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Today’s challenges require a structural reform response

The global economy is fragile. Continued trade policy tensions and increasing uncertainties are undermining confidence, trade and investment. The consequences can be long lasting, with a real risk of the global economy being locked into a period of structurally low growth. As a result, it will be more difficult to deliver broad gains in productivity, wages and living standards making people’s lives better, for all.

The global economic slowdown comes on top of increasing pressures from global “mega-trends”. Globalisation, digitalisation, population ageing and environmental degradation are shaping tomorrow’s living standards and well-being. Inequality and poverty remain major concerns, both in advanced and emerging-market G20 economies. In the absence of renewed reform dynamism, economies are poorly prepared to address these challenges.

The ESRA report tracks progress on reforms and makes the case for further action

Faced with these pressing challenges, governments must take action. Structural reforms are an important driver of growth and a key element of achieving the G20’s objective of strong, sustainable, balanced and inclusive growth. The OECD’s Report on Progress on Structural Reform under the G20 Enhanced Structural Reform Agenda (ESRA) tracks structural policy achievements and the need for further actions in G20 economies across priority areas selected by the G20 members. The report also highlights examples of good practice reforms by G20 countries in the different areas.

G20 economies have taken significant actions since 2017, but further reforms are required to achieve stronger, sustainable and more inclusive growth.

Promoting inclusive growth

Reducing inequality and poverty as well as improving equality of opportunity are important objectives for the well-being of citizens. Inclusiveness is necessary to safeguard social cohesion, restore trust and sustain growth in the longer run.
Advancing labour market reform, educational attainment and skills
Lifting barriers and disincentives to formal employment and addressing labour market segmentation can promote growth and ensure more equal access to quality jobs. Effective active labour market policies coupled with social policies can give more people access to the labour market and to good jobs.
Access to good quality education is crucial to ensure equality of opportunities and enable current and future generations to lead more productive careers.

Promoting trade and investment openness
Trade and market openness creates new opportunities for workers, consumers and firms. Trade openness gives firms access to larger markets, encouraging competition, and innovation. It gives consumers greater access to goods and services at a lower price. Increased openness to FDI can boost productivity through technology transfer and the provision of sophisticated inputs within multinational networks.

Encouraging innovation
Innovation and investment in knowledge-based capital are important drivers of growth and living standards, especially in the long term. Reforms in this area can help advance the technology frontier and encourage faster diffusion of technologies.

Promoting fiscal reform
A well-designed tax system is crucial to raise revenues to pay for key public services, support inclusion and redistribution, and maintain incentives for economic growth. Improving the efficiency of public spending and administration is also a key element of fiscal reform.

Promoting competition and an enabling environment
Competition and the entry of new firms encourage investment, innovation and reallocation among firms to boost productivity. Pro-competition product market regulations help boost the speed at which new sectors and businesses grow, the incentives for innovative efforts and the adoption of new technologies.

Improving infrastructure
High quality, accessible infrastructure is the backbone of economic growth and inclusiveness. Public investment contributes to the economy-wide capital stock, including through its role as a catalyst for private investment.

Strengthening the financial system
A healthy financial system plays a critical role in funding investment, smoothing consumption and ensuring that capital is allocated where it is most productive. Financial systems need to contribute to economic resilience as a poorly regulated financial sector may have unintended effects of allocating capital to low return projects and creating boom-and-bust cycles.

Enhancing environmental sustainability
Climate change is a major systemic risk to future growth and well-being. Outdoor air pollution, with an estimated global death toll of over four million annually, affects both growth and well-being. Other significant risks, such as waste management, ocean health and biodiversity loss, would be most efficiently addressed through multilateral approaches.
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2019 OECD Technical Report on Progress on Structural Reform under the G20 Enhanced Structural Reform Agenda

1. Introduction

At the G20’s request, this OECD technical report to G20 Finance Ministers and Governors provides an assessment of progress on structural reforms and remaining needs to achieve strong, sustainable, balanced and inclusive growth under the G20 Enhanced Structural Reform Agenda (ESRA) agreed at the Hangzhou summit in 2016.1,2,3 The OECD delivered the first ESRA report in 2017. This second report takes stock of the G20 reform progress since 2017 and outlines the scope for further policy action. The report also outlines best practice reforms in G20 countries in the different policy areas.

Over the past year, the global economy has slowed down, amidst heightened policy uncertainty, persistent trade tensions and declines in business and consumer confidence (OECD, 2019a). GDP growth in some European G20 countries is particularly weak (e.g. Germany, Italy and the United Kingdom). In emerging-market G20 economies, growth has remained on average higher than in advanced G20 countries.4 However, uncertainty is increasing about future growth in China while Argentina, Brazil, Turkey and South Africa have experienced significant growth volatility. Greater structural reform ambition in all economies would help offset the negative impacts of rising restrictions on trade and cross-border investment, and to enhance medium-term living standards and opportunities for all.

The slowdown comes at a time when digitalisation, globalisation, ageing and environmental degradation are key forces shaping economic developments. Slow income growth and unequal opportunities are pressing challenges in many countries. Structural reforms are key for economies to cope with these challenges, adapt, stay competitive and deliver inclusive growth. Across the G20, structural reforms are crucial to tackle these long-term challenges and they can also support confidence, demand and growth in the short term especially when combined with macroeconomic policy initiatives.

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1 The report was prepared by a team including Tomasz Kozluk, Nicolas Ruiz, Agnes Cavaciuti, Dorothée Rouzet, Oliver Röhn, Lukas Lehner, and Colombe Ladreit de Lacharrière, under the supervision of Aida Caldera Sánchez and Asa Johansson. Editorial support was provided by Penny Elghadhab and Wendy Stokle provided communication support. The report benefited from inputs from the country desks of the country studies branch of the OECD Economics Department and from comments from Cristiana Vitale (Head of the Product Market regulation work-stream) and other OECD directorates. The report also greatly benefitted from G-20 country delegates feedback.

2 The 24 July 2016 Chengdu Communiqué asked “the OECD to help assess G20 progress and challenges within the structural reform priority areas by producing a technical report, with input from other international organizations, using the common set of indicators.”


4 Throughout the report, G20 Emerging refers to Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa and Turkey; and G20 Advanced refers to Australia, Canada, France, Germany, Italy, Japan, Korea, the United Kingdom, the United States and the European Union.
This technical report comprises five sections. Section 2 describes the G20 Enhanced Structural Reform Agenda. Section 3 provides an overview of the most pressing reform challenges to promote strong, inclusive and sustainable growth. Section 4 presents the progress and recent reform of the G20 members in the nine structural priority areas agreed by G20 members. Section 5 provides country-specific notes assessing progress in priority areas for each G20 member individually. The Annex outlines the data sources used.

2. The G20 Enhanced Structural Reform Agenda

After the global financial crisis, the G20 set a comprehensive goal of achieving strong, sustainable and balanced growth with structural reform as a key part of achieving this goal. G20 members started to coordinate their actions with the Mutual Assessment Process through which they identified common objectives for the global economy, the policies needed to reach them, and the progress toward meeting these shared objectives.

Table 1. Overview of the G20 Enhanced Structural Reform Agenda

<table>
<thead>
<tr>
<th>G-20 Structural Reform Priorities</th>
<th>Structural indicators</th>
<th>Policy indicators</th>
<th>Outcome indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting trade and investment openness</td>
<td>Implicit barriers to trade and investment OR*</td>
<td>Trading across borders</td>
<td>Labour productivity</td>
</tr>
<tr>
<td>Promoting competition and an enabling environment</td>
<td>Barriers to entrepreneurship OR*</td>
<td>Starting a business</td>
<td></td>
</tr>
<tr>
<td>Encouraging innovation</td>
<td>Public funding of business R&amp;D (% of GDP) AND R&amp;D tax incentives (% of GDP) OR*</td>
<td>Total spending on R&amp;D (% of GDP) OR*</td>
<td></td>
</tr>
<tr>
<td>Improving infrastructure</td>
<td>Public investment (% of GDP) OR*</td>
<td>Investment (% of GDP)</td>
<td></td>
</tr>
<tr>
<td>Advancing labour market reform, educational attainment and skills</td>
<td></td>
<td>Employment to population ratio</td>
<td></td>
</tr>
<tr>
<td>Improving and strengthening the financial system</td>
<td></td>
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<tr>
<td>Promoting fiscal reform</td>
<td></td>
<td></td>
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<tr>
<td>Enhancing environmental sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promoting inclusive growth</td>
<td></td>
<td>Gini coefficient OR*</td>
<td></td>
</tr>
</tbody>
</table>

Note: G20 countries chose their preferred indicator when different options were available. The “barriers to trade and investment” indicator is one of the six mid-level components of the OECD product market regulation (PMR) indicator. The “barriers to entrepreneurship” indicator has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”.

Under the Chinese Presidency in 2016, G20 members formulated an Enhanced Structural Reform Agenda (ESRA) to implement structural reforms to boost growth and employment as well as to address inequality. The G20 ESRA identifies nine priority areas for structural
reform, sets out guiding principles for each priority area, and establishes a set of agreed indicators mapped to priority areas.\(^5\) Table 1 presents the mapping of outcome with policy indicators to help assess and monitor the progress on structural reforms. The indicator-based assessment is complemented with input from the OECD’s teams of country experts.

3. G20 reform challenges to promote strong, inclusive and sustainable growth

*Longer-term growth prospects are modest*

Structural reforms are an important driver of growth over the medium to long-term and—in combination with macroeconomic policies they are—a key element of achieving the G20’s objective of strong, sustainable, balanced and inclusive growth. GDP per capita in G20 countries is on a lower growth path than prior to the global financial crisis (Figure 1). This reflects not only less favourable demographic trends but also the consequences of the past decade of sub-par investment and productivity growth. In the longer term, productivity growth will be crucial to ensure strong and sustainable increases in living standards.

**Figure 1. GDP per capita is on a lower growth path than before the crisis**

GDP per capita in thousand USD, constant 2010 prices and PPPs

*Note: Simple averages.*

*Source: OECD, Economic Outlook Database.*

*Productivity growth has slowed*

For several G20 countries, the productivity slowdown started before the crisis. However, since the crisis, the slowdown has become more pronounced and affected nearly all countries (Figure 2, Panel A). Since 2008, labour productivity has grown at only about half the pace of that experienced in the mid-2000s. Labour productivity growth has been stronger in emerging-market economies (EMEs) than in advanced G20 countries, generally due to a catching-up effect, but the slowdown is also visible in EMEs including China and India. Weak productivity growth in G20 countries is due to both lower investment and lower multi-factor productivity growth. Long-term structural impediments include a decline in business dynamism, a slowdown in investment in knowledge-based capital and

\(^5\) The details are laid out in the 2016 paper “G20 Enhanced Structural Reform Agenda” prepared by the G20 Framework Working Group.
insufficient diffusion of new technologies, production and management practices from best-performing firms to other firms.

Figure 2. Productivity growth has been slowing, but employment rates are close to pre-crisis levels

Labour market conditions are relatively strong

Labour market conditions have generally been improving since the early 2010s. Employment rates in G20 countries are close to pre-crisis levels (Figure 2, Panel A). Many advanced and emerging-market G20 economies have seen rising employment on the back of the upswing in economic activity in recent years. In some countries, the employment rate is now higher than before the global financial crisis, for example in Germany, Indonesia, Saudi Arabia and Turkey. Nevertheless, in some countries such as China and the United States, the share of people in work is lower than before the crisis, partly because of population ageing. In parallel, unemployment rates have declined in most G20 countries and labour shortages have emerged in some countries, particularly for high-skilled workers. However, in many countries the quality of jobs has not kept up with the quantity, as a significant share of new jobs created are involuntary part-time or non-regular, with weaker social security coverage. This has been the case particularly in some European G20 countries. Informality remains high in some emerging-market G20 economies and in a few developed G20 economies.

Lower-income households have benefitted little from growth

Inequality and poverty are pressing challenges. In many advanced G20 economies, lower-income households benefited little from economic growth in the years following the global financial crisis and are falling behind the rest of the society (Figure 3, Panel A). This increase in inequality largely reflects an increase in market income inequality at the bottom of the income distribution. Moreover, in the past two decades income redistribution through taxes and transfers has weakened in some advanced G20 countries (Causa and Hermansen,
More recently, tightening labour markets are translating into comparatively strong income gains for those at the bottom of the income distribution in some G20 countries. By contrast, in many emerging-market economies, poverty and inequality have fallen in the past decade. For example in Brazil and Indonesia, sustained poverty reduction via social protection policies has led to reductions in overall inequality. Still, disposable income inequality in emerging-market economies remains high (Figure 3, Panel B).

Figure 3. Inequality is a pressing challenge in many countries

1. G20-Emerging excludes India, Indonesia and Saudi Arabia due to the lack of data. 2016 or last available year.

Environmental pressures are rising

Progress in ensuring environmental sustainability is still far from G20 countries’ aspirations to prevent severe climate disruptions, including the longer-term goals of the COP 21 agreement. Greenhouse gas emissions are far off-track from the zero net global emissions in the second half of the century (OECD, 2013). Emissions are on an upward trend in emerging-market G20 countries, while they have stabilised at a high level in advanced G20 countries (Figure 4). More recent data from the International Energy Agency shows that global energy-related CO₂ emissions continue to rise (IEA, 2019). Urgent action is required to prevent environmental degradation and its harmful long-term effects on social welfare and living standards.
4. G20 reform progress and further reform needs

One way to assess G20 economies’ collective reform progress is through the lens of implementation of National Growth Strategy Commitments. In 2014, under the Australian Presidency, G20 members agreed to develop National Growth Strategies, with policy commitments to raise their combined GDP by at least 2% above baseline by 2018 (IMF-OECD, 2014). G20 Leaders called on the OECD, the IMF and the World Bank to support this process by assessing the progress in implementation and quantifying the growth impact of members’ Key Commitments from the Growth Strategies. Figure 5 shows the progress on implementation of the 2016 Hangzhou and the 2017 Hamburg key commitments as assessed in 2018 by the OECD, IMF and the World Bank.

G20 economies issued around 440 commitments at the 2016 Hangzhou and the 2017 Hamburg summit combined. Most countries made commitments in the areas of advancing labour market reform, educational attainment and skills, promoting competition and enabling environment and improving infrastructure (Figure 5). Advanced G20 economies committed to and implemented the largest number of reforms in the area of advancing labour market reform, educational attainment and skills. Emerging G20 economies issued and implemented the highest share of commitments in the area of promoting competition and enabling environment.

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6 The final assessment of the Growth Strategies for the 2018 Buenos Aires summit (IMF-OECD, 2018) indicated that nearly 60% of all assessed measures had been fully implemented. The measures implemented since 2014 were estimated to have raised G20 GDP by around 1.3 per cent by 2018. Slower-than-expected implementation means that the collective growth ambition of 2% will be achieved later than anticipated.
Promoting inclusive growth

Reducing inequality and poverty as well as improving equality of opportunity are important objectives for the well-being of citizens. Inclusiveness is necessary to safeguard social cohesion, restore trust and sustain growth in the longer run. This is important as in the past two decades technological advances in G20 economies have not automatically translated into broadly-based productivity and income gains, in particular in the lower part of the earnings distribution (OECD, 2017b). Ensuring that technological progress translates into widespread gains requires equipping workers with adequate skills to meet changing labour market needs, including digital skills. Likewise, it requires firms to adapt organisational structures to be able to reap productivity gains from new technologies. Furthermore, regulatory settings need to keep up with the pace of innovation so to ensure a level-playing field for different firms.

Equality of opportunity is an overarching objective to ensure strong, sustainable and inclusive growth. A society where an individual’s wage, education and occupation are strongly related to those of his or her parents implies unequal opportunities to succeed in life and a waste of talent or misallocation of human skills. The lack of equal opportunities may also affect individuals’ motivation and effort and, in turn, the productivity and growth of countries (OECD, 2018). At the same time periods of strong growth might have positive long-term supply and inclusiveness effects by attracting previously discouraged workers into the labour force, prompting more investment into training and encouraging efficiency-enhancing job switches (Yellen, 2016; Blanchard, 2018).

Inequality of outcomes and inequality of opportunities are related. Evidence shows that inequality of income and wealth shape today and tomorrow’s equality of opportunities. For example, inequality in parental income translates into differences in the investments parents can make in their children. Furthermore, differences in children’s education and health due to their socio-economic background can translate into inequality in their incomes at adult age.
Policies and institutions affecting access to education, health and jobs can contribute to more equal opportunities. Cross-country differences in economic and social policies in these areas can explain some of the differences in observed equality of opportunity across G20 members (OECD, 2018, 2019b).

**Education and skills**

Education and skills policies shape individuals’ life chances, ensure the acquisition of relevant job-market skills and the development and efficient allocation of talents. Reforms that facilitate the access to education and the accumulation of human capital and skills are paramount for enhancing living standards (Cohen and Soto, 2007). In many G20 advanced and emerging-market economies, individuals’ educational outcomes remain strongly linked to their socio-economic status, inherited from their parents.

A second challenge is to raise the quality of education. Progress has been achieved in enrolment rates, in G20 advanced and G20 emerging-market economies, but there are still large gaps across countries in terms of quality of education, as reflected for example in the latest results of the OECD’s Programme for International Student Assessment. Enhancing the quality of education, in particular vocational training and tertiary education, is needed in practically all G20 economies.

A related challenge is to improve the responsiveness of education to labour market needs, as the failure to do so translates into people acquiring obsolete or inadequate skills. Persistent skill shortages and mismatches are costly for individuals, firms and society in terms of lower wages, productivity and growth. Teaching quality can also be improved through different policy levers, ranging from improving teachers’ training to introducing performance-based remuneration schemes or attracting higher performing graduates to the teaching profession and improving their career prospects.

Finally, investment in education infrastructure would be beneficial in several G20 economies, including providing modern technology in classrooms and reducing class sizes. Recent reforms in the area of education and skills are reported in Box 1.

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7 The 2010 G20 Training Strategy and the 2015 G20 Skills Strategy highlighted the challenges and policy directions for G20 countries to improve access to training and skills development and adapt skills policies to the requirements of current and future labour markets.
Box 1. Recent reforms in education and skills policies in G20 countries

- In 2017, **Australia** created a new programme (Youth Jobs PaTH), aimed at improving skills and opportunities of indigenous communities.

- In **Brazil**, a 2017 education reform gave schools more flexibility in adapting curricula to the needs of students. Vocational training programmes for low-skilled workers and scholarships for tertiary education are being expanded.

- In **Canada**, federal government transfers to provinces to support employment and skills training programs were expanded in 2017. Initiatives were launched to identify emerging skills needs (2018) and to identify and implement priorities for the collection, analysis and distribution of labour market information (2017).

- In **China**, the State Council issued in 2018 the implementation details of a life-long VET system for the unemployed, university graduates and rural workers. In 2017, colleges introduced 2311 new undergraduate majors across the country, such as big data technics, robotics engineering and data science.

- **France** halved class sizes for grades 1 and 2 in poor neighbourhoods and lowered the compulsory school age to three years old in 2018. A lifelong learning reform was introduced and additional public expenditures deployed targeting unemployed and low-skilled workers. Finally, apprenticeship procedures have been eased and the management of apprenticeship centres has been transferred to social partners.

- In **Japan**, free early childhood education and care for children aged three to five will be introduced in late-2019. The support for vocational training for non-regular workers has also been enlarged.

- In **Korea**, access to free childcare was revised in 2016 to give priority to working mothers. Moreover, incentives for fathers’ take up of parental leave have been increased.

- In 2017, **Germany** increased financial support for individuals pursuing life-long learning, for vocational education graduates and universities. The federal government increased the funding for school infrastructure in financially weak municipalities. A 2018 law provides more financial support and counselling for lifelong learning. Support for continuing vocational education and training has been expanded for workers whose jobs are at risk due to technology or structural changes, or who wish to pursue vocational training in a profession affected by skilled labour shortages.

- In **Indonesia**, the government increased the use of the national poverty database to improve the targeting of conditional cash transfers to facilitate school attendance for children from poor households.

- In 2017, the **United Kingdom** increased spending on lifelong learning pilots to test different approaches to help workers retrain and upskill throughout their adult lives.

- In **South Africa**, starting in 2018 fee-free tertiary education is being phased in for qualifying first-year students from low-income households.

- In **Spain**, vocational education and training was reformed in 2018-19 by increasing the involvement of the private sector in the design of the programmes, simplifying administrative procedures and reinforcing digital skills.

Source: OECD Reform Database.
**Labour market reforms and better inclusion in the labour market**

Lifting policy barriers and disincentives to employment can promote growth and ensure more equal access to the labour market. For example, differences in working conditions stemming from gaps in labour market protection between regular and non-regular contracts (so-called labour market dualism) can affect access to quality jobs. Excessive protection of regular contracts can leave a significant share of workers unemployed, in poor quality non-regular contracts or in the informal sector. Informal and low quality jobs often offer lower wages and poorer, if any, security and social protection coverage. Tackling informality and promoting high-quality formal sector jobs are key issues in, for example, Indonesia, India, Italy, Mexico and Turkey. Japan, Korea and Spain have scope to reduce the dualism in the labour market.

High average and marginal taxes on labour incomes can reduce individuals’ labour supply and raise unemployment, especially among workers with low incomes. High employer social security contributions and payroll taxes increase labour costs and weigh on firms’ labour demand. In countries with weak public-administration capacity and legal institutions, excessively high social security contributions and tax wedges are also major drivers of informality. The labour income tax wedge is high in a number of G20 countries, including Argentina, Italy, Germany and Russia.

Addressing policy-related barriers is also important to improve the opportunities of groups with weaker positions on the labour market – such as women, minorities or migrants. Promoting female participation is a key issue in G20 emerging-market economies as well as in G20 advanced economies, and further progress needs to be made on the G20 Brisbane commitment to reduce the gender gap in labour force participation rates by 25% by 2025. Women are overrepresented among (involuntary) part-time workers, or more likely to be in the informal economy. The disproportionate share of women in part-time and precarious work can often be traced to barriers or disincentives provided by policies, such as insufficient childcare provision or joint spouse income taxation. Promoting female participation in the labour market will not only ensure better opportunities for women, but will also offer more opportunities to children from disadvantaged backgrounds. For example, families where no one is participating in the labour market and single mothers face greater poverty risk, and their children are more likely to face lifetime disadvantages.

Unemployment benefits, social protection and active labour market policies aim to provide income support during unemployment spells and facilitate the return to work via job counselling or training. They help to achieve a better matching of workers and skills, and can improve resource allocation and productivity. This is particularly important in countries with high and sustained long-term and youth unemployment rates, or in countries where large segments of the population are facing important difficulties to access the formal labour market. Activation policies are most effective where the unemployed receive income and employment support in return for active participation in job search and training. Examples of labour market reforms in G20 countries are listed in Box 2.
Box 2. Recent reforms to boost the efficiency and inclusiveness of labour markets in G20 countries

- **Germany** increased funding for child day care services by approximately EUR 1.1 billion, from 2017 to 2020. A law in force in 2019 grants employees the right to return to their previous working time arrangements following a limited period of part-time employment. Moreover, to foster the integration of migrants, since 2016 refugees with good prospects of staying can participate in a job opportunity programme financed by the Federal Government. In 2019, the earnings ceiling for reduced social security contributions was increased from EUR 850 to 1300 a month.

- To foster entrepreneurship opportunities for women, the Bank of Canada has committed to investing CAD 200 million in women-led technology firms over 2018-19 to 2022-23.

- In **France**, a 2017 labour market reform aimed at facilitating collective wage bargaining and firm-level negotiations, as well as at reducing legal uncertainty surrounding dismissals for open-ended contracts. It also regulated the administrative extensions of sector-level agreements by setting up an independent committee to evaluate the economic and social effects of administrative extensions. New unemployment insurance rights have been made open to some self-employed workers and to resigning employees subject to conditions.

- In **India**, rules for fixed-term contracts were softened in 2018 and workers with fixed-term contracts were given access to the same social insurance benefits as permanent workers. Moreover, maternity leave was extended to 6 months and a childcare facility was made mandatory for establishments with 50 or more employees.

- In **Italy**, the 2015 Jobs Act introduced a permanent contract where employment protection increases with job tenure for new hires, while grandfathering existing contracts. Social security contributions for new permanent contracts and exemptions for firms located in southern regions hiring unemployed young workers were introduced, though on a temporary basis. The new agency (ANPAL) for coordinating active labour market policies across regions has been operational since 2017. The minimum income scheme conditional on participation in activation programmes was rolled out nationally in 2018 and boosted significantly in 2019. In 2018, EUR 1 billion per year was allocated for 2019 and 2020 to revamp public employment services.

- In **Japan**, to promote the engagement of all available talents in the labour market amid rapid population ageing, a plan to expand childcare capacity by 320,000 children by 2020 was launched in 2018. Guidelines for equal or balanced treatment between regular and non-regular workers were also formulated in 2018.

- **Korea** expanded training programmes aimed at older workers and subsidies for those who participate in 2018, while also tripling spending on the earned-income tax credit between mid-2018 and mid-2019 and increasing minimum pensions.

- To reduce barriers to labour mobility, in 2017 the **United Kingdom** introduced the Housing Infrastructure Fund to deliver 100,000 new homes in areas of high demand, and an additional 40,000 affordable homes.

- **Saudi Arabia** introduced the Citizen Account Program in 2017, a cash transfer programme targeting particularly low-income households.

- A national minimum wage was introduced in **South Africa** starting 2019.
• In Spain, the minimum wage was increased and social security contributions for very short-term contracts were raised in 2018. Parental leave was extended from four to five weeks in July 2018 and the progressive equalisation of parental and maternal leaves by 2021 was approved.

• In Turkey, starting from 2018, employer contributions for newly hired workers have been considerably reduced until 2020.

Source: OECD Reform Database.

Promoting trade and investment openness

Over the past decades, trade and market openness have gone together with better economic performance in countries at different levels of economic development, creating new opportunities for workers, consumers and firms (OECD, 2017c). Trade openness benefits firms by giving access to larger markets, allowing them to increase the scale of their production and source a wider range of intermediate inputs, and encouraging market competition and innovation. Trade also facilitates the diffusion of new technologies around the world, benefitting companies and people. For consumers, trade openness provides greater access to goods and services at a lower price.

Participation in global value chains (GVCs), where goods and services cross several borders along different production stages, allows lower-income countries to access world demand and advanced technologies more easily without having to develop an entire industry. Increased openness to FDI can help facilitate integration into GVCs and boost productivity through technology transfer and the provision of sophisticated inputs within multinational networks. However, trade within GVCs can magnify the negative impact of tariff and non-tariff trade barriers, as the effects spill over through greater interconnections.

The OECD-WTO-UNCTAD report on G20 Trade and Investment Measures documents an increasing trend in the number and coverage of trade-restrictive measures, such as tariff increases, import bans and export duties in G20 countries, since the global financial crisis, with a particular surge in the coverage of such measures over the past year (OECD-WTO-UNCTAD, 2019). In parallel, global trade growth has stalled (OECD, 2019a), emphasising the need to halt the move towards protectionism and reinforce the global rules-based international trade system through multilateral dialogue and regional agreements.

There also remains significant variation across G20 advanced and G20 emerging economies in terms of their level of restrictiveness to FDI, with restrictions in emerging G20 economies being on average significantly higher. Many primary and service sectors remain partly off limits to foreign investors.

Reducing barriers to trade and foreign direct investment (FDI) can generate strong productivity gains, especially in G20 emerging-market economies with large productivity gaps and significant restrictions to trade or FDI, such as Argentina, Brazil, Indonesia and Russia. Both G20 advanced economies and G20 emerging-market economies would benefit from preserving and enhancing trade openness and avoiding the imposition of new trade-distorting tariffs, in particular in the context of current trade tensions. In addition, G20 economies still exhibit significant non-tariff barriers to trade. Enhancing trade facilitation, notably by measures to modernise and simplify customs procedures in emerging-market economies, helps improve the capacity to export and to import high-quality inputs. In this respect, the implementation of the
WTO Trade Facilitation agreement is a step forward. Nonetheless, recent efforts to facilitate trade and FDI in the G20 have been relatively scarce (Box 3).

**Box 3. Recent reforms to promote trade and FDI openness in G20 economies**

The OECD-WTO-UNCTAD report on G20 Trade and Investment Measures documents a surge in the number and coverage of trade-restrictive measures such as tariff increases, import bans and export duties in G20 countries (OECD-WTO-UNCTAD, June 2019). Nevertheless, some measures to facilitate trade and FDI have been taken in recent years:

- **In Argentina**, some tariffs and non-automatic product import licenses have been reduced since 2017.
- **Brazil** removed foreign equity caps in air transport in 2019.
- In March 2019, **China** promulgated the Foreign Investment Law, aiming to promote further opening up, better protect the legitimate rights and interests of foreign investors, foster fair competition and create a more stable, transparent, predictable market environment for foreign investment. In 2018, China reduced most favoured nation (MFN) tariffs for more than 3,000 products, lowering China’s overall tariff level to 7.5% by the end of 2018, from 9.8% in 2017.
- In 2018, **Indonesia** relaxed foreign investment restrictions in the insurance sector and allowed foreign universities to open branches in Indonesia in co-operation with local private universities.
- In 2016, **India** removed (or raised) caps on FDI in activities such as asset reconstruction, trading in manufactured food products, defence sector, broadcasting carriage services, brownfield pharmaceutical projects, brownfield airport projects, air transport services and private security agencies.
- Reform in **Mexico**, effective in 2016, raised foreign investment caps for the telecommunications and broadcasting sectors.
- The WTO Trade Facilitation Agreement, concluded in Bali in 2013 and aimed at reducing the costs and time needed to export and import goods, entered into force in 2017.
- In 2016, a free trade agreement was reached between the Southern African Development Community (SADC) (including **South Africa**) and the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA), agreeing on tariff liberalisation and related rules.
- In 2017, the free trade agreement between **Canada** and the **European Union** came into force.
- The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) entered into force at the end of 2018, including **Australia**, **Canada**, **Japan** and **Mexico**.
- The free trade agreement between **Japan** and the **European Union** came into effect in 2019.

Source: OECD Reform Database.

**Promoting competition and an enabling environment**

Competition and the entry of new firms encourage investment, innovation and reallocation among firms to boost productivity. Pro-competition product market regulations help raise productivity by boosting the speed at which new sectors and businesses grow, the incentives for innovative efforts and the adoption of new technologies, as well as the capacity of the economy to allocate capital and labour resources to their best use. Estimates
of the potential pay-offs from reforms to reduce regulatory barriers to entry and competition suggest strong gains (Egert, 2018).

Barriers to starting a business and to entrepreneurship remain significant, along with challenges regarding the effectiveness of the regulatory frameworks and bankruptcy laws, in many G20 countries. Reducing barriers to starting and expanding a business, and removing unnecessary regulatory barriers to competition, would help foster business dynamism in several countries. Examples of recent actions in this area are reported in Box 4.

**Box 4. Recent reforms to enable competition in G20 countries**

- In **Argentina**, administrative burdens were eased in 2017, including with the creation of a one-stop shop.
- In **Australia**, the implementation of measures to strengthen competition has continued following the 2015 Harper Review. Additionally, amendments to insolvency legislation to facilitate restructuring of failing firms have been made.
- The **Canadian** Free Trade Agreement came into force in 2017, and automatically covers all sectors unless explicitly exempt (e.g. as in the case of agriculture).
- In **France**, the government reorganised the railway sector in 2018 to open up the passenger transport sector to competition.
- In **India**, the Insolvency and Bankruptcy Code was amended in 2017 and now provides a time-bound process to resolve insolvency of companies and individuals. Some cities also simplified the number of procedures for construction projects.
- In **Indonesia**, the central government licensing processes were eased in 2017 and 2018, including through the operation of one-stop shops for large investors that process licences in three hours, the launch of an online single submission system for licensing and by striking out large numbers of regulations in some sectors.
- In **Japan**, the full liberalisation of the retail market for electricity in 2016 resulted in nearly 400 new entrants in the market.
- In **Korea**, several measures to boost competition between developers were introduced in 2017.
- In the **European Union**, mobile telephony roaming charges within the EU were abolished in 2017.
- In **Mexico**, selected caps on foreign equity and private sector participation in network sectors were lifted and the retail fuel market was opened up in 2017. In 2018, the mandate of the regulatory improvement agency was extended to the sub-national level while the Federal Competition Commission (COFECE) was reformed, its advocacy and investigative powers strengthened and its autonomy was improved in the recent years.
- **Saudi Arabia**’s new bankruptcy law came into force in 2018, and a new competition law was approved in 2019.
- In **South Africa**, The Small Business and Innovation Fund established to support entrepreneurs from the idea and pre-start-up phases all the way to the growth stage will begin to operate in the fiscal year 2019/20.

Source: OECD Reform Database.
Encouraging innovation

Innovation, which involves the creation and diffusion of new products, processes and methods, is an important driver of growth and in turn living standards, especially in the long run (OECD, 2015, 2016). Enhancing innovation would benefit both advanced and emerging-market G20 economies. Innovation contributes to growth via a higher efficiency in the use of labour and capital in the production process (i.e. increasing total factor productivity growth). It advances technological progress by underpinning investment in more advanced machinery and equipment as well as knowledge-based capital, including R&D, software, design, skills and organisational capital.

Governments play a key role in fostering a sound environment for innovation. Education policies are critical in this respect, as a skilled workforce is the core ingredient to generate and implement new technologies and ideas. Regulatory settings that ensure a sound business environment enable firms to experiment with new business models and technologies, and to raise resources to implement and upscale them. Finally, public innovation support policies, such as funding of basic research and R&D grants and tax expenditures, can tackle various barriers that entrepreneurs may face, such as the high risks or public good elements associated with breakthrough innovations.

Innovation-related reforms in G20 countries can boost productivity by advancing the technology frontier and encouraging more rapid adoption and diffusion of existing technology. Combined with appropriate policies in education, investment in knowledge-based capital and product market regulations, reforms of specific innovation policies would encourage private sector investment in R&D. Examples of recent actions in this area are reported in Box 5.

Box 5. Recent reforms to boost innovation in G20 countries

- In **Australia**, the 2018-19 budget contains strengthened incentives in the R&D tax credit.
- In **Canada**, the Strategic Innovation Fund was established in 2017 and it allocates repayable and non-repayable contributions to firms of all sizes across industrial and technology sectors.
- In **Italy**, as part of the Industry 4.0 Plan, extra depreciation schemes were introduced starting in 2016 and 2017 for investments in technologies and equipment that are instrumental to the digitalisation and innovation of industrial processes. New R&D tax credits, patent boxes, and tax incentives for collaboration with research centres were introduced in 2017. The 2019 Budget introduced new measures: a EUR 45 million public fund for the 2019–21 period; the National Innovation Fund (a fund of funds) to coordinate all funds and programmes involved in supporting start-ups through venture capital.
- In **Japan**, in 2016 the government launched the Program on Open Innovation Platforms with Enterprises, Research Institutes and Academia (OPERA) to enhance university-industry partnerships to accelerate open innovation.
- In **Korea**, the government has stepped up its support for data, network, and artificial intelligence (DNA) as key components for innovative growth in 2018-19, in particular through subsidies, R&D investment and information sharing.

Source: OECD Reform Database.
Improving infrastructure

High quality, accessible infrastructure is the backbone of economic growth and inclusiveness. Public investment contributes both directly and indirectly to the economy-wide capital stock, including through its role as a catalyst for private investment. High-quality public spending on “soft” infrastructure, such as education, health and research and development contributes to growth and to foster inclusiveness. Solving infrastructure bottlenecks, particularly in transport, electricity, water and sanitation, can also contribute to social inclusion, more equal opportunities, better market access, enhanced labour mobility and a better matching of skills and labour market demand. Investments in energy-efficient green technologies and renewable-energy projects also have environmental benefits, such as reduced pollution and waste.

Strong institutions and effective public governance are key for successful investment projects. Reliable ex ante assessments of investment projects’ social rates of return are crucial to ensure that high returns materialise and to prevent cost overruns and overestimation of future demand (OECD, 2016a). Regulation and framework conditions such as access to markets and pricing regimes also affect the return on investment and help attract private complementary investment.

The G20 has significant infrastructure investment needs, requiring the mobilisation of both public and private sector investment (including through Public Private Partnerships) and efforts to ensure the quality of infrastructure spending.\(^8\) Infrastructure quality and accessibility are particularly poor in some G20 emerging economies such as Argentina, Brazil, India and South Africa. Investment and maintenance of infrastructure including digital investments are also areas of challenges for some advanced G20 countries (e.g. Germany, the United States), while in some others timely and effective project selection is still a problem (e.g. Italy). The current environment of weak global growth strengthens the case for boosting infrastructure investment as part of structural reform packages, given that such investments have high fiscal multiplier effects. Examples of recent actions are reported in Box 6.

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\(^8\) The G20 has highlighted the importance of the quality of infrastructure investment, including in the Leaders’ Communiqué at the 2016 Hangzhou Summit, in the Roadmap to Infrastructure as an Asset Class endorsed by Leaders in 2018 and in the G20 Principles for Quality Infrastructure Investment endorsed by Leaders in 2019.
Box 6. Recent reforms to improve the quality and accessibility of infrastructure in G20 countries

- **Argentina** increased infrastructure investment with several projects developed as public-private partnerships in 2018.

- In 2017, the **European Commission** lowered regulatory capital requirements for investments of insurance and reinsurance companies in qualifying infrastructure projects, aiming at boosting private investment in infrastructure.

- In **India**, a massive electrification programme resulted in providing electricity to all villages in 2018. The government also increased funding for land acquisition in 2017 and 2018, to remove obstacles to key infrastructure projects.

- In late 2016 the **United Kingdom** extended the UK Guarantees Scheme (UKGS) – a guarantee scheme to support private investment in infrastructure projects – to at least 2026. All Public Private Partnerships (PPP) projects are now recorded in the Whole of Government Accounts, a consolidated set of financial statements for the UK public sector.

- In 2019, **Italy** established two central government agencies to improve infrastructure management and project selection at the central and local levels.

Source: OECD Reform Database.

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**Improving and strengthening the financial system**

The financial system plays a critical role in funding investment for productive activities and ensuring that capital is allocated where it is most productive. Greater financial development can promote economic growth, allowing firms to borrow for high-return investments and households to smooth consumption. At the same time, financial systems need to contribute to economic resilience. A poorly regulated financial sector may have unintended effects by misallocating capital to low return projects and creating boom-and-bust cycles. Macro- and micro-prudential policies can help safeguard financial stability and investor protection, while ensuring that the institutional framework is conducive to market financing and safeguarding access to both traditional bank financing and innovative sources of finance. Recourse to macro-prudential tools, for example caps on loan-to-value or loan-to-income, have become more frequent in G20 countries after the financial crisis. A large number of G20 countries have in recent years focussed on implementation of the evolving post-crisis international regulatory system such as capital and liquidity requirements for banks. As a result, significant progress has been made towards the implementation of the Basel III framework. Yet, some emerging G20 countries have scope to strengthen banking sector regulation as well as to enhance financial literacy to enable households to benefit more from financial development.

Some G20 members have also taken measures in the area of capital flow management. The OECD Code of Liberalisation of Capital Movements (OECD, 2019c) is a multilateral agreement that promotes openness, transparency and mutual accountability in capital flow policies and helps countries put in place an appropriate framework for capital flow management to reap the benefits of capital flows while mitigating their risks. The Code is open to adherence by non-OECD countries and has gained new momentum recently, including three non-OECD G20 members (Argentina, Brazil, South Africa) having
requested adherence. The recently completed review of the Code provides new understandings on the treatment of macro-prudential and currency-based financial regulations.

Examples of recent actions to strengthen and improve the financial system are reported in Box 7.

<table>
<thead>
<tr>
<th>Box 7. Recent reforms to the financial system in G20 countries</th>
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<tbody>
<tr>
<td>• In Brazil, a law approved in 2017 introduced a gradual alignment of directed lending rates with market rates by 2022 at the latest.</td>
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<tr>
<td>• In China, steps to open up the financial sector taken in 2018 include allowing majority foreign ownership in the sector. The banking and insurance regulators were merged and the central bank was equipped with additional powers as the lead financial regulator.</td>
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<td>• France introduced counter-cyclical capital buffers (CCyB) at a rate of 0.25% of risk-weighted assets in July 2019, to be increased to 0.5% in April 2020. The United Kingdom introduced counter-cyclical capital buffers at a rate of 0.5% in June 2018, raised to 1% in November 2018. Germany is planning the introduction of counter-cyclical capital buffers of 0.25% as of July 2020.</td>
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<tr>
<td>• In India, a large recapitalisation programme for public banks was launched in 2017, and several public banks were merged in 2017. In August 2019, the government of India undertook further measures aimed at amalgamation of major national banks.</td>
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<tr>
<td>• In Indonesia, the easing of foreign investment restrictions in the insurance sector in 2018 is expected to deepen local capital markets by increasing investor demand for domestic equities and bonds.</td>
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<td>• In Italy, significant banks updated their non-performing loans (NPL) reduction plans in 2018. Following the introduction of a government guarantee (compliant with EU competition rule) on securitisation of NPLs, a secondary market for NPLs has taken off with the participation of foreign and domestic investors.</td>
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<tr>
<td>• In Mexico, a National Financial Inclusion Strategy was finalised in 2016. In 2017, a regulatory framework for FinTech was established, and initial secondary regulation issued in September 2018. In January 2019, an eight-point financial sector plan was announced.</td>
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<tr>
<td>• In the EU reforms were passed to ease and protect cross-border investments in 2017 and 2018 with notably the establishment of a Code of conduct for investors. The EU also harmonized the approach on the priority ranking of bank bond holders in insolvency and in resolution.</td>
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<tr>
<td>• In Russia, the Central Bank adopted its first Financial Inclusion Strategy (FIS) for 2018-20. In compliance with the 2016 financial market development guidelines, the Bank also withdrew many bank licences and improved recovery and resolution mechanisms.</td>
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<tr>
<td>• In Spain, a national macroprudential authority, comprising members of several relevant institutions, was established and given the authority to be able to introduce macroprudential measures, such as countercyclical capital buffers on sector-specific exposures and limits on the sectoral concentration of loans.</td>
</tr>
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</table>

Source: OECD Reform Database.

G20 Finance Ministers and Central Bank Governors have called on all G20 Members that do not already adhere to consider adhering in the Baden-Baden Communiqué in March 2017.
Promoting fiscal reform

Improving the efficiency of government expenditure and tax systems can boost productivity and raise employment, while contributing to fiscal sustainability, greater trust in government, and increased voluntary tax compliance (IMF-OECD, 2015; OECD, 2019d). On the spending side, improving the fiscal system requires prioritising growth-friendly expenditure such as education, implementing sustainable and efficient social protection programmes, undertaking public infrastructure investment; and improving the efficiency of public administration and public service delivery.

An effective tax system is crucial to raise revenues to pay for key public services, support inclusion and redistribution, and maintain incentives for economic growth. This requires broadening tax bases, phasing out inefficient tax expenditures and improving tax collection. It also means relying more on less growth-distortive forms of taxation, such as property taxation, consumption or environmental taxes, while balancing the growth and redistribution objectives of the tax system. Continuing to shift away from fossil fuel subsidies to more effective social support, in particular through targeted cash transfers, is also key (IEA and OECD, 2018; World Bank, 2014). In recent years, several G20 economies took bold actions in these areas, examples of which are reported in Box 8.

Improving the efficiency of public spending and administration is also a key element of fiscal reform. It can improve the delivery of value-for-money public services, facilitate the implementation of policies, law enforcement and more generally save resources. It can also help secure trust in the government. Many G20 countries could reap significant gains from reforms in this area.

An important international aspect of fiscal and tax policies is related to base erosion and profit shifting (BEPS) – tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations without actually shifting economic activity. BEPS undermines the fairness and integrity of tax systems, providing an unfair competitive advantage to businesses operating across borders and discouraging voluntary tax compliance. In this respect, the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) brings together over 130 jurisdictions on an equal footing to collaborate on the implementation of the BEPS Package and addressing the tax challenges arising from the digitalisation of the economy. With respect to tax transparency, the automatic exchange of financial account information that started in 2017 and 2018 has delivered impressive results with the exchange of 47 million offshore bank accounts, with a total value of EUR 4.9 trillion. These results add to the over EUR 95 billion in additional revenue identified through investigations and voluntary compliance programmes and to the large decrease of bank deposits in international financial centres.
Box 8. Recent fiscal and tax reforms in G20 countries

- In 2017, **Argentina** reduced corporate income taxes and increased taxes on undistributed profits to encourage investment. A 2017 reform established a timeline for the gradual reduction of provincial revenue-based taxes.

- **Australia** lowered corporate income taxes for SMEs in 2017 and adopted a path of short- and medium-term reductions in personal income taxes targeted to low- and middle-income earners.

- In 2018, **Canada** removed a number of inefficient tax expenditures such as restricting income splitting between household members within the small business tax regime.

- As of April 1st, 2019, **China** has lowered the standard VAT rate from 16% to 13% and the reduced VAT rate from 10% to 9%.

- **India** introduced the Goods and Service Tax (GST), in effect as of 2017, replacing various taxes on goods and services levied by the central government and states by a single tax on value added. The GST reform harmonised indirect tax rates on goods and services that previously differed across different states and the centre. Goods and services are divided into four categories of tax rates, that is, 5%, 12%, 18% and 28%. A tax rate over 28% is levied on some luxury, sin and demerit goods (including sodas, tobacco and luxury cars). Several items are exempt, including alcohol, tobacco and petroleum products. Firms with a turnover of less than INR 4 million are exempt from GST. Small firms are exempt.

- **Indonesia** has been improving its tax administration to raise compliance. The tax office is investing in its IT capacity and is using technology to simplify registration and tax payment.

- **Japan** cut the corporate income tax rate from 23.4% in 2016 to 23.2% in 2018 (FY2016 tax reform). The consumption tax rate was hiked from 8% to 10% October 2019.

- **Russia** increased the standard VAT rate from 18% to 20% in 2019.

- **Saudi Arabia** introduced a VAT tax in 2018, with a 5% levy applying to most goods and services.

- In **Spain** measures to broaden the corporate income tax base were introduced in 2017 and taxes on alcohol and tobacco were increased. An electronic VAT filing system came into effect in 2017 to address VAT fraud. The labour tax wedge was reduced in 2018 via increasing the threshold for income exempt from taxation.

- The **United States** adopted a major tax reform at the end of 2017. The federal statutory corporate income tax rate was reduced from 35% to 21% together with an increased bonus depreciation rate (to be phased out by 2026). Personal income tax deductions were introduced for individuals receiving income from pass-through businesses (to expire by 2025). Business interest deductions were disallowed for interest in excess of 30% of measures of business income. A one-off tax on un-repatriated foreign earnings was levied at either 8% or 15.5%, depending on whether the earnings are illiquid or liquid. The reform involved a shift towards a semi-territorial tax system, including measures to discourage moving intellectual property to book profits in low-tax jurisdictions. Personal income tax rates were reduced for most brackets starting from 2018 (to expire in 2025), while the indexation of tax brackets was changed to better reflect inflation. The standard deduction was increased and the Child Tax Credit expanded. The reform capped state and local tax deductions to USD 10,000 and reduced deductions for education and medical expenses. The threshold for the estate tax was doubled to USD 22 million while the mortgage interest deduction was capped at interest on USD 750 000 worth of loans.

Source: OECD Reform Database.
**Enhancing environmental sustainability**

The environment underpins the foundations of any economic activity and life itself. Climate change is a major systemic risk to future growth and well-being, even if the exact effects are uncertain. Four years after the Paris Agreement, greenhouse gas emissions in the G20 are not on track to meet the globally agreed long-term targets. Outdoor air pollution affects both growth and well-being, with an estimated global death toll of over four million annually, many of them in G20 economies. Waste, oceans and biodiversity loss are among other significant risks and potential bottlenecks, which would be most efficiently addressed through multilateral approaches.

Examples of recent international actions are reported in Box 9. In addition, in 2019, Japan and the United Kingdom adopted long-term carbon neutrality targets.

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**Box 9. Recent international actions to improve environmental sustainability**

- In late 2018, the 24th Conference of Parties in Katowice made progress towards the implementation of the 2015 Paris Agreement to mitigate and adapt to climate change, in particular by agreeing on rules on how to measure and report on emission-cutting efforts.
- Since 2016, six G20 economies have undergone the process or are in the process of peer reviewing their fossil fuel subsidies, including China, the United States, Mexico, Germany, Indonesia and Italy. In mid-2018 Argentina and Canada agreed to conduct a peer review.
- Starting 2018, the European Union is pursuing a new Plastics Strategy, which entails rolling out a future ban on selected single use plastic products, measures to reduce plastic use and improved collection, recycling and labelling.
- The European Commission adopted its “Action Plan on financing sustainable growth” in March 2018. Key actions currently being implemented include the proposal to establish an EU-wide classification system for environmentally sustainable economic activities (“EU taxonomy”), environmental sustainability disclosure requirements for the financial sector and new benchmarks to help steer private capital to low-carbon investments.
- In October 2019, the European Union, Argentina, Canada, Chile, China, India, Kenya, and Morocco launched the International Platform on Sustainable Finance, aiming to improve the cooperation to scale up environmentally sustainable finance and promote the integration of markets for “green” financial products.

Source: OECD Reform Database.
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5. Country Notes

ARGENTINA

Growth performance has been weak and highly volatile in recent years and the economy is currently going through a severe recession. Labour productivity slightly decreased compared to 2011 while the employment to population ratio has been falling since 2007. A draft law to promote gender equality and increase female labour force participation was submitted to Congress in 2018, but has not yet been voted on.

Source: Panel A: OECD calculations based on OECD, National Accounts, Economic Outlook and International Labour Organisation (ILO), Key Indicators of the Labour Market (KILM) Databases; Panel B: ILO KILM, Table 2A.

The total investment rate has continued its trend decline, reflecting a poor business climate and difficulties to access financing. Yet, public infrastructure investment rose in 2017 and a new airport for low-cost flights in Buenos Aires started operations in 2018. In the face of fiscal adjustment, several infrastructure projects are now being developed as public-private partnerships.

Source: Panel C: International Monetary Fund, International Financial Statistics Database. For Argentina, Mexico and South Africa, the source is OECD, Economic Outlook Database; Panel D: OECD, Science and Technology Indicators Database except for Brazil, India and Indonesia for which the source is World Bank, World Development Indicators Database.
ARGENTINA (continued)

Barriers to entrepreneurship, as measured by the OECD Product Market Regulation indicator, are above the average of G20 emerging economies. Many administrative procedures remain burdensome and restrict competition. High tariff barriers continue to preclude Argentina from stronger participation in international trade and global value chains. The World Bank Doing Business indicator on Trading across borders is markedly below the average of G20 emerging economies. Some progress has been made in specific areas since 2017, including zero tariffs for notebook and tablet computers, reductions in the number of products subject to non-automatic import licenses, and progress in trade facilitation through the implementation of a one-stop shop. At the same time, export taxes have been temporarily reintroduced in the context of an exceptionally difficult fiscal situation.

Source: Panel E: World Bank, Doing Business Database; Panel F: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
GDP per capita has been growing at an annual pace of around 1% following the global financial crisis, and labour productivity growth has picked up. The employment to population ratio has been declining on the back of an ageing population. Inequality, as measured by the Gini index, has increased modestly since 2011. Steps taken since 2017 include a new programme aimed at improving the skills and opportunities of indigenous communities.

The total investment rate has declined since 2012, amid substantial declines in mining investment. Direct public support to business R&D has not caught up to pre-crisis levels, but indirect support has increased significantly. Since 2015, the government is implementing the National Innovation and Science Agenda, aiming at making the indirect support more effective. The Australian Government also recently implemented additional incentives in R&D tax credits in its 2018-19 budget.
AUSTRALIA (continued)

Barriers to entrepreneurship, as measured by the OECD Product Market Regulation indicator, are well below the average of G20 advanced economies, while barriers to trade and investment are slightly above the average of G20 advanced economies. Measures to strengthen competition have continued to be implemented following the 2015 Harper Review.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
BRAZIL

Income per capita has been declining since 2014, and despite a recent rebound, has yet to recover to its 2010 level. Labour productivity remains weak and the employment to population ratio has fallen sharply over the past decade. Inequality is high, but has been declining steadily throughout the 2000s. Low and middle-income households shared in the benefits of growth with better access to education as well as targeted poverty reduction programmes. In order to reduce high school drop-out rates, more flexible school curricula were adopted in 2017 to better fit the needs of the students. Vocational training programmes for low-skilled workers as well as scholarships for tertiary education have been expanded since 2011, though a better alignment of training content with labour market needs could enhance the effectiveness of these policies.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, Table 2A; Panel C: World Bank, Global Database of Shared Prosperity.

Total investment as a share of GDP has been falling since 2012. R&D tax incentives have fallen since 2012 but remain at higher levels then in the mid-2000s.

Source: Panel D: International Monetary Fund, International Financial Statistics Database. For Argentina, Mexico and South Africa, the source is OECD, Economic Outlook Database; Panel E: OECD, R&D Tax Incentive Indicators, http://oe.cd/rdtax and Main Science and Technology Indicators.
BRAZIL (continued)

The regulatory environment for starting a business and trading across borders, as measured by the World Bank Doing Business indicators, has been improving over time but remains less favourable than the average of G20 emerging economies. Brazil has made some progress in reducing burdensome administrative procedures and scaling back local content requirements in the oil and gas sectors in recent years. In addition, foreign equity caps in air transport were abolished in 2019. Yet, tariffs and local content requirements remain high in international comparison.

Growth in income per capita has slowed compared to pre-crisis rates. While labour productivity increased somewhat recently, the employment-to-population ratio has not recovered to its pre-crisis level, partly reflecting declining labour participation in a context of ageing of the population. Income inequality, as measured by the Gini coefficient, has declined marginally while the median inequality in advanced economies has increased. Incomes of the poorest households stagnated between 2008 and 2013, but have risen since then.

Public investment as a share of GDP is lower than it was post-crisis, but it is nevertheless at a comparatively high level compared with other advanced G20 economies. Direct public support to business R&D has picked up in the post-crisis period from a fairly low level and R&D tax incentives have declined substantially. This represents a welcome rebalancing of R&D support, as recommended by OECD. Implementation of the Innovation and Skills plan announced in 2017 continues. The Plan comprises multiple measures under the themes of people and skills; research, technology and commercialisation; and, investment, scale-up and clean growth.
Regulatory barriers to entrepreneurship, as measured by the OECD Product Market Regulation indicator, are above the average of G20 advanced economies. Entry barriers in professional services and retail trade remain high. Regulatory barriers to external trade and investment, also measured by the OECD Product Market Regulation indicator, have remained comparatively high due to FDI restrictions and the presence of barriers to the entry of foreign suppliers in professional services and transport sectors.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
Growth in income per capita remains high, though it has slowed compared to the pre-crisis era. Labour productivity continues to improve. The employment to population ratio has declined from a relatively high level, driven by ageing. Inequality, as measured by the Gini index, has been decreasing since 2007 and the gap between rural and urban populations has narrowed. In 2017 access to health care, in particular for rural populations, was improved by increasing the portability of health insurance.

The investment rate has declined somewhat since 2012 as the rebalancing of the economy continues, but remains at a high level. Total spending on R&D has been rising steadily since the early 2000s. At the same time, education reforms were undertaken in order to ensure a better match between the demand and supply of skills on the labour market. In particular, in 2017, colleges introduced 2311 new undergraduate majors in big data technologies, robotics engineering and data science. In addition, vocational schools are now able to access foreign capital more easily and their integration with industry has been further increased.
Barriers to trade, as measured by the World Bank Doing Business indicator, are below the average of other G20 emerging economies. The establishment of free trade zones has fostered business exchanges. Regulatory barriers to entry have eased significantly since 2014. Reforms to simplify administrative procedures in the past few years have substantially reduced the burden for new entrants, increasing overall efficiency. According to the World Bank Group's Doing Business 2020 released in October 2019, China's ranking saw notable improvement to 31, from 46 in the previous year. In parallel, steps to open up the financial sector further to FDI were implemented in 2018, including allowing majority foreign ownership in the banking sector.

Growth in income per capita picked up in 2015 and has remained broadly stable since then. Labour productivity has increased since 2011 and the employment to population ratio has recovered to its pre-crisis level. Inequality, as measured by the average Gini coefficient across EU Member States, has been broadly stable since the pre-crisis period and is well below the average of G20 advanced economies.

As a share of GDP, public investment has declined compared to pre-crisis levels but it remains above the average of G20 advanced economies. The lowering of regulatory requirements for investments of insurance companies in infrastructure in 2017 aims at boosting private infrastructure investment. Direct public funding to business R&D has fallen markedly since 2012 while indirect support to business R&D has been increasing substantially since the mid-2000s.
EUROPEAN UNION (continued)

Overall barriers to starting a business, as measured by the World Bank Doing Business indicators, have declined on the back of measures taken to reduce administrative burdens. Efforts to spur competition have been undertaken, for instance the elimination of mobile telephony roaming charges within the EU in 2017. Barriers to trading across borders are low on average for EU countries, and below the average of G20 advanced economies. The 2017 services package aims at further facilitating the mobility of professionals between EU Member States and streamlining cross-border administrative procedures in construction and business services.

FRANCE

Post-crisis GDP per capita has continued to grow slowly, while labour productivity is relatively high and increased recently. The employment to population ratio has been declining since the crisis, mainly driven by demographic trends as the share of people between 65 and 74 years old has increased strongly. Inequality, as measured by the Gini coefficient, remains at comparatively low levels. The 2018 lifelong learning reform and additional public expenditures should help improve labour market inclusion by enhancing access to training for unemployed and low-skilled workers. In addition, apprenticeship procedures for students and employers were eased and the management of apprenticeship centres transferred to social partners.

Public investment as a share of GDP has been on a steady decline since 2012 and is well below pre-crisis levels. Direct public support for business R&D has not fully recovered after the crisis, but indirect support in the form of tax incentives has increased significantly since 2004 and both are higher than the average of G20 advanced economies.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.
Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are comparatively low. Regulatory barriers to entrepreneurship, also measured by the OECD Product Market Regulation indicator, are above the average of G20 advanced economies due to barriers in the service sectors, in particular professions and retail trade. Some reforms have been implemented recently to ease them, such as opening up the railway passenger transport sector to competition.

Source: Panel D: OECD, Economic Outlook Database; Panel E: OECD calculations based on OECD, Science and Technology Indicators Database; Panel F: OECD, R&D Tax Incentive Indicators, http://oe.cd/tdt; and Main Science and Technology Indicators.

Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are above the average of G20 advanced economies due to barriers in the service sectors, in particular professions and retail trade. Some reforms have been implemented recently to ease them, such as opening up the railway passenger transport sector to competition.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
GERMANY

GDP per capita remains among the highest in OECD countries, although its growth slowed markedly after 2011 on the account of lower labour productivity growth driven by weak investment. Average labour productivity growth over the 2012-18 period was only about half of its pace over the 2002-08 period. Unemployment is very low and the employment to population ratio has been improving since the 2000s, from an already high level, partly reflecting stronger employment of older workers. Recent measures on childcare provision and working time arrangements aim at improving female participation. Inequality, as measured by the Gini index, has remained low.

A. Labour productivity
GDP per employee, 2010 constant prices and PPPs, thousands USD

B. Employment to population ratio
15 years old and older

C. Gini coefficient
Disposable income based Index of 0-100

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

Public investment has barely increased as a share of GDP relative to the 2009-12 period and stands at a low level. Total spending on R&D has held up throughout the crisis and is now above its mid-2000s level.
Barriers to trade and investment as well as barriers to entrepreneurship, both measured by the OECD Product Market Regulation indicators, are low relative to other G20 advanced economies. Yet, regulatory barriers to competition remain relatively high in some sectors, such as professional services. In 2016, reforms enhanced competition in the mobile market.

Source: Panel D: OECD, Economic Outlook Database; Panel E: OECD, Science and Technology Indicators Database.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
INDIA

Income per capita is now growing faster than in most other G20 countries, driven by increasing labour productivity. Nevertheless, labour productivity remains below the median of G20 emerging economies. The employment to population ratio has been declining since the mid-2007, mainly driven by falling female labour force participation. To help address this issue, in 2017, maternity leave was extended and childcare facilities became mandatory for companies of more than 50 employees. Absolute poverty has declined steadily, but inequality remains high and the bottom 40% have benefitted less from economic growth than the rest of the population.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: World Bank, Global Database of Shared Prosperity.

Both total investment rates and expenditure on R&D rose slightly between the mid-2000s and 2012. Since then, total investment and expenditure on R&D have been falling markedly while poor infrastructure continues to weigh heavily on activity, access to markets and services and the urban/rural divide. A recent massive electrification programme has resulted in providing electricity to all villages in 2018.
Investment and formal activity would benefit from lower regulatory barriers to doing business. In this respect, some progress has been made both at the central government and state levels. Regulatory and administrative barriers to starting a business, as measured by the World Bank Doing Business indicator, have been on a steady decline since 2013. The new bankruptcy law should help shorten insolvency procedures and improve banks’ balance sheet and ability to lend. Barriers to trade across borders, also measured by the World Bank Doing Business indicator, stand below the average of G20 emerging economies. Barriers to FDI have loosened significantly in several sectors, such as finance, food and defence. The implementation of the Goods and Services Tax in 2017 has also helped unify India’s internal market.
Income per capita has grown steadily since 2012, reflecting increasing labour productivity. The employment-to-population ratio is relatively high and has been an upward trend since the mid-2007. Inequality is moderate compared to other emerging market economies and has decreased since 2011.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, Table 2A.

Source: Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries; Panel D: World Bank, Global Database of Shared Prosperity.
INDONESIA (continued)

The overall investment rate increased rapidly until 2012 and stabilised afterwards at a high level. In recent years, the government has promoted infrastructure investment and reforms removed some obstacles to key infrastructure projects related to land acquisition. Public spending on education has been gradually increasing since the early 2000s but remains low relative to other countries as public revenues are low. The government has improved the targeting of conditional cash transfers to facilitate school attendance for children from poor households.

Progress has been achieved in regulatory conditions to start a business, as measured by the World Bank Doing Business indicator. Central government licensing processes were eased in 2017 and 2018, including through one-stop shops for large investors and subsequently an Online Single Submission System for licensing. In addition, in 2018 a regulation was passed to ease the administrative process for hiring foreign workers. Nevertheless, while barriers to entrepreneurship have decreased, regulatory uncertainty continues to impede private investment. Barriers to trading across borders, also measured by the World Bank Doing Business indicator, are slightly higher than the average of G20 emerging economies.

Source: Panel E: International Monetary Fund, International Financial Statistics Database. For Argentina, Mexico and South Africa, the source is OECD, Economic Outlook Database; Panel F: World Bank, World Development Indicators Database.

ITALY

Italy’s recovery following the recession has been modest and GDP per capita remains well below pre-crisis levels. This reflects a combination of persistent structural challenges and weak demand. Labour productivity has been stagnating and the employment rate of the working-age population is still low compared to most G20 advanced economies, despite increasing female labour force participation. Inequality, as measured by the Gini index, has risen since 2007 but recent reforms have been implemented to provide poor households with a guaranteed minimum income, conditional on using public employment and other social services.

The public investment rate has been on a steady decline since 2012. There are deficiencies in the quantity and quality of public investment as well as in the management of the existing infrastructure stock. The establishment of the anti-corruption commission to prevent corruption and implement the new public procurement code is an important step. New measures, adopted in 2018, enhanced investigative powers, introduced stricter penalties and lengthened prescription terms for corruption offences in addition to strengthening whistle-blowers’ protection system. However, recent legislative changes have diminished the role of the anti-corruption commission in implementing the new public procurement code and increased regulatory uncertainty in this area. The 2019 budget plans to establish two central public investment unit to improve infrastructure management and project selection at the central and local levels. Direct public support to business R&D has remained at a low level, but indirect R&D support has increased substantially in recent years. New R&D tax incentives were introduced in 2017.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.
Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are slightly below the average of G20 advanced economies. Regulatory barriers to entry and competition, also measured by the OECD Product Market Regulation indicator, are at par with other G20 advanced economies.
Growth in GDP per capita picked up post-crisis, and has reached its pre-recession pace. Labour productivity remains close to the lower end of G20 advanced economies. The employment to population ratio has reversed a long-term downward trend in part due to the rising labour market participation of women and seniors, against the backdrop of a shrinking working age population. The expansion of childcare capacity by 320 thousand children by 2020 as well as the provision of free early childhood education and care for children aged 3-5 from October 2019 will help raise female participation. Income inequality has remained stable, close to the average of G20 advanced countries.

The total investment rate is close to its pre-crisis level and R&D spending has remained stable, well above the average of G20 advanced economies. The government recently set an agenda of realising “Society 5.0” to better incorporate the advances of the 4th industrial revolution in society. Significant reforms were also implemented in 2018, including regulatory sandboxes and grants as well as tax incentives for high quality investments such as IoT.
Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are at par with other G20 advanced economies. Regulatory barriers to entrepreneurship, also measured by the OECD Product Market Regulation indicator, stand well below the average of advanced economies in the G20. Entry barriers in some service sectors however remain relatively high, in particular professional services. Liberalisation of the retail market for electricity in 2016 resulted in nearly 400 new entrants in the market.

OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors” G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.

Source: Panel D: International Monetary Fund, International Financial Statistics Database. For Australia, Japan and the United Kingdom, the source is OECD, Economic Outlook Database; Panel E: OECD, Science and Technology Indicators Database.
KOREA

GDP per capita has increased steadily since the crisis, on the back of sustained improvements in labour productivity that started before the global financial crisis. Yet, Korea’s labour force works particularly long hours compared to the OECD average, with potential negative effects on well-being. A 2018 law aims to improve work-life balance by reducing maximum working hours. The employment to population ratio has recovered to high levels after a temporary decrease. However, the employment rate of women is 20 percentage points below the rate of men. Inequality, as measured by the Gini coefficient, is higher than the average of G20 advanced economies.

The investment rate has remained unchanged at relatively high levels since the early 2000s. Total spending on R&D has been increasing steadily and, relative to GDP, has doubled since the early 2000s. The government has focused in particular on building an ecosystem for innovative start-ups.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.
Barriers to trading across borders, as measured by the World Bank Doing Business indicator, are at par with other G20 advanced economies. The ease of starting a business, also measured by the World Bank Doing Business indicator, has improved as a result of several government initiatives to cut red tape and lower some barriers in the service sector in recent years. The government announced the “first permission, ex-post regulation” system in September 2017. Furthermore, in 2018, fin-tech start-ups were exempted from regulations for two years if the government judges their services to be innovative. Since early 2019, ICT companies have been allowed to own a stake (up to 34%) in an online-only bank.

MEXICO

After a post-crisis bounce back, growth in income per capita has slowed since 2013, but labour productivity slightly picked up following recent reforms. The employment to population ratio has risen in recent years and stands close to its pre-crisis level. Inequality, as measured by the Gini coefficient, has remained stable, slightly above the median of G20 emerging economies. Poverty remains high and prevalent with only 5% of the national disposable income held by the poorest 20%.

![Graphs showing A. Labour productivity, B. Employment to population ratio, and C. Gini coefficient.]

Source: Panel A: OECD calculations based on OECD, Economic Outlook Database; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

Total investment as a share of GDP has remained relatively stable since the mid-2000s. Spending on R&D as a share of GDP remains low. Low institutional quality and weak rule of law appear to hamper business dynamism by increasing the costs of contract enforcement. This in turn is reducing investment and employment growth.
Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are higher than the average of G20 emerging countries, as stringent barriers to FDI remain in some services sectors such as transportation, logistics and banking, and foreign suppliers still face very high regulatory impediments to enter the Mexican market. Nevertheless, some network industries (i.e. telecoms and energy) have been opened up to FDI. In addition, the cap on foreign equity in air services was increased from 25% to 49% in 2017. The ease of starting a business, as measured by the World Bank Doing Business indicator, has remained broadly unchanged since 2014. Particular sectors such as professional services, retail trade and infrastructure, are limiting entry to new businesses with costly registration procedures and burdensome licensing requirements, particularly at the municipal level.
RUSSIA

GDP per capita has been growing slowly since the 2008 crisis and on the account of declining oil prices and sanctions affecting trade revenues since 2015. The depreciation of the rouble has provided some relief. At the same time, the employment to population ratio remains high and increased slightly in recent years as did labour productivity. Inequality has been consistently decreasing since 2007.

![Graph A: Labour productivity](image)

A. Labour productivity
GDP per employee, 2010 constant prices and PPPs, thousands USD

![Graph B: Employment to population ratio](image)

B. Employment to population ratio
15 years old and older

![Graph C: Gini coefficient](image)

C. Gini coefficient
Disposable income based Index of 0-100

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

Total investment as a share of GDP is higher than in the pre-crisis period but below the average of G20 emerging economies. The overall spending on R&D has slightly increased, in part due to the extension of public-private partnerships. While government support to R&D has increased, it failed to trigger research spending in the business sector.
Barriers to starting a business, as measured by the World Bank Doing Business indicator, have gradually been lowered. Barriers to trading across borders, also measured by the World Bank indicator, are at par with other G20 emerging economies. Yet, several industrial and service sectors are subject to tight restrictions on FDI and trade.

SAUDI ARABIA

Income per capita recovered in 2018 on the back of increasing oil prices, but oil markets have been volatile recently. Labour productivity has decreased since 2011 but the employment ratio has been rising steadily. Female labour force participation has been rising, but from a very low level. Inequality, as measured by the Gini coefficient, has decreased significantly from 2007 and is close to the median of G20 emerging economies.

Both investment rates and public spending on education have been on an upward trend over the past decade. However, investment has recently fallen after having peaked in 2009-12. As part of the Vision 2030 agenda, the government aims to increase public and private investment capabilities to diversify the economy in non-oil sectors.
Administrative barriers to starting a business, as measured by the World Bank’s Doing Business indicator, have significantly improved since 2007 and are approaching the average of G20 emerging economies. Barriers to trading across borders remain comparatively high. The government started implementing measures to develop its non-oil economy as part of its Vision Realisation Programs (VRPs). Those include incentives to foster the development of SMEs, enhance FDI attraction and a deepening of financial markets. Foreign investment restrictions were lifted in 2018 in recruitment, real estate brokerage, media services, commission agents and land transport services. The adoption of a bankruptcy law in 2018 and the implementation of the new competition law should help improve the competitive environment and encourage investment.
Income per capita and labour productivity have stagnated since the 2008 crisis. This is mainly due to low investment, weak labour utilisation and weak total factor productivity growth. The employment to population ratio has recovered to its pre-crisis level but remains comparatively low. Inequality and poverty were high in the early 2010s – with the bottom 40% of households having benefitted slightly less from growth than the average – despite increases in social transfers. A national minimum wage was introduced in 2019. Starting in 2018 fee-free tertiary education is being phased in for qualifying first-year students from low-income households.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: World Bank, Global Database of Shared Prosperity.

After a fall in 2009-10, total investment recovered, but fell again starting in 2016. Some infrastructure spending took place in 2016 and 2017 with the creation of 136 new schools and the expansion of public transport networks in major cities. Spending on R&D has remained at relatively low levels, but a Small Business and Innovation Fund has been established to support innovative entrepreneurs.
Administrative barriers to starting a business, as measured by the World Bank Doing Business indicator, have remained relatively high, although they are decreasing, and competition in network services remains muted. Several steps have been initiated to tackle these issues. The Competition Act has been amended to give competition authorities extended powers to investigate market concentration and impose structural remedies. The STER Bill, which seeks to consolidate economic regulation and policy of the transport sector within a single framework, has been released for public comment. Implicit barriers to trading across borders, also measured by the World Bank indicator, are comparatively high, in particular with high non-tariff barriers on intra-regional trade.

SPAIN

The strong economic recovery has pushed GDP per capita above pre-crisis levels. Labour productivity has been improving, but productivity growth remains a challenge. In the aftermath of the crisis, the employment to population ratio declined significantly amid high unemployment, while inequality rose as the income of the poorest households fell significantly. However, with the recovery underway, the labour market has been improving with strong job creation since 2014 and a partial recovery in the employment to population ratio. Nevertheless, the unemployment rate remains high.

Public investment as a share of GDP has fallen significantly and is now at half of its 2009 peak. Direct public funding of business R&D has also halved since its peak around 2009-12 and indirect support for R&D remains at low levels, although it is increasing. Low R&D spending adversely affects innovation performance and productivity growth. The recently activated R&D Public Policy Network can help improve coordination of regional and national innovation policies.
Regulatory barriers to entrepreneurship, as measured by the OECD Product Market Regulation indicator, are comparatively low. Administrative burdens on new firms are very low and barriers to network sectors are very low. Barriers to trade and investment, also measured by the OECD indicator, are lower than the average of advanced G20 economies.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
TURKEY

GDP per capita has continued to catch up with advanced economies, despite adverse shocks that include severe financial turbulence in 2018, geo-political tensions at the south-eastern border and an attempted coup attempt in 2016. Labour productivity has picked up and exceeds the average of G20 emerging economies. Labour force participation and job creation have risen until the sharp slowdown of the economy in late 2018. Starting from 2018, employer contributions for newly hired workers have been reduced until 2020. Inequality, as measured by the Gini coefficient, has been stable since 2011 but remains high.

The total investment rate has increased steadily since 2009-12 and now exceeds its pre-crisis level. Private business investment was more subdued over most of 2016-19, reflecting “wait and see” attitudes amid various domestic, regional and international uncertainties. Total spending on R&D has been gradually increasing. A Turkey “Fund of Funds” scheme was created by the Treasury in 2013, to take minority participations (of less than 30%) in venture funds. An additional Treasury facility of TRY 2 billion was announced in December 2017, to directly invest in start-ups.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.
Barriers to trading across borders and barriers to starting a business, as measured by the World Bank Doing Business indicators, are both lower than the average of other G20 emerging economies. New legislation was adopted in early 2018 facilitating market entry and infrastructure access by start-ups, as a first step in a broad programme to improve Turkey’s business environment. Nevertheless, obstacles to competition in network sectors and in agricultural markets remain and undermine productivity growth.


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**D. Investment**
As a percentage of GDP

**E. Total spending on R&D**
As a percentage of GDP

**F. Trading across borders**
Index scale from 0 to 100, from lowest to highest performance

**G. Starting a business**
Index scale from 0 to 100, from lowest to highest performance

Source: Panel D: International Monetary Fund, International Financial Statistics Database. For Argentina, Mexico and South Africa, the source is OECD, Economic Outlook Database; Panel E: OECD, Science and Technology Indicators Database except for Brazil, India and Indonesia for which the source is World Bank, World Development Indicators Database.
UNITED KINGDOM

Income per capita growth has recovered since the crisis and remains stable. However, significant risks to growth arise from the high uncertainty surrounding the exit from the European Union and the nature of the future relationships with the EU.Labour productivity growth remains weak but employment growth has been relatively strong since the early 2010s. In 2017, spending on lifelong learning pilots increased to help workers retrain and upskill throughout their adult lives. Inequality, as measured by the Gini index, has decreased since the mid-2000s, but remains high compared to the median of other G20 advanced economies.

A. Labour productivity
GDP per employee, 2010 constant prices and PPPs, thousands USD

B. Employment to population ratio
15 years old and older

C. Gini coefficient
Disposable income based Index of 0-100

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

The total investment rate has recovered somewhat since 2009-12 but remains below pre-crisis levels, with private investment held back by uncertainty about the future relationship with the European Union. Support for business R&D has been increasing throughout the 2000s due to substantial increases in indirect support as well as rising direct public funding.
Barriers to trade and investment and barriers to entrepreneurship, as measured by the OECD Product Market Regulation indicators, are low and well below the average of other G20 advanced economies. Trade and investment restrictions could however rise overall with the exit from the European Union.

Source: OECD, Product Market Regulation 2018 Database. Note: The indicator “barriers to entrepreneurship” has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: “administrative burden on start-ups” and “barriers in network and service sectors”. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.
Growth in output per capita has been recovering from the crisis period thanks to growing employment and productivity growth. The employment to population ratio remains below its pre-crisis level, as a sizeable share of people remain outside the active labour force, despite record low unemployment rates and emerging labour shortages. Income inequality has been declining recently but remains high compared to the average of G20 advanced economies, with a low share of national disposable income accruing to the poorest 20%.

Source: Panel A: OECD calculations based on OECD, National Accounts and Economic Outlook Databases; Panel B: ILO KILM, table 2A; Panel C: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

After temporary boosts during the crisis, public investment and public funding of business R&D have fallen below pre-crisis levels. Indirect R&D support has steadily increased but remains comparatively low. Public infrastructure provision is not keeping pace with economic developments and more investment in infrastructure would help raise productivity. Announcements have been made in this direction but have not been followed by legislative action yet.
Barriers to trade and investment, as measured by the OECD Product Market Regulation indicator, are comparatively low, but significant tariff hikes have been implemented recently. Barriers to entrepreneurship are close to the average of G20 advanced economies. In some services sectors, burdensome regulation, occupational licensing and zoning hinder the business environment and create barriers to workers moving between jobs.
Annex. Data Sources for G20 ESRA Indicators

Labour productivity

Measured by Gross domestic product per employee (expenditure approach) expressed in USD, constant prices, constant PPPs, OECD base year 2010.

Source: OECD calculations based on OECD, National Accounts and Economic Outlook Databases. For employment data for Argentina and Saudi Arabia, the source used is International Labour Organisation (ILO), Key Indicators of the Labour Market (KILM) Database.

Employment to population ratio

Measured by employment for age 15 and over as a share of the population age 15 and over.

Source: International Labour Organisation (ILO), Key Indicators of the Labour Market (KILM) Database, table 2A.

Gini coefficient

Measured based on disposable income post taxes and transfers or by consumption expenditures – as indicated in each individual country note. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. For OECD countries, data have been rebased to ensure comparability between historical series and latest data.

G20-Advanced and G20-Emerging refer to 2016 except for Canada, Korea, Brazil, China, Indonesia, Argentina, the United Kingdom and the United States (2017), Japan, Turkey, Russia (2015), South Africa (2014), Saudi Arabia (2018). The base year 2007 was replaced by 2008 for Germany, 2009 for India and Japan. The base year 2011 was replaced by 2012 for Australia, France, Japan and Mexico and 2013 for the United States and Saudi Arabia.

Source: OECD Income Distribution Database for OECD countries; China National Bureau of Statistics for China; GASTAT for Saudi Arabia and World Bank, World Development Indicators for other countries.

Barriers to trade and investment and Barriers to entrepreneurship

Index scale of 0-6 from least to most restrictive. The “barriers to trade and investment” indicator is one of the six mid-level components of the OECD product market regulation (PMR) indicator. The “barriers to entrepreneurship” indicator has been created for this publication and is the average of two mid-level components of the OECD PMR indicator: Administrative burden on start-ups and Barriers in network and service sectors. G20 averages do not include China, India, Indonesia, Russia, Saudi Arabia, and the United States for which PMR data is not yet available.

Source: OECD, Product Market Regulation 2018 Database.
Investment
Measured by Gross fixed capital formation as a percentage of GDP.

The average for G20-Emerging refers to 2018 except for China (2017).

Source: International Monetary Fund, International Financial Statistics Database. For Argentina, Australia, Japan, Mexico, South Africa, and the United Kingdom, the source is OECD, Economic Outlook Database.

Public investment
Measured by General government gross fixed capital formation, value, appropriation account, as a percentage of GDP.

Source: OECD, Economic Outlook Database.

Public funding of business R&D
Measured by Government support for research and development (R&D) aimed at encouraging innovation by direct public funding of business R&D, as a percentage of GDP.

The average for G20-Advanced refers to 2016 except for Australia and France, which refers to 2015. The 2009-12 period was replaced by 2009-11 for Australia.

Source: OECD calculations based on OECD, Science and Technology Indicators Database.

Public spending on education as a percentage of GDP
Source: World Bank, World Development Indicators Database.

R&D tax incentives
Measured by Government support for business R&D aimed at encouraging innovation through tax incentives, as a percentage of GDP.

G20-Advanced and G20-Emerging refer to 2016 except for Australia, France, the United Kingdom, South Africa (2015) and the United States (2013). No data available for India, Indonesia and Saudi Arabia.

Total spending on R&D

Measured by Gross domestic expenditure on research and development (GERD) which refers to total intramural expenditure on research and development performed on the national territory during a given period, as a percentage of GDP.

G20-Advanced and G20-Emerging refer to 2017 except for Indonesia, Saudi Arabia (2013), Australia, India (2015), Mexico, Brazil, South Africa (2016), Canada (2018). The 2009-12 period was replaced by 2009-11 for India.

Source: OECD, Science and Technology Indicators Database except for Brazil, India and Indonesia for which the source is World Bank, World Development Indicators Database.

Trading across borders and Starting a business (distance to frontier)

The distance to frontier score helps assess the absolute level of regulatory performance over time. It measures the distance of each economy to the “frontier,” which represents the best performance observed on each of the indicators. An economy’s distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier. Due to changes in methodology and coverage, the indicators are not strictly comparable through years for selected countries. However, the series have been adjusted to allow comparability: for both series where only data for one city was available prior to 2014 these have been rebased and combined with the more recent national series; and for trading across borders, the Doing Business 2016-17 methodology is used and historical data have been rebased to allow comparability with latest data.


Shared prosperity premium

Difference in percentage points between the growth in the income or consumption of the bottom 40% of the population in a country and the growth in the income or consumption of its total population. The larger the growth rate in the incomes of the bottom 40, the more quickly economic progress is shared with the poorer segments of society. Performance on this indicator is examined by country rather than globally.


Shared prosperity premium has been updated using the last version of the Global Database of Shared Prosperity (March 19, 2019), and data are for circa 2011-16. India has been removed from the dataset so we use old data from 2 years ago (2004-11).

Source: World Bank, Global Database of Shared Prosperity.

Unless otherwise indicated, the indicators for the European Union are the simple averages of the 28 EU members.
The OECD Technical Report on Progress on Structural Reform under the G20 Enhanced Structural Reform Agenda (ESRA)

At the G20’s request, this OECD technical report to G20 Finance Ministers and Governors provides an assessment of progress on structural reforms and remaining needs to achieve strong, sustainable, balanced and inclusive growth under the G20 Enhanced Structural Reform Agenda (ESRA) agreed at the Hangzhou Leaders’ summit in 2016. The OECD delivered the first ESRA report in 2017. This second report takes stock of the G20 reform progress since 2017 and outlines the scope for further policy action. The report also outlines best practice reforms in G20 countries in the different policy areas.

oe.cd/g20-esra-2019