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Global Wealth Report 2011

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Introduction

The Credit Suisse Global Wealth Report and the accompanying more detailed Global Wealth Databook provide the most comprehensive study of world wealth. Unlike other studies, they measure and analyze trends in wealth across nations, from the very bottom of the "wealth pyramid" to the ultra high net worth individuals.

This second Wealth Report sees the continuation of our close collaboration with Professors Anthony Shorrocks and Jim Davies, recognized authorities on this topic, and the architects and principal authors of "Personal Wealth from a Global Perspective," Oxford University Press, 2008.

Since last year's inaugural report, global wealth has increased to USD 231 trillion from USD 195 trillion in 2010, led by growing wealth in South Africa, India, Australia, Chile and Singapore. Looking ahead, we expect to see total world wealth increase by 50% to USD 345 trillion by end-2016. China should add a total of USD 18 trillion to the stock of global wealth in the next five years, surpassing Japan as the second-wealthiest country in the world, with total household wealth reaching almost USD 39 trillion in 2016. The USA should remain top of the wealth league though, with USD 81 trillion by 2016.

This Wealth Report differs from other studies in several ways. For example, we employ new data and analysis on long-term patterns in wealth and on the link between wealth and aging. As we outline on page 26, the "life-cycle" link between wealth and age is key to the financial services industry as this relationship drives the allocation of savings and pension investment.

In particular, the study of wealth through time highlights the rise in wealth in several developed countries in the past two decades, accompanied by sharp increases in debt in some cases. Interestingly, based on the experience of the developed economies during the 20th century, emerging markets have scope to increase their wealth-to-income ratios. The average asset-to-income ratio is exactly 1 in emerging markets, barely 40% of the figure of 2.4 recorded in high-income countries.

The Credit Suisse Global Wealth Report lays the foundation for a long-running examination by the Credit Suisse Research Institute of one of the crucial research areas in economics, and a vital driver of future megatrends. Moreover, it continues the thought leadership and proprietary research undertaken by the Research Institute over the past three years.

Hans-Ulrich Meister

Chief Executive Officer Credit Suisse Private Banking & Chief Executive Officer Credit Suisse Switzerland

Global wealth overview

Our analysis spans the entire wealth spectrum, from the very wealthy, who drive trends in financial markets, to the fast growing, through to the less well-off middle and bottom layers of the wealth pyramid, which we see as the force behind emerging trends in consumption and economic power.

Figure 1

Number of high net worth individuals, 2011





Figure 2

Average annual wealth growth rates (%) 2000–09 and 2010–11

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Like other studies, we provide estimates of the numbers of high net worth individuals by country of residence (see Figure 1). However, our interest is much broader, encompassing all of the world's adult citizens and all of the world's wealth - which we estimate to have totaled USD 231 trillion as of mid-2011. Last year's inaugural Credit Suisse Wealth Report 2010 documented the significant rise in household wealth during the previous decade, particularly evident in Australia, China, New Zealand, Poland and Romania - which all saw wealth per adult triple in terms of US dollars - and in Indonesia and Russia, where wealth rose by a factor of five. At the other end of the scale, the performance of Japan was relatively poor, rising by only 5% in US dollar terms between 2000 and 2010, and declining slightly when measured in yen. Argentina performed even worse, registering a 30% decline in wealth.

The past year saw a continuation of the recovery from the financial crisis, with total household wealth reaching an all-time high in the world as a whole, and in all regions of the world except North America and Europe. From the start of 2010 until mid-2011, all regions except Europe achieved higher wealth growth than the average rate for the period from end-2000 until end-2009 (Figure 2). Wealth growth has been particularly strong recently in Africa, Latin America and India.

Wealth winners and losers

Regarding individual countries, Brazil, China, India, Indonesia and South Africa are among the countries whose strong performance during 2000–09 has been maintained since the start of 2010. However the dramatic growth of Russian wealth during the past decade has tailed off in recent months. Japan and Argentina have managed to reverse the poor showing up to 2010, but in Japan's case the improvement is again due to appreciation of the yen. The strength of the Swiss franc has also had a notable impact, propelling net worth per adult in Switzerland to unprecedented levels when measured in US dollars.



Table 1

Annual wealth growth rates by country, 2000-09 and 2010-11

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011

	2010–2011	2010–2011	2010–2011
	High (> 10%)	Medium (5%–10%)	Low (< 5%)
2000–2009 High (> 10%)	Australia, Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, South Africa	Czech Republic, Poland	Bulgaria, France, Hungary, Romania, Russia, Spain, Turkey
2000–2009	Canada, Korea, Mexico, Philippines,	Egypt	Austria, Belgium, Germany, Greece,
Medium (5%–10%)	Sweden, Switzerland, Thailand		Italy, Netherlands, Portugal, UK
2000–2009 Low (< 5%)	Argentina, Hong Kong, Japan, Saudi Arabia	Taiwan, USA	

Household wealth: A global portrait

Wealth is one of the pillars of the economic system – driving economic growth, the accumulation of capital, trends in consumption, asset prices, and specific industries such as health care and banking. Although personal wealth attracts a great deal of attention, in the past there has been a shortage of reliable data and in-depth research on the topic. Better data and new research have begun to correct that.

Much of the public debate on wealth focuses on the billionaires and those in the very top echelons of wealth. Our approach is more inclusive and more global in that we seek to examine the whole spectrum of wealth holdings from rich to poor across all countries and regions. This chapter outlines key trends and levels in wealth, and explains what wealth is and how it is distributed.

We estimate that global household wealth totaled USD 231 trillion in mid-2011, equivalent to USD

Figure 1

Aggregate global wealth, 2000–2011

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



51,000 per adult. Total wealth figures in North America and Europe remain a little below the peaks achieved in 2007, but the aggregate value in all other regions - and in the world as a whole exceeded pre-crisis levels in mid-2011. From the viewpoint of our estimates, the financial crisis would appear to be no more than a modest setback in a benign decade for household wealth accumulation, which saw aggregate wealth double from the USD 113 trillion recorded for late 2000 (see Figure 1). Part of the increase may be attributed to the rise in the adult population from 3.6 billion to 4.5 billion. The depreciation of the dollar against most major currencies has also had a significant impact on dollar-denominated values. Nevertheless, since the start of the millennium, net worth per adult had still risen by 67% as of mid-2011 when measured in current dollars and by 36% when exchange rates are held constant.

Worldwide wealth

The global figure for average wealth masks considerable variation across countries and regions (Figure 2). The richest nations, with wealth in 2011 above USD 100,000 per adult, are found in North America, Western Europe, and among the rich Asia-Pacific and Middle East countries. They are topped by Switzerland, the first and only country to register wealth per adult in excess of USD 500,000. Australia and Norway also have average wealth above USD 300,000, followed closely by France, Singapore, Sweden and Belgium. Apart



World wealth levels 2011

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



from France, wealth per adult in all the G7 nations is confined to a narrow range from USD 200,000 to USD 260,000.

Interestingly, the ranking by median wealth is slightly different, favoring countries with lower levels of wealth inequality. Australia (USD 222,000) now tops the table by a considerable margin, with Italy, Belgium, Japan and the UK in the range from USD 120,000 to 160,000, and Singapore and Switzerland each around USD 100,000. The USA lags far behind with median wealth of just USD 53,000.

Emerging wealth: The band of mean wealth from USD 25,000 to USD 100,000 covers many recent EU entrants (Czech Republic, Estonia, Hungary, Lithuania, Malta, Poland, Slovenia) and important Latin American countries (Brazil, Chile, Mexico, Uruguay), along with a number of Middle Eastern nations (Bahrain, Lebanon, Oman, Saudi Arabia, Turkey). The two leading sub-Saharan nations (South Africa, Namibia) have recently joined this group.

Frontier wealth: Most of the heavily populated nations in the world, including China, India, Indonesia, Pakistan, Philippines, and Russia, fall in the USD 5,000 to 25,000 range, together with many transition nations outside the EU (Albania, Armenia, Bosnia, Georgia, Kazakhstan and Mongolia). The group also contains most countries in Latin America (Argentina, Colombia, Costa Rica, Ecuador, Peru and Venezuela) and many countries bordering the Mediterranean (Algeria, Egypt, Jordan, Morocco, Syria and Tunisia).

Finally, the category below USD 5,000 is heavily concentrated in Sub-Saharan Africa, although the wealth range also covers some major Asian nations (Bangladesh, Cambodia, Laos, Nepal, Sri Lanka, Viet Nam) and three countries bordering the EU (Belarus, Moldova, Ukraine).

The wealth of regions

Figure 3 highlights a number of pronounced regional differences. In particular, North America has higher average wealth than Europe, but the greater European population means that the ranking is reversed in terms of total wealth ownership. Residents of Europe own 34% of global wealth compared to 28% in North America, and 22% in the Asia-Pacific countries (excluding China and India). The rest of world accounts for the remaining 16% of total household wealth, although it contains 58% of the global adult population.

What is wealth?

This report aims to provide a comprehensive global portrait of household wealth covering the whole spectrum of wealth holders from rich to poor, and examining in detail the level and pattern across countries and regions. Household net worth or "wealth" is defined as the value of financial assets plus real assets (principally housing) owned by individuals less their debts. The figures are obtained by applying cutting-edge techniques to data derived from a great variety of sources. In the longer Credit Suisse Global Wealth Databook that accompanies this report, the methodology employed is described in more detail. Because children rarely own much wealth on their own account, the results are expressed in terms of the global population of adults, which totaled 4.5 billion in 2011. Due to the size of their populations, China and India are treated separately from the "Asia-Pacific" region.

Why wealth?

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

The composition of household portfolios is of considerable interest and varies widely and systematically across countries. Over the past decade, the average global value of household financial and nonfinancial wealth has closely followed the trend in net worth, increasing up to 2007 and then falling back by approximately 10% before recovering this year to the earlier peak. At the start of the decade, financial assets accounted for more than half of the household portfolio, but the share declined up to 2008, at which point the global portfolio was equally split between financial and non-financial assets (mostly property). In the period since 2008, the balance has again tipped slightly toward financial assets (see Figure 4).

On the liability side of the household balance sheet, average debt rose by 80% between 2000 and 2007, and then roughly leveled out. It now amounts to USD 9,070 per adult. Expressed as a proportion of household assets, average debt has moved in a narrow range, rising over the period, but never exploding.

Examining how global wealth is spread across households and individuals – rather than just regions or countries – requires information on the pattern of wealth holdings within countries. The available evidence indicates that wealth is more concentrated than income or consumption. In this study, we combine information on levels and patterns of household wealth across and within countries to allow us to estimate the global distribution of wealth.

How wealth is distributed

To count among the wealthiest half of the world, an adult needs only USD 4,200 in assets, once debts have been subtracted. However, each adult

Figure 3

Wealth shares in 2011 by region (%)

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 4 Global trends in wealth per adult

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Regional composition of global wealth distribution 2011

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011





requires at least USD 82,000 to belong to the top 10% of global wealth holders and more than USD 712,000 to be a member of the top 1%. The bottom half of the global population together possess barely 1% of global wealth, although wealth is growing fast for some members of this segment. In sharp contrast, the richest 10% own 84% of the world's wealth, with the top 1% alone accounting for 44% of global assets.

Figure 5 shows how the regions of the world are represented among the wealth deciles (i.e. population tenths). Unsurprisingly, North America and Europe together account for the lion's share of the top wealth decile. China has relatively few representatives at the very top and bottom of the global wealth distribution, but dominates the upper middle section, supplying 40% of those in deciles 5-8. The sizeable presence of China in the middle section reflects not only its population size and the medium value of its average wealth, but also moderate wealth inequality. China's position in the global picture has shifted upward in the past decade as a consequence of a strong record of growth, rising asset values and the appreciation of the renminbi relative to the US dollar. China already has more people in the top 10% of global wealth holders than any country except for the USA, Japan, Italy and Germany, and is poised to overtake both Germany and Italy in the near future.

Regional comparisons

The obvious comparison between India and China is a core feature of the chart. While China and India together account for almost half of global citizens in deciles 3–8, India is heavily concentrated in the lower regions of the wealth distribution, hosting one quarter of individuals in the bottom half. However, high inequality in India means that it also has numerous representatives in the top echelons of wealth holders.

Taken together, residents of the other Asia-Pacific nations are very evenly spread across the global wealth spectrum. However, this masks a substantial degree of polarization. Members of highincome Asian countries (e.g. Japan, Singapore and Hong Kong) are heavily concentrated at the top end of the global wealth distribution: over half of all adults in high income Asia-Pacific countries are placed in the top global decile. In contrast, residents of lower income countries in Asia, such as Indonesia, Bangladesh, Pakistan and Vietnam, tend to be found low down in the wealth distribution. In fact, the overall pattern within Asia-Pacific countries excluding the high income group resembles that of India, with both regional groupings contributing about one quarter of those on the bottom half of the wealth ladder.

Africa is even more concentrated at the bottom end. Nearly half of all African adults are found in the two bottom global wealth deciles. At the same



time, wealth inequality within and across countries in Africa is so high that a sprinkling of individuals are found among the top 10% of global wealth holders, and even among the top 1%.

Latin America is another region whose wealth distribution closely mimics the global pattern, with individuals fairly evenly spread across the global distribution. North America and Europe are much more skewed toward the top deciles, together accounting for 60% of those in the top 10%. Europe alone is home to 38% of members of the top wealth decile, a figure that has risen considerably in the past decade due to euro appreciation against the US dollar. North America, Europe and Asia-Pacific together account for 87% of members of the top wealth decile, and an even higher fraction (93%) of the top percentile.

The world wealth spectrum

In summary, the Credit Suisse Global Wealth Report provides a comprehensive picture of world wealth – all parts of the wealth spectrum from rich to poor, across a wide range of countries and regions. Despite a decade of near zero real returns on equities, several equity bear markets, and the collapse of housing bubbles, we find that total global wealth has doubled since 2000. Strong economic growth and rising population levels in emerging nations have been important drivers of this trend. The head of the wealth (per adult) league table is dominated by smaller, dynamic economies –Switzerland, Singapore, Norway, Sweden, Belgium as well as France and Australia. Notable cases of emerging wealth are found in the Czech Republic, Slovenia, Chile, Turkey and South Africa, while "frontier" wealth is evident in Colombia, Indonesia, Egypt and Tunisia.

Wealth is unevenly distributed. Our analysis finds some stark differences in the distribution of wealth. The bottom half of the global population owns barely 1% of global wealth. In sharp contrast, the richest 10% own 84% of the world's wealth, with the top 1% alone accounting for 44% of global assets. Already we see signs that this is changing with very rapid growth in some low-wealth countries. In time, we expect that the distribution of the world's wealth will become more even, with China and India likely to be the major catalysts toward such a trend.

Wealth is a vital, but a relatively under-researched cog in the economic system. It is valued as a source of finance for future consumption, especially in retirement, and for reducing vulnerability to shocks such as unemployment, ill health or natural disasters. Wealth also enhances opportunities for the informal sector and entrepreneurial activities, when used either directly or as collateral for loans. In the next section, we look in more detail at the pattern of wealth holdings across individuals.



The global wealth pyramid

The previous chapter highlighted the pattern of wealth ownership globally, which some people liken to a pyramid. This chapter investigates the wealth pyramid in more detail, looking not just at the top of the pyramid on which others focus, but at the whole structure from bottom to top.

In the spirit of C.K. Prahalad's "The Fortune at the Bottom of the Pyramid," we see great dynamism in the middle and base segments, where emerging wealth will drive new trends in consumption and industrial change. At the same time, the "top of the pyramid" will be the strong driver of private asset flows and investment trends.

The wealth pyramid

Figure 1 shows "The global wealth pyramid" in striking detail. It is made up of a solid base of low wealth holders with upper tiers occupied by progressively fewer and fewer people. We estimate that 3.1 billion individuals – more than two thirds of the global adult population – have wealth below USD 10,000. A further billion (24% of the world's adult population) are placed in the USD 10,000– 100,000 range, leaving 398 million adults (9% of the world total) with assets above USD 100,000.

Our figures for mid-2011 indicate that 29.7 million adults are above the threshold for dollar millionaires. While they make up less than 1% of the world's adult population, they own more than a third of global household wealth. Of this group, we estimate that 85,000 individuals are worth more than USD 50 million, and 29,000 are worth over USD 100 million.

The middle and base segments of the pyramid have USD 41 trillion in total wealth. This underlines the potential of this group for emerging consumption trends and for the development of the financial services industry in growing economies. Moreover, wealth in "bottom of the pyramid" countries is currently limited, but growing quickly. In India, wealth is skewed to the bottom end yet has almost qua-





drupled since the year 2000. Indonesia has also seen dramatic growth and, in Latin America, aggregate wealth today is approximately USD 10.2 trillion, compared to USD 3.3 trillion in 2000. In contrast, while North Americans dominate the top of the wealth pyramid, the rate of growth in US wealth has not been as stellar, moving from USD 40 trillion in 2000 to USD 58 trillion today.

Bottom of the pyramid

The various tiers of the wealth pyramid have distinctive characteristics. The base level is spread broadly across countries. It has significant membership in all regions of the world, and spans a wide variety of family circumstances (see Figure 2). The upper wealth limit of USD 10,000 is a modest sum in developed countries, excluding most adults owning houses, with or without a mortgage. Nevertheless, a surprisingly large number of individuals in advanced countries have limited savings or other assets.

A high proportion are young people with little opportunity or interest in accumulating wealth. In fact, limited amounts of tangible assets combined with credit card debts and student loans lead many young people to record negative net worth. This is an important and often overlooked group of people, not least in the context of the credit crisis.

Low wealth is also a common feature of older age groups, particularly for those individuals suffering ill health and exposed to high medical bills. In fact, the means testing applied to many state benefits, especially contributions to the cost of residential homes, provides an incentive to shed wealth. Yet relatively few people in rich countries have net worth below USD 10,000 throughout their adult life. In essence, membership of the base section of the global wealth pyramid is a transient, life-cycle phenomenon for most citizens in the developed world.

The situation in low-income countries is quite different. More than 90% of the adult population in India and Africa fall in this band; in many low-income African countries, the fraction of the population is close to 100%. However, the cost of living is usually much lower. For a resident of India, for instance, assets of USD 10,000 would be equivalent to about USD 30,000 to a resident of the United States. In much of the developing world, this is enough to own a house or land – albeit possibly with uncertain property rights – and to have a comfortable lifestyle by local standards.

Middle of the pyramid

The billion adults in the USD 10,000–100,000 range constitute the middle class of global wealth holders (Figure 3). With USD 34 trillion in total wealth, the segment certainly carries economic weight. This tier has the most regionally balanced membership, although China now contributes almost a third of the total. In high income countries, this wealth range covers the median person over most of his/her adult life. In middle income countries, it would encompass a middle class person in middle age. However, in low-income countries only those in the top decile qualify, restricting membership to significant landowners, successful businessmen, professionals and the like.

High segment of the pyramid

When we consider the "high" segment of the wealth pyramid - the group of adults whose net worth exceeds USD 100,000 - the regional composition begins to change. With 398 million adults worldwide, this group is far from exclusive. But the typical member of the group is very different in different parts of the world. In high income countries, the threshold of USD 100.000 is well within the reach of middle-class adults once careers have been established. In contrast, residents from low-income countries would need to belong to the top percentile of wealth holders, so only the exceptionally successful, well endowed or well connected qualify.

The regional contrast shows up in the fact that North America, Europe and the Asia-Pacific regions account for 89% of the global membership of the USD 100,000+ group, with Europe alone home to 39% of the total. As far as individual countries are concerned, the membership ranking depends on three factors: the population size, the average wealth level, and wealth inequality within the country. Only 16 countries host more than 1% of the global membership. The USA comes top with 21% of the total. All three factors reinforce each other in this instance: a large population combining with high mean wealth and an unequal wealth distribution. Japan comes a strong second and is the only country at present to seriously challenge the hegemony of the USA in the global wealth ranking. Although its relative position has declined since the year 2000 due to lackluster stock market and housing market performance, Japan is still home to 16% of individuals with wealth above USD 100,000.

Emerging wealth

The most populous EU countries - Germany, Italy, the UK and France - occupy the next four places in the global table, each contributing 6%-8%. China is also credited with 6% of members, a dramatic rise from the position in the year 2000, when China's representation in the top wealth percentile was too small to register. Brazil, Taiwan and Korea are other emerging market economies estimated to each host at least four million residents with net worth above USD 100,000 (Figure 4).

Top of the pyramid

At the top of the pyramid, we find the world's millionaires, where we again witness a different pattern of membership. The proportion of members from the United States rises sharply to 34%, and the share of members from outside of the North American, European and Asia-Pacific regions falls to just 7%. The relative positions of most countries move downward, but there are exceptions. The French share is estimated to dou-

Figure 2

Regional membership of global wealth strata





Figure 3

Membership of global wealth strata by region



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011

Figure 4

Owners of wealth above USD 100,000 by country of residence

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Dollar millionaires by country of residence

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



ble to 9%, while both Sweden and Switzerland are now credited with more than 1% of the global membership (Figure 5).

Wealth analysis: The importance of data quality

To assemble details of the pattern of wealth holdings above USD 1 million requires a high degree of ingenuity. The usual sources of wealth data – official statistics and sample surveys – become increasingly incomplete and unreliable at high wealth levels. A growing number of publications have followed the example of Forbes magazine by constructing "rich lists," which attempt to value the assets of particular named individuals at the apex of the wealth pyramid. But very little is known about the global pattern of asset holdings in the high net worth (HNW – from USD 1 million to USD 50 million) and ultra high net worth (UHNW – from USD 50 million upward) range.

We bridge this gap by exploiting well-known statistical regularities in the top wealth tail. Using only data from traditional sources in the public domain yields a pattern of global wealth holdings for each country in the USD 250,000 to USD 5 million range, which can be used to estimate the number of dollar billionaire households. We match these projections to the number reported by Forbes magazine for February 2011 and adjust the wealth distribution across adults within countries accordingly.

The base of the wealth pyramid is occupied by people from all countries of the world at various stages of their life-cycles, in contrast, HNW and UHNW individuals are heavily concentrated in particular regions and countries, sharing a much more similar lifestyle. Even members at other locations tend to participate in the same global markets for high coupon consumption items. The wealth portfolios of individuals are also likely to be similar, dominated by financial assets and, in particular, equity holdings in public companies traded in international



Our figures for mid-2011 indicate that there were 29.6 million HNW individuals with wealth from USD 1 million to USD 50 million, of whom the vast majority (26.7 million) fall in the USD 1-5 million range (see Figure 6). North America used to host the greatest number of members, and still accounts for 11 million HNW individuals (37% of the total), but membership in the North American region has been surpassed this year by residents of Europe (37.2% of the total). Asia-Pacific countries excluding China and India are home to 5.7 million members (19.2%), and we estimate that there are now just over 1 million HNW individuals in China (3.4% of the global total). The remaining 937,000 HNW individuals (3.2% of the total) reside in India, Africa or Latin America.

Ultra high net worth

Our figures indicate a global total of 84,700 UHNW individuals with net assets exceeding USD 50 million. Of these, nearly 29,000 are worth at least USD 100 million and 2,700 have assets above USD 500 million. North America dominates the regional ranking, with 37,500 UHNW residents (44%), while Europe hosts 23,700 individuals (28%) and 13,000 (15%) reside in Asia-Pacific countries, excluding China and India.

In terms of single countries, the USA leads by a huge margin with 35,400 UHNW individuals, equivalent to 42% of the group (see Figure 7). The recent fortunes created in China have propelled China into second place with 5,400 representatives (6.4% of the global total), followed by Germany (4,135), Switzerland (3,820) and Japan (3,400). Numbers in other BRIC countries are also rising fast, with 1,970 Russian members, 1,840 Indian (1,400), Turkey (1,100) and Hong Kong (1,030). Although comparable data on the past are sparse, it is almost certain that the number of UHNW individuals is considerably greater than a decade ago. The general growth in asset values accounts for some of the increase, along with the appreciation of other currencies against the US dollar. However, it also appears that, notwithstanding the credit crisis, the past decade has been especially conducive to the establishment of large fortunes.

Changing fortunes

Wealth is often seen in terms of a pyramid, with millionaires on top and poorer people at the base. Many surveys focus exclusively on the top part of the pyramid, which in our view is unfortunate in that it excludes the fast-growing USD 41 trillion in the middle and base segments. Here, emerging wealth is set to drive new trends in consumption and industrial change. China, Korea, and Brazil are countries that are already rising quickly through this part of the wealth pyramid, with Indonesia close behind and India growing fast from a low starting point.

At the same time, the ultra wealthy "top of the pyramid" segment will continue to be the strong driver of private asset flows and investment trends. Our figures for mid-2011 indicate that there are nearly 30 million HNW individuals with more than a million of these in China, and 5.7 million residing in Asia-Pacific countries other than China and India.

At the top of the pyramid, there are almost 85,000 individuals in the UHNW bracket, with net worth exceeding USD 50 million. The recent fortunes created in China lead us to estimate that 5,400 Chinese (6.4% of the global total) now rank among the UHNW group along with a similar number in Russia, India and Brazil when combined.

Figure 7

Ultra high net worth individuals 2011: selected countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Bubbles, crashes and wealth: A century of data

The wealth to income ratio in the USA and UK has been relatively stable for most of the past century, although upward "breakouts" occurred during the Great Depression and just before the recent credit crisis. Household debt to income ratios are now at an all time peak in high-income nations. Emerging markets have considerable scope to increase personal wealth, since the ratio of net financial assets to income in mature economies is more than twice as high.

> Many factors influence the evolution of household wealth, including property rights and other institutional considerations, the maturity of financial markets and financial instruments, and the extent to which public provision of retirement pensions and health care mitigate the need for private accumulation. But the single most important factor in developed economies is household income. As real incomes grow and price inflation erodes purchasing power, the value of household wealth also tends to rise. The interesting question is the relation between income and wealth over time, and the reasons for deviations from the long-run pattern.

Figure 1

Wealth-income ratios for France, UK and USA since 1900

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



A century of wealth data

Figure 1 shows wealth to income ratios for France, the UK and the USA dating back to 1900. The most striking feature is the relatively stable pattern observed for the USA. For most of the period since 1900, household wealth in the USA has fluctuated in a narrow band between about four and five times disposable income. Furthermore, there is no upward trend over the whole period: the wealthincome ratio in 2009 is almost identical to that recorded a hundred years earlier.

Deviations from the typical range in the USA have occurred twice, both involving breaks through the top of the band. The first episode is associated with the disruption caused by the Wall Street crash and the onset of the Great Depression. The wealth-income ratio remained consistently above 5.3 during the period 1928–39, and reached 7.3 in 1932, a level never since repeated.

The second divergence episode occurred from 1997 to 2007, when the wealth-income ratio again broke the 5.3 barrier. In fact, two sub-episodes are evident in the "Greenspan era": the first from 1997 to 2002 came to an end when the dot. com bubble was punctured; the second from 2002 to 2007 ended with the global financial crisis. The overall impression is thus one of remarkable stability in the USA wealth-income ratio for the most part, with a few departures from the long-run equilibrium followed promptly by a return to the normal range.



Household wealth - income ratio in G7 countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 3

Household gross financial assets – income ratio in G7 countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 4

Household debt - income ratio in G7 countries



In France and the UK, the wealth-income ratio has also averaged between 4 and 5 for much of the time, but departures from this range have been more frequent and longer lasting. The ratio in the UK has followed the general pattern observed in the USA, with high values during the Great Depression and a recent spurt halted by the global financial crisis. But abnormally high values also occurred after the end of the Second World War, and the recent episode of high values has been both more sustained - beginning around 1985 - and more pronounced - peaking at a multiple of 9 in the year 2007. In fact, the wealth-income ratio in the UK has trended upwards since the start of the Thatcher era in 1979, and is now more than double the level seen in the mid-1970s.

The French experience during the past century shows long periods of relatively stable wealthincome ratios punctuated by three periods of significant change. The ratio fell sharply from about 7 during 1900–1914 to less than half that figure ten years later, then climbed back up to 5.4 by 1944, after which it again quickly halved in value. Most of the decline in the wealth-income ratio during 1913–1949 was due to falling house prices, high inflation, and poor stock market performance, with only 10% of the decline attributed to wartime loss of capital.

For a half century after the war, the wealthincome ratio in France rose gradually, from 2.7 in 1950 to 4.8 in 1999. But, since the year 2000, a booming housing market has propelled the ratio above 8, a level similar to the UK and significantly above the USA.

Evidence for G7 countries

From 1960 onwards, data on the wealth-income ratio are available for a larger group of countries than just France, the UK and the USA. Figure 2 shows markedly different experiences for G7 countries during the first and second halves of the period. Until 1985, the ratios changed very little over time and fell within the band from 3.5 to 5.5 for most countries in most years. After 1985, there is considerable variation in the evolution of net worth as a multiple of disposable income, both across countries and over time; but in each country there is an upward trend.

Possible explanations for the upward trend since 1985 include the liberalization of financial markets, the aging of the population, declining interest rates and inflation rates pushing up asset prices, and a shift in emphasis towards greater "personal responsibility" in preparing for retirement, children's education and other expenses. Each of these factors has no doubt made its contribution, but their relative importance remains an open question.

Canada and Germany display the highest stability among G7 countries, and show especially clearly the underlying rise in the wealth-income ratio experienced elsewhere. The wealth-income ratio in Ger-

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Wall Street - still the center of the financial world?

many rose steadily from 4.7 in 1991 to 6.1 in 2008. Wealth in Canada rose even more gradually and steadily from four times income in 1985 to 5.5 times income in 2009. Alone among the G7 countries, the wealth-income ratio in Canada did not decline as a result of the global financial crisis, probably due to the conservative nature of both its banking regulations and bankers.

At the other end of the scale, the greatest volatility – at least initially – was experienced in Japan, where the wealth-income ratio exploded from 4.4 in 1977 to peak at 9.4 in 1989, a level never reached by any other country for which data are available. Although house-price and land-price inflation contributed most to this growth, the stock market also fuelled the rise. When the asset price bubble burst, the wealth-income ratio in Japan declined rapidly to 7.5 in 1993, and has remained very close to this level ever since.

As already noted, the UK has also experienced explosive growth in the wealth income ratio since 1985, and greater volatility than Japan. France has also shown abnormal wealth growth, although without the volatility observed in Britain. By those standards, the experience in the USA during the past two decades looks relatively stable, even allowing for the short-term peaks in 1999 and 2006.

Wealth components in history

Similar series for sub-components of wealth as multiples of disposable income provide further insights into the historical trends. The graphs for gross financial assets in Figure 3 again show relatively little change up to 1985, after which a regular pattern of growth is the norm, so that by 2008, the gross financial wealth-income ratio is typically higher by a factor of 1–2. However, the volatility seen in Figure 2 has almost vanished. With the exception of Canada, the financial crisis caused the financial wealth-income ratio to decline in all countries, although the ratio has rebounded in all countries with 2010 data.

France and Germany have marched steadily and in tandem since 1990, while the graph for Canada has been exceptionally smooth and quite flat for the past 15 years. Even Italy and Japan exhibit relatively smooth growth of financial wealth punctuated with occasional fluctuations. Britain and the USA are outliers, moving in tandem since 1985, but showing almost pure cyclical movement since 1995, rather than steady growth.

How indebted are Western households?

A significant rise in household debt relative to income is evident in all G7 countries since 1980 (Figure 4). The UK experienced the greatest absolute rise in the debt-income ratio, which tripled from 0.6 in 1980 to 1.8 in 2008; but the greatest proportionate rise occurred in Italy and France, where the ratio almost quadrupled between 1978 and 2009. The ratio doubled in both Canada and the USA from 1985 to 2009, but has remained unchanged in Japan since the mid-1990s, and even declined slightly in Germany during the past decade.



As expected, the evolution of net financial wealth is very similar to the pattern for gross financial wealth (Figure 5). But it now emerges that the ratios of net financial wealth to income in 1980 were confined to a narrow range between 1.0 and 1.5 for all G7 countries except the USA, for which the ratio was about 2.5 from 1973 to 1988. After the gyrations of the Greenspan era, the US ratio has returned to its long-term norm. In the meantime, the other G7 countries have closed most, if not all, of the gap with the USA. This convergence to US levels of the net financial assets to income ratios is an important trend to which little attention has been given.

Data on real (i.e. non-financial) assets as a multiple of disposable income yields quite a different picture, showing more variation across countries and much more erratic behavior. The trends shown in Figure 6 are closely related to the evolution of real asset prices, particularly the price of real estate.

The evolution of real assets in the USA has been remarkably constant over time, close to double the level of income from 1960 until 1995, when the multiple rose steadily to 3 in 2007 before returning back to 2, the lowest level among G7 countries. The real asset-income ratios in Canada, Germany and Italy have all been on a rising trend since 1995, and show no sign that housing prices have been adversely affected by the financial crisis. In contrast, the graphs for France and Britain show a dip following the financial crisis, although both countries have experienced a sustained house price boom since the late 1990s, almost doubling in value, so that real assets remain a high multiple of disposable income. In fact, the graphs for France and the UK are eerily similar from 1990 onwards.

The experience of Japan provides a salutary lesson in allowing real estate prices to run out of control. The explosive growth from 1984 to 1990 has been followed by declining property prices for three decades, reducing the real assets-income ratio from 6.5 at its peak in 1990 to 3.5 in 2008. This reversal of fortune has been so pronounced that Japan is now on a par with Canada, and ranks below every other G7 country except the USA. Based on the Japanese experience, toleration of housing booms in Britain, France and Italy seems reckless in comparison to the slow and steady progress of Canada and Germany.

Determinants of wealth: The role of savings

While share prices and house prices are often the proximate reason for variations in household wealth relative to income, very little is known about the underlying causes of the different country experiences.

The level of savings is one obvious source of wealth differences, with increased savings translating into greater aggregate wealth and a higher wealth-income ratio. In practice, it is often difficult

Figure 5

Household net financial wealth – income ratio in G7 countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 6

Real assets – income ratio in G7 countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



1960 1965 1970 1980 1975 1985 1990 1995 2000 2005 2010 - Canada - France - Germany - Italy - Japan - UK - USA

Net worth as multiple of disposable income, 2000–8

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 8

Ratio of financial assets to non-financial assets, 2000-08

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



to identify the connection. Among G7 countries, the household saving rate shows substantial heterogeneity, ranging in 2009 from as little as 2% in Japan to 16% in Italy and 17% in Germany. During the past 15 years, saving rates decreased in the UK, the USA, Italy, Japan and Canada, but remained unchanged in France and even rose slightly in Germany. The link to aggregate wealth is not immediately evident.

Determinants of wealth: The role of institutions

Viewing differences across countries, the low wealth (especially financial wealth) to income ratios in Austria, Germany and Norway may reflect high levels of public pensions and good state provision of health services, which people expect to be maintained in the future. Growing populations and land scarcity are expected to correlate with high values of real assets relative to income, but the link has become less evident in recent years given the low real asset figure for Japan and the very high value for Australia.

The provision of more sophisticated financial instruments is likely to result in higher levels of financial assets, as is the general tendency to replace defined benefit pensions with defined contribution pensions offering lower benefits. The impact of financial innovation on debts is even more evident. The explosion of household debt in the past two decades is undoubtedly linked to greater access to credit for mortgages and consumer expenditure, reinforced by the growing availability and acceptance of student debt, for example in Denmark and Sweden.

Historical lessons for emerging markets

What implications can be drawn for wealth accumulation in emerging markets from the past experience of high income countries? The average wealth-income ratios for 16 high-income countries and nine emerging markets (Chile, China, Colombia, Czech Republic, India, Slovakia, Slovenia, South Africa and Ukraine) show striking differences between high-income countries and emerging markets (Figure 7). Over the period 2000–08, the average ratio for high income countries is 6.35, with Great Britain, Belgium and Switzerland recording ratios above 7.5. In contrast, the average for emerging markets is 3.25, and several countries struggle to achieve wealth levels equal to twice disposable income.

The comparison is even starker for net financial assets. The average asset-income ratio is exactly 1 in emerging markets, barely 40% of the 2.4 figure recorded in high-income countries. There are also major differences in debt levels. On average, households in emerging markets owe just 30% of their annual income, while households in developed countries owe almost 1.5 years of income. Bear in



IT revolutions.

mind, however, that net worth, net financial assets and debt levels in high-income countries have all risen significantly since 1980. The wealth figures recorded for emerging markets now are not so different from the historical values for France, Britain and the USA displayed in Figure 1, or the G7 values prior to 1980.

China is the exception among emerging market economies. Its wealth-income ratio of 6.9 lies within the top third of the range of the high-income table, close to the level of Japan, and well above the figure for the USA. The household savings rate in China has exceeded 20% of GDP since the early 1990s, and has even risen slightly in recent years, due to increases in income uncertainty and changes in pension provision. This may help account for the different pattern in China relative to other emerging markets, alongside frothy house prices and intense international demand for Chinese equities. It may also be the case that asset values in China are already close to rich country levels, but household income has yet to catch up.

Goldsmith (1986)¹ claims that the wealthincome ratio does not necessarily rise during development, because capital is used more efficiently and generates more income; but financial development increases the ratio of financial assets to nonfinancial assets. Figure 8 shows that the ratio of financial to non-financial assets is typically higher in rich countries, with an average just below 1 for the period 2000–08, compared to 0.6 for emerging markets. Goldsmith anticipated a ratio of 1 for mature economies. In practice, ratios above 2 are now found not only for high-income countries, but also for at least one emerging economy: South Africa.

Noticeable exceptions to the general pattern are South Africa and China among the emerging markets, and France, Norway and Australia in the highincome country list. The high financial to non-financial assets ratio in South Africa reflects a dynamic stock market and mature life insurance and pension industries together with relatively low real estate prices. China's position is explained by the high savings rate and relatively well-developed financial markets. In contrast, at just 0.53, the financial to non-financial ratio in Australia is below the average even for emerging markets. This reflects a sparsely populated country with a large endowment of land and natural resources, but also high urban real estate prices.

Conclusions

Available evidence suggests that household wealth in mature economies was a fairly constant multiple of income for much of the 20th century until 1980, after which the wealth-income ratio has trended upwards and more volatility has been experienced. Financial assets in G7 countries also show little change relative to income up to 1985, when a regular pattern of growth began. Canada alone survived the financial crisis without a fall in the ratio of financial wealth to income, although the ratio has rebounded in all G7 countries with 2010 data. The ratio of non-financial assets to income shows greater variation across countries and much more erratic behavior.

Household debt has risen significantly in all G7 countries since 1980, but the rise has been especially pronounced in the UK, Italy and France. As a multiple of income in 1980, net financial wealth in the USA was about double the level in all other G7 countries, but the gap has eroded over time, and the ratio of net financial wealth to income is now much more similar across the G7 nations.

The ratio of net worth to income tends to be considerably lower in emerging markets, and the same is true of the ratio of financial assets to nonfinancial assets, but there are exceptions to the general pattern, China in particular. While not guaranteed, it seems likely that household wealth will grow faster than household income in emerging markets, raising the wealth-income ratio over time, although stopping short of the inflated levels seen in rich countries in recent years. Increasing life expectancy and longer retirement, aging populations, and increasing uncertainty about labor earnings and future health costs are all factors that point to an increase in the need for private wealth.

¹ Goldsmith, Raymond W., (1986), Comparative National Balance Sheets, A Study of Twenty Countries, 1688–1978. Chicago: University of Chicago Press.

Wealth and age

Saving for retirement and other factors lead to a distinct age profile with regard to wealth holdings and personal debt. The links between wealth and age have important implications for global aging in future, increasing demand for financial assets, for example, relative to real assets like housing. A key issue is the strain that population aging will place on public pension systems and other supports for the elderly, which is likely to prompt greater private provision of resources for retirement.

It has long been recognized that the level of personal wealth is related to age. One obvious reason is that the passage of time provides more opportunity for households to acquire wealth via savings out of income, successful investments, capital appreciation and inheritances. Later in life, wealth may be drawn down in order to maintain a customary level of consumption in the face of lower income, or to make gifts to children and grandchildren. So it is natural to expect wealth to peak at some point after the end of working life. However, the rate at which wealth rises and falls over time, and the age at which wealth peaks, vary considerably across individuals, between countries, and over time. Much depends on the motives for saving or to be more precise - the strength of desire to acquire, accumulate and retain wealth.

Motives for saving

There are three main reasons for saving. The **precautionary motive** aims to provide "rainy day" insurance against events like unemployment or ill health. Precautionary saving results in a buffer stock of fairly liquid assets that can be used to survive adverse unanticipated events without taking on excessive debt.

A second reason for accumulating wealth is **lifecycle saving**, undertaken to smooth consumption in response to anticipated future periods when income may be lower than normal, mainly retirement years, but also possibly child-rearing spells. Consumption smoothing for retirement results in a hump-shaped age-wealth pattern, made familiar by the life-cycle model developed by Franco Modigliani¹ and others a half century ago.

The third motive for saving is to accumulate assets to pass on to one's heirs. The strength of

¹ Albert Ando and Franco Modigliani, "The 'life-cycle' hypothesis of saving: aggregate implications and tests," American Economic Review, 1963, pp 55–84



the **bequest motive** tends to rise with income, and is very important for some HNWIs; but saving by people at all income levels is often influenced by a desire to leave something for future generations.

The Life-Cycle Model

The link between wealth and age is most prominent in the context of life-cycle saving. To understand the link, imagine a simplified world in which an individual contemplates the future at age 20, expecting to work until age 60 and to die at age 80. Assume further that income will be USD 30,000 per year, desired consumption is constant, the interest rate is zero, and no bequests are planned. Then the individual should spend USD 20,000 per year, resulting in constant annual saving of USD 10,000 while working, and constant annual dissaving of USD 20,000 during retirement. Figure 1 illustrates

Figure 1

Wealth-age profile in a life-cycle model

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011 400,000 USD



Wealth per adult by age relative to overall disposable income, selected countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 3

Financial assets as percentage of total wealth by age, selected countries

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Figure 4

Debts as percentage of total assets by age, selected countries



Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011

the tent-shaped age-wealth profile, with peak wealth of USD 400,000 at age 60.

Varying the parameters in this simple model yields clear results. For example, if longevity is fixed and the working life is longer than the period of retirement, a decrease in retirement age increases peak wealth. And if longevity is rising, peak wealth will rise too, as long as neither the working lifetime nor the period of retirement becomes shorter. Overall it is safe to say that peak wealth tends to rise with increases either in the length of retirement, or in longevity, in the life-cycle model.

Another implication of the simple life-cycle model is that the ratio of aggregate wealth to income is positively correlated with the length of retirement and with longevity. If the population is equally distributed by age, mean wealth will equal half of peak wealth. This means that in the world of Figure 1, average wealth is USD 200,000. Averaged over the entire adult lifetime, annual earnings are USD 20,000 per year, so that the wealth to income ratio is 10. Empirical work has confirmed the positive impact of increasing longevity and longer retirement on the wealth-income ratio. The upward trend in wealth-income ratios seen in the G7 countries over the last 25 years may in part reflect these effects.

Intergenerational transfers: From the old to the young

If wealth accumulation is driven by precautionary motives rather than life-cycle considerations, then the level of desired wealth would not be expected to show great variations by age. If both motives are present, it is likely that precautionary needs will be satisfied by wealth accumulated for life-cycle purposes, except perhaps for the youngest and oldest members of society, so the impact on the agewealth pattern should be minimal.

Bequests and gifts may be intentional or else "accidental" – arising because individuals are usually unable to guarantee leaving precisely zero wealth at the time of death. If bequests are purely accidental and recipients consume them gradually, average wealth will rise for older age groups, and wealth could peak at a higher age. Planned gifts and bequests may reduce saving and wealth holdings in early years by those anticipating receipt of bequests, but increase wealth later on in the lifecycle by those planning bequests. The net result again is higher average household wealth, and a higher peak level of wealth, with the peak possibly occurring later in life.

Intergenerational transfers: From the young to the old

Retirement pensions of all types – state pensions and private pensions of either defined benefit (DB) or defined contribution (DC) form – raise particular difficulties when attempting to confront the lifecycle model with data on household wealth. All types of retirement pensions offer the prospect of future payments in old age, thus tending to substitute for private saving and lower non-pension wealth, although evidence suggests that individuals do not view pension wealth as a perfect substitute for private saving.

The capital value associated with entitlements to DC or DB pensions can be estimated in principle, but the required information is not usually available to those assembling estimates of the wealth holdings of individuals. Most household surveys therefore omit private pensions, but there are important exceptions, for example in Canada, the UK and the USA, as discussed in the next section.

Public pensions raise deeper issues. The capitalized values of the associated income streams can be estimated, but while it may be possible to mobilize private pension wealth through early withdrawals in some cases, or by borrowing against future pension income, this is less likely to be true with public pensions, so it becomes more problematic to regard the pension as part of an individual's wealth. More importantly, since public pensions are mostly on an unfunded, pay-as-you-go basis, they do not appear as an item in national household balance sheets: the positive wealth values for older persons are exactly offset by the negative values of (unsuspecting) younger individuals when future public pension liabilities are taken into account.

Our wealth estimates in this report try to follow the standard approach to national balance sheet accounting, by including private pensions in household wealth, but not public pensions. For countries with relatively larger public pensions compared to private pensions, this should lead to both a lower hump in the age-wealth profile and a lower ratio of aggregate wealth to income.

The empirical evidence

Empirical evidence on the age-wealth relationship is available for a limited number of countries. This section considers age-wealth relationships in four high income countries (Canada, Italy, the UK and the USA), and two emerging market countries (Chile and Indonesia), based on data from household surveys that provide differing coverage of private pensions. The wealth estimates in this report adjust for these differences, so that the figures fully reflect private pension wealth; but here the results of the raw household surveys are reported without adjustment. The surveys in Canada and the UK cover private pensions fully. The US survey includes DC but not DB pensions. In Italy, Chile and Indonesia, private pensions are completely excluded.

Figure 2 shows the mean wealth of various age groups expressed as a multiple of overall disposable income. Despite the differences in pension coverage, a hump-shaped age-wealth profile is observed in each case, with a peak in two countries at ages 55–64 and in four countries at ages 65–74. Peak wealth is about 60% above overall average wealth in Canada, Chile, the UK and the USA, but only about 30% above the average in Italy and Indonesia.

In Italy and Indonesia the age profile of wealth is flatter than in the other countries. This is likely to be partly a reflection of the omission of pension wealth, but also reflects lower debt among the young in these two countries compared with the others.

The pattern is broadly in line with the predictions of the life-cycle savings model. The early peak observed for Canada and the UK could be due to the fact that the graphs refer to cross-section data for different age groups at a given time, rather than longitudinal data for a cohort of individuals as they age. The decline in wealth above age 65, which averages about 2% per year across the countries shown, seems in line with expectations, but this level of dissaving could simply reflect the lower lifetime earnings of older cohorts in growing economies.

Asset allocation and aging

Figure 3 shows that the share of financial assets in total assets (excluding debts) varies widely across countries. The high levels in the English-speaking countries are partly explained by the full inclusion of private pensions in Canada and the UK, and partial inclusion in the USA. The low levels observed in Italy, Chile and Indonesia may reflect not only the omission of pension wealth, but also data problems and other factors. Historic episodes of inflation in these countries may have made households shy of financial assets, so real assets may be preferred for consumption smoothing: in Indonesia, for example, gold plays an important role as a store of emergency funds.

In five of the countries, the share of financial assets rises at least up to retirement, but in Indonesia the importance of financial assets declines uniformly with age, perhaps reflecting a transition to greater use of financial assets by younger people for consumption smoothing. The other five countries provide an interesting contrast in what happens after retirement. In Canada and the USA, financial assets continue to increase in importance, perhaps reflecting a downsizing in home ownership. In Chile, Italy and the UK, the importance of financial assets peaks around retirement age and then gradually declines – as expected if retirement savings are being spent and people remain in the same home.

Debt shows more dramatic changes with age than assets (Figure 4). For people aged 25–34 in the English-speaking countries, debts – largely mortgages – are equal to about 40% of total assets. As mortgages are gradually paid off and financial assets are accumulated, the debt ratio declines fairly rapidly, almost vanishing by the age of retirement, except in the USA, where debt still averages 6.4% of total assets at ages 65–74. The debt ratio in Chile is similar when averaged across age groups, but starts at a lower level (25%) for the 25–34 year old group. Italy and Indonesia have much lower overall debt levels than the other countries, and the debts of the young are very modest in comparison to those in the other four countries. In Italy, this pattern is related to the difficulty of obtaining mortgages.

Implications of aging

The theoretical predictions and empirical evidence on the relationship between wealth and age have important implications for global wealth holdings in the context of the major demographic and social changes likely to take place in the future. Some of the future trends directly affect the age-wealth pattern: this category includes pension changes, longer life expectancy, and – particularly in developing countries – social trends such as increased education, smaller families, and higher female labor force participation. Other future trends may have important social or economic consequences because of age-wealth relationships: the major factor in this second category is population aging.

Changes to public and private pensions

A number of high income countries have raised, or plan to raise, the minimum age for receiving public pensions, which is expected to lead to lower levels of private wealth since it will likely lead to later retirement. An increase in pension contributions will reduce net incomes and reinforce the tendency toward lower saving. Reducing pension benefits, on the other hand, increases the need for private retirement saving and hence raises wealth. Thus different wealth impacts can be predicted for countries that pursue different solutions to public pension deficits.

Regarding private sector employer-based pensions, there has been a significant shift toward defined contribution pensions in high-income countries, which is expected to increase life-cycle saving and wealth. Low current rates of return on most financial assets and increased uncertainty about future income streams resulting from the trend to defined contribution schemes will tend to raise the need to accumulate wealth. Widespread confusion about the expected future benefits from both public and private pensions could, on the other hand, lead some people to abandon their saving efforts if unsure whether their private saving will make any difference.

Changing family values

Reduced fertility and rising female labor force participation – trends seen all around the world, although not in every single country – raise real incomes per head and therefore also tend to increase both life-cycle saving and household wealth. Moreover, the wealth-income ratio will increase further because a family's relative consumption needs fall in the years when children are at home and shift to the retirement period. If there is also a trend toward retired people living sepa-



rately, rather than with their offspring, which may occur in developing and emerging countries in the future as it did in high income countries in the past, the need for retirement savings will be increased, again leading to greater wealth.

Most of the above factors tend to increase lifecycle saving and wealth. Rising education is likely to reinforce this trend, since its main effect is to raise lifetime earnings, which will lead to higher saving for retirement.

Savings and wealth in an aging world

The most important future consequences of the age-wealth relationship are likely to arise because of the global demographic trends expected to lead to population aging in all regions of the world over the next 50 years. Overall, higher age groups are wealthier than average, so population aging increases wealth through a simple compositional effect. There will also be compositional effects on portfolio patterns. The relative demand for financial assets, and especially for risky financial assets, will likely increase with age. The converse is a relative decline in the demand for housing. Household debt should also decrease in relative terms since older groups are less indebted.

Population aging will have many other effects, of course. It is expected to increase real wages, but reduce returns to capital, with opposing effects on



household saving and wealth. It is also expected to increase public expenditures on health care and other services to the elderly, leading to higher taxes on working age people, which may reduce their saving ability. On the other hand, there may be cutbacks in public services for the elderly due to their increased cost, leading to greater need for private preparation for old age. The net effect of all these factors is unclear.

Conclusions

Wealth accumulation occurs for three principal reasons: for precautionary reasons, in anticipation of retirement needs, and to make intergenerational transfers. Saving for life-cycle purposes, in particular, means that age is an important determinant of household wealth levels. Economic theory predicts a "hump shape" for the age-wealth profile, and cross section data confirms this pattern in all countries. Empirical evidence also shows that – expressed as fractions of total assets – debt drops sharply with age, and financial assets tend to rise fairly strongly with age, at least up to retirement.

The life-cycle saving model suggests that, in future, the age-wealth profile will be more peaked, and average wealth will be higher if life expectancy is longer, retirement is earlier, or public pensions are lower. At present, life expectancy continues to increase in many countries and public pensions are tending to become less generous, pointing to a rise in household wealth. On the other hand, retirement ages are trending upward in the developed world, with the opposite effect. So, although it seems likely that wealth/income ratios will rise in developing and emerging market countries in the future, they may not continue to rise everywhere.

In the coming years, the relationship between wealth and age is likely to have greatest significance in the context of global demographic trends leading to population aging. Average wealth and wealth-income ratios will rise as the population weighting shifts to older groups. Aging is also expected to increase the demand for financial assets relative to real assets like housing. More important, perhaps, is the strain that population aging places on public pension systems and other supports for the elderly, which is likely to further strengthen calls for private responsibility in preparing for retirement.

The open question is whether population aging will precipitate a crisis due to insufficient private saving for retirement. While low saving for retirement remains a concern in several countries, and while some people are woefully unprepared for retirement financially, overall household wealth accumulation has increased and wealth/income ratios have risen. Lower estimates of the level of income needed to maintain pre-retirement standards of living, provide additional grounds for optimism that most countries will avoid a fiscal crisis due to an aging population.

Prospects for personal wealth in 2016

Assuming moderate and stable economic growth, we expect total household wealth to rise by more than 50% in the next five years from USD 231 trillion in 2011 to USD 345 trillion by 2016. Net worth per adult should reach USD 70,700, a 40% increase relative to 2011. We expect China to add a total of USD 18 trillion to the stock of global wealth in the next five years and surpass Japan as the second wealthiest country in the world. The USA should remain on top of the wealth league though, with USD 81 trillion by 2016.

Despite the financial crisis starting in 2007, we calculate that global household wealth increased by USD 117 trillion between 2000 and 2011, with the share of emerging markets trending strongly upwards. But what is likely to happen in the near future?

We present a picture of future global household wealth at mid-2016 based on individual country estimates of total wealth and its distribution across adults. Our results suggest that emerging economies will continue to catch up with developed nations, that the middle segment of the wealth pyramid will grow in importance, and that the number of millionaires will rise significantly.

World wealth at USD 345 trillion by 2016

We estimate that total household wealth will rise by 50% in the next five years from USD 231 trillion in 2011 to USD 345 trillion in 2016, equivalent to

Total wealth in the USA (USD trn) and the relative position of emerging economies

Source: Credit Suisse



Figure 2

Percentage share of wealth and contribution to growth, by country income groupings

Source: Credit Suisse



Figure 3

Distribution of adults (%) by range of wealth

Source: Credit Suisse

Share of adult population (%)



8.4% growth per year. Net worth per adult worldwide is expected to reach USD 70,700 in the year 2016, an increase of almost 40% over 2011.

According to our estimates, China will replace Japan as the second-wealthiest country in the world, with total household wealth of USD 39 trillion in 2016, compared to USD 31 trillion for Japan. The USA is expected to maintain its supremacy in the wealth ranking, with a projected total household wealth of USD 82 trillion. Well behind in fourth and fifth places are France and Germany with USD 20.1 trillion and USD 19.6 trillion, respectively.

Leapfrogging

Over the next five years, we expect to see a big improvement in the position of emerging economies. Wealth in both China and Africa as a whole is projected to rise by over 90%, but India and Brazil are forecast to do even better, with personal wealth more than doubling by 2016.

Figure 1 compares the total wealth of certain countries and regions today and in five years time, using US wealth over the course of the 20th century as a yardstick. Despite having almost 300 million more adults than the USA, Africa's total current wealth of USD 3 trillion in 2011 is comparable to total US wealth in 1908. Even though we expect a substantial improvement in Africa's wealth in the next five years, it will rise only to the level of US wealth holdings back in 1928, so the improvement equates to 20 "US years."

The case of India is particularly striking. With total wealth of USD 4.1 trillion in 2011, India's household wealth is comparable to the USA in 1916. But, during the next five years, India is projected to gain as much wealth as the USA achieved over the course of 30 years beginning in 1916. This is due to an increase in wealth per adult accompanied by a significant rise in the adult population.

The case of Brazil is also noteworthy. With household wealth expected to reach USD 9.2 trillion by 2016 – a level comparable to the USA in 1948 – the rise in wealth in the next five years should correspond to the gain in the USA over the 23-year period from 1925 to 1948.

Total household wealth in China is currently USD 20.1 trillion, equivalent to that recorded for the USA in 1968. If recent trends continue, by 2016 China could reach the wealth level that the USA achieved in 1990 – a jump of 22 US years in just five years.

Wealth growth in middle- and low-income countries

Grouping countries according to income level, we find that low- and middle-income countries, which together account for 21% of global wealth in 2011, are projected to contribute 36% of the

global growth in wealth between 2011 and 2016 (Figure 2).

China alone will add USD 18 trillion to the stock of global wealth in the next five years, equivalent to the combined contribution of all the other Asia-Pacific countries apart from India. Latin America's contribution to global wealth growth is expected to be USD 7.5 trillion, with the region accounting for USD 17.7 trillion of world wealth in 2016. Africa lags behind, with projected wealth totalling USD 8.9 trillion in 2016.

The middle and top segments

The last decade has seen an increase in importance of the middle segment of wealth holders, comprising adults with net worth between USD 10,000 and USD 100,000. Our projections show this segment continuing to grow in importance. Figure 3 displays the current and estimated future wealth distribution across the various segments. The middle segment accounts for 24% of adults in 2011, but the fraction is expected to rise to about 31% in 2016. We also expect an increase in the proportion of adults with wealth above USD 100,000.

Who wants to be a millionaire?

Focusing on the top tier of the wealth distribution, our estimates suggest that the number of global millionaires will rise by 17 million over the next five years to reach a total of nearly 47 million by the year 2016.

While the number of millionaires in emerging economies will remain well below the levels in the US (12.6 million) or Europe (18.5 million), we expect the process of catching up to be very evident in the next five years (see Table 1). China should more than double its number of millionaires to perhaps 2.4 million by 2016, and the number in India and Taiwan are both predicted to rise above half a million for the first time. In Africa, the number of millionaires is expected to treble to 367,000 in 2016, with especially large contributions from South Africa (243,000) and Egypt (92,000). Projections for Latin America suggest a total of 1.4 million millionaires by 2016, led by Brazil with 815,000 and Mexico with 344,000.

Conclusion

Assuming that the global economic climate remains relatively benign, over the next few years, we expect growth in household wealth to average 8%–9% per annum, with emerging market economies, especially China and India, as the principal drivers. China is likely to move into second place in the world wealth league, comfortably overtaking Japan, whose household wealth is projected to grow very modestly.

Middle-income countries are expected to increase their share of global wealth, along with the

Table 1

Emerging market millionaires 2011 and 2016, selected countries

Source: Credit Suisse

	Number (thousand)		Change
	2011	2016F	(%)
China	1,017	2,381	134
Taiwan	343	503	47
Brazil	319	815	155
Korea	217	425	96
India	204	510	150
Singapore	183	408	123
Mexico	175	344	97
Indonesia	112	242	116
Turkey	98	179	83
Russia	95	171	80
Hong Kong	89	146	64
South Africa	71	243	242
Saudi Arabia	44	64	45
UAE	40	54	35
Malaysia	39	73	87
Colombia	37	56	51
Kuwait	31	45	45
Argentina	31	58	87
Egypt	31	92	197
Chile	28	40	43
World	29,674	46,580	57

middle segment of the wealth distribution covering adults in the wealth range from USD 10,000 to USD 100,000. There will also be a rise in the number of millionaires in both high-income and emerging economies, with the worldwide total expected to approach 50 million in the next five years.

Methodology

Projections of total net worth at the country level for the next five years are based on separate forecasts of its three components: financial assets, non-financial assets and debts.

For aggregate financial wealth, we make a 5-year projection of market value using a dividend discount model at the country level. Non-financial wealth is estimated by regressing non-financial wealth on GDP and inflation, using IMF-based forecasts of these variables. Household debt projections assume that the ratio of debts to GDP per capita remain constant and use IMF GDP per capita forecasts up to 2016.

For countries lacking the data to make projections, GDP per capita growth is used to predict net worth, and the financial/non-financial/debt ratios to net worth is assumed to be the same as for 2011.

Wealth of nations

Countries differ greatly in the levels and pattern of wealth holdings. The following pages provide a picture of the variety of country circumstances and the range of experiences.

While data quality is good in the rich countries that have most of the world's wealth, when we look more broadly, quality is far from uniform. On the following pages, we highlight some of the most interesting countries. All of these have data on mean household wealth and evidence on the distribution of wealth across the population.

Data quality is rated as no worse than "fair," meaning that there is at least a recent household survey on wealth. In most of the selected countries quality is "good," meaning that there is an official household sector balance sheet as well as an acceptable way to estimate wealth distribution. A "satisfactory" rating is given when the data are good but somewhat out of date.

The accompanying charts summarize some of the most important facts, giving wealth values on a per adult basis and mainly in terms of US dollars (using official exchange rates). The first chart shows changes in mean wealth over 2000–11. Since exchange-rate fluctuations can alter the apparent trend, for each country, we provide an alternative series using its average USD exchange rate over the twelve years. A typical pattern is a mild decline in mean wealth from 2000 to 2002, an increase to 2006 or 2007, a drop in 2008 and then recovery. Generally, wealth in 2011 is higher than in 2000, but about the same as in 2007. Also, since most currencies appreciated against the US dollar over the period, growth of a country's wealth usually does not appear as strong using the average exchange rate.

Countries that show typical features over 2000–11 include the United States itself (except there is no exchange rate issue), Canada, Denmark, France, and the United Kingdom. Some countries, notably China, India and Indonesia, show significantly above-average growth. At the other extreme, although Japan shows some growth in US dollars it has had a long slow decline in yen. Experiences after 2007 vary, with the United Kingdom for example showing a very large drop, and Switzerland no decline in 2008 in US dollars. Wealth in most major OECD economies, including the UK and the USA, has still not reached its 2007 level in constant exchange-rate terms. Australia, Canada and Germany provide exceptions.

Our second chart shows countries' breakdown of assets between financial and real (non-financial) forms, as well as mean debt and net worth. On average internationally, financial assets are 52% of total assets, and debt is 15%. There are several countries, however, where financial assets are more important – notably the USA and Japan. At the other extreme, real assets dominate heavily in India and Indonesia, and in Australia and France among rich countries.

Our last chart shows wealth distribution. There are some interesting contrasts. For example, 43% of adults in India have less than USD 1,000, whereas this fraction is only 6% in China. Also, some developed countries have significant percentages in the very low wealth ranges, while others have very few. This reflects such factors as availability of credit, including student loans, as well as how many young adults live separately from their parents, making their low wealth more apparent.
United States

Land of fortunes

The United States has seen fluctuating wealth levels since the year 2000. Average wealth was close to USD 200,000 at the turn of the century and rose fairly steadily until 2006, before falling as a result of the financial crisis (Figure 1). There has subsequently been a recovery, but wealth per adult remains below the 2006 level. It is yet to be seen whether recovery will continue or if the wealth level in the United States will decline again in the face of slower growth or a "double-dip" recession.

The United States is unusual in having a very high proportion of assets (68%) held in financial form, partly because it has a larger number of active shareholders than other countries. Also, compared with many other OECD countries, the United States has more economic activity in the private rather than public sector, and more outward foreign investment – both of which rely partly on financing by households through their ownership of bonds, stocks and other financial instruments. Debts of USD 59,000 per adult are not extreme by international standards.

Compared to the wealth distribution in the rest of the world, the US distribution has a high proportion of the population with wealth above USD 100,000. The fraction with wealth at higher levels is even more disproportionate. The United States has by far the greatest number of members of the top 1% global wealth group, accounting for 41% of those with wealth exceeding USD 10 million and 32% of the world's billionaires. The number of UHNW individuals with wealth above USD 50 million is six times that of the next country (China).

Country summary 2011		
Population	321	million
Adult population	234	million
GDP	66,756	USD per adult
Mean wealth	248,395	USD per adult
Median wealth	52,752	USD per adult
Total wealth	58.1	trillion USD
Dollar millionaires	10,061	thousand
Top 10% of global wealth holders	94,213	thousand
Top 1% of global wealth holders	12,584	thousand
Quality of wealth data	ል ቅቅቅቅ	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Japan

Continuing to stagnate

In growth terms, Japan has had the least impressive wealth record of any G7 country in recent years. It began the century with wealth per adult of USD 190,000, almost the highest level in the world. Average wealth today is higher in US dollar terms, but about 10% lower when measured in Japanese yen. This decline is due to the combined effect of a lackluster performance of equities, low interest rates and investment income, a housing market which has been on a downward trend since the 1990s, and a reduced saving rate.

The decline in property values means that financial wealth is now the major component of household assets. Debts amount to 15% of total assets, which is about average internationally.

Japan has a relatively equal wealth distribution by international standards, which together with its high average wealth means that few individuals have assets below USD 10,000. The proportion of the population with wealth above USD 100,000 is almost seven times the global average. At the start of the decade, the number of Japanese in the top 10% and top 1% of global wealth holders was a close second to the number of US members. Japan still retains second place, but looks set to be overtaken by China in the near future.

Country summary 2011		
Population	127	million
Adult population	104	million
GDP	55,533	USD per adult
Mean wealth	248,770	USD per adult
Median wealth	128,688	USD per adult
Total wealth	25.9	trillion USD
Dollar millionaires	3,121	thousand
Top 10% of global wealth holders	68,894	thousand
Top 1% of global wealth holders	5,642	thousand
Quality of wealth data	፞ ፝ ፟፟፟፟	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



China

Star performer

Wealth per adult in China has grown vigorously since the year 2000, more than tripling from USD 6,000 to USD 21,000 in 2011. Wealth fell by approximately 20% as a result of the financial crisis, but has subsequently risen above its pre-crisis peak. The level has increased more in US dollars than in yuan, due to the slow appreciation of China's currency, but the most important source of wealth increase is growth in real terms.

China's total household wealth is now the third highest in the world, 22% behind Japan and 44% ahead of France (in fourth place). Due to a high savings rate and relatively well developed financial institutions, a high proportion (51%) of Chinese assets are in financial form compared with other major developing or transition countries. At the same time, privatized housing, new construction and rural land are very important forms of wealth in China, accounting for much of the USD 10,470 in real assets per adult. Debt averages just USD 630, which is very small in international terms and more similar to levels seen in developing rather than developed countries.

Although significant inequality is created by the strong urban-rural divide in China, in the year 2000 overall wealth inequality was low – both by broad international standards and in comparison to other transition countries. This was due to such factors as the virtual absence of inherited fortunes, and relatively equal division of both rural land and privatized housing. Wealth inequality has been rising, strongly however, with the increasing wealth of successful entrepreneurs, professionals and investors. This year, China had over a million millionaires for the first time, and more than 5,000 residents with wealth above USD 50 million. Only the United States has more UHNW individuals.

Country summary 2011		
Population	1,340	million
Adult population	975	million
GDP	6,639	USD per adult
Mean wealth	20,711	USD per adult
Median wealth	7,496	USD per adult
Total wealth	20.2	trillion USD
Dollar millionaires	1,017	thousand
Top 10% of global wealth holders	28,950	thousand
Top 1% of global wealth holders	1,602	thousand
Quality of wealth data	ት ት ት	fair

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



India

Unlocking wealth

Wealth in India has grown strongly in the last decade or so, with wealth per adult rising from USD 2,000 in the year 2000 to USD 5,500 in 2011. Given the 29% rise in adult population, aggregate wealth has more than tripled. In US dollar terms, there was a significant contraction in 2008, although much of this was due to changes in the rupee exchange rate. When this is taken into account, wealth growth in India has been fairly steady.

Along with most countries in the developing world, in India personal wealth is heavily skewed towards property and other real assets, which make up 88% of estimated household assets. Personal debts are recorded at only USD 258 per adult. However, it has been claimed that the large and well-established household survey on which the debt for India is based suffers from significant under-reporting of household liabilities, so that this figure may be an underestimate.

While wealth has been rising strongly in India, and the ranks of the middle class and wealthy have been swelling, not everyone has shared in this growth and there is still a great deal of poverty. This is reflected in a high proportion (43%) of adults with wealth below USD 1,000, well above the world average (27%).

At the other end of the scale, a very small proportion of the population (just 0.4%) has net worth over USD 100,000. If current growth continues, that number will rise: in 2011 alone, India acquired 34,000 new millionaires. However, details of Indian billionaires and similar high profile UHNW individuals suggest that a higher-than-normal proportion may be more properly regarded as residents of other countries.

1,231	million
735	million
2,315	USD per adult
5,548	USD per adult
1,291	USD per adult
4.1	trillion USD
204	thousand
4,138	thousand
306	thousand
ት ት ት	fair
	735 2,315 5,548 1,291 4.1 204 4,138 306

Figure 1 Wealth per adult over time







Figure 3

Wealth distribution relative to world (in %)



France

Robust and resilient

After the turn of the century, wealth per adult grew very strongly in France, tripling in value between 2000 and 2007. It then fell back by 15% and has not yet regained its 2007 value. Much of the earlier rise can be attributed to appreciation of the euro against the dollar, a factor which affected all Eurozone countries. However France also experienced a rapid rise in house prices as a result of which real property now accounts for two thirds of household assets. Personal debts are 12% of household assets, which is a relatively low ratio in developed economies.

In both euro and US dollar terms, the total wealth of French households is very sizeable. Although it has just 1.1% of the world's adults, France ranks fourth among nations in aggregate household wealth – behind China and just ahead of Germany. Europe as a whole accounts for 40% of the individuals in the global top 1%, but France itself contributes a quarter of the European contingent. This reflects not only the high average net worth of French households, but also greater inequality of wealth than is seen in most other EU countries.

Very few households in France are recorded as having less than USD 1,000 per adult. The proportion with assets over USD 10,000 is double the world average, and the proportion with more than USD 100,000 is four times the global figure. There are more millionaires in France than in any other European country. However, Germany has more people above the USD 50 million mark, and above USD 100 million both Germany and the United Kingdom rank higher.

Country summary 2011		
Population	63	million
Adult population	48	million
GDP	57,419	USD per adult
Mean wealth	293,685	USD per adult
Median wealth	90,271	USD per adult
Total wealth	14.0	trillion USD
Dollar millionaires	2,606	thousand
Top 10% of global wealth holders	23,827	thousand
Top 1% of global wealth holders	3,982	thousand
Quality of wealth data	ል ቅቅቅቅ	good

Figure 1 Wealth per adult over time



------Wealth per adult at constant exchange rate

Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



United Kingdom

Outlook uncertain

The construction of personal sector balance sheets was pioneered in the United Kingdom, which also developed the methods of estimating household wealth from estate tax records. As a consequence, the United Kingdom has data on wealth holdings which date back more than a century. These data capture the trends in personal wealth during the course of the 20th century, most especially the substantial drop in wealth concentration between 1900 and 1970 that has been attributed to the effects of the two world wars, taxation, more equal division of estates on death, and the spread of popular assets like consumer durables and owner-occupied housing. In the last few decades, wealth has grown more quickly and wealth inequality has increased moderately.

The past decade has been one of considerable fluctuations in average wealth fuelled by a booming housing market up to the year 2007 and a subsequent fall in both real property and financial assets. Expressed in terms of US dollars, wealth per adult in 2011 is above that in the year 2000, but remains far below the peak of USD 320,000 in 2007. Much of the fluctuation is attributable to exchange-rate movements: expressed in terms of UK pounds, the series is more stable. But average wealth declined slightly in 2011 and remains below the 2007 figure. Real assets now make up 51% of household assets, while debts account for 17%.

Relatively few people are recorded as having wealth below USD 10,000, while over half the population has wealth exceeding USD 100,000. The UK counts 2.8 million people in the top 1% of the world wealth distribution, and 1.6 million millionaires.

Country summary 2011		
Population	62	million
Adult population	48	million
GDP	51,655	USD per adult
Mean wealth	257,881	USD per adult
Median wealth	121,852	USD per adult
Total wealth	12.3	trillion USD
Dollar millionaires	1,647	thousand
Top 10% of global wealth holders	28,453	thousand
Top 1% of global wealth holders	2,847	thousand
Quality of wealth data	ል ቅቅቅቅ	good

Figure 1 Wealth per adult over time



------Wealth per adult at constant exchange rate

Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Switzerland

Tall peaks

Average wealth in Switzerland was among the highest in the world in the year 2000. Expressed in US dollars, it had more than doubled by 2011, propelling Switzerland to the top of the world ranking. The past year has seen a further dramatic rise, making Switzerland the first and only country to have average wealth above USD 500,000. However, almost all the rise in wealth since 2000 has been due to the appreciation of the Swiss franc against the US dollar. Measured instead in Swiss francs, household wealth fell in 2001 and 2002, and then showed a gentle upward trend.

Given the strength of the Swiss financial sector, it is not surprising that most household wealth is held in financial assets, whose share of total assets is 59%. Debts average USD 131,000 per adult, one of the highest levels in the world, again reflecting the strength of the domestic currency.

Alone among about a half dozen advanced countries with long-time series on wealth distribution, Switzerland has displayed only a small decrease in wealth inequality over the past century. As a consequence, a large proportion of the Swiss population is found in the upper echelons of the world distribution. Fully 1.8% of the global top 1% is Swiss, remarkable for a country with just 0.1% of world population. More than 95% of Swiss adults have assets above USD 10,000 and 50% of the population is worth more than USD 100,000.

Country summary 2011		
Population	8	million
Adult population	6	million
GDP	95,958	USD per adult
Mean wealth	540,010	USD per adult
Median wealth	100,901	USD per adult
Total wealth	3.3	trillion USD
Dollar millionaires	622	thousand
Top 10% of global wealth holders	3,293	thousand
Top 1% of global wealth holders	833	thousand
Quality of wealth data	****	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Czech Republic

Successful transition

The Czech Republic is among the most successful of the former socialist nations in Eastern Europe, but has many features in common with other transition countries. Average wealth grew strongly from USD 12,000 in the year 2000 to USD 35,000 in 2007, after which the level fluctuated slightly to reach USD 41,000 in 2011. A good proportion of this growth was due to appreciation of the Czech koruna against the dollar: when this is taken into account, wealth per head grew just 4% per annum from 2000 to 2011. This is about average for European transition countries – faster growth than seen in Slovakia and the Baltic transition countries, but slower than estimated for Poland and Russia.

In many European transition economies, real property especially housing – is the dominant component of household wealth. This aspect is not so pronounced in the Czech Republic, where the privatization of housing did not proceed as far as in most other transition countries (the current home ownership rate is only about 50%), but real assets still account for 54% of total assets. Household debt amounts to USD 8,900 per adult, and rose quickly over the past decade, which is a feature common to transition economies.

Compared to the rest of the world, a higher proportion of Czech citizens are found in the USD 10,000–100,000 range, and a lower proportion has wealth above USD 100,000. We estimate that the country nevertheless has 25,000 millionaires and 39,000 members of the world's top 1% of wealth holders.

Country summary 2011		
Population	10	million
Adult population	8	million
GDP	25,846	USD per adult
Mean wealth	40,817	USD per adult
Median wealth	14,472	USD per adult
Total wealth	0.3	trillion USD
Dollar millionaires	25	thousand
Top 10% of global wealth holders	701	thousand
Top 1% of global wealth holders	39	thousand
Quality of wealth data	ል ፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞፞	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Singapore

Strong, stable growth

Household wealth in Singapore has grown steadily and vigorously since the turn of the century, rising from USD 105,000 at the outset to USD 285,000 by mid-2011. Most of the rise was due to the saving rate and asset price increases, rather than exchange-rate movements, although the latter gave a strong boost in the last year or so. Singapore now ranks sixth in the world in terms of mean personal wealth.

Household assets are divided about equally into financial and real assets, in part reflecting strong government encouragement for both saving on the one hand and home ownership on the other. Average debts of USD 44,000 are relatively low for a high wealth country, equating to just 13% of total assets. Singapore has recently begun to produce official household balance sheet data, so the information is more reliable than that for other countries in the South East Asian region which lack these high quality data.

The distribution of wealth in Singapore shows only moderate inequality. There is a relatively small number of people with wealth below USD 1,000, and about six times the global average of those with wealth above USD 100,000. Reflecting its very high average wealth rather than high inequality, the country's 314,000 members form 0.7% of the global top 1%, while its adult population is just 0.1% of the world total.

Country summary 2011		
Population	5	million
Adult population	4	million
GDP	62,317	USD per adult
Mean wealth	284,692	USD per adult
Median wealth	101,033	USD per adult
Total wealth	1.1	trillion USD
Dollar millionaires	183	thousand
Top 10% of global wealth holders	2,153	thousand
Top 1% of global wealth holders	314	thousand
Quality of wealth data	ል ቆቆቆቆ	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Taiwan

Model Asian Tiger

Taiwan is a prime example of a successful Asian Tiger economy. Its average level of wealth, at USD 161,000, is well above that of even the most successful developing and transition countries, and approaches that of some countries in Western Europe. There was a modest rise in wealth from USD 105,000 in the year 2000 to USD 128,000 in 2007, followed by a small dip in 2008 to USD 122,000. Subsequent recovery has been stronger than in most other countries, with mean wealth rising at an average annual rate of 9.8%. Also unusually, exchange-rate movements make the recent growth lower than it would have been with a constant exchange rate. On the latter basis, wealth has risen 12.9% per year since 2008.

Reflecting a high saving rate and well-developed financial institutions, the composition of household wealth is skewed towards financial assets, which comprise 66% of total assets. Debt is modest, averaging 13% of total assets or 20% of net worth.

Compared to the rest of the world, wealth distribution in Taiwan is skewed towards the high end, with about double the proportion owning more than USD 10,000, and three times the number owning more than USD 100,000. This reflects Taiwan's high average wealth, rather than high wealth inequality.

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Figure 1 Wealth per adult over time



Wealth per adult at constant exchange rate

Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Indonesia

Stunning growth

The rise of personal wealth in Indonesia has been stunning since the year 2000, with average wealth growing by a factor of five. This may partly reflect depressed asset values in the year 2000 lingering from the Asian financial crisis of 1997. In dollar terms, the global financial crisis caused a small setback, but growth recovered quickly and wealth per adult is now well above the pre-crisis level. When exchange rate fluctuations are taken into account, no drop in wealth is observed in 2007–08.

The comparison between Indonesia and India is interesting. They had similar wealth per adult in the year 2000, but the figure for Indonesia is now more than double that for India, similar to the difference between the two countries' GDPs. The composition of wealth is now also a little less skewed toward real assets than in India, with real assets making up 81% of total assets versus 88% in India. Personal debts are very low on average, although the figure of USD 275 may be an underestimate, reflecting under-reporting of debt in the household surveys that provide the primary source here for Indonesian data.

Indonesia has 28% of its population with wealth less than USD 1,000, which is very close to the figure of 27% for the world as a whole. Indeed, up to USD 100,000, the distribution of wealth in Indonesia is not too different from the global distribution. However, only 2% of its people have wealth over USD 100,000, compared with 9% for the whole world.

Country summary 2011		
Population	235	million
Adult population	153	million
GDP	5,333	USD per adult
Mean wealth	12,109	USD per adult
Median wealth	2,718	USD per adult
Total wealth	1.8	trillion USD
Dollar millionaires	112	thousand
Top 10% of global wealth holders	3,076	thousand
Top 1% of global wealth holders	176	thousand
Quality of wealth data	***	fair
,		

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Australia

Stellar performance

Australia has experienced robust growth since the turn of the century, with wealth per adult quadrupling over the past decade. This was due in part to the appreciation of the Australian dollar, but wealth has doubled even when this is taken into account. In 2011, average wealth in Australia, at USD 397,000, was second highest in the world – after Switzerland and ahead of Norway. More surprisingly, perhaps, its median wealth of USD 222,000 is the highest in the world.

A noticeable feature is the composition of wealth, which is heavily skewed towards real assets, which amount on average to USD 323,000 and form 65% of total household assets. In fact, the level of real assets per adult in Australia is now the second highest in the world, after Norway. In part, this reflects a sparsely populated country with a large endowment of land and natural resources, but it also is affected by high urban real estate prices.

Compared to the rest of the world, very few Australians have net worth less than USD 1,000. This reflects such factors as relatively low credit card and student loan debt. The proportion of those with wealth above USD 100,000 is the highest of any country – eight times the world average. With 1,861,000 people in the global top 1%, Australia accounts for 4.1% of the members of that wealthy group, despite having just 0.4% of the world's adult population.

Country summary 2011		
Population	22	million
Adult population	16	million
GDP	86,291	USD per adult
Mean wealth	396,745	USD per adult
Median wealth	221,704	USD per adult
Total wealth	6.4	trillion USD
Dollar millionaires	1,079	thousand
Top 10% of global wealth holders	12,085	thousand
Top 1% of global wealth holders	1,861	thousand
Quality of wealth data	****	Good

Figure 1 Wealth per adult over time



Wealth per adult at constant exchange rate

Figure 2





Figure 3

Wealth distribution relative to world (in %)



South Africa

African model

In many respects, South Africa is the model for many other African economies. Its household wealth has grown vigorously over the last decade or so, quadrupling in value from USD 8,400 in the year 2000 to USD 34,300 by mid-2011. There were, however, noticeable fluctuations during this period. When wealth is expressed in terms of US dollars, the financial crisis appears to have caused a significant setback, from which South Africa has now fully recovered. However, when measured in South African rand, the 2008 trough is quite mild. A larger fall in proportional terms occurred in 2003.

Unusually for a still developing country, household wealth is largely comprised of financial assets, which contribute more than 75% to the household portfolio. This reflects a vigorous stock market and sophisticated life insurance and pension industries, which are key aspects of the strong modern sector of the economy. Average real assets of USD 9,300 are not too much above the average level of debt (USD 5,900), in part the result of relatively low real estate prices. South Africa is also unusual among developing countries in having an official household sector balance sheet, which provides a more reliable basis for the wealth composition numbers.

As in Indonesia, the distribution of wealth in South Africa is roughly similar to the distribution for the world as a whole, except that somewhat fewer individuals have wealth above USD 100,000 and correspondingly more are in the secondhighest wealth group. Nevertheless, we estimate that there are 71,000 US dollar millionaires in the country, and that 116,000 South Africans are members of the global top 1% of wealth holders.

Country summary 2011				
Population	51	million		
Adult population	31	million		
GDP	12,626	USD per adult		
Mean wealth	34,288	USD per adult		
Median wealth	8,007	USD per adult		
Total wealth	1.0	trillion USD		
Dollar millionaires	71	thousand		
Top 10% of global wealth holders	2,449	thousand		
Top 1% of global wealth holders	116	thousand		
Quality of wealth data	***	fair		

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Chile

Sustained high growth

Average wealth in Chile has grown steadily since the year 2000, more than tripling from USD 10,000 per head in 2000 to USD 32,300 in 2011. Exchange-rate changes have given a boost to the upward trend since 2002. Also note that the apparent setback due to the financial crisis vanishes when wealth is measured in Chilean pesos. Either way, wealth per adult is now well above the pre-crisis level recorded in 2007.

One noticeable feature is the very low proportion of financial assets. Most household wealth is held in the form of real property, with financial assets accounting for just 17% of gross assets. The low figure for financial assets may reflect the fact that, as in China, India and Indonesia, the portfolio composition data come from a household survey: unless extensive corrections are made, such surveys typically under-record financial assets. While we do make a correction, based on comparisons of survey and independent balance sheet totals in countries where both are available, it is possible that a larger adjustment is needed. At 12% of total assets, average debt is moderate.

The reported distribution of wealth in Chile differs from that in the world as a whole by having more people in the USD 10,000–100,000 range and fewer in each of the other ranges that we show. This may give the appearance of lower inequality than average, but that would be a mistaken impression. In fact, overall inequality is relatively high, as shown by the Gini coefficient value of 78.2% and by the fact that Chile has 28,000 millionaires and 44,000 adults in the global top 1% by wealth.

Country summary 2011		
Population	17	million
Adult population	12	million
GDP	19,093	USD per adult
Mean wealth	32,311	USD per adult
Median wealth	9,260	USD per adult
Total wealth	0.4	trillion USD
Dollar millionaires	28	thousand
Top 10% of global wealth holders	739	thousand
Top 1% of global wealth holders	44	thousand
Quality of wealth data	ል ቁ ቁ	fair

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)



Canada

Wealth on the rise

Despite its relatively small population, Canada ranks eighth in the world in terms of aggregate household wealth and thirteenth in wealth per adult. Its current wealth level, at USD 245,000, is very close to the USD 248,000 figure for the United States, reflecting considerable convergence since the year 2000, when mean wealth in Canada was only 56% of that in the United States in USD terms.

Measured in terms of US dollars, mean household wealth grew at an annual rate of 7.7% from 2000 to mid-2011. When exchange-rate changes are excluded, the rise in wealth is more modest, showing annual growth of 3.6%. Also, the contraction in household wealth due to the financial crisis – almost 30% in US dollar terms – is much less evident when wealth is expressed in Canadian dollars. While wealth per adult in the United States is still 8% below the 2007 level, Canada's wealth in domestic currency is now 3% above the 2007 figure. This reflects the fact that Canada's financial institutions and housing market did not suffer a collapse during the global financial crisis.

Canada is similar to the United States in having more than half of its household wealth in financial assets, although the fraction of assets in financial form, at 56% is less than in the United States, where they make up 68% of total assets. The wealth distribution is more equal than that of the United States, as reflected in the much higher median wealth – USD 89,000 versus USD 53,000 in the United States. Canada has both a smaller fraction with wealth less than USD 1,000 and a larger percentage with wealth over USD 100,000 than the United States. It has almost a million millionaires, and contributes 4% of the global top 1% despite having only 0.5% of the world's population.

Country summary 2011

Population	34	million
Adult population	26	million
GDP	64,960	USD per adult
Mean wealth	245,455	USD per adult
Median wealth	89,014	USD per adult
Total wealth	6.5	trillion USD
Dollar millionaires	940	thousand
Top 10% of global wealth holders	13,315	thousand
Top 1% of global wealth holders	1,603	thousand
Quality of wealth data	****	good

Figure 1 Wealth per adult over time



Figure 2 Composition of wealth per adult



Figure 3

Wealth distribution relative to world (in %)





About the authors

Anthony Shorrocks was Director of the World Institute for Development Economics Research of the United Nations University (UNU-WIDER) in Helsinki from 2001 to 2009. 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. He was elected a Fellow of the Econometric Society in 1996. He has published widely on income and wealth distribution, inequality, poverty and mobility. 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) and "The Level and Distribution of Global Household Wealth" (Economic Journal 2011).

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