



# OECD Economic Surveys

# GERMANY

## Executive Summary

December 2020



- **The economy is in recession**
- **Structural reforms and infrastructure investment can support the recovery**
- **Unleashing digital transformation**
- **The crisis risks exacerbating labour market inequalities**

# Main findings

## Macroeconomic policies to support the recovery

- Fiscal policy is highly expansionary and an immediate return to a tight deficit limit under the debt brake could derail the recovery.

## Structural reforms and infrastructure investment for a sustainable recovery

- Public investment has picked up since 2014, but not enough to resolve the infrastructure backlog. Future needs will increase with the energy transition, digital transformation and ageing.
- Capacity constraints in the construction industry and local planning offices hold back the delivery of new infrastructure.
- The tax burden on low labour income is high, due to high social security contributions, while environmental and property taxation is low and exemptions to inheritance and capital income taxes contribute to high wealth inequality.
- Progress in reducing greenhouse gas emissions has been concentrated in electricity generation, with the transport sector in particular facing considerable challenges to meet its 2030 goal.
- Substantive emissions pricing is being introduced for transport and heating, but inconsistencies in energy taxation remain.

## Unleashing digital transformation

- A very low share of fibre results in low broadband speeds. Public funds for broadband deployment have been disbursed slowly.
- The entrance of a fourth player to the mobile market has the potential to promote competition and innovation.
- Firms' investments in knowledge based capital that is crucial for data driven innovation, including software, databases, and organisational capital, are low and have hardly increased over the past decade.
- The share of individuals and firms interacting with public authorities online is growing only slowly and Germany lags behind on open government data; the now mandatory e-procurement could be further improved.
- The use of ICT in schools lags behind most OECD countries and computational thinking and programming skills have much scope to improve, in particular among women.

## Increasing labour market inclusion

- High marginal effective tax rates at the bottom of the income distribution create disincentives to expand labour market participation and can trap individuals in low-wage employment.
- Mothers, even those with older children, often work part time. Flexible work arrangements can reduce part-time work.
- Occupational entry regulations affect a high share of the workforce, which leads to higher prices, slows labour market dynamism and hurts the ability of immigrants to use their skills.
- Germany has relatively strict rent control, which is associated with lower housing supply elasticities and reduced labour mobility.

# Key recommendations

## Macroeconomic policies to support the recovery

- Stand ready to give further support if the recovery is weak.
- Gradually remove fiscal support once the recovery is well underway.
- Pursue planned fiscal consolidation while addressing long-term challenges.

## Structural reforms and infrastructure investment for a sustainable recovery

- Further increase spending on high quality public investment, including through funding to municipalities.
- Bolster local planning capacity through inter-municipal cooperation, training and expanding staffing in key technical roles.
- Reduce taxation of labour income, while removing inheritance tax exemptions, raising reduced VAT tax rates to the standard rate, and strengthening environmental, property and capital income taxation.
- Provide low-emissions alternatives through expanding public transport and charging networks, urban planning that creates proximity between people and places they visit for work or leisure, and facilitating telework.
- Make emissions pricing more consistent across sectors and fuels.

## Unleashing digital transformation

- Shorten administrative approval times for communication network deployment, including obtaining rights of way, and improve coordination between public authorities.
- Support competition through facilitating that the market entrant can obtain national roaming agreements. Consider all market participants when existing spectrum licenses expire.
- Improve conditions for firms to invest in knowledge-based capital, including by reviewing the cap for R&D tax incentives to make them more applicable to mid range companies.
- Accelerate progress towards digital government and a data-driven public sector, focusing on high-impact services, collaboration across levels of government and open government data, and systematically collect and use data from e-procurement processes.
- Increase ICT training for teachers to ensure effective use of ICTs.  
Introduce computational thinking earlier (particularly benefitting girls) while avoiding gender stereotypes in education and career guidance.

## Increasing labour market inclusion

- Reduce marginal effective tax rates for low income earners through slower and more coordinated withdrawal of social assistance, child supplement and housing benefits.
- Strengthen legal rights to flexible working arrangements for all employees, including teleworking where possible.
- Liberalise entry conditions, prioritising sectors subject to supply constraints (such as construction) and preserving the strengths of the vocational education and training system.
- Reduce strictness of rent controls in markets where more supply is needed, such as Berlin.



## The economy is in recession

The German economy experienced a severe contraction in 2020 (Table 1) following a decade-long expansion. The initial COVID 19 outbreak was brought under control with less stringent containment measures than in many countries thanks to high health sector capacity and early testing, tracing and isolation of cases. Resurgence of the virus in October led to renewed nationwide containment measures in November, including closure of hospitality and entertainment venues, while retail as well as schools remained open.

**The economy has been hit hard by the collapse in global trade.** Germany exports a large part of its output, particularly manufactured capital goods. Key trading partners in Europe have been badly affected by the crisis and stalling global investment has seen demand for capital goods plunge.

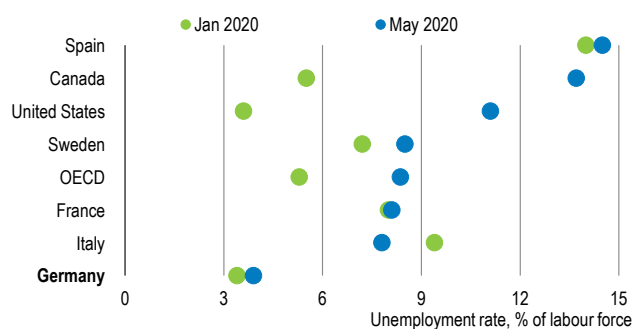
**Table 1. A deep recession in 2020**

	2020	2021	2022
Gross domestic product	-5.5	2.8	3.3
Unemployment rate	4.2	4.8	4.3
Fiscal balance (% of GDP)	-6.3	-4.4	-1.8
Public debt (gross, Maastricht, % of GDP)	73.9	76.2	75.8

Source: OECD Economic Outlook 108 database.

**Increasing unemployment was cushioned by the government-supported short-time work scheme.** Short-time work bore a much bigger part of the reduced demand for labour than did unemployment (Figure 1), with almost 20% of all dependent workers in short-time work in April 2020. An extended downturn would increase the need for resource reallocation, in which case consideration should be given to more active labour market policy, such as training or placement assistance.

**Figure 1. Increases in unemployment were cushioned by short-time work**



Note: Data for United States refer to June. Temporary layoffs are included in unemployment figures for the United States and Canada but not for the other countries.

Source: OECD Short-Term Labour Force Statistics database.

**A strong government response to the crisis has reinforced health system capacity while protecting jobs and firms.** Loans, guarantees, grants and equity injections safeguarded liquidity, while a recovery package is supporting consumption and investment. These measures notwithstanding, bank vulnerabilities should be monitored closely as corporate and household defaults are liable to increase. There is around EUR 140 billion (4¼ per cent of GDP) of discretionary stimulus in 2020. The rate of consolidation needs to be carefully managed, as a rapid withdrawal of support could derail the recovery, particularly if underlying growth is weak.



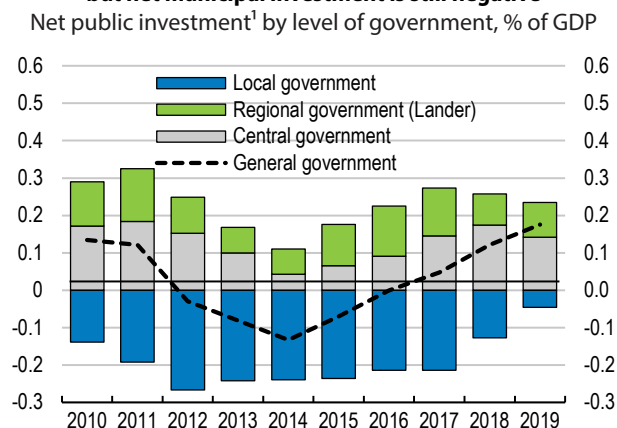
# Structural reforms and infrastructure investment can support the recovery

The COVID-19 crisis exacerbates structural challenges from weak external demand and the energy transition. Policy needs to facilitate the shift to cleaner energy and new technologies in the automotive industry, while accelerating progress on digital transformation.

**Infrastructure investment, which is critical for digital transformation and decarbonisation, has been insufficient and could be an important part of the recovery.** Public investment has stepped up since 2014 (Figure 2) and further spending on low-emission transport, digitalisation and health has been announced. These are key areas where more investment is needed, along with social housing, early childhood education and electricity networks. Two decades of low investment have left a backlog, while construction and administrative capacity and cumbersome planning procedures constrain delivery.

**Infrastructure governance reforms and active federal government support are needed to overcome capacity constraints.** Independent infrastructure planning advice would improve alignment across sectors and provide greater certainty for construction sector companies to expand capacity. Further streamlining planning processes, cooperation between agencies and more attractive employment conditions for public sector planners would help. Municipalities’ revenues have been hit hard by the crisis and measures to partially compensate for shortfalls will be insufficient to make up the backlog of municipal investment in transport infrastructure and schools.

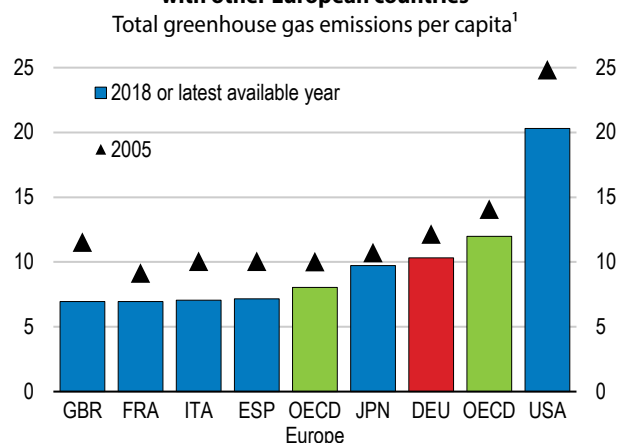
**Figure 2. Public investment has recovered, but net municipal investment is still negative**



1. Public gross fixed capital formation less depreciation  
Source: OECD National Accounts database.

**Germany made considerable progress on climate change policy in 2019, which must not be derailed by the COVID-19 crisis.** Key steps include introduction of emissions pricing in transport and heating, increased support for electric vehicles and charging stations, higher targets for renewable power generation, and a commitment to cease coal-fired generation by 2038 at the latest. Despite success deploying renewables in the electricity sector over the past two decades, emissions are high (Figure 3).

**Figure 3. GHG emissions per capita are high compared with other European countries**



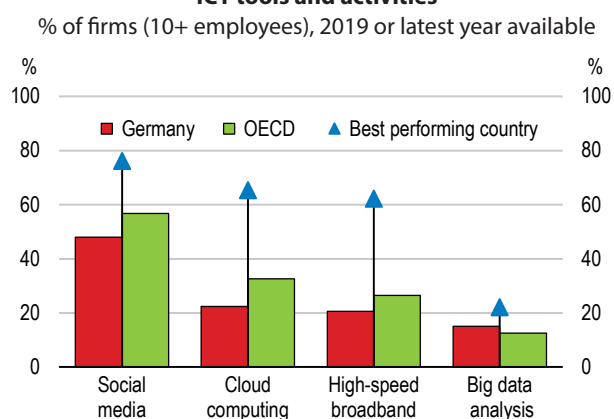
1. Excluding land use, land use change and forestry; thousand kilograms per capita.  
Source: OECD Environment Database.

**Further policy steps are needed to meet the target to reduce greenhouse gas emissions by 55% by 2030.** Coal-fired generation should be reduced ahead of schedule via stronger price signals, which is a cost-effective way to decrease emissions. Stronger price signals would also promote more efficient waste management. Energy efficiency requirements on new buildings are high, but energy efficient renovations need to increase by at least 50% to meet the 2050 goal of a near climate-neutral building stock. The transport sector is unlikely to meet its 2030 abatement target. Further action is needed on pricing for fuels, vehicles and roads, while providing alternatives through sustainable transport modes.

## Unleashing digital transformation

Germany is a world leader in technology and engineering, but lags on digital transformation. Access to high speed broadband networks could be improved, particularly in rural areas. Mobile data usage and connection speeds are also low. Firms in Germany are behind in the use of key ICT tools required to create value with data, such as high-speed broadband and cloud computing (Figure 4).

**Figure 4. German firms lag in the adoption of advanced ICT tools and activities**



Note: Excludes firms from the financial sector. High-speed broadband are subscriptions with 100+ Mbps.

Source: OECD ICT Access and Usage by Businesses database.

**To improve connectivity, administrative processes should be streamlined and competition enhanced.** The ambitious goal for nationwide gigabit Internet coverage by 2025 is welcome, as are public broadband subsidies, if used efficiently. However, the disbursement of funds has been slow. Long approval processes delay progress, particularly in relation to rights of way required to build infrastructure. The entry of a fourth network operator to the mobile market is a positive development and should be supported by regulatory policy for this to increase competition and outcomes for consumers.

**Barriers to firms' adoption of advanced ICTs and investment in knowledge-based capital need to be reduced.** Innovation and productivity are held back by firms' sluggish adoption of advanced ICTs that are crucial to create value with data, SMEs' difficulties to access bank financing, a low initial cap on new research and development tax incentives and digital security concerns. More venture capital is essential to finance start-ups with high growth potential and related financing instruments could become more effective by avoiding complexity and scaling up later-stage funding.

**The COVID-19 crisis increases the importance of accelerating progress towards digital government and a data-driven public sector.** Germany has been slow introducing digital public services, but progressing on high-impact services is now a priority. Greater efforts are also needed to enhance collaboration across levels of government and access to open government data.

**Strong foundational skills help people adjust to new technology.** The impact of high numeracy and literacy skills on earnings and employment is higher in Germany than in most OECD countries, reflecting high demand for these skills. Better acquisition of foundational skills, especially for those with disadvantaged backgrounds, would help reduce inequality, secure opportunities for upward intergenerational mobility and support future participation in adult education.

**If teachers have the right complementary skills, digital technologies can enhance students' skills and engagement.** Germany is lagging other OECD countries in using digital technologies in schools and the skills of teachers to use them effectively. Countries have been tackling the need for ICT training through a range of policies, from compulsory training, to national accreditation standards or certification for teachers.





## The crisis risks exacerbating labour market inequalities

Upward earnings mobility is weak and school closures due to COVID-19 risk further increasing the gap between advantaged and disadvantaged students. Youth, women and low-wage workers are more prone to unemployment as they are concentrated in some industries that are being hit heavily by the crisis.

### **Reducing high effective tax rates would remove one impediment to moving to jobs with higher earnings.**

Taxation of labour income is high; reducing this while strengthening environmental, property and capital income taxation and removing exemptions would improve incentives and increase efficiency. Building on Germany's success with social partnerships can help firms and workers weather the economic downturn through training, collective agreements and continuing with effective social dialogue for setting minimum wages.

### **The gender wage gap is high and has declined little over the past two decades.**

One factor is the high share of part-time work among women, particularly mothers. Improving further the availability of high quality, full-time childcare and encouraging longer parental leave by fathers would strengthen sharing of child care and support female employment. Women account for a very small proportion of management positions. Improving pay-transparency laws, broadening quotas, improving accessibility of STEM and ICT fields of study, and supporting greater flexibility on working hours and teleworking are key levers to promote gender equality.

### **The share of the workforce covered by occupational licensing is the highest in the OECD.**

Occupational licensing reduces competition, pushing up prices and holding back productivity and job mobility. Licensing is likely to be particularly costly for immigrants who cannot use their skills, and in the construction sector where labour shortages hold back investment.

### **Housing shortages in urban areas prevent people moving closer to jobs.**

Lack of availability of developable land and stringent rent control hold back the housing supply response. Rent controls introduced in 2015 have not been found to have a negative effect on construction so far, but tighter measures such as the rent freeze in Berlin risk restricting mobility.



# GERMANY

The German economy entered a deep recession in 2020 due to the coronavirus pandemic. A strong government response has reinforced health system capacity while protecting jobs and firms. The response to the crisis has included increases in investment to meet structural challenges from the energy transition and digital transformation. Further public investment is needed to resolve the infrastructure backlog, along with steps to remove delivery bottlenecks. Emissions pricing in transport and heating will help reduce greenhouse gas emissions, though further steps will be needed to meet targets. The German government has made good progress in addressing some key barriers to digital transformation, but can do more to unleash its full benefits. Alleviating connectivity bottlenecks, incentivising investment in knowledge-based capital and supporting business dynamism during the recovery by reducing administrative burden, facilitating access to financing, and accelerating progress towards digital government can boost technology diffusion and productivity. To empower everyone to thrive in digital environments, computational thinking should be introduced earlier and training for teachers increased to ensure effective use of digital technologies in schools.

## **SPECIAL FEATURES: UNLEASHING THE BENEFITS OF DIGITAL TRANSFORMATION**

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