McKinsey Global Institute

# Inequality: A persisting challenge and its implications

#### **Discussion paper**

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### **Preface**

Inequality is not a new phenomenon, but it has become one of the burning social and economic issues of our age—one that is contested in academic literature and street demonstrations alike. For this year's 45th meeting of the G-7 heads of government in Biarritz, France, the French presidency has made "fighting inequality" the core theme.

The McKinsey Global Institute is publishing this fact base to help inform the debate, both in the lead-in to the Biarritz meeting in August and more broadly. MGI's mission is to help leaders in the commercial, public, and social sectors develop a deeper understanding of the evolution of the global economy and to provide a fact base that contributes to decision making on critical management and policy issues.

We believe there are a need and a utility for such a fact base on economic inclusion, given the polarized nature of the debate characterized by sometimes-opposing perspectives and contradictory facts. This document draws on multiple sources of data, including our own prior research on income advancement and inclusive growth. We do not present a single view or take sides in the debate. Rather, our intention is to step back from the polemics and provide a solid foundation that can inform those debating, whether they be policy makers, business leaders, or actors in civil society.

This research was directed by David Fine, leader of McKinsey's global Public and Social Sector Practices and a senior partner in London; James Manyika, chairman of MGI and a McKinsey senior partner in San Francisco; Pal Erik Sjatil, leader of McKinsey in Europe; Tilman Tacke, a partner in Munich; and Karim Tadjeddine, a partner in Paris. Anu Madgavkar, an MGI partner in Mumbai, provided guidance and support. Maggie Desmond headed the research team, which comprised Abdulla Abdulaal, Lucas Beard, Lucie Bertholon, Ben Hamilton, Kimberley Moran, Katie Parry, Joshua Powell, TJ Radigan, and Olivia Robinson.

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This report contributes to MGI's mission to help business and policy leaders understand the forces transforming the global economy, identify strategic locations, and prepare for the next wave of growth. As with all MGI research, this research is independent and has not been commissioned or sponsored in any way by any business, government, or other institution. We welcome your comments at MGI@mckinsey.com.

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#### In brief

# Inequality: A persisting challenge and its implications

Inequality has become a social and political flash point in many advanced economies and beyond, prompting a polarized debate about causes and solutions and fueling public discontent with governments and other institutions. This paper provides a fact base to inform the discussion, while at the same time recognizing that economic realities vary widely across and within countries and that differing perspectives on inequality are shaped by cultural, economic, and social points of view. It draws on a wide range of sources and ongoing McKinsey Global Institute research. Key findings include:

- The world has become more equal as developing economies have narrowed the gap with richer countries. High-income countries' share of global wealth fell from 80 percent in 2000 to 71 percent in 2014, while the share of middle-income countries such as China and India rose from 14 to 22 percent. Average incomes globally have also converged; the Gini coefficient that measures income dispersion fell from 0.44 to 0.36 between 2000 and 2014. These trends are also evident for consumption: the consumption expenditure gap between G-7 and low-spending Organisation for Economic Co-operation and Development (OECD) countries has halved since 2000.
- Within advanced economies, economic outcomes have grown more unequal, especially inequalities of wealth and income. Wealth inequality as measured by the meanto-median wealth ratio has increased in two-thirds of OECD member economies since 2000. In income, the top 1 percent in the OECD almost doubled its share of total pretax income from 6 percent in 1980 to around 11 percent in 2014.
- Economic realities differ widely across G-7 countries, and we observe some variations in growth, innovation, social transfers, and inequalities. Some G-7 countries perform strongly on growth or employment with higher levels of inequality, and vice versa. In G-7 countries, various research has shown that taxes and social transfers can sharply reduce pretax relative poverty levels.
- Personal factors such as gender, age, ethnicity, place of residence, and family background continue to affect opportunities and outcomes in G-7 countries. Women are now more likely than men, and young people (ages 25 to 35) are more likely than their elders (55–65), to have a

tertiary degree, but earnings and wealth still lag for these groups. Women have narrowed the wage gap but earn only 84 cents for every \$1 men earn. City dwellers are one-third more likely than rural dwellers to have tertiary education, but unemployment among them is higher and rising.

- Wages have stagnated for many in advanced economies: real disposable incomes have fallen since 2005 for one in four individuals living in six of the G-7 economies. These effects are particularly acute for middle-income earners and those in medium-skill jobs. Education, healthcare, and housing costs have over the same time risen faster than overall inflation across the European Union and the United States. Household indebtedness has also risen, albeit with high dispersion across economies, from 87 percent of net disposable income in 1995 to 123 percent in 2017.
- Global trends beyond economic cycles are affecting wealth and incomes and may deepen inequality challenges in the future. These trends include the declining labor share of income, which partly reflects pressure on wages; technology further polarizing job opportunities and incomes between high- and low-skill workers; the growth of "superstar" sectors and cities that are pulling away from their peers; and increasing global competitive pressures driven by the rise of dynamic firms in emerging markets.
- Both old and new interventions will be needed to counter disparities, but no single solution is likely to fit all. Economic growth remains a critical precondition for broad-based prosperity but will likely not suffice. Solutions to address equality of opportunities could include providing wider access to quality healthcare and education, rethinking work and skills, addressing biases and discrimination while promoting diversity and inclusion, and employing better metrics and incentives to encourage social value creation. Challenges related to equality of outcomes may require rethinking how economic gains are shared or redesigning social assistance for the modern age. Building consensus on how to achieve greater economic inclusion among policy makers, business leaders, citizens, and other stakeholders remains a central challenge of our time.

# Executive summary

Inequality is not a new phenomenon, but in recent years it has reemerged as a social and political flash point in G-7 and advanced economies and beyond, stoking public dissatisfaction. Perspectives about inequality—what it is, how it is evolving, and how to address it—are polarized. At times, even the data used to support arguments are contested.

This report seeks to present a fact base to inform the ongoing debate; it is neither a position paper nor a manifesto. Indeed, we acknowledge that inequality is viewed differently and plays out differently from country to country (see Box E1, "Views about inequality vary widely, the result of different cultural, economic, and social attitudes"). Drawing from a wide range of sources including our own research at the McKinsey Global Institute, we highlight different dimensions of inequality, such as inequality of wealth, of income, of consumption, and of opportunity, with a particular but not exclusive focus on the G-7 countries—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States (see Box E2, "How we define and measure inequality"). Part of the motivation for this discussion paper is the G-7 summit in Biarritz, France, in August 2019, and its expected focus on inequality. The G-7 countries are in many ways at the epicenter of the challenges of inequality in advanced economies. While we also highlight the situation elsewhere, much of our focus is thus on the G-7.

We identify some global trends underlying recent growth in certain types of inequality, as well as the way the issue is playing out in public opinion. We conclude with a discussion on solution spaces. This describes the range of interventions being discussed among a broad set of stakeholders, based on a review of more than 350 practical measures being proposed and tested to improve economic inclusion in G-7 countries.

### The world has become more equal, as developing economies narrow the gap with advanced economies

Viewed from a broad perspective, inequality is in decline as developing economies led by China and India have considerably narrowed the gap in wealth and income with richer countries since the 1980s. Higher-income countries' share of global wealth fell from 80 percent in 2000 to 71 percent in 2014, according to the World Bank, while the wealth share of middle-income countries such as Indonesia and Mexico rose from 14 percent to 22 percent (Exhibit E1).1

Our prior research shows that emerging economies generally have accounted for about two-thirds of the world's GDP growth and more than half of new consumption over the past 15 years. The convergence can also be seen within the 36-member Organisation for Economic Co-operation and Development (OECD): the consumption expenditure gap between G-7 and low-spending OECD countries has halved since 2000.

World Bank, 2019.

Outperformers: High-growth emerging economies and the companies that propel them, McKinsey Global Institute, September 2018.

Onsumption expenditure data, OECD, 2017. The OECD member countries are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

#### Box E1

### Views about inequality vary widely, the result of different cultural, economic, and social attitudes

Inequality is complex and polarizing as an idea and has been the subject of fierce debate throughout history. Since the Enlightenment in 17th-century Europe—and especially today—the discussion has been marked by a lack of consensus about the extent of inequality, how it is measured, and what levels of inequality are optimal or appropriate.

At the heart of the debate are differing viewpoints shaped by culture, history, and ideology, as well as economic and social trade-offs. Is inequality inevitable and even useful, or is it fundamentally bad? To what extent can inequality be offset by greater opportunity and innovation? And are these notions mutually exclusive?

Our work has been informed by a comprehensive literature review encompassing a wide range of perspectives. Some economists and social scientists argue that inequalities of wealth, income, and consumption can harm economic growth in the long run by hindering educational opportunities, human capital formation, and intergenerational mobility.<sup>2</sup> Growing inequality is seen by some economists as a signal of excessive monopoly power, rent seeking, or activities with negative externalities and adverse effects on economic performance.<sup>3</sup> Moreover, when incomes go mostly to those at the top, some suggest there is little left to motivate people further down the earnings ladder.<sup>4</sup> One economist in the 1970s, Arthur Okun, made a celebrated analogy between inequality and a "leaky bucket": if some people are suffering from thirst while others have plenty of water, he argued, then water should be transferred to the thirsty people even if the only way to do so is to use a leaky bucket, resulting in a loss of efficiency (water).<sup>5</sup> In the public debate, similarly, some of the focus has been on issues of fairness and on whether amassing wealth or incomes in a small stratum of society is in itself right or wrong.<sup>6</sup>

Others argue that these debates would be better served by a focus on economic growth and increasing the absolute size of the economy, rather than how the growth is shared. In this view, inequality is a result and enabler of economic progress, driving

Debates on inequality date back at least to Plato and Aristotle, who pondered the relationship between equality, justice, human rights, and society. One of the most rousing calls for greater equality was a slogan of the French Revolution 230 years ago: "liberty, equality, fraternity." Despite their opposing worldviews, Hobbes and Locke in the 17th century both postulated similar ideas about how man is born with a perfect state of equality before any form of government. Rousseau in the 18th century suggested that inequality comes from existing social arrangements and hierarchy, and that a social contract is needed to ensure an ideal, egalitarian society. Such Enlightenment ideas stimulated modern social movements and are enshrined in many countries' constitutions.

<sup>&</sup>lt;sup>2</sup> See, for example: Philippe Aghion and Jeffrey G. Williamson, Growth, Inequality, and Globalization: Theory, History, and Policy, Cambridge, UK: Cambridge University Press, 1998; Federico Cingano, Trends in income inequality and its impact on economic growth, OECD Social, Employment and Migration Working Papers, number 163, 2014; Joseph Stiglitz, The Price of Inequality: How Today's Divided Society Endangers Our Future, New York, NY: W. W. Norton & Co., 2012; Richard Wilkinson and Kate Pickett, The Spirit Level: Why Equality Is Better for Everyone, New York, NY: Bloomsbury Press, 2010; Francisco Perez-Arce, Ernesto F. L. Amaral, and Haijing Crystal Huang, Inequality of opportunity: The relationship between income inequality and intergenerational transmission of income, RAND Corporation, 2016; and Joseph Stiglitz, "Leaders and followers: Perspectives on the Nordic model and the economics of innovation," Journal of Public Economics, July 2015, Volume 127, pp. 3–16.

Inequality features in various debates within different branches of economics. While the theoretical trade-off between efficiency and distribution is a focus of public economics, proponents of welfare economics argue that inequality is a signal for risk and market failures, with high rates of income and wealth inequality leading to lower aggregate consumption. Some academics argue that the level of inequality in society is a result of a choice model with multiple steady states; for example, the United States and Canada have "fundamentals" similar to Western Europe's but limited redistribution policies. See Roland Benabou, "Unequal societies: Income distribution and the social contract," American Economic Review, 2000, Volume 90, Issue 1; Jonathan Ostry, Andrew Berg, and Charalambos G. Tsangarides, Redistribution, inequality, and growth, International Monetary Fund, staff discussion note, April 2014.

Steven A. Greenlaw, David Shapiro, and Timothy Taylor, *Principles of Economics*, 2nd edition, Houston, TX: Rice University, 2017.

<sup>&</sup>lt;sup>5</sup> Arthur M. Okun, *Equality and Efficiency: The Big Tradeoff*, Washington, DC: Brookings Institution, 1975.

<sup>&</sup>lt;sup>6</sup> E. Wesley F. Peterson, "Is economic inequality really a problem? A review of the arguments," Social Sciences, December 2017, Volume 6, Issue 4.

investment and the willingness to take risks. Accordingly, certain social transfers aimed at redistributing economic gains are viewed as dampening incentives or distortionary, where the role of the state could be rolled back. Such arguments focus on removing structural barriers and targeting high growth rates, so that individuals across all parts of the wealth, income, and consumption distributions can progress. This view also emphasizes the need to address issues of basic consumption, over and above wealth or income inequalities.

Such differing perspectives make for a complex debate. Research suggests that people perceive outcomes arising from choices, effort, and risk as generally fair. Moreover, during periods of sustained growth—and when that growth is shared among the broad base of the population—social attitudes tend to overlook faster growth of income in top quintiles, according to some research. However, inequality can flare up as a point of contention and contestation during periods of slow progress, if the wealthiest or highest earners continue advancing while others are squeezed. This is exacerbated when inequality is associated with treatment, for example by employers or justice systems.

Such debates have heated up since the 2008 financial crisis, as incomes have stagnated in G-7 and other advanced economies. A plethora of new research into causes and solutions has attracted public attention. This discussion paper does not seek to take sides in the debate, but rather to share a set of facts aimed at informing it.

Further, we recognize that each country context is unique. MGI's recent work on economic resilience in Europe demonstrates the existence of very different social contract models across countries, with some more or less egalitarian in the creation and distribution of economic value. This paper similarly shows how economic indicators vary widely across advanced economies, and especially the G-7 countries.

See, for example, Robert J. Barro, Inequality, growth, and investment, National Bureau of Economic Research (NBER) working paper number 7038, March 1999; Thieß Petersen and Ulrich Schoof, "The impact of income inequality on economic growth," Future Social Market Economy, Impulse #2015/05, Bertelsmann Stiftung, 2015; Jean-Philippe Delsol, Nicolas Lecaussin, and Emmanuel Martin, Anti-Piketty: Capital for the 21st century, Cato Institute, 2017; Scott Winship, Inequality does not reduce prosperity: A compilation of the evidence across countries, Manhattan Institute, October 2014.

<sup>&</sup>lt;sup>8</sup> Casey Mulligan, Parental Priorities and Economic Inequality, Chicago, IL: University of Chicago Press, 1997; Phil Gramm, "How income equality helped Trump," Wall Street Journal, June 24, 2018.

Ohristina Starmans, Mark Sheskin, and Paul Bloom, "Why people prefer unequal societies," Nature Human Behaviour, April 2017, Volume 1, Issue 4.

Merve Akbaş, Dan Ariely, and Sevgi Yüksel, When is inequality fair? An experiment on the effect of procedural justice and agency, Duke University, 2014.

<sup>&</sup>lt;sup>11</sup> Neal Caren and Sarah Gaby, "The rise of inequality: How social movements shape discursive fields," *Mobilization: An International Quarterly*, December 2016, Volume 21, Number 4, pp. 413–29.

See, for example, Thomas Piketty, Capital in the 21st Century, Cambridge, MA: Harvard University Press, 2013; Joseph E. Stiglitz, The Price of Inequality: How Today's Divided Society Endangers Our Future, New York, NY: W. W. Norton, 2012; Branko Milanovic, Global Inequality: A New Approach for the Age of Globalization, Cambridge, MA: Harvard University Press, 2016.

<sup>13</sup> Testing the resilience of Europe's inclusive growth model, McKinsey Global Institute, December 2018.

#### In advanced economies, economic outcomes are becoming more unequal

Inequality within many advanced countries is moving in the opposite direction from the global trend of declining inequality between countries. In G-7 economies and across many (but not all) advanced economies, wealth and income inequality in general has been rising since the 1980s. It is important to provide nuance and context to this blanket statement. Within inequality, there is a hierarchy of sorts: the distribution of wealth among the population is substantially more unequal than the distribution of income, which in turn is more unequal than the distribution of consumption, based on consumption expenditure. For example, in 2014, the wealthiest 1 percent of people in G-7 countries owned about 27 percent of the total wealth. That was double the 13 percent share of total income that went to the top 1 percent of income earners in the same countries that year, according to the World Inequality Database.<sup>4</sup> As we will see, inequality trends within the G-7 also vary considerably.

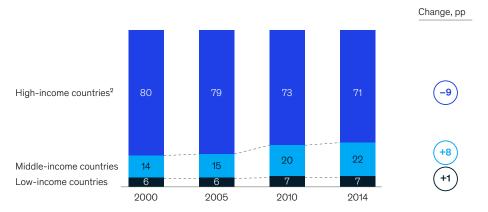
In the OECD, wealth inequality has risen since 2000 on average in two-thirds of the member countries, as measured by the ratio of mean-to-median wealth. Not all countries march in lockstep; inequality as measured by the wealth Gini coefficient grew significantly in countries affected by the financial crisis such as Ireland, Eastern European economies such as Latvia and Slovenia, and some of the most developed economies including Switzerland and the United States. Meanwhile, inequality improved in Belgium, Poland, and Sweden.

In France, the United Kingdom, and the United States, the G-7 countries for which data are most readily available, the share of wealth for the top 1 percent rose rapidly, from 20 percent in 1990 to 27 percent in 2000. The rise subsequently tapered off, with the share of wealth of this top cohort remaining around 27 percent by 2014.

In income terms, too, inequality has become more pronounced. The pretax income share of the top 1 percent in the OECD almost doubled from 6 percent in 1980 to around 11 percent in 2014.

Exhibit E1 **Average wealth inequality between countries has fallen slightly since 2000.** 

Share of global wealth,  $^{1}$  %, 2000-14



Includes wealth data for 141 countries.

<sup>&</sup>lt;sup>2</sup> High income includes OECD and non-OECD countries; middle income refers to upper middle-income countries; low income includes lower middle-income countries.

Source: Glenn-Marie Lange, Quentin Wodon, and Kevin Carey, *The changing wealth of nations 2018: Building a sustainable future*, World Bank, 2019; McKinsey Global Institute analysis

Global Spending Data, World Data Lab, March 2019, worlddata.io; World Inequality Database, wid.world/data, February 2019, wid.world/data.

<sup>&</sup>lt;sup>5</sup> James Davies, Rodrigo Lluberas, and Anthony Shorrocks, *Global wealth databook 2018*, Credit Suisse, October 2018.

The Gini coefficient, formulated by the Italian statistician Corrado Gini in 1912, measures the level of difference in wealth, income, or consumption expenditure that exists between people in a population. It is measured on a scale of 0 (all individuals have the same income) to 1 (one individual controls all income); the lower the coefficient, the more equal.

World Inequality Database, 2019.

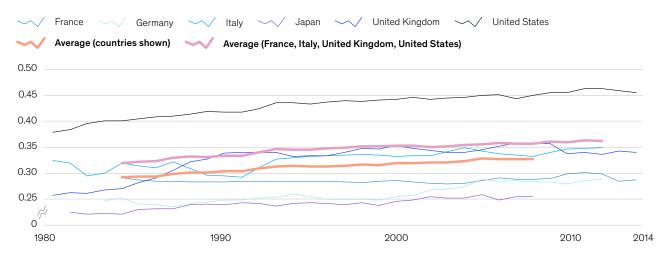
<sup>&</sup>lt;sup>8</sup> Ibid.

Similarly, income inequality as measured by the Gini coefficient of post-tax disposable income has been mostly rising since the 1980s, albeit at different levels across G-7 countries (Exhibit E2).

Exhibit E2

Income inequality as measured by income Gini increased since the 1980s.

Equivalized disposable income Gini, 1980–2014, selected G-7 countries



<sup>&</sup>lt;sup>1</sup> Pretax income Gini is defined by World Inequality Database as pretax national income Gini for the adult population; average calculated as an unweighted average of France, Italy, United Kingdom, and United States.

Source: World Inequality Database, February 11, 2019, wid.world/data; McKinsey Global Institute analysis

In G-7 countries, despite legislative equality of opportunity, access in practice to quality higher education and highly paid jobs can depend on personal attributes or endowments such as gender, age, ethnicity, family background, and place of residence. Our research shows that people in G-7 countries on average attain tertiary education degrees more frequently today than they did ten years ago, although some educational outcomes in literacy and numeracy have been declining. About 50 percent of women had attained tertiary degrees in 2017, compared with 42 percent of men. Women's average net income nonetheless continues to trail men's, at 84 cents for every \$1 a man earns, although the gap is narrowing.

For people between the ages of 25 and 35, the story is similar: at the same age, their nowolder peers earned more than they do, even though the younger generation is considerably better educated.

OECD education database, Programme for International Student Assessment (PISA), 2015 results. See also Claudia Goldin and Lawrence F. Katz, *Women working longer: Facts and some explanations*, NBER working paper number 22697, September 2016

OECD gender wage database, 2019. The adjusted wage gap for hours worked, occupations chosen, education, and job experience is typically lower. See also Francine Blau and Lawrence Kahn, "The gender wage gap: Extent, trends, and explanations," *Journal of Economic Literature*, Volume 55, Number 3, 2017.

#### Box E2

#### How we define and measure inequality

This discussion paper is a synthesis of existing research on inequality drawn from multiple sources, including our own work. We focus on economic outcomes rather than looking more broadly at social, political, or environmental inequality.¹ We examine three types of inequality: inequality of wealth, inequality of income, and inequality of consumption. Our focus is mainly on advanced economies, including the OECD and G-7 countries, although we also cover inequality at a global level.

Each of these forms of economic inequality can be measured in different ways—for example, by looking at wealth or income shares, using the Gini coefficient, or measuring inequality between or within countries—and each type of measurement can produce different findings and narratives. In general, data describing the distribution of income are the most widely available across a range of countries, while data on wealth and consumption distribution are harder to find.

As befits a polarized debate, data sources and the metrics used are at times contested. For example, when examining income inequality, important distinctions should be made between measures of incomes before tax, after tax, and after tax but including in-kind transfers. This is particularly important in places like the United States, where some economists and policy makers have argued that poverty and income statistics are over- or understated in OECD

comparisons, for example, because they do not include transfers such as Medicare.<sup>2</sup>

Similarly, many economists point out limitations of the Gini coefficient, saying it does not provide a nuanced picture of the population or may underweight increases in wealth, income, or consumption shares gained by the top few percentiles in a population. Comparisons of the Gini coefficient over time do not typically correct for external factors like an increase in aging or female labor-force participation. Others are critical of an overemphasis on measuring incomes or wealth among the very top of the population, suggesting that this distracts from a broader discussion of poverty and consumption equality.

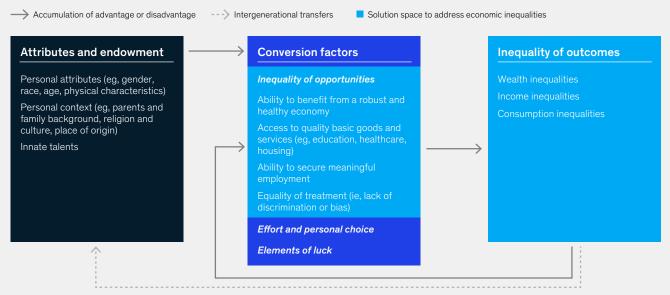
We take such criticism into account in our research by seeking a range of sources for the exhibits in the following pages. In addition to gathering facts on economic outcomes, we attempt to capture changes in economic opportunities. Economic inequality can be viewed as part of a dynamic system, in which an individual's endowments and opportunities lead to differences in economic outcomes (Exhibit E3).

Inequality of opportunities relates to the ability to partake in a healthy economy, access to basic goods and services, access to meaningful employment, and equality of treatment. These, along with elements of effort, personal choice, and luck, enable individuals to achieve different economic outcomes.

#### Exhibit E3

### Economic inequality can be viewed as part of a dynamic system, where endowments and opportunities lead to differences in economic outcomes.

#### Dynamics of economic inequality



Source: McKinsev Global Institute analysis

While we focus on economic inequality, we recognize that inequality is a multidimensional concept encompassing economic, social, political, and environmental opportunities and outcomes. Several frameworks have been developed to account for multidimensional measures in recent years. These include the OECD's Better Life Index; World Economic Forum's Inclusive Development Index; UN's Sustainable Development Goals; and UN's Human Development Index. See All on board:

Making inclusive growth happen, OECD, May 29, 2015; Richard Samans et al., The inclusive growth and development report 2017, World Economic Forum, 2017.

<sup>&</sup>lt;sup>2</sup> See, for example, Phil Gramm, "The myth of American inequality," Wall Street Journal, August 10, 2018; Phil Gramm, "Government can't rescue the poor," Wall Street Journal, October 11, 2018; and Phil Gramm, "Tax reform unleashed the U.S. economy," Wall Street Journal, March 5, 2019.

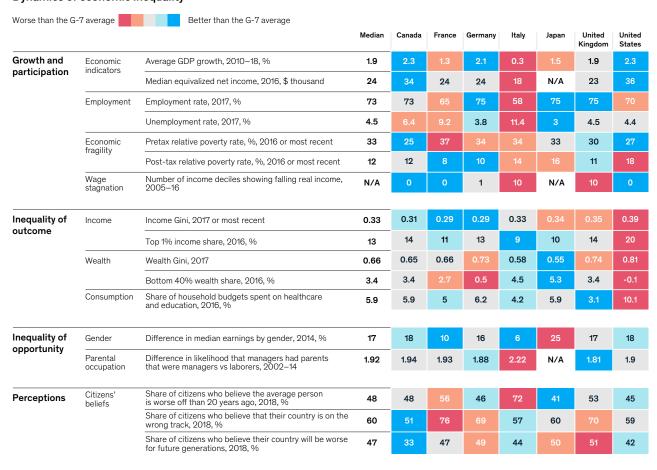
#### Economic realities differ widely across G-7 countries

The picture above is a broad one, and the economic situation in individual G-7 countries across a range of indicators—including inequalities of income, wealth, and consumption, as well as more general economic measures—can vary considerably (Exhibit E4).

Exhibit E4

Economic realities differ widely across G-7 countries.

#### Dynamics of economic inequality



Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

Source: International Monetary Fund; OECD; World Economic Forum; World Inequality Database; Allianz; Pew Research Center; McKinsey Citizen Development and Confidence Research Survey; McKinsey Global Institute analysis

When it comes to inequalities of opportunity, the percentage difference in median earnings by gender covers a range from 6 to 25 percent across G-7 economies, according to OECD data. Variations in measures of social mobility are less pronounced, with managers being 2.2 times more likely to come from a family of managers in one country versus 1.8 times more likely in another. Further, citizens' beliefs are not correlated with specific economic outcomes across G-7 countries. It is not the case that citizens in the most equal or unequal economies, or those with the highest or lowest levels of growth and employment, are the most or least satisfied. This suggests that citizen discontent is influenced by a range of both economic and noneconomic factors.

<sup>11</sup> OECD gender wage gap database, 2019.

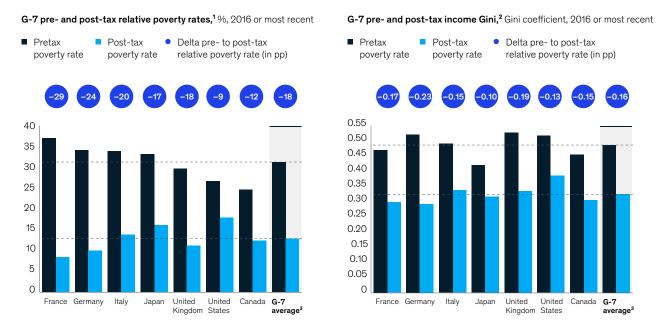
A broken social elevator? How to promote social mobility, OECD, June 15, 2018.

<sup>13</sup> Citizens, participation and the economy, RSA Citizens' Economic Council, 2017. Already in the 1970s, Richard Easterlin found that, paradoxically, while richer individuals were happier than those with lower incomes, there was no evidence to suggest that average happiness increased over time in line with increased GDP. Richard A. Easterlin, "Does economic growth improve the human lot? Some empirical evidence," in Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz, Paul A. David and Melvin W. Reder, eds., New York, NY: Academic Press, 1974.

There is also considerable variation in relative poverty levels before and after taxes due to policy choices. For example, France and Germany move from the highest pretax poverty levels to the lowest following social transfers. On average, transfers brought the Gini coefficient for income inequality in the G-7 in 2016 down from 0.49 pretax to 0.32 thereafter. The reductions were particularly significant in Germany and the United Kingdom and smaller in Japan and the United States (Exhibit E5).

Exhibit E5

### Policy interventions lower both the post-tax relative poverty rate and post-tax income Gini coefficient.



<sup>&</sup>lt;sup>1</sup> The relative poverty rate is the percentage of people whose disposable income is lower than the poverty threshold, which is set as less than 50% of median household income.

<sup>3</sup> G-7 averages are unweighted.

Source: OECD, Income Distribution and Poverty Database, February 21, 2019, oecd.org; Standardized World Income Inequality database, Harvard Dataverse, April 2019, dataverse.harvard.edu; McKinsey Global Institute analysis

#### Growing inequality has left many people behind

Economic disruptions and the widening of inequality over the past several decades have affected large segments of the population in G-7 countries. Wages have stagnated for many, male employment has declined, and the economy may have become more fragile, as market incomes increasingly fail to lift people out of poverty. Market incomes for households were flat or fell for around 70 percent of households in advanced economies in 2014 compared with similar households in 2005, our prior research found, although government taxes and transfers reduced the impact on disposable income for many households. At the same time, the cost of basic goods and services, such as education and healthcare, has risen faster than overall inflation.

Average real wages have grown in five of the G-7 countries since the financial crisis in 2008, but in Italy and the United Kingdom they have fallen. Real net income has declined for 25 percent of individuals in six of the G-7 economies (excluding Japan) since 2005. For

<sup>&</sup>lt;sup>2</sup> Pretax income Gini is defined as Gini of equivalized household market income before taxes and transfers.

For the purposes of this report, the relative poverty rate is defined as the percentage of people whose disposable income is lower than the poverty threshold, which is set as less than 50 percent of median household income. We recognize that absolute poverty gives a better indication of material well-being, while relative poverty is an indicator of economic inclusion.

See, for example, Anne Case and Angus Deaton, "Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century," *Proceedings of the National Academy of Sciences*, December 8, 2015, Volume 112, Number 49, pp. 15078–83

<sup>&</sup>lt;sup>16</sup> Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016.

60 percent of the population, disposable income has risen faster for people in the next-richest income decile than it has for them.

These effects are related to a decline in middle-wage jobs across advanced economies over the past three decades. In the United States, for example, the share of adults living in middle-income households declined from 61 percent in 1971 to just 50 percent in 2015. While about two-thirds of this shift has been upward, to upper-middle and higher-income households, one-third of those have shifted down to lower-middle and the lowest income households, creating an hourglass-like effect. Our research on skill shifts and automation suggests competition for high-skill workers will likely increase, while displacement may be concentrated mainly on low-skill workers, continuing a trend that has exacerbated income inequality and reduced middle-wage jobs.

On the employment front, average employment in the G-7 has remained broadly stable since the 1980s and employment of the working-age population has risen. However, the employment rate for women has grown sharply, by 16 percentage points, even as the male employment rate has declined by four points, according to OECD data. The male employment rate remains higher than the female rate, at 76 to 65 percent, but the gap has narrowed markedly.<sup>21</sup>

Several indicators point to a growing fragility and precarity in the economy. Relative poverty rates before taxes on average in the G-7 have risen by seven percentage points from 23 percent of the population in 1985 to almost 30 percent in 2016. Transfers and tax reduce that proportion but do not fully compensate; on average, almost one in seven people living in the most advanced economies remains in relative poverty after taxes and transfers.<sup>22</sup>

The rise in material living costs is another indicator of the difficulty some people have in making ends meet in G-7 countries. Education, healthcare, and housing costs have all risen. Since 2002, overall inflation has increased by 36 and 32 percentage points in the United States and in the European Union, respectively, while the nominal price of education has increased by 101 and 77 percentage points. Healthcare costs have also exceeded inflation in both Europe and the United States.<sup>23</sup>

Further increasing financial fragility has been the rise in household indebtedness, which jumped from 87 percent of net disposable income in 1995 to 121 percent in 2008 and 123 percent in 2017.<sup>24</sup> In the United States, more than one in five households today has zero or negative net worth, and two-thirds do not have enough savings to cover a \$500 emergency.<sup>25</sup> Such trends in material living standards have contributed to rising discontent (see Box 3, "Pessimism about the future raises the pressure on citizen engagement").

### Some global trends have contributed to today's rising inequalities and are likely to continue doing so

The financial crisis of 2008 and the slow recovery from the recession that followed it left many households exposed. Beyond cyclical factors, long-term global trends have also contributed to changing economic outcomes and will likely continue to play out in coming years. These trends include the declining labor share of income, which partly reflects pressure on wages; technology

<sup>&</sup>lt;sup>17</sup> UNU-WIDER World Income Inequality Database (WIID4); consumer price indexes, OECD, 2017. See also, Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016.

See, for example, Daron Acemoglu and David Autor, "Skills, tasks, and technologies: Implications for employment and earnings," in *Handbook of Labor Economics*, Volume 4b, Orley Ashenfelter and David Card, eds., San Diego, CA: Elsevier, 2011; *Under pressure: The squeezed middle class*, OECD, 2019; Peter Temin, *The Vanishing Middle Class: Prejudice and Power in a Dual Economy*, Cambridge, MA: MIT Press, 2018.

<sup>&</sup>lt;sup>19</sup> The American middle class is losing ground, Pew Research Center, December 2015.

<sup>&</sup>lt;sup>20</sup> Skill shift: Automation and the future of the workforce, McKinsey Global Institute, May 2018.

<sup>&</sup>lt;sup>21</sup> Employment database, OECD 2019.

<sup>&</sup>lt;sup>22</sup> OECD income distribution and poverty database, 2019. Figure based on unweighted average across G-7 countries.

OECD consumer price index database, 2019.

<sup>&</sup>lt;sup>24</sup> National accounts at a glance, OECD, 2019.

 $<sup>^{25} \ \</sup> Maggie \ McGrath, \ "63\% \ of \ Americans \ don't \ have \ enough \ savings \ to \ cover \ a \ \$500 \ emergency, \ \textit{Forbes}, \ January \ 2016.$ 

#### Box E3

### Pessimism about the future raises the pressure on citizen engagement

People are not feeling optimistic about the future in the light of these trends and their own personal economic situations, and surveys show a waning of public trust in governments and other societal institutions.

In one global survey, more than 60 percent of respondents said they believed their country was "on the wrong track." Citizens in most countries are pessimistic that future generations will be better off than they are. Trust in government fell in more than half of the OECD economies between 2007 and 2016, with the largest declines in Chile, Spain, and the United States.

Income inequality and wage stagnation are causes of particular dissatisfaction. Almost half of the people polled in 16 advanced economies believe the average person in their country is worse off today than 20 years ago.<sup>6</sup>

This discontent has ramifications on citizen engagement. For example, the average tenure of elected leaders has declined steadily across the G-20. Between 1969 and 1991, the average Western European electorate switched votes to a different political party approximately 9 percent of the time, compared with roughly 13 percent of the time between 1992 and 2015.7

- 3 What worries the world, Ipsos Public Affairs, 2018.
- McKinsey Citizen Development and Confidence Research, 2018.
- <sup>5</sup> Gallup, 2016.
- <sup>6</sup> Global attitudes survey Q2 and Q3, Pew Research Center, Spring 2018.
- Alessandro Chiaramonte and Vincenzo Emanuele, "Party system volatility, regeneration and de-institutionalization in Western Europe (1945—2015)," Party Politics, Volume 23, Number 4, 2017.

further polarizing job opportunities and incomes between high- and low-skill workers; the growth of "superstar" sectors and cities that are pulling away from their peers; and increasing global competitive pressures driven by the rise of dynamic firms in emerging markets.

The declining labor share of national income has been driven by structural changes in advanced economies since 1980. Its causes and effects are widely debated in the literature, with some evidence that it contributes to wage stagnation. Our recent research focusing on the capital share of income in the United States suggests that boom-bust cycles and rising capital depreciation have played a significant role. The largest declines have been in France, Germany, and especially Spain, where the labor share has dropped by 12 percentage points since the 1980s. The United States has seen a 5 percent decline in the labor share since 1980; three-quarters of that decrease occurred since 2000. The same time, collective wage bargaining—often via unions—has declined in both the G-7 and the OECD, putting employees in a weaker position in negotiating wage increases. Moreover, labor productivity growth is near historic lows in the United States and much of Western Europe.

Digitization and automation are frequently cited as factors in the declining labor share of income, and they pose other profound challenges in the workplace.<sup>29</sup> Scenarios we have developed for the effect of automation and artificial intelligence (AI) adoption on the global workforce suggest that, in most cases, the jobs displaced by automation and others created

<sup>&</sup>lt;sup>26</sup> See Mai Chi Dao et al., *Drivers of declining labor share of income*, International Monetary Fund, April 2017.

<sup>&</sup>lt;sup>27</sup> A new look at the declining share of labor income in the United States, McKinsey Global Institute, May 2019.

<sup>&</sup>lt;sup>28</sup> Solving the productivity puzzle: The role of demand and the promise of digitization, McKinsey Global Institute, February 2018.

<sup>&</sup>lt;sup>29</sup> David Autor and Anna Salomons, Is automation labor share-displacing? Productivity growth, employment, and the labor share, Brookings Institution, Spring 2018; Emin Dinlersoz and Zoltan Wolf, Automation, labor share, and productivity: Plant-level evidence from U.S. manufacturing, American Economic Association, December 2018.

by new labor demand, including from rising productivity as a result of technical change, could be approximately in balance in many advanced countries. However, significant workforce transitions could occur in the short to medium term. <sup>30</sup> Occupations in some sectors will decline while in others they will rise. Skills requirements for workers will likely change as machines increasingly complement the work of humans, with basic cognitive skills no longer sufficing for many jobs, while demand for technological and social and emotional skills rises. <sup>31</sup> A similar trend is occurring in connection with cities and job locations. <sup>32</sup>

This may have repercussions on wages. Highly automatable activities dominate many of the current middle-wage jobs in advanced economies, in fields such as manufacturing and accounting, which are therefore likely to decline. In prior work, we have estimated a net loss of five million to ten million middle-wage jobs in the United States by 2030. High-wage jobs are expected to grow significantly, especially for skilled professionals, particularly in medicine and technology. However, a large portion of jobs that are expected to grow, such as carers, typically have lower compensation structures. The risk is that automation could exacerbate wage polarization, income inequality, and the lack of income advancement.<sup>33</sup>

Changing dynamics in the business world also affect workers. Over the past 20 years, 70 percent of GDP and gross surplus gains across G-20 countries have accrued to a handful of economic activities including finance, real estate, tech, pharma, and some business services. This drives strong wealth effects in the form of gains to holders of physical assets (real estate) and intangible assets. While these sectors tend to be light on labor, high-skill workers associated with these activities see gains. Moreover, the search for assets in these sectors fuels geographically concentrated searches for talent, IP, and other intangible assets that reinforce the gains to these locations, contributing to the growth of "superstar" cities that are gateways of finance, tech, and innovation activity, and which are pulling away from peer cities in terms of income growth. The impact also contributes to a bifurcation of growth prospects within superstar cities, which have some of the highest levels of urban inequality among the world's cities.<sup>34</sup>

Finally, global integration is leading to higher competition in the labor market in advanced economies. Research over the past several decades suggests that this is playing a part in the narrowing wage gap between workers in advanced and developing economies while contributing to increasing domestic income inequality. The growing prosperity of developing economies, at times propelled by dynamic large companies, is also raising the competitive stakes for firms in advanced economies. These emerging-market firms now play a large role on the global stage: while they accounted for only about 25 percent of the total revenue and net income of all large public companies in 2016, they contributed about 40 percent of the revenue growth and net income growth from 2005 to 2016. Changing value chains, the growth of regional trade, reduced labor-cost arbitrage, and signs of premature deindustrialization, among other factors, may affect this dynamic in the future, however, potentially challenging the classic manufacturing-led development path for emerging economies.

#### New consensus will be needed to improve economic inclusion

Given the combination today of rising inequality, discontent in advanced economies, and precarious economic realities for many, new measures and interventions may be needed,

<sup>&</sup>lt;sup>30</sup> Jobs lost, jobs gained: Workforce transitions in a time of automation, McKinsey Global Institute, December 2017.

<sup>&</sup>lt;sup>31</sup> Skill shift: Automation and the changing workforce, McKinsey Global Institute, May 2018.

Enrico Moretti, *The New Geography of Jobs*, Boston, MA, and New York, NY: Houghton Mifflin Harcourt, 2012.

<sup>33</sup> Jobs lost, jobs gained: Workforce transitions in a time of automation, McKinsey Global Institute, December 2017; Skill shift: Automation and the future of the workforce, McKinsey Global Institute, May 2018.

<sup>&</sup>lt;sup>34</sup> Superstars: The dynamics of firms, sectors, and cities leading the global economy, McKinsey Global Institute, October 2018.

<sup>&</sup>lt;sup>35</sup> See, for example, Uri Dadush and William Shaw, Globalization, labor markets, and inequality, Carnegie Endowment, February 2012; Globalization, jobs and wages, OECD policy brief, June 2007; Matthew Slaughter and Phillip Swagel, The effect of globalization on wages in advanced economies, IMF working paper number 97/43, April 1997.

<sup>36</sup> Outperformers: High-growth emerging economies and the companies that propel them, McKinsey Global Institute, September 2018.

<sup>37</sup> Globalization in transition: The future of trade and value chains, McKinsey Global Institute, January 2019.

alongside well-established approaches, to counter disparities and strengthen inclusive growth. However, given the wide range of views and differing economic situation in G-7 countries, no single solution is likely to fit all.

New consensus will need to be found among policy makers, business leaders, civil society organizations, and citizens to enact meaningful change. Any such consensus will need to be built on a national level, given the broad divergences among countries on the issue. Multilateral cooperation may also be needed, especially relating to trade and tax policies. In this final section, we do not make specific recommendations but rather provide a scope of solutions based on an in-depth analysis of more than 350 initiatives being proposed and piloted in G-7 countries.<sup>38</sup>

#### Growth is foundational

Economic growth has been the central mechanism to deliver broad-based prosperity. Abundant literature covers aspects of this imperative, including promoting fair and efficient markets, nurturing a well-balanced economy across geographic areas, investing in innovation and infrastructure, leveraging monetary policy, and increasing the ease of doing business to stimulate growth while balancing the regulatory burden for entrepreneurs.<sup>39</sup>

In addition to promoting sustainable economic growth, business leaders, policy makers, and other stakeholders have at their disposal a range of actions to improve economic inclusion. The ideas being proposed and piloted align with two main pathways for action: addressing inequality of opportunities and addressing inequality of outcomes.

#### Addressing inequality of opportunities and of outcomes

Policy makers, academics, business leaders, labor organizations, and others are examining ways to widen economic opportunities and improve outcomes for all. In addition to delivering economic growth, actions aimed at addressing equality of opportunities relate to providing wider access to quality healthcare and education, rethinking work and skills, addressing biases and discrimination while promoting diversity and inclusion, and employing better metrics and incentives to encourage social value creation. Areas to improve equality of outcomes under discussion include ways in which economic gains are shared and redesigning social assistance for the modern age.

- Providing access to quality healthcare and education. Healthcare and education are basic goods that are widely cited as being able to improve economic chances for individuals. 40 Accessible healthcare will likely be increasingly important as individuals live longer, with action needed to address imbalances in health outcomes based on socioeconomic and geographic factors. Effective primary and secondary education will also be indispensable in a transition period to a more automated future. Schools may need to adjust their curricula to focus on skills of the future, including creativity and complex problem solving, alongside a new emphasis on science, technology, engineering, and mathematics (STEM) subjects. Encouraging innovation in education and expanding vocational training and apprenticeships could help ease transitions into work in a more digital world.
- Rethinking work and skills. Beyond primary and secondary education, providing workers
  with lifelong skills at scale is sometimes seen as the challenge of our generation. Research
  suggests that tomorrow's workers will need to be adaptable and equipped with both

We conducted an extensive literature review to compile the ideas proposed or piloted by academics, business leaders, civil society organizations, grassroots movements, and policy makers at the national, state, and city levels. We categorized these initiatives based on whether they seek to address economic growth, inequalities of opportunity, and inequalities of outcomes.

See, for example, N. Gregory Mankiw, Principles of Economics, Boston, MA: Cengage Learning, 1998; Paul Krugman, Maurice Obstfeld, and Marc Melitz, International Economics: Theory and Policy, 7th edition, Boston, MA: Pearson Addison-Wesley, 2006; Milton Friedman, Milton Friedman on Economics: Selected Papers by Milton Friedman, Chicago, IL: The University of Chicago Press, 2007.

<sup>&</sup>lt;sup>40</sup> See, for example, *Bridging the gap: Inclusive growth*, OECD, 2017.

enhanced technical skills and well-developed social, emotional, and higher cognitive skills. A number of large companies in Europe, the United States, and Asia are implementing large-scale "reskilling" programs for their workforces, although they remain the exception; some of these efforts start with an attempt to map the existing skills of workers and then project forward to the skills the firms expect they will need. If Efforts being considered also examine issues of fair and adequate compensation, opportunities to increase labor market flexibility for more efficient and fluid work transitions, and effective ways to support those in nonstandard employment.

Addressing biases and discrimination while promoting diversity and inclusion.
 Targeted action to ensure that all individuals are given a fair chance, regardless of

background or personal attributes, is among the ideas being tested. 42 Efforts include supporting underrepresented groups, not only through antidiscrimination policies and frameworks but through a diversity and inclusion agenda that can also serve as a source of competitive advantage. Other approaches suggested to widen inclusion include improving citizen or employee representation, potentially on corporate boards or by encouraging forms of labor-management cooperation.

- Employing new metrics and incentives to encourage social value creation. Further efforts to encourage and enable capital owners to deploy their capital for social good, for example through outcome-based funds, are widely discussed. Many call for improvements in the measurement of economic and social value created by companies, what investors prioritize, how business is taught at business schools, and how national success is defined, including focusing on metrics of inclusion or well-being beyond GDP.<sup>43</sup>
- Solving for how economic gains are shared. Discussions of economic inequality
  frequently coincide with debates on tax and transfer models. Leading thinkers from within
  government, the private and social sectors, and academia are proposing ideas for how to
  alter or introduce new forms of taxation to achieve greater fairness or effectiveness.
- Designing social assistance for the modern age. Transfer models in advanced economies are seen by some as ripe for updating for a world of automation and workforce transitions. Ideas being considered include rethinking employment benefits, providing better support to individuals in times of hardship or old age, facilitating greater prosperity among younger generations, and fundamentally rethinking social assistance through cash transfer programs.<sup>44</sup>

Each country in the G-7 and beyond has a different starting point with an array of strengths and challenges. Within our societies, perspectives on the root causes and the approaches that will be most effective to improve economic inclusion likewise differ.

Inequality is not a condition that can be eradicated, but its rise can be dulled or reversed and its causes and outcomes addressed. For all the differing views, inequality is a social and political issue that is both unpredictable and potentially volatile. For policy makers, business leaders, and other stakeholders, the current climate of mistrust and waning confidence in institutions creates a new urgency to work together to build social consensus and find effective solutions for a more inclusive future.

<sup>&</sup>lt;sup>41</sup> See, for example, "Building the workforce of tomorrow, today," McKinsey Quarterly, November 2018.

<sup>&</sup>lt;sup>42</sup> See, for example, Flannery Stevens, Victoria Plaut, and Jeffrey Sanchez-Burks, "Unlocking the benefits of diversity: All-inclusive multiculturalism and positive organizational change," *The Journal of Applied Behavioral Science*, Volume 44, Increase 1, 2008.

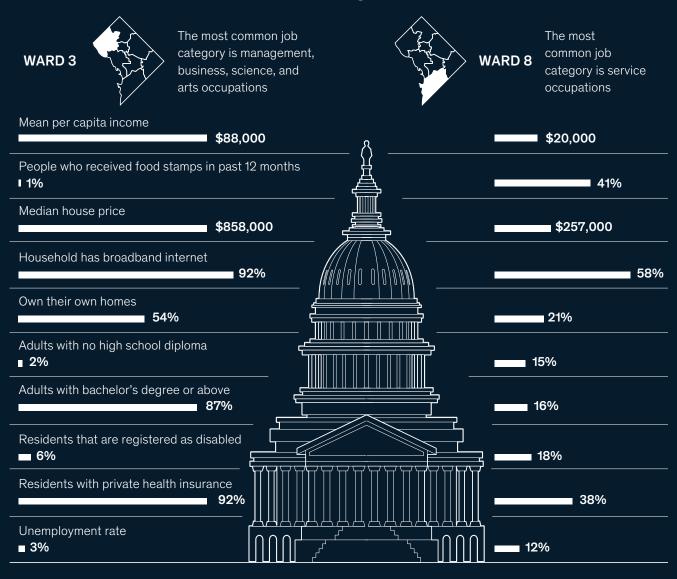
<sup>&</sup>lt;sup>43</sup> See, for example, Joseph E. Stiglitz, Amartya Sen, and Jean-Paul Fitoussi, Report by the Commission on the Measurement of Economic Performance and Social Progress, 2008; Global happiness policy report 2018, Global Happiness Council, 2018.

<sup>44</sup> See, for example, Nathalie Morel, Bruno Palier, and Joakim Palme, eds., Towards a Social Investment Welfare State? Ideas, Policies and Challenges, Bristol, UK: Policy Press, 2011.

## Lived realities: How inequality plays out in two cities

Inequality manifests in many ways, including among individuals living just miles from one another. We chose two G-7 capitals to highlight the disparities. In Washington, DC, residents of Ward 3 have on average much higher social and economic outcomes than residents of Ward 8. Likewise, in Saint Ouen, just outside the city limits of Paris, life differs markedly from life in the 7th arrondissement, 11 stops away on the Metro.

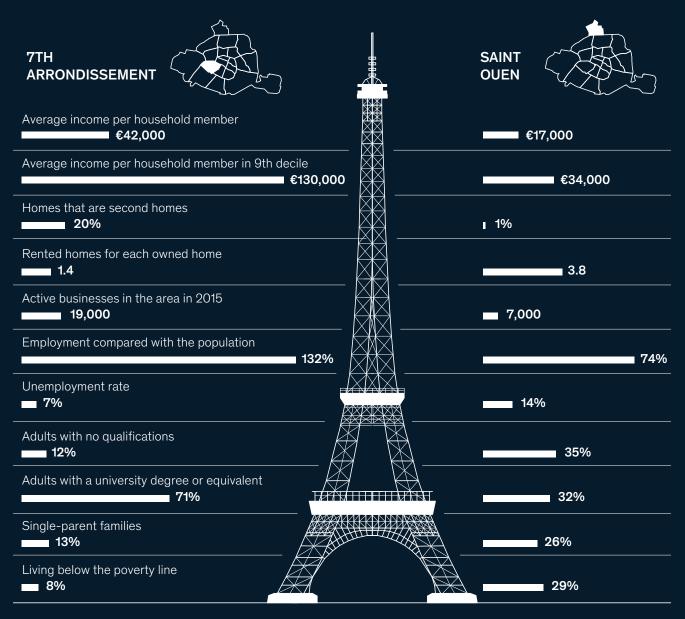
### Washington, DC, is one of the most unequal cities in the United States, as reflected in different outcomes for average residents of Ward 3 and Ward 8.



Source: ACS 2017 5-year survey, US Census Bureau, March 2019, census.gov; McKinsey Global Institute analysis

McKinsey & Company

### Life in Saint Ouen, just outside the city limits of Paris, differs markedly from life in the 7th arrondissement of the city itself.



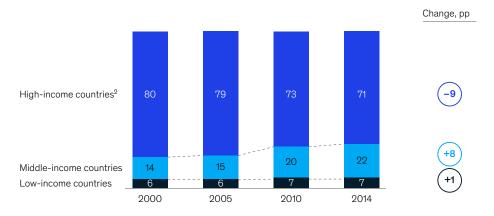
Source: National Institute of Statistics and Economic Studies (INSEE); McKinsey Global Institute analysis

# In global terms, the world has become more equal

## Average wealth inequality between countries has decreased since 2000.

Over the past several decades, developing economies led by China and India have seen rapid growth in prosperity, narrowing the gap with advanced economies in both wealth and income. <sup>45</sup> High-income countries' share of global wealth fell from 80 percent of the total in 2000 to 71 percent in 2014, according to the World Bank. The share of middle-income countries rose from 14 percent to 22 percent (Exhibit 1).

#### Share of global wealth, 1%, 2000-14



<sup>&</sup>lt;sup>1</sup> Includes wealth data for 141 countries.

<sup>&</sup>lt;sup>2</sup> High income includes OECD and non-OECD countries; middle income refers to upper middle-income countries; low income includes lower middle-income countries.

Source: Glenn-Marie Lange, Quentin Wodon, and Kevin Carey, *The changing wealth of nations 2018: Building a sustainable future*, World Bank, 2019; McKinsey Global Institute analysis

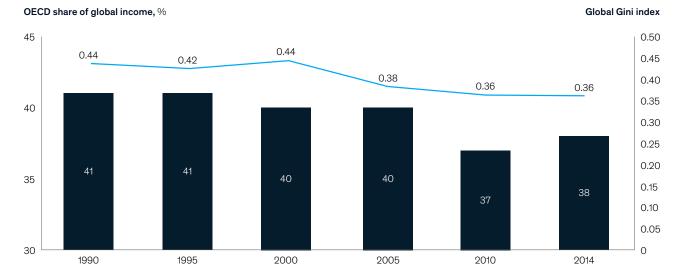
<sup>&</sup>lt;sup>45</sup> A recent article shows evidence for local convergence within high-, middle-, and low-income countries, but not global convergence. The authors argue that the recent wave of growth in developing economies was due to one-off level effects of removing inefficiencies that do not imply ongoing economic growth, with the exception of a few Asian countries that transformed significantly. See Paul Johnson and Chris Papageorgiou, "It's too soon for optimism about convergence," Vox, April 16, 2019.

# Globally, income inequality between countries has been falling since the 1990s.

As with wealth, income inequality between countries has fallen globally, driven by the rise of developing economies. On average, income is also becoming more equal when comparing the unweighted global average of within-country Gini coefficients, which fell from 0.44 in 1990 to 0.36 in 2014 (Exhibit 2).

The global national income share of OECD countries fell from 41 percent to 38 percent between 1990 and 2014, providing another indication of the rise of developing economies, according to World Bank data. Economists Christoph Lakner and Branko Milanovic have shown how the middle class in developing economies has been catching up. Those in the 50th to 60th percentile of the global income distribution, representing middle-class earners in developing contexts, experienced the greatest increase in real per capita income between 1988 and 2008, ranging from 68 to 76 percent cumulative growth. Simultaneously, middle-class earners in advanced economies (those in the 80th to 90th percentiles globally) achieved only 2 to 6 percent cumulative growth. <sup>46</sup>

#### OECD share of global gross national income, and global Gini index, 1990-2014



<sup>&</sup>lt;sup>1</sup> Share of global income is defined as the share of total gross national income of 35 OECD countries divided by total gross national income across the globe; income Gini is based on disposable income, post-tax, and includes all sources of income (labor, capital, transfers), and is calculated as an unweighted average of 50 countries globally.

Source: World Bank Open Data, April 11, 2019, data.worldbank.org; McKinsey Global Institute analysis

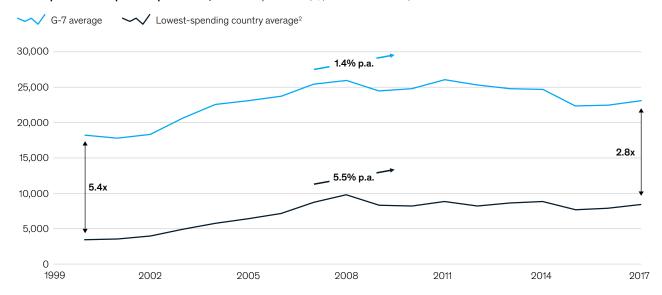
<sup>&</sup>lt;sup>46</sup> Christoph Lakner and Branko Milanovic, "Global income distribution: From the fall of the Berlin Wall to the Great Recession," *The World Bank Economic Review*, July 2016, Volume 30, Number 2, pp. 203–32.

# Within the OECD, consumption inequality between countries has declined as less developed economies make gains.

Like global wealth and income inequality, consumption inequality has decreased across OECD countries, with a catch-up effect from the lowest-spending OECD countries, which include the Eastern and Central European countries of the Czech Republic, Estonia, Latvia, Lithuania, Poland, and the Slovak Republic. Across OECD countries, the per capita consumption expenditure gap between the G-7 country average and lowest-spending country average decreased from a multiple of 5.4 in 2000 to 2.8 by 2017 (Exhibit 3). The per capita consumption expenditure Gini coefficient also fell from 0.30 to 0.22 from 2000 to 2016 between OECD countries.

Consumption of basic goods and services, such as education and healthcare, has generally become more equal in OECD countries at the aggregate level, although the situation for individuals and households in different countries can vary widely. For healthcare, infant mortality dropped between 2000 and 2017 from 8.4 to 4.4 per 10,000 live births. <sup>48</sup> The gap across OECD countries in education expenditure has decreased, with the Gini coefficient of education expenditure for primary and secondary school declining from 0.22 in 2005 to 0.17 in 2015. <sup>49</sup> Moreover, access to technology has become more equal in developed economies. Smartphone penetration has risen across the board since 2007, reaching around 70 percent of the population in 2018 within selected geographies. <sup>50</sup> In the United States, however, additional spending on healthcare, housing, and food absorbed more than 100 percent of incremental income between 2000–04 and 2014–17. In Germany that ratio was approximately 50 percent and most of the incremental income went to housing. <sup>51</sup>

#### Per capita consumption expenditure, annual expenditure, \$, OECD countries, 2000–161



<sup>&</sup>lt;sup>1</sup> Shown for 34 OECD countries (for which data were available).

Source: Household accounts, OECD, February 2019, data.oecd.org; Population, World Bank, February 2019, data.worldbank.org; Official exchange rate, World Bank, February 2019, data.worldbank.org; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>2</sup> Low spending countries are defined as the 6 OECD countries with lowest per capita consumption expenditure in 2000: Czech Republic, Estonia, Latvia, Lithuania, Poland, and the Slovak Republic.

<sup>&</sup>lt;sup>3</sup> Latest available year for France and Japan is 2016.

<sup>47</sup> OECD household accounts, 2019.

<sup>48</sup> OECD infant mortality rates, 2019.

<sup>&</sup>lt;sup>49</sup> OECD public and private spending on education, 2019. Calculated for 25 countries for which data are available.

<sup>&</sup>lt;sup>50</sup> Global mobile market report, Newzoo, 2019.

US Bureau of Labor Statistics, Consumer Expenditure Survey; Eurostat, German Household Budget Survey.

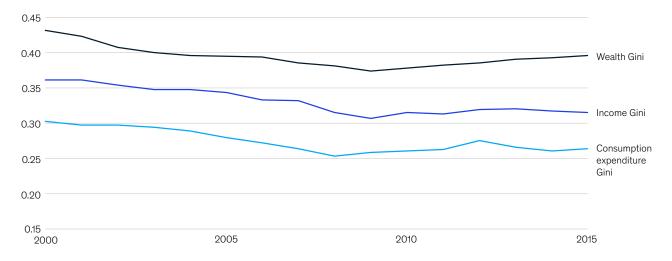
# Wealth, income, and consumption inequality between countries has been declining at similar rates.

When comparing the different types of economic inequality, wealth inequality is consistently higher than income inequality, which is higher than consumption inequality. This hierarchy remains in place whether measuring distribution via the Gini coefficient or percentage shares of wealth, income, and consumption.

The relationships between wealth and income inequality can be partially explained by the view that returns from capital are higher than the return on labor, which creates a positive feedback loop as the wealthy get wealthier and inequality increases. <sup>52</sup> Consumption Gini is lower than income and wealth Gini, which is explained by the fact that lower-income households save less than higher-income households. This in turn leads to greater wealth accumulation by higher-income households and more wealth inequality.

Between countries, all three distribution measures using the Gini coefficient have been decreasing since 2000 at similar rates, according to data from Credit Suisse, OECD, and the World Bank (Exhibit 4). Between 2000 and 2015, wealth Gini fell from 0.43 to 0.40; income Gini fell from 0.36 to 0.32; and consumption expenditure Gini fell from 0.30 to 0.26.

#### Between-country Gini for wealth, income, and consumption expenditure in OECD countries, 2000-15, OECD countries<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Income Gini is calculated between countries based on average gross national income; wealth Gini is calculated between countries based on average wealth; consumption expenditure Gini is calculated between countries based on average consumption.

Source: World Bank Open Data, April 11, 2019, data.worldbank.org; Credit Suisse Global Wealth Databook 2018, Credit Suisse, 2018; Gini index (World Bank estimate), World Bank, January 30, 2019, data.worldbank.org; Household accounts, OECD, February 2019, data.oecd.org; Population, World Bank, February 2019, data.worldbank.org; Official exchange rate, World Bank, February 2019, data.worldbank.org; McKinsey Global Institute analysis

 $<sup>^{52}\ \</sup> Thomas\ Piketty, \textit{Capital in the 21st Century,}\ Cambridge, MA: Harvard\ University\ Press, 2014.$ 

# Within advanced economies, inequalities of wealth and income have risen significantly

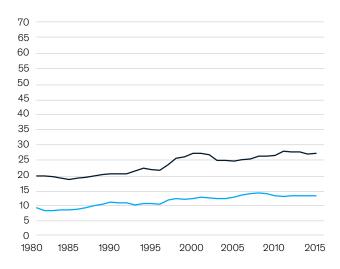
# Economic inequality has risen in advanced economies since 1980, as demonstrated by wealth and income shares.

Inequality within advanced economies has risen substantially over the past several decades. This can be seen through the increasing shares of wealth and income accrued by the wealthiest individuals in G-7 economies (Exhibit 5).

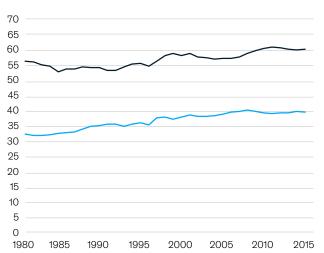
In 1980, the top 1 percent of individuals by wealth held about 20 percent of total national wealth and 9 percent of total national income in G-7 countries; by 2014, the top 1 percent held 27 percent of total wealth and 13 percent of total income, according to the World Inequality Database. Similarly, the top 10 percent increased their share of wealth from 53 percent in 1990 to 60 percent in 2014, and the share of income increased from 35 to 40 percent. <sup>53</sup>



**Top 1% wealth and income shares in G-7 countries,** %, G-7 average, 1980–2014



Top 10% wealth and income shares in G-7 countries, % G-7 average,  $^1$  1980–2014



 $<sup>^{</sup> ext{t}}$  Wealth share average includes France, United Kingdom, and United States only because of data availability .

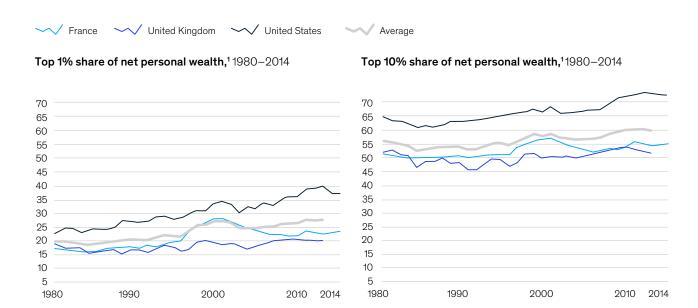
Source: Global Spending Data, World Data Lab, March 2019, worlddata.io; World Inequality Database, wid.world/data, February 2019, wid.world/data; McKinsey Global Institute analysis

 $<sup>^{53}</sup>$  Wealth shares reflect data from France, the United Kingdom, and the United States, because of data availability.

### Wealth inequality grew fastest in the 1990s.

The share of wealth that the top 1 percent held in France, the United Kingdom, and the United States remained around 20 percent during the 1980s. During the 1990s, however, the top 1 percent share gained on average seven percentage points to rise to 27 percent in 2000 (Exhibit 6). In the following years, the share of wealth fluctuated slightly before returning to 27 percent.

In comparison, the share of wealth of the top 10 percent slightly declined from 56 percent in 1980 to 53 percent by 1990. The top 10 percent share of wealth then increased to 59 percent in 2000 and 60 percent in 2014.



<sup>&</sup>lt;sup>1</sup> Net personal wealth includes housing assets, business assets, and financial assets owned by households, subtracting household liabilities; data available only for limited set of countries shown; average is calculated as an unweighted average of countries shown.

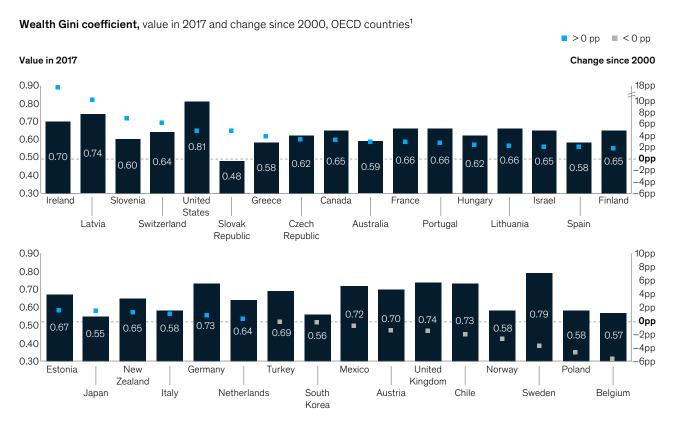
Source: World Inequality Database, April 4, 2019, wid.world/data; McKinsey Global Institute analysis

# Wealth dispersion as measured by the Gini coefficient has increased in most OECD economies in the 2000s.

The Gini coefficient measuring the spread of wealth within advanced economies increased in 70 percent of OECD economies between 2000 and 2017 (Exhibit 7). In that period, wealth inequality increased within all G-7 countries except the United Kingdom, according to data from Allianz.

Among the countries with the largest increase in wealth inequality are those that were significantly affected by the 2008 recession, such as Ireland and Greece. Others that had large increases include Eastern European countries such as Latvia, the Slovak Republic, and Slovenia, and high-income economies such as Switzerland and the United States. Inequality decreased by more than two percentage points from 2000 to 2017 in only five countries: Belgium, Chile, Norway, Poland, and Sweden.

Other measures of wealth show the same pattern. The mean-to-median wealth ratio increased in 67 percent of OECD countries from 2000 to 2018. Wealth is also becoming increasingly concentrated among fewer billionaires; in 2018, just 26 billionaires owned 50 percent of global wealth, compared with 43 in 2017, according to Credit Suisse data. <sup>54</sup>



Data for 33 OECD countries shown; missing Denmark, Iceland, and Luxembourg.

Source: Kathrin Brandmeir, Michaela Grimm, Michael Heise, and Arne Holzhausen, Allianz Global Wealth Report 2018; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>54</sup> Global wealth databook, Credit Suisse, 2018.

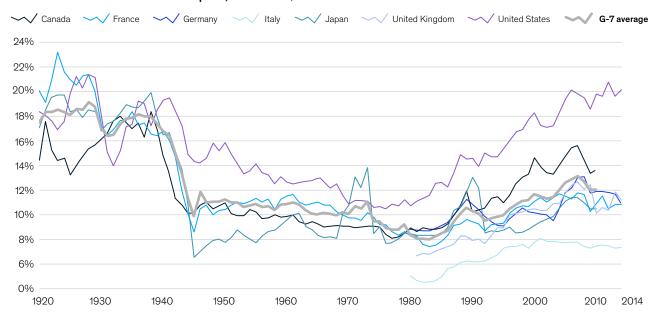
# The top 1 percent pretax income share in advanced economies has climbed since the 1980s, with significant differences between countries.

The top 1 percent share of pretax national income increased from 8 percent to 12 percent for G-7 countries from 1980 to 2014 on average, and from 6 percent to about 11 percent for OECD economies, according to the World Inequality Database.

The top 1 percent income share in the United States has outpaced the share in other advanced economies, almost doubling from 11 percent in 1980 to 20 percent in 2014. This level of inequality—with the top 1 percent of earners accounting for about one-fifth of all income—was last seen during the 1920s, before declining sharply during the Great Depression (Exhibit 8). Like the United States, Canada and the United Kingdom have historically exhibited a U-shaped trend, with peaks during the 1920s and today, lower levels of inequality during the middle of the 20th century, and income inequality starting to rise most sharply during the 1980s. Conversely, income for the top 1 percent in France and Japan has increased in recent years but is below peak levels seen in the prewar era. 55

One driver of this trend has been the steep increase in executive compensation. In 1978, CEO earnings were roughly 30 times the average worker's salary, a metric that reached 300 times by 2014. In this period, workers' salaries grew by 11 percent adjusted for inflation, while CEO pay increased by more than 900 percent. <sup>56</sup> CEO compensation grew 70 percent faster than stock markets. <sup>57</sup>

#### Pretax national income share of top 1%, 1920–2014, G-7 countries<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Averages are unweighted by population; the average for G-7 countries is 12% in 2014, taking the last available data point for each country. Source: World Inequality Database (WID); McKinsey Global Institute analysis

<sup>&</sup>lt;sup>55</sup> World Inequality Database, 2019.

<sup>66</sup> Ruth Umoh, "CEOs make \$15.6 million on average—here's how much their pay has increased compared to yours over the

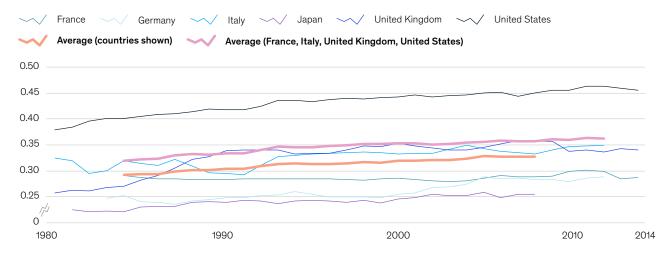
Lawrence Mishel and Jessica Schieder, CEO pay remains high relative to the pay of typical workers and high-wage earners, Economic Policy Institute, July 20, 2017.

# Post-tax income inequality as measured by the Gini coefficient has increased since the 1980s, although at a slower rate and with differences across countries.

Increases in income inequality based on disposable income after tax have risen compared with levels in the 1980s. However, compared with pretax income inequality, as measured by the share of income to the top 1 percent, growth in post-tax income inequality has been much lower.

As with wealth and pretax income inequality, the United States is an outlier, with the highest levels of post-tax income inequality compared with other G-7 countries, excluding Canada (Exhibit 9). Among these countries, the United Kingdom experienced the largest increase in the post-tax Gini coefficient, which grew by eight percentage points between 1980 and 2014. France, Germany, and Japan have considerably lower levels of inequality in

#### Equivalized disposable income Gini, 1980–2014, selected G-7 countries



<sup>&</sup>lt;sup>1</sup> Pretax income Gini is defined by World Inequality Database as pretax national income Gini for the adult population; average calculated as an unweighted average of France, Italy, United Kingdom, and United States.

Source: World Inequality Database, February 11, 2019, wid.world/data; McKinsey Global Institute analysis

disposable income.

# Economic realities differ widely across G-7 countries

# Levels of wealth, income, and consumption vary widely, as do other economic indicators.

The picture above is a broad one, and the economic situation in individual G-7 countries in inequalities of income, wealth, and consumption, as well as other economic indicators, can vary considerably (Exhibit 10). Some countries perform strongly on growth or employment but with higher levels of inequality or post-tax poverty, and vice versa.

In the case of inequalities of opportunity, the percentage difference in median earnings by gender covers a range from 6 to 25 percent across G-7 economies. Variations in measures of social mobility are less pronounced, with managers being 2.2 times more likely to come from a family of managers in one country versus 1.8 times more likely in another.

Citizens' beliefs are not correlated with specific economic outcomes across G-7 countries. It is not the case that citizens in the most equal or unequal economies, or those with the highest or lowest levels of growth and employment, are the most or least satisfied. This suggests that citizen discontent is influenced by a range of economic and noneconomic factors.

#### Dynamics of economic inequality

Worse than the G	i-7 average	Better than the G-7 average								
			Median	Canada	France	Germany	Italy	Japan	United Kingdom	United States
Growth and participation	Economic indicators	Average GDP growth, 2010–18, %	1.9	2.3	1.3	2.1	0.3	1.5	1.9	2.3
		Median equivalized net income, 2016, \$ thousand	24	34	24	24	18	N/A	23	36
	Employment	Employment rate, 2017, %	73	73	65	75	58	75	75	70
		Unemployment rate, 2017, %	4.5	6.4	9.2	3.8	11.4	3	4.5	4.4
	Economic fragility	Pretax relative poverty rate, %, 2016 or most recent	33	25	37	34		33	30	27
		Post-tax relative poverty rate, %, 2016 or most recent	12	12	8	10	14	16	11	18
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	0	0	1	10	N/A	10	0
Inequality of outcome	Income	Income Gini, 2017 or most recent	0.33	0.31	0.29	0.29	0.33	0.34	0.35	0.39
		Top 1% income share, 2016, %	13	14	11	13	9	10	14	20
	Wealth	Wealth Gini, 2017	0.66	0.65	0.66	0.73	0.58	0.55	0.74	0.81
		Bottom 40% wealth share, 2016, $\%$	3.4	3.4	2.7	0.5	4.5	5.3	3.4	-0.1
	Consumption	Share of household budgets spent on healthcare and education, 2016, $\%$	5.9	5.9	5	6.2	4.2	5.9	3.1	10.1
Inequality of opportunity	Gender	Difference in median earnings by gender, 2014, %	17	18	10	16	6	25	17	18
	Parental			_						
	occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.94	1.93	1.88	2.22	N/A	1.81	1.9
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	48	56	46	72	41	53	45
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	51	76	69	57	60	70	59
		Share of citizens who believe their country will be worse for future generations, 2018, %	47	33	47	49	44	50	51	42

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

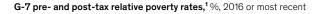
Source: International Monetary Fund; OECD; World Economic Forum; World Inequality Database; Allianz; Pew Research Center; McKinsey Citizen Development and Confidence Research Survey; McKinsey Global Institute analysis

# Policy interventions lower both the post-tax relative poverty rate and the post-tax income Gini coefficient.

Tax and transfer policies make a meaningful difference in lowering both relative poverty rates and the level of inequality within G-7 nations (Exhibit 11).

Pretax relative poverty rates are significantly higher than post-tax relative poverty rates in all G-7 economies. On average, transfers cut the share of the G-7 population living in poverty by more than half, from 31 percent based on market incomes to 13 percent post-tax, according to OECD data. This suggests that one-third of all individuals living in the G-7 do not make sufficient market income to stay out of poverty, and nearly one-fifth of the population relies on transfers to make ends meet.

The average Gini coefficient for pretax income in G-7 economies is 0.49, falling to 0.32 post-tax. Reductions are particularly significant in France and Germany, and smaller in Canada and the United States. Our prior research has shown that government taxes and transfers can play a decisive role in limiting or reversing the decline of market incomes at the level of disposable incomes. Lowest income groups were not always the segment to bear the brunt of flat or falling incomes.<sup>58</sup>





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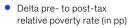
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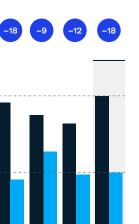
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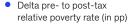
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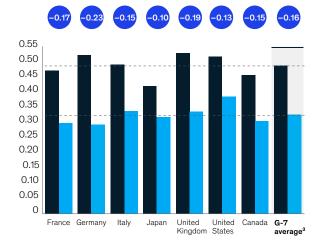




#### G-7 pre- and post-tax income Gini, <sup>2</sup> Gini coefficient, 2016 or most recent







<sup>&</sup>lt;sup>1</sup> The relative poverty rate is the percentage of people whose disposable income is lower than the poverty threshold, which is set as less than 50% of median household income.

Kingdom States

Japan

Source: OECD, Income Distribution and Poverty Database, February 21, 2019, oecd.org; Standardized World Income Inequality database, Harvard Dataverse, April 2019, dataverse, harvard.edu: McKinsey Global Institute analysis

<sup>&</sup>lt;sup>2</sup> Pretax income Gini is defined as Gini of equivalized household market income before taxes and transfers.

<sup>&</sup>lt;sup>3</sup> G-7 averages are unweighted.

<sup>&</sup>lt;sup>58</sup> Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016.

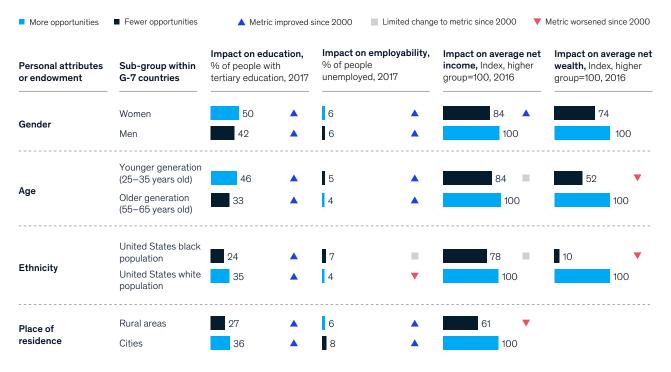
4

Opportunities are unequal depending on different personal attributes and geographies

### Gender, age, ethnicity, and place of residence affect average levels of education and employment as well as economic outcomes.

Both opportunities and outcomes can differ for individuals depending on a range of personal characteristics (Exhibit 12). For example, young people have some of the highest levels of education but some of the lowest levels of income and wealth. Women are more likely to have tertiary degrees than men in G-7 countries but earn only 84 cents to every \$1 men earn. City dwellers in the G-7 are one-third more likely than rural dwellers to have tertiary education, but unemployment is higher in cities than in rural areas and is rising.

Moreover, parental and family background has been shown to be a strong predictor of outcomes. One study shows that, among children born around 1950 in the United States who grew up at a time of relatively low inequality, test scores of low-income children lagged behind those of high-income peers by about 50 points on SAT-type tests. For children born in 2000, at a time of much higher inequality, this gap was twice as large.<sup>59</sup>



Note: This chart uses illustrative sub-groups or country data in some cases, due to limited data availability (eg, ethnicity only for United States; place of residence for sub-set of G-7 countries). Inequality data by group indexed on a scale of 100 to the group with more opportunities, eg, income gap between men and women in G-7 countries is 16 percent on average in 2016, meaning if men's income is 100 percent, women's is 84 percent. Women's wealth is shown as the average of Europe and North America in 2018. Rural areas are defined as municipalities where more than 50 percent of people live in areas with a population density of less than 300 persons/km² and have fewer than 5,000 people. Income figures comparing urban and rural reflected the United Kingdom.

Source: Eurostat; OECD; US Census Bureau; UK Office for National Statistics; US Bureau of Labor Statistics; McKinsey Global Institute analysis

Sean F. Reardon, "The widening academic achievement gap between the rich and the poor: New evidence and possible explanations," in Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children, Greg J. Duncan and Richard J. Murnane, eds., New York, NY: Russell Sage Foundation, 2011; Ariel Kalil, How economic inequality affects children's outcomes, Washington Center for Equitable Growth, October 2016.

# Women in G-7 countries are more likely than men to attain tertiary education and have become less likely to be unemployed.

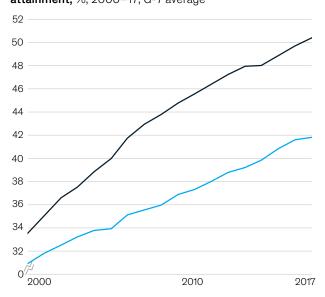
In G-7 countries, women are increasingly more likely than men, on average, to have a tertiary education, according to OECD data (Exhibit 13). In 2000 among 24- to 34-year-olds, 34 percent of women had a tertiary education, compared with 32 percent of men. By 2017, the gap had increased to 50 percent of women versus 42 percent of men.<sup>60</sup>

In recent years, men have become more likely than women to be unemployed in G-7 countries. In 2000, on average 7.9 percent of women, compared with 6.6 percent of men, were unemployed. In 2017, 6.0 percent of women were unemployed compared with 6.2 percent of men.

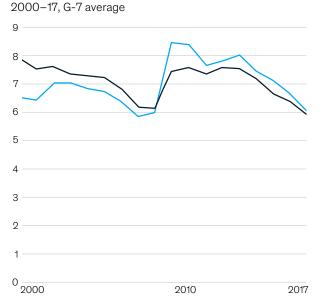
Women nonetheless have worse economic outcomes than men. The gender wage gap has decreased since 2000, but women in G-7 countries still earned 14 percent less than men on average in 2017. Large disparities exist between countries. For example, the gender wage gap in Japan in 2017 was 25 percent, compared with 16 percent in Germany. <sup>61</sup> Despite making up half the population, women held 40 to 45 percent of household wealth in Europe and the United States in 2018. <sup>62</sup>

✓ Men ✓ Women

### Share of people 25–34 years old with tertiary education attainment, %, 2000–17, G-7 average



### Unemployment rate by gender, as % of labor force,



Source: Education database, OECD, March 2019, oecd.org; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>60</sup> Overall education outcomes have declined in some G-7 countries. For example, PISA mathematics scores fell from 493 in 2000 to 470 in 2015. Similarly, reading scores declined slightly from 504 to 497, and science from 499 to 496 during the same period. PISA, OECD, 2019.

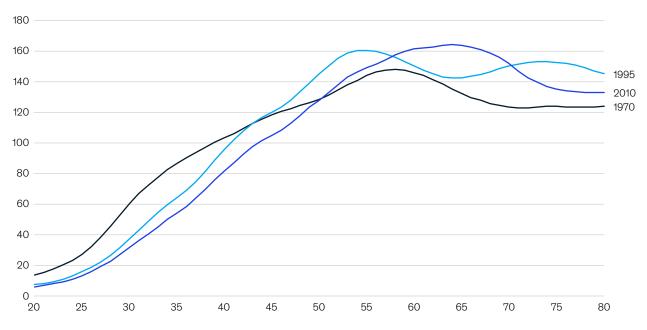
<sup>&</sup>lt;sup>61</sup> OECD gender wage gap database, 2019. The gender wage gap is defined as the difference between median earnings of men and women relative to median earnings of men. Data refer to full-time employees and to self-employed.

<sup>62</sup> Global wealth databook, Credit Suisse, 2018.

# Younger generations are accumulating wealth at a later stage in life compared with older generations.

Younger generations in G-7 countries are more educated than older generations. At the same time, younger people remain more exposed to unemployment and have seen their incomes increase at a slower rate than older age groups. Younger generations are also accumulating wealth at a later stage in life, reaching peak wealth five to ten years later than previous generations (Exhibit 14). Higher education expenses in some countries and higher rates of tertiary education attainment, coupled with lower starting salaries, contribute to the delay in peak wealth for younger generations. In France, for example, on average, people accumulated 80 percent of the average adult wealth by the age of 33 in 1970 and by the age of 40 in 2010.

#### Age-wealth profiles, wealth as % of average adult wealth, France, 1970-2010



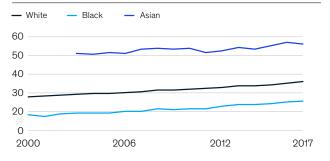
Source: Bertrand Garbinti, Jonathan Goupille-Lebret, and Thomas Piketty, *Accounting for wealth inequality dynamics: Methods, estimates and simulations for France (1800–2014),* wid.world/data working paper 2016/5, December 2016; McKinsey Global Institute analysis

# In the United States, ethnicity significantly affects average levels of education, employment, income, and wealth.

Opportunities remain unequal among ethnic groups in the United States (Exhibit 15). For instance, in 2000, 17 percent of the US black population completed four years of college or more, compared with 26 percent of the white population, according to US Census data. In 2017, 24 percent of the black population completed college compared with 34 percent of the white population. The black population is also more likely to be unemployed, without any significant narrowing in the gap between black and white workers in the United States between 2000 and 2017.

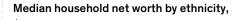
The significant inequality of economic outcomes between the US black and white populations has been increasing since the late 2000s. In 2000, white individuals earned, on average, 26 percent more than black individuals. That gap increased to 33 percent in 2018. Similarly, the median net worth of the average white household was about 10 times higher than the average black household's in 2016.

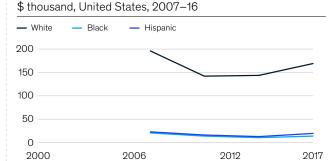
### Share of people aged 25+ who completed 4+ years of college, %, United States, 2000–17



#### 2000 2006 2012

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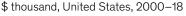


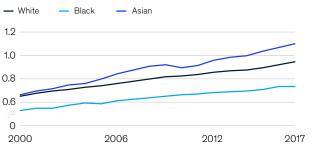


Unemployment rate by ethnicity, %, United States, 2000–17

2017

#### Median weekly earnings, employed full time, aged 25+ years,





Source: US Census Bureau database, March 2019; McKinsey Global Institute analysis

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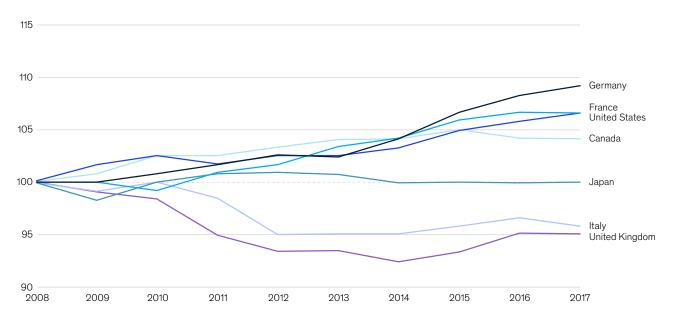
People are not just falling behind others; their wages are also stagnating in real terms

# Average real wage growth has diverged in the G-7, with stagnation in Italy, Japan, and the United Kingdom.

Since 2008, divergent trends have characterized overall income growth in G-7 economies, as evidenced by the change in average real wages (Exhibit 16). One group of countries that includes Canada, France, Germany, and the United States experienced growth in average real wages ranging from 5 to 11 percent. Meanwhile, Japan's average real wages remained flat, and Italy and the United Kingdom saw declines of 5 to 6 percent over the same period.

On the whole, average real wages in the G-7 grew at a considerably slower pace than in large developing economies. Average real wages increased by 20 to 100 percent between 2008 and 2017 for the BRIC economies of Brazil, Russia, India, and China.<sup>63</sup>

#### Average real wage index for G-7 countries, index 2008 = 100, 2008-17



<sup>&</sup>lt;sup>1</sup> Real wages are calculated using average nominal gross monthly wages and adjusted for price inflation; real wage growth refers to year-on-year change in real average wages of all employees.

Source: Global Wage Report 2018/19: What lies behind gender pay gaps, International Labor Organization, 2018

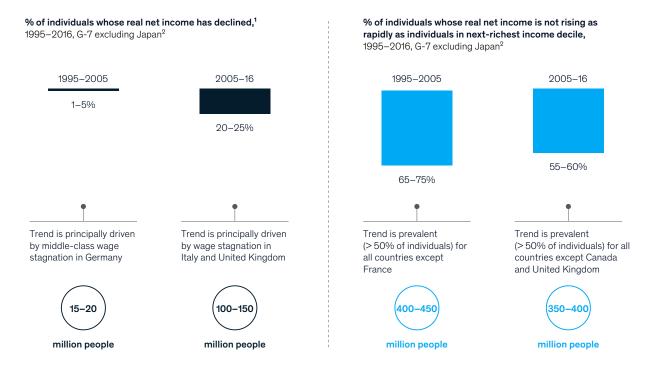
<sup>&</sup>lt;sup>63</sup> Global Wage Report 2018/19: What lies behind gender pay gaps, International Labour Organization, 2018.

# Moving beyond average wages, real net income fell for one-quarter of individuals in the G-7, and 60 percent experienced slower growth than the next-richest decile.

Wage stagnation is particularly acute for those in lower income deciles. Real net income has fallen for 25 percent of individuals—more than 100 million people in total—in six G-7 economies since 2005, driven principally by stagnation in Italy and the United Kingdom (Exhibit 17).<sup>64</sup>

Those in lower income deciles are also experiencing slower wage growth compared with higher earners. Real incomes did not rise as fast as in the next-richest income decile for 60 percent of individuals in G-7 economies from 2005 to 2016. In other words, three out of every five citizens in G-7 countries, excluding Japan, experienced slower wage growth than citizens in the richest income decile.<sup>65</sup>

Further evidence of economic fragility can be seen in the United States, where more than one in five households today has zero or negative net worth. Moreover, research suggests two-thirds do not have enough savings to cover a \$500 emergency.<sup>66</sup>



<sup>&</sup>lt;sup>1</sup> Real net income is defined as net income adjusted for inflation using OECD CPI rates where 2017 = 100; net income is defined in the UNU-WIDER database as the income concept recommended by the Canberra Group including employee income, income from self-employment, income less expenses from rentals except rent of land, property income, and current transfers received (eg, social insurance benefits from employers' schemes).

Source: Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>2</sup> Sample includes Canada, France, Germany, Italy, United Kingdom, United States; outcomes shown are an average of sample countries, weighted by 2016 population; calculated as the percentage of deciles that saw falling income (ie, 1 decile = 10%), between the first and last year in the specified time period, summed for all 6 G-7 countries included, and weighted by 2016 population.

<sup>64</sup> UNU-WIDER World Income Inequality Database (WIID4); consumer price indexes, OECD, 2017.

<sup>65</sup> Ibid

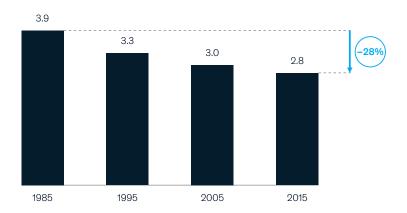
Edward Wolff, "The asset price meltdown, rising leverage, and the wealth of the middle class," *Journal of Economic Issues*, Volume 47, Issue 2, 2013; Maggie McGrath, "63% of Americans don't have enough savings to cover a \$500 emergency," *Forbes*, January 2016.

# The middle class has been particularly affected, with its economic influence declining by almost one-third since the 1980s.

Since the 1980s, the economic influence of the middle class—as measured by the aggregate income share of middle-income households compared with upper-income households—has declined by almost one-third (Exhibit 18). The aggregate income of middle-income households fell from approximately four times that of upper-income households in 1985 to less than three times by 2015.87 For example, in the United States, the share of adults living in middle-income households declined from 61 percent in 1971 to 50 percent in 2015. While about one-third of those have shifted down to lower middle- and low-income households, two-thirds of the shift has been upward, creating an hourglass-like effect.88

The 2008 financial crisis exacerbated this trend. Between 2007 and 2016, the annual growth rate of real median incomes was 0.3 percent on average across OECD countries, compared with 1.0 percent between 1985 and 1995, and 1.6 percent between 1995 and 2005.

#### Aggregate income share ratio between middle- and upper-income households, 1 OECD average, 1985–2015



Data refer to the aggregate income of all middle-income households as a ratio of the aggregate income of all upper-income households. "Middle income" households defined as households with income between 75% and two times the national median. "Upper income" households defined as households with income above two times the national median. Incomes are disposable incomes, corrected for household size.

Source: OECD; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>67</sup> Under pressure: The squeezed middle class, OECD, 2019.

<sup>&</sup>lt;sup>68</sup> The American middle class is losing ground, Pew Research Center, December 2015.

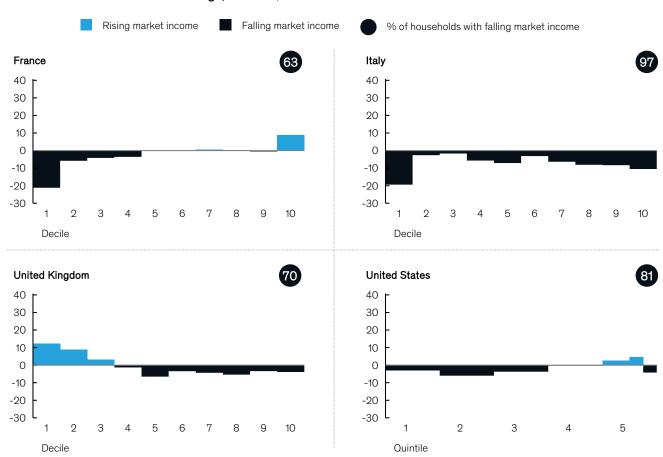
<sup>&</sup>lt;sup>69</sup> Under pressure: The squeezed middle class, OECD, 2019.

# Market incomes fell or were flat for a large percentage of households in some G-7 countries between 2005 and 2014.

Along with stagnating incomes for individuals, our prior research has shown that many households across advanced economies also saw their market incomes—wages and income from capital before taxes and transfers—stagnate or even fall in the period between 2005 and 2014. This affected as many as 70 percent of households in 25 advanced economies, the equivalent of more than 500 million people. It compares with less than 10 million people, or 2 percent of households, who were affected a decade previously, between 1993 and 2005.70

Government transfers and lower tax rates reduced the effect on disposable incomes, but 20 to 25 percent of households were nonetheless in segments of the income distribution whose disposable income was flat or down between 2005 and 2014, compared with less than 5 percent in 1993–2005. While the recession after the 2008 financial crisis and the sluggish recovery that followed were a major contributor, our research showed that the problem has been aggravated by longer-run factors such as aging, shrinking household sizes, automation, trade, migration, and other changes in the nature of work.

#### Real household market income change, 2005–14, %



Source: Institut national de la statistique et des études économiques (INSEE); Bank of Italy; UK Office for National Statistics (ONS); US Congressional Budget Office (CBO); McKinsey Global Institute analysis

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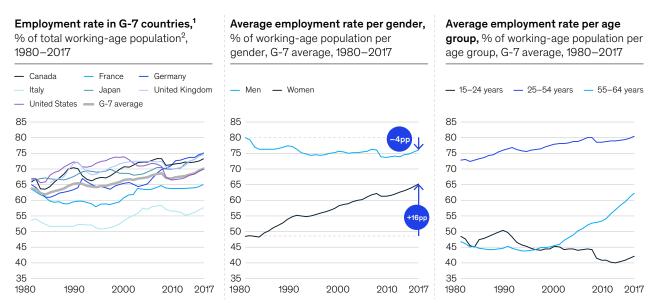
<sup>&</sup>lt;sup>70</sup> Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016.

# Employment of the G-7 working-age population increased by six percentage points between 1980 and 2017. While male employment fell four percentage points, female employment rose 16 points.

The rate of aggregate employment in G-7 countries has exhibited overall growth since the 1980s despite some turbulent periods, obscuring the uneven changes in employment rates among different gender and age groups (Exhibit 20). Employment has shifted to become older and more female, while younger workers and males have seen employment rates fall. Male employment has dropped by four percentage points as female employment rates have increased by 16 percentage points, according to OECD data.

The highest growth in employment since 1980, an increase of 32 percentage points, has come from individuals aged 55 to 64 years old. Employment for workers aged 25 to 54 years old increased only ten percentage points over the same period, likely driven by the large increase in female labor force participation. Meanwhile, employment for young people aged 15 to 24 has fallen 6 percent since 1980, although university enrollment increased significantly during this time.

Unemployment rates at the country level have followed economic cycles, with Italy generally having higher, more volatile rates than the rest of the G-7. Female unemployment rates decreased to match male rates at around 6 percent of the labor force in 2017. Youth unemployment is three to four times higher than it was for older generations and is significantly more volatile during difficult economic cycles.



<sup>&</sup>lt;sup>1</sup> Employment rate refers to the ratio of the employed to the working-age population (15–64 years old).

<sup>&</sup>lt;sup>2</sup> Working-age population is the population from 15 to 64 years old.

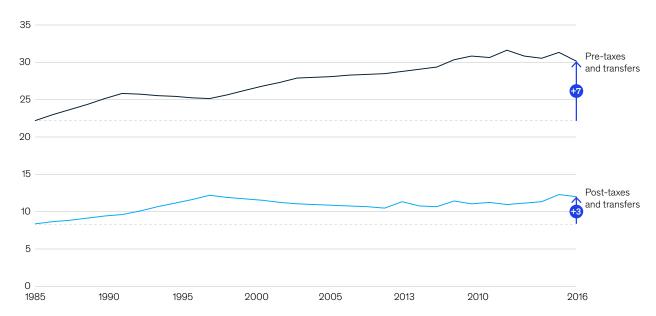
Source: LFS by sex and age database, OECD, February 28, 2019, oecd.org; McKinsey Global Institute analysis

## The relative poverty rate before taxes and transfers has been increasing since the 1980s.

Market incomes are increasingly unable to keep people out of poverty and are only partially compensated for by social transfers. The relative poverty rate among G-7 countries on gross incomes, before taxes and transfers, was 30 percent in 2016, up seven percentage points over the previous 30 years (Exhibit 21).

While redistributive policies result in far fewer individuals living below the poverty line, the average G-7 poverty rate after taxes and transfers also increased between 1985 and 2016, driven by Italy and Japan. The post-transfer relative poverty rate increased by three percentage points to reach 12 percent in 2016.

#### Relative poverty rate, 1% of total population, G-7 average<sup>2</sup>, 1985–2016



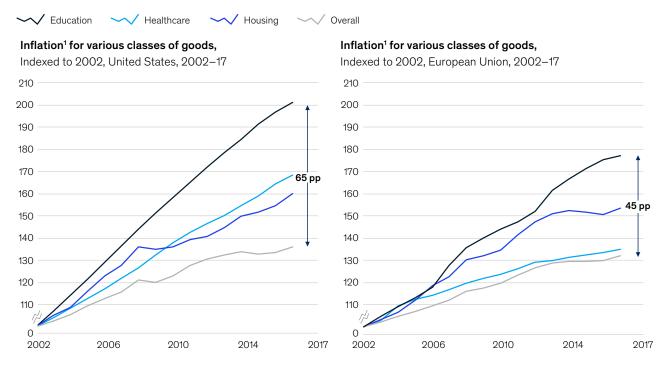
<sup>&</sup>lt;sup>1</sup>The poverty rate is the percentage of people whose disposable income is lower than the poverty threshold, which is set as less than 50% of median household income. <sup>2</sup> Average poverty rate for G-7 countries is based on 5–6 data points on average each year.

 $Source: Income \ distribution \ and \ poverty \ database, OECD, February \ 19, 2019, oecd.org; McKinsey \ Global \ Institute \ analysis$ 

## Education, healthcare, and housing costs rise faster than inflation.

The prices of education, healthcare, and housing have outpaced overall inflation across the European Union and the United States, making it harder for households to pay for these essentials (Exhibit 22). Education, a primary avenue for people to increase future earnings, has become particularly expensive, exceeding overall inflation by 65 percentage points in the United States and 45 percentage points in the European Union.

Necessities including healthcare and education have also contributed to higher household debt levels. Indebtedness increased on average from 87 percent of G-7 net household disposable income in 1995 to 123 percent in 2017.<sup>71</sup> High indebtedness can increase financial fragility and vulnerability to financial shocks while lowering a household's ability to afford unexpected expenses.



<sup>&</sup>lt;sup>1</sup> Harmonized Index of Consumer Prices (HICP).

Source: Consumer Price Indices database, OECD, extracted February 21, 2019, oecd.org; HICP database, Eurostat, extracted February 21, 2019; McKinsey Global Institute analysis

 $<sup>^{71}\,\,</sup>$  OECD national accounts at a glance, 2019.

# Public discontent related to economic issues is rising

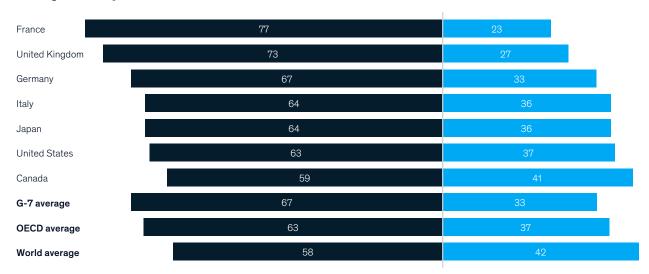
# More than 60 percent in OECD countries say their country is on the 'wrong track.'

Individuals in developed countries are exhibiting significant discontent. <sup>72</sup> On average, 63 percent of residents of OECD countries say they believe their country is on the "wrong track," according to a 2018 survey, while just 37 percent say it is heading in the "right direction" (Exhibit 23). <sup>73</sup> Forty-three percent of individuals in advanced economies believe the average person today is worse off than 20 years ago. <sup>74</sup>

They are also pessimistic about the future: 45 percent of respondents in a poll of residents of G-7 nations say their country will be "worse" or "much worse" for future generations, compared with only 27 percent saying it would be "better" or "much better." Those in disadvantaged economic positions are the most pessimistic. Individuals who say their own financial position is not advancing are three times more likely to agree with the statement "I expect the next generation to advance more slowly in the future" than those who believe their position is advancing or neutral.<sup>75</sup>

### Answer to question "Do you believe your country is heading in the right direction, or on the wrong track?" % of respondents by country





<sup>1</sup> Representative sample of 20,787 adults aged 16-64 in 28 participating countries, surveyed between August 24 and September 7, 2018; simple averages used for G-7, OECD, and world averages.

Source: What worries the world, Ipsos Public Affairs, September 2018; McKinsey Global Institute analysis

Several works have discussed rising discontent. For example, Paul Krugman's *The Age of Diminished Expectations* (1997) discussed the impact of economic crises on society. More recently, Anne Case and Angus Deaton show that rising annual death rates among uneducated, middle-aged, white Americans are being driven by suicides and substance abuse. Anne Case and Angus Deaton, "Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century," *Proceedings of the National Academy of Sciences*, December 8, 2015, Volume 112, Number 49, pp. 15078–83.

<sup>73</sup> What worries the world, Ipsos Public Affairs, 2018.

<sup>&</sup>lt;sup>74</sup> Global attitudes survey, Pew Research Center, Spring 2018.

<sup>&</sup>lt;sup>75</sup> McKinsey Citizen Development and Confidence Research, 2018; Poorer than their parents? Flat or falling incomes in advanced economies, McKinsey Global Institute, July 2016.

# A majority of low- and middle-income individuals believe their wealth has decreased or stagnated in the past few years.

While a variety of national, economic, and social issues create discontent, economic issues appear to be the most potent.

Eighty-two percent of low-income individuals and 69 percent of middle-income individuals believe their own wealth has decreased or stagnated in the past few years (Exhibit 24). While 50 percent of high-income individuals believe their level of wealth has increased, only 31 percent of middle-income and 18 percent of low-income individuals believe this.<sup>76</sup>

Respondents indicating whether they had "more," "less," or "the same" amount of wealth in "the last few years" % of respondents by income level



<sup>&</sup>lt;sup>1</sup> McKinsey Citizen Development and Confidence Research surveyed 27,500 respondents from across the G-7 countries; survey responses are weighted in these results by the total populations of each country.

 $Source: McKinsey\ Citizen\ Development\ and\ Confidence\ Research\ Survey,\ 2018;\ McKinsey\ Global\ Institute\ analysis$ 

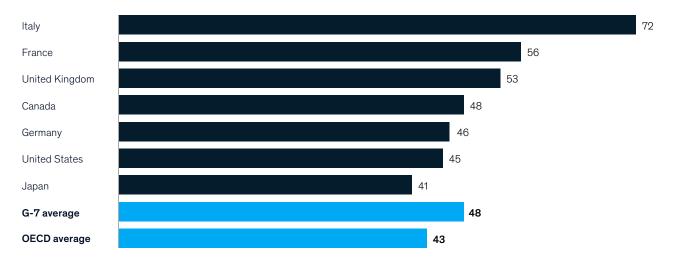
<sup>&</sup>lt;sup>76</sup> McKinsey Citizen Development and Confidence Research, 2018.

## Almost half of people polled in advanced economies believe the average person in their country is worse off today than 20 years ago.

A large proportion of citizens in advanced economies are pessimistic about their country's current position and prospects. Forty-eight percent of respondents in G-7 economies believe the average person in the country is worse off than 20 years ago (Exhibit 25). In Italy, nearly three-quarters of survey respondents say individuals today are worse off. When asked about the future, in all OECD countries surveyed, more than 60 percent of respondents say they think their country will be worse off for future generations than it is today.

In a survey of 28 of the world's largest economies, one-third of individuals cite unemployment as the top "worry area" from a list of 15 issues; poverty and social inequality are second and third, respectively. In a different survey, 59 percent of respondents named "economic issues" as the top "area for improvement" on a list of five choices.

### Individuals stating "the financial situation of the average person in our country is worse than it was 20 years ago," % of individuals



Note: Averages are population weighted.

Source: Global Attitudes & Trends surveys, Pew Research Center, Spring 2018, pewglobal.org; McKinsey Global Institute analysis

<sup>77</sup> What worries the world, Ipsos Public Affairs, 2018.

<sup>&</sup>lt;sup>78</sup> McKinsey Citizen Development and Confidence Research, 2018.

# Almost half of voters surveyed feel disconnected from democratic processes and believe their vote does not matter.

Even among those who vote, morale is low: across 13 OECD countries surveyed, 45 percent of voters indicated that they do not believe their vote matters; in the G-7, this number jumps to 50 percent (Exhibit 26).

Movements are on the rise that question current economic and political models, resulting in further uncertainty. These movements range from trade disputes to "Euroskepticism" to the rise of outsider political candidates.

Meanwhile, trust in government is waning. In 19 out of 32 OECD countries surveyed, including three G-7 economies, the percentage of respondents indicating they trust their government decreased from 2006 to 2016.

#### Respondents indicating they vote, but do not believe their vote matters, 1 % of respondents



<sup>&</sup>lt;sup>1</sup> McKinsey Citizen Development and Confidence Research surveyed 27,500 respondents from across the G-7 countries; survey responses are weighted in these results by the total populations of each country; averages population-weighted.

Source: McKinsey Citizen Development and Confidence Research Survey, 2018; McKinsey Global Institute analysis

 $<sup>^{79}\,</sup>$  McKinsey Citizen Development and Confidence Research, 2018.

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Trends aggravating inequality may deepen in the future, necessitating both old and new solutions

# The labor share of national income has declined sharply in advanced economies since the 1980s, compounding wage stagnation.

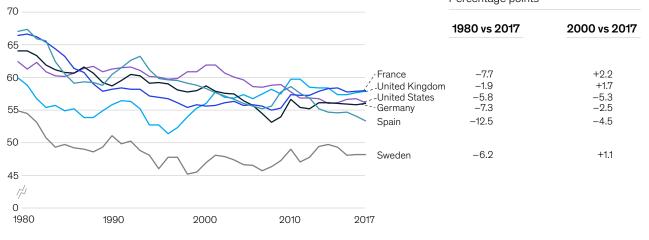
While the financial crisis of 2008 exposed the vulnerability of many households, several underlying trends have long been under way and are expected to deepen economic challenges for affected groups in the years ahead. The declining labor share of national income reflects the impact of some of these underlying trends, from slow productivity growth and wage stagnation to the effects of digitization and automation or market concentration. <sup>80</sup>

Among advanced economies, labor's share of national income has declined since 1980, meaning that those dependent on wages are able to grow wealth less quickly than wealthy households (Exhibit 27). From 1980 to 2017, Spain had the largest contraction of labor share, losing more than 12 percentage points, but since 2000, as we describe in a recent discussion paper, the United States has seen the largest continued shift from labor to capital, with the labor share declining more than five percentage points.<sup>81</sup>

At the same time, collective wage bargaining—often via unions—has declined in both the G-7 and the OECD, putting employees in a weaker position when it comes to negotiating wage increases. Moreover, labor productivity growth is near historic lows in the United States and much of Western Europe. <sup>82</sup>

#### Adjusted labor share of income, 1%, advanced economies, 1980-2017

#### Change in labor share, Percentage points



Adjusted wage share for total economy over GDP at market prices from AMECO, based on ratio of total compensation of employees to GDP multiplied by the ratio of total employment to the number of employees (salaried people); this helps account for income of self-employed households, assuming that their wage is similar to salaried households.

Source: AMECO; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>80</sup> For example, more than 75 percent of US industries have become more concentrated over the past two decades. Gustavo Grullon, Yelena Larkin, and Roni Michaely, "Are US industries becoming more concentrated?," forthcoming, *Review of Figure* 1

<sup>81</sup> A new look at the declining labor share of income in the United States, McKinsey Global Institute, May 2019.

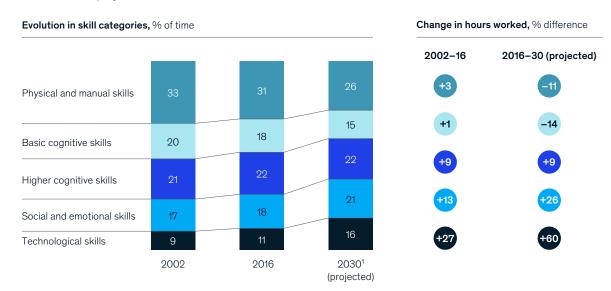
<sup>82</sup> Solving the productivity puzzle: The role of demand and the promise of digitization, McKinsey Global Institute, February 2018.

# Digitization and automation are leading to skill shifts for workers, putting low-skill workers at risk of not being able to find jobs.

High-skill workers are more in demand, and low-skill workers are increasingly at risk of being unable to find jobs. McKinsey Global Institute research on skill shifts and automation suggests that competition for high-skill workers will continue to increase, with likely repercussions on wages. Many of the current middle-wage jobs in advanced economies are dominated by highly automatable activities in fields such as manufacturing and accounting, which are likely to decline. 83

In prior work we have estimated a net loss of five million to ten million middle-wage jobs in the United States by 2030 (Exhibit 28). Manual laborers and workers in jobs requiring only basic cognitive skills are particularly at risk of seeing their positions automated in the next ten years. High-wage jobs are expected to grow significantly, especially for skilled professionals, particularly in medicine and technology. However, a large portion of jobs that are expected to grow, such as nursing aides, typically have lower wage structures. The risk is that automation could exacerbate wage polarization, income inequality, and the lack of income advancement. Before the content of the prior wage structures.

**Automation and AI will accelerate skill shifts,** based on McKinsey Global Institute workforce skills model, United States, all sectors, 2002–30 (projected)



Note: Based on difference between hours worked per skill in 2016 and modeled hours worked in 2030. Numbers may not sum to 100% because of rounding. 12030 projection calculated using the 2004 to 2016 CAGR extrapolated to a 14-year period.

Source: US Bureau of Labor Statistics; McKinsey Global Institute workforce skills model; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>83</sup> Skill shift: Automation and the future of the workforce, McKinsey Global Institute, May 2018.

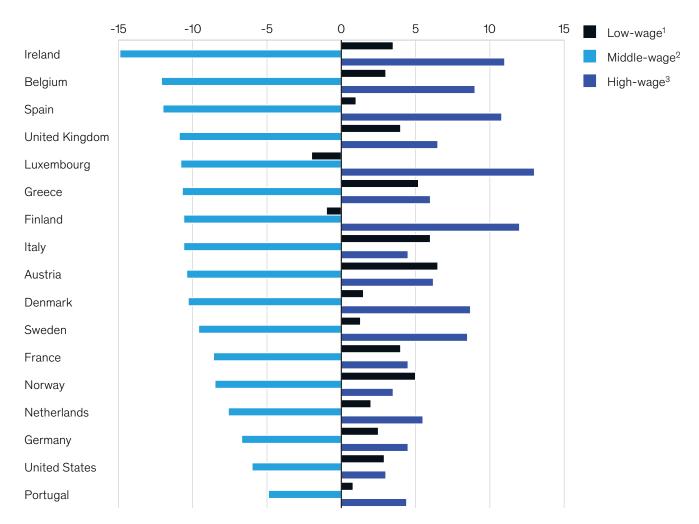
<sup>84</sup> Jobs lost, jobs gained: Workforce transitions in a time of automation, McKinsey Global Institute, December 2017; Skill shift: Automation and the future of the workforce, McKinsey Global Institute, May 2018.

<sup>85</sup> See, for example, Daron Acemoglu and David Autor, "Skills, tasks, and technologies: Implications for employment and earnings," in *Handbook of Labor Economics*, Volume 4b, Orley Ashenfelter and David Card, eds., San Diego, CA: Elsevier, 2011. Others argue that automation combined with strong social safety nets can drive productivity and entrepreneurship as well as facilitating the transition of jobs across sectors; see Peter S. Goodman, "The robots are coming, and Sweden is fine," *New York Times*, December 27, 2017.

# Since the early 1990s, the share of middle-wage occupations has declined as income polarization has increased.

Digitization of the economy and the rise of automation have contributed to income polarization between high-skill and low-skill workers and put wage and employment pressure on the middle class. Across 16 European countries and the United States, middle-wage occupations declined in terms of employment shares between 1993 and 2010. The majority of these shifted to high-wage occupations, but low-wage occupations increased, by between one and six percentage points during that period, with the exceptions of Finland and Luxembourg. Technology-induced unemployment tends to disproportionately affect lower-skill workers: skill differentials in unemployment widen initially, but then decline after a roughly five-year lag, as training, learning, and rehiring take place. 86

Change in occupational employment shares in low-, middle-, and high-wage occupations in 16 EU countries and the US, 1993–2010, percentage points



- 1 Laborers and service workers; lower-wage jobs barely allow workers to provide for day-to-day needs and do not allow saving for retirement.
- <sup>2</sup> Clerks, operators, and assemblers.
- <sup>3</sup> Professionals and managers.

Source: Maarten Goos, Alan Manning, and Anna Salomons, "Explaining job polarization: Routine-biased technological change and offshoring," American Economic Review, Volume 104, Number 8, August 2014; McKinsey Global Institute analysis

<sup>&</sup>lt;sup>86</sup> Jacob Mincer and Stephan Danninger, *Technology, unemployment, and inflation*, National Bureau of Economic Research working paper number 7817, July 2000.

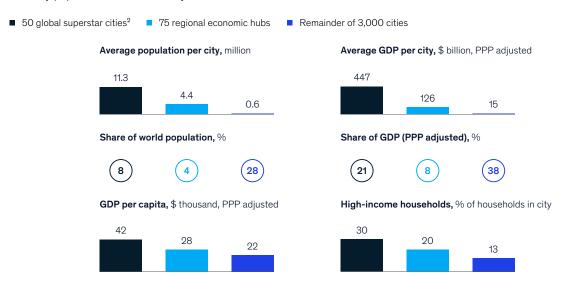
# Superstar effects could see certain sectors and cities continuing to pull away from their peers.

The benefits of growth accrue unequally to large superstar cities, companies, and sectors. Over the past 20 years, 70 percent of GDP and gross surplus gains across G-20 countries have accrued to a handful of economic activities including finance, real estate, tech, pharma, and some business services. They drive strong wealth effects in the form of gains to holders of physical assets (real estate) and intangible assets. The search for assets in these sectors fuels geographically concentrated searches for talent, IP, and other intangible assets that reinforce the gains to these locations, contributing to the growth of cities that are gateways of finance, tech, and innovation activity, and which are pulling away from peer cities in terms of income growth.

Fifty global superstar cities constitute 8 percent of world population and 21 percent of global GDP (Exhibit 30). The gap between superstar cities and the rest has widened over the past ten years: today superstar cities' GDP per capita is 45 percent higher than their peers', compared with 30 percent ten years ago. 87

Superstar cities are also gaining population share as urbanization continues across the globe. The global urban population is growing by 65 million annually, equivalent to adding seven Chicagos a year, every year. 88

**Geographic concentration of economic activity in 2015,** measured among the 3,000 largest metropolitan areas in the world by population as measured by GDP<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Analysis by the McKinsey Global Institute with the McKinsey CityScope database.

Source: Superstars: The dynamics of firms, sectors, and cities leading the global economy, McKinsey Global Institute, October 2018; McKinsey Global Institute analysis

The 50 superstar cities were identified looking at GDP and personal income per capita today and evolution over the past 10 years. Of those 50 superstar cities, 14 are located in the Americas, 11 in Europe, 21 in Asia (including 10 in China), 3 in the Middle East and Northern Africa, and 1 in Australia.

<sup>87</sup> Superstars: The dynamics of firms, sectors, and cities leading the global economy, McKinsey Global Institute, October 2018.

The emergence of "superstar" firms that take a disproportionate share of economic profit has fueled a lively debate but the links to this phenomenon and inequality are unclear. For example, corporate return on capital has not increased once the growth of mergers and acquisitions since the 1990s is accounted for; profit markups have only increased relative to cost of goods, but they disappear once the increased R&D and SG&A spending is factored in; and domestic market concentration does not account for rapid growth of cross-sector competition or the growth of imports, particularly intermediate imports through supply chains, in the past two decades. Moreover, the churn among superstar firms has not changed over the past three business cycles, with about 50 percent of companies in the top ranks in every cycle falling out.

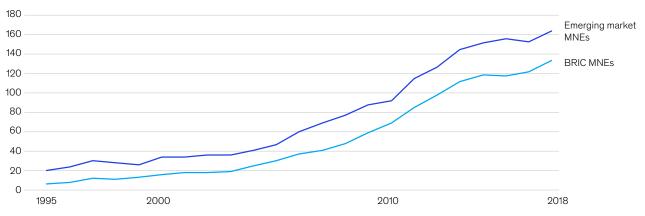
# Global integration and the rise of developing economies are increasing competition in advanced economies.

Global integration is leading to greater competition in the labor market in advanced economies. Research over the past several decades suggests that this is playing a part in narrowing the wage gap between workers in advanced and developing economies while contributing to increasing domestic income inequality.<sup>89</sup>

The growing prosperity of developing economies, at times propelled by dynamic large companies, is raising the competitive stakes for firms in advanced economies. These emerging-market firms now play a disproportionately large role on the global stage: while they accounted for about 25 percent of total revenue and net income of all large public companies in 2016, they contributed about 40 percent of the revenue growth and net income growth from 2005 to 2016. In the 1990s, about 25 multinational enterprises from emerging economies, including the BRIC countries (Brazil, Russia, India, and China) were in the Fortune Global 500; by 2018, the number was nearly 300 (Exhibit 31).90

Global trade is also an important factor. Global trade as a percentage of GDP peaked in 2008 but has remained consistently higher than 55 percent. Five of the G-7 countries have trade ratios higher than the global average, and export-oriented growth has been an integral driver of economic growth. Our recent research suggests that globalization is now in transition, with value chains shifting and regional trade growing. 92

### Number of emerging market multinational enterprises (MNEs) in Fortune Global 500, 1995–2017



Source: Yadong Luo and Rosalie Tung, "A general theory of springboard MNEs," *Journal of International Business Studies*, Volume 49, Issue 2, 2017; McKinsey Global Institute analysis

See, for example, Uri Dadush and William Shaw, Globalization, labor markets, and inequality, Carnegie Endowment, February 2012; Globalization, jobs and wages, OECD policy brief, June 2007; Matthew Slaughter and Phillip Swagel, The effect of globalization on wages in advanced economies, IMF working paper number 97/43, April 1997.

<sup>90</sup> Outperformers: High-growth emerging economies and the companies that propel them, McKinsey Global Institute, Sentember 2018

<sup>&</sup>lt;sup>91</sup> World Bank national accounts data and OECD national accounts data, 2019.

<sup>&</sup>lt;sup>92</sup> Globalization in transition: The future of trade and value chains, McKinsey Global Institute, January 2019.

## Appendix: Country deep dives

### Canada

Compared with residents in the rest of the G-7 nations, Canadians are relatively happy with their country's trajectory and are optimistic about the future (Exhibit A1). Canada has strong economic indicators, with both high growth and high income; average levels of wealth and income inequality for the G-7; and low levels of pretax poverty with average post-tax poverty rates.

Worse than the G	7 average	Better than the G-7 average	Median	Canada	Comparison with average
Growth and	Economic indicators	Average GDP growth, 2010–18, %	1.9	2.3	
participation	muicators	Median equivalized net income, 2016, \$ thousand	24	34	
	Employment	Employment rate, 2017, %	73	73	
		Unemployment rate, 2017, %	4.5	6.4	
	Economic	Pretax relative poverty rate, %, 2016 or most recent	33	25	
	fragility	Post-tax relative poverty rate, %, 2016 or most recent	12	12	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	0	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.31	
outcome		Top 1% income share, <i>2016</i> , %	13	14	
	Wealth	Wealth Gini, 2017	0.66	0.65	
		Bottom 40% wealth share, 2016, %	3.4	3.4	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	5.9	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	18	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.94	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	48	
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	51	
		Share of citizens who believe their country will be worse for future generations, 2018, %	47	33	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### France

Despite high levels of pretax poverty, France has low post-tax poverty, which indicated that a relatively high share of the population depends on public redistribution (Exhibit A2). Moreover, it has the lowest levels of income inequality in the G-7 and is not experiencing wage stagnation like some other countries. However, a high proportion of people in France believe that their country is on the wrong track.

Worse than the G	-7 average	Better than the G-7 average			
			Median	France	Comparison with average
Growth and participation	Economic indicators	Average GDP growth, 2010–18, %	1.9	1.3	
	indicators	Median equivalized net income, 2016, \$ thousand	24	24	
	Employment	Employment rate, 2017, %	73	65	
		Unemployment rate, 2017, %	4.5	9.2	
	Economic	Pretax relative poverty rate, %, 2016 or most recent	33	37	
	fragility	Post-tax relative poverty rate, %, 2016 or most recent	12	8	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	0	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.29	
outcome		Top 1% income share, <i>2016,</i> %	13	11	
	Wealth	Wealth Gini, 2017	0.66	0.66	
		Bottom 40% wealth share, 2016, %	3.4	2.7	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	5	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	10	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.93	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	56	
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	76	
		Share of citizens who believe their country will be worse for future generations, 2018, $\%$	47	47	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### Germany

Germany has low income inequality, similar to France, but fairly high wealth inequality (Exhibit A3). Despite relatively strong economic growth and good employment figures, many Germans have a more negative outlook compared with people in other G-7 countries.

Worse than the G	G-7 average	Better than the G-7 average			
			Median	Germany	Comparison with average
Growth and	Economic indicators	Average GDP growth, 2010–18, %	1.9	2.1	
participation	indicators	Median equivalized net income, 2016, \$ thousand	24	24	
	Employment	Employment rate, 2017, %	73	75	
		Unemployment rate, 2017, %	4.5	3.8	
	Economic	Pretax relative poverty rate, %, 2016 or most recent	33	34	
	fragility	Post-tax relative poverty rate, %, 2016 or most recent	12	10	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	1	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.29	
outcome		Top 1% income share, 2016, %	13	13	
	Wealth	Wealth Gini, 2017	0.66	0.73	
		Bottom 40% wealth share, 2016, %	3.4	0.5	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	6.2	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	16	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.88	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	46	
		Share of citizens who believe that their country is on the wrong track, 2018, %	60	69	
		Share of citizens who believe their country will be worse for future generations, 2018, $\%$	47	49	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### Italy

Italy has relatively low GDP and wage growth, and higher unemployment than other G-7 countries (Exhibit A4). However, it has comparatively low wealth and income inequality. Most Italians believe that the average person is worse off now than 20 years ago, but they remain relatively optimistic about the future.

Worse than the G	-7 average	Better than the G-7 average			
			Median	Italy	Comparison with average
Growth and	Economic indicators	Average GDP growth, 2010–18, %	1.9	0.3	
participation	indicators	Median equivalized net income, 2016, \$ thousand	24	18	
	Employment	Employment rate, 2017, %	73	58	
		Unemployment rate, 2017, %	4.5	11.4	
	Economic	Pretax relative poverty rate, %, 2016 or most recent	33	34	
	fragility	Post-tax relative poverty rate, %, 2016 or most recent	12	14	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	10	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.33	
outcome		Top 1% income share, <i>2016</i> , %	13	9	
	Wealth	Wealth Gini, 2017	0.66	0.58	
		Bottom 40% wealth share, 2016, %	3.4	4.5	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	4.2	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	6	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	2.22	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	72	
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	57	
		Share of citizens who believe their country will be worse for future generations, 2018, $\%$	47	44	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### Japan

Japan has the lowest wealth inequality in the G-7 and high employment rates (Exhibit A5). Compared with the rest of the G-7, Japan has lower economic growth, above-average relative poverty rates, and a larger gender wage gap.

			Median	Japan	Comparison with average
Growth and participation	Economic indicators	Average GDP growth, 2010–18, %	1.9	1.5	
	indicators	Median equivalized net income, 2016, \$ thousand	24	N/A	
	Employment	Employment rate, 2017, %	73	75	
		Unemployment rate, 2017, %	4.5	3	
	Economic fragility	Pretax relative poverty rate, %, 2016 or most recent	33	33	
	ITagility	Post-tax relative poverty rate, %, 2016 or most recent	12	16	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	N/A	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.34	
outcome		Top 1% income share, <i>2016</i> , %	13	10	
	Wealth	Wealth Gini, 2017	0.66	0.55	
		Bottom 40% wealth share, 2016, %	3.4	5.3	
	Consumption	Share of household budgets spent on healthcare and education, 2016, $\%$	5.9	5.9	
nequality of	Gender	Difference in median earnings by gender, 2014, %	17	25	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	N/A	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	41	
		Share of citizens who believe that their country is on the wrong track, 2018, %	60	60	
		Share of citizens who believe their country will be worse for future generations, 2018, %	47	50	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### **United Kingdom**

The United Kingdom has relatively low poverty rates compared with the rest of the G-7, and state healthcare and education systems mean that expenses in these areas take up a small amount of household budgets. The country has higher-than-average inequality (Exhibit A6). Seventy percent of citizens are unhappy with the direction of the country, and just over half of those polled are relatively pessimistic about the future.

Worse than the G	i-7 average	Better than the G-7 average			
			Median	United Kingdom	Comparison with average
Growth and	Economic indicators	Average GDP growth, 2010–18, %	1.9	1.9	
participation	indicators	Median equivalized net income, 2016, \$ thousand	24	23	
	Employment	Employment rate, 2017, %	73	75	
		Unemployment rate, 2017, %	4.5	4.5	
	Economic fragility	Pretax relative poverty rate, %, 2016 or most recent	33	30	
	паушту	Post-tax relative poverty rate, %, 2016 or most recent	12	11	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	10	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.35	
outcome		Top 1% income share, 2016, %	13	14	
	Wealth	Wealth Gini, 2017	0.66	0.74	
		Bottom 40% wealth share, 2016, %	3.4	3.4	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	3.1	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	17	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.81	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	53	
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	70	
		Share of citizens who believe their country will be worse for future generations, 2018, $\%$	47	51	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

### **United States**

The United States has had strong economic growth since the financial crisis, and its wages are higher than the G-7 average. It has high income and wealth inequality, with the bottom 40 percent of the population having negative net wealth (Exhibit A7). The United States has lower-than-average levels of pretax poverty but high post-tax poverty. A higher proportion of household budgets is spent on healthcare and education than in other G-7 countries.

Worse than the G	-7 average	Better than the G-7 average			
			Median	United States	Comparison with average
Growth and	Economic indicators	Average GDP growth, 2010–18, %	1.9	2.3	
participation	indicators	Median equivalized net income, 2016, \$ thousand	24	36	
	Employment	Employment rate, 2017, %	73	70	
		Unemployment rate, 2017, %	4.5	4.4	
	Economic	Pretax relative poverty rate, %, 2016 or most recent	33	27	
	fragility	Post-tax relative poverty rate, %, 2016 or most recent	12	18	
	Wage stagnation	Number of income deciles showing falling real income, 2005–16	N/A	0	
Inequality of	Income	Income Gini, 2017 or most recent	0.33	0.39	
outcome		Top 1% income share, 2016, %	13	20	
	Wealth	Wealth Gini, 2017	0.66	0.81	
		Bottom 40% wealth share, 2016, %	3.4	-0.1	
	Consumption	Share of household budgets spent on healthcare and education, 2016, %	5.9	10.1	
Inequality of	Gender	Difference in median earnings by gender, 2014, %	17	18	
opportunity	Parental occupation	Difference in likelihood that managers had parents that were managers vs laborers, 2002–14	1.92	1.9	
Perceptions	Citizens' beliefs	Share of citizens who believe the average person is worse off than 20 years ago, 2018, %	48	45	
		Share of citizens who believe that their country is on the wrong track, 2018, $\%$	60	59	
		Share of citizens who believe their country will be worse for future generations, 2018, $\%$	47	42	

Note: This chart is not exhaustive and does not address all considerations within each segment. Wage data reflect individuals and do not include transfers; consumption, healthcare, and education are among the largest categories of spend on average in addition to housing and transport. Household income data, which are not reflected in this chart, show broader stagnation; see *Poorer than their parents? Flat or falling incomes in advanced economies*, McKinsey Global Institute, July 2016.

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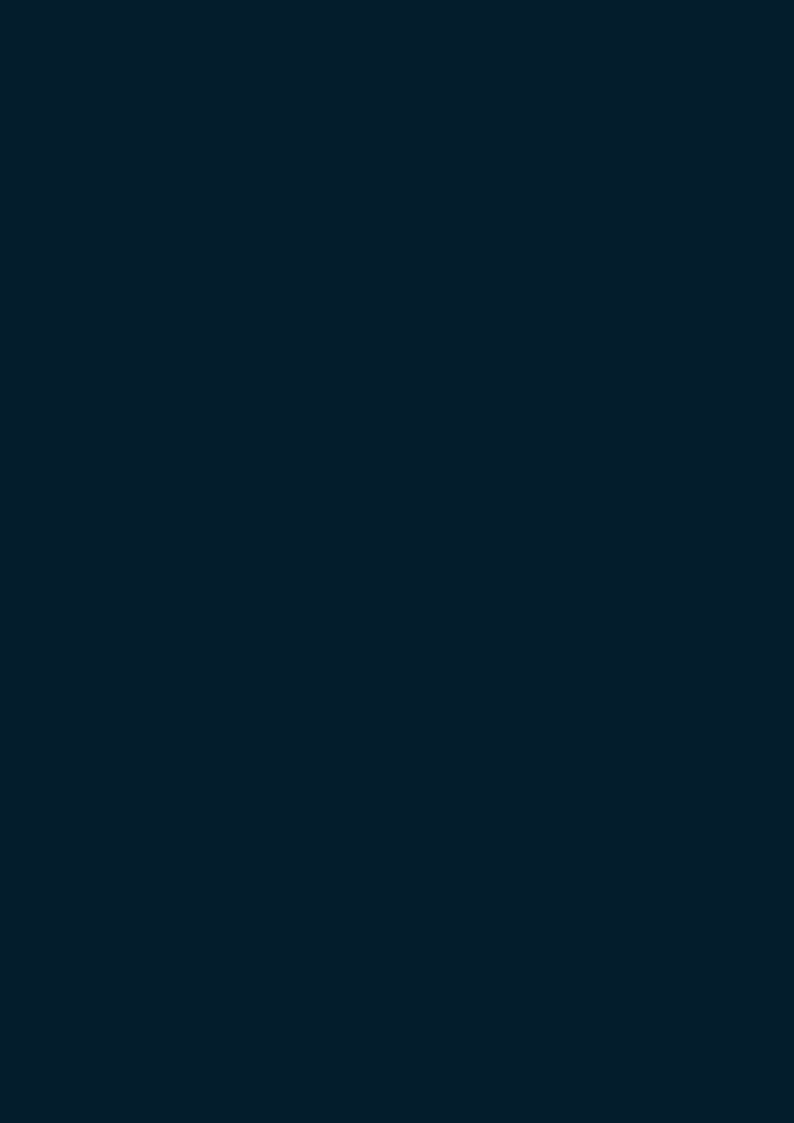
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