other financial instrument. Any information including facts, opinions or quotations, may be condensed or summarized and is expressed as of the date of writing.

The information may change without notice and Credit Suisse (UK) Limited ("Credit Suisse") is under no obligation to ensure that such updates are brought to your attention. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. Past performance is not a guide to future performance. If an investment is denominated in a currency other than your base currency consult with

such advisor(s) as you consider necessary to assist you in making these determinations. Nothing in this document constitutes legal, accounting or tax advice. Credit Suisse does not advise on the tax consequences of investments and you are advised to contact a tax advisor should you have any questions in this regard. The levels and basis of taxation are dependent on individual circumstances and are subject to change. Germany: The information and views expressed herein are those of CS at the time of writing and are subject to change at any time without notice. They are derived from sources believed to be reliable. CS provides no guarantee with regard to the content and completeness of the information. If nothing is indicated to the contrary, all figures are unaudited. The information provided herein is for the exclusive use of the recipient.

© 2020 Credit Suisse Group AG and/or its affiliates. All rights reserved.

# Also published by the Research Institute



**Asia in Transition**November 2018



Assessing Global Debt Davos edition January 2019



Al & The Future of Work Davos edition January 2019



Summary Edition Global Investment Returns Yearbook 2019 February 2019



Emerging Consumer Survey March 2019



**Healthcare transformation** June 2019



The CS Gender 3000 in 2019
The changing face of companies
October 2019



**Global wealth report 2019** October 2019



Rethinking retirement Davos edition January 2020



Water scarcity: Addressing the key challenges Davos edition January 2020



Summary Edition Global Investment Returns Yearbook 2020 February 2020



The Family 1000: Post the pandemic September 2020



Credit Suisse Research Institute research.institute@credit-suisse.com credit-suisse.com/researchinstitute